

**Neutral Citation Number: [2005] EWHC 2810 (TCC)**  
IN THE HIGH COURT OF JUSTICE  
QUEEN'S BENCH DIVISION  
TECHNOLOGY AND CONSTRUCTION COURT

Court No 7  
St Dunstan's House  
133-137 Fetter Lane  
London EC4A 1HD

Date: 14th November 2005

Before:  
MR JUSTICE JACKSON

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**Between:**

MIDLAND EXPRESSWAY LIMITED

**Claimant**

**- and -**

- (1) CARILLION CONSTRUCTION LIMITED  
(2) ALFRED MCALPINE CONSTRUCTION LIMITED  
(3) BALFOUR BEATTY GROUP LIMITED  
(4) AMEC CAPITAL PROJECTS LIMITED

**Defendants**

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(No. 1) WordWave International, 190 Fleet Street, London EC4A 2AG  
[casemanager@wordwave.co.uk](mailto:casemanager@wordwave.co.uk) Tel. 020 7421 4010 Fax. 020 7421 9260 [www.wordwave.co.uk](http://www.wordwave.co.uk)

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MR JOHN BLACKBURN QC and MR DARRYL ROYCE appeared on behalf of the Claimant.  
MR DAVID STREATFEILD-JAMES QC and MS NERYS JEFFORD appeared on behalf of the Defendants.  
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**JUDGMENT**

## **JUDGMENT**

1. MR JUSTICE JACKSON: It is now late in the day and counsel have just completed their closing speeches. I will make a start on giving judgment this afternoon and get as far as time allows. The remainder of this judgment will be delivered tomorrow. The judgment will be lengthy and there is no need for the parties or their lawyers to remain in court while I deliver it.
  
2. This judgment is in 21 parts, namely:
  - Part 1. Introduction
  - Part 2. The contractual arrangements
  - Part 3. The present proceedings
  - Part 4. MEL's factual evidence
  - Part 5. CAMBBA's factual evidence
  - Part 6. Expert evidence
  - Part 7. The Belfry Agreement
  - Part 8. Provisional sums and aggregate tax
  - Part 9. Chasewater Footbridge
  - Part 10. Dunton Island
  - Part 11. Omission of Sign Gantries
  - Part 12. Mandatory speed limits
  - Part 13. Coin baskets
  - Part 14. Re-use of gantries
  - Part 15. Foul drainage
  - Part 16. Archaeology
  - Part 17. New roads and street works discounts
  - Part 18. Lodge Lane Link
  - Part 19. Vehicle Inspectorate
  - Part 20. Planning fee
  - Part 21. Conclusion.

## Part 1. Introduction

3. In 43 AD four Roman legions led by Claudius invaded Britain and subdued the indigenous Celtic tribes. The Roman aggressors brought with them remarkable engineering skills. During the first century AD the Romans constructed a network of roads across England and Wales. The first and most important of these roads was Watling Street. Watling Street ran from Kent through London and St Albans, across the West Midlands and finally into Wales.
4. The Romans departed after four hundred years. However, the roads which they constructed remained in use. Indeed they still leave an imprint on our modern transport system. The section of Watling Street which passed across the West Midlands will feature in part 16 of this judgment.
5. In the late 20th century there was another major development in road construction, namely the creation of motorways. The M1 was the first motorway to be constructed, running northwards from London up to Leeds. The M6 motorway followed. This motorway links the M1 to Birmingham and after that it runs northwards to Carlisle.
6. By the 1980s the volume of traffic on the M6 to the east and north of Birmingham had become excessive. It was therefore decided to construct a new motorway which would relieve that section of the M6.
7. Plans were drawn up for this new motorway to be self financing. The tolls paid by motorists would, in due course, defray the cost of constructing and operating the motorway. Although motorways charging tolls are commonplace in continental Europe, this scheme was an innovation in the United Kingdom. No UK standards existed to regulate the design of toll stations on motorways. This circumstance, combined with the lack of UK experience, has generated some of the problems in the present case.
8. The proposed new motorway was originally referred to as the Birmingham Northern Relief Road. By an agreement dated 28th February 1992 ("The Concession Agreement") the Secretary of State for Transport granted to Midland Expressway Limited ("MEL") the right to design, construct and operate the Birmingham Northern Relief Road.
9. During 1995 and 1996 a public inquiry was held to determine whether the Birmingham Northern Relief Road should be constructed. The outcome of that public inquiry was a decision that the project should go ahead.
10. Following the successful outcome of the public inquiry, MEL engaged Ove Arup & Partners to prepare a set of drawings which would show the entire length of the proposed motorway.
11. These drawings were duly prepared and were entitled "Post Decision Scheme" drawings. They are generally referred to as "PDS drawings" and I shall use that term.
12. MEL invited tenders for the design and construction of the new motorway. The PDS drawings formed part of the tender documents.
13. The successful tenderers were four well known construction companies, namely Carillion Construction Limited, Alfred McAlpine Construction Limited, Balfour Beatty Group Limited and AMEC Capital Projects Limited. These four companies have come together in a joint venture to design and construct the new motorway. The four companies are collectively referred to as "the CAMBBA construction group", which is generally shortened to "CAMBBA".

14. On 27th September 2000 MEL and CAMBBA entered into a contract ("the D&C Contract") for the design and construction of the Birmingham Northern Relief Road.
15. At about this time there was a change of terminology, the term "M6 toll road" became generally used instead of "Birmingham Northern Relief Road".
16. CAMBBA engaged two well known firms of engineers, namely Ove Arup and Atkins to carry out design work on their behalf. Those two engineering firms or their offshoots came together in a joint venture called "Arup Atkins Joint Venture" which is generally shortened to "AAJV".
17. CAMBBA, with the assistance of AAJV, duly designed and constructed the M6 toll road. It was opened to the public in December 2003. The M6 toll road, it must be said, is a fine motorway. It branches off the M6 motorway at junction 3A, which is in the vicinity of Birmingham international airport. The M6 toll road runs northwards and then westwards. It rejoins the M6 motorway at junction 11A.
18. There are two toll stations which actually straddle the M6 toll road. These are referred to as "main line toll stations". The Great Wyrley toll station straddles the northwest bound carriageway. The Weeford Park toll station straddles the southeast bound carriageway. Motorists who are travelling the entire length of the M6 toll road will pay their tolls at one or other of those two toll stations.
19. Motorists who join or leave the M6 toll road at some intermediate point must also pay their dues. There are toll stations for the benefit of these motorists at four junctions on the M6 toll Road. These junctions are as follows: Junction T3, otherwise known as the A38 junction or Langley Mill; Junction T4, otherwise known as Weeford Junction; Junction T5, otherwise known as Shenstone Junction; Junction T6, otherwise known as Burntwood Junction. The approaches to toll stations are generally referred to as "toll plazas".
20. Although the construction project was completed on time and to the satisfaction of all parties, a number of contractual disputes have arisen.
21. In order for me to explain what these disputes are about it will first be necessary to set out the contractual arrangements.

#### Part 2. The Contractual Arrangements

22. The Concession Agreement which was made on 28th February 1992 included the following provisions: Clause 4.1:

"The Secretary of State has appointed the Department's Agent to be his agent during the execution of the Highway Works to exercise the functions outlined in Parts 4, 5 and 6 of Schedule 7 and during execution of the MSA Works to exercise those functions referred to in Clause 19 and during the execution of the Works to exercise such further or other functions as the Secretary of State may exercise under the Concession Agreement in respect of the Works and as he may notify to the Concessionaire in writing from time to time ...."

Clause 7.2:

"The Concessionaire warrants and undertakes to the Secretary of State that ..."

"7.2.5 The design of the Highway Works and each part thereof will meet in all respects the requirements of the Concession Agreement and in particular the Technical Requirements..."

Clause 8:

"8.1 The Department's Agent may at any time prior to the issue of the Maintenance Certificate issue a request in writing to the Concessionaire for a Department's Change ..."

Clause 29:

"Fossils and Antiquities"

"Fossils and Antiquities as between the Secretary of State and the Concessionaire shall be deemed to be the absolute property of the Secretary of State. The Concessionaire shall take all reasonable precautions to prevent its workmen or any other persons from removing or damaging any Fossils and Antiquities and shall immediately on discovery thereof and before removal inform the Department's Agent of such discovery and to carry out such instructions as the Department's Agent may give as to the disposal of the same. No extensions of time will be granted for delays caused by compliance with requests made by the Department's Agent except to the extent that there shall be a material delay to or material increase in the cost of the execution of the Works in which case the Department's Agent shall issue a Department's Change in accordance with Clause 8 [Department's Changes] or the basis to be adopted in accordance with Clause 19.5.1.3 [Motorway Service Areas]."

23. Schedule 1 to the Concession Agreement contains a number of definitions. These definitions include the following passages:

""Change' means a variation in the design, quality or quantity of the Works and may include additions, substitutions, alterations in design and variations in the Technical Requirements. A Change shall either be a Concessionaire's Change or a Department's Change as the case may be ..."

""Concessionaire' means Midland Expressway Limited, the company which is the second party hereto or any person to whom this Concession Agreement is assigned pursuant to Clauses 35.1.1 to 35.1.3 ..."

""Highway Works' means the Highway Permanent Works and the Highway Temporary Works."

""Highway Permanent Works' means that part of the Permanent Works relating to the design, construction and completion of the Project Facilities and all related side roads, drainage, accesses, accommodation works, and communication facilities, but shall not include any Entrusted Works.

""Highway Temporary Works' means that part of the Temporary Works relating to the design, construction and completion of the Project Facilities and all related side roads, drainage and communication facilities, but shall not include any Entrusted Works ..."

""MSA Works' means the MSA Permanent Works and the MSA Temporary Works."

""MSA Permanent Works' means that part of the Permanent Works relating to the design, construction and completion of the Motorway Service Areas and all

related drainage and communication facilities but shall not include any Entrusted Works."

"'MSA Temporary Works' means that part of the Temporary Works relating to the design, construction and completion of the Motorway Service Areas and all related drainage and communication facilities but shall not include any Entrusted Works. ..."

"'Technical Requirements' means the Department's Requirements and the Concessionaire's Construction Proposals and the other documents referred to in Parts 1 to 3 of Schedule 7 as may be amended from time to time ..."

24. Schedule 7, part 4 to the Concession Agreement provides as follows:

"Department's Agent".

"The Secretary of State will appoint Consulting Engineers to act as the Department's Agent in order to receive the assurances he requires as to safety, quality and durability and to carry out the functions referred to in Clauses 5 [Pre-Concession Period] 7 [Design and Construction], 8 [Department's Changes], 10 [Access and Facilities for Department's Agent], 11 [Quality Assurance], 12 [Programme], 13 [Extensions of Time for Completion of the Highway Works], 19 [Motorway Service Areas] and set out in this Schedule 7 and Schedule 8.

"The Department's Agent will monitor the design, construction, completion, commissioning and testing of the Works and the completion of outstanding Works and the remedying of any defects during the period of maintenance as defined in the Construction Contract. The Department's Agent will also audit the Concessionaire's Quality system."

25. The firm of consulting engineers whom the Secretary of State appointed to act as Department's Agent was Owen Williams Limited. Mr John Keaney of Owen Williams Limited was the individual who principally performed the functions of Department's Agent. When I use the term "Department's Agent" or "DA", this will be a reference either to Owen Williams Limited or to Mr Keaney.
26. On 26th September 2000 the Secretary of State and MEL entered into a further agreement which is known as the Second Supplemental Agreement. The Second Supplemental Agreement amended the Concession Agreement by providing fresh provisions to stand as Parts 1, 2 and 3 of Schedule 7 to the Concession Agreement.
27. A Consequence of the Second Supplemental Agreement was that Part 3 of Schedule 7 to the Concession Agreement now contained the following passage:

"The Concessionaire's route proposals have been subject to change during the Statutory Order-making process, up to the Scheme and Orders being made and coming into force on 12th February 1998. This Part 3 Schedule 6 describes the route at 20 April 2000 including the changes made to the route up to this date ...

2.1 (d):

"Between A460 and Churchbridge the route is in successive cuttings and

embankments passing under Saredon Road and Walkmill Lane. The new A460 and A5 parallel route (Lodge Lane Link) is dual carriageway from the A460 to a roundabout junction with Saredon Road, and wide single carriageway up to a new roundabout at Churchbridge, which combines two existing roundabouts."

28. I shall use the term "Saredon" to describe the roundabout referred to in this passage at which Saredon Road joins Lodge Lane Link.

29. Let me now turn to the D&C Contract which was made on 27th September 2000, ie one day after the Second Supplemental Agreement.

30. The definitions set out in clause 1.1 of the D&C Contract include the following:

"'Accommodation Works' means the Specified Accommodation Works and/or the Unspecified Accommodation Works, as the context requires;

"'Adjacent Areas' means the areas which do not form part of the Site nor of the Motorway Service Area but upon which part of the Works are to be carried out;

"'Aggregate Tax' means any tax or levy imposed by the Government of the United Kingdom on or in connection with sands, gravels, aggregates and the like to be used in or about the Works including without limitation the commercial exploitation and/or import of aggregates (as such terms or similar terms are defined in the implementing legislation);

"'Change' has the meaning ascribed to it in the Concession Agreement;

"'Concession Agreement' means the agreement dated 28th February 1992 made between the Secretary of State and the Concessionaire together with Schedules 1 to 15 thereof.

"'Concession Road' means the Birmingham Northern Relief Road as outlined in the Employer's Requirements;

"'Construction Dispute' means a difference or dispute of whatever nature between the Employer and the Contractor arising under, out of or in connection with this Contract and includes, but is not limited to:

(a) any claim, demand or assertion as to contractual entitlement under this Contract made by either Party against the other Party, which is neither agreed nor disputed by such other Party;

(b) any dispute as to any decision, opinion, instruction, direction, certificate or valuation of the Employer, the Employer's Agent or the Certifying Engineer (whether during the progress of the Works or after their completion and whether before or after the determination, abandonment or breach of this Contract);

"'Contractor's Agent' has the meaning ascribed to it in Clause 13.2"

"'Contractor's Change' means a variation or amendment to the Employer's Requirements proposed by the Contractor and implemented in accordance with Clause 39.8"

""Department's Agent' means Owen Williams Limited of Edgbaston House, Three Duchess Place, Hagley Road, Edgbaston, Birmingham B16 8NH or such replacement as may be appointed for the time being to represent the Secretary of State during the design and construction process and more particularly, to fulfil the role identified in Parts 4, 5 and 6 of Schedule 7 of the Concession Agreement."

""Department's Change' means a Change as to the Department's standards or any additions, substitution or omission of any item of infrastructure initiated or implemented by the Department's Agent in accordance with Clause 8 of the Concession Agreement;"

""Design Input Statement' means a statement which covers all relevant input to the subsequent design activity of a scheme or section of the Works which includes as a minimum:

- (a) a brief description of the purpose of the scheme or section of the Works;
- (b) a reference to the relevant Construction Documents;
- (c) the Contractor's method of approach;
- (d) the parameters or co-efficients that are assumed and the standards and computer programmes to be used;
- (e) the source of the data and the applicable Statutory Requirements; and
- (f) the proposed checks and frequency thereof;"

31. I interject at this point to say that a design input statement is often referred to as a "DIS". I now return to the definitions clause:

""Design Review Procedure' means the procedure referred to in Part C of Appendix 4;"

""Disputes Resolution Procedure' means the procedure referred to in clause 53 (*Settlement of Disputes*) and set out in Appendix 6 hereto;"

""Effective Date' means the date on which the Employer notifies the Contractor that all the Project Conditions have been satisfied or waived;"

""Employer's Change' means a variation to the Employer's Requirements initiated or implemented by the Employer in accordance with clause 39.5 (*Employer's Change Procedure*);"

""Employer's Requirements' means the requirements of the Employer in respect of the Works, as set out in Appendix 2 hereto;"

""Future Mining Works' means the design and construction of structures in areas of potential future mining in accordance with Annex 3/7 clause 7 of the Employer's Requirements;"

""Highway Permanent Works' means that part of the Permanent Works relating to the design, construction and completion of the Concession Road and all

related side roads, drainage, accesses, accommodation works and communication facilities (but for the avoidance of doubt excluding the MMA Works, the Tolling Works, the TCF Works and the Non-core Toll Collection System Works);

""Highway Temporary Works' means that part of the Temporary Works relating to the design, construction and completion of the Concession Road and all related side roads, drainage, accesses, accommodation works and communication facilities (but for the avoidance of doubt excluding the MMA Works, the Tolling Works, the TCF Work and the Non-Core Toll Collection System Works);

""Highway Works' means the Highway Permanent Works and the Highway Temporary Works;"

""MMA Works' means that part of the Works relating to the Motorway Maintenance Areas all as more particularly identified in Sections 5.3 and 5.4 of the Employer's Requirements;"

""MSA Works' means that part of the Works relating to the Motorway Service Area all as more particularly identified in Section 4 of the Employer's Requirements;"

""Non-MSA Works' means the Works other than the MSA Works;"

""Permit to Use' means the permit to be issued by the Department's Agent in accordance with the Concession Agreement prior to commercial operation of the Project Facilities;"

""Price Adjustment' means any sum which is to be added to or deducted from the Contract Price (as specified at the date of this Contract) in accordance with the Contract and any separate payment, in respect of or in any way connected with the subject matter of this Contract which is payable by one Party to the other whether pursuant to any term of this Contract, by way of damages for breach of contract, on the basis of quantum meruit or otherwise;"

""Pricing Schedule' means the document contained in Appendix 1 hereto;"

""Project Facilities' means the Concession Road, the Motorway Maintenance Areas and the Tolling Control Facilities and includes (for the avoidance of doubt) the Tolling Works;"

""Provisional Sum' means a sum included and so identified in the Pricing Schedule for the execution of any part of the Unspecified Accommodation Works or the Future Mining Works or the expenditure of Aggregate Tax up to the maximum provided for in Clause 36.3.3 which sum may be used in whole or in part in accordance with the instruction of the Employer given in accordance with clause 36.3 (*Provisional Sums*);"

""Relevant Authorities means those entities identified in Part A of Appendix 10 hereto whose authority is or may be required for the carrying out of all or part of the Works;"

""Relevant Authorities Works" means any work required by a Relevant Authority

to be undertaken as a consequence of or in order to facilitate the carrying out and completion of the Works, including any replacement, re-routing or diversion of utilities or services, whether temporarily or permanently, and any abandonment or stopping of redundant services or general disconnection;"

""Schedule of Prices' means the schedule of prices contained in Part A of the Pricing Schedule;"

""Schedule of Rates' means the schedule of rates and prices contained in Part B of the Pricing Schedule;"

""Site' means the land, spaces, waterway, roads and any surface required for the Project Facilities, an indication of the general area of which is identified in the drawings numbered SDP-CEH O1-19 inclusive;"

""Statutory Discount' means the amount of savings given or credit allowed by a Relevant Authority pursuant to section 85 of the New Roads and Street Works Act 1991 and regulations made thereunder in respect of Relevant Authorities' Work in respect of any allowable cost to be borne by that Relevant Authority in accordance;"

""Toll Collection System' means the equipment and systems for the toll collection system for the Concession Road;"

""Toll Collection System Proposal' means the Contractor's proposal for a Toll Collection System to meet the requirements of the Toll Collection System Requirements Specification;"

""Toll Collection System Sub-Contract' means a contract between the Contractor and the Toll Collection System Sub-contractor for the carrying out of the Toll Collection System Works."

""Toll Collection System Sub-contractor means Ascom Monetel SA or such other person as may be substituted for it from time to time with the prior written consent of the Employer;"

""Toll Collection System Requirements Specification' means the specification for the Toll Collection System Works as set out in Section 6 of the Employer's Requirements."

""Toll Collection System Works' means the Core Toll Collection System Works and the Non-Core Toll Collection System Works;"

""Unspecified Accommodation Works' means all accommodation works and licences (other than the Specified Accommodation Works) necessary for the Permanent Works but excluding all accommodation works and licences that are necessary for the design, construction and removal of the Temporary Works and for the purposes of this definition (i) 'accommodation works' means work of any kind whatsoever (including without limitation the modification, improvement or regrading of land, the design and construction of modified, substituted or new structures, services or infrastructure and the supply and/or erection of fences, barriers or other forms of protection) that are required by any Statutory Requirement (or are otherwise necessary) to be provided to any person with an interest in land adjacent to the Site, the Adjacent Areas or Motorway Service

Area and (ii) 'licences' means rights in, under or over land adjacent to the Site, the Adjacent Areas or the Motorway Service Area;"

"Works" means the Highway Works, the MSA Works, the MMA Works, the Tolling Works, the TCF Works, the Non-core Tool Collection System Works and, where the Advance Works Contract is entered into between the Employer and the Contractor, the Advance Works, together with all other works to be done and services, goods, materials and equipment to be supplied by the Contractor under this Contract including the production of the Detailed Design and the Detailed Drawings;"

32. Clause 6.1 of the D&C Contract provides:

"6.1.1 The Related Agreements are:

- (a) The Concession Agreement;
- (b) The Financing Agreements;
- (c) The Licence; and.
- (d) The NTL Agreement ...

6.1.3 Save to the extent the provisions of this Contract expressly require to the contrary but not otherwise, the Contractor shall:

"(a) Carry out and complete the Works and otherwise perform this Contract so that no act, omission or default by the Contractor in relation thereto shall constitute, cause or contribute to any breach by the Employer of any of its obligations pursuant to or liability under the Related Agreements or otherwise give rise to any other liability on the part of the Employer or diminish any right of the Employer pursuant to any Statutory Requirements.

"(b) Assume and perform all the obligations and observe and comply with all the conditions of the Concession Agreement on the part of the Employer to be assumed, performed, observed and complied with so far as they relate and apply to the Works or any part thereof."

33. Clause 8 of the D&C Contract provides:

"8.1.1. The Contractor shall design, construct, complete, commission, maintain and test the Works in strict accordance with the Employer's Requirements and the other requirements of this Contract and provide all labour, including supervision thereof, materials, Construction Plant and all other things, whether of a temporary or permanent nature, required in or for such design, construction, completion, commissioning, maintenance and testing, so far as the necessity for providing the same is specified in or is reasonably to be inferred from this Contract.

8.1.2 The Contractor shall adopt and accept responsibility for the Preliminary Design as though such design had been carried out by the Contractor hereunder. The Contractor shall be solely liable for any error or defect in the Preliminary Design and shall not be entitled to any Price Adjustment or extension to any Completion Period in respect of any cost or delay incurred as a

result of or in connection with any part of or matter concerning the Preliminary Design.

8.1.3 The Contractor shall take full responsibility for the adequacy, stability and safety of the design and of all site operations and methods of construction, commissioning, maintenance, testing and making good and shall ensure that its obligations under clause 8.1(*Contractor's General Obligations*) are, without prejudice to clause 8.1.1, executed in accordance with Good Industry Practice

8.1.5. The Contractor's responsibility under this Contract shall not be relieved or absolved or otherwise modified by any examination or review by the Department's Agent, the Employer, the Employer's Agent, the Certifying Engineer or any other person.

8.2 Contractor's warranties.

The Contractor warrants and undertakes to the Employer that:

8.2.1 it will comply with the Employer's Requirements as they may be interpreted by the Department's Agent or the Employer or in the event of a dispute regarding such an interpretation by the Adjudicator;

8.2.4 the Contractor will at all times comply with the reasonable requirements of any of the Relevant Authorities and comply with any Statutory Requirement in carrying out the Works and where design, workmanship, methods of construction, materials, Plant, commissioning, testing or maintenance are to be reviewed by the Employer, the Department's Agent or Relevant Authorities, timeous notice will be given so as to enable such a review to be carried out;

8.2.5. the design of the Works and each part thereof will meet in all respects the requirements of this Contract and the Employer's Requirements and in particular:

(a) In the case of the Department's standards those appearing in Annex 1/2 of the Employer's Requirements;

(b) In the case of British Standards, codes of practice and other relevant international standards in so far as they relate to design, those standards in force and in effect as at the date of this Contract;

(c) In all other cases, the standards applying at the date of the execution of the construction works;

8.2.6. the completed Works shall be fit for the purpose(s) expressly stated in the Employer's Requirements and shall, as at the expiry of the Maintenance Period, be free from Defects other than Excluded Latent Defects;

8.2.7. it has been provided with sufficient information to ascertain the scope and nature of the Works, the obligations being assumed and the resources necessary for it to discharge its obligations under and in accordance with this Contract; and

8.2.8. it has reviewed and satisfied itself of the accuracy and buildability of the Employer's Requirements and the correctness and completeness of the Employer's Requirements to achieve the objectives set out in this Contract."

34. Clause 9.1.4 of the D&C Contract provides:

"Nothing in this clause 9 (*Design and Checking*) shall relieve the Contractor from any liability or obligation under this Contract and the Contractor shall be responsible for the acts, defaults and neglects of the Designer and the Checker and their respective agents, Sub-contractors or employees as fully as if they were the acts, defaults or neglects of the Contractor."

35. Clause 9.3 of the D & C contract provides:

"9.3 Toll Collection System.

9.3.1 The Contractor is responsible for executing the Toll Collection System Works in accordance with this Contract.

9.3.2 The Toll Collection System Proposal has been prepared by the Contractor in conjunction with the Toll Collection System Sub-contractor and the Contractor warrants that the Toll Collection System Proposal satisfies the Toll Collection System Requirements Specification.

9.3.3 The Contractor shall engage the Toll Collection System Sub-contractor to carry out the Toll Collection System Works under its direction and control. Notwithstanding the foregoing, the Contractor shall remain fully and completely responsible for the execution and performance of the Toll Collection System Works.

9.3.5 The Employer shall be entitled to require the Contractor and the Toll Collection System Sub-contractor to undertake Design Development. Within 90 days of the Effective Date the Employer may notify the Contractor of the process and programme for Design Development and the Contractor will, and will procure that the Toll Collection System Sub-contractor shall, co-operate fully with the Employer and use their respective best efforts to undertake the Design Development in accordance with the Employer's reasonable requirements to the satisfaction of the Employer.

9.3.6 Subject to clause 9.3.10, the Employer may not require any further variation to the Toll Collection System Works under the process of Design Development after the Freeze Date.

9.3.7 Notwithstanding any Design Development, the Contractor will remain fully responsible for (i) ensuring that the Toll Collection System is fit for the purpose specified in the Toll Collection System Requirements Specifications and (ii) for the proper and timely performance of the Tolling Works, in each case as they may have been varied by the Design Development ...

9.3.10 Nothing in this Clause 9.3 (*Toll Collection System*) shall prevent the Employer from requiring a variation to the Toll Collection System Works after the Freeze Date and the provisions of clauses 39.2 (*Employer's Change*) and 39.7 (*Payment for Change*) will apply."

36. Clause 12 of the D&C Contract provides:

"12.1.1 Without prejudice to clauses 39 (*Changes*) and 40 (*Compensation Events*), the Contractor shall forthwith comply with all instructions issued to it by

the Employer in regard to any matter in respect of this Contract.

12.1.2 Without prejudice to clause 12.1.1, the Employer is empowered to issue any instruction which is issued by the Employer as a consequence of any obligation of the Employer under any Related Agreement or the exercise of any right or entitlement by the Secretary of State or any other party to a Related Agreement in relation to the Works.

12.1.3 All instructions by the Employer shall be issued in writing. The Employer may in cases of emergency (stating that to be the case) give an instruction orally and the Contractor shall comply with such instruction. Provided that the Employer must confirm such oral instruction in writing as soon as reasonably practicable.

12.2 "Employer's Agent."

12.2.1 The Employer may from time to time by notice in writing to the Contractor appoint a person as Employer's Agent who shall be entitled to exercise such powers and perform such duties of the Employer under this Contract as the Employer may specify in the notice including those power and duties of the Certifying Engineer who may be appointed by the Employer in accordance with clause 12.4.1. The appointment shall not take effect until a signed copy of the Employer's notice is delivered to the Contractor ."

37. Clause 13.2 of the D&C Contract provides:

"Contractor's Agent."

The Contractor or a competent or authorised agent or representative approved in writing by the Employer ("**Contractor's Agent**") is to be constantly on the Works and shall give his whole time to the superintendence of the same. The Contractor's Agent shall be in full charge of the Works and shall receive on behalf of the Contractor directions and instructions from the Employer. The Contractor's Agent shall be responsible for the safety of all operations. Within 7 days of the Effective Date the Contractor shall notify the Employer of the identity of its proposed Contractor's Agent."

38. Clause 17 of the D&C Contract provides:

"17.1 Relevant Authorities' Works and Requirements

The Contractor shall:

17.1.1 comply with the requirements (whether future or existing) of any Relevant Authority who has jurisdiction over the Works or whose system or assets may be affected by the construction of the Works;

17.1.2 be solely responsible for liaising and undertaking all discussions and negotiations with the Relevant Authorities in respect of all matters associated with the carrying out of the Relevant Authorities' Works to the satisfaction of the Relevant Authorities, including but not limited to:

(a) Determining the scope of the Relevant Authorities' Works;

(b) The design of and the methodology for the carrying out of such Relevant Authorities' Works;

(c) All necessary planning permissions and consents; and

(d) The person that shall undertake such Works; and

17.1.3 where requested by the Relevant Authority carry out and complete the Relevant Authorities' Works in which case, but without prejudice to clauses 17.1.1 and 17.1.2, and save where the Relevant Authorities' Works are to be carried out under an agreement made between the Contractor and such Relevant Authority directly, such Relevant Authorities' Works shall be deemed to form part of the Works and the provisions of this Contract shall apply accordingly.

