



Highway Adoption Procedures A Guide for Developers

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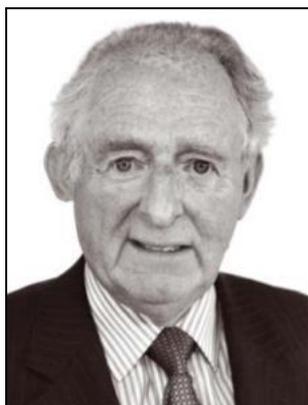
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FOREWORD



Councillor Ted Richards OBE
Cabinet Member for
Transport & Highways

Welcome to Solihull, a Metropolitan Borough at the heart of the UK.

We have set out on an ambitious journey to create a world leading environment which will encourage growth and prosperity for the region, and health and opportunity for all our citizens. To this end I recognise the benefits of a fusion of public and private partnership where great ideas and innovation can be free to flourish.

There is a challenge to us all to encourage and promote ambitious, attractive and sustainable development yet to maintain the “*urbs in rure*” (town in the country) character for the area.

My fellow members, together with a committed team of planning, transport and highway officers are looking forward to working closely with you over the coming years to achieve this grand ambition.

Yours sincerely

Ted Richards OBE
Cabinet Member for Transport & Highways

1.0 INTRODUCTION

Solihull Metropolitan Borough Council (SMBC) is the Local Highway Authority for all publicly maintained roads in the Borough other than motorways and trunk roads, and as such, is responsible for the adoption of new roads and the improvement of existing roads within the Borough. An adopted road is one which is maintained by the Council at public expense.

This document outlines SMBC's procedures for managing the adoption of roads under Section 38 of the Highways Act 1980, and for the construction of works on existing public highway under Section 278 of the Highways Act 1980.

Areas which the Highway Authority will normally adopt include carriageways, footways, main footpaths, cycle ways, verge and highway structures which are constructed in accordance with the appropriate standards and are for the use of the general public.

All land required for sight lines will be adopted as part of the highway where the road is of distributor class. Where sight line areas are not adopted it will be a condition of planning consent that these sight lines areas are not obstructed.

The Highways team are always on hand for early discussions and assistance prior to submitting detailed applications.

The team at SMBC are also able to offer the following services:

- Full design of road layouts for access roads and estate roads
- Construction of roads through our partner contractor Balfour Beatty
- Design and installation of street lighting
- Landscaping design, installation and tree planting
- Travel Planning

These services are available at competitive rates and offer the benefits of right-first-time solutions and timely adoptions.

2.0 SERVICES OFFERED BY SMBC

SMBC offer a host of design based services. If the proposals are designed by SMBC they would **not be** subject to a technical approval charge. The services SMBC offers are detailed below.

2.1 Street Lighting

SMBC Street Lighting Team has the expertise to design and implement street lighting layouts for Section 278 and Section 38 Schemes. Street Lighting layouts designed by SMBC will receive automatic technical approval, therefore, SMBC designed schemes would not be subject to a technical approval charge.

If you would like a quotation for a street lighting design please contact Ed Bradford, ebradford@solihull.gov.uk, 0121 704 6477.

2.2 Traffic Signals and Controlled Crossings

SMBC Urban Traffic Control Team has the expertise to design and implement traffic signal junctions and signal crossings for Section 278 and Section 38 Schemes. Traffic signal controlled layouts designed by SMBC will receive automatic technical approval, therefore, SMBC designed schemes would not be subject to a technical approval charge.

If you would like a quotation for a traffic signal layout please contact James McNeil, jmcneil@solihull.gov.uk, 0121 704 7100.

2.3 Landscaping

Solihull Council's award winning Conservation & Historic Environment, Landscape Architecture, Urban Design and Ecology Team can provide a wide range of complementary services to protect and enhance the local built and natural environment, local character and distinctiveness; where biodiversity is valued and resources are used efficiently. Our place making expertise seeks to promote sustainable development, safe walkable neighbourhoods and to promote civic pride through high quality public realm.

Below are some examples of the services the team could provide:

- Landscape Design, Planting Plans and Construction;
- Urban Design, Master Planning and Public Realm Design;

- Ecological Surveys and Assessment;
- Habitat Creation, Management, Mitigation and Restoration Schemes.

For further information please visit the team's web site:

<https://socialsolihull.org.uk/peopleplacenature/>

If you would like a quotation for survey, design and management services please contact Mike Eastwood meastwood@solihull.gov.uk, 0121 704 6391

Contact details:

Please contact Duljit Madahar, duljit.madahar@solihull.gov.uk, 0121 704 6487, to discuss any of the services we offer in more detail.

3.0 HIGHWAY AGREEMENTS

3.1 Section 38 Agreement

Section 38 of the Highways Act 1980 allows SMBC as Highway Authority to enter into a legal agreement with a Developer to adopt highways, provided they are constructed to SMBC's requirements, standards and specifications.

Road adoption is a term used to describe the Council taking on maintenance/ownership of a new street. A 'private street' is a street which is not maintained at public expense and means that the Highway Authority has no responsibility for its maintenance.

In the case of existing private streets which have not been constructed under a Section 38 Agreement, the Council may, if requested to do so, adopt the street providing they are of a suitable standard. In some cases they may require additional work to be carried out to bring them up to adoptable standards under Section 228 of the Highways Act 1980.

3.2 Section 278 Agreement

Where schemes require alterations or improvements to the existing public highway, Section 278 of the Highways Act 1980 allows for SMBC to enter into a legal agreement with a Developer to enable the Developer to make alterations or improvements to the public highway.

The works must be carried out by SMBC's term contractor or a contractor approved by SMBC. The Developer is normally responsible for all aspects of the works on the public highway, from design through to supervising construction and ensuring that the works are fully and finally completed to SMBC's satisfaction.

3.3 Combined Section 38 and Section 278 Agreement

Section 38 Agreements may be combined with a Section 278 Agreement if works on the existing highway are involved. Section 278 Agreements may also be combined with a Section 38 Agreement if adoption of land forming part of the altered/improved highway is required.

3.4 Section 184 Licence - Application

For smaller scale works a Section 184 Agreement may be appropriate. For instance; the construction of, or alterations to, any site access or accesses where these are the only highway works required to be executed to enable the development.

In some instances the scope of a Section 184 Agreement may be extended to cover additional minor works such as relaying a short length of kerbing either side of a

new access, re-positioning a road gully, or for the provision of a street light to illuminate the access.

The works will be placed on the highway register as a permanent record for future searches from third parties.

Note:

For simple domestic access crossings please see:

<http://www.solihull.gov.uk/Resident/Parking-travel-roads/parking/parking-at-home/lower-your-kerb>

3.5 Surety/Bond

To protect the Council the Developer will be required to provide a financial security in order to ensure that there is adequate provision to allow the Section 38/278 Works to be completed should the Developer default on his obligations under the Section 38/278 Agreement. This may include unfinished or defective works. The bond amount is as follows:

150% of SMBC estimated works cost (to include 20% contingency) or tendered works price if known of which the highest figure is used. Reduction to 50% of the works cost at Substantial Completion and release of the remaining bond on Final Completion. Please note: if a Road Safety Audit Stage 4 (RSA 4) is required the remaining bond will be retained until completion of the RSA 4 and associated works.

The security may be in the form of:

- a bond in SMBC's agreed format with a reputable financial institution (Bank/Insurance company) approved by SMBC
- a deposit of the equivalent sum deposited with SMBC until issue of the final certificate of completion of the Section 38/278 works.

SMBC reserves the right, having given notice to the Developer, to use this surety to carry out works if tasks, have not been completed within 30 days of the end of the maintenance period.

3.6 Entering into a Section 38/278 Agreement

The Developer is advised to consult SMBC's Planning and Highway sections, in good time, prior to submitting an application for planning permission. Especially if the proposed highway works are extensive. This will provide an opportunity to discuss new ideas, identify potential pitfalls and resolve any highway issues relating to the proposed development prior to submission of any planning application.

Before entering into a Section 38/278 Legal Agreement the Developer must:

- Obtain full planning permission for the development from the planning authority.
- Obtain Technical Approval from the highway Services.
- Prove title to the land proposed to be dedicated as public highway within the Agreement.

To commence the Section 38/278 adoption procedure, the following should be submitted to SMBC:

- Covering letter indicating the type of agreement the Developer wants to enter into, i.e. S38, S278 or combined S38/278 Agreement
- Completed S38/S278 application form
- An application Technical Review fee.
- Electronic copy (in pdf format) of all information submitted for technical approval.

3.7 Fees/Payments to SMBC

Fees Payable with Timeline

- **Technical Review Fee** – Payment of the Technical Review Fee shall be made before commencement of the technical review process. Payment of all outstanding fees shall be made before issue of the Technical Approval letter.
- **Legal fees** will be charged separately by SMBC Legal Team.
- **Construction Supervision and Post Completion Work Fees** – Payment of the estimated construction supervision and post completion work fee shall be made prior to works commencing on site.
- **Testing** - All schemes will be subject to testing of the construction materials. The cost of this testing is dependent upon the size of the scheme.
- **Adoption Fees** – Time spent will be invoiced monthly, with the final payment (including VAT) being made before issue of the Adoption Certificate.

- Supplementary Fees** - The Developer will also be responsible for payment of all additional fees incurred by the Council for design checks and design reviews carried out for non-standard / specialist items of work. For Section 38 works, the Technical Review Fee calculations are based on an estimate of the costs of construction of a standard highway, i.e. carriageway, footway and verge. It does not include for any non-standard / specialist items. Specialist items of work may include structures and major junctions both new and alterations to existing.
- Additional Fees** - Work in addition to that listed in the fee estimate (i.e. additional meetings, reviews and responses, dealing with any matters arising from Asset Management Audits, the initial liaison with local residents, stakeholders and emergency services etc) may incur additional fees.

Summary:

Fee	How calculated	When Payable
Technical Review Fee	Based on estimated works cost	Before commencement of the technical review process
Legal Fees	Fixed charge	Before completion of the S278 / S38 Agreement
Construction Site Supervision and Post Completion Work	Based on estimated works cost and time charged.	Before commencement of any works on site.
Commutated Sums	Based on scope of works	Before completion of the S278 / S38 Agreement.
Testing	Based on scheme cost	As requested, but before issue of the Adoption Certificate
Safety Audits	Fixed Charge	If the Highway Authority's response is required, payment is required before issue of the HA's response.
Supplementary Fees	Varies	In advance/on request. For site inspection of non-standard items will be payable within 21 days of commencement of works on site

Additional Fees	Time Charged	In advance/on request.
Adoption Fees	Time Charged	Before issue of the Adoption Certificate (Estimate)

Calculation of the Bond

The bond is calculated at 150% of the estimated works cost initially (to include 20% contingency) or the tendered works price if known of which the highest figure is used.

The Bond amount is reduced to 50% of the Works cost after the substantial completion certificate is issued.

The Bond is fully released when the Final Completion Certificate has been issued and Final Adoption completed.