17.3.1. The Contractor shall be solely responsible for all costs associated with the carrying out and completion of the Relevant Authorities' Works in accordance with the provisions of this Contract ...

17.3.4 Without prejudice to clause 17.3.1, where in respect of Relevant Authorities' Works, either;

(a) An agreement is in place as at the date when such works are carried out pursuant to which the Relevant Authority acknowledges the Employer's right to a Statutory Discount in respect of such works; or

(b) The Employer subsequently reaches an agreement with a Relevant Authority for a Statutory Discount in respect of the Relevant Authorities' Works,

And the Employer in either case accordingly instructs the Contractor to make an advance payment in respect of such works in accordance with the Street Works (Sharing of Costs of Works) Regulations 1992 and a Statutory Discount is given by that Relevant Authority or would have been given had the Contractor made payment as aforesaid, the Contract Price shall be reduced by a sum equal to 50% of the amount of such Statutory Discount. The Employer shall receive the benefit of such reduction by way of a corresponding reduction in the amount payable under clause 37.1 (Payment of Items in the Schedule of Prices) in respect of item 16.0 thereof following the date on which such Relevant Authorities' Works are completed.

17.5 The Contractor shall not be entitled to any Price Adjustment or any extension of any of the Completion Periods as a result of compliance with its obligations under clause 17.1 (Relevant Authorities' Works and Requirements) and 17.2 (Contractor's Responsibility in respect of the Relevant Authorities' Works) or otherwise in connection with the carrying out of any Relevant Authorities' Works."

39. Clause 21 of the D&C Contract provides:

"21.1.1 The Employer shall grant to the Contractor Vacant Possession of such part or parts of the Site, the Adjacent Areas and the Motorway Service Area (together with Ancillary Rights relating thereto) as soon as the Secretary of State delivers the same to the Employer in accordance with clause 6.2.2 of the Concession Agreement..."

40. Clause 25 of the D&C Contract provides:

"25.1.1 Save as provided in clause 25.1.2 and subject to any rights which the Contractor may have under clause 7 (*Contractor's Rights*) in respect of a Project Relevant Event and clause 40 (*Compensation Events*), the Contractor shall at its own costs:

(a) Ensure that all of its obligations under this Contract are carried out in compliance with all applicable Statutory Requirements;

(b) Obtain all permits, approvals and/or licenses from the Relevant Authorities and other governmental authorities having jurisdiction over the Works and/or the Contractor which are necessary for the performance of this Contract; and

(c) Comply with the rules and regulations of all Relevant Authorities and other public bodies and companies whose property or rights are affected or may be affected in any way by the Works .

25.4 The Contractor shall give all notices and pay all fees required to be given or paid by any authority (including any Relevant Authority) or Statutory Requirements in relation to the execution of the Works or by the rules and regulations of any public bodies and companies whose property or rights are or may be affected in any way by the Works."

41. Clause 27 of the D&C Contract provides:

"Fossils and Antiquities."

27.1.1 The Contractor acknowledges that all Fossils and Antiquities shall be that deemed to be the absolutely property of the Secretary of State. The Contractor shall take all reasonable precautions to prevent its workmen or any other persons from removing or damaging any Fossils and Antiquities and shall immediately on discovery thereof and before removal inform the Department's Agent and the Employer of such discovery and carry out such instruction as the Department's Agent may give to the Employer under Clause 29 of the Concession Agreement (and the Employer shall forthwith provide a copy of such instruction to the Contractor) as to the disposal of the same.

27.1.2 No extensions of time will be granted for delays caused by compliance with requests made by the Department's Agent except to the extent that there shall be a material delay to or material increase in the cost of the execution of the Works in which case the Employer shall issue a Department's Change or an Employer's Change in accordance with clause 39 (*Changes*)."

42. Clause 32 of the D&C Contract provides for the Contractor to be granted an extension of time in respect of Delay Events, including Department Changes or Employer's Changes.

43. Clause 33 of the D&C Contract sets out various requirements for completion of the Works. These include a requirement that a Permit To Use ("PTU") should be issued.

44. Clause 36 of the D&C Contract provides:

"CONTRACT PRICE.

### 36.1 Price for the Works.

The Contract Price is £485,500,000, subject to adjustment in accordance with the express provisions of this Contract.

### 36.2 Adjustment of Contract Price

"The Contract Price is a fixed price lump sum and shall not be subject to remeasurement or any other adjustment save in accordance with the express provisions of this Contract.

### 36.3 Provisional Sums.

36.3.1 The Employer shall be entitled to instruct the Contractor to expend or execute in whole or in part any work in respect of which a Provisional Sum is stated in the Pricing Schedule (as the case may be). If the Employer issues such an instruction such expenditure shall, subject to clause 36.3.3, be added to the Contract Price and such work shall form part of the Works (as the case may be) and the Contractor shall be entitled to a Price Adjustment on the basis referred to in clause 39.6.1 (a)

36.3.2 Without prejudice to clause 15.4 (*Sufficiency of Contract Price*), the Contractor shall be deemed to have allowed the necessary time and resources to enable the work relating to the Provisional Sum to be executed and satisfied itself as to all risks and matters associated with such execution, provided that any instruction for the expenditure of the Provisional Sum is given by the Employer within a reasonable time of the Effective Date, and the Contractor is not accordingly entitled to any extension of any Completion Period for the execution of work instructed in accordance with clause 36.3.1.

36.3.3 The Price Adjustment to which the Contractor is entitled for the expenditure of the Provisional Sum in respect of Aggregate Tax shall not:

(a) In the case of imported materials incorporated by the Contractor in the Works, exceed the sum equal to the amount of Aggregate Tax levied on 1,800,000 tonnes of such materials; and

(b) In the case of in-situ materials on the Site which the Contractor excavates or quarries and are incorporated in the Works, exceed the sum equal to the amount of Aggregate Tax levied on 3,000,000 tonnes of such materials."

## 45. Clause 37 of the D&C Contract provides terms of payment:

### "37.1 Payment of Items in the Schedule of Prices

Subject to the terms of this clause 37 (*Terms of Payment*) and clause 38 (*Method of Payment*) the Contractor shall be entitled to payment of the amounts set out in the Schedule of Prices as follows: .....

18.0 Unspecified Accommodation Works. Pro rata to percentage of completion.

19.0 Aggregate Tax. Monthly in arrears as levied.

20.0 Future Mining Works. Pro rata percentage of completion.

37.2 Payment of the Contract Price.

"Subject as provided in clause 37.3 (*Limit on Payments*), each month the Contractor shall be entitled to be paid:

37.2.1 the amount calculated in accordance with clause 37.1 (*Payment of Items in the Schedule of Prices*) and clause 38.2 (*Monthly Measurement*); and

37.2.2 all such other amounts to which the Contractor has become entitled during that month in accordance with the express terms of the Contract."

46. Clause 38 of the D&C Contract sets out a procedure for interim applications and interim payments during the course of the Works. The first part of clause 38 provides:

"38.1 Measurement of Quantities

The Employer and the Contractor shall within 28 days of the Effective Date agree a procedure and basis for assessing the measurement and the progress of the Works for the purposes of clause 37.2.1 and the Schedule of Prices. Failing agreement as aforesaid the Employer and the Contractor shall adopt such procedure and basis as the Employer in its absolute discretion shall reasonably decide."

47. Clause 39 of the D&C Contract provides:

"CHANGES

39.1 Department's Change.

"The Employer may at any time prior to the issue of the Maintenance Certificate issue a request in writing to the Contractor for a Department's Change.

39.2 Employer's Change.

The Employer may at any time prior to the issue of the Maintenance Certificate issue a request in writing to the Contractor for an Employer's Change in respect of the Works."

48. Detailed provisions follow setting out the procedures for Department's Changes and Employer's Changes and for the valuation of those changes.

49. Clause 39.8 of the D&C Contract provides:

"Contractor's Change.

39.8.1 If in the opinion of the Contractor it is necessary or desirable to vary or amend the Employer's Requirements such proposal together with all supporting Design Data and an explanation of the reasons therefor, including, if appropriate, the Designer's comments, shall be submitted under cover of a submission document by or through the Contractor as a proposed Contractor's Change in accordance with the Employer's Review Procedure.

39.8.2 The Employer shall be entitled, in its absolute discretion, to:

(a) Reject the proposed Contractor's Change; or

(b) Approve the Contractor's Change and, where the same relates to the Technical Requirements, submit a proposed Concessionaire's Change in accordance with clause 7.7 of the Concession Agreement

39.8.6 No Contractor's Change implemented in accordance with clause 39.8 (*Contractor's Change*) shall in any way vitiate or invalidate the Contract and where such Contractor's Change shall result in increased costs or any delay such consequences shall be borne entirely by the Contractor who shall also have the benefit of any savings which occur."

50. Clause 40 deals with Compensation Events. Clause 40 includes the following provisions:

"40.1.1 Save in respect of Department's Changes and Employer's Changes, where a specific provision is made in this Contract for the payment of compensation or other monies upon the occurrence of specified events, matters or circumstances, such specific provision together with this clause 40 (*Compensation Events*) shall apply and shall govern the rights and remedies of the Parties to the exclusion of any other rights or remedies relating to such payment which might otherwise be available pursuant to this Contract or otherwise howsoever.

40.1.2 The Contractor shall have no further entitlement whether by way of a Price Adjustment or an extension of time or otherwise or any relief of its obligations under this Contract in respect of a Compensation Event other than that set out expressly in this Contract, subject always to the provisions of clause 7 (*Contractor's Rights*) and clause 40.3 (*Claims Procedure*).

40.3 Claims Procedure.

40.3.1 The provisions of this clause 40.3 (*Claims Procedure*) shall govern the procedure for any claim which the Contractor may wish to make for a Price Adjustment, other than a Department's Change or an Employer's Change in respect of which the provisions at clause 39 (*Changes*) shall apply.

40.3.2 If the Contractor considers that it may have grounds to claim any Price Adjustment it shall give written notice (including such particulars of the event and the basis of the claim as are available at that time) to the Employer within 21 days after the event giving rise to the claim has first arisen or should reasonably have come to the knowledge of the Contractor, whichever is later .

40.3.5 Notwithstanding any other provision of this Contract, it shall be a condition precedent to the Contractor's right to any Price Adjustment that:

(a) The Contractor shall have complied fully with the provisions of clauses 40.3.2, 40.3.3 and 40.3.4; and

(b) The Contractor shall have used all reasonable endeavours and shall have taken all such steps as may reasonably be required from time to time to mitigate and minimise the amount of any additional payment to which it may be entitled by virtue of this Contract and any cost or loss it may incur or suffer in connection with the circumstances giving rise to the Contractor's right to that Price Adjustment."

51. Clause 50 of the D&C Contract includes the following provisions:

"50.2 Consent, Approval etc.

Save to the extent provided for expressly in this Contract, the Contractor's liability under the Contract shall not be affected by:

"50.2.1 any comment, review, audit, rejection, approval, acquiescence or acceptance of any matter or thing nor any failure to comment, review, audit, reject, approve, acquiesce or accept the same;

50.2.2 any test, inspection, supervision or failure to test, inspect or supervise;

50.2.3 the issue of any certificate;

50.2.4 the making of any payment;

50.2.5 the provision of any information, whether contained in this Contract or otherwise; or

50.2.6 any failure or delay by the Employer to enforce any provision of this Contract or to require performance thereof.

50.3 Entire Agreement.

Each party agrees and acknowledges that;

50.3.1 it has had or, as the case may be, is deemed to have had, full opportunity to include in this Contract any representation or warranty (if any) made to it by the other Party leading up to this Contract;

50.3.2 this Contract embodies the entire and only agreement between the Parties as to the subject matter hereof.

50.4 Amendments.

No amendment to this Contract shall be binding on the Parties unless in writing and signed by the duly authorised representatives of the Employer and the Contractor.

50.5 No Waiver.

The rights of any Party shall not be prejudiced or restricted by any indulgence or forbearance extended to the other Party.

50.5.2 No waiver by either Party of any default or variation by the other in the performance of any of the provisions of this Contract shall operate or be construed as a waiver of any other or further default or variation whether of a like or a different character, or shall be effective, unless in writing duly executed by an authorised representative of such Party."

52. Appendix 1 to the D&C Contract comprises three parts. Part A is a Schedule of Prices. Part B is a Schedule of Rates. Part C is a list of Cumulative Payment Limits.

53. Part A of Schedule 1 includes the following provisions:

"(ii) The pricing information provided under this Part 1 of the Pricing Schedule will only be used for the purposes of submission and approval of interim progress payments under clause 38.3 (*Monthly Application for Payment*) and 38.4 (*Interim Payment Certificate*) .

18.0 Provisional Sum for Unspecified Accommodation Works

To be expended under instruction by the Employer for work agreed by the District Valuer and the Contractor as referred to in clause 36.3 of the Conditions of Contract.

19.0 Provisional Sum for Aggregate Tax.

To be expended under instruction of the Employer in respect of Aggregate Tax levied on the Contractor, subject in aggregate to the relevant maximum amounts provided for in clause 36.3.3 of the Conditions of Contract.

20.0 Provisional Sum for Future Mining Works.

To be expended under instruction of the Employer for extra cost of undertaking Future Mining Works as referred to in clause 36.3 of the Conditions Contract."

54. After the prose section of Part A there follows a schedule. This schedule includes the following items:

"Item 1.1.4. Archaeology. Sum: £2,453,227.00

Evaluation Method: By percentage complete at Defined Dates...

Item 7.9 Sign Gantries.

Sum: £3,436,237.00 Evaluation Method: By percentage complete.

Item £ 10.00 Signage.

Sum: £1,514,239.00

Evaluation Method. By percentage complete against agreed sums for sections identified by chainages.

Works Included. All associated trenchwork, concrete foundations, the fixings, Roadside and Gantry Signage. Road markings.

Item 18.00 Provisional Sum for Unspecified Accommodation Works. Amount £1,900,000.00 Evaluation Method. By percentage complete of expenditure under Employers Instructions.

Works Included: All Advanced work required and not scheduled within the Employer's Requirements.

Item 19.00 Provisional Sum for Aggregate Tax. Amount: £50,000.00

Evaluation Method. As levied subject to the limits in clause 36.3.3 of the Conditions of Contract.

Item 20.0 Provisional Sum for Future Mining Works. Sum: £50,000.00

Evaluation Method. By percentage complete.

Item 21.0 CONTRACT SUM (£) 485,500,000.00

Value of Non-MSA Works: 484,507,354 Including Provisional Sum items, 18.0, 19.0 & 20."

55. Appendix 2 to the D&C Contract is entitled "Employer's Requirements"
56. I must set out substantial parts of the Employer's Requirements. Section 1 of the Employer's Requirements is the introduction.

This section includes the following provisions:

"1.1 Preamble.

1.1.3 Except where otherwise directed, all materials, workmanship, design and construction shall comply with:

(i) Standards, including Advice Notes and other documents listed in Annex 6-1, and Annex 1/2 as modified and extended by Annex 1/16 ...

(vi) Undertakings given at the Public Inquiry and undertakings arising from the Secretary of State's Decision Letter of 23rd July 1997.

1.1.4 The Works comprise all works necessary for the completion and opening of the Concession Road including obtaining all outstanding consents, approvals and permissions, provision of all facilities necessary for opening the road to the public as a toll road and the completion of all associated works necessary to comply with current practice and legislation .

1.2. Statutory Orders and Availability of Site .

1.2.3 The Site boundaries are shown on the SDP series of drawings as listed in Annex 1/5.

1.2.4 Notwithstanding the site boundaries as defined above, the Contractor shall be responsible for those locations remote from the site where permanent or temporary works may be necessary (as required in the Contract for remote traffic signing or forming parts of temporary diversions proposed by the Contractor) ...

1.3. Design Data

1.3.1 Traffic figures to be used for Detailed Design are supplied by the Employer in Annex 1/4 ...

1.3.5 Technical Approval Authority.

Prior to any Design Data being submitted under the Design Process, the TAA shall review the relevant Design Input Statement. This may take the form of a statement outlining the basic parameters to be used for the Detailed Design or, for structures, an AIP. The Design Input Statement shall be signed by the Designer and the Contractor. The procedure for reviewing the Design Input Statement shall be as Section 3.4 of the Employer's Requirements for Structures except that the time period for review under the Design Process shall be 28 days .

#### 1.4. Definitions ...

'AIP' means an Approval in Principle Form or Form A: Approval in Principle Form shown in Annex 3/4 or Annex 3/9 respectively ...."

"TAA means the Technical Approval Authority appointed in accordance with Schedule 7, Part 1, Section 1 paragraph 2.6 of the Concession Agreement save that in respect of the Rail Line Underbridges it shall mean Railtrack PLC ...

#### 1.5 Employer's Drawings

1.5.1 Employer's Drawings are listed at Annexes 1/5 and 3/5 to the Employer's Requirements. The status of each series of drawings is indicated in the following table as defined by one of the categories below:

"Mandatory Requirements: these drawings cover essential elements of the Works which must be incorporated into the Contractor's proposals.

Provisional Drawings: These drawings show the Preliminary Design and are provided for guidance. The Contractor may adopt or modify these designs to suit his own proposals, provided that in either event he can demonstrate that the proposals meet the Employer's Requirements and are in full compliance with the Made Statutory Orders.

Informatory Drawings: These drawings are issued for information only."

57. Then there follows a schedule with columns. The first two entries read as follows:

"Post Decision Scheme Site Definition Plans. Status: Mandatory Requirements. Comment: These drawings define the boundaries of the site to be provided by the Employer.

"Post Decision Scheme Road Works Plan/Profiles. Status: Provisional Drawings. Comment: The Highway alignments shown on these drawings may be modified by agreement with the relevant highway authorities but only to the extent that they remain within the Made Statutory Orders ..."

58. Section 2 of the Employer's Requirements deals with highways. Section 2 includes the following provisions. Paragraph 2.10:

"Traffic Signs, Traffic Signals and Road Markings ...

2.10.2 The Contractor shall design and provide all signs (excluding tourist signing), signals and road markings required for the satisfactory operation of the BNRR tolling system and shall obtain all necessary agreements and approvals for his proposals from the relevant Highway Authorities.

2.10.3 Traffic signs and signals shall be designed in accordance with Traffic Signs Manual and the appropriate standards listed in Annex 1/2. The likely operating speeds and the mandatory speed limit shall be as described in Numbered Appendix 12/1.

2.10.4 The Contractor shall be responsible for the detailed design, supply and installation of all signing necessary for opening and operating the road as a toll road including:

- signing required for the operation of the tolling system.
- modified or new signing on the M6 and M42 motorway approaches to the BNRR
- direction and route confirmatory signs for non-trunk roads consistent with the signing policy of the relevant Highway Authority
- all necessary warning, regulatory, informative and directional signs required by new or revised side roads or junctions on all approaches, including temporary or permanent modifications to existing signing, as agreed with the relevant Highway Authorities. Such signs may be sited at locations remote from the site and beyond the extent of highway works indicated on Side Roads Orders on land described in the Contract as Adjacent Areas, but exclude remote signing required solely as a result of BNRR being added to the highway network.

2.10.5 Variable direction signs and message matrix signs shall be provided at the diverges between the BNRR and M6 and M42 Motorways and at other locations all to the satisfaction of the relevant Highway Authority. Variable message signs shall be designed in accordance with the relevant standards listed in Annex 1/2. Variable message signs will be required on the approach to tolling booths ."

"2.12.16. Variable message signs shall be provided in the most suitable form for their purpose. The variable message signs on BNRR shall be designed for ...

"• tolling information purposes, advising road users on the current toll price and status of toll booths ...

## 2.14 Archaeological Works.

2.14.1 Previous archaeological investigations have been carried out on the site in order to identify any sites or areas of potential archaeological interest and evaluate their importance. The 'BNRR Public Inquiry Archaeological Report' (1994) and the 'BNRR Archaeological Addendum to 1994 Archaeological Desktop' (2000) contain details of the Cultural Heritage of the Site and the surrounding area. The 'BNRR Archaeological Project Design: General Strategy and Methodology' (2000; referred to below as the General Project Design) sets out the nature of the archaeological works to be undertaken in respect of each identified archaeological site and of the Site as a whole, together with standard methodologies to be applied in executing the archaeological works. The BNRR Aerial Photograph Assessment: Archaeology: Rectified Mapping Report (August 2000) identifies and gives details of features visible on aerial photographs. The requirements for Site No 7 in Table 2.7.3 of the General Project Design are extended. Black Country SMR 10350 records cropmarks of a multiple ditch system in this area, of local significance. The Contractor shall determine from the Rectified Mapping Report whether it suggests that the site is of more than local

interest and is substantially affected by the BNRR works. If so, more detailed treatment, including geophysical survey, trenching and excavation will need to be carried out. In addition, the AP plotting indicates three possible extra sites, not listed in the General Project Design and as listed below, for which the Contractor shall assess the extent and impact of necessary investigation. The Contractor shall also determine whether the AP plotting has revealed other sites requiring investigation.

SK11960499 Crop marked ditch enclosure and linear ditches indicative of a former enclosure. Aligned contrary to the modern fields, suggesting that they are more than former boundaries.

SK12480443 Crop marked linear ditch and perpendicular linear ditch with possible rounded corner. Could be a Roman camp, but this interpretation is very tenuous. Also pit alignment of unknown date and function.

SK12940449 Pit alignment, crop marked.

2.14.2 The Contractor shall employ an Archaeologist who shall be a Member of the Institute of Field Archaeologists with at least 10 years' relevant archaeological experience since graduating. The Archaeologist shall prepare Design Input Statements in respect of each archaeological site and in respect of scheme-wide advance works and scheme-wide works during construction, in accordance with the requirements of the General Project Design, and in accordance with Annex 1/3 part 5.

2.14.3. The Contractor should be aware of the possibility of uncovering archaeological features during the removal of topsoil or other soils within the Site. In the event of a feature of possible interest being discovered and unless otherwise agreed with the Employer, the relevant Local Authority Archaeologists and English Heritage (as appropriate), the Contractor shall:

(i) cease the stripping of topsoil and other soils and materials in the vicinity of the feature of possible interest;

(ii) immediately inform the Employer that a feature of possible archaeological interest has been uncovered. After consulting with the Department's Agent, the Employer will decide whether English Heritage and/or the relevant Local Authority Archaeologist should be contacted and should this prove necessary the Contractor shall erect temporary fencing around the area/feature of possible archaeological interest and shall allow representatives of English Heritage and/or the relevant Local Authority Archaeologist access to the Site provided it is deemed safe to do so.

2.14.4 In the event of a significant discovery being made the Employer, in consultation with English Heritage and/or the relevant Local Authority Archaeologist, will decide on an appropriate course of action and duly inform the Contractor in writing of that action. Should it prove necessary for representatives of English Heritage and/or the relevant Local Authority Archaeologist to visit the Site the Contractor shall allow them access to the Site ..."

59. Section 3 of the Employer's Requirements is headed "Structures". This includes the following provisions:

### "3.1 New Structures.

3.1.1 A list of the new Structures is given in Annex 3/1. The Employer's Mandatory Requirements for Structures are given in Annex 3/7. Employer's drawings illustrating the Preliminary Design and, where provided, CAMBBA's drawings which supersede the Preliminary Design are listed at Annex 3/5. The drawings will be used to develop the Approvals in Principle. However, where the CAMBBA drawings conflict with the Employer's Requirements the Employer's Requirements will be used as the benchmark....

3.1.3 the following is the estimated numbers of new Structures. The actual number of new Structures shall be determined by the Contractor in accordance with the Detailed Design."

There then follows a schedule of structures which includes the entry "New Structure type, Gantries, Number 68 ...

### 3.2 Existing Structures.

3.2.1 An indication of the existing Structures forming part of the Works and requiring initial maintenance, alteration, demolition, strengthening or reconstruction are listed in Annex 3/2."

60. I interject at this point to observe that Annex 3/2 does not include any gantries.

61. Let me now return to the provisions of section 3 of the Employer's Requirements:

### "3.3 Structure Design.

3.3.1 The preliminary Structure layouts were prepared to satisfy the route alignment and were used in submissions to both the RFAC and Public Inquiry. The CAMBBA designs of the Structures representing the Preliminary Design are listed in Annex 3/5...

### 3.4 Technical Appraisal and Certification Procedures.

3.4.1 All proposals concerning the design of new Structures or work that involves existing Structures shall be subject to technical appraisal by a TAA. The appraisal entails submission to the Employer and review of the proposals under the Design Process within the framework of the AIP contained in Annex 3/4, or for a Rail Line Underbridge a Form A: Approval in Principle in Annex 3/9 or a Design Input Statement. A separate form shall be prepared for each Structure.

3.4.2 The design of Highway Structures incorporated in the Works shall comply with Standards in Annex 2/1 ..."

62. Section 5 of the Employer's Requirements deals with Motorway Maintenance Areas and the Operations Management Centre. Section 5 includes the following provisions:

"5.2.8 The Contractor shall be responsible for obtaining all necessary consents, approvals and agreements from the relevant planning authorities for the construction of the buildings and from the appropriate utility providers for the provision of services...

5.3.7 The contractor shall be responsible for obtaining all necessary consents, approvals and agreements from the relevant planning authorities for the construction of the buildings and from the appropriate utility providers for the provision of services...

#### 5.5 Building Specification.

5.5.1 An outline building specification to be used in detail design of the Operations Management Centre, the Maintenance Personnel Building and the Police Security Building is contained in Annex 5/1."

63. Section 6 of the Employer's Requirements deals with Tolling Facilities. This section includes the following provisions:

"6.3.3 The buildings shall be fully serviced with electricity, gas (where practicable), hot and cold water supplies, drainage, heating, lighting, ventilation and in the case of rooms housing electronic control equipment, air conditioning, to a standard and specification to the satisfaction of the Employer."

64. Section 9 of the Employer's Requirements is entitled "Safety Audits". This provides as follows:

#### "9.1 General

9.1.1. The scheme shall be subject to road safety audits in accordance with the Standard HD 19/94 and HA 42/94 except that the procedure shall be amended as given below.

9.1.12 The Stage 1 Safety Audit Report for the scheme is available for inspection at the office of the Employer.

#### 9.2 Stages of Audit

Two further stages of audit shall apply:

9.2.1 Stage 2 Audit: for any item or stage of the Detailed Design, a Stage 2 Safety Audit shall be carried out prior to the start of construction of that item or stage.

9.2.2 Stage 3 Audit: immediately prior to occupation or use by the Employer of any part of the Permanent Works; any remedial works so identified shall be completed before opening of the road to public use except where otherwise agreed by the Department.

Depending upon the programme for the Works, it is anticipated that individual Stage 3 Safety Audits will be required for each side road and interchange.

9.2.3 The Contractor should be aware that the Department may require Stage 3 Safety Audits to be undertaken for the traffic management works proposed for motorways and trunk roads.

#### 9.3 Method of Audit.

9.3.1 The Safety Auditor shall be appointed by the Designer and shall be independent of the design team. Communication between Auditor and the Designer shall be via the Employer.

9.3.2 The audit brief prepared in accordance with Clause 2.20 of HD 19/94 shall exclude reference to Standards that are not included in the Technical Requirements.

9.3.3 The Contractor shall implement at its own cost all recommendations of the Auditor except where otherwise approved by the Department.

9.3.4 The Designer shall supply to the Employer reports and certificates at each stage of the audit to certify that the audit has been carried out and that except where otherwise approved the recommendations of the audit team have been incorporated into the Works."

65. I interject at this point to say that Mr Richard Thomas of Ove Arup, who is based in Ove Arup's Cardiff office, was the road safety auditor appointed pursuant to section 9 of the Employer's Requirements.
66. Annex 1/3 to the Employer's Requirements deals with anticipated additional survey requirements.
67. Section 5 of Annex 1/3 is headed "Pre-construction Archaeological Surveys" and it reads as follows:

"The Contractor shall be responsible for designing, agreeing, organising and arranging the archaeological works to be undertaken both before the start of and during construction in accordance with Paragraph 2.14 of the Employer's Requirements.

"The Contractor shall procure that all Archaeological Works are designed and carried out in accordance with the Code of Conduct of the Institute of Field Archaeologists, the relevant Standard and Guidance documents issued by the Institute of Field Archaeologists, and the relevant guidance documents issued by English Heritage.

The Contractor shall submit archaeological drawings and Design Input Statements to the Employer in accordance with the Design Process, and shall copy them to English Heritage and the relevant Local Authority Archaeologist (as appropriate). The archaeological Design Input Statements shall be Written Schemes of Investigation as required in accordance with the 'BNRR Archaeological Project Design: General Strategy and Methodology' (referred to below as the General Project Design).

Where more than one stage of archaeological works are required in accordance with the 'BNRR Archaeological Project Design: General Strategy and Methodology' (referred to below as the General Project Design), updated archaeological drawings and Design Input Statements shall be submitted in advance of each stage of archaeological works.

The Contractor shall, prior to submitting any archaeological drawings and Design Input Statements, agree liaison procedures with each of English Heritage and the relevant Local Authority Archaeologists.

The Employer may comment on an archaeological drawing or Design Input Statement on the grounds that the relevant archaeological drawing or Design Input Statement:

- (i) is not in accordance with the General Project Design;
- (ii) does not take into account any relevant archaeological information in respect of the relevant archaeological site;
- (iii) does not comply with the Code of Conduct of the Institute of Field Archaeologists, the relevant Standard and Guidance documents issued by the Institute of Field Archaeologists, or the relevance guidance documents issued by English Heritage;
- (iv) does not comply with the Employer's Requirements;
- (v) does not comply with Good Industry Practice.

In reviewing any archaeological drawings or Design Input Statements, the Employer will take into account any views expressed by the English Heritage or the relevant Local Authority Archaeologist.

The Contractor shall not carry out any Works within any part of the Site or Adjacent Areas which are subject to any archaeological works until the archaeological drawings and Design Input Statements submitted under Review Procedure have been returned marked received."

68. Annex 1/4 to the Employer's Requirements deals with Traffic Figures for Detailed Design. In the section headed "Geometric Design" there appears the following passage:

"Where the requirements of TD 16/93, as amended by Annex 1/16, cannot be achieved with regard to RFC values, then the geometric design of junctions shall be optimised to provide the greatest capacity available (up to the Design Year flows) within the available landtake and taking into account notified future highway improvement schemes. Such optimisation shall not rely on new structures or the need for significant elements of service and utility diversions, such as relocation of electricity transmission towers, sub-stations or major valve chambers, which would otherwise not be included in the Project."

69. Annex 1/5 to the Employer's Requirements is a list of Employer's Drawings. The first section of this list is entitled "Site Definition Plans (Post Decision Scheme)". This list of drawings includes drawing SDP-CEH-16. That is a Site Definition Plan and the location covered by that site definition plan is indicated in Annex 1/5.

70. Annex 3/1 to the Employer's Requirements sets out details in new bridges to be constructed. Bridge number 204 is shown in this annex as being Chasewater Footbridge.

71. Annex 3/7 to the Employer's Requirements is entitled "Employer's Mandatory Requirements for Structures". This annex includes the following provision:

"9.3 The following Structures shall be constructed in accordance with the provisions set against it below ...

5. Gantries.

#### "5.1. General

"Gantries shall be used to mount Advance Direction Signs, tolling signs and signals in accordance with paragraph 2.10 and 2.12 of the Employer's Requirements.

#### 5.2. Loading

"All gantries shall be designed to the full loading requirements of BD 51/98 including provision for signalling, and including impact loading as a result of Department's Change No 1.

#### 5.3 Provision for Signalling

"Sign only gantries shall be designed such that any additional structural metal work can be added to accommodate the signalling without redesign of the gantry structure itself ...

#### 5.6 Re-use of gantries

Existing gantries may be re-used providing they comply at a minimum with the following requirements.

(i) a satisfactory structural assessment to BD 51/98.

(ii) the gantry must satisfy clauses 5.2 and 5.3 above.

(iii) the minimum sign area shall be 5m high and extend the full width of the gantry ...."

72. Annex 5/1 to the Employer's Requirements is an Outline Building Specification. This includes the following passage at the very end of the last page.

"Drainage. Underground drains will be provided to collect both foul and surface wall."

73. Annex 6/1 to the Employer's Requirements is the specification setting out the requirements for the Toll Collection System (TCS).

74. Section 1 of Annex 6/1 is headed "Scope" and it includes the following provisions:

#### "1.1 Purpose of this document

This document contains the Requirements Specification of the Employer for the Toll Collection System (TCS) for the Birmingham Northern Relief Road (BNRR). This document is referred to in the Conditions of Contract and the Employer's Requirements as the "Toll Collection System Requirements Specification".

This Toll Collection System Requirement Specification outlines the general requirements and parameters for the Toll Collection System and is not an exhaustive statement of the requirements for the Toll Collection System Works ...

#### 1.3 System Overview.

The Toll Collection System is a system that is installed as part of the Works. The mission of the TCS is to allow the efficient, error-free processing of toll collection at the BNRR.

The Toll Collection System is based on the concept of a so called "open toll system", which implies that the Customer is required to pay toll fees at only one charging point, the Toll Station. Each Toll Station consists of a number of Lanes, closed with a barrier to prevent the passage of non-paying Customers.

The Toll Collection System comprises the complete system required to charge fees at the Toll Stations and to support the Employer in operating the system ..."

75. Paragraph 4 is headed "Document Overview". This is a lengthy paragraph and it includes the following provision:

"An option is a feature of the system that shall be included in the tender of the Toll Collection System. However, the Employer will decide at a later stage if the option shall be implemented in the delivered system."

76. Section 3.2 of this specification is headed "Characteristics". This section sets out the characteristics which the Toll Collection System must possess. This section includes the following provisions:

"3.2.1.1.2[15] As an option the TCS shall inform the Road User:

-- using variable message signs in front of the Toll Station over the carriageways showing only the actually applicable toll fees for all vehicle classes..."

"3.2.1.1.3[47] The TCS shall not cause unnecessary delay to the passage of vehicles specified in Chapter 13.2(a), (b), (c) of the [NRSWA] (police vehicles, ambulances and fire engines) by giving away to the vehicle as soon as the Cashier or Supervisor have indicated that these vehicles are exempted from paying toll.

[48] The processing time of the TCS for the Fee Charging process shall be equal to or lower than the times specified in the following table."

77. There then follows a table showing very rapid response times.

78. "3.7.3.2[250] Semi-Automatic Toll Lane Equipment for payment using coins shall be provided with a basket or hopper for easy coin insertion."

79. Appendix 1/17 to the Employer's Requirements deals with "Traffic Safety and Management-Motorways and Trunk Roads". This includes the following provisions:

"2. Responsibilities.

2.1. The Contractor shall be responsible for the design, construction and maintenance, at each location, of the traffic safety and management system and associated work as described in Clause 117 of the Specification and this Appendix including complying with the requirements and advice in the following publications."

80. There then follows a list of standards and publications.

81. "2.2 The Contractor shall appoint a Traffic Safety and Control Officer at the commencement of the Traffic Management Operation.
- 2.3 The Contractor shall participate in regular traffic management meetings with the Employer, the Highways Agency and their maintaining agents, other relevant Highway Authorities, Police and other parties as may be specified by the Employer, throughout the traffic management period, to liaise on all matters relating to traffic management including **inter alia**:
- layout of traffic management schemes ... "
- 2.8 The Contractor shall be responsible for obtaining all necessary approvals, authorisations and/or agreements in relation to his proposed Traffic Safety and Management System from the relevant highway authorities and the Police, in advance of its implementation. The Contractor shall agree with the authorities concerned the period of prior notice required to obtain such approvals, authorisations and/or agreements."
82. Appendix 12.1 to the Employer's Requirements is entitled "Traffic Signs: General" and this includes the following provisions:
- "1. The likely operating speeds (design speeds) and mandatory speed limits shall be as follows:
- BNRR-main route.
- Design speed: 120 kilometres per hour.
- "Mandatory Speed Limit: 70 miles per hour ... "
- "Before using these figures for design of traffic signs, the Contractor shall satisfy himself as to the proposed design speed and/or prevailing mandatory speed limit at the particular locations being considered. Reference should also be made to the side road design standards given in Annex 1/2.
- "2. The installation of mandatory signs shall be complete before new roads are opened to traffic."
83. That completes my reading of the Employer's Requirements, which constitute Appendix 2 to the D&C Contract. Let me now move on to Appendix 4 to the D&C Contract.
84. Appendix 4 deals with the design and review procedure. Part C of Appendix 4 reads as follows:
- "1. All Design Data shall be prepared by or under the supervision of the Designer. The Contractor shall submit all Detailed Drawings to be used for Construction to the Employer who shall selectively review and audit the same. In addition to the Detailed Drawings the Contractor shall provide as much Design Data as the Employer may request for carrying out review and audit.
2. All Detailed Drawings submitted shall be the subject of a Design Review Certificate stating that the design has been prepared in accordance with and complies in all respects with the Employer's Requirements and the Design Input

Statement. Where appropriate, the Design Review Certificate shall be accompanied with a Check Certificate.

3. All Design Review Certificates, Check Certificates and Detailed Drawings together with additional requested Design Data, shall be submitted to the Employer in triplicate free of charge by the Contractor.

4. The Employer shall, as soon as practicable, and in any event within 28 days, return one copy of the relevant document covering the submission endorsed "received", "received with comments" or "comments" as appropriate. Where a submission is endorsed "received" the Contractor may proceed without further reference except as expressly provided for under the Design and Checking Procedure. Where the submission is endorsed 'received with comments' provided the material, the subject matter of the submission, is amended by the Contractor in accordance with those comments, then except as expressly provided for in the Design and Checking Procedure the Contractor may proceed without further reference. Where the submission is endorsed 'comments' then, unless the matter is referred to the Disputes Resolution Procedure, it shall be revised by the Contractor and re-submitted to the Employer."

85. Appendix 6 to the D&C Contract sets out the Dispute Resolution Procedure. In the first instance all disputes are referred to an adjudicator. Paragraph 9 of Appendix 6 is entitled "Referral to the Courts". It provides:

"9.1 The decision of the Adjudicator shall be final and binding on the parties until the Dispute is finally determined by:

"9.1.1 the agreement by the parties; or

"9.1.2 legal proceedings in accordance with paragraph 9.2.

Prior to such final determination the decision of the Adjudicator shall be implemented without delay and the parties shall be entitled to such reliefs and remedies as are set out in the Adjudicator's decision (and shall be entitled to summary enforcement thereof) regardless of whether such decision is or is to be the subject of any challenge or review."

9.2 Subject to paragraph 9.5, a party may, within 60 days after receipt of the determination of the Adjudicator, refer any matter comprised in the Construction Dispute to the Court for determination, and the Court shall have jurisdiction to determine the rights of the parties in respect of such matters. The Court shall have full power to open up, review and revise any endorsement, decision, opinion, instruction, notice, statement of objection, finding, determination, requirement or certificate of the Department's Agent, the Department's Representative, the Employer, the Employer's Agent or the Certifying Engineer related to the Construction Dispute and any determination of the Adjudicator ..."

86. Appendix 10 to the D&C Contract sets out a List of Relevant Authorities. The list in Appendix 10 includes, under the heading "Government Departments", the Department of the Environment, Transport and the Regions, the Highways Agency and also the Police. Under the heading "Local Authorities" there is included the Lichfield District Council.

87. A number of Statutory Undertakers and utilities are listed in section 3 of Part A of Appendix 10, and a number of other bodies are listed in section 4 of Part A of Appendix 10.

88. One police organisation which falls under the rubric of Appendix 10 is the Central Motorway Police Group ("CMPG").
89. Having identified the relevant contractual provisions, I should now give some supplementary information.
90. The firm of engineers whom MEL appointed as TAA were Jacobs Babtie, to whom I shall refer as "Babtie". Babtie also performed certain other functions under the contract to which I shall revert later.
91. The statutory provisions referred to in clause 1.1 and clause 17.3.4 of the D&C contract are as follows.
92. Section 85 of the New Roads and Street Works Act 1991 ("the 1991 Act") provides:
- "(1) Where an undertaker's apparatus in a street is affected by major highway works ... the allowable costs of the measures needing to be taken in relation to the apparatus in consequence of the works ... shall be borne by the highway ... authority concerned and the undertaker in such manner as may be prescribed.
- "(2) The regulations may make provision as to the costs allowable for this purpose
- (4) The regulations shall provide for the allowable costs to be borne by the authority and the undertaker in such proportions as may be prescribed."
93. The Street Works (Sharing of Costs of Works) Regulations 1992 were made pursuant to section 85 of the 1991 Act. These regulations include the following provisions:
- "3. Save as provided in regulations 7 and 9 in cases where works are initiated by an authority and an undertaker executes measures which need to be taken in respect of his apparatus because of those works, the authority shall pay to the undertaker a sum equal to the allowable costs incurred by the undertaker in taking those measures, provided that the authority shall pay only 82 per cent of the said allowable costs if the authority pays to the undertaker a sum equal to 75 per cent of the estimate of the said 82 per cent pursuant to paragraph (a) of regulation 9 ...
9. Allowable costs under any of the provisions of these Regulations shall be payable as follows:-
- "(a) in the case of any payment due from an authority pursuant to regulations 3 and 6, the authority may pay to the undertaker a sum equal to 75 per cent of the estimate of 82 per cent of the allowable costs in a single lump sum before the works begin or, if the authority and the undertaker so agree in the case of works of an estimated duration of more than 3 months, by instalments of such amounts payable at such times during the execution of the works as the authority and undertaker agree;
- (b) after the works have been completed the person to whom the allowable costs are due (the creditor) shall issue to the person from whom they are due (the debtor) an account of the allowable costs and within 35 days of that account having been issued the debtor shall pay to the creditor a sum equal to the allowable costs ..."

94. The Street Works (Sharing of Costs of Works) Regulations came into force on 15th January 2001. These new regulations replaced the 1992 regulations. So far as the issues in this case are concerned, the 2001 regulations are in substantially the same terms as the 1992 regulations.
95. Let me now turn to the TCS requirements specification which, it will be recalled, is set out at Annex 6/1 to the Employer's Requirements. This specification was developed in accordance with clause 9.3 of the D&C Contract. The final version of this specification was dated 6th February 2002. Insofar as it is necessary to refer to changes between Annex 6/1 and the final version of the TCS requirements specification, I shall do so later in this judgment.
96. The subcontractor who designed and supplied the toll collection equipment to CAMBBA was Ascom Monetel SA ("Ascom").
97. A number of disputes have arisen between the parties concerning the application of the above contractual provisions to events which have occurred on site. The disputes were referred to adjudication. In respect of 14 of these disputes, the unsuccessful party did not accept the adjudicator's decision. Accordingly, in order to obtain the Court's decision on these matters, the unsuccessful party gave notice in accordance with paragraph 9.2 of Appendix 6 to the D&C Contract. Thereafter the parties commenced the present proceedings.

### Part 3. The Present Proceedings

98. By a claim form issued in the Technology and Construction Court in London on 22nd October 2004, MEL sought relief in respect of the following six disputes in relation to which it had been unsuccessful before an adjudicator:
  - (1) A dispute as to whether in calculating the sums payable for Provisional Sum items the Provisional Sums shown in the contract should be deducted.
  - (2) A dispute as to whether MEL are entitled to recover from CAMBBA the costs which MEL has incurred in employing another contractor to enclose Chasewater Footbridge.
  - (3) A dispute as to whether CAMBBA are entitled to be paid extra for work done outside the Site boundary at Dunton Island.
  - (4) A dispute as to whether MEL is entitled to a reduction of the Contract Price because certain toll station signs were post-mounted rather than gantry-mounted.
  - (5) A dispute as to whether CAMBBA are entitled to be paid extra for establishing signs to impose speed limits on the approaches to mainline toll stations.
  - (6) A dispute as to who should pay the sum of £30,000 required by the Lichfield District Council as a condition for the grant of planning permission for the erection of certain buildings at Weeford.
99. CAMBBA by their counterclaim in this action sought relief in respect of another dispute about Provisional Sums. This dispute concerned how interim payments in respect of Aggregate Tax should be calculated.
100. These proceedings are generally referred to as "the London action".

101. By a claim form issued in the Technology and Construction Court in Birmingham on 22nd October 2004, CAMBBA applied for relief in respect of the following six disputes in relation to which they had been unsuccessful before an adjudicator:
- (1) A dispute as to whether MEL is entitled to a price reduction because CAMBBA have failed to upgrade certain existing gantries on which they placed new signs.
  - (2) A dispute as to whether CAMBBA are entitled to be paid extra for installing package treatment plants as opposed to cesspools at four locations.
  - (3) A dispute as to whether CAMBBA are entitled to be paid extra in respect of certain archaeological works.
  - (4) A dispute as to whether MEL is entitled to a share of the discounts received pursuant to section 85 of the 1991 Act.
  - (5) A dispute as to whether CAMBBA are entitled to extra payment for constructing part of the Lodge Lane Link to a width of 10 metres as opposed to 7.3 metres.
  - (6) A dispute as to whether CAMBBA are entitled to extra payment in respect of certain works done at the premises of the Vehicle Inspectorate.
102. These proceedings are generally referred to as "the Birmingham action".
103. CAMBBA did originally advance two further claims in the Birmingham action but these claims are not pursued and I say no more about them.
104. There is one other issue which arises in the Birmingham action. This is the question whether certain claims are shut out by the so-called Belfry Agreement. The Belfry Agreement is the name given to a document signed by representatives of the parties in March 2002. The document is given this name because it is the culmination of discussions which started four months previously at a meeting held in the Belfry Golf Club. That meeting is variously referred to as "the Belfry meeting" or "the Belfry workshop".
105. By a claim form issued in the Technology and Construction Court in London on 4th March 2005, MEL sought relief in respect of a further dispute in relation to which it had been unsuccessful in adjudication. This dispute concerns whether CAMBBA are entitled to extra payment for reducing the height of certain coin baskets at toll booths. These proceedings are generally referred to as "the coin baskets action".
106. On 21st March 2005 Her Honour Judge Kirkham, sitting at the Technology and Construction Court in Birmingham, ordered that the Birmingham action be transferred to London. In due course an order was made that the three actions should be tried together.
107. The trial of the three actions commenced on 17th October 2005. Mr John Blackburn QC and Mr Darryl Royce represent MEL. Mr David Streatfeild-James QC and Ms Nerys Jefford represent CAMBBA. The first day of the trial was taken up with opening speeches. On the second day of the trial there was a Site view. After that evidence was called in the following order:
- MEL's factual evidence.
- CAMBBA's factual evidence.
- The expert evidence.

108. After the evidence had been called the trial was adjourned for a period to enable counsel on each side to prepare written closing submissions and then oral closing speeches. Whilst counsel were engaged in that task I had the opportunity to study the evidence as well as the parties' written closing submissions. Oral closing speeches were delivered yesterday, which was Monday 14th November.
109. Having outlined the course of these proceedings, my next task will be to outline the evidence which was adduced at trial. After that I shall deal with the issues concerning the Belfry Agreement because these issues impact on a number of individual disputes between the parties. Having dealt with the Belfry Agreement, I shall then turn individually to each of the disputes which have been referred to this court for determination.
110. As indicated just now, however, my next and immediate task will be to outline the evidence.

#### Part 4. MEL's Factual Evidence

111. In this part of the judgment I shall summarise the evidence given by MEL's factual witnesses. In doing so, I shall weave together the gist of each witness's written statement and oral evidence.

#### JONATHAN LANGHAM

112. Mr Langham is a chartered civil engineer who has been involved in the construction of roads since 1968. Mr Langham has been construction director of MEL since February 2000. He dealt with the preparation of tender documents for the design and build contract for the M6 toll road. He dealt with the award of the contract to CAMBBA. During the construction period Mr Langham has carried out the functions of employer's agent.
113. Mr Langham has prepared a witness statement which sets out the narrative history of events and summarises the relevant correspondence. Much of this statement is uncontroversial. Although it is extremely helpful as a reference document, it does not all need to be reiterated in this judgment.

#### Chasewater Footbridge

114. Chasewater Footbridge is a footpath over the M6 toll road. On one side of the bridge there is a recreational lake and a public open space. On the other side of the bridge the footpath leads to a nearby housing estate. The footbridge was constructed in 2002 with a parapet height of 1.15 metres.
115. On 11th November 2002, PC Turner wrote to Mr Langham expressing the police's concern that this bridge may become a congregation point for youths and that objects may be thrown from the bridge onto the motorway.

116. In cross-examination Mr Langham was asked about this letter. He said that MEL recognised the letter as setting out a concern raised by the police. MEL did not regard the letter as setting out a requirement of Chasewater Footbridge being closed or indeed as setting out any requirement that had to be complied with. Mr Langham did not even reply to that letter.
117. On 1st April 2003 the police reported an incident when youths were throwing missiles from the bridge. Mr Langham took the view that this was a public order matter to be dealt with by the police.
118. At the end of April there was another incident. This time a brick was thrown from Chasewater Footbridge and it went through the window of a passing CAMBBA tractor. Terry Lewis, MEL's construction manager, expressed the view that the footbridge should be enclosed. This incident was a source of concern to Mr Langham and triggered his action thereafter.
119. On 2nd May Mr Langham wrote to Mr Neal reporting the problem and requesting his proposals for making the Highway Works safe for the public. It was MEL who raised this matter. Mr Langham was not passing on a requirement of the police. During May Mr Langham made a note in his diary analysing the problem from all angles. He set out the possible remedial measures that may be taken and the relevant considerations. This was not a document which he sent to any other party.
120. The stance adopted by CAMBBA in May 2003 was that the problem of youths throwing objects from the bridge was a public order matter for which CAMBBA were not responsible. If MEL or the Highways Authority wanted security measures to be taken, MEL would have to issue an instruction and CAMBBA would be entitled to payment for the work involved.
121. There was an argument in correspondence about this matter. Mr Langham relied on departmental standard BD 29-87. He did not argue that enclosure of the bridge was a police requirement because it was not his view that this was a police requirement. It can be seen from the bundle that during June AAJV were working on a design solution to the problem, but Mr Langham was not aware of this at the time. Mr Langham did not attend the meeting between PC Turner and CAMBBA.
122. On 23rd July Mr Langham received PC Turner's letter dated 18th July. Mr Langham knew from his discussions with Mr Neal that this letter was coming. Mr Langham subsequently discussed this letter with PC Turner, when she called into MEL's office. At MEL's commercial review meeting on 1st August 2003 the problem of Chasewater Footbridge was discussed. MEL decided to consult the TAA.
123. After further discussions with the police, MEL came to the conclusion that it was necessary to enclose the footbridge. Mr Langham does not recall that this was a specific requirement of the police.
124. Some time before 12th September 2003 MEL commissioned Babbie to design an enclosure for the footbridge. On 19th September Babbie submitted their detailed design for the enclosure. This design had to take into account wind loading and the effect of ice in winter. Mr Langham is confident that Babbie did this although Mr Langham did not personally check the calculations.
125. The actual enclosure work was carried out by other contractors, because Mr Langham understood that CAMBBA would not do this work unless they received an Employer's Change. The work was done in two stages. Initially the bridge over the motorway was enclosed. MEL considered, however, that this was insufficient. So the enclosure was then extended for the full length of the footbridge on either side of the motorway.

126. In November 2003 Mr Langham had discussions with PC Atkin of the CMPG. He understood from those discussions that the police would object to the issue of a PTU, unless Chasewater Footbridge was either closed to the public or enclosed. Accordingly, MEL arranged for the bridge to be closed to the public until the enclosure was erected.

#### Dunton Island

127. Dunton Island is a roundabout at junction 9 of the M42. It also enables traffic to access the M6 toll road. The southbound entry slip road leading onto the M42 required to be widened in order to accommodate anticipated future traffic flows. At the top of the slip road the widening works would extend onto land beyond the Site boundary as defined in the D&C Contract. This land, although outside the site, belonged to the Department of Transport.
128. There was an argument in correspondence about whether or not the works on this land fell within the contract. In order to progress matters, Mr Langham asked Mr Faulkner, CAMBBA's commercial manager, for an estimate of the cost of the disputed works. In an e-mail dated 17th October 2002 Mr Faulkner gave an estimate in the order of £25,000. Subsequently CAMBBA said that the works had been carried out and gave a lump sum quotation of £180,000 for those works. Mr Langham maintained in correspondence that CAMBBA were not entitled to an Employer's Change, a Department's Change or any additional payment in respect of those works.

#### Mandatory Speed Limits

129. The first occasion on which MEL raised a concern about the speed of vehicles approaching mainline toll stations was the "walk through" meeting of 12th August 2002. This concern was voiced by Mr Moretti, who had been seconded to MEL because of his experience of Italian Autostrada. Tony Ball of MEL shared this concern.
130. Over the next few months there was correspondence between MEL and CAMBBA on this matter. CAMBBA's position, which was summarised in a letter dated 4th December 2002, was that mandatory speed limit signs at mainline toll stations were unnecessary and confusing.
131. Mr Langham also approached the road safety auditor, Mr Thomas, on this matter. In a letter dated 17th December 2002 Mr Thomas expressed his view that mandatory speed limits were probably unnecessary but that the CMPG should be consulted.
132. On 17th January 2003 there was a meeting between MEL, CAMBBA and others about toll plaza safety, but Mr Langham did not attend. According to the various notes of that meeting, Mr Rooker of CMPG advised that there should be a mandatory speed limit of 50 miles per hour on the approach to mainline toll plazas. AAJV expressed a similar view to the road safety auditor.
133. On 27th January CAMBBA wrote to MEL stating that they could not promote mandatory or advisory speed limit signs. This letter did not put Mr Langham's mind at rest, because he believed that the police (like MEL) favoured mandatory speed limit signs.
134. On 31st January MEL commissioned Babtie to prepare a report on the matter. On 13th February there was a meeting between MEL, CAMBBA and others at which various safety measures were agreed to be taken, including 50 mile per hour speed limits. Steve Warren represented MEL at this meeting.

135. On 24th February Babbie produced their report which had been commissioned on 31st January. Babbie recommended a mandatory 50 mile per hour speed limit on the approach to mainline toll plazas. On 26th March Mr Langham sent a letter to CAMBBA which seems unduly harsh, but Mr Langham explained in cross-examination that this was because he had not then seen any minutes of the 13th February meeting. Mr Langham's letter crossed in the post with a letter from CAMBBA setting out what they had agreed to do at the February meeting.
136. On 1st April Mr Ball of MEL wrote to the DA stating that in the view of MEL and CMPG there should be mandatory speed limits of 50 miles per hour and then 30 miles per hour on the approaches to mainline toll stations. At this time MEL and CMPG were having very frequent meetings and it was Mr Rooker of CMPG who had suggested a step down from 50 to 30 miles per hour.
137. On 2nd April the DA replied that the initial view of the Department of Transport was that this was not necessary. Furthermore, this measure would necessitate a change to the draft M6 toll regulations. The DA added that in order to obtain Department of Transport approval, MEL would need to get the backing of the CMPG for their proposals.
138. It was really CAMBBA's responsibility to deal with these matters. However, MEL stepped in because, in Mr Langham's view, CAMBBA were failing to deal with these matters satisfactorily.
139. On 2nd May 2003 Mr Langham and his colleagues attended a meeting with the DA, CAMBBA and AAJV. It was agreed that AAJV would revise their drawings in accordance with the February meeting and re-submit these through the review and safety audit process. There were further meetings during May.
140. In a letter to MEL dated 17th June and a letter to the Highways Agency ("HA") dated 1st July, CMPG set out their view that there should be speed limits of 50 miles per hour and then 30 miles per hour on the approaches to mainline toll stations. It was the function of the CMPG to give advice rather than instructions on these matters. Mr Langham had asked CMPG to set out their advice in writing. This advice was confirmed in a later letter from Mr Rooker and Mr Atkin of CMPG.
141. In due course the HA secured a traffic regulation order imposing a 50 mile per hour speed limit followed by a 30 mile per hour speed limit on the approaches to mainline toll stations. By a letter dated 5th September MEL required CAMBBA to incorporate these speed limits and consequential matters into their design.
142. CAMBBA duly did so, but there was a dispute in correspondence as to whether the introduction of mandatory speed limits constituted an Employer's Change.

#### The Belfry Agreement

143. MEL and CAMBBA attended a workshop on 29th to 30th January 2001. The objective was to promote openness, to resolve the parties' differences and to direct everyone's energies to completing the project.
144. Unfortunately more disputes and claims between the parties arose during the period between January and November 2001. In order to address these matters, a board level workshop was held on 15th November 2001 at the Belfry Golf Club.

145. Mr Langham made a presentation. He proposed that both MEL and CAMBBA should drop all claims against each other. In part of Mr Langham's handout he used the graphic phrase "putting the contract in the drawer". However, CAMBBA did not want that. CAMBBA made it clear on 15th November that they wanted to work in accordance with the contract.
146. During the meeting Mr Langham said that if CAMBBA made unjustified claims then MEL would implement "devices" in order to reduce the Contract Price. By this Mr Langham meant that he would construct Employer's Changes which would reduce the Contract Price. In other words, MEL would make tit for tat counterclaims against CAMBBA. CAMBBA were concerned at this suggestion.
147. As at November 2001, Mr Langham considered that CAMBBA were making unjustified claims. Relations had reached a pretty low level. Accordingly, Mr Langham proposed that the letters of claim sent by each side in correspondence should be "parked". It was agreed that a list of those letters would be drawn up.
148. By the word "parked" (which features in several MEL documents of this period) MEL meant that neither side would pursue the various letters of claim which it had sent. However, the word "parked" indicates a temporary rather than a permanent state of affairs. It does not mean that those claims were abandoned forever.
149. The directors of MEL and CAMBBA met again on 16th January 2002 but the list of relevant letters had not yet been drawn up.
150. By 28th January a list of relevant letters sent by each side had been drawn up and Mr Langham sent a draft agreement to Mr Neal for signature. At a meeting on 31st January, Mr Neal said that the document should be more a statement of intent rather than something in place of the D&C Contract.
151. On 21st February Mr Neal sent a letter to Mr Langham in which he declined to sign the document MEL had prepared. He continued:

"This is on account of the fact that the letter constitutes a change to the Conditions of Contract, which neither of us are empowered to agree to. As discussed we agreed to draft out a "Statement of Intent" which adequately reflects the agreements and discussions that have taken place between ourselves."

152. Mr Neal attached to his letter a document headed "Statement of Intent" setting out his proposed wording.
153. During March 2002 both Mr Langham and Mr Neal signed the document, which Mr Neal had produced on 21st February. That document reads as follows:

"Statement of Intent".