Traffic Regulation Orders and Statutory Notices

The Developer will be responsible for all costs and expenses associated with any Traffic Regulation Orders and statutory notices that are required as a result of the Works.

Note:

An additional fee will be charged for any supplement or alteration to the proposal requested by the Developer after granting of Technical Approval or post completion of the Agreement, unless the change is at the specific request of SMBC.

3.8 The Land Compensation Act 1973 And The Noise Insulation Regulations 1975

Under the Land Compensation Act 1973 people affected by the proposed development works may be entitled to 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 SMBC 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 Section 38/S278 Agreement contains a clause requiring the Developer to indemnify SMBC against the full costs of any payments and fees SMBC make under these regulations and any other third party claims. SMBC will notify the Developer of any claim received and also about any offers of noise insulation.

4.0 THE TECHNICAL APPROVAL PROCESS

4.1 Information

The S38 / S278 highway works associated with your development will be progressed through Highways Services for technical review and delivery. We would be happy to arrange to meet you to discuss your scheme further if you would like to suggest some dates / times which are convenient.

S278 and S38 schemes are delivered through a phased approach, with the Developer (or their agent) working with Highway Services to progress the scheme to construction. The two phases are summarised below. It should be noted that legal fees will be charged separately by SMBC's Legal Team.

No S38 / S278 works shall commence on site until the Technical Approval and Legal Agreement are in place. If any S38 / S278 works have been undertaken prior to these approvals being granted then the works will be carried out under the developers own risk and will lead to complications to the adoption process.

4.2 Phase 1 – Technical review

In the (usual) case where the Developer has appointed their own Principal Designer and design team, the design for the highway works must be subjected to a technical review by the Council's engineers, for which a fee is payable in advance. The fee is based on the cost of the works. We will need a general arrangement drawing in .DWG format in order to prepare our estimate.

The purpose of this review is to ensure that the scheme is suitable for the highway. The drawings and the detail required for the technical review is set out in Appendix 2 and 3 of this document. It is strongly recommended that this is passed to the developers design team as soon as possible.

4.3 Phase 2 – Site supervision and post-completion work

SMBC will inspect construction of your works using a Site Engineer and a Clerk of Works, and where appropriate, other specialist disciplines. The Developer or agent will be expected to be responsible for the day-to-day supervision of the road works construction. The developer must manage the commercial aspects of contract administration through the construction phase, albeit with some decisions needing our prior approval.

The developer must give SMBC staff access to the works in progress at all times, if problems arise, we will be happy to discuss possible solutions with you, but it will still be the responsibility of the Developer / Contractor to make sure that the works are satisfactorily completed in accordance with our requirements and specification.

4.4 Timescales

It is difficult to give any indication of timescales for each of the phases; however we will work closely with you to understand the aspirations for a start date on site. The main determining factor though is the quality of the information provided by the design team for the technical review phase which is why it is important that they have early sight of our requirements.

4.5 Design Submission

To ensure that the Section 38/278 Works are carried out in a manner and to a standard that is acceptable to SMBC, detailed proposals must be submitted for review and approval this is referred to as Technical Approval.

To enable a comprehensive check to commence a full set of design documents must be provided and fee; only on receipt of this submission can the 6 week timescale begin. All drawings and plans provided must be drafted by competent highway design consultant(s) and specialists appointed by the Developer.

SMBC will only grant Technical Approval when:

- We have reviewed all information submitted
- The Developer has supplied any additional or amended details requested.

Only when the review process is complete, and the Agreement is complete can work commence on site.

Note:

The Developer will be required to enter into a formal agreement with the Local Water Authority in respect of sewers and pumping stations in accordance with Section 104 Water Industry Act 1991 and provide written assurance that the Water Authority will adopt sewers within the Section 38/278 Works. Private sewers within the Section 38/278 Works are not accepted by SMBC and will not be adopted. Adoption of the Section 38/278 Works cannot take place until proof of the adoption of the private sewers etc. by the Local Water Authority has been provided to SMBC.

4.6 Design Standards

SMBC is keen to receive new innovative designs and has adopted Manual for Streets as its highway design standard for new developments. The design proposal should hold true to the aims of this and any other design manuals SMBC has adopted. Where Manual for Streets does not provide detailed guidance, e.g. the design of major junctions, DfT DMRB standards should be adopted. The Developer should seek confirmation from SMBC of the appropriate design standards to be used. The proposal must also be in compliance with current legislation relating to highway matters. SMBC will expect the design to be in accordance with current guidance and recommendations issued by the DfT, however we do recognise that each situation has to be considered according to specific site characteristics.

Note:

SMBC uses Warwickshire County Council's (WCC) Highway Construction Details (HCD), unless otherwise agreed, the most recent version of these can be found at www.warwickshire.gov.uk/highwayconstruction.

4.7 Phased Construction

Developments which are proposed to be carried out in phases MUST have a turning facility provided at the end of any unlinked roads until the link into a further phase is provided.

4.8 Commuted Sums

SMBC shall seek commuted sums for:

- All Non Standard Footway and Carriageway Surfacing materials..
- Highways Structures (including walls, culverts, bridges etc) and Special Features etc.
- Street Lighting, Street Furniture, Traffic Signals and illuminated road signs
- Landscaping within the proposed highway, including trees; and shrubs.
- Sustainable drainage systems (SUDS),
- All Drainage methods including Kerb Drainage, Gullies, ponds, etc
- Fencing and VRS safety barriers.
- Rain Gardens
- Public Art
- Public open spaces

4.9 Safety and Quality Audits

In line with good practice the Developer must commission and submit Stage 1/2 Road Safety Audits for proposed Section 38/278 works, and make all subsequent changes agreed by SMBC as the local highway authority required to address any road safety issues identified in the audit(s). Safety audits must be carried out by an accredited Safety Audit team that is independent from the Designer(s) and approved by SMBC. We do encourage shared space and other novel designs so please bear this in mind when carrying out safety Audits. The Developer will be responsible for commissioning and paying for all Safety Audits and corrective actions. SMBC will require Safety Audits for all highway works covered by S278 Agreements. RSA 3 and the Designers Response must be carried out within 1 month of the Substantial Completion for all S38 / S278 works.

Note:

For further information please see:

http://www.solihull.gov.uk/portals/0/ParkingTravelRoads/Road_Safety_Audits.pdf

4.10 Traffic Regulation Orders

Where a development requires changes to an existing traffic regulation order (TRO) or a new TRO is required, the Developer will be required to pay all costs associated with this, including all consultation, advertising and legal costs. TRO's are subject to statutory procedures and consultations. This can be a very lengthy process and a successful outcome is not guaranteed. The Developer is advised to seek advice on the likely timescale and take this into account when programming the proposed works. Examples of TRO's are:

- waiting restrictions
- speed limits
- one-way streets
- prohibitions of vehicles
- residents' parking schemes
-

4.11 Traffic Calming and Other Traffic Management Schemes

Where the works involve the introduction of new traffic calming features on existing highway, e.g. road humps, the developer will consult interested parties, such as emergency services, bus companies, parish or town council, councillors and residents. This may include a public exhibition and other consultations beyond minimum statutory requirements. Statutory consultation under S90 of the Highway Act 1980 is required in respect of any vertical traffic calming measures proposed on existing highway. After SMBC has received and analysed comments, a decision will be forwarded to the Developer. The Developer must incorporate in the design any changes resulting from the consultation process.

The Developer must pay all costs in connection with the consultation process whether or not the outcome is successful.

4.12 Stopping Up of Public Highway

In instances where a scheme requires the permanent closure of existing public highway a Highways Stopping Up Order will be required.

Stopping Up requests related to development are typically dealt with through the planning process and should be highlighted at the time of your application and referenced within it. Stopping up requests which include all purpose highway will normally be dealt with by the National Case Work Team and applications should therefore be submitted directly to the DfT.

Further information on this process is available here: <http://www.gov.uk/government/publications/stopping-up-and-diversion-of-highways>.

Applications affecting footpaths, bridleways and cycle tracks only are dealt with by the Local Authority under Section 257 of the Town and Country Planning Act 1990. Such orders are only made by the Council as the Local Planning Authority to enable development to be carried out.

Should a Developer wish to apply to stop-up or divert a public footpath, bridleway or cycle track to enable a development to be carried out, please ensure that the matter is raised with the planning officer and is referenced in any subsequent planning application.

4.13 Street Naming and Numbering

SMBC is responsible for the naming and numbering of streets within the Borough. The Developer is advised to submit their application for new postal address/alteration to the Planning Department.

5.0 CONSTRUCTION STAGE

5.1 Information required prior to start of works

Where works are proposed to be carried out under a Section 38/278 Agreement, the Developer must not begin construction unless and until:

- technical approval has been granted;
- the Section 38/278 Agreement has been completed and signed and an appropriate surety is in place;
- SMBC has been provided with written confirmation that the Developer has notified the Health and Safety Executive (notification via form F10) that they are client for the works for the purposes of the Construction (Design and Management) Regulations 2015
- Principal Designer (Safety) has been appointed, and details of the appointment have been provided/agreed with SMBC
- all necessary fees have been paid to SMBC;
- SMBC has been provided with details of the appointed Contractor in order for SMBC to validate the Contractor's suitability to carry out the Section 38/Section 278 Works.
- SMBC has been provided with evidence of the appointed Contractors public liability insurance.
- SMBC has been provided with and approved the traffic and pedestrian management proposals for any works on existing highways (S278) in connection with the development.
- a pre-start meeting has been held with SMBC representatives

5.2 Notification of start of works

The Developer must give SMBC notice in writing of their intention to begin S38/278 works. **For works of more than 10 days duration the notification period is at least 3 months.** The Developer is advised to contact SMBC's Street Works section for further information on the notice period required for the extent/nature of the proposed works.

In addition to notifying SMBC, the developer may be required to notify local residents / businesses in the immediate vicinity of the site and road users via appropriate signage, details of which should be agreed with SMBC in the first instance.

5.3 Pre-start meeting

The meeting should be attended by the Developer, Designer, Contractor and, SMBC's officers from Highway Services and Neighbourhood Services.

5.4 Health and safety

The Developer must comply with all aspects of the Construction (Design and Management) Regulations 2015 and indemnify SMBC against all claims, liabilities and actions should they fail to do so. The Developer is also required to submit full details of any traffic management proposals in accordance with Chapter 8 of the Traffic Signs Manual as published by the DfT for the construction of the road works for approval by SMBC officers in Highway Services.

5.5 Site inspections

Inspection of the Section 38/278 Works will be carried out by SMBC officers in Highway Services. The Developer must provide access to inspect the works at all times. The Developer retains responsibility for supervising the work and for making sure that it is carried out in a proper and safe manner, and in line with the specification. If problems arise, SMBC will consider possible solutions with the Developer, but it will still be the Developer's responsibility to instruct the Contractor and make sure that the works are satisfactorily completed in accordance with SMBC's requirements.

5.6 Timescale for completing works

Once the works have commenced, it is the Developer's responsibility to complete the works to SMBC's satisfaction within timescales in the agreed programme of works, and to make sure adoption takes place within a reasonable timescale to minimise any potential risks or inconvenience to residents.