"Both MEL and CAMBBA will work together to achieve the timely and successful opening of the Project by the end of September 2003. Annex 1 contains a list of letters itemising certain issues which it is agreed CAMBBA will not pursue in respect of claims for extension of time and/or Price Adjustment against MEL. Both parties agree that they will work together to achieve a final account price of £485.5 million with pricing adjustments only applying in respect to increases or decreases in the Scope of Works, Provisional Sums, claims against the

Highways Agency and any other Third Party or Relevant Authority and other unforeseen events or circumstances as provided for in the Contract.

"Where departures from Standards are technically acceptable, MEL will not seek any price reductions as a condition of acceptance unless in doing so MEL would suffer loss, damage or diminution in value. This applies to Departures that have already been accepted technically and those which are being or may be proposed."

154. Annex 1 to this document was headed "Schedule of CAMBBA and MEL letters that have no contractual or commercial effect". It took the following form. Letters are identified by their date and reference number. There is then a summary of the subject matter of the letter. There is then a column for comments.
155. The first page of Annex 1 lists letters sent by CAMBBA. The second page of Annex 1 lists letters sent by MEL.
156. It was made clear in the third column of Annex 1 that CAMBBA were only dropping claims against MEL and claims for an Employer's Change. CAMBBA were not dropping any claims which they might have against HA or for a Department's Change.
157. This document is referred to by the shorthand "the Belfry Agreement", because its origins lay in the convivial meeting at the Belfry Golf Club in November 2001.
158. In Mr Langham's view the purpose of the Belfry Agreement went beyond the mere dropping of claims. The idea was that both parties would pull together and would concentrate their efforts on achieving early completion of the motorway. Mr Langham accepted Mr Neal's statement to the effect that Mr Langham and Mr Neal were not empowered to make a formal contract. Mr Langham also accepted that both men would keep their word. Mr Langham regarded the Belfry Agreement as a "commercial" agreement rather than a "contractual" agreement.

#### Omission of Gantries

159. Annex 6/1 to the Employer's Requirements sets out the requirements for the Toll Collection System ("TCS")

Mr Langham considered that the phrase in paragraph 3.2.1.1.2[15] "over the carriageways" meant that the signs had to be gantry-mounted.
160. Pursuant to paragraph 1.4[1] of Annex 6/1 an option is a feature of the TCS which must be included in the tender price but which the employer may later omit.
161. Representatives of MEL and CAMBBA held numerous meetings to deal specifically with the TCS. The lane functional design was developed at a TCS meeting on 16th February 2001, which Mr Langham did not attend. There is nothing in the minutes of this meeting about the variable message signs being overhead.
162. On 17th May 2001 there was a mainline signing forum meeting between MEL and CAMBBA. The minutes of this meeting include the following paragraph:

"Gantries for Toll Plazas".

"It was agreed that two gantries on the approach to mainline toll plazas would be sufficient, the 1 mile signs could be post mounted. It was also agreed that gantries would not be required on approaches, slip road toll plazas if a safe system of post mounted signage could be designed. Babbie to confirm basis of Atkins Odlin design at tender stage."

163. In the meantime MEL, CAMBBA and Ascom were continuing to develop the specification for the TCS. This had to be finalised by the design freeze date, 19th September 2001.

164. On 10th September 2001 MEL sent to CAMBBA version 2 of the TCS requirements specification. Paragraph 3.2.1.1.3 of this document provided:

"The TCS shall inform the road user using variable message signs in front of the toll station over the carriageways showing only the actual applicable toll fees for cash or card payment for all vehicle classes. These signs are the same as those referred to in the final sentence of clause 2.10.5 of the Employer's Requirements. The vehicle classes referred to in this requirement are the classes according to the initial configuration specified in [18], see also figure 7."

165. This provision re-appeared, albeit with a different paragraph number, in the third and final version of the TCS requirements specification, which was reviewed and formally issued on 6th February 2002.

166. It can be seen from this sequence of events that in practice MEL exercised its option to have the variable message signs mounted on gantries on 10th September 2001. This is because the words "as an option" which appear in paragraph 3.2.1.1.2[15] are omitted from version 2.

167. On 3rd December 2002 Mr Langham wrote to CAMBBA in the following terms:

"Employer's Change No 13, Relaxation of Requirement for signing of the 1 mile approach to mainline toll plazas and approaches to slip road toll plazas to be gantry-mounted ... pursuant to clause 39.5 of the Design and Construction Contract we hereby instruct that the requirement for CAMBBA to provide gantry-mounted signs for the 1 mile approach to the mainline toll plazas (2 No.) and on the approaches to the slip road toll plazas (3 No.) is reduced to the requirement that post-mounted signs are provided (item 3.2.1.1.2.[15] of version 3 of the Toll Collection System refers). The five gantries that are covered by this Change (using the references contained in the 'Procedure and Basis for Assessing Measurement and Progress of the Works Contract Clause 38.1') are 31200S, 18200N, 21900S, 30700N and 39800N. As provided for in paragraph 39.5 of the Design and Construction Contract, please send me a quotation identifying the cost saving and any other effects resulting from this relaxation of the mandatory requirements of this contract."

168. The gantry-mounted toll signs which Mr Langham was referring to in this letter were the following: the toll signs for one mile before each of the two mainline toll stations; the toll sign for the exit slip road to the Burntwood junction; the toll sign for the exit slip road to the Weeford junction; and the toll sign for the exit slip road to the A38 junction.

169. It was pointed out to Mr Langham in cross-examination that the purported relaxation occurred on 17th May 2001, which was some four months before MEL exercised its option to have the variable message signs overhead. It was suggested to Mr Langham that this particular matter was a tit for tat claim; he had put together two unconnected events to make this claim because

he felt that CAMBBA had made unjustified claims. Mr Langham accepted that this was fair comment.

#### Vehicle Inspectorate

170. During the 1990s, the Vehicle Inspectorate had premises just off the A5 trunk road near Wall Island. The works to construct the M6 toll road made it necessary to stop up the existing access to those premises and to provide a replacement access. This change of access arrangements was authorised by an order made by the Secretary of State for Transport in 1998. Mr Langham was invited to attend a meeting between CAMBBA and the Vehicle Inspectorate on 2nd March 2001 but was unable to attend.
171. It was part of CAMBBA's works under the D&C Contract to change the access arrangements to the Vehicle Inspectorate's premises in the manner set out in the Secretary of State's order. However, Mr Langham learnt from CAMBBA's letter dated 3rd October 2001 that CAMBBA were doing much more than that. CAMBBA did these further works at the behest of the Vehicle Inspectorate. MEL were not involved. Mr Langham did not attend any of the meetings between CAMBBA and the Vehicle Inspectorate. Mr Langham was told during the course of the works that CAMBBA were having difficulty gaining access to the Vehicle Inspectorate's premises even though those premises formed part of the site under the D&C Contract.
172. On 20th May 2002, CAMBBA wrote to MEL requesting an Employer's Change or a Department's Change to cover the additional works which CAMBBA were doing for the Vehicle Inspectorate. Mr Langham passed this letter on to the HA. He supported CAMBBA's proposal that the Vehicle Inspectorate should suspend operations at Wall Island for a period.
173. There was discussion in subsequent correspondence and meetings as to whether the Vehicle Inspectorate was a "Relevant Authority" under the Concession Agreement and/or under the D&C Contract.
174. MEL took the view that this issue was really between CAMBBA and the HA. CAMBBA were probably entitled to a Department's Change. However, CAMBBA never asked for a Department's Change and the HA never offered one.
175. The issue subsided. The Vehicle Inspectorate ceased to cause problems. Then much later, by a letter dated 30th July 2004, CAMBBA claimed an interim payment in respect of works done for the Vehicle Inspectorate.

#### Coin Baskets

176. Mr Langham had very little involvement in this matter. However, he was told that coin baskets had been set too high. Tests on the Toll Collection System were done on 1st April 2003. Mr Langham was not present at these tests, although a DVD of these tests was shown during Mr Langham's cross-examination.
177. Mr Langham understood that the main purpose of these tests was to see if the equipment was working properly; whether the vehicles were being measured correctly, charged the right price, getting through fast enough and so forth. After the tests Mr Sandland, who had a fairly high vehicle, commented that the coin baskets were fine. However, Steve Werret, who had been

driving an Audi in the tests, sent an e-mail stating that he found the coin baskets to be rather high. He thought that some drivers would have difficulty.

178. On 15th April 2003 Mr Langham wrote to Mr Neal informing him of the recent tests and stating as follows:

"The tests revealed concerns about the height of the ACM baskets which were described as being 'much higher than the ones on the Dartford crossing'. The height of the lower ACM basket is 127 centimetres from the road surface, whereas at the second Severn crossing the height is 101 centimetres (lowest part of the basket). The extra height means that coins have to be thrown rather than dropped into the baskets. We believe that this will have an adverse effect on our lane throughput if nothing is changed, through coins falling on the carriageway."

179. Mr Langham did not do any investigations before writing this letter.
180. During May 2003 CAMBBA agreed to lower the coin baskets. This was done by modifying the ACM units. Over a year later, by a letter dated 7th June 2004, CAMBBA asked MEL for an Employer's Change to cover this work. Mr Langham rejected that claim on the basis that the work arose from CAMBBA's design or construction errors.

#### Re-use of Gantries

181. CAMBBA were required to change the signs on five existing gantries over the M42 and M6 motorways, where they approach the M6 toll road.
182. An issue then arose between the parties as to whether this constituted "re-use" of gantries within the meaning of paragraph 9.3.5.6 of Annex 3/7 to the Employer's Requirements. This issue was debated at length in correspondence.

#### New Roads and Street Works Discounts

183. The construction of the M6 toll road affected the apparatus of various utility companies or statutory undertakers. CAMBBA had to secure that this apparatus was re-routed. When CAMBBA placed orders for the diversion of services, it could obtain statutory discounts by making advance payments. In April 2001, at CAMBBA's request, MEL sent letters to certain statutory undertakers stating that MEL wished to take advantage of section 85 of the 1991 Act.
184. CAMBBA made advance payments to the statutory undertakers, although CAMBBA recouped those advance payments on their monthly interim applications. CAMBBA employed the quantity surveyors George Corderoy and Co ("Corderoy") to negotiate discounts with the statutory undertakers. Mr Langham never instructed CAMBBA to make advance payments to Relevant Authorities pursuant to clause 17.3.4 of the D&C Contract.
185. Despite the absence of any instruction under clause 17.3.4, CAMBBA adopted the practice of sharing with MEL the discounts which they received from statutory undertakers. At the same time CAMBBA and MEL each paid half of Corderoy's success fees for securing the discounts. This arrangement was confirmed in correspondence and it was implemented through the mechanism of interim payments.

186. It appears, however, from spreadsheet TS10, annexed to Mr Smailes' witness statement, that from October 2002 onwards MEL stopped paying part of Corderoy's fees. Mr Langham cannot say why that was.
187. By a letter dated 25th March 2004 CAMBBA departed from their position as stated in earlier correspondence. They contended that the requirements of clause 17.3 of the D&C Contract were not satisfied and that accordingly CAMBBA should receive all of the discounts. Mr Langham rejected that claim.

#### Foul Drainage

188. CAMBBA proposed to install cesspools at four toll stations, namely Weeford Park, Langley Mill, Great Wyrley and Shenstone. Mr Langham rejected this proposal by a letter dated 25th June 2002. In the second and third paragraphs of that letter he wrote:

"The most satisfactory solution for the Employer is to have a gravity connection to a public sewer. However we do recognise that where this is not reasonably achievable there are other options that could be considered, such as a pumped rising main, a package treatment plant or perhaps a septic tank with appropriate filtration.

"We do not accept the provision of a holding tank cesspool which requires frequent emptying, transportation and discharge elsewhere to be an acceptable solution for buildings which are expected to be in use for the 50-year concession period."

189. The parties were unable to reach agreement on this issue. MEL required that package sewage treatment plants be installed. CAMBBA contended, but MEL denied, that this entitled CAMBBA to an Employer's Change. In his witness statement Mr Langham justified MEL's position by reference to the number of people present at toll stations.
190. In his oral evidence he also relied upon paragraphs 6B and 6F of guidance note PPG4, issued by the Environment Agency. Those paragraphs read as follows:

"B. A cesspool is a covered water-tight tank used for receiving and storing sewage and has no outlet. It relies on road transport for the removal of raw sewage and is therefore the least sustainable option for sewage disposal. Because of this, a cesspool is best regarded as a temporary measure pending a more satisfactory solution such as the provision of mains drainage. It is essential that a cesspool is and remains impervious to the ingress of ground water or surface water and has no leaks ...

"F. The minimum capacity of a cesspool is prescribed by the building regulations as 18 cubic metres (18,000 litres) and at least 45 days' storage should be provided."

191. Mr Langham made two points in relation to these paragraphs, namely (1) the proposed cesspools would not be temporary as envisaged by paragraph 6B; (2) the proposed cesspools would require emptying every 14 days or so and therefore they would not have the capacity required by paragraph 6F.

#### Archaeology

192. CAMBBA were required to and did carry out excavation of a number of archaeological sites along the route of the M6 toll road. This entailed analysis of finds and reporting. CAMBBA claimed additional payment and extension of time in respect of these works. Initially CAMBBA were only seeking a Department's Change in respect of archaeological works. Subsequently they also sought an Employer's Change in respect of these matters.
193. Mr Langham resisted this claim in correspondence.

#### Lodge Lane Link

194. CAMBBA produced a design for this road which showed a carriageway width of 7.3 metres. This would have put MEL in breach of the Concession Agreement, since that required a width of 10 metres. Mr Langham asserted that CAMBBA would have to design and construct this carriageway to a width of 10 metres, unless CAMBBA secured a Contractor's Change in this regard. In due course CAMBBA made a claim for designing and constructing the carriageway to a width of 10 metres as opposed to 7.3 metres. Mr Langham rejected that claim.

#### PETER FASHAM

195. Mr Fasham is an archaeologist of 30 years' experience. He is a Technical Director of Babbie and is responsible for all of their cultural heritage works. During 2000 Mr Fasham assisted in the preparation of tender documents for the design and construction of the M6 toll road.
196. He was part of the tender review team. He was lead archaeologist on the certification team, assisted by his colleague Kevin Beachus.
197. Section 2.14 of the Employer's Requirements deals with archaeological works. Paragraph 2.14.1 refers the reader to a document known as "the General Project Design" or "the GPD". The GPD is based upon a report prepared by Oxford Archaeological Unit in 1990 and a subsequent addendum to that report. The report and its addendum were prepared for the public inquiry into the proposed BNRR and deal with matters of archaeological interest along the route of the proposed motorway.
198. Section 4 of the GPD is entitled "Scope of proposed archaeological works".
199. It envisages two stages of investigation of specified sites of interest: first, evaluation by geophysical survey or trenching; then secondly either excavation or a site-specific watching brief.
200. The concept of a "targeted watching brief" is a fairly new one. It facilitates both archaeological work and construction work. The normal excavation of topsoil is carried out under archaeological supervision. If archaeological remains are found, then these are excavated archaeologically. If no remains are found, then the normal works of excavation and construction proceed.
201. Table 2.7.3 of the GPD sets out the specified sites of interest. The table lists 30 numbered sites and several unnumbered sites. The unnumbered sites (which have been given letters for ease of reference during the trial) are of lesser importance. Table 2.7.3 has columns headed: "Site Number", "Site", "Grid Reference", "Local Authority", "SMR number", "Gazette ER numbers", "Significance", "Approximate Area", "Geophysical Survey", "Trenching", "Excavation", "Targeted Watching Brief", "Other Watching Brief", "Mitigation" and "Comments".

202. Against each site there is either a blank in the columns headed "Geophysical Survey", "Trenching", "Excavation", "Targeted Watching Brief", "Other Watching Brief", "Mitigation", or a question mark, or a "Y".
203. If there is a "Y", then work of the kind indicated will definitely be required at that site. If there is a question mark, then in Mr Fasham's view it was possible or probable that work of the kind indicated would be required. What work would actually be required would depend upon the outcome of the preliminary investigation.
204. During the course of his oral evidence Mr Fasham was specifically asked to consider sites 10, 11, 12 and 29 at the time of tender. Mr Fasham considered it was likely that the work indicated by question marks against those sites would be required.
205. Site 11 was a known large Roman site at Wall. A possible Roman fort there had been identified in the archaeological report. Site 10 was also in the vicinity of Wall. Site 12 (Ryknield Street) was a lesser Roman road which ran north-south and crossed Watling Street. Ryknield Street crossed the line of the M6 toll road not far from the point where Watling Street crossed the line of the M6 toll road. Site 29 to the north of Langley Mill had a flint scatter which was indicative of a pre-historic settlement.
206. The purpose of the GPD as a whole and of the "Y"s and question marks in table 2.7.3 in particular was to provide a level of information to the contractor, so that the contractor could assess its risk in relation to the archaeological work which would be required. Furthermore in the post-tender period the GPD and in particular table 2.7.3 became incorporated by reference into paragraph 2.14.1 of the Employer's Requirements.
207. Turning to paragraph 2.14.4 of the Employer's Requirements, Mr Fasham was asked about the meaning of the phrase "significant discovery".
208. This term is not defined in the contract. However, in relation to national importance, the criteria set out by the Secretary of State in PPG 16 of 1990 are of assistance and widely used. Furthermore, an archaeological find which does not meet those criteria may still be of regional importance.
209. After commenting on the Employer's Requirements, Mr Fasham then explained the procedure adopted during the course of the works. CAMBBA prepared Design Input Statements after carrying out preliminary investigations. These are referred to as "DISs". In each DIS CAMBBA set out the action which they proposed to take, whether by excavation or otherwise. If Babbie returned that DIS marked "received" or "received with comments" then CAMBBA could proceed accordingly. In fact there was much sensible discussion between the parties while each DIS was in draft, so that CAMBBA generally knew what measures Babbie would regard as satisfactory.
210. In the early period the functions of Mr Fasham and the TAA were kept separate. However, this changed on 21st February 2001. From then onwards Mr Fasham was authorised to return DISs marked "received", "received with comments" or "comments" as appropriate.
211. Mr Fasham visited site every week or two. Mr Beachus visited more regularly. When archaeological features were discovered, it was for CAMBBA to assess their importance. If CAMBBA regarded something as a "significant discovery" within the meaning of paragraph 2.14.4 of the Employer's Requirements, then CAMBBA should state this in their DIS. This never in fact happened and so clause 2.14.4 was never triggered. It is true, however, that some of the remains found caused excitement amongst the various local authority archaeologists who were monitoring the works.

212. It is also true that, according to the minutes of a meeting on 27th April 2001, CAMBBA's subcontractors, Oxford Wessex Archaeology, described the finds on six sites as significant discoveries. Nevertheless this assertion was not made in the DISs relating to those six sites.
213. Site 12: At this site unsurprisingly a number of Roman features were found. These included a cremation cemetery. The excavation work at this site was contemplated from the outset.
214. Site 29: In respect of this site Mr Fasham agreed to omit trenching and to proceed straight to excavation. This was because excavation was likely to be required and that course would enable work to proceed more quickly.
215. The finds on this site included a quern fragment and a quantity of Roman pottery. Indeed the area of excavation on site 29 was expanded to 0.7 hectare because of the remains found. In Mr Fasham's view the excavation work at site 29 was contemplated from the outset.
216. The mitigation measures required for sites 12 and 29 had become clear by the time of a meeting on 27th April 2001. On 15th May 2001 CAMBBA requested an employer's certificate in respect of excavation work required to an area south of site 29. This particular area was not a designated archaeological site.
217. In June 2001 human remains dating from about 2000 BC were found at site 19. A Home Office licence is required to excavate such remains. CAMBBA sought either an Employer's Change or a Department's Change in respect of this.

#### PETER DYER

218. Dr Dyer is a Director of MEL. He became Chairman in early 2001.
219. MEL had a credit facility with Bank of America to finance the project. Under the terms of this facility MEL had to obtain the consent of Bank of America for a number of more important matters, such as amending the procedure agreed for valuing works. However, MEL did not have to seek bank approval before issuing change orders.
220. Dr Dyer attended the board level workshop between MEL and CAMBBA at the Belfry Golf Club in November 2001. It was subsequently agreed to convert the goals identified at that workshop into a formal agreement. This became the so-called "Belfry Agreement" signed in March 2002.
221. Dr Dyer told Mr Langham that he was happy with that agreement before Mr Langham signed. The Belfry Agreement was a commercial agreement, not a change to the D&C Contract. Accordingly MEL did not consider that the Belfry Agreement required bank approval and they did not refer it to the bank for approval. However, Babbie (the lender's technical agent) was on site and was aware of the agreement, although there are no documents to substantiate this.

#### MRS ROLFE

222. During the period of the construction works, this witness was Police Constable Turner. Mrs Rolfe is now her married name. Since her former name appears in all the documents, this is the name that I shall use.

223. PC Turner worked in a special traffic management unit set up by the Staffordshire, Warwickshire and West Midlands police forces. Once the CMPG had been set up, the CMPG dealt with motorway matters and PC Turner's until dealt with side roads. Two other police officers worked with PC Turner in the special traffic management unit. They were Sergeant Calladine from Staffordshire and PC Jackson from Warwickshire.

224. When safety audits were carried out in respect of the motorway, these were done in conjunction with the police. The police did not have a design function and did not approve the design. The police indicated support when they were in favour of a proposal and concern when they were not. If the police were strongly opposed to a proposal, they might object to the scheme.

225. In letters to Mr Neal and Mr Langham, both dated 11th November 2002, PC Turner wrote as follows:

"Concerns have been raised regarding the construction of the Chasewater Footbridge (bridge 204) which will be a thoroughfare over the M6 toll road. I understand that the bridge is to be constructed with the standard height railing of 1.1 metres. Staffordshire police feel strongly that, due to the nature of the area surrounding that particular bridge, it will become a natural congregation point for local youths. They feel that this is likely to result in many problems, not least, the dropping of objects onto the carriageway below. The possible consequences of such actions need no explanation. It is therefore requested that consideration be given, at the design stage, to either enclosing the top of the bridge, or raising the height of the barrier such that it prevents objects being hurled over or persons climbing over it."

226. This letter was based upon what Sergeant Calladine had said to her. PC Turner had not visited the bridge at that stage. She must have taken the measurement of 1.1 metres off some drawings. She received no reply to this letter.

227. PC Turner discussed Chasewater Footbridge with CAMBBA and others at a traffic management meeting on 11th March 2003. The minutes of that meeting wrongly show her as an apology for absence. Her witness statement is also in error as to the date of the meeting. At the meeting PC Turner expressed concern about horse riders on the bridge. She also expressed concern about people throwing stones from the bridge. This latter concern was based upon what Sergeant Calladine had said to her.

228. PC Turner does not recall the conversations on 29th May and 7th July 2003 which Mr Jones has described in his witness statement, but she has no reason to doubt that they occurred. She would be surprised if she said that her first choice was CCTV.

229. On 9th July 2003, Mr Jones of CAMBBA sent an e-mail to PC Turner as follows:

"Sally, following our discussion on Monday have you been able to speak to Sgt. Carradine[sic]. There are a range of options to address the risk of objects being dropped/thrown onto the motorway and it is difficult to know what the best solution is. CCTV coverage would be a strong deterrent but not physically prevent the risk, although it could provide evidence. Structural changes to the parapet fencing might reduce the risk at this location but move it elsewhere.

Clearly CAMBBA are concerned about the programme implications of any changes to the current design, in particular if it has the potential to delay opening. We need to fully understand the Police's requirements. Maybe a meeting at B204 with yourself and Sgt. Carradine [sic] would help."

230. PC Turner replied as follows after speaking to Sergeant Calladine:

"We don't think that the structural changes will move the problem elsewhere because the characteristics of other overbridges are very different and the Police would welcome a higher railing with mesh. There is always the problem that whatever you place there to prevent the lobbing of missiles, can become the missile itself following damage. Hence we still believe that the deterrent and evidential value of CCTV coverage with signs on the footbridge cannot be underestimated and we would urge this line of action. In the Staffordshire Police area this system is operating successfully on one of the M6 over-bridges."

231. When PC Turner wrote this e-mail she understood from previous discussion with Mr Jones that enclosure would involve redesign and strengthening of the bridge. She did not, however, understand the technical details.

232. On 11th July PC Turner attended a meeting with Mr Jones. Mr Jones said that the bridge could not be enclosed because of engineering difficulties. They then discussed CCTV and where the camera could be placed.

233. On 18th July PC Turner wrote a letter in the following terms to Mr Langham:

"On Friday 11th July 2003 I attended a site meeting at the Chasewater Footbridge with Mr Richard Jones, and others, in an attempt to address the issues and concerns raised by Staffordshire police regarding this location. These were underlined in a letter to your self in November 2002.

"The meeting was very constructive and the limitation of any physical alterations to the bridge structure at this stage was understood. In the absence of such physical enclosure the Police view is that a CCTV camera mounted on the nearby M6 Toll gantry and very visible signs at both ends of the footbridge would act as both a deterrent to wrong doers and as evidence gathering for possible proceedings. The camera would be safe from damage and the signs a constant reminder to 'Smile- you are on camera'. We feel that this system is essential to the safe operation of the M6 Toll in this area and it would go a long way to resolving the issues raised. It would receive our full support."

234. PC Turner learnt shortly afterwards from Mr Langham that enclosure was possible. She did not feel it was necessary to write another letter revising what she had written on 18th July, because her letter of 18th July had indicated a preference for enclosure.

235. A year later PC Turner wrote another letter to Mr Langham on the subject, but this was at his specific request.

DAVID CATTLEY

236. Mr Cattley is a chartered engineer experienced in major highway schemes and a Senior Consultant with Bابتie. During the post contract period Bابتie was involved in the M6 toll road project in four different ways.

1. Babbie was the TAA, which dealt with Approvals in Principle. In this capacity Babbie received DISs from CAMBBA and indicated that these were "received" or "received with comments" or else returned them marked "comments". If the third course was adopted, CAMBBA had to put matters right and re-submit a DIS. If either of the first two courses were adopted, then CAMBBA could proceed to the Detailed Design stage.
  2. Babbie received and considered CAMBBA's detailed design submissions. Babbie first carried out a procedural audit. This meant checking that the documentation was in order. Then Babbie reviewed about 10 per cent of the detailed drawings. In the early period Babbie reviewed much more than 10 per cent of the detailed drawings but this diminished as Babbie's confidence in CAMBBA grew. Some of the CAMBBA detailed designs went to the DA for review. Babbie co-ordinated the DA's comments on these designs.
  3. Babbie acted as certifying engineer under the contract.
  4. Babbie also acted as lender's technical agent on behalf of Bank of America.
237. Babbie's personnel performing these various functions were kept separate. The first function, namely acting as TAA, was carried out by a team headed by Keith Sykes. The second function, namely dealing with detailed designs, was performed by a separate design review team. The third function, certifying, was carried out by Gary Smith. Mr Smith was the director with overall responsibility for the TAA team and the design review team.
238. The fourth function, namely acting as lender's technical agent, was performed by a completely separate team within Babbie.
239. Mr Cattley was immediately below Mr Smith in the hierarchy. Mr Cattley oversaw the commercial aspects of what the TAA team were doing. He oversaw the design review team as well.

#### Dunton Island

240. In February 2003 Mr Cattley and Mr Langham had an exchange of e-mails. Mr Langham asked Mr Cattley to reject any submission from CAMBBA in which the Dunton Island slip road was narrowed, and Mr Cattley agreed. Mr Cattley would have discussed the matter with Mr Langham if he had disagreed. The PDS drawings showing Dunton Island were indicative, not prescriptive. Mr Cattley cannot recall if these drawings show the slip road as the same width throughout its length.

#### Lodge Lane Link

241. In August 2001 Mr Cattley was informed by Mr Langham that a problem was brewing with Lodge Lane Link. In an e-mail to Mr Langham, dated 25th September, Mr Cattley informed Mr Langham that the PDS drawing showed Lodge Lane Link as a 10-metre-wide carriageway deduced by scaling, but there was no dimension to confirm that. That e-mail does not go as far as is suggested in Mr Cattley's first witness statement.
242. Nevertheless, Mr Cattley had the PDS drawings. By scaling, he believed that they showed Lodge Lane Link as a 10-metre-wide single carriageway between Saredon and Churchbridge roundabout.

## Part 5. CAMBBA's Factual Evidence

243. In this part of the judgment I shall summarise the evidence given by CAMBBA's factual witnesses. In so doing I shall weave together the gist of each witness's written statement and oral evidence.

### PAUL NEAL

244. Mr Neal is a chartered civil engineer. He has worked for Balfour Beatty ever since he graduated 30 years ago. He has been CAMBBA's Project Director for the M6 toll road project from the outset. He has also been Contractor's Agent since 5th October 2001.

### Allowances in CAMBBA's tender

245. CAMBBA's tender included an allowance of £17 million for dealing with protester action. This was a risk which concerned all parties to the joint venture and Mr Neal had looked into it. Mr Blackburn suggested that the extent of archaeological investigation which may be required was a similar type of risk which was allowed for in the tender. Mr Neal did not accept this.

### Organisation of Work

246. As project manager, Mr Neal has always been CAMBBA's senior site-based representative with responsibility for supervising the day-to-day running of the contract. The toll road was divided into four sections for the purpose of organising the work. Each of those four sections was managed by a section head. However, some activities ran across the whole project.
247. CAMBBA had a team of 10 design co-ordinators. This was headed by Allan Hargreaves. Richard Jones was one of the design co-ordinators.
248. It was AAJV who undertook the design work. CAMBBA reviewed the designs for buildability and to see how they fitted with the programme. Also the design co-ordinators would have to check that AAJV were not overdesigning. The co-ordinators would look at honing the design and value engineering. They would be concerned to see that the job was done as economically and well as possible.