Note:

Any anomalies/amendments encountered following completion of the S38/278 Agreement and before the issue of the Final Certificate will require formal amendment to the plans appended to the Section 38/278 Agreement. This may require the completion of a Supplemental Agreement. The Developer will be responsible for any costs associated with the drafting and completion of the Supplemental Agreement and any additional supervision fees that may be required.

Other Requirements:

During the construction phase, the Developer will be required to provide SMBC with revised Works Information, including revised drawings and revised information (as and where necessary), to allow SMBC to review and approve if appropriate.

6.0 MAINTENANCE AND ADOPTION

6.1 Combined S38/278 Works

Part 1 Certificate

The Part 1 Certificate must be formally requested in writing by the Developer from SMBC. The Part 1 Certificate will be issued once the following Section 38/Section 278 Work items have been completed (including completion of any defective works) in accordance with the approved drawings and to the satisfaction of SMBC:

- All highway drainage.
- All kerb foundations and where appropriate kerbs including lowering at vehicle and pedestrian crossings.
- Carriageway sub-base, base course and any supporting structures thereto.
- Carriageway binder course and surfacing where appropriate, and where applicable binder course to pedestrian access to such highway.
- Demarcation of sight lines and clearance vision splays.

Street lighting columns erected ready for connection in accordance with the electricity company's requirements for an electricity supply.

Following a request for the Part 1 Certificate

The site inspection process is as follows:

- i. As soon as is reasonably practicable a joint inspection of the Section 38/278 Works will be undertaken by SMBC and the Developer. SMBC will produce and supply a Defects List (if applicable) to the Developer.
- ii. The Developer shall within 3 months from the date of receipt (or such other period of time as notified in writing by SMBC) complete the works as identified on the Defects List.
- iii. When SMBC is satisfied all works identified have been carried out in accordance with the Section 38/278 Agreement and to SMBC's specification or as otherwise directed by SMBC, the Part 1 Certificate will be issued. The Developer will remain fully responsible for maintaining the works until the Final Certificate of Completion is issued.

Part 2 Certificate

The Part 2 Certificate must be formally requested in writing by the Developer from SMBC. The Part 2 Certificate will be issued once the following Section 38/278 Work items have been completed (including completion of any defective works) in accordance with the approved drawings and to the satisfaction of SMBC:

- All outstanding kerbing not completed in Part 1
- Pedestrian access ways/areas
- Carriageway surface course and/or carriageway binder course
- Vision splays and verges

- Street lighting and street furniture
- Street name plates
- Road markings (if applicable)
- All other works described in the Specification and shown on the Drawings
- Where required, Stage 3 Road Safety Audits completed and all changes required carried out satisfactorily.

Following a request for the Part 2 Certificate

The inspection process is as follows:

- i. As soon as is reasonably practicable a joint inspection of the Section 38/278 Works will be undertaken by SMBC and the Developer. SMBC will produce and supply a Defects List (if applicable) to the Developer.
- ii. The Developer will within 1 month from the date of receipt (or such other period of time as notified in writing by SMBC) complete the works as identified on the Defects List.
- iii. When SMBC is satisfied all works identified have been carried out in accordance with the Section 38/278 Agreement and to SMBC's specification or as otherwise directed by SMBC, the Part 2 Certificate will be issued. The issue of the Part 2 Certificate will commence the 12 months maintenance period. The bond supporting the Agreement will then be reduced. The Developer will remain fully responsible for maintaining the works until the Final Certificate of Completion is issued.

Note:

The issue of the Part 2 Certificate will constitute the road being 'first open to public traffic' for the purposes of Section 1(9) of the Land Compensation Act 1973. The Section 38/278 Agreement will make provision for the Developer to indemnify SMBC from any claims relating to the works including those made under the Land Compensation Act 1973.

Even though the road is 'open to public traffic' it will not, in respect of the Section 38 Works, constitute the road becoming highway maintainable at the public expense. The road will remain private until the Final Certificate of Completion is issued. Similarly, in respect of any Section 278 Works carried out, the works will not be deemed to form part of the highway maintainable at public expense until the issue of the Final Certificate of Completion and Developer will be responsible for all maintenance activities such as cleansing, grass mowing, etc.

Defects and Notice to Surety

SMBC may without prejudice to any other rights, claim or seek remedy under the Section 38/278 Agreement:

- In respect of an Agreement supported by a Bond or Surety, send to the Surety a Notice in writing ("Default Notice") specifying the works required to be carried out, containing an estimate by SMBC of the cost of carrying out the outstanding works and of the cost of administration, supervision, execution, completion and maintenance of the works for a period of 12 months prior to the road(s) becoming a highway maintainable at the public expense, or in the case of existing highway forming part of highway maintainable at the public expense.
- In the case of the financial security being in the form of a cash deposit lodged with SMBC, send to the Developer notice in writing ("Default Notice") specifying the work to be carried out, containing an estimate by SMBC of the cost of carrying out the outstanding works and of the cost of administration, supervision, execution, completion and maintenance of the works for a period of 12 months prior to the road(s) becoming a highway maintainable at the public expense, or in the case of existing highway forming part of highway maintainable at the public expense, and without further notice to the Developer apply the sum held upon deposit in the execution of carrying out the defective works.

Final Certificate

At the end of the 12 month Maintenance Period the Developer must request in writing the Final Certificate from SMBC. Prior to adoption, the Developer will be required to submit a copy of the completed Health and Safety File in accordance with the Construction, Design and Management 2015 Regulations.

The inspection process for the issuing of the Final Certificate will follow the process outlined above for the issue of the Part 1 & 2 Certificates. If SMBC is satisfied that all works identified have been carried out in accordance with the Section 38/278 Agreement and SMBC's specification or as otherwise directed by SMBC, the Final Certificate will be issued.

The issuing of the Final Certificate is notification to the Developer of adoption of the Section 38/278 Works by SMBC. Any roads open to public traffic forming part of the Section 38/278 Works will be highway(s) maintainable at the public expense. The Bond or deposit provided in support of the Agreement may now be cancelled / refunded.

Should the Developer not have carried out the defective works, (if any), nor requested the Final Certificate within 12 months of the date of issue of the Part 2 Certificate, SMBC may apply the remedies set out in the section entitled 'Defects and Notice to Surety' above.

6.2 S278 Works

The Certificate of Substantial Completion

The Certificate of Substantial Completion must be formally requested in writing by the Developer from SMBC. The Certificate will be issued once the Section 278 Works have been completed (with the exception of minor defects) in accordance with the approved drawings and on completion of the Stage 3 Road Safety Audit, and resolution of any remedial items identified in the Audit and agreed by SMBC to be required for reasons of road safety.

Following a request for the Certificate of Substantial Completion the site inspection process will be as follows:

- i. As soon as is reasonably practicable a joint inspection of the Section 278 works will be undertaken by SMBC and the Developer. SMBC will either issue the Certificate of Substantial Completion and supply a Defects List (if applicable) to the Developer, or confirm a list of outstanding items required to be completed.
- ii. The Developer shall within 12 months from the agreed date of Substantial Completion (or such earlier period of time as notified in writing by SMBC) referred to as the Defects Correction Period complete the works as identified on the Defects List.
- iii. When SMBC is satisfied all works identified have been carried out in accordance with the Section 278 Agreement and to SMBC's specification or as otherwise directed by SMBC, the Certificate of Substantial Completion will be issued. The issue of the Certificate of Substantial Completion will commence the 12 month Defects Correction Period. The Bond supporting the Agreement will then be reduced. The Developer will remain fully responsible for maintaining the works until the Final Certificate of Completion.

Note:

The issue of the Certificate of Substantial Completion will constitute the road being 'first open to public traffic' for the purposes of Section 1(9) of the Land Compensation Act 1973. The Section 278 Agreement will make provision for the Developer to indemnify SMBC from any claims relating to the works including those made under the Land Compensation Act 1973.

Even though the road is 'open to public traffic', in respect of the Section 278 Works carried out, the works will not be deemed to form part of the highway maintainable at public expense until the issue of the Final Certificate of Completion. The developer will carry out the following maintenance activities.

- Sweeping/cleaning/litter picking
- Grass cutting
- Gully emptying
- Street lighting
- Landscape maintenance

Defects and Notice to Surety

If the defect works as set out in the Defects List have not been completed, SMBC will seek/consider legal advice to ensure the works are completed. SMBC may without prejudice to any other rights, claim or seek remedy under the Section 278 Agreement:

- In respect of an Agreement supported by a Bond or Surety, send to the Surety a Notice in writing ("Default Notice") specifying the works required to be carried out, containing an estimate by SMBC of the cost of carrying out the outstanding works and of the cost of administration, supervision, execution, completion and maintenance of the works for a period of 12 months prior to the road(s) becoming a highway maintainable at the public expense, or in the case of existing highway forming part of highway maintainable at the public expense.
- In the case of the financial security being in the form of a cash deposit lodged with SMBC, send to the Developer notice in writing ("Default Notice") specifying the work to be carried out, containing an estimate by SMBC of the cost of carrying out the outstanding works and of the cost of administration, supervision, execution, completion and maintenance of the works for a period of 12 months prior to the road(s) becoming a highway maintainable at the public expense, or in the case of existing highway forming part of highway maintainable at the public expense, and without further notice to the Developer apply the sum held upon deposit in the execution of carrying out the defective works.

Certificate of Final Completion

At the end of the 12 month Defects Correction Period the Developer must request in writing the Final Certificate from SMBC. Prior to handover/adoption, the Developer will be required to submit a copy of the completed Health and Safety File in accordance with the Construction, Design and Management 2015 Regulations.

The inspection process for the issuing of the Final Certificate will follow the process outlined above for the issue of the Certificate of Substantial Completion. If SMBC is satisfied that all works identified have been carried out in accordance with the Section 278 Agreement and SMBC's specification or as otherwise directed by SMBC, the Certificate of Final Completion will be issued.

The issuing of the Certificate of Final Completion is notification to the Developer of adoption of the Section 278 Works by SMBC. Any roads open to public traffic forming part of the Section 278 Works will be highway(s) maintainable at the public expense. The Bond or deposit provided in support of the Agreement may now be cancelled / refunded.

Should the Developer not have carried out the defective works, (if any), nor requested the Final Certificate within 12 months of the date of issue of the

Certificate of Substantial Completion, SMBC may apply the remedies set out in the section entitled 'Defects and Notice to Surety' above.

7.0 HEALTH & SAFETY/ROAD SAFETY AUDITS AND QUALITY AUDITS

7.1 Road Safety Audits and Quality Audits

Road Safety Audits or Road Safety Reviews in accordance with DfT standard HD 19/03 and or SMBC's Road Safety Audit policy will be required on all developments that require alterations to the existing public highway. SMBC's road safety officers will confirm if Road Safety Audits are required for other developments. SMBC's road safety officers will also decide if Vulnerable Road Users Audits are required for any particular site.