### Vehicle Inspectorate

249. Graeme Greene was the design co-ordinator who was involved with the Vehicle Inspectorate and their requirements. Graeme Greene has subsequently left CAMBBA. Mr Neal never learnt Mr Greene's view as to whether the events at the Vehicle Inspectorate entitled CAMBBA to an Employer's Change.
250. Mr Neal had a number of meetings with Mr Langham about the Vehicle Inspectorate. Mr Neal maintained that MEL was requiring CAMBBA to do extra work. It may be that Mr Langham said

he would support CAMBBA in seeking a Department's Change. Certainly Mr Langham was sympathetic to CAMBBA's plight in respect of the Vehicle Inspectorate.

251. It is standard practice to send a letter of protest when a contractor is required to do extra work without a change instruction. Mr Neal did not send such a letter in respect of the Vehicle Inspectorate works.

#### Lodge Lane Link

252. This road, where it runs between Saredon and Churchbridge junction, was described in the public inquiry as a wide single carriageway. Mr Neal knows this now but he did not know it at the time.
253. In their tender CAMBBA had allowed for this stretch of road to be 10 metres wide. Richard Jones was the design co-ordinator responsible for Lodge Lane Link. He raised a query as to why it was necessary to build this road 10 metres wide. On the basis of a road traffic survey he considered that a width of 7.3 metres would suffice.
254. Mr Jones and Mr Hargreaves asked AAJV to design this as a 7.3-metres-wide carriageway. MEL said that they would support a width of 7.3 metres but they needed information from CAMBBA as to the cost saving which this would achieve. That information was never forthcoming. The matter was never pursued with the department. Mr Neal knew that the Concession Agreement required that stretch of road to be 10 metres wide.
255. All this happened in the spring of 2001. Correspondence about Lodge Lane Link was included in the annex to the Belfry Agreement. Following the Belfry Agreement it was not Mr Neal's intention to pursue this claim.

#### Belfry Agreement

256. In relation to the Belfry Agreement Mr Neal went through the same history of events and documentation as Mr Langham had traversed. The concept of "parking" correspondence emerged from the Belfry workshop in November 2001.
257. The idea was that the issues in that correspondence would not be pursued as between MEL and CAMBBA. Instead the parties would work together to achieve a timely completion of the project. If, however, either party acted in a manner contrary to this understanding, then the issues in the parked correspondence could be resurrected.
258. It was understood that CAMBBA could still seek Department's Changes in respect of the subject matter of the parked correspondence.
259. On 28th January Mr Langham sent to Mr Neal his proposed written agreement to be signed by both men on behalf of their respective organisations. Mr Neal was content with the schedule of letters annexed but he was not content with the proposed wording.
260. On 21st February Mr Neal sent to Mr Langham the letter which I quoted when summarising Mr Langham's evidence. This letter was drafted by Mr Faulkner, the commercial manager of CAMBBA, who dealt with claims.

261. Mr Neal sent the letter of 21st February in those terms because he did not believe that he had authority to enter into a legally binding agreement on behalf of CAMBBA. It was for the same reason that he headed the attached document "Statement of Intent".
262. Mr Neal reported to CAMBBA's supervisory board. This board had eight members, namely two from each of the four companies in the consortium. One member from each company had a vote. In his absence the other member could exercise that vote. The supervisory board could give to Mr Neal such authority as he did not have.
263. In relation to Mr Langham's letter of 28th January, Mr Neal did not officially report this matter to CAMBBA's supervisory board. However, he did advise the board members about this matter orally at a board meeting. Indeed the supervisory board knew that discussions were taking place with a view to identifying a list of letters to be parked.
264. In due course both Mr Langham and Mr Neal signed the Belfry Agreement. Mr Neal believed that he was authorised to sign this document because and only because it was a statement of intent as opposed to a legally binding contract.
265. Mr Neal concedes that CAMBBA subsequently pursued claims which were the subject of the parked correspondence set out in the annex to the Belfry Agreement. CAMBBA did so because MEL resurrected matters by issuing dispute resolution proceedings.

#### Notices

266. Mr Neal was aware of the notice provisions in clause 40 of the contract. He appreciated that they were there for a purpose. He believed that generally CAMBBA complied with these provisions. In respect of the Vehicle Inspectorate the reason for any delay in notices was this: CAMBBA tried to get an amicable resolution of the issues before pursuing a more formal route.

#### Coin Baskets

267. The TCS was a specialist element of the contract for which the design development process continued until September 2001 (the design freeze date).
268. CAMBBA, with the assistance of its specialist subcontractors, prepared designs for the TCS, which passed through the AIP process.
269. None of the comments made by the TAA were critical of the height of coin baskets. The detailed design process followed, again with no criticism being made of the height of coin baskets. MEL first raised a query about this matter following site tests on 1st April 2003. By then the coin machines manufactured by Ascom had been installed on their concrete plinths at the toll stations. Indeed the project completion date was approaching and this was an extremely inconvenient time for MEL to raise such a concern.
270. After some debate MEL instructed CAMBBA to lower the height of the lower coin baskets and CAMBBA duly did so. Mr Neal did not regard the original height as unsuitable and he did not consider that the additional works instructed were necessary.
271. Nevertheless CAMBBA carried out those works without receiving a change order and without sending a letter of protest. Mr Neal accepts that it is standard industry practice for a contractor

to send a letter of protest, when it carries out works which it regards as a change without receiving a change order.

272. In a cross-examination Mr Neal was taken through a number of documents originating in the period April to May 2003. It certainly appears from the documents that quite a few people concerned with this aspect of the project regarded the lower coin baskets as too high. These included Mr Broadley, a member of Mr Neal's team, and Ascom, the specialist subcontractors.
273. It can also be seen from the correspondence that there was a debate as to whether it was Ascom or AAJV who were responsible for the excessive height. Ascom had designed the machines, whereas AAJV had designed the concrete plinths. Mr Neal said that during the period after April 2003 he was trying to find out whether there was an interface problem. Certainly there seemed to be some confusion.

#### Chasewater Footbridge

274. CAMBBA's design of Chasewater Footbridge was approved by the TAA. Thereafter it went through the detailed design stage and review by Babbie.
275. No one suggested that the footbridge should be enclosed, although there was some debate about the precise height of the parapet. This ended up as 1150 mm. On 4th February 2002 Babbie issued a Design Confirmation and Review Certificate which related to this bridge. Thereafter construction works proceeded.
276. It was the responsibility of AAJV and subsequently CAMBBA's design co-ordinators to consider the requirements of standard BD 29-87. Mr Neal assumes that this standard was considered although he personally was not involved in that level of detail.
277. On 13th November 2002, after the bridge had been constructed, Mr Neal received the letter from PC Turner which I have previously read out. Mr Neal wrote a note on that letter to Richard Jones, CAMBBA's design co-ordinator, stating that this matter should be referred to MEL and the HA. CAMBBA could not modify their designs to cater for deliberate acts by members of the public compromising safety. A week later CAMBBA received an e-mail from Richard Thomas, the road safety auditor, expressing reservations about enclosing the footbridge.
278. Thereafter the matter was debated between MEL and CAMBBA. There were two incidents in which youths threw things from the bridge. CAMBBA requested an Employer's Change order in respect of any works which MEL required to the bridge.
279. MEL did not issue any change order. Indeed MEL did not issue any instruction at all for further work to be done to the bridge. Mr Neal does not accept that CAMBBA ever refused to enclose the bridge. CAMBBA did not enclose the bridge, because CAMBBA were not instructed to do so.

#### Dunton Island

280. The top part of the on slip road as constructed leading from Dunton Island to the M42 is outside the Site boundary as defined in the D&C Contract.

281. Accordingly, CAMBBA maintain that they are entitled to a change order and additional payment in respect of widening this section of slip road. Mr Neal agreed that, looking at the drawings, it would have been sensible for the slip road to be the same width along the whole of its length. However, he points out that sometimes contracts are not sensible.
282. In this instance Mr Neal did not originally expect that the northern part of the slip road would be widened to a point beyond the Site boundary.
283. In the end CAMBBA had no choice but to do the widening works. They received an instruction under clause 12 of the contract requiring this. Furthermore Mr Neal was aware that the DA had sent a letter saying that he may not issue a permit to use if the widening works were not done.
284. When asked to estimate the costs involved, CAMBBA first quoted £25,000 as an order of magnitude. This figure was produced at short notice. CAMBBA's final quotation for this work was £189,000.

#### Mandatory Speed Limits

285. This topic is not covered in Mr Neal's statement because the matter was dealt with by his subordinates. However, Mr Neal was aware of the problem. At a meeting on 13th February 2003 Mr Neal's staff agreed to introduce 50 mile per hour speed limits before the mainline toll plazas. This measure was acceptable to CAMBBA. Subsequently MEL required a step down to 30 miles per hour in the zone closer to the toll stations. CAMBBA agreed to install this under protest.
286. So the issue between the parties in Mr Neal's view turns upon whether the 30 mile per hour speed limit was necessary in order to make the toll plazas safer.

#### JOHN BORDER

287. Mr Border is a civil engineer who has been employed in one capacity or another by Ove Arup and Partners since 1987. He has been involved with the Birmingham Northern Relief Road, now known as the M6 toll road, since 1991.
288. During 1995 and 1996 Mr Border did a lot of work in connection with the public inquiry, following which the Secretary of State approved the project.
289. During the course of the public inquiry new traffic figures were published, which indicated that there would be an increased flow of traffic to Wall Island. As a result it was decided to change the existing single roundabout at Wall Island to two linked roundabouts in the form of a dumbbell. The new configuration of roads would inevitably affect the Vehicle Inspectorate who had premises by the existing roundabout.
290. The Vehicle Inspectorate were consulted about the matter in 1995, as can be seen from the correspondence. A plan was drawn up for the new arrangement of roads. This involved stopping up the existing four access points to the Vehicle Inspectorate and providing new access arrangements. In 1998 the Secretary of State made a Side Roads Order authorising these changes to be made. Drawing 6 attached to the Side Roads Order shows how the Vehicle Inspectorate's premises would be affected.

291. Mr Border has annexed to his witness statement a set of transparencies showing in great detail:
- (a) The original layout.
  - (b) What was intended at the time of the Side Roads Order; and
  - (c) What was actually constructed.
292. During the course of the trial for the benefit of those who were struggling (in particular myself) a simplified version of these transparencies was prepared and agreed as exhibit MEL 4.
293. After the contract was awarded to CAMBBA, AAJV was appointed as designer to that consortium.
294. Mr Border joined AAJV as the leader of the section 3 design team. Section 3 of the M6 toll road included Wall Island and the premises of the Vehicle Inspectorate.
295. The Vehicle Inspectorate was an agency of the Department of Transport. The Vehicle Inspectorate's premises fell within the boundary of the Site as defined in the D&C Contract.
296. The design co-ordinator at CAMBBA who dealt with section 3 of the toll road was Graeme Greene.
297. Mr Border took instructions from Mr Greene and submitted designs to him for consideration. In relation to the Vehicle Inspectorate's premises there were endless problems.
298. Mr Border attended numerous meetings with the Vehicle Inspectorate in order to discuss their changing requirements. The Vehicle Inspectorate required numerous departures from and improvements upon the layout originally proposed for their premises. So there were substantial changes from the site layout and access arrangements shown in the tender drawings upon which CAMBBA had originally priced the works.
299. On the instructions of Mr Greene, Mr Border drew up plans and revised plans in order to cater for the Vehicle Inspectorate's various requests.
300. The history of the meetings held and revisions made were explored in cross-examination, but it is not necessary for me to recount them in this judgment. The important point, which Mr Border readily accepted, is that MEL were not present at any of the meetings.
301. None of the documents and plans, which AAJV produced, were sent by Mr Border and his colleagues to MEL. Perfectly understandably, Mr Border reported to CAMBBA and it was then a matter for CAMBBA to decide whom they copied documents to.
302. In the end, after some delay, access and layout arrangements were designed to the satisfaction of the Vehicle Inspectorate and duly constructed.
303. In paragraph 6 of his witness statement, Mr Border describes these works as "Accommodation Works". However in cross-examination Mr Border accepted that strictly speaking these works did not fall within the contract definition of "Accommodation Works" because the premises of the Vehicle Inspectorate lay within the boundaries of the site as defined in the D&C Contract.
304. Mr Keaney of Owen Williams was present at a meeting on 12th September 2001 to discuss the amended layout of the Vehicle Inspectorate's site, so the DA was aware of what was

happening. However, none of the changes made in this regard were initiated or implemented by MEL.

#### Mandatory Speed Limits

305. The mainline toll plazas on the M6 toll road are almost unique in the United Kingdom. The only toll plaza which to some extent is comparable is one at the end of the Severn Bridge. There are no UK design standards which bear upon how traffic should be controlled at the mainline toll plazas on the M6 toll road.
306. One of the mainline toll stations, namely the southbound toll station at Weeford Park, falls within section 3 of the motorway. Therefore the plaza for that toll station came within Mr Border's remit.
307. In May 2001 AAJV submitted to the TAA a DIS relating to traffic signs and road markings. These did not provide for mandatory speed limits at the mainline toll plazas. This was returned by the TAA on 12th July 2001 marked "received with comments". None of the comments related to the need for speed limits.
308. The design process continued. Subsequent DISs were submitted to the TAA and the preparation of detailed designs for the toll plazas followed. During this process it was accepted by Babbie, both in their capacity as TAA and in their capacity as reviewers, that mandatory speed limits below 70 miles per hour were not required to the approaches to mainline toll stations.
309. The Road Safety Auditor took the same view and his Stage 2 Audit was concluded in February 2002.
310. Drawings for the construction of the toll plaza area were issued by AAJV in May 2002. Three months later, on 12th August 2002, there was a "toll stations' external walk-through" meeting attended by MEL, CAMBBA, AAJV and Babbie.
311. Mr Border was one of the AAJV representatives at the meeting. At this meeting for the first time MEL raised concerns about the speed of motorists approaching the mainline toll stations. Mr Border argued that there was no need for speed limits at these locations. Having recently heard Mr Border defend his views under cross-examination, I have no doubt that on 12th August 2002 Mr Border stated the case against mandatory speed limits with clarity and vigour. Nevertheless MEL were not persuaded. The matter was left on the basis that CAMBBA would give further advice.
312. On 17th January 2003, Mr Border attended a toll plaza safety meeting. Two police officers from CMPG were at this meeting, one of whom was Mr Rooker. Mr Rooker favoured a 50-mile per hour speed limit at the start of the toll plaza splay and a 20 or 30 mile per hour speed limit halfway between the start and the toll stations (see CAMBBA's notes of this meeting and paragraph 25 of Mr Border's witness statement). The other police officer took a different view.
313. A further meeting was held on 13th February. Mr Border could not attend and Mr Dimmock represented AAJV. It was agreed at this meeting that a 50mph speed limit would be imposed about one third of a mile before the mainline toll stations.
314. The detailed designs were then duly amended to incorporate this agreed speed limit. The revised drawings were submitted for a road safety audit. During this period there were further discussions about speed limits between MEL, Babbie, the Highways Agency and the police, to which AAJV were not a party.

315. At a late stage AAJV were informed of the decision to step down the speed limit from 50mph to 30mph as vehicles approached the toll stations.
316. Mr Border regarded and still regards that 30mph speed limit as unnecessary. Mr Border maintains that it was unreasonable for MEL to impose the 30mph speed limit at such a late stage. He accepts that it would have been reasonable if it had been imposed at the outset.
317. There was a lengthy debate during Mr Border's cross-examination about the merits of speed limits in general and more specifically about whether a 30mph speed limit was necessary in order to promote a reasonable level of safety at mainline toll plazas on the M6 toll road. The factors set out in Babbie's report of 24th February 2003 were examined.
318. Mr Border maintained that Babbie's report was simplistic. Babbie drew conclusions from the speed limits imposed at various overseas toll plazas without considering the nature of the road at each location where a speed limit was imposed.
319. Mr Border pointed that on the M6 toll road there are long straight approaches to the two mainline toll stations. The toll stations can clearly be seen running across the motorway. The three lanes of the motorway diverge into ten lanes in good time. At the approach to the plazas, the geometry of the lanes has been very carefully designed. Because of the number of lanes queues will not build up.
320. Mr Blackburn pressed a number of points on the other side. In particular toll plazas are inherently dangerous areas; drivers are likely to weave from one lane to another in an effort to get through the toll station as quickly as possible. Overseas experience suggests that speed limits are quite often introduced at such locations.
321. Mr Blackburn did not succeed in converting Mr Border to MEL's point of view. However, Mr Border did accept that this was a matter upon which two different views could be taken.

#### STEVEN DIMMOCK

322. Mr Dimmock is an engineer who worked for AAJV in the period after November 2000. He dealt with signage matters on the M6 toll road.
323. In relation to mandatory speed limits, Mr Dimmock confirmed that he attended the meeting on 13th February 2003, when it was agreed to impose a 50mph speed limit. He did the necessary re-design work following that meeting.
324. Mr Dimmock was not involved in relation to the 30mph speed limit, which was added later.
325. Although he expresses opinions about speed limits in his witness statement, Mr Dimmock does not claim the same expertise or experience as Mr Border in relation to speed limits and accordingly he was not cross-examined on this issue.

#### Omission of Gantries

326. Mr Dimmock designed post mounted signs informing drivers about the toll stations (a) at distances of one mile and two thirds of a mile from each of the two mainline toll stations, and (b) on the approaches to exit slip roads leading to other toll stations. These were not variable message signs. On Mr Dimmock's reading of the Employer's Requirements nothing more elaborate was required.
327. Mr Dimmock attended the mainline signing forum meeting on 17th May 2001. I have previously read out the relevant part of the minutes of that meeting.
328. Atkins Odlin who are referred to in those minutes are a separate firm unrelated to Atkins, the well known firm of engineers. Atkins Odlin had apparently prepared a design for signage at tender stage, but Mr Dimmock never saw that design.
329. There was some discussion at the meeting on 17th May about the issue of omission of gantries. DIS 51 dealt with portal gantries. That was first produced in June 2001 and it went through a number of revisions. Revision E was produced for detailed design in August 2003. Section 2.2 dealt with sign gantries and Mr Dimmock assisted with this aspect. Paragraph 2.3 of Revision E reads:
- "Sign gantries which incorporate signals...
- "2.3.6. The schematic design by Atkins Odlin included in the tender documents will be considered, reviewed and adopted."
330. Mr Dimmock draws inferences from this document about what was included in the tender, but Mr Dimmock was not himself involved during the tender period.

PAUL FRENCH

331. Mr French is an experienced engineer employed by Atkins, who was assigned to AAJV as a design manager. He was based in Atkins' Epsom office.
332. In April 2001 Mr French started work on designing the five footbridges which would cross the M6 toll road. One of these is Chasewater Footbridge, structure number B204.
333. On 30th July 2001, Mr French and his team submitted an AIP form in relation to their design of Chasewater Footbridge to the TAA.
334. According to this design, the parapet on either side of the bridge would be 1 metre high. In designing this bridge Mr French took into account the relevant standards, including BD 29-87.
335. In relation to paragraph 10.1 of that standard, Mr French did not consider that there was a high risk of objects being thrown from Chasewater Footbridge.
336. Mr French considered then and he considers now that that bridge is in a rural location. Although there is an adjacent housing estate on one side of the motorway, Mr French points out that this is not a bridge in the middle of Birmingham, for example.
337. When designing the bridge Mr French consulted a number of Relevant Authorities as listed in the AIP but these did not include the police. He did not visit the location of the bridge before making the original design submittal on 30th July 2001.

338. On 28th August Keith Sykes of Babbie, acting as TAA, returned the AIP for Chasewater Footbridge marked "received with comments". The comments included a requirement that the parapet height be raised from 1 metre to 1150 mms. There was no suggestion that the bridge should be enclosed.
339. Thereafter, Mr French proceeded with the detailed design. On 29th January 2002, he signed the Design Confirmation and Review Certificate relating to Chasewater Footbridge. In due course this was countersigned by Babbie. Babbie made certain further comments on the design but did not require an enclosure. There was some debate about disabled access to the bridge.
340. Richard Jones was the design co-ordinator at CAMBBA, whose functions included checking Mr French's designs.
341. On 28th February 2002, AAJV issued the construction drawings relating to Chasewater Footbridge. It is probable that construction started within a few months after that date, but Mr French cannot say when.
342. The construction of the bridge was probably fairly well completed by November 2002. On 11th November PC Turner sent a letter to CAMBBA expressing concerns about the bridge, but Mr Jones did not draw this letter to Mr French's attention at the time.
343. In June 2003, AAJV were asked to look at options which would prevent vandals throwing things from the bridge. On 27th June, Mr French sent an e-mail to Mr Jones setting out four options. These were:
- (1) Add mesh to the existing parapet.
  - (2) Raise the existing parapet to 1800 mm and add mesh.
  - (3) Construct a full enclosure of the bridge with mesh.
  - (4) Construct a solid enclosure with glass or perspex.
344. Mr French indicated in his email that there were serious drawbacks to options (1), (2) and (4). The first two options would not prevent objects being thrown. The last option would not be viable because of aerodynamic excitation effects.
345. The third option was illustrated by a sketch plan attached to Mr French's e-mail. Mr French included in his e-mail the following paragraph qualifying Option 3:
- "Important Comment on option 3:
- "We have concerns about the aerodynamic stability of the mesh 'total enclosure' option. There is also a possibility of icing up of the mesh in Winter, which would effectively result in solid enclosure (see concerns about Option 4 below) and the effects of placing banners on the parapets, although their prompt removal could be a requirement of the Maintenance Manual. Either of these issues could cause the bridge to become aerodynamically unstable -- we are investigating this issue with an expert at Imperial College (Professor Tom Wyatt) and will be in touch when we have some conclusions, hopefully early next week."
346. Following that e-mail AAJV were never instructed by CAMBBA to proceed with the detailed design of any of the four options. So AAJV's role came to an end in relation to this issue.

347. At the end of his oral evidence, Mr French was asked to look at a photograph of Chasewater Footbridge as it now is. Mr French said that the mesh enclosure as constructed is similar to that shown in the sketch plan attached to his e-mail of 27th June. The only differences are:

(a) Mr French's mesh would be slightly more square and;

(b) Mr French did not include a tubular structure at each end to prevent people from climbing on top of the enclosure.

#### RICHARD JONES

348. Mr Jones is a civil engineer employed by Carillion. Since September 2000 Mr Jones has been seconded to CAMBBA as one of the ten design co-ordinators.

349. Mr Jones was responsible for the Section 2 works. He was also responsible for side road design along the whole length of the project.

#### Chasewater Footbridge

350. Mr Jones was not involved in the original design of the bridge. However, in September 2001, Mr Jones attended meetings with Lichfield District Council to discuss issues affecting Chasewater Country Park. These issues included the matter of disabled access to Chasewater Footbridge. On 13th February 2002, Mr Jones drafted a letter for Mr Neal to send to MEL setting out the provisions for disabled access which were proposed.

351. In November 2002 the letter from PC Turner to Mr Neal concerning Chasewater Footbridge (which I have previously read out) was drawn to Mr Jones' attention.

352. Mr Jones raised the matter with Richard Thomas, the road safety auditor. In an e-mail dated 19th November Mr Thomas advised Mr Jones as follows:

"I note that Sally is picking this footbridge out as a special case due to the nature of the surrounding area. The problem is real, but the counter to it is less easy to resolve. Simply raising the level of the parapet would be unlikely to be effective, as it would still be possible to throw objects over. I also have reservations about enclosing the footbridge as there would be a requirement for daylight to penetrate -- experience with these in this area indicates that such an enclosure would soon be smashed, and the problem would not be solved. The only method of enclosure which might be effective would probably be a heavy duty mesh enclosure, but this could also be vandalised."

353. Mr Jones understood the phrase "experienced with these in this area" to be a reference to experience in South Wales where Mr Thomas lived and worked.

354. On 29th May, Mr Jones had a meeting with PC Turner, Mr Varley of AAJV, Mr Thomas, the road safety auditor, and Mr Parrish of Staffordshire County Council. They discussed the options of full enclosure, partial enclosure or the provision of CCTV surveillance.

355. Mr Thomas did not support either full or partial enclosure. Mr Thomas pointed out that other footbridges were not enclosed and he did not want to set a precedent for enclosing all footbridges in the country. Mr Jones understood from this discussion that the police would be content with either full enclosure or the use of CCTV.
356. Although Mr Jones cannot find any written record of this meeting he is confident in his recollection of it. On the other hand, when pressed in cross-examination, Mr Jones was unable to explain why he did not refer to that meeting in letters which he wrote during June and July 2003.
357. On 29th May 2003 (the same day as the meeting) MEL wrote to CAMBBA requesting their proposals for preventing objects being dropped or thrown from Chasewater Footbridge. Mr Jones discussed this letter with Mr Copeman of AAJV and subsequently instructed AAJV to investigate the options.
358. CAMBBA were concerned about this matter because they saw it as a potential threat to the issue of a PTU.
359. On 27th June, Mr Jones received from Mr French the e-mail which I have summarised in my account of Mr French's evidence. Mr Jones understood from this e-mail that any mesh enclosure of the bridge may be aerodynamically unstable because of the possibility of the mesh icing up in winter.
360. On 7th July, Mr Jones spoke to PC Turner. He told PC Turner the gist of AAJV's advice. They discussed the options of increased mesh height and CCTV. PC Turner said that her first choice was CCTV and Mr Jones made a note of this in his day book.
361. On 9th July, Mr Jones sent an e-mail to PC Turner, which I have read out during my summary of PC Turner's evidence. This proposed a meeting with her and Sergeant Calladine. PC Turner sent an e-mail in response pointing out the advantages of CCTV.
362. Mr Jones' next meeting with PC Turner duly took place on 11th July. Sgt. Calladine could not attend. Mr Jones was accompanied by Jason Pavey of AAJV and Mr Jeff Virgo, CAMBBA's security adviser. Mr Jones, Mr Pavey, Mr Virgo and PC Turner had a wide ranging discussion. Mr Jones explained the difficulties of putting an enclosure on the bridge as explained in Mr French's e-mail of 27th June. They discussed the merits of CCTV surveillance and where the camera could be placed. By the end of the meeting Mr Jones understood that the police would be satisfied with CCTV surveillance and warning signs.
363. PC Turner agreed to write to MEL and CAMBBA confirming the police's view. PC Turner duly wrote a letter, dated 18th July, setting out the police's view. I have read this letter during my summary of PC Turner's evidence.
364. Mr Jones is aware that subsequently an enclosure was put on the bridge by others. He does not know whether or not the bridge was strengthened for this purpose.

#### Lodge Lane Link

365. Mr Jones was aware from the public inquiry decision and from the PDS drawings that the section of Lodge Lane Link between Saredon and Churchbridge roundabout was to be a single carriageway.

366. In November 2000, AAJV produced a draft DIS for this section of work showing the carriageway as 10 metres wide. Mr Jones queried why this carriageway was shown as 10 metres wide. In his view the latest traffic figures showed that a carriageway 7.3 metres wide would be sufficient.
367. Mr Jones was unaware that the Concession Agreement between CAMBBA and the Department required a width of 10 metres.
368. In March 2001, Mr Jones instructed AAJV to design this section of Lodge Lane Link as a 7.3 metres wide carriageway. The design proceeded on this basis for the next few months. The TAA raised no objection. However, in August 2001, Owen Williams wrote to both MEL and CAMBBA reminding them that the Concession Agreement required a width of 10 metres; if this part of the technical requirements was going to be changed, then a detailed justification would need to be provided.
369. MEL wrote to CAMBBA seeking information about the proposed change and also about the cost saving which would result. CAMBBA did not respond.
370. Mr Jones appreciated that MEL was prepared to support CAMBBA in requesting a change to the Department's requirements for Lodge Lane Link. However, as Mr Jones explained in cross-examination, CAMBBA did not follow this up simply through lack of time and pressure of other work.
371. In the event, CAMBBA reverted to AAJV's original design and constructed this section of Lodge Lane Link as a 10 metre wide carriageway.
372. During cross-examination Mr Jones was asked to look at one of the PDS drawings, namely drawing SDP-CEH-03. This was one of the tender drawings. Using a scale ruler, Mr Jones scaled off the width of the Lodge Lane Link as 10 metres.
373. Mr Jones also confirmed that the term "wide single carriageway" denotes a carriageway which is 10 metres wide.

#### THOMAS SMAILES

374. Mr Smailes is a quantity surveyor and an associate director of Corderoy. From February 2002 onwards Mr Smailes dealt with the commercial management of works for utilities and third parties. This included diversionary works of statutory undertakers' apparatus affected by the M6 toll road.
375. Although Mr Smailes did not accept in cross-examination that he was seconded by Corderoy to CAMBBA, the documents suggest that the relationship came quite close to secondment. Mr Smailes wrote letters on CAMBBA notepaper on behalf of CAMBBA and on occasions described himself as CAMBBA's commercial manager.
376. In so far as Mr Smailes' evidence covers events before February 2002, his evidence is based upon discussion with colleagues and research through the documents.
377. Mr Smailes and his predecessors at CAMBBA negotiated discounts pursuant to Section 85 of the 1991 Act with the following statutory undertakers and bodies: BTU, GPU (in respect of underground cables and overhead lines), South Staffordshire Water, Transco (in respect of

medium and low pressure pipelines), NTL, Telewest, Cable & Wireless, Energis, COLT and Kingston Communications. Mr Smailes' witness statement sets out in some detail the history of negotiations with those organisations and an account of the various financial arrangements. This statement is supplemented by a sheaf of spreadsheets and amended spreadsheets which show what sums of money passed from whom and to whom on various dates. The details of this evidence have not been challenged in cross-examination or indeed relied upon by either party. I hope that I shall not be thought faint-hearted if I do not attempt to paraphrase this evidence.