The developer will be responsible for arranging and submitting Road Safety Audits and / or Quality Audits in line with Solihull Council's Road Safety Assessment Policy and Procedure (a copy of which is available on the SMBC website). This will include submission of Audit reports along with the designer comments, for review and response. Prior to the issue of the Part 2 Certificate (Section 38 Agreements) / Substantial Completion (Section 278 Works), the developer will be responsible for submitting a Stage 3 Road Safety Audit, for review and response, prior to the final adoption.

Note:

The Developer should refer to SMBC's Road Safety Audit policy for the requirements for Quality Audits.

Attention is drawn to the timing of these audits and their likely duration that may have programme implications for the development.

The Developer shall obtain SMBC approval of the Audit Team in advance of the Audit.

7.2 Departures from Standards

Where necessary, the Developer shall provide Proposed Departure from Standards Applications. Each Application shall state:

- The design standards to which the Departure(s) relate(s);
- The precise details of the Departure(s); and
- The justification for the Departure.

The Application shall be in the form of a report containing all of the information needed to assess it.

7.3 The Construction (Design and Management) Regulations 2015

Before works start, the Developer must provide written proof that they have informed the Health and Safety Executive in writing that they are appointed client for the works for the purposes of the Construction, Design and Management 2015 Regulations (CDM Regulations). SMBC will not sign the Agreement until the Developer has provided this proof.

(Note: As defined in the CDM Regulations, client means any person for whom a project is carried out. As client for the works, the Developer will be responsible for meeting the Regulations and making sure that the works are designed and constructed in line with the Regulations).

Prior to Final Completion and adoption, the Developer will be required to submit a copy of the completed Health and Safety File in accordance with the Construction, Design and Management 2015 Regulations.

APPENDICES

APPENDIX A	Typical Design Standards
APPENDIX B	Site Construction Details
APPENDIX C	Submission for Technical Approval - Drawings/Information Checklist
APPENDIX D	Information to be shown on drawings
APPENDIX E	Flowchart showing Section 38/278 process
APPENDIX F	Document revision sheet

APPENDIX A

TYPICAL DESIGN STANDARDS

Item	Requirements
Min. number of properties on road to be considered for adoption	Roads serving less than 10 properties will not be considered for adoption.
Shared private drives	Normally limited to 9 properties.
Topographical Surveys	<p>Co-ordinates shall be to the National Grid, levels shall be relative to Ordnance Survey datum and digital data shall be made available in both GENIO and 3D AutoCAD format.</p> <p>The presentation of survey data shall include the position of survey stations, each of which shall be labelled and annotated to show the corresponding coordinate (easting and northing), level information and radii of curves.</p>
Service strips	2m within highway
Carriageway Layouts and Alignments	<p>The presentation of horizontal alignments (in plan) shall include appropriate feature labels, chainage points and corresponding annotation. The design alignment data for each chainage point on a particular feature shall include coordinates, level information, bearing information and horizontal radius information.</p> <p>Vertical alignments shall be presented in longitudinal section format and shall be accompanied by tabulated data showing chainages, levels, longitudinal gradients, super-elevations, vertical curvature (including K values) and corresponding horizontal curvature. The tabulated data shall demonstrate that geometric standards have been achieved.</p> <p>Both the horizontal and vertical alignments shall be presented so as to demonstrate that the stopping sight distances and any other visibility criteria have been achieved.</p> <p>Carriageway areas shall be presented with annotated contours superimposed upon them to show the position of any unavoidable flat or low areas/spots and demonstrate that there are no irregular carriageway profiles or shapes.</p>
Carriageway Gradients (Longitudinal)	<p>Normal Max 1:15 (6.7%) Normal Min 1:150 (0.67%)</p> <p>Gradients exceeding the maximum values will only be permitted in short lengths.</p>
Carriageway	

Item	Requirements
Gradients (Crossfall)	Generally 1:40
Footway widths/Layout	Generally 1:40
Footway Gradients (crossfall)	1:40 towards carriageway
Footway Gradients (Longitudinal)	Max 1:12
Private drives and accesses	<p>On drives which slope down towards an adoptable road, an adequate means of intercepting surface water must be provided to prevent run-off onto adoptable highway.</p> <p>Longitudinal gradient - Max 1:12</p>
Highway Drainage	<p>All drainage features should conform to the latest editions of the CIRIA SuDS Manual or Sewers for Adoption, but we ask that they mimic natural processes as much as possible. Further details can be found in Solihull's SuDS design guide, which is available at http://www.solihull.gov.uk/flood</p> <p>Swales should be the first choice for receiving highway water and conveying all surface water through a site. As such, we prefer gully free highways that run off directly to a swale or through kerb drainage. Where an existing ditch network is present then that must be preserved and enhanced and utilised where it has the appropriate capacity.</p> <p>Where a net increase in road surface area is proposed, then discharge rates from the proposed system must be limited to the equivalent Greenfield run off rate, with the use of above ground surface water attenuation features wherever possible. Our preference is for such features to be permanently wet in nature, so as to provide additional biodiversity benefit.</p> <p>Where headwalls are proposed, then our preference is for the design to take into account and be sympathetic of the surrounding area, e.g. through the use of materials that allow vegetation growth.</p> <p>Unfortunately, Solihull predominantly has clay soils that are unsuitable for infiltration. Therefore when a soakaway is proposed we will require that full soakage tests are carried out to the method described in BRE Digest 365. Note that extrapolated infiltration rates will not be accepted.</p> <p>We ask that schemes provide a maintenance plan that shows what operations will be required to maintain the asset. For those schemes</p>

Item	Requirements												
	<p>that include SuDS features, it is recommended that these plans are based on Chapter 32 of the CIRIA SuDS Manual 2015 and they should be clear about which operations are required and which party or parties are to be responsible for them. Where SMBC are to adopt assets, commuted sums will be payable and are calculated on a bespoke basis based on the maintenance requirements for the SuDS features.</p> <p>Where it is necessary to provide a piped network then the following points should be noted:</p> <p>I. The use of inspection chambers and manholes and the impact of their location within the highway must be minimised. Access for any routine cyclical maintenance or repair work must be maintained whilst minimising disruption to road users.</p> <p>II. Equally, carriageway crossings should be minimised and any crossing shall be on the line of the shortest practical route.</p> <ul style="list-style-type: none"> • To enable routine maintenance, no drain-run between chambers or between a rodding eye and a chamber shall exceed 90m. Filter drains or combined filter and surface water drains shall not be situated beneath paved areas such as footways, cycleways or accesses. Catchpit chambers must always be situated at the downstream end of a filter drain run, where the continuation of the drain is a surface water drain run. Rodding eyes shall be situated at the head of all drainage systems • Pipe, bedding, backfill and trench specification details shall be in accordance with WCC HCDs F701.1, F702.1 and F702.2 (as appropriate). • Chambers for highway drains shall be catchpits (Type 71 or 73, as appropriate, in accordance with WCC HCDs F703.1 and F703.2 unless otherwise agreed with SMBC. Pipes at catchpit locations shall be designed with level soffits. <p>Chamber diameters shall be as follows:</p> <table border="0"> <thead> <tr> <th>Diameter of largest pipe connected (mm)</th> <th>Chamber section diameter (mm)</th> </tr> </thead> <tbody> <tr> <td>150 -225</td> <td>1050</td> </tr> <tr> <td>300 1200</td> <td></td> </tr> <tr> <td>375 – 450</td> <td>1350</td> </tr> <tr> <td>500 – 700</td> <td>1500</td> </tr> <tr> <td>750 - 900</td> <td>1800</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Gully spacing or alternative run-off collection methods shall be determined or designed in accordance with industry procedures and incorporate industry standard methods which have been approved in advance by SMBC. • Gullies shall be in accordance with WCC HCD F704.1 • Written confirmation and supporting documentation shall be supplied to demonstrate that any necessary third party authority (sewer authority, lead local flood authority, Environment Agency etc.) approvals are in place. These will be required for connection to existing Public Sewers and discharging into watercourses etc. • Design submissions shall include calculations, computer inputs 	Diameter of largest pipe connected (mm)	Chamber section diameter (mm)	150 -225	1050	300 1200		375 – 450	1350	500 – 700	1500	750 - 900	1800
Diameter of largest pipe connected (mm)	Chamber section diameter (mm)												
150 -225	1050												
300 1200													
375 – 450	1350												
500 – 700	1500												
750 - 900	1800												

Item	Requirements
	<p>and outputs (as necessary), diagrams, and shall show the locations, types, sizes, gradients etc. of all pipes, chambers, gullies, rodding eyes and any other proposed drainage infrastructure.</p> <ul style="list-style-type: none"> • Pipe Group details for Specification for Highway Works (SHW) Numbered Appendix 5/1 shall be presented in the format shown in Annex 1 to WCC's HCDs (Volume 1).
Earthworks	<ul style="list-style-type: none"> • Cross sections shall comply with WCC HCDs A701.1 and A701.2 (as appropriate) and shall incorporate the requirements of WCC HCDs B701.1 and B701.2 (as appropriate). • Cutting and embankment slope gradients shall be suitable for the soils or materials encountered or involved (note that acceptable general fill materials are Specification for Highway Works (SHW) material Classes 1A, 2A or 2B).
Road Pavements	<ul style="list-style-type: none"> • Pavements shall be designed in accordance with WCC Highway Construction details. • Where areas of existing carriageway are to be overlaid or where existing layers are to be planed out and replaced the design shall comply with the requirements for construction joints and regulating courses set out in WCC HCDs B705.1 and B705.2. • Where lengths of existing carriageway are to be 'strip-widened', new surface course will be required over the full width of carriageway.
Footways and Paved Areas (Including Cycleways)	<ul style="list-style-type: none"> • Footway and cycleway construction shall be specified in accordance with WCC HCD B704.1 and B704.5, taking into account the likely level of vehicle trafficking. • Access construction shall be specified in accordance with WCC HCD B704.2, taking into account the intended use of the access.
Traffic Signs and Road Markings	<ul style="list-style-type: none"> • Information shall be supplied in a format suitable for inclusion in SHW Numbered Appendices 12/1 and 12/3 and 14/5. Appendix 14/5 shall include details of the electrical connections and disconnections for illuminated traffic signs and shall identify the organisation, which will be responsible for undertaking this work.
Traffic Signals and Controlled Crossings	<ul style="list-style-type: none"> • Information shall be supplied in a format suitable for inclusion in SHW Numbered Appendices 12/1 and 12/3 and 14/5. Appendix 14/5 shall include details of the electrical connections and disconnections for illuminated traffic signs and shall identify the organisation, which will be responsible for undertaking this work.
Structures	<p>SMBC, as Highway Authority is responsible for the approval of all structures which are constructed on, over, under or adjacent to all public highways, with the exception of motorways and trunk roads. In these cases approval is given by Highways England.</p> <p>Approval is required for all types of structure including bridges, culverts, retaining walls, gantries, support structures for pipes and conveyors, scaffolding, buildings which overhang the highway and temporary structures. Approval extends to all highway structures whether they remain in private ownership or are adopted and subsequently maintained by SMBC.</p> <p>All structures which support, form part of or affect the public highway will require Technical approval and require Approval in Principle. Highway structures are defined as those of a clear span or internal diameter</p>

Item	Requirements
	<p>greater than 0.9 metres, and retaining walls with over 1.0 metres of retained height.</p> <p>Developers are advised to consult SMBC prior to deciding the form of any structure.</p> <p>One purpose of the technical approval system is to maintain public safety. At the same time SMBC also requires to approve the form of construction and suitability of materials used on structures which are to be adopted and maintained by it. SMBC normally adopts all structures which are a necessary feature of the public highway such as bridges supporting the road, retaining walls supporting the road, sign gantries and drainage culverts.</p> <p>Structures which would not be adopted (but would still be subject to Technical Approval) include private over-bridges and retaining walls supporting adjacent development.</p> <p>Those structures which will not be adopted may need a licence from the Highway Authority in addition to technical approval.</p> <p>All highway structures should be designed and detailed in accordance with the current Department of Transport standards.</p>
Road restraint systems	Details for road restraint systems (where required) shall be presented in accordance with the SHW. Information shall be supplied in a format suitable for inclusion in SHW Numbered Appendices 4/1 and 4/2.
Hedges, boundary fencing and field gates	Hedges, boundary fencing and field gates, shall comply with the details shown on WCC HCDs H701.1, H702.1 and H703.1.
Statutory Bodies, Statutory Undertakers and other Authorities	<ul style="list-style-type: none"> Design proposals shall demonstrate that the relevant Statutory Bodies, Statutory Undertakers and any other authorities have been considered and, where necessary, consulted. The need for service apparatus diversions and any other measures required in accordance with the New Roads and Street Works Act 1991 shall be established. Information shall be supplied in a format suitable for inclusion in SHW Numbered Appendix 1/16.
	<p>The provision of undertakers' mains and plant is an essential part of any development and should be considered at the preliminary design stage. It is of vital importance that Developers have early discussion with the Undertakers to establish their requirements. Detailed advice on providing for utilities in new development can be found in the current National Joint Utilities Group Guidance (NJUG).</p> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p>Note: For further information on the NJUG good practice guide</p> </div>

Item	Requirements
	<div style="border: 1px solid black; padding: 2px;"> <p>please see: http://www.njug.org.uk/good-practice-guidance/</p> </div> <p>Where mains are laid in a highway verge (service strip) which is contiguous with open gardens the verge will form part of the adopted highway; owners and residents may cut the grass but must not introduce planting or paving on these areas.</p> <p>Where mains are laid in a highway verge (service strip) which is contiguous with open gardens the verge will form part of the adopted highway; owners and residents may cut the grass but must not introduce planting or paving on these areas.</p> <p>Particular attention must be paid to the location of inspection covers, boxes, gullies etc., so that they accord with the overall design. Each Statutory Undertaker has special requirements which should be considered in the initial design.</p> <p>For Severn Trent Water meter boxes, manifold covers are specified when serving multiple properties, these ensure that the footways are not left with multiple covers that become difficult to reinstate to meet the Specification for the Reinstatement of Openings in Highways (SROH Code of Practice):</p> <div style="border: 1px solid black; padding: 2px;"> <p>Note: For further information on the SROH Code of Practice please see: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/11042/sroh.pdf</p> </div>
Street Lighting	<p>The Developer is advised to contact SMBC's Street Lighting team at an early stage.</p> <ul style="list-style-type: none"> -The use of energy efficient street lighting equipment such as LED Luminaires- I.E Holophane or Urbis, electronic ballasts and drivers that are capable of adjustment of light levels (dimming) and connected to a Central Management System (CMS) -LED Sign Lights (Simmon Signs or Similar) -LED Base Lit Bollards Simmons Signs "LED Global Base " -Photo Electric Cells should be set at 35 lux for Street lighting and 70 lux for Zebra Crossing. -Where columns are to be erected in shared surfaces, the proposed new columns will require the installation of column protectors (see attached). -Where proposed columns are to be sited on private residential grass areas, we would require a hard standing area of 500mm X 500mm, to

Item	Requirements
	<p>reduce damage to the lamp columns by strimmer and lawnmowers. The hard standing should be constructed of a robust material such as concrete to a suitable depth, or block pavers set on a bed of concrete, to ensure no failures of materials over time.</p> <p>-All installations must be to SMBC Street Lighting specification 2009 or at the approval of the SMBC Street Lighting Dept and submitted at the planning approvals stage.</p> <p>Refer to Design Guide and document:</p> <p>‘Specification for Street Lighting and Illuminated Street Furniture, 2nd Revision August 2009’ also</p> <ul style="list-style-type: none"> • Zebra Crossing Specification • Christmas Lights Sockets and Timer Specification • SMBC ducting Specification • Column Protectors
Traffic Signals	<p>The Manual of Contract Documents for Highway Works Vol 1 - Appendix 12/5 document. TR2500 traffic signal specification and MCH 1827B form 1:500 drawing (minimum)</p>
Landscaping	<p>All hard and soft landscape works shall be carried out in accordance with the approved details. The works shall be carried out prior to the occupation of any part of the development or in accordance with a programme agreed in writing with the Local Planning Authority. If within a period of 5 years from the date of planting of any tree, that tree or any tree planted in replacement for it, is removed, uprooted, destroyed, dies or becomes seriously damaged or defective, another tree of the same species and size as that originally planted shall be planted at the same place within the next planting season (October-March), unless the Local Planning Authority gives its written consent to any variation.</p>
Verges which abut Private Gardens	<p>Verges which abut private gardens and which the Highway Authority agrees to adopt will require special attention to ensure that the rights of the Highway Authority and Statutory Undertakers are fully understood by the purchaser of adjacent property. The limits of this verge must be indicated by markers such as sets or bricks in private drives and at boundaries between individual dwellings. The Developer must ensure that purchasers are made aware of any trees, shrubs, walls and boundaries between individual dwellings. Also, the Developer must ensure that purchasers are made aware that trees, shrubs, walls and fences must not be placed on the verge.</p>
Provisions for pedestrians and cyclists	<p>SMBC Pedestrian Route Assessment Guidelines - Walked Routes to Schools</p>
Public Rights of Way	<p>SMBC Right of Way Improvement Plan 2016-2026.</p>

Item	Requirements
Access for deliveries and refuse collection vehicles	<p>Every dwelling on a new development must be capable of being serviced by refuse collection, furniture and other domestic delivery vehicles.</p> <p>Refer to guidance document:</p> <p>'Design guide on refuse storage and presentation for new residential properties in Solihull'</p>
Highway Licences	Skip points, hoarding points, S171, S184, canopy / overhanging structure
Considerate Contractor Scheme	Developers and the contractors they engage for the construction of roads and other transport facilities for new developments will be expected to be familiar with the national Considerate Contractors Scheme and also familiarise themselves with SMBC's Considerate Contractors Scheme and ensure they fully comply with its recommendations or requirements.

OTHER CONTACTS

Organisation	Telephone Number
<p>Transport For West Midlands</p> <p><u>Guidance for Utility Companies</u> If you wish to suspend a bus stop or shelter temporarily so that works can be carried out, please ensure that Centro are informed beforehand.</p>	0121 214 7325

APPENDIX B

SITE CONSTRUCTION DETAILS

Item	Requirements
Noise During Construction	Noise from construction and associated works has the potential to cause disturbance to neighbouring residents. In order to minimise this, this Authority would normally recommend that any works should only be carried out between the hours of 8.00 am to 6.00 pm on Mondays to Fridays and 8.00 am to 1.00 pm on Saturdays; there should be no noisy works carried out on Sundays or Bank Holidays. Best practicable means to prevent noise from the site should also be employed as defined in British Standard BS 5228 Part 1: 1984 (1). Failure to keep these hours or to employ best practicable means to control noise could lead to the service of an enforcement notice under Section 60 of the Control of Pollution Act 1974. We would encourage applications for prior consent under Section 61 of the Act, particularly where the construction and/or demolition phases(s) may be prolonged or if work may be undertaken beyond the aforementioned hours. Please contact the Contact Centre (0121 704 8000) for further details.
Setting-Out:	The setting-out of the development may be checked by SMBC's representative. However, any checks carried out by SMBC do not relieve the Developer of his responsibility to ensure the correctness of his setting-out.
Materials Delivery checks and Controls	The level of checks to be carried out for the particular developments shall be established at the Pre-start meeting.
Materials/Soil Testing:	All recycled materials used shall be covered by a compliance/grading certificate (not more than 1 month old). CBR tests will be carried on the proposed formation to determine if capping material is required. CBR tests will be carried out on drainage trenches to check that correct compaction has been achieved.
Drainage:	<p>Drainage backfill material will be inspected and test certificates will be required for inspection.</p> <p>A Vesting certificate from Severn Trent Water will be required before adoption of the development takes place.</p> <p>The positioning of service covers within the footway shall be agreed with SMBC's site representative.</p>
Road pavements:	Road pavements to comply with Manual of Contract Documents for Highway Works.

Item	Requirements
	<p>The temperature of bituminous materials will be checked on site prior to laying.</p> <p>Dips of the pavement layers shall be carried out with SMBC's site representative.</p> <p>The surface tolerances of the pavement layers shall be in accordance with the Manual of Contract Documents for Highway Works.</p> <p>During winter working, base and binder course material will not be permitted to be laid in freezing temperatures or on snow. Surface course will not be permitted to be laid until temperatures reach +5 on a rising thermometer.</p>
Kerbs:	Kerbs will be checked for line, level and damage.
Structures:	Retaining walls adjacent to highways shall be covered by Approval In Principle documentation and submitted to SMBC Structures section for approval.
Traffic Signs:	Traffic signs to be in accordance with SMBC colour specification. The position of all signs shall be agreed with SMBC's site representative.
Street Lighting:	Developers are advised to liaise with SMBC Street Lighting section. All electrical certificates to be provided prior to the development being placed onto maintenance.
Landscaping:	Verges and Public Open Space areas will be subject to a final inspection by SMBC's Landscape Officers prior to adoption of the development.
Prior to final surfacing being laid	<p>A site meeting will be held with a representative from SMBC, the Developer and their appointed Contractor to identify and correct any defects prior to final surfacing. In addition the Developer should sweep and weed kill the binder layer and provide the following:</p> <ul style="list-style-type: none"> • Electrical certificates (if not already supplied). • Confirmation that Severn Trent have inspected and approved all the drainage works.
Prior to placing development onto maintenance	<p>A site meeting will be held with a representative from SMBC and the Developer, the site will be inspected and a list (if necessary) of remedial works agreed, this list will be formally issued to the Developer by SMBC. Before this meeting takes place the Developer should ensure that the following has been carried out:</p> <ul style="list-style-type: none"> • All gullies are clean and their connections free from debris. • Repair/replace any damaged kerbs (if in doubt replace) and agree method of sealing joints, and size/extent of any carriageway reinstatement required. • Clean all ironwork of surfacing materials. • Check all works against agreed drawings. <p>When all the works identified on the remedial list have been carried out the Developer may formally apply for the development to be placed onto</p>

Item	Requirements
	<p>maintenance. SMBC will inspect the development to ensure that all works have been carried out as agreed. If all the agreed works have been carried out, SMBC will issue a letter to the Developer informing that the development has been placed onto maintenance. If the works have not carried out to SMBC's requirements/satisfaction, or if there are still outstanding items from the remedial list, the Developer will be informed and the above process repeated.</p>

Item	Requirements
<p>At the end of the Maintenance Period</p>	<p>A site inspection will be held with a representative from SMBC and the Developer and they will either agree to commence the final adoption process or agree a list of remedial works required to bring the development up to adoptable standard. Before this meeting takes place the Developer should ensure that the following has been carried out:</p> <ul style="list-style-type: none"> • Carriageway has been swept • Gullies have been emptied • Any reinstatements have been repaired in accordance with the Manual of Contract Documents for Highway Works • White lines have been laid • Street nameplates are in place • All street furniture is the correct colour in accordance with SMBC's specification • Provided written confirmation to SMBC that sewers have been adopted by Severn Trent Water • Stage 3 Road Safety Audit with all issues (if any) resolved <p>Providing all the above have been carried out and there are no further remedial issues to resolve, the development will be proposed for adoption and the final adoption process will commence.</p>

APPENDIX C

SUBMISSION FOR TECHNICAL APPROVAL - DRAWING / INFORMATION CHECKLIST

This list is intended to enable Developers to check that all aspects of the design have been included and/or are adequate for submission to SMBC. However, it must be noted that this list is not necessarily comprehensive and that additions/omissions may be appropriate and requested for each development.