378. The discounts achieved were shared with MEL. Some of Corderoy's fees were deducted from the share of discounts paid to MEL. The extent of MEL's contribution to Corderoy's fees is shown on spreadsheet TS10A and spreadsheet TS11.
379. Mr Smailes very fairly accepted in cross-examination that spreadsheet TS10 (now superseded) is misleading. This is the spreadsheet which was put to Mr Langham in cross-examination.
380. In October 2003 Mr Smailes had reservations as to whether MEL had been entitled to the share of the discounts which it had received. MEL had not generally put CAMBBA in funds to make the various advance payments to statutory undertakers. Moreover it was CAMBBA in conjunction with Corderoy who had done all the work to obtain the discounts. Accordingly, on 27th October 2003, Mr Smailes wrote an internal memo to CAMBBA setting out his views on the matter.
381. This was considered within CAMBBA for a period. In 2004 CAMBBA advanced in correspondence the claim that they were entitled to the whole of the discounts.

#### Dunton Island

382. In relation to Dunton Island slip road, Mr Smailes did some calculations which formed the basis of the lump sum quotation for £180,000 which CAMBBA sent to MEL in February 2003. Mr Smailes did these calculations at the request of Mr Butterworth, who was then commercial manager of CAMBBA.
383. Mr Smailes took as his starting point the calculation of direct costs done by Gary Costello. Mr Smailes had not been involved in any earlier estimate sent by CAMBBA to MEL in respect of these works.
384. That concludes my summary of the factual evidence called on behalf of both parties. It is now time to turn to the expert evidence.

#### Part 6. The Expert Evidence

385. The expert evidence in this case falls into a very small compass. MEL has served two expert reports.

386. The first report is by Mr Kolesar and deals with Provisional Sums. During the course of the trial the parties reached some agreed facts on this topic. The consequence is that Mr Kolesar has not been called and his report is not relied upon.
387. The second expert report is by Mr Ian Nottingham, a civil engineer with long experience of road projects. Mr Streatfeild-James objected to the admissibility of sections 4, 5 and 6 of that report.
388. I upheld part of those objections. In the result Mr Nottingham gave expert evidence on Day 9 in relation to three issues, namely: re-use of sign gantries, Dunton Island and foul drainage.
389. I shall now summarise that evidence drawing together the gist of his expert report and his oral evidence.
390. Insofar as Mr Nottingham expresses opinions (a) on matters of contractual interpretation, (b) on points of law, or (c) upon how conflicts between the factual witnesses should be resolved, I shall pass over these aspects of his evidence. It is perfectly understandable that Mr Nottingham should reveal his opinions on these matters but these opinions are not, strictly speaking, admissible as evidence.

#### Sign Gantries

391. The construction of the M6 toll road necessitated changes to some of the signs displayed on the M42 motorway and the M6 motorway. The signs which required to be changed were mounted on the following seven gantries: G1, G2, G3, G4 and G5 on the M42 motorway, gantries GEX1 and GEX2 on the M6 motorway.
392. The locations of these seven gantries and photographs of the gantries before and after the sign changes are set out in Exhibit MEL 3, which is agreed.
393. The gantries in question were built in 1978 in accordance with the standards which then prevailed.
394. The signs displayed are attached to posts which are fixed to the superstructure of each gantry. The wind load is transmitted from the signs to the posts and from there to the superstructure and then to the foundations.
395. The standards in relation to wind load, which prevailed in 1978, were conservative. So wind load is not a problem. Indeed all seven gantries, with their new signs, comply with current standards in relation to wind load.
396. There is, however, a new standard which was introduced in 1998 and which bears upon the risk of impact damage. This is BD 51-98 entitled "Portal and Cantilever Signs/Signal Gantries". This standard requires sign gantries to have a level of protection against impact from vehicles. The protection required may take the form of a double rail open box beams ("DROBBs") or higher vertical concrete barriers ("HVCBs").
397. The collision loads which must be accommodated are set out in Table 2 of Part 4 of the standard. The manner in which DROBBs and HVCBs must be installed is illustrated figures 2A to 2E in Annex A to the standard.

398. The DROBBs and HVCBs required by standard BD 51-98 are meant to protect a gantry from collapsing if it is struck by a heavy vehicle travelling at speed. They may also provide some protection to the vehicle as it approaches the gantry.
399. The present issue between the parties is whether or not the seven gantries bearing new signs were required under the contract to comply with standard BD 51-98.
400. Mr Nottingham makes the point that CAMBBA might have complied with their obligation as to signage by:
- (a) Building new gantries.
  - (b) Taking down and re-erecting existing gantries.
  - (c) Refurbishing existing gantries; or
  - (d) Putting new signs on existing gantries unaltered.
401. The fourth course was followed.

#### Dunton Island

402. Exhibit MEL7 was produced at the start of Mr Nottingham's evidence. This is an agreed plan showing the on slip road, the Site boundary, the work depicted on the PDS drawings and the work actually done.
403. CAMBBA increased the width of the existing on slip road from 6 metres to 7.3 metres. This was done by extending the western side of the road. This new construction was stepped downwards in stages, in order to prevent cracking occurring along the line of the join. In addition to increasing the width of the road, CAMBBA have also applied a new wearing course overlay across the entire surface of the road.
404. A increase in width from 6 metres to 7.3 metres was required by the traffic figures contained in the Employer's Requirements.
405. The widening and resurfacing works along the top 80 metres, of the slip road were carried out on land falling outside the Site boundary as shown on the site definition plans listed in Annex 1/5 to the Employer's Requirements.
406. If no widening work had been carried out to the top 80 metres, then that narrow section at the top would have throttled the traffic flow along the whole slip road. Therefore Mr Nottingham considers that CAMBBA were obliged to carry out this widening work as part of the original contract.
407. Mr Nottingham accepts, however, that there are often areas of constraint outside the site on which a contractor is working. The contractor does not normally deal with those areas of constraint. MEL would have had no problem in getting some other contractor to deal with an area of constraint at the top of the slip road.

408. The original limit of CAMBBA's intended works is marked in red on MEL 7. On the other hand, AAJV's drawing entitled "Pavement Junction 11 Section 4" shows a new inlay to be laid along the top 80 metres of the slip road, which is outside the site boundary. Mr Nottingham was not asked about the date of this drawing. However it can be seen from the right-hand side that this drawing was first issued in January 2002 and then reissued for review in February.

#### Foul Drainage

409. The Employer's Requirements in relation to toll stations provide at paragraph 6.3.3:

"The buildings shall be fully serviced with ... Drainage ... To a standard and specification to the satisfaction of the Employer."

410. The same form of words is used in paragraph 5.2.4 (relating to the Operations Management Centre at Weeford) and paragraph 5.3.4 (relating to Motorway Maintenance Area Buildings).
411. Mr Nottingham made a slip in his report in that he referred to the wrong paragraph number.
412. Four toll stations lacked main drainage. The 1991 and 2000 Building Regulations permitted either package treatment plants or septic tanks or cesspools to be used in those locations. Whether the Amended Buildings Regulations, which came into force on 1st April 2002, permitted cesspools was debated in cross-examination but this is really a question of law.
413. Package treatment plants remove pollution to a high degree. The outflow can be discharged into a watercourse. Septic tanks break down the sewage to a more limited extent. The effluent from septic tanks is good enough to put on agricultural land, but it cannot be discharged into watercourses. Cesspools do nothing to improve the sewage. They simply hold the foul water until it can be collected by a sludge wagon.
414. In view of the fact that (a) toll stations were continuously occupied, and (b) the concession period is 50 years, Mr Nottingham considers that MEL acted reasonably in refusing to accept drainage into cesspools at toll stations. The motorway maintenance areas (where cesspools were accepted) are very different; they are only occupied for part of the time.
415. The document PPG4, published by SEPA and the Environment Agency, reflects best practice.
416. A cesspool should have the capacity for 45 days storage. Mr Nottingham considers that it was reasonable for MEL to propose at toll stations a "permanent system that required little routine attention or maintenance". (See paragraph 3.2.4 of his report.) The provision of a septic tank in each of the four toll stations would have met this requirement. If package treatment plants were required at the toll stations, Mr Nottingham would have expected the parameters of that plant to have been specified.
417. The Employer's Requirements also contain an outline building specification at Annex 5/1. This states:
- "Underground drains will be provided to collect both foul and surface water."
418. The verb "collect" does not imply that any particular form of disposal will be used. Foul water must first be collected, irrespective of whether it goes into main drains or to a cesspool or to any other form of disposal.

419. In relation to motorway maintenance compounds, the Department of Transport's "Design Brief", Issue 293, gives further details concerning the drainage to be provided.
420. That concludes my summary of the expert evidence which has been called at trial. All that remains before I embark upon the individual disputes is for me to deal with the matter of the Belfry Agreement, which straddles a number of the individual disputes between the parties.

#### Part 7. The Belfry Agreement

421. It is common ground that MEL and CAMBBA attended a board level work shop on 15th November 2001 in the congenial surroundings of the Belfry Golf Club. The discussions initiated on that occasion continued over the next four months. Those discussions culminated in a document headed "Statement of Intent", which both Mr Langham and Mr Neal signed in March 2002.
422. The issue between the parties is whether that document had any and, if so, what, legal effect.
423. The evidence on this issue was given by Mr Langham, Dr Dyer and Mr Neal. I have summarised that evidence and the relevant documents in Parts 4 and 5 above.
424. In relation to this issue, my findings of fact are as follows:
- (1) Mr Neal as Project Director for CAMBBA did not have authority to enter into a binding agreement whereby CAMBBA waived otherwise valid claims under the D&C Contract. Mr Neal's powers under clause 13.2 of the D&C Contract were not enlarged in order to give him that authority.
  - (2) The Supervisory Board could have given Mr Neal authority to enter into such a binding agreement, but it did not do so.
  - (3) Mr Neal's lack of authority was communicated to MEL (a) by Mr Neal's letter dated 21st February 2002 and (b) in the discussions between Mr Neal and Mr Langham during this period.
  - (4) The Belfry Agreement, signed in March 2002, bears the heading "Statement of Intent". This heading meant and was understood by both parties to mean that the arrangement was binding in honour only and was not a legally binding agreement.
  - (5) Insofar as some of Mr Langham's evidence conflicts with findings 1 to 4 above, this is because his recollection of conversations and their nuances is not quite correct. This is unsurprising, since those conversations occurred about four years ago. Indeed, today is the fourth anniversary of the gathering at the Belfry Golf Club.
425. On the basis of these findings of fact my decision on the question of law is as follows: the so called Belfry Agreement is not a legally binding agreement at all. It does not prevent either party from pursuing an otherwise valid claim under the D&C Contract.

#### Part 8. Provisional Sums and Aggregate Tax

426. This part of the judgment deals with two related disputes.
427. The provisions of the D&C Contract relating to Provisional Sums are clause 1.1 (Definitions), clause 36, clause 37, and Appendix 1, Part A.
428. As can be seen from the above, the contract contained the following provisional sums: Unspecified Accommodation Works: £1,900,000. Aggregate Tax: £50,000. Future Mining Works: £50,000.
429. During the course of the works £758,426 was certified in respect of Unspecified Accommodation Works. £2,880,000 was certified in respect of Aggregate Tax (subject to a separate dispute which I shall address later). Nothing was certified in respect of future mining works because no works in this category were either instructed or executed.
430. It is common ground between the parties that the sums which have been certified in respect of those items should be added to the Contract Price of £485.5 million.
431. The issue which is in dispute is whether or not the three Provisional Sums specified in the contract (totalling £2 million) should be deducted.
432. This dispute was referred to adjudication. The adjudicator, Mr John Marrin QC, by a decision dated 26th August 2004, found in favour of CAMBBA on this issue. However, as can be seen from paragraphs 24 to 27 of his decision, the adjudicator found the arguments to be finely balanced and the conundrum difficult to resolve.
433. MEL does not accept the adjudicator's decision. Accordingly, in the London action MEL claims a declaration in the following terms:
- "That on a true interpretation of the contract, the Defendants' entitlement in respect of the Provisional Sums is the total of £758,426 for Item 18 and £2,880,000 for Item 19, subject to a deduction from the contract sum of the total value of the 3 Provisional Sums stated in the Pricing Schedule."
434. The rival arguments have been set out by counsel very clearly in writing and were developed orally in closing speeches.
435. MEL originally proposed to call expert evidence on this issue, but that expert evidence has now been superseded by an agreed statement in the following terms:
- "The term "provisional sum" is used in construction contracts to make financial provision for works which cannot be sufficiently defined at the time of tender to enable the Contractor to price it accurately. In some construction contracts, the mechanism for determining the sum payable for work the subject of a Provisional Sum involves the substitution for the Provisional Sum of the value of the work carried out in respect of the item. The way in which this mechanism is achieved varies according to the nature of the contract. For example: (1) In the case of some lump sum contracts, such as some JCT forms, it is achieved by deducting the Provisional Sum from the Contract Price and substituting a figure to reflect the value of the work carried out. (2) In re-measurement contracts (such as ICE) no sum is deducted from the Contract Price in this way. The value of the work performed is calculated by way of admeasurement.
- The effect of any particular contractual provision will be determined by the proper construction of the relevant contract."

436. In response to a query from myself the parties subsequently agreed that the word "admeasurement" has the following meaning:

"The process of measurement of completed work."

437. Having considered the respective submissions of counsel and also the agreed statement and the contractual provisions, I have come to the conclusion that MEL is right on this issue. The total sum specified in the contract for Provisional Sums, namely £2 million, falls to be deducted from the Contract Price.

438. I reach this conclusion for eight reasons:

(1) A Provisional Sum is by definition a sum provided in a building contract in respect of work which cannot be sufficiently defined or properly evaluated at the time when the contract is executed. (See the first paragraph of the agreed statement). In practice a provisional sum is generally the best guess that can be made at the time. It is "provisional" because neither party is held to that figure, if the actual cost turns out to be higher or lower.

(2) It is a necessary feature of the Provisional Sum mechanism that when the actual value of the work in question is identified and added to the Contract Price, the provisionally estimated value is deducted. If the Provisional Sum is not deducted: (a) the whole system breaks down; (b) the contractor is paid twice over; and (c) the Provisional Sum loses its provisional quality. The so called Provisional Sum becomes a fixed and definite sum which the contractor is bound to receive in any event (even if he does nothing to earn it).

(3) Clause 36.3.1 is not a happily drafted clause. Nevertheless the meaning of that clause is perfectly clear. It is as follows: if the employer instructs the contractor to pay sums of money (eg Aggregate Tax) or to carry out works in respect of an item for which a Provisional Sum is stated in the pricing schedule, then the Contract Price shall be adjusted accordingly. In other words, the contractor shall receive in lieu of the Provisional Sum an amount assessed by reference to the actual expenditure incurred or the actual work done.

(4) If no work is instructed or executed in respect of a Provisional Sum item (as happened here in respect of future mining works), then clause 36.3.1 is not triggered at all. In those circumstances the entire Provisional Sum allocated to that item must be deducted. I say this because: (a) that is the natural and obvious meaning of paragraphs 18, 19 and 20 of Part A of Appendix 1 to the contract; (b) the very words "Provisional Sum" mean a sum which must be deducted if the relevant item of work is not done; (c) any other interpretation of the contract would be absurd. The absurdity arises in this way, it would mean that if the contractor does a small amount of work in respect of a Provisional Sum item, he receives a small payment; if the contractor does nothing at all in respect of such an item, he receives a much larger sum. (The adjudicator addressed this conundrum at paragraph 27 of his decision.)

(5) The last line of Part A of Appendix 1 to the D&C Contract reads: "Value of non-MSA works, £484,507,354 including Provisional Sum items 18, 19 and 20." There would be no point in stating that the contract price includes the three provisional sums if those sums were payable in any event.

(6) The definition of Provisional Sum in clause 1.1 is inconsistent with the interpretation for which CAMBBA contend. Note the words "which sum may be used in whole or in part".

(7) Clause 36.3.1 refers to Price Adjustment. The term "Price Adjustment" is defined in clause 1.1 so as to include additions to and deductions from the contract sum.

(8) When pressed by me in argument Mr Streatfeild-James conceded that his proposed construction of clause 36.3 had "a surprising feel". That is an elegant understatement. In my view the interpretation for which CAMBBA contend does not make commercial sense.

439. Let me now turn to the separate and additional dispute concerning Aggregate Tax.
440. Aggregate Tax is defined in clause 1.1 of the contract. Clause 37.1 provides that CAMBBA should be entitled to be paid for Aggregate Tax "monthly in arrears as levied".
441. Clause 38.1 provides that the parties should agree a procedure and basis for assessing interim payments. Such a procedure was agreed on 12th April 2001. Paragraph 19 of this document provided as follows:

"Provisional Sums for Aggregate Tax".

"As levied subject to the limits in clause 36.3.3 of the Conditions of Contract. Value £50,000. Sum capped on quantity [at £50,000 maximum]. To be based upon MEL instructions and price agreed. Basis of application by CAMBBA to be submission of taxation invoices post-payment by CAMBBA."

442. By the Finance Act 2001, which received royal assent in June 2001, the Government introduced a new tax on aggregates. This tax had been anticipated when the D&C Contract had been entered into but its details were not then known. This new tax was imposed with effect from 1st April 2002 on those responsible for commercially exploiting aggregate in the United Kingdom. From then on the cost of aggregate increased by the amount of the tax.
443. The introduction of this new tax triggered the operation of clause 36. CAMBBA became entitled to receive payment in respect of Aggregate Tax up to a maximum of £2.88 million, which was the limit imposed by clause 36.3. CAMBBA have in fact expended more than £2.88 million on Aggregate Tax.
444. On 23rd August 2004, MEL issued interim payment certificate number 47. This certificate included an interim payment to CAMBBA of £2.88 million in respect of Aggregate Tax.
445. During the summer of 2004 the parties were engaged in an adjudication in order to determine how the contractual provisions governing Provisional Sums should be operated. By his decision, dated 26th August 2004, the adjudicator, Mr John Marrin QC, held that the maximum sum which CAMBBA could receive for Aggregate Tax in interim certificates was £50,000. This limitation was imposed by paragraph 19 of the written procedure agreed between the parties on 19th April 2001. He added that this limitation would not apply to the sum allowed for Aggregate Tax in the Final Certificate.
446. On 15th September 2004, MEL issued interim certificate number 48. In that certificate MEL, as it was legally bound to do, gave effect to the adjudicator's decision. In particular, MEL reduced to £50,000 the sum allowed by way of interim payment in respect of Aggregate Tax.
447. There was then a dispute between the parties as to how Mr Marrin's decision should be interpreted. That dispute went to a yet further adjudication. The new adjudicator, Mr Harris, by a decision dated 21st December 2004, confirmed that CAMBBA's entitlement to interim payment in respect of Aggregate Tax was limited to £50,000. Accordingly CAMBBA should re-pay the overpayment which they had received.

448. CAMBBA were aggrieved by both adjudicators' decisions. Accordingly, by their counterclaim in the London action, CAMBBA applied for a declaration to the effect that they were entitled to an additional interim payment of £2.83 million in respect of aggregate tax.
449. The parties' respective contentions on this issue have been set out in writing. There was no oral evidence on this issue except that Mr Langham, by his witness statement, helpfully identified the relevant documents.
450. Having considered the rival submissions of the parties on this issue, both the written submissions and the oral arguments in closing speeches, I have come to the conclusion that CAMBBA are correct in their contentions and that interim payments for Aggregate Tax are not limited to £50,000.
451. I reach this conclusion for six reasons:
- (1) The written procedure, dated 12th April 2001, was agreed at a time when Parliament had not yet introduced any Aggregate Tax. Accordingly, the total figure stated in paragraph 19 merely reflected the Provisional Sum stipulated in the contract.
- (2) On 1st April 2002 the new Aggregate Tax came into force. The consequence of this development was that CAMBBA were bound to become entitled to payments in respect of Aggregate Tax substantially in excess of the Provisional Sum of 50,000.
- (3) The written procedure, dated 12th April 2001, was prepared pursuant to clause 38.1 of the D&C Contract. As such, this written procedure was bound to be consistent with the provisions of the D&C Contract. The purpose of this document was to implement the D&C Contract, not to override it.
- (4) Paragraphs 2 and 3 of the written procedure, dated 12th April 2001, expressly provide:
- "2.1. This document is prepared within the terms of clause 38.1 of the D&C Contract in agreeing between the Employer and the Contractor the basis for assessing the measurement and progress of the Works.
- "2.2. The fundamental basis and procedures have already been established within the D&C Contract: the purpose of this document is to build upon the primary details provided therein, to develop in more definitive details the procedures and basis for establishing the monthly measurement and progress of the works.
- "2.3. However, the purpose is not to allow the process to evolve into a resource and time consuming re-measurement of the works, but to establish an equitable means to fairly provide within a short period of time the monthly measured assessment as required within Clauses 37.1 and 38.2 of the D&C Contract.
- "3.1. Any procedures already defined within the D&C Contract shall take precedence over any of the following with regard to interpretation of Procedure and Basis for Assessing the Measurement and Progress of the Works." These provisions make it clear that the written procedure is not intended to override or frustrate the operation of the D&C Contract. Insofar as any provisions of the written procedure do appear to have that effect, they are of no effect and they are in themselves superseded by or overridden by the provisions of the D&C Contract.

(5) In the circumstances which prevailed after 1st April 2002, the express terms and procedures set out in clause 36, clause 37 and Appendix 1 to the D&C Contract were inconsistent with any limitation of interim payments for Aggregate Tax to £50,000.

(6) CAMBBA's entitlement under the D&C Contract to payments in respect of Aggregate Tax amounts to £2.88 million. From a commercial point of view it is absurd to interpret the interim payment provisions in such a way that for several years CAMBBA receive only £50,000 and then, at the very end, when the final certificate is issued, are paid the balance of £2.83 million. The whole purpose of interim applications and interim certificates is to maintain the contractor's cash flow as and when it incurs costs (subject to deductions for retention and so forth).

452. Let me now draw the threads together. In respect of Provisional Sums and Aggregate Tax, I have come to the conclusion that all three adjudicators' decisions were wrong. MEL is, in principle, entitled to the relief which it seeks in respect of Provisional Sums. CAMBBA are, in principle, entitled to the relief which they seek in respect of Aggregate Tax.

453. I invite counsel to assist the court by drawing up an appropriate declaration or declarations to give effect to my decisions in respect of Provisional Sums and Aggregate Tax.

#### Part 9. Chasewater Footbridge

454. The Chasewater Footbridge is part of the Permanent Works which CAMBBA agreed to design and construct. It is bridge number 204.

455. Annex 3/1 to the Employer's Requirements require that this bridge should be 2 metres wide and should have a parapet of P4 mesh to a height of 1250 mms.

456. Paragraph 3.3.1 of the Employer's Requirements, in conjunction with Annex 3/5, stated that CAMBBA had prepared a preliminary design for this bridge in drawing B204-1. That drawing shows a parapet 1150 mms high.

457. Paragraph 3.4.2 of the Employer's Requirements required bridges to comply with a number of standards, including BD 29-87. Paragraph 10.1 of BD 29-87 provides as follows:

"Where it is considered that there is a high risk of objects being dropped or thrown from the footbridge, consideration should be given to full or partial enclosure of the crossing and its ramps or stairs. The need for such provision shall be agreed with the Technical Approval Authority. Normally mesh infill will be suitable but if solid panels are specified they should be translucent with provision made for cleaning. The design of the enclosure shall be such that unauthorised access to the sides or the roof is prevented."

458. The narrative history of events in relation to Chasewater Footbridge has been set out in the evidence of Mr Langham, Mrs Rolfe (formally PC Turner) Mr Neal, Mr French and Mr Jones.

459. I accept that all those witnesses were honest and giving their best recollection of events. The only important controversy on the facts concerns what was said on 29th May, 7th July and 11th July 2003.

460. In relation to the meeting on 29th May 2003, I find as a fact that PC Turner did say on that occasion that the police would be content with either enclosure of Chasewater Footbridge or the use of CCTV.
461. Let me move on now to the conversation on 7th July 2003. My findings of fact are as follows: Mr Jones told PC Turner the gist of the paragraph headed "Important Comment" in Mr French's e-mail dated 27th June 2003. Mr Jones genuinely believed there were doubts about the aerodynamic stability of any form of total enclosure for the reasons set out in that paragraph. PC Turner stated that the police's first choice was CCTV and their second choice was an increase in height of the mesh parapet. Accordingly, the note in Mr Jones' day book is accurate in this regard.
462. Let me turn next to the meeting on 11th July. At this meeting Mr Jones again explained the difficulties of enclosing the bridge as he understood them. PC Turner again stated that the police would be satisfied with CCTV surveillance.
463. It has subsequently emerged that the difficulties of enclosing Chasewater Footbridge were not as great as they appeared to be from Mr French's e-mail. Nevertheless I am quite satisfied that, in June and July 2003, Mr Jones did no more than convey to the police the gist of the advice which CAMBBA had received from their engineers AAJV. I do not consider that Mr Jones misled the police.
464. Let me now turn to MEL's claim.

MEL's claim is put on the basis that the police are a Relevant Authority and the police required the footbridge to be enclosed. That claim was rejected by the adjudicator, Mr John Marrin QC in a decision dated 26th August 2004.

465. MEL now renews that claim in the present litigation. See paragraphs 12 to 16 of the particulars of claim in the London action.
466. I have come to the conclusion that this claim is unsound and I reject it for five reasons:
- (1) It is not the case that each Relevant Authority listed in Appendix 10 to the D&C Contract has jurisdiction over the whole of the works. More specifically the police are not a Relevant Authority for the purposes of Chasewater Footbridge. The police are not a body whose approval or consent was needed for the bridge in its final form. The police did not have authority to require that any particular feature be incorporated in or omitted from the design of that bridge. The matters in respect of which the police act as a Relevant Authority are specifically identified in the contract. (See for example paragraph 2.3 and paragraph 2.8 of Appendix 1/17 to the Employer's Requirements).
- (2) PC Turner's letter dated 11th November 2002 (relied upon in paragraph 14 of the Particulars of Claim) does not contain a requirement that the bridge be enclosed. It merely contained a request that consideration be given to either enclosure or raising the height of the barrier.
- (3) None of the other letters sent by the police require that the bridge be enclosed.
- (4) In the various discussions between the police and MEL, no police requirement for enclosure was stated. On the contrary PC Turner made it clear that the police regarded CCTV as a satisfactory alternative to enclosure.

(5) Subsequently MEL decided, for perfectly understandable reasons, to enclose the footbridge. They engaged a separate contractor to carry out this work. MEL never instructed CAMBBA to carry out that work and CAMBBA were under no obligation to do it.

467. Finally, I should add that whatever PC Atkin may have said to Mr Langham in November 2003, this was not conveyed to CAMBBA as a police requirement with which they must comply.
468. In the result, I conclude that MEL must bear the cost of enclosing Chasewater Footbridge. MEL is not entitled to the declaratory relief which it seeks.

#### Part 10. Dunton Island

469. Dunton Island is a roundabout close to the M42 and M6 toll road. The on slip road at Dunton Island runs from the roundabout to the M42 southbound.
470. It is common ground that the Highway Works, which CAMBBA agreed to carry out under the D&C Contract, included upgrading the on slip road at Dunton Island, at least insofar as that road lay within the boundaries of the Site.
471. Paragraph 1.3.1 of the Employer's Requirements stipulated that CAMBBA shall use the traffic figures in Annex 1/4 for the purpose of detailed design. Those traffic figures necessitated a widening of the on slip road from 6 metres to 7.3 metres. (See the evidence of Mr Nottingham).
472. It was clearly sensible for the slip road to be widened to 7.3 metres along its entire length. Nevertheless the boundary of the Site cut across the slip road at a distance of about 80 metres from the roundabout. That last 80 metres of slip road lay outside the Site, as defined in the D&C contract. (See clause 1.1 of the contract, paragraph 1.5.1 of the Employer's Requirements and the Site Definition Plan SDP-CEH-16).
473. The sequence of events in relation to Dunton Island is not in dispute. CAMBBA's tender submission drawing did not show any works to be done to the top section of the slip road. Nevertheless, during 2001 and 2002, MEL requested CAMBBA to widen the slip road along its entire length without any Employer's Change. CAMBBA resisted this. In 2003, MEL instructed that the work be done and CAMBBA complied with that instruction. CAMBBA maintained that they were entitled to an Employer's Change in respect of the work done to the slip road outside the Site boundary. MEL and Babbie took the view that this work was required by the contract in any event. MEL refused to issue an Employer's Change. (See the evidence of Mr Langham, Mr Cattley and Mr Neal).
474. CAMBBA referred their claim for an Employer's Change to an adjudicator. By a decision dated 26th August 2004 Mr Marrin QC declared:
- "CAMBBA is entitled to an Employer's Change to reflect the fact that the 80 metre strip of land at the top of the Southbound M42 on slip road at Dunton Island became available only after the Contract was concluded."
475. MEL did not accept the adjudicator's decision. Accordingly, by the London action, MEL claimed the following declaration:

"That, on a true interpretation of the Contract, the land used by the Defendants

in constructing the M42 southbound on-slip road at Dunton Island which did not form part of the Site was an Adjacent Area, the use of which did not involve a variation to the Employer's Requirements, nor entitle the Defendants to further sums."