	Application/Submission for Technical Approval
	<p>An application is made for Technical Approval for a new road(s) or for work on the existing highway to be constructed in accordance with SMBC Materials / Design Specifications and “Manual for Streets” to be considered for adoption as a road maintainable at public expense. The application should include:</p> <ul style="list-style-type: none"> • Covering letter indicating that the Developer wants to enter into a Section 38/278 Agreement • Proof of ownership of the land (S38 works). A copy of the conveyance, or up-to-date copy entries and filed plan if the plan is registered at HM Land Registry • Land dedication plan (if applicable (S278/38)) • Completed application form • Application fee • A copy of the planning permission • Stage 1 and 2 safety audit or quality audit as agreed with SMBC. • complete and compliant set of drawings (in electronic pdf format as listed below): <ul style="list-style-type: none"> • 1:2500 or 1:1250 scale A4 location plan showing the planning application site boundary edged red; • General Engineering Arrangement/Layout Plans (minimum scale 1:500), including details of service routes, tree and lighting locations. • Cross sections and longitudinal sections of the proposed road. <ul style="list-style-type: none"> a) longitudinal section on the centre line of each road showing: <ul style="list-style-type: none"> - existing ground levels and proposed centre line and channel levels at a maximum of 20m intervals related wherever possible to Ordnance Datum or otherwise to an identified datum - the section should also show distance in figures from the point of origin, - gradients of the proposed road, length and radius of vertical curves - and invert levels of manholes;

	<ul style="list-style-type: none">- proposed pipe sizes and gradients between manholes. - Suitable scales are 1/500 horizontal and 1/100 vertical b) cross-sections should be provided where necessary at appropriate intervals to a natural scale of 1/100 showing:<ul style="list-style-type: none">- existing and proposed levels; these should show crossfalls of carriageways and footways and cutting and embankment levels and slopes, - together with any retaining walls adjacent to the proposed highway; whether or not they are part of the adopted highway; - kerb and pavement construction details should be shown on a typical cross-section • Complete construction details • Highway drainage plans and details (minimum scale 1:500) • Street Lighting Specification/Column Locations/Illumination Calculations (Standard specification available on SMBC website. All non-standard apparatus to be referred to SMBC's Lighting Engineer for approval) • Details of landscaping including species and tree pits / planting details. • A3 Adoption/Legal Plan • Stopping Up Order Plan • AutoTRACKing details. • Surfacing Drawing. • Section 104 Adoptable Drainage Details.
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APPENDIX D

INFORMATION TO BE SHOWN ON DRAWINGS

General Note:

- Please make sure that information on drawings is legible
- The extent of the development site boundary should be shown on all relevant drawings.
- Include north point on all relevant drawings.
- Housing/ building information should be shown in grey scale, i.e. made less prominent on drawings.
- Show current and proposed highway boundary.

Drawing	Information to be included
Location Plan	Planning application site boundary edged red
S38/S278 Legal Plan	<ul style="list-style-type: none"> • All assets proposed for adoption should be shown on key. • The full extent of the S38/S278 areas must be shown. • Include (if known) name of existing/proposed road(s)
Stopping-Up Order Plan	Include key showing proposal
Site Clearance	Include items for removal.
General Arrangement Plan	<ul style="list-style-type: none"> • Extent of scheme with key dimensions, ie, road/footway widths • Landscape proposal • Street Lighting proposal • Surface finishes • Vehicle/pedestrian crossovers
General Engineering Layout	<ul style="list-style-type: none"> • Chainages at maximum 20m intervals • Highway features, i.e. traffic calming measures, tactile paving, etc • Proposed and existing levels (clearly differentiated) • Drainage – proposed and existing • Street Lighting - proposed and existing • Landscape detail • Existing and proposed services • Visibility splays
Surfacing and Kerbing Plan	<ul style="list-style-type: none"> • Detail of surface finishes (including colour) • Detail of kerbing (i.e. type HB2, BN etc) • Location of vehicle/pedestrian crossovers • Location, type and colour of tactile paving

Drawing	Information to be included
	<ul style="list-style-type: none"> • Highlight shared areas • Location and form/type of traffic calming features
Existing and Proposed Services	Include key showing proposal
Traffic Signs, Roadmarkings and Street Furniture	<ul style="list-style-type: none"> • TSRGD Diagram numbers and markings (dimensions, traffic signs schedule, post size, mounting height, planting depth etc) • Highway features, i.e. traffic calming measures • Street name plates • Street furniture items and type, i.e. bollards, bins, seats etc
Drainage	<ul style="list-style-type: none"> • Highlight drainage proposed for adoption (SUDS is preferred) • Show existing and proposed detail in plan and in cross section <ul style="list-style-type: none"> • Include invert and cover levels <ul style="list-style-type: none"> • Drainage Outfall Consent - wayleave from landowner • Drainage Outfall Consent - from NRA • S104 Details
Cross Sections	<ul style="list-style-type: none"> • Existing and proposed levels • Ensure sections should correspond with chainages shown on plan. • Gradients
Longitudinal Sections	<ul style="list-style-type: none"> • Chainages • Existing and proposed levels • Gradients
Construction Details	Include all relevant standard details
Street Lighting	<ul style="list-style-type: none"> • Location and detail of proposed and existing columns • State if power supply will be by Independent Distribution Network Operator (IDNO) <p>If the street lighting design has not been carried out by SMBC. The full design must be included in the submission for Technical Approval.</p>
AutoTracking Plan	<p>Movement of Refuse Vehicle (current largest refuse vehicle should be used)</p> <p>Movement of buses on bus routes</p>

Drawing	Information to be included
Traffic Management	<ul style="list-style-type: none"> • Construction phasing • Construction Access • Site compound, storage, welfare facilities etc <p>Detailed traffic management plan for each phase of the works to be provided in advance of construction works starting.</p>
Haul Routes	Details of construction traffic routes to the site to be provided for each phase of the works.
Traffic Signals and Controlled Crossing	<p>This drawing (or set) should identify the layout of traffic signal and controlled crossing facilities. The detail should include:</p> <ul style="list-style-type: none"> • the locations and types of signal controllers; • the locations of traffic signal poles and signal heads, pedestrian aspects, push-button units, on-crossing detectors, kerbside detectors, microwave vehicle detectors, detection loops and any other equipment necessary for the operation of the facility or facilities; • all road markings within and around the facility or facilities and the referenced positions of all traffic signs (including bollards) within and around the facility or facilities. Road marking and traffic sign reference details should match those shown on the Traffic Signs and Road Markings drawing(s); • ducting layouts, sockets, footing/foundation details for equipment, access chambers, crossing-specific kerbing arrangements and tactile paving; and • all pedestrian guard railing within and around the facility or facilities. This should match the information shown on the Fencing and Road Restraint Systems drawing(s).
Miscellaneous	<p>This drawing (or set) should identify all works which are not covered by the other drawing titles listed. Items to consider include but are not limited to:</p> <ul style="list-style-type: none"> • work for Statutory Undertakers (to enable service diversions and the like); and • accommodation works.
Other documents to be provided	<ul style="list-style-type: none"> • A copy of the Planning Permission for the associated development, including the details of any conditions; • Details of any tree preservation orders for trees affected by the Section 278 or S38 works; • Where relevant, a copy of any plans or drawings to be included in the Section 278 or S38 Agreement (other than Land Dedication); • A copy of the notice (Form F10) sent to the Health and Safety Executive.

Summary of information to be shown for each highway feature

LEGAL PLAN	
Highway Feature	Colour Code
Boundary of Developer's Ownership	Red outline
Land to be dedicated as highway	Yellow
Section 38 areas	Pink
Section 278 areas	Light blue
Landscape/grass areas/verges	Hatched Green over pink or blue areas
Highway drainage	Dark Blue
Street lighting	Red dot
Highway easement for future maintenance	Hatched orange over pink or blue areas
Public open space and amenity areas	Green
Road signs/road nameplates	Blue

CARRIAGEWAY	
Show in plan the following:	Show in section the following:
Width	Gradient
Horizontal Alignment	Cross sections (with gradients)
Crossfall/Gradients/Camber	Vertical Alignment (with gradients)
Junction Layout	Construction depth/details
Junction Radius	Kerb Detail
Junction Visibility	Ramp Detail
Forward Visibility	Speed Restriction Detail
Visibility Splay	Visibility Splay - Height/ Means of Retention (rear of splay)
Traffic Calming Measures – spacings etc	Existing and proposed levels
Street Lighting	
Landscape Details	
Gullies	
Kerb details	
Ramp Detail	
Service Routes	
Traffic Signs	
Existing and proposed levels	
Auto Tracking	
Surface Finishes	

FOOTWAYS/FOOTPATHS	
Show in plan the following:	Show in section the following:
Width	Cross sections (with gradients)
Horizontal Alignment	Vertical Alignment (with gradients)
Pedestrian Crossings	Construction depth/details
Pedestrian Barriers	Edging
Vehicle Crossings	Vehicle Crossing Construction
Service Routes	Pedestrian Barrier Detail
Street Lighting	Gullies
Landscape Details	Cutting Slope
Bollards	Embankment Slope
Gullies	Retaining Wall
Cutting Slope	Existing and proposed levels
Crossfall/Gradients/Camber	
Embankment Slope	
Retaining Wall	
Kerbing	
Edging	
Traffic Signs	
Existing and proposed levels	
Surface Finishes	
Street name plates	