476. It will be noted from the form of declarations sought that MEL concede in their pleadings that the land in question, at the top of the slip road, did not form part of the Site.
477. In support of its claim for a declaration, MEL relies upon the following provisions of the D&C Contract: the definition of "Adjacent Areas" in clause 1.1, clause 6.1.3 and clause 21.1.1. MEL also relies upon the paragraph from Annex 1/4 to the Employer's Requirements, which I read out in Part 2 above.
478. MEL contends that the top 80 metres of the on-slip road was an "Adjacent Area" as defined in clause 1.1 of the contract; further, that 80 metre strip forms part of the "Land Take" referred to in Annex 1/4 to the Employer's Requirements. Therefore the execution of necessary works to that section of slip road did not involve a change to the Employer's Requirements. Relying upon both common sense and upon Mr Nottingham's evidence, MEL contends that the top 80 metres of slip road needed to be widened to the same extent as the rest of the slip road.
479. In his oral closing speech, Mr Blackburn developed the further submission that the boundary of the Site is not precise. However, I was not persuaded by that submission on the evidence; at least I was not persuaded by that submission that the relevant part of the on slip road was within the Site boundary. Furthermore, that is not a submission which is open to MEL on its pleadings.
480. Mr Blackburn also developed the submission that CAMBBA's obligations are not limited by the Site boundary.
481. I reject MEL's contentions in relation to Dunton Island for four principal reasons.
- (1) On the proper construction of the D&C Contract, CAMBBA were only required to construct permanent highway works within the boundaries of the Site. It would not make business sense to construe this contract as requiring CAMBBA to carry out permanent highway works to an unspecified extent beyond the boundaries of the site.
- (2) The works required upon Adjacent Areas must be ancillary works such as the erection of signs or Unspecified Accommodation Works. See clause 1.1 of the D&C Contract and clause 2.10.4 of the Employer's Requirements. These are examples of provisions which provided for works on Adjacent Areas.
- (3) I doubt that the passage in Annex 1/4 to the Employer's Requirements upon which MEL rely has any application to the on-slip road which is in issue. That passage is dealing with the geometric design of roundabouts.
- (4) Even if I am wrong in the previous subparagraph, the passage in question does not assist MEL. The phrase "available land take" in Annex 1/4 to the Employer's Requirements can only mean the Site. The effect of this provision is that if the relevant part of the Employer's Requirements cannot be met within the available area of the Site, then CAMBBA must optimise the design. In other words, in those circumstances CAMBBA must do the best that can be achieved.
482. For all of these reasons I conclude that the adjudicator reached the correct decision on this issue. CAMBBA are entitled to an Employer's Change in respect of the work carried out to the

top section of the on- slip road at Dunton Island. Accordingly, MEL's claim for a declaration fails.

#### Part 11. Omission of Sign Gantries

483. Section 2.10 of the Employer's Requirements sets out the Contractor's obligations in respect of signage. Gantries are structures. Section 3 of the Employer's Requirements sets out the Contractor's obligations in respect of structures. In particular, paragraph 3.1.3 of the Employer's Requirements said that the estimated number of gantries was 68 but the actual number would be determined by the Contractor in accordance with the Detailed Design.
484. Annex 6/1 to the Employer's Requirements sets out the requirements for the Toll Collection System. The crucial paragraph for present purposes is paragraph 3.2.1.1.2[15].
485. Let me now turn from the contractual provisions to certain of the signs which have been constructed. There are post-mounted variable message signs one mile in advance of the two mainline toll stations and one mile in advance of three intermediate toll stations, namely those at junctions T3, T4 and T6. These five variable message signs indicate tolls which are charged on all categories of vehicles. The amount of the tolls will vary according to the time of day. It will also vary from one year to the next.
486. MEL contends that pursuant to paragraph 3.2.1.1.2[15] of Annex 6/1 to the Employer's Requirements CAMBBA were obliged to erect these five signs on gantries. Accordingly the omission of those gantries and the use of post-mounted signs was an Employer's Change in respect of which MEL is entitled to a Price Adjustment downwards.
487. The adjudicator, Mr John Marrin QC, rejected MEL's claim by his decision dated 26th August 2004.
488. MEL now advances essentially the same claim in litigation. (See paragraphs 24 to 28 of the particulars of claim in the London action). Factual evidence relating to this issue was given by Mr Langham and Mr Dimmock. That evidence is summarised in parts 4 and 5 above and I have no reason to doubt the recollection of either witness about these matters.
489. In my judgment the construction of post-mounted signs at the five locations mentioned was not a departure from the original contractual requirements. MEL is not entitled to an Employer's Change in respect of this matter or to claim a consequential reduction in the contract price.
490. I reach this conclusion for six reasons:
- (1) The precise number of gantries was a matter for CAMBBA to determine in accordance with paragraph 3.1.3 of the Employer's Requirements. CAMBBA did so and the outcome was that no gantries were placed at those five locations.
  - (2) Pursuant to paragraph 2.10.5 of the Employer's Requirements it was a matter for CAMBBA to determine the location of message matrix signs. These had to be to the satisfaction of the relevant highway authorities and those authorities were duly satisfied. In addition, variable message signs were required on the approaches to tolling booths. Each of these requirements was complied with.

(3) Paragraph 3.2.1.1.2[15] of Annex 6/1 to the Employer's Requirements does not require sign gantries at the five locations in question. In my view MEL's proposed interpretation of this clause is unduly strained. Signs which are located one mile away from the toll plazas are not "in front of the toll station".

(4) The TCS requirements specification is concerned with the functionality of the system, not the location of signs.

(5) The requirements concerning signs are set out not in Annex 6/1, but in section 2.10 of the Employer's Requirements. The five post-mounted signs which are in issue comply with all the requirements of section 2.10.

(6) As admitted in cross-examination, Mr Langham created MEL's claim for omission of gantries by putting together two unconnected events. He did this as a response to claims by CAMBBA which he regarded as unjustified.

491. Finally, in relation to this issue, I should record that from time to time during the trial efforts were made to identify plans showing gantry-mounted signs one mile in advance of the five toll stations. These efforts were unsuccessful. At the end of his closing speech Mr Blackburn nailed his colours to the mast. He relied not upon any plans showing gantry-mounted signs, but upon the contractual provisions previously mentioned.

492. Let me now draw the threads together. For the reasons enumerated above, I hold that MEL is not entitled to the declaratory relief which it seeks in respect of the omission of gantries.

#### Part 12. Mandatory Speed Limits

493. By clause 8.1.3 of the D&C Contract, CAMBBA undertook full responsibility for the safety of the design of the works.

494. Section 2.10 of the Employer's Requirements sets out CAMBBA's obligations in respect of traffic signs and road markings. Appendix 12/1, referred to in paragraph 2.10.3 of the Employer's Requirements, sets out CAMBBA's further obligations in respect of signs for mandatory speed limits. The history of events in relation to the late introduction of mandatory speed limits on the approaches to mainline toll plazas has been narrated in the evidence of Mr Langham, Mr Neal, Mr Border and Mr Dimmock. So far as the factual history is concerned, the evidence given by each of those four witnesses is consistent and I accept it.

495. The key facts, if I may cut down a very long story to its essentials, are these: CAMBBA and AAJV produced a design for the approaches to mainline toll stations which did not include any mandatory speed limits lower than 70 miles per hour. That design was approved by Babbie, both as TAA and as reviewer. Neither the road safety auditor nor the DA raised any objection to the absence of mandatory speed limits. MEL, however, became concerned about this matter in August 2002. MEL consulted others and found out that its concerns were shared by the CMPG.

496. At a meeting on 13th February 2003 CAMBBA agreed to introduce a 50 miles per hour speed limit on the approaches to mainline toll stations. MEL continued to take advice on this matter and in due course came to the conclusion that the speed limit of 50 miles per hour should be stepped down to 30 miles per hour as vehicles approached closer to the toll stations.

497. By a letter dated 5th September 2003, MEL instructed CAMBBA to introduce a speed limit of 30 miles per hour at the commencement of the toll plaza widening. CAMBBA carried out under protest the work which had been instructed. CAMBBA maintained that they were entitled to an Employer's Change.

498. The adjudicator, Mr John Marrin QC, upheld CAMBBA's claim. MEL invites this court to come to the opposite conclusion. (See paragraphs 29 to 34 of the particulars of claim in the London action).

499. MEL seeks a declaration in the following terms:

"That on a true interpretation of the contract, the work required to be carried out in connection with the mandatory speed limits referred to in the Claimant's letter to the Defendants dated 5th September 2003 did not constitute an Employer's Change."

500. I have heard much more extensive evidence than was available to the adjudicator and I have come to the conclusion that MEL's claim is well founded. In my view the speed limits of 50 miles per hour and 30 miles per hour were both required in order to achieve a reasonable level of safety on the approaches to mainline toll stations.

501. I reach this conclusion for eight reasons:

(1) So far as the 50 mile per hour speed limit is concerned, this was agreed at the meeting on 13th February 2003 to be reasonably necessary. In their oral evidence neither Mr Neal nor Mr Border sought to sustain a case for a change order in respect of the 50 mile per hour speed limit. Indeed this point is conceded in CAMBBA's closing written submissions.

(2) The toll plazas are an area of increased risk. Accordingly special measures are required in that vicinity.

(3) The M6 toll road is the first motorway of its kind in the UK. There are no UK standards applicable to the approaches to motorway toll stations. It is therefore necessary for toll station approaches to be designed on first principles and in a manner that will minimise the risk of accidents.

(4) It is self-evident that drivers approaching a toll station will search for the shortest or fastest-moving queue and they may weave from lane to lane in order to achieve their objective.

(5) It is clear on the evidence and it accords with common sense that if drivers are required to slow down from 70 to 50 miles per hour and then from 50 to 30 miles per hour as they approach the toll stations, then the risk of collisions will be reduced.

(6) Experience overseas as summarised in Babbie's report dated 24th February 2003 supports the case for tight speed limits on the approaches to toll stations.

(7) The CMPG recommended a step down in speed limits from 50 miles per hour to 30 miles per hour on the approaches to toll stations. In a matter of this nature it would have been foolhardy for either MEL or CAMBBA to disregard the advice of the police. It will be recalled that the road safety auditor advised that the CMPG should be consulted about the matter of speed limits.

(8) Having considered all the circumstances, the Department of Transport changed its initial view that speed limits of 50 miles per hour and 30 miles per hour were unnecessary. The Department was prepared to and did promote regulations which gave effect to these speed limits. It is clear from the correspondence that the Department did not act as a mere post box. The experienced officials within the Department gave independent consideration to the issues.

502. In reaching the conclusions set out above, I have gained considerable assistance from the cross-examination of Mr Border by Mr Blackburn. During that cross-examination the arguments for and against mandatory speed limits, in particular the 30 mile per hour speed limit, were articulated with great clarity.
503. For the reasons set out above, in my judgment it was always the obligation of CAMBBA to design approaches to mainline toll stations with mandatory speed limits first of 50 miles per hour and then of 30 miles per hour. The fact that Babbie initially approved a design which omitted mandatory speed limits does not absolve CAMBBA of that responsibility. (See clause 8.1.5, clause 9.1.4 and clause 50.2 of the D&C Contract).
504. In the result, therefore, I hold that MEL is entitled to the declaration which it seeks in respect of this issue.

#### Part 13. Coin Baskets

505. Coin baskets were required to be provided at toll booths into which drivers could place the appropriate payment. These comprised an upper coin basket for the benefit of lorry drivers and a lower coin basket for the benefit of car drivers.
506. CAMBBA's general design obligations are set out in clauses 8 and 9 of the D&C Contract. Clause 9.3 deals specifically with the Toll Collection System. Annex 6/1 to the Employer's Requirements sets out the Toll Collection System requirements specification. In that annex, paragraph 1.3, paragraph 3.2.1.1.3[47-48] and paragraph 3.7.3.2[250] set out requirements which the coin baskets must satisfy. Apart from their numbering, these provisions did not undergo any material change during the design development process.
507. The narrative history of events concerning coin baskets has been given in the evidence of Mr Langham and Mr Neal. There was also some evidence from Mr Gareth Brown concerning the height of coin baskets at a motorway toll station in Ireland. I accept Mr Streatfeild-James' submission that Mr Brown's evidence does not assist the court either way, and therefore I shall say no more about it.
508. The key facts in relation to coin baskets are as follows: when originally installed, the lower coin baskets were set at a height of 127 centimetres from road surface level. Site tests of the Toll Collection System were carried out on 1st April 2003. Following these tests MEL formed the view that the lower coin baskets were too high. MEL took this matter up with CAMBBA. In or soon after July 2003 CAMBBA lowered the height of those coin baskets to approximately 115 centimetres.
509. By a letter dated 7th June 2004 (almost a year later) CAMBBA requested an Employer's Change to cover the lowering of the coin baskets. MEL refused to issue an Employer's Change. CAMBBA took this issue to adjudication. By a decision dated 10th January 2005 the adjudicator, Mr ter Haar QC, held that an Employer's Change ought to be issued in respect of this matter.

510. In the coin baskets litigation MEL seeks a declaration in the following terms:

"That any work involved in the modification of the automatic coin machines by reducing the height of the lower coin baskets did not entitle CAMBBA to an Employer's Change."

511. Having considered all of the evidence on this issue, I find as facts (a) that the original height of the lower coin baskets was too great and (b) that the present height of the lower coin baskets is about right.

512. I reach this conclusion for four reasons:

(1) When watching the DVD film of the tests on 1st April 2003, I formed the view that the lower coin baskets were too high. A measure of skill was required, which not all drivers would possess, in order to throw coins at an appropriate angle into that basket. I should add that I have watched the DVD both in court during the cross-examination of Mr Langham and also privately when considering the parties' written submissions on this issue.

(2) During the view on Day 2 of the trial I spent a few minutes standing at Great Wyrley toll station and watching the traffic pass through. It seemed to me that the present height of the lower coin baskets was about right. If those baskets had been raised to 127 centimetres, they would have been too high for a significant proportion of car drivers.

(3) If coins have to be thrown at the angle originally required, they are more likely to miss the basket. When this happens there may well be a delay while the driver exits his vehicle and retrieves his coins. It is self-evident that when there is a delay at any toll booth the drivers behind will become impatient. They may try to manoeuvre out of their present lane in order to get to a different toll booth. Indeed, during the view I saw this happen on one occasion when there was a hold-up at one of the toll booths for an unrelated reason. Clearly this practice is undesirable and reduces the efficiency of the toll station.

(4) It is clear from the correspondence in 2003 that the staff of CAMBBA, Ascom and AAJV all regarded the lower coin baskets as being too high. The debate in correspondence concerned who was responsible for the problem and how to remedy it, not whether there was a problem at all.

513. On the basis of my findings of fact I conclude that when the baskets were set at their original height, CAMBBA were in breach of clauses 8.1.1, 8.1.3, 8.2.1, 8.2.6 and 9.3.7 of the D&C Contract. They were also in breach of the following provisions in Annex 6/1 to the Employer's Requirements: paragraph 3.2.1.1.3[47], paragraph 3.7.3.2[250].

514. In those circumstances MEL's instruction that CAMBBA should lower the coin baskets was not an Employer's Change. It was a requirement that CAMBBA should comply with their contractual obligations.

515. No earlier approval by MEL or Babtie of the original design of the toll stations relieved CAMBBA of their contractual obligation to reduce the height of the lower coin baskets to an appropriate distance from the road surface. (See clause 8.1.5, clause 9.1.4 and clause 50.2 of the D&C Contract).

516. For all of these reasons MEL is entitled to the declarations which it seeks in respect of coin baskets.

#### Part 14. Re-use of Gantries

517. Paragraphs 1.2.4 and 2.10.4 of the Employer's Requirements required CAMBBA to change the signs on certain gantries over the M42 and M6 motorways. These sign changes were necessary because new information had to be given to drivers on those two motorways following the construction of the M6 toll road.
518. What happened as a matter of fact has been agreed between the parties and is depicted on exhibit MEL 3. Five gantries on the M42 motorway were affected, namely gantries G1 to G5 inclusive. In each instance the existing sign standing on top of the gantry was removed and a new sign was fixed in its place. It can be seen from the photographs and drawings that the new signs are generally of a different shape and size from the old signs. Some new wind posts were required.
519. Two gantries on the M6 motorway were affected, namely gantries GEX1 and GEX2. In the case of GEX1 the old sign was removed and a new sign was put in its place. Also the ten wind posts required modification. In the case of GEX2, however, the existing sign and the existing wind posts were retained unaltered. A plate was fixed over one relatively small part of the existing sign. The effect of this plate was to obliterate the words "A446 Lichfield" and to substitute "A446 Coleshill". The seven gantries in question were all of adequate strength. Even where the new sign was larger than the old one, wind load was not a problem.
520. Although CAMBBA changed the signs and the wind posts in the manner described above, they did not make any alterations to the structure of the gantries. In particular CAMBBA did not make any alterations in order to upgrade those gantries to current standards.
521. MEL for its part did not require any structural changes to be made to those gantries. On the other hand MEL took the view that this indulgence on its part constituted a relaxation which entitled the employer to a price reduction. MEL's argument hinged upon paragraph 9.3.5.6 of Annex 3/7 to the Employer's Requirements. MEL contended that those seven gantries were being "re-used" within the meaning of paragraph 9.3.5.6. Therefore, absent any relaxation, those gantries should be made to comply with standard BD 51-98.
522. By a letter dated 12th December 2002 MEL issued to CAMBBA Employer's Change number 14 in the following terms:

"Employer's Change number 14 ...

"Where any existing gantry is proposed for re-use solely due to resigning then, subject to the following conditions, the requirements of Annex 3/7, paragraph 9.3.5.6, may be reduced to the requirement for a satisfactory structural assessment using the original standard that the gantry was designed to.  
Conditions:

"(1) There are no changes whatsoever to the proximity of traffic to any part of the gantry's structure (this includes traffic on any carriageway).

"(2) There is no reduction in head room."

CAMBBA did not accept the validity of this Employer's Change. Accordingly this dispute was referred to adjudication.

523. The adjudicator, Mr Marrin QC, took the view that those seven gantries had been re-used within the meaning of clause 9.5.3.6. Accordingly, there had been a valid Employer's Change and MEL was entitled to a price reduction.
524. CAMBBA did not accept that decision. Accordingly in the Birmingham action they applied for a declaration in the following terms:
- "That MEL is not entitled to any Price Adjustment under clause 39.6 or otherwise by reason of the purported relaxation referred to in their letter dated 12th December 2002."
525. The evidence on this issue at trial was given by Mr Langham and Mr Nottingham. Mr Langham outlined the background facts which are not in dispute. Mr Nottingham explained the structural changes which might be required in order to make those seven gantries comply with standard BD 51-98. In essence, it might possibly be necessary to add DROBBs or HCVBs to the gantries in order to protect them against impact from vehicles. I use the phrase "might possibly be necessary" because this court is not asked in the present litigation to determine the precise requirements of BD 51-98 on a gantry by gantry basis.
526. Let me now turn to the crucial issue. Did the D&C Contract in the absence of any relaxation require those seven gantries to be upgraded so as to comply with standard BD 51-98?
527. CAMBBA contend that "re-use" in paragraph 9.3.5.6 of Annex 3/7 to the Employer's Requirements means re-use by dismantling and reconstruction. CAMBBA support this contention by reference to the context in which paragraph 9.3.5.6 appears and also by reference to paragraphs 3.2 and 3.11 of the Employer's Requirements. (See paragraphs 15 and 16 of the points of claim in the Birmingham action and CAMBBA's various written submissions).
528. I am not persuaded by this argument. Let me deal first with the context in which paragraph 9.3.5.6 appears. It is quite true that the rest of paragraph 9.3 of Annex 3/7 is dealing with structures which are constructed. Indeed, the remainder of paragraph 9.3.5 is dealing with gantries which are constructed. Nevertheless it seems to me that paragraph 9.3.5.6 is carved out as an exception from all the surrounding paragraphs. Paragraph 9.3.5.6 both by its heading and by its content is dealing with something different from the surrounding paragraphs. It is dealing with gantries which are being re-used as opposed to constructed.
529. I see nothing either in paragraph 9.3.5.6 or in the remainder of paragraph 9.3 which requires the court to interpret "re-use" as meaning "re-use by dismantling and reconstruction".
530. Let me turn now to paragraph 3.2 of the Employer's Requirements, which must be read in conjunction with Annex 3/2. These provisions identify a number of existing structures which require maintenance, alteration, demolition, strengthening or reconstruction. The structures listed do not include any gantries.
531. I do not think that these provisions can assist CAMBBA's case. I say this because the list of existing structures in Annex 3/2 does not purport to be comprehensive.
532. There is, however, a further point to be made about paragraph 3.2 and Annex 3/2. If CAMBBA's interpretation of clause 9.3.5.6 were correct, I would expect to see at least some gantries listed in Annex 3/2 as being earmarked for dismantling and reconstruction. No such gantries are listed. It seems to me that neither party to this contract seriously expected that any existing gantry over any motorway would be dismantled and rebuilt. Although, as Mr

Nottingham states, it would be possible to dismantle and reconstruct a gantry before changing the sign on top of it, this would be a somewhat odd way to proceed.

533. In my view these are yet further reasons why CAMBBA's interpretation of paragraph 9.3.5.6 is implausible.
534. In its closing written submissions MEL relies upon **Hancock v Brazier** [1966] 1WLR 1317. In my view the similarity between the contractual obligations of the defendant in that case and the contractual obligations of CAMBBA in this case is so slight that the authority does not assist.
535. For the reasons set out above, I have come to the conclusion that the word "re-use" in paragraph 9.3.5.6 must be given its ordinary and natural meaning.
536. In my judgment an existing sign gantry is "re-used" if the current sign is removed and a new sign is fixed in its place. The principal function of a sign gantry is to support signs. If the existing signs are removed and new signs are put there instead, then logically that must be re-use.
537. On the other hand, if all that happens to a sign gantry is that the wording on one small part of an existing gantry sign is modified, then, in my judgment, that does not constitute re-use of the sign gantry. The same wind posts are in place, the same sign board is in place affixed to those wind posts. The sign gantry is continuing to be used as before. It is not being "re-used".
538. Let me now apply this analysis to the facts of the present case. Like the adjudicator, I consider that gantries G1 to G5 and gantry GEX1 were all re-used and therefore were caught by paragraph 9.3.5.6 of Annex 3/7 to the Employer's Requirements.
539. On the other hand, in respect of gantry GEX2, I have considerably more information than was available to the adjudicator. Indeed, that is one of the signs which I saw myself in the course of the view.
540. On the facts as they have now emerged, I hold that gantry GEX2 was not re-used and was not caught by clause 9.3.5.6 of Annex 3/7.
541. In the result, therefore, I shall grant the declaration which CAMBBA seek, but limit that declaration to gantry GEX2.

#### Part 15. Foul Drainage

542. As previously noted, paragraph 6.3.3 of the Employer's Requirements requires toll station buildings to be serviced with drainage "to a standard and specification to the satisfaction of the Employer".
543. The final unnumbered paragraph of Annex 5/1 to the Employer's Requirements requires that underground drains be provided to collect foul and surface water.
544. Unfortunately main drainage is not available at four of the toll stations, namely Great Wyrley, Weeford Park, Shenstone and Langley Mill.

545. In May 2002 CAMBBA made the following proposals for foul drainage at those four locations: at Great Wyrley a cesspool which requires emptying every 17 days. At Shenstone a cesspool which requires emptying every 30 days. At Weeford Park a cesspool which requires emptying every 17 days. At Langley Mill a cesspool which requires emptying every 24 days.
546. Mr Langham rejected this proposal by his letter dated 25th June 2002, which I have previously read out.
547. In the event package sewage treatment plants were installed at those four locations.
548. The issue which arose between the parties was whether MEL had been entitled to reject CAMBBA's original proposal for cesspools. That issue was referred to adjudication. By a decision dated 24th August 2004, the adjudicator, Mr John Marrin QC, held that it was entirely reasonable for MEL to refuse to accept the proposal for cesspools. Accordingly he held that CAMBBA were not entitled to an Employer's Change in respect of this matter.
549. In the Birmingham action CAMBBA contend that the adjudicator's decision was wrong. CAMBBA seek a declaration in the following terms:

"That the drainage and installation of package treatment plant is a variation to the Employer's Requirements and CAMBBA is therefore entitled to the issue of an Employer's Change in respect of the change from cesspits to package treatment units. Upon the issue of such change, the provisions of clause 39.5 will apply and CAMBBA is entitled to have the Price Adjustment agreed or ascertained."

550. The evidence which bears on this issue was given by Mr Langham and Mr Nottingham. The parties' respective contentions were debated in correspondence but it is not necessary to read out that correspondence in the judgment.
551. Although the applicable Building Regulations have been produced at my request, these are only part of the background. Neither party relies upon the Building Regulations in support of its positive case.
552. Having considered the evidence and the competing submissions of the parties, I have come to the conclusion that CAMBBA's proposal for cesspool drainage at the four toll stations was not a proposal which complied with the requirements of the D&C contract. I reach this conclusion for eight reasons:
- (1) The four toll stations were intended to be continuously manned for very many years. Accordingly the use of cesspools in that location was contrary to paragraph 6(b) of guidance note PPG4.
- (2) CAMBBA proposed cesspools at the two mainline toll stations which would require emptying every 17 days. CAMBBA proposed cesspools at the other locations which would require emptying after intervals of 24 days and 30 days respectively. The installation of cesspools which would require such frequent emptying is contrary to paragraph 6(f) of guidance note PPG4.
- (3) In my view, the use of cesspools, with their concomitant maintenance requirements and high operating costs, was quite inappropriate on toll stations at this motorway development.
- (4) Motorway maintenance compounds (where cesspools were accepted) are not comparable locations. Motorway maintenance compounds are manned less frequently than toll stations.

(5) Having listened to Mr Nottingham's views being tested under skilful cross-examination, I am quite satisfied that his basic thesis is correct. It was entirely reasonable for MEL to reject the proposal for cesspools.

(6) I do not accept Mr Streatfeild-James' contention that for the purposes of satisfaction under paragraph 6.3.3 of the Employer's Requirements operating costs are an irrelevant consideration.

(7) The last paragraph of the building specification at Annex 5/1 to the Employer's Requirements does not assist CAMBBA's case in the manner suggested. That paragraph states that foul water must be collected. It says nothing about what should happen to foul water after collection.

(8) As a matter of historical fact MEL was not satisfied with the proposal for cesspools (see MEL's letter to CAMBBA dated 25th June 2002 and Mr Langham's evidence). That dissatisfaction was reasonable.

553. It follows from the above that CAMBBA are not entitled to the specific relief which they seek in respect of foul drainage.

554. There is, however, a further issue which has troubled me concerning foul drainage. It might be argued, on the basis of Mr Nottingham's evidence, that MEL ought to have been satisfied with septic tanks at the four toll stations and that septic tanks would have been less expensive than package treatment plants.

555. I canvassed this point with both counsel in the course of closing speeches. Mr Blackburn demonstrated that there is nothing in this point. Neither CAMBBA nor their advisers ever put forward a proposal for septic tanks. On the contrary, AAJV specifically advised against septic tanks for a number of perfectly sensible reasons (see the minutes of the meeting on 15th April 2002).

556. Furthermore it can be seen from the correspondence that at all material times the debate between the parties had been whether (a) cesspools or (b) package treatment plant should be installed. I have come to the conclusion that in this debate MEL was right and CAMBBA were wrong.

557. In the result, CAMBBA's claim in respect of foul drainage fails.

#### Part 16. Archaeology

558. Clause 29 of the Concession Agreement sets out MEL's obligations in respect of fossils and antiquities. Clause 27 of the D&C Contract sets out CAMBBA's obligations in respect of fossils and antiquities. This is supplemented by section 2.14 of the Employer's Requirements and Annex 1/3, Part 5.