MAINTENANCE/SERVICE MARGINS	
Show in plan the following:	Show in section the following:
Width	Cross sections (with gradients)
Pedestrian Crossings	Vertical Alignment (with gradients)
Vehicle Crossings	Construction depth/details
Service Routes	Edging
Boundary Demarcation	Vehicle Crossing Construction
Existing and proposed levels	Pedestrian Barrier Detail
	Existing and proposed levels

DRAINAGE	
Show in plan the following:	Show in section the following:
Surface Water Outfall	Surface Water Manholes
Surface Water Route	Surface Water Outfall
Surface Water Manholes	Surface Water Pipe/Gully Detail
Gully Connections	Foul Water Pipe/Gully Detail
Foul Water Route	Foul Water Manholes
Foul Water Manhole	Foul Water Outfall

Foul Water Outfall	Trench Bedding/Backfill
Existing and proposed levels	Depth of Cover
	Existing and proposed levels

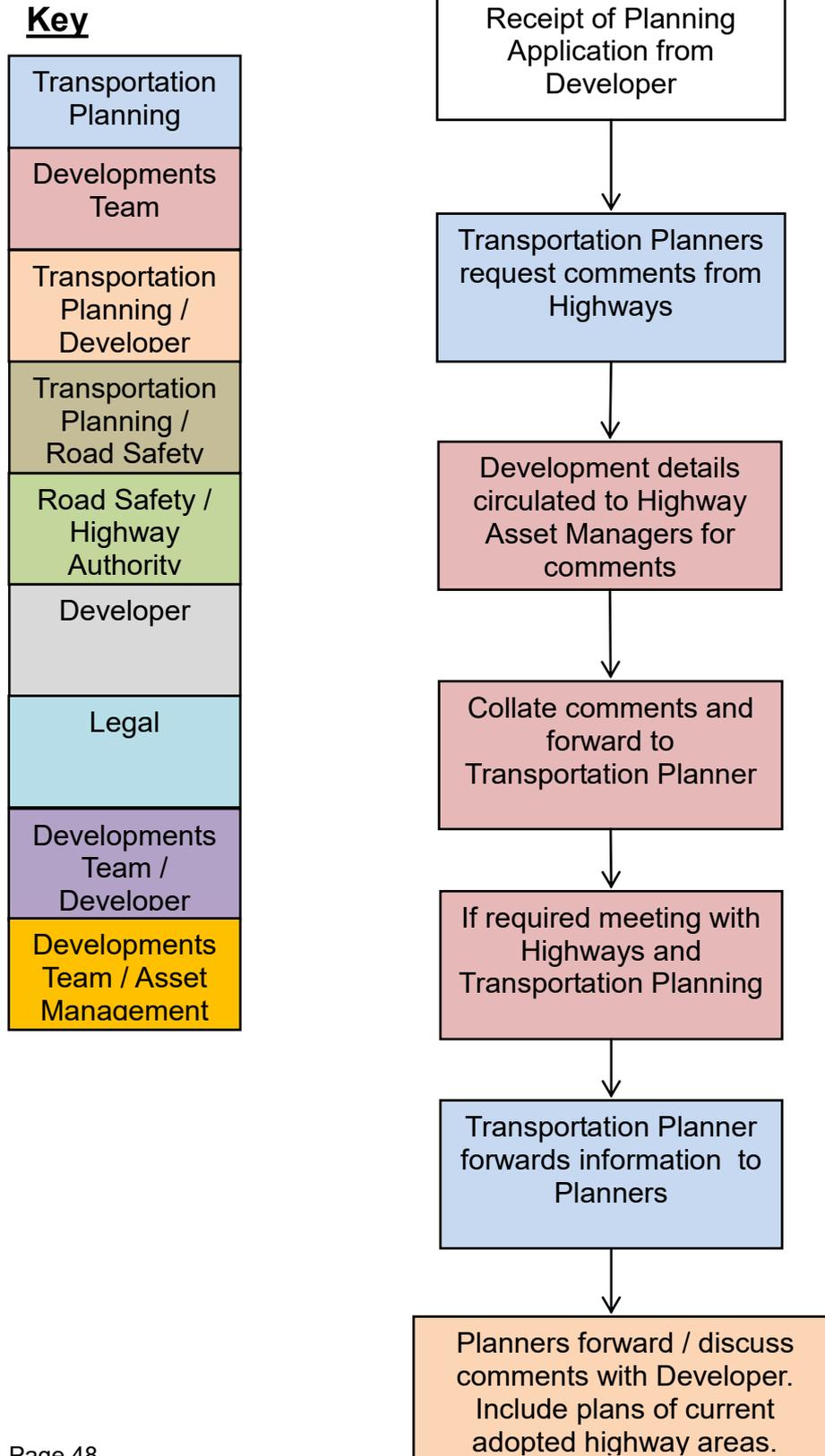
HIGHWAY BOUNDARY	
Show in plan the following:	Show in section the following:
Retaining Walls	Cutting Slopes
Boundary Fence/Wall	Embankments Slopes
Embankment	Retaining Walls
Cutting	Wall/Fence/Bank Details
Highway Overhang	Existing and proposed levels
Existing and proposed levels	

OFF STREET FACILITIES (ADJACENT TO PROPOSED HIGHWAY)	
Show in plan the following:	Show in section the following:
Dimension of parking spaces	Proximity of Parking Spaces
Proximity of Parking Spaces	Drive Construction
Alignment	Parking Space Gradient
Garage Set-Back	Parking Space Construction
Drainage (Communal storage tanks in private gardens/areas are discouraged)	Drainage Details (Communal storage tanks in private gardens/areas are discouraged)
Vehicle Turning	Existing and proposed levels
Pedestrian Visibility	
Vehicle Visibility	
Existing and proposed levels	