559. The factual evidence on this issue was given by Mr Fasham, the archaeologist, and Mr Langham.

560. No witness gave evidence about archaeology on behalf of CAMBBA.

561. The first issue which I must address is what archaeological works were reasonably anticipated at the time of tender. In this regard a considerable amount of helpful information was given in the General Project Design ("GPD").
562. It can be seen from the GPD that the route of the M6 toll road passes along an area of considerable historical interest. The north-western stretch of the toll road lies close to the line of Watling Street. Indeed, in the vicinity of Wall the toll road actually crosses the line of Watling Street. Unsurprisingly, there are a number of Roman buildings and numerous Roman remains in this area. (See paragraph 2.5.9 of the GPD).
563. This area was revived following Hadrian's visit to Britain in 122 AD. That emperor's interest in British affairs is well known.
564. The GPD identifies 30 principal archaeological sites which lie along the route of the M6 toll road as well as 23 lesser sites. These 53 sites were liable to contain relics from the Mesolithic period, the Bronze Age, the Iron Age, the period of Roman occupation, the medieval period and later.
565. Paragraph 2.7.3 of the GPD is entitled "BNRR proposed mitigation outline schedule of sites" and takes the form of a schedule with columns. This is generally referred to as "table 2.7.3".
566. There are 30 numbered sites in table 2.7.3. According to paragraph 2.7.2 of the GPD these 30 sites "require a direct programme of archaeological work of whatever scale".
567. Specific archaeological work which will definitely be required is indicated in table 2.7.3 by the letter Y. Specific archaeological work which will possibly be required is indicated by means of question marks in table 2.7.3.
568. It is, however, clear from table 2.7.3 and from the GPD as a whole that there is a real risk of other archaeological work being required at any of the 53 sites identified.
569. I reach these conclusions simply from my reading of the GPD. These conclusions are, however, fortified by the evidence of Mr Fasham, which I accept.
570. The next issue which I must address is a contractual one. What archaeological works form part of "the works" as defined in clause 1.1 of the D&C Contract? MEL contend that all archaeological works found to be necessary in the course of the project fall within this definition. CAMBBA, on the other hand, contend that the only archaeological works falling within that definition are those marked with a "Y" in table 2.7.3.
571. On this issue I accept MEL's contention and reject that of CAMBBA. I reach this conclusion for four reasons:
- (1) Paragraph 2.14 of the Employer's Requirements, in conjunction with Annex 1/3, makes it clear that the Contractor must carry out whatever work is necessary in order to excavate and preserve all archaeological finds along the route of the toll road. The actual scope of the archaeological works will be determined as the project progresses, following the procedures set out in Part 5 of Annex 1/3.
- (2) The GPD is a factual document which assists the Contractor in assessing the extent of the risk in respect of archaeological works. It is also a document which describes in greater detail the procedures to be followed in respect of any archaeological works found to be necessary during the course of the project.

(3) CAMBBA seeks to read paragraph 2.14.1 of the Employer's Requirements, in conjunction with table 2.7.3 of the GPD, as restricting the Contractor's obligation to the specific archaeological works which are marked with a "Y" in the table. In my view, and with all due respect, that is a tortuous reading of the documents. Nothing in paragraph 2.14.1 or in the GPD imposes such a restriction.

(4) The interpretation which I favour is consistent with the general scheme of the D&C Contract, namely allocation of risk. This is not a contract which defines precisely what the Contractor will have to do. On the contrary, it sets out requirements which will have to be met. The contract sets out the risks which the Contractor must bear and by his tender the Contractor prices those risks. For example, CAMBBA priced the risk of having to deal with protester action at £17 million. Happily that risk did not eventuate. Another risk which CAMBBA priced and allowed for in their tender was the risk of archaeological works being required.

572. Let me now turn to the claims which CAMBBA make in respect of archaeology.

573. In the particulars of claim in the Birmingham action CAMBBA put forward the following case:

(1) The schedule of prices incorporated into the contract included £2,453,225 in respect of archaeology.

(2) Pursuant to clause 38.1 of the contract, the parties agreed a method and basis for assessing interim payments. In respect of archaeological works, this document mirrored the items marked "Y" in table 2.7.3.

(3) During the course of the project significant discoveries were made, and MEL, through Babbie, required extensive archaeological works to be carried out in addition to those marked "Y" in table 2.7.3. These additional archaeological works are identified in Annexure 1 to the Birmingham particulars of claim. They relate to prehistoric remains, Roman remains and some later relics.

(4) The DA did not issue any instructions in respect of the disposal of antiquities found.

(5) Significant discoveries made during the course of the project have caused CAMBBA to incur (a) additional expense in carrying out post-excavation analysis and reporting (as required by sections 6.10 and 6.11 of the GPD) and (b) the cost of storing all finds in an archive until the publication report has been prepared.

(6) In the circumstances CAMBBA are entitled to declarations that:

" (a) The additional and varied work identified in Annexure 1 was instructed by MEL in response to significant discoveries.

"(b) CAMBBA is entitled to the issue of an Employer's Change in respect of the additional and varied work identified in Annexure 1 and any post-fieldwork following on therefrom. Upon the issue of such change the provisions of clauses 32 and 39.5 will apply and CAMBBA is entitled to have a Price Adjustment agreed or ascertained.

"(c) Unless MEL obtains a Department's Change pursuant to clause 7.2, MEL is obliged to issue an Employer's Change under clause 27.1.2 for the disposal of all fossils and antiquities recovered from the Site. Upon the issue of such Employer's or Department's Change, the provisions of clauses 32 and 39.3 or

39.5 will apply and CAMBBA is entitled to have a Price Adjustment agreed or ascertained."

574. Two adjudicators have rejected CAMBBA's claims in respect of archaeology, namely Mr John Marrin QC by a decision dated 26th August 2004 and Mr Roger ter Haar QC by a decision dated 10th January 2005.
575. So far as necessary CAMBBA seek a declaration that those decisions are of no effect.
576. I have come to the conclusion that CAMBBA are not entitled to any of the relief which they seek in respect of archaeology. I reach this conclusion for seven reasons:
- (1) On the evidence before the court, it seems to me that all of the archaeological works carried out by CAMBBA fell within paragraph 2.14 of the Employer's Requirements and Annex 3/1. Archaeological discoveries were dealt with in accordance with the contractual procedures as and when those discoveries were made.
  - (2) None of the works alleged in Annexure 1 to the Birmingham particulars of claim falls outside the scope of the D&C Contract and the Employer's Requirements.
  - (3) The DA has not given any instruction pursuant to clause 29 of the Concession Agreement and clause 27.1.1 of the D&C Contract. Accordingly CAMBBA are not entitled to relief under clause 27.1.2 of the D&C Contract.
  - (4) The post-contract procedure agreed for assessing interim payments is irrelevant. This document cannot assist the court in the exercise of determining which items fall within the contract works.
  - (5) The finds made during the project, in particular those from the Roman period, were certainly interesting. On the other hand, they were not asserted by either party in the Design Input Statements to be "significant". They were not significant within the meaning of clause 2.14.4. Clause 2.14.4 of the Employer's Requirements was not triggered.
  - (6) Even if clause 2.14.4 of the Employer's Requirements had been triggered, that would not entitle CAMBBA to an Employer's Change. Under the terms of the D&C Contract and Employer's Requirements CAMBBA bore the risk of (a) significant archaeological discoveries being made and (b) the costs consequential upon such discoveries.
  - (7) Finally, and for the avoidance of doubt, I consider that all of the post-excavation work and assessment carried out by CAMBBA in respect of archaeological finds falls within the scope of the contract works.
577. In view of the conclusions which I have reached on the substantive issues, it is not necessary to address MEL's defence based on lack of notices. For the reasons set out above CAMBBA are not entitled to the declarations which they seek.

#### Part 17. New Roads and Street Works Discounts

578. The 1991 Act and associated regulations made provision for statutory undertakers to give discounts of 18 per cent in situations where they received advance payment in respect of

moving their apparatus in order to accommodate highway works. These provisions have been set out in Part 2 above.

579. Clause 17.3.4 of the D&C Contract provided for those Statutory Discounts to be shared between the Employer and the Contractor if certain conditions were satisfied. The statutory undertakers in respect of whom this provision applies are set out in Appendix 10 to the D&C Contract.
580. During the course of the project CAMBBA made advance payments to a number of statutory undertakers and utility companies. CAMBBA and their quantity surveyors, Messrs Corderoy, negotiated discounts with those bodies. Those bodies paid the Statutory Discounts direct to CAMBBA.
581. Through the mechanism of interim payments, CAMBBA shared those discounts with MEL. Through the same mechanism, MEL made a contribution to Corderoy's fees.
582. The factual history of these matters has been narrated by Mr Langham and Mr Smailes. The details of their evidence are not in dispute. The conflict between the parties arises because in 2004 CAMBBA decided that, on a proper reading of clause 17.3.4, MEL was not entitled to a share of the discounts received. CAMBBA requested reimbursement of the share of discounts which MEL had received but MEL rejected that request.
583. The issue was referred to adjudication. The adjudicator, Mr ter Haar QC, by a decision dated 10th January 2005, held that MEL was entitled to payment of or credit for 50 per cent of the discounts received by CAMBBA from the Relevant Authorities listed in Appendix 10 to the contract (but not from other bodies).
584. CAMBBA do not accept the adjudicator's decision. In the Birmingham action they claim a declaration that:

"The conditions of clause 17.3.4 of the Contract have not been met in respect of any Relevant Authority's Works and accordingly MEL is not entitled to receive the benefit of any Statutory Discounts."
585. Although it was initially disputed, it is now conceded by MEL that CAMBBA are correct in their primary contention. The conditions of clause 17.3.4 have not been met in a number of respects. For example, in no case did MEL instruct CAMBBA to make an advance payment to any statutory undertaker.
586. In those circumstances MEL resists CAMBBA's claim on two grounds: first an estoppel argument pleaded in the further information under paragraph 77 of the Defence, and secondly a plea that CAMBBA failed to give timeous notice of their claim.
587. Let me deal first with the estoppel argument. MEL's case as originally pleaded and as opened was that there was an estoppel by representation. This estoppel prevented CAMBBA from relying upon the strict requirements of clause 17.3.4.
588. On Day 1 of the hearing and again by an exchange of e-mails with both junior counsel, following the delivery of closing written submissions, I enquired whether MEL also intended to rely upon estoppel by convention. On each occasion the response was that MEL limited its case to estoppel by representation.
589. In the course of his closing speech Mr Blackburn candidly confessed his difficulty. He could not support his plea of estoppel by representation because there was no representation of existing

fact. In his oral closing speech Mr Blackburn advanced a wholly new case on this issue, namely the contention that promissory estoppel debars CAMBBA from relying upon the strict requirements of clause 17.3.4. In support of this contention, Mr Blackburn produced a bundle of authorities relating to promissory estoppel.

590. Mr Streatfeild-James objected to this approach. He submitted that MEL should not be allowed to advance a new case which had not been pleaded and which had not featured in the course of the trial. He further submitted that the afternoon of the day which had been allocated for oral closing speeches was not an appropriate occasion to introduce a bundle of authorities in support of novel legal arguments which had not previously been foreshadowed.

591. I accept Mr Streatfeild-James' submissions on this issue. In the exercise of my case management discretion I do not allow MEL at this late stage to advance a new case on estoppel which (a) has not been pleaded and (b) differs substantially from the case presented throughout the trial.

592. Having said that, I should add that I do not think that the new case on promissory estoppel could succeed. I reach this conclusion for four reasons:

(1) Neither the oral evidence nor the documents disclose a promise made by CAMBBA which satisfies the requirements set out in paragraph 3-086 of Chitty on Contracts (29th edition).

(2) Promissory estoppel is suspensory only. It does not shut CAMBBA out for all time from enforcing clause 17.3.4.

(3) Promissory estoppel is a shield and not a sword. In this instance, MEL is seeking to use promissory estoppel as a sword.

(4) The argument which MEL is seeking to advance is barred by clause 50.5 of the contract.

593. In the result, therefore, even if I had allowed MEL to advance its new case, I should still have rejected it.

594. I should add that my observations on the new case advanced by MEL have been expressed in somewhat short form. This is because the submissions of both counsel on that new case of estoppel by representation were expressed very briefly on both sides. In the case of Mr Streatfeild-James there was no opportunity whatsoever for preparation, and in the case of MEL's counsel my impression was that because the new case was put forward at such a late stage the preparation of legal argument had been limited.

595. MEL also seeks to advance an alternative case based upon CAMBBA's breach of fiduciary duty as agent. Mr Blackburn drew my attention to Bowstead and Reynolds on Agency, 17th edition, paragraphs 6074 to 6075. Having done so, Mr Blackburn only pressed this alternative case faintly.

596. I reject the alternative case for three reasons:

(1) It is not pleaded and did not feature during the trial.

(2) As a matter of case management I do not allow MEL to advance that new case at such a late stage.

(3) On the facts I do not think that this new case could possibly succeed.

597. Let me turn next to MEL's argument based upon lack of notice.

The contention here is that CAMBBA have failed to satisfy the condition precedent set out in clause 40.3.5 of the D&C Contract. In my view clause 40.3.5 does not bar CAMBBA's claim for six reasons:

(1) CAMBBA are not asserting that there should be any Price Adjustment by reason of the saga concerning statutory undertakers. CAMBBA's case is that:

(a) CAMBBA should keep the Statutory Discounts paid to them by the Statutory Undertakers.

(b) The Contract Price is unaffected by those events.

(2) It is MEL who contends that the Contract Price should be adjusted pursuant to clause 17.3.4 of the D&C Contract. CAMBBA are resisting that contention.

(3) Since CAMBBA are not claiming any Price Adjustment by reason of the dealings with Statutory Undertakers, clause 40.3.2 has not been triggered. Accordingly, CAMBBA did not come under an obligation to give written notice pursuant to that clause.

(4) The true analysis of events is as follows: MEL have made certain deductions from interim certificates in which CAMBBA acquiesced for a period. CAMBBA then woke up to the fact that those deductions were impermissible. They then insisted that there be no Price Adjustment in respect of Statutory Discounts.

(5) It is permissible under this Contract, as under many forms of construction contract, for mistakes in one interim certificate to be corrected in a later interim certificate.

(6) By reason of the foregoing, CAMBBA are not in breach of any condition precedent under clause 40.3.5.

598. Let me now draw the threads together. It is common ground that the requirements of clause 17.3.4 of the D&C Contract have not been met. MEL has failed to establish any legal basis upon which it is entitled to receive or retain a share of the Statutory Discounts paid to CAMBBA.

599. In the result, I hold that CAMBBA are entitled to the declaration which they seek.

600. There is, however, one rider which I should add. Since MEL is not receiving any share of the Statutory Discounts, there can be no legal basis upon which CAMBBA are entitled to retain the contribution which MEL has paid to Corderoy's fees.

601. I request that either this rider be reflected in the declaration of the court or alternatively, if this course be acceptable to the parties, that the repayment of MEL's contribution to Corderoy's fees be dealt with administratively.

#### Part 18. Lodge Lane Link

602. The factual history concerning Lodge Lane Link has been narrated in the evidence of Mr Langham, Mr Cattle, Mr Neal and Mr Jones. That factual history is not controversial.

603. In addition to that evidence, it is an agreed fact that Lodge Lane Link as constructed is 10 metres wide. At a distance of 1 metre from each side of the road there is a white line so that the width of the carriageway along which vehicles actually travel is 8 metres.
604. CAMBBA contend that their contractual obligation was to construct a carriageway which was only 7.3 metres wide. This is because the anticipated traffic flow set out in the Employer's Requirements did not necessitate any greater width.
605. Accordingly, so the argument runs, MEL's requirement for a carriageway 10 metres wide was additional work in respect of which CAMBBA are entitled to an Employer's Change. The adjudicator, Mr Ter Haar QC, rejected CAMBBA's claim by a decision dated 10th January 2005.
606. CAMBBA now apply to this court for a declaration that they are entitled to an Employer's Change in respect of the increased width of Lodge Lane Link. (See paragraphs 104 to 118 of the Birmingham particulars of claim).
607. The first question which I must address concerns the extent of MEL's obligation under the Concession Agreement, as amended by the Second Supplemental Agreement.
608. Clause 7.2.5 of the Concession Agreement required MEL to comply with "the Technical Requirements". The definition of "Technical Requirements" directs the reader to parts 1 to 3 of schedule 7 to the Concession Agreement. Part 3 of schedule 7 (as amended by the Second Supplemental Agreement) states that Lodge Lane Link between Saredon and Churchbridge roundabout is to be a "wide single carriageway". The term "wide single carriageway" denotes a carriageway which is 10 metres wide. (See standard TD/96, which was promulgated by the Highways Agency in August 1996).
609. I do not accept CAMBBA's contention that the words "wide single carriageway" appearing in the context of amended schedule 7 are not prescriptive.
610. Having regard to all of those provisions, it is clear that MEL's obligation under the Concession Agreement was to construct that section of Lodge Lane Link to a width of 10 metres, unless the DA agreed to relax the requirement.
611. Let me now turn to the position as between MEL and CAMBBA. CAMBBA were obliged to carry out the works in a manner compliant with the Concession Agreement. (See clause 6.1 of the D&C Contract).
612. It should also be noted that paragraph 1.1.3(i) of the Employer's Requirements required CAMBBA to comply with the standards listed in Annex 1/2. Standard TD 27/96 is included in the list at Annex 1/2.
613. It was, therefore, CAMBBA's obligation to construct the relevant section of Lodge Lane Link to a width of 10 metres. This was the width shown on the PDS drawings prepared following the public inquiry. This was the width allowed for in CAMBBA's tender. It was also the width shown on the drawings initially produced by AAJV.
614. Mr Jones of CAMBBA took the view that the width of Lodge Lane Link should be reduced, and he gave instructions to that effect. In my judgment, Mr Jones' opinion was based upon an incorrect understanding of the contractual position. The fact that a lesser road width would suffice for the anticipated traffic flow did not override CAMBBA's obligation under clause 6.1.3 of the D&C Contract.

615. When the DA and MEL subsequently required that the road width should be 10 metres, they were not making either a Department's Change or an Employer's Change. They were simply holding CAMBBA to their original contractual obligations.
616. It may well have been possible for CAMBBA to have procured a Contractor's Change whereby the width of Lodge Lane Link was reduced. MEL indicated that it would support CAMBBA in seeking such a Contractor's Change.
617. The procedure for securing a Contractor's Change is set out in clause 39.8 of the D&C Contract. In the event, however, CAMBBA chose not to go down this route. (See the evidence of Mr Neal and Mr Jones).
618. For all of the above reasons CAMBBA are not entitled to the relief which they claim under this head.

#### Part 19. Vehicle Inspectorate

619. The factual evidence concerning the Vehicle Inspectorate was given by Mr Langham, Mr Neal and Mr Border. The principal facts as they have emerged from the correspondence bundle and the evidence at trial are these:

- (1) The Vehicle Inspectorate's premises formed part of the Site under the D&C Contract.

- (2) CAMBBA were required under the D&C Contract to change the access arrangements to the Vehicle Inspectorate's premises in accordance with the provisions of the Birmingham Northern Relief Road (Burntwood to Weeford section) (Side Roads) Order 1998.

- (3) The Vehicle Inspectorate had more ambitious plans for their premises than that. The Vehicle Inspectorate had a series of meetings with CAMBBA and AAJV during 2001 in which they stated their requirements. CAMBBA and AAJV duly complied with these requirements and prepared revised designs for the Vehicle Inspectorate's premises. MEL was not involved in this process, but the DA was involved, in particular, by attending meetings with CAMBBA and the Vehicle Inspectorate on 16th July and 12th September 2001.

- (4) During 2002 it occurred to CAMBBA that they may be under no contractual obligation to carry out any of the works to the Vehicle Inspectorate's premises beyond those works stipulated in the Side Roads Order. This matter was debated both in correspondence and at meetings. MEL treated the issue as one between CAMBBA and the Highways Agency. MEL never issued an Employer's Change or indeed any instruction requiring CAMBBA to comply with the Vehicle Inspectorate's requirements.

- (5) AAJV, on MEL's instructions, continued to prepare designs for the Vehicle Inspectorate's premises which accorded with the Vehicle Inspectorate's requirements. Those designs were approved by Babbie and in due course issued for construction.

- (6) During 2003 CAMBBA carried out works to the Vehicle Inspectorate's premises in accordance with those designs. The works as executed are clearly illustrated on the overlays produced by Mr Border and also on Exhibit MEL 4.

620. Let me now turn to the claims which have been advanced. CAMBBA did not request a Department's Change in respect of the works done for the Vehicle Inspectorate. They did, however, claim an Employer's Change.

621. The adjudicator, Mr Ter Haar QC, rejected that claim by his decision dated 10th January 2005.

622. CAMBBA now renew their claim for an Employer's Change (see paragraphs 138 to 152 of the Particulars of Claim in the Birmingham action).

623. The claim is formulated on two bases in paragraphs 150 and 151 as follows:

"150. In the premises to bring MEL's requirements into line with the Employer's Requirements and to prevent MEL being in breach of its obligation to provide vacant possession, CAMBBA is entitled to treat the Vehicle Inspectorate as a Relevant Authority or Third Party with whom MEL has forced CAMBBA as its agent to enter into an agreement with. Pursuant to Clauses 6.4.3 and 6.4.4, this constitutes and entitles CAMBBA to the issue of an Employer's Change. Upon the issue of such change, the provisions of Clause 39.5 will apply and CAMBBA is entitled to have a Price Adjustment agreed or ascertained and CAMBBA seeks a declaration to that effect.

"151. Alternatively, MEL could avoid being in breach of its obligation to give vacant possession by varying the Contract to make the Vehicle Inspectorate facility an Adjacent Area instead of being part of the Site. The Vehicle Inspectorate's works could then have been carried out as Unspecified Accommodation Works. Upon the issue of such instruction, the provisions of clause 36.3 will apply and CAMBBA is entitled to have a Price Adjustment agreed or ascertained."

624. CAMBBA then seek a declaration on one or other of those two bases. MEL resists this claim on two bases. First, MEL contends that the Vehicle Inspectorate are a Relevant Authority. Secondly, MEL denies that CAMBBA are entitled to the relief claimed, even if the Vehicle Inspectorate are not a Relevant Authority.

625. Let me first address the status of the Vehicle Inspectorate. If the Vehicle Inspectorate are a Relevant Authority under the D&C Contract, then that is a complete answer to CAMBBA's claim by reason of clause 17 of the Contract.

626. I have come to the conclusion, however, that the Vehicle Inspectorate are not a Relevant Authority and therefore MEL's first line of defence is rejected. I reach this conclusion for three reasons:

(1) The Vehicle Inspectorate are not listed as a Relevant Authority in Appendix 10 to the D&C Contract.

(2) The Vehicle Inspectorate's links with the Department of Transport and the Highways Agency (both of which are listed) do not either expressly or impliedly bring the Vehicle Inspectorate within Appendix 10.

(3) The bodies listed in parts 1 and 2 of Appendix 10 are all included because they have statutory powers over some aspect of the construction work. The Vehicle Inspectorate are in a different category. They are inhabitants of one small part of the Site, who were trying to carry out their functions.

627. Let me turn next to CAMBBA's substantive claim. The evidence does indeed show that CAMBBA encountered difficulties in their dealings with the Vehicle Inspectorate.
628. There may possibly be grounds for a claim against MEL for failing to give CAMBBA possession of that part of the site which the Vehicle Inspectorate occupied, contrary to clause 21.1 of the D&C Contract. No such claim is made in the present action and I express no view either way on the question whether such a claim would succeed.
629. What I have to focus upon is whether CAMBBA are entitled to the specific relief claimed in the Birmingham action or some reasonable variant of that relief.
630. In my judgment they are not entitled to such relief. I reach that conclusion for four reasons:
- (1) MEL did not force CAMBBA to enter into any agreement or arrangement with the Vehicle Inspectorate. On the contrary, MEL stood back from the dispute between CAMBBA and the Vehicle Inspectorate.
- (2) MEL at no stage instructed CAMBBA to do any works to the Vehicle Inspectorate's premises, which went beyond the provisions of the Side Roads Order. In my view, none of the correspondence cited by CAMBBA in section 14 of their closing written submissions has that effect. Furthermore, none of the documents relied upon by Mr Streatfeild-James in his closing speech has that effect.
- (3) If CAMBBA had felt the need to carry out works which went beyond their contractual obligations, they could have insisted upon receiving either a Department's Change or a specific instruction from MEL. As I read the correspondence, the issue of a Department's Change might have been a more likely outcome in that eventuality. However CAMBBA did not take that course. They simply went ahead and designed and executed the works.
- (4) The works carried out by CAMBBA for the Vehicle Inspectorate do not fall within the definition of "Unspecified Accommodation Works" in clause 1.1 of the D&C Contract. This is because the Vehicle Inspectorate's premises are within the Site and not adjacent to it.
631. For all these reasons CAMBBA fail in their substantive claim and MEL's defence based upon lack of notices does not arise for consideration.

#### Part 20. Planning Fee

632. The facts in relation to this issue emerge from the correspondence bundle and are agreed. CAMBBA applied to Lichfield District Council for planning permission in order to construct the complex of buildings which were required at Weeford. The council granted planning permission on condition that the applicants or their successors in title entered into an agreement under section 106 of the Town and Country Planning Act 1990 to make a financial contribution of £30,000 towards offsite environmental improvements.
633. There was a dispute between MEL and CAMBBA as to who should enter into the Section 106 Agreement and who should pay the £30,000. In order to expedite matters CAMBBA agreed to enter into the Agreement and to pay the sum of £30,000 without prejudice to its right to seek recovery from MEL.

634. CAMBBA referred this dispute to adjudication. The adjudicator, Mr John Marrin QC, made a declaration that CAMBBA was entitled to an Employer's Change in respect of the instruction to enter into the section 106 Agreement and to make the payment of £30,000 pursuant to that Agreement.

635. In the London action MEL claims the following declaration that:

"On a true interpretation of the contract, the requirement made by the Claimant in its letter dated 18th November 2002 that the Defendants should enter into a Section 106 Agreement with Lichfield District Council, and to make a financial contribution of £30,000 under that agreement, did not constitute an Employer's Change."

636. Although it is not usual for the court to grant a negative declaration, Mr Blackburn submits that such relief is appropriate where the court is being asked to reverse the effect of a positive declaration made by an adjudicator. As a matter of civil procedure, in my judgment that submission is well founded.

637. Let me turn now to the substantive issue. MEL contends: (a) that the sum of £30,000 is a "cost" which CAMBBA is obliged to bear pursuant to clause 25.1.1 of the D&C Contract; (b) that the sum of £30,000 is a "fee" which MEL is obliged to pay pursuant to clause 25.4 of the contract. CAMBBA take issue with both these contentions.

638. It should be noted that clauses 5.2.8 and 5.3.7 of the Employer's Requirements buttress the provisions of clause 25 of the Contract but they do not affect either party's submissions on this issue.

639. It should also be noted that Section 106 of the Town and Country Planning Act 1990 provides as follows:

"(1) Any person interested in land in the area of a local planning authority may, by agreement or otherwise, enter into an obligation (referred to in this section and sections 106A and 106B as 'a planning obligation'), enforceable to the extent mentioned in subsection (3)-

(a) restricting the development or use of the land in any specified way;

(b) requiring specified operations or activities to be carried out in, on, under or over the land;

(c) requiring the land to be used in any specified way; or

(d) requiring a sum or sums to be paid to the authority on a specified date or dates or periodically."

640. Having considered the parties' rival submissions on the construction of clause 25 of the D&C Contract, my conclusion is that CAMBBA are right and MEL is wrong. Absent an Employer's Change, the party who should have entered into the Section 106 Agreement and paid the sum of £30,000 was MEL.

641. I reach this conclusion for four reasons:

(1) The party under Section 106 of the 1990 Act who should enter into the relevant agreement is "any person interested in land". That description naturally applies to MEL and not to

CAMBBA. If it was intended to impose upon CAMBBA the obligation to enter into any Section 106 Agreement, or to perform its terms, then clear words to that effect should have been used in the Contract. They were not.

(2) Many obligations imposed by a Section 106 Agreement could only be performed by the Employer (who has an interest in land) and could not be performed by the Contractor. Against that background the only sensible reading of clauses 25.1.1 and 25.4 is to exclude altogether from their purview the performance of obligations imposed by Section 106 Agreements.

(3) The word "fee" in clause 25.4 naturally applies to remuneration for the performance of a service. In the present case it would apply to the fee which CAMBBA paid to the council for processing the planning application. It is a distortion of language to characterise a financial contribution towards offsite environmental improvements as a "fee".

(4) The word "costs" in clause 25.1.1 has a similar meaning to "fee" at least in relation to subclause (b). It is a distortion of language to say that a financial contribution of £30,000 towards offsite environmental improvements is a "cost" of obtaining planning permission.

642. In his closing speech Mr Streatfeild-James drew attention to paragraph B25 of Circular 1/97 and to the provisions of the local policy. These planning documents, which were all in the public domain, make it plain that the obligations imposed upon CAMBBA in this instance ought to have fallen upon the shoulders of MEL. It is quite true, as Mr Blackburn observed, that the Contractor had a licence to occupy the site, but that is the case under every building contract.

643. For the reasons set out above, I refuse to grant the relief which MEL seeks under this head.

#### Part 21. Conclusion

644. For the reasons set out in Parts 7 to 20 of this judgment I hold that MEL is entitled to the declarations which it seeks in respect of Mandatory Speed Limits and Coin Baskets. I hold that CAMBBA are entitled to the declaration which they seek in respect of New Roads and Street Works Discounts. As to re-use of Gantries, CAMBBA are entitled to the declaration which they seek, but only in respect of gantry GEX2.

645. In relation to the linked issues of Provisional Sums and Aggregate Tax, I hold that each party succeeds in its claim and I invite counsel to assist the court in drafting the appropriate declaration or declarations to give effect to this outcome.

646. I also invite counsel to assist the court as to the simplest and most effective way of dealing with the reimbursement to MEL of its contribution to Corderoy's fees.

647. All of the other claims made by both parties are dismissed.

648. Finally, I express my appreciation of the excellent work done by the lawyers on both sides. The bundle, although running to about 70 ring files, is user-friendly and contains everything which the court needs. The witness statements of both parties are clear, concise and to the point. The solicitors on both sides have rendered a valuable service both to their clients and to the court in the preparation of the material for this trial.

649. Furthermore, the advocacy throughout this trial has been of a high order. I am indebted to both leading counsel and junior counsel for the excellence of the oral and written submissions and for the economy with which examination of witnesses has been carried out.

650. As a result of all these matters it has been possible for this substantial trial to proceed from opening speeches to judgment within the space of a month.

651. Returning to the issues in the case, the court will grant the declarations indicated above.