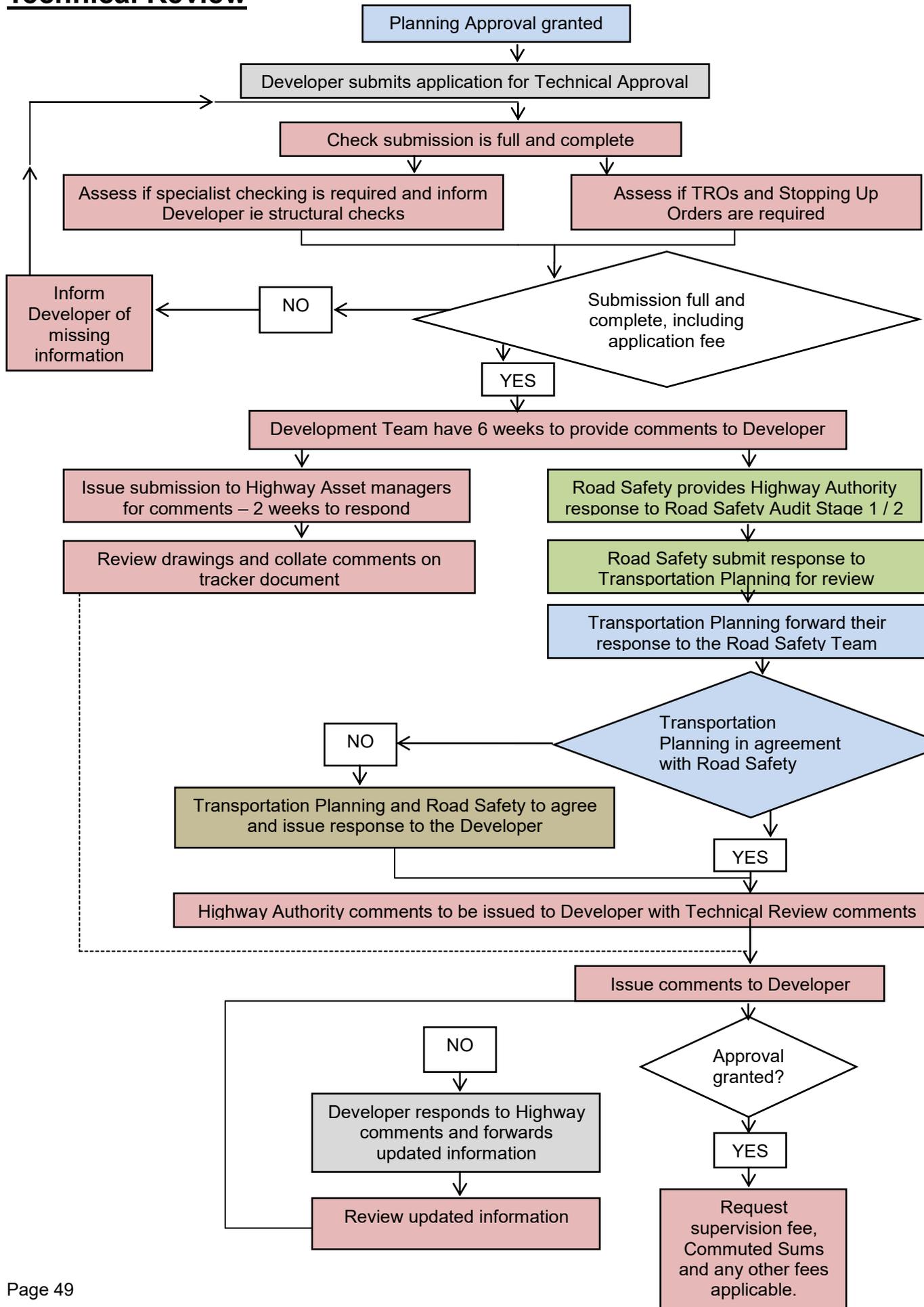
APPENDIX E

FLOWCHART SHOWING S38/278 PROCESS

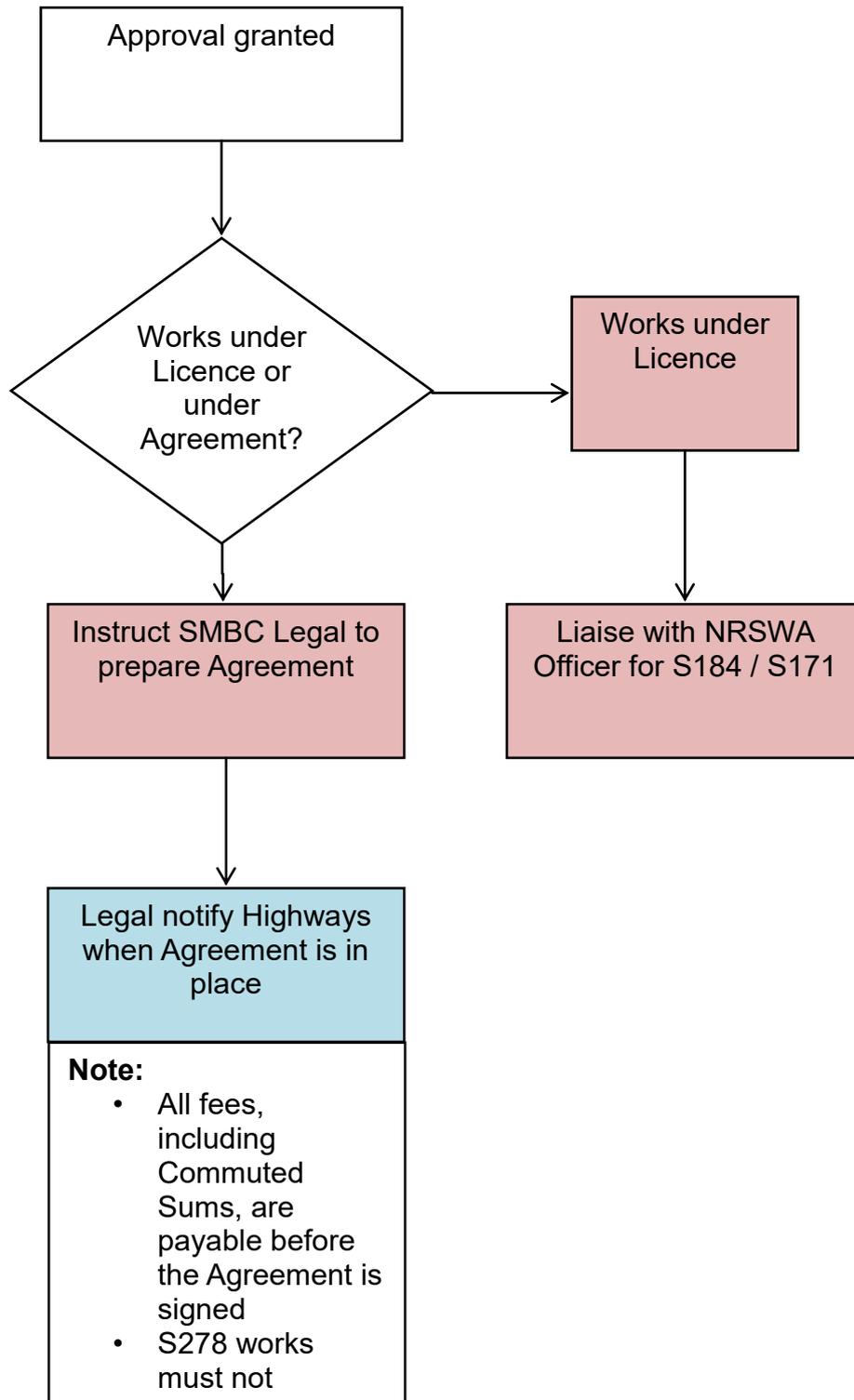
Planning Stage



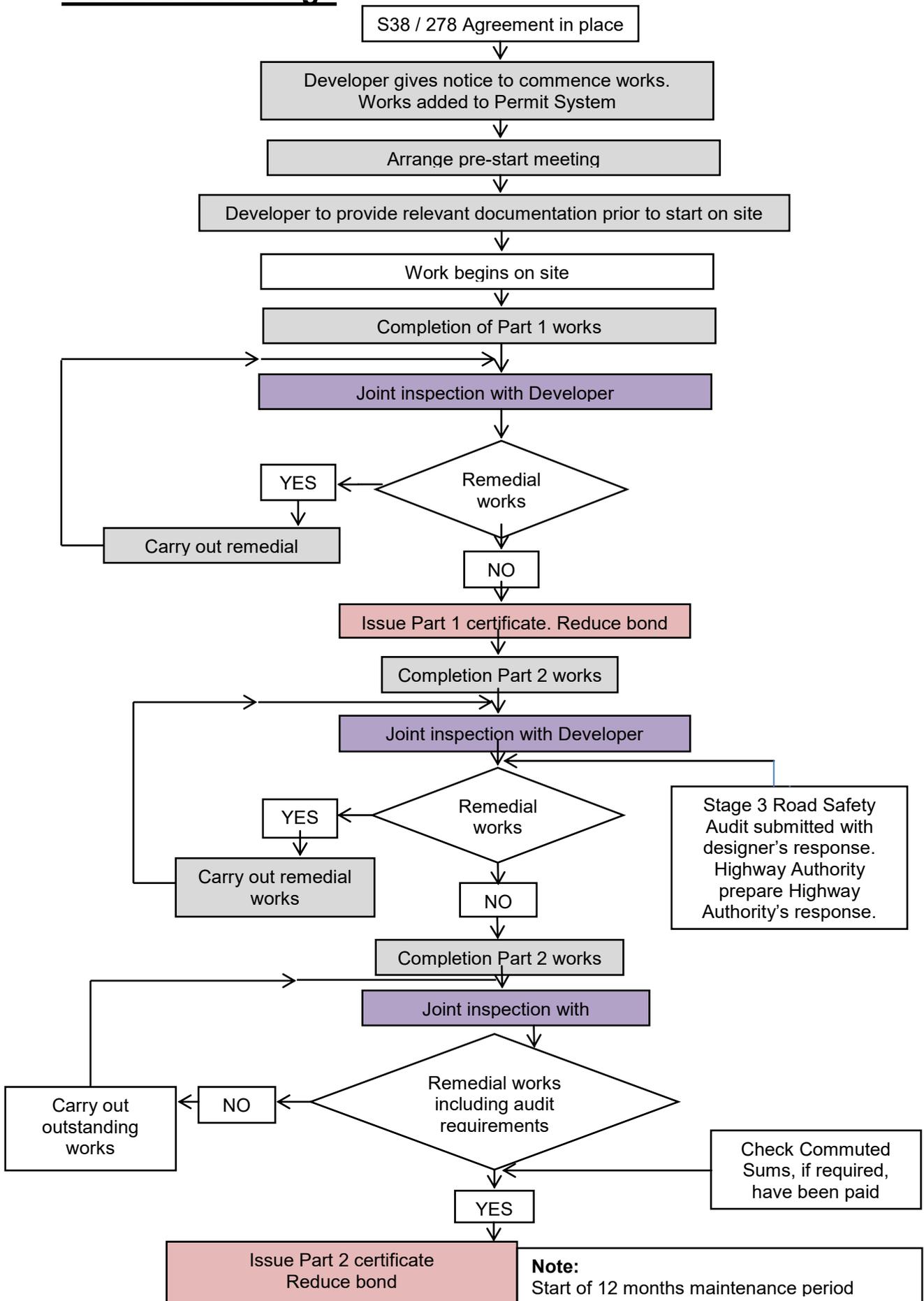
Technical Review



Instruction to Legal



Construction Stage



Construction Stage (Cont'd)

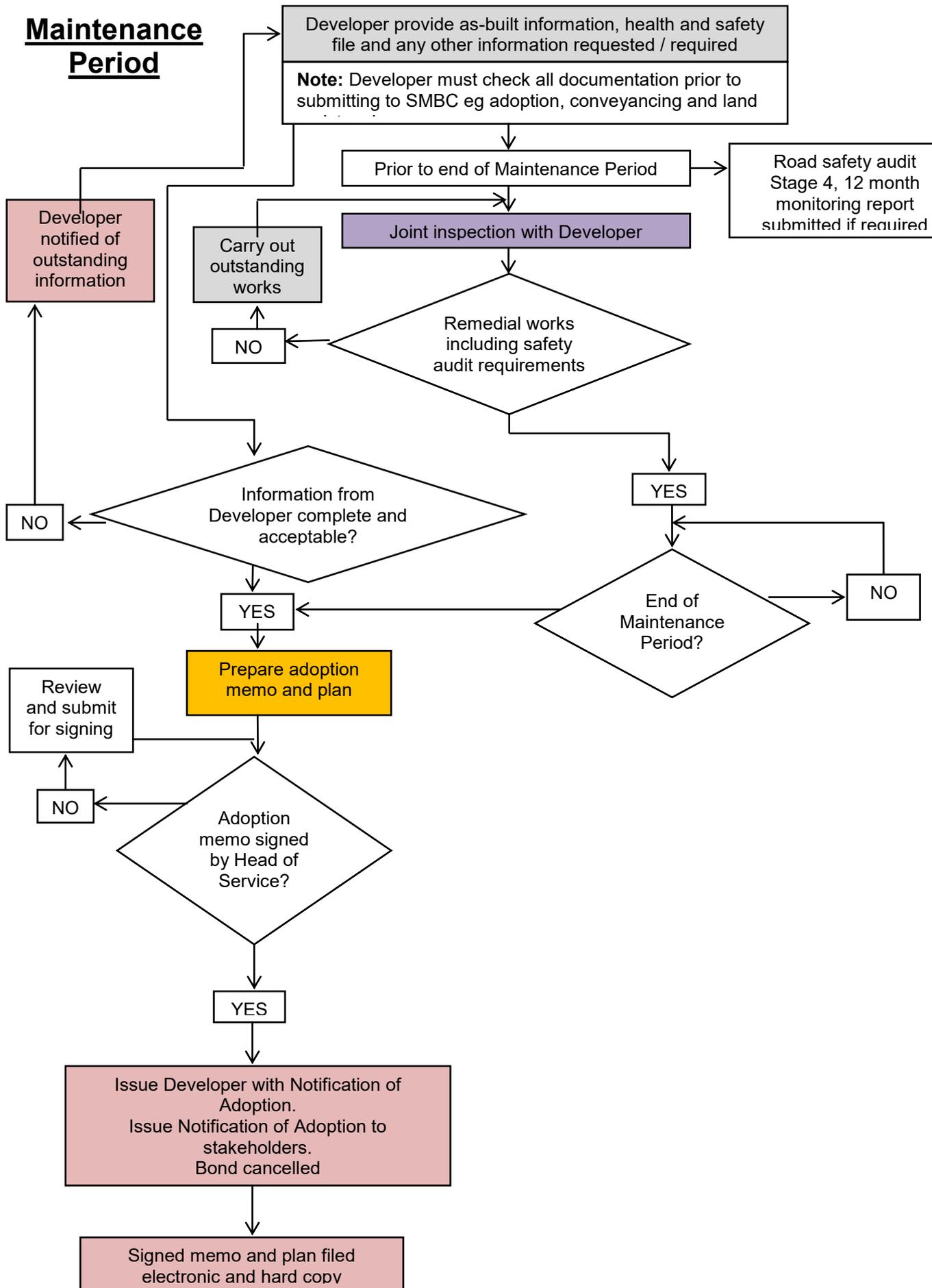
Notification of Maintenance issued to:

SMBC

Environment Services
Asset Management
Street Lighting
NRSWA Team
Neighbourhood Coordinators
Income & Awards
UKC

External

Severn Trent Water (new connections)
Severn Trent Water
Central Networks PLC
Severn Trent Water Ltd
(Coventry and North Warwickshire District)
BT new sites
British Gas Trading



Adoption Notification

Notification of adoption issued to:

SMBC

- Asset Management
- Road Safety
- Neighbourhood Coordinators
- Drainage Team
- Street Lighting
- Planning
- Sustainable Travel
- Environmental Services
- NRSWA Team
- Urban & Landscape Design Team
- Project Team
- Land Charges
- Income & Awards
- UKC
- Legal Team

APPENDIX F

DOCUMENT REVISION SHEET

Current Version	Revision	Date Amended	Amendment	
Draft	Rev 0			
Draft	Rev001	18/02/2016	DK	