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## SERIES 100

### PRELIMINARIES

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## 101 Execution of the Works

### General

- 1 The whole of the Works shall be executed in the manner specified and to the dimensions and in accordance with the particulars shown on the Drawings or given in the Schedule of Rates. The Contractor shall be paid only for the work executed to the satisfaction of the Engineer. The Works shall be executed and maintained, in the most approved and workmanlike manner, by workmen skilled in the various trades and callings required for carrying out and maintaining the Works and have or will be given training in accordance with the New Roads and Street Works Act 1991 (referred hereafter as the NRSWA 1991). Works shall be undertaken to the required Workmanship and Quality as described in the Contract Specification. All plant employed on the Works shall be to the approval of the Engineer.

### New Roads and Street Works Act 1991

- 2 The whole of the Works shall be executed in accordance with the NRSWA 1991 including any Orders and Regulations made under Parts III and IV of the Act, together with all Codes of Practice made under various sections of the NRSWA 1991 and the particulars shown on the drawings or given in the Bill of Quantities.
- 3 The terms and references adopted in the wording of this Specification are those used in Parts I and III of NRSWA 1991, which are Parts specific to legislation in England and Wales.
- 4 The Contractor is specifically reminded that the Defects Correction Period under the Conditions of Contract is 2 years. This shall apply to all trenching/ductwork and chamber works, together with all works associated with the construction of cabinet foundations and the erection of cabinets. This Period shall be extended in parallel with any extension of the Employer's Guarantee Period, as a result of any non-compliance with the requirements of the NRSWA 1991 on the Contractor's part.

As a consequence of the BT vs. Nottingham Council ruling over the interpretation of parts of the NRSWA 1991, reinstatements not complying with the requirements of the Code of Practice – Specification for the Reinstatement of Openings in Highways – shall be deemed to be interim. By implication, the Contractor will be deemed not to have conformed to the requirements of the Contract, as outlined in sub-Clause 1 of this Clause, and the Defects Guarantee Period will therefore be deemed not to have commenced. The Contractor shall therefore be required to rectify (i.e. make permanent) any such non-compliant reinstatements, after which time, the Defects Correction Period will commence for such non-compliant reinstatements.

- 5 For the purposes of the Employer complying with his duties as the Undertaker under the NRSWA 1991, subject to the reinstatements being permanent, the Defects Correction Period for the Works (or Section) shall be deemed to start upon issuance of the Substantial Completion Certificate. Unless a standard form of Substantial Completion Certificate is adopted by the Engineer, for the purposes of the Contract, the Substantial Completion Certificate shall be taken to be the Engineer's written confirmation to the Contractor that the Works (or Section) are, in the opinion of the Engineer, fit for submission (by the Employer) of the Works Closed Notice to the relevant street authority. (See also Clause 122 of the Specification in respect of defect attendance).
- 6 The Contractor's attention is particularly drawn to the handing over of all (or parts thereof) of the Works (or Section) for the purposes of cabling and commissioning by other contractors, on behalf of the Employer (see Clause 120). This handing over should be taken to be independent of the requirements of sub-Clause 4 of this Clause.

### Reference to Contracts in Scotland

- 7 Further to sub-Clause 2 of this Clause, equivalent terms and references to be used when working under Parts II and IV of the NRSWA 1991, which are Parts specific to legislation in Scotland.

### Reference to Contracts in Northern Ireland

- 8 For Contracts in Northern Ireland, the whole of the Works shall be executed in the specified manner and dimensions, and in accordance with the Street Works (Northern Ireland) Order 1995 (referred hereafter as the SWNIO 1995), including any other Orders and Regulations, together with all Codes of Practice made under any Article of the SWNIO 1995 and the particulars shown on the drawings or given in the Bill of Quantities.
- 9 General reference within the Specification to the NRSWA 1991, shall be deemed to imply a reference to the SWNIO 1995, for Contracts in Northern Ireland.
- 10 In the absence of relevant Codes of Practice being issued or approved by the DRD (as sub-Clause 3 of this Clause), made under various Articles of the SWNIO 1995, the Engineer shall confirm whether the adoption of equivalent Codes of Practice made under various sections of the NRSWA 1991, is appropriate.
- 11 For the purposes of the Employer complying with his duties as the Undertaker under the SWNIO 1995, subject to the reinstatements being permanent, the Defects Correction Period for the Works (or Section) shall be deemed to start 2 months after the Substantial Completion Certificate. Unless a standard form of Substantial Completion Certificate is adopted by the Engineer, for the purposes of the Contract, the Substantial Completion Certificate shall be taken to be the Engineer's written confirmation to the Contractor that the Works (or Section) are, in the opinion of the Engineer, fit for submission (by the Employer) of the R Notice to the relevant street authority. (See also Clause 122 of the Specification in respect of defect attendance).
- 12 The Contractor's attention is particularly drawn to the handing over of all (or parts thereof) of the Works (or Section) for the purposes of cabling and commissioning by other contractors, on behalf of the Employer (see Clause 120). This handing over should be taken to be independent of the requirements of sub-Clause 10 of this Clause.

### Reference to Contracts in England

- 13 In addition to sub-clauses 1 – 5 of this Clause, Contracts in England will be subject to the requirements of Section 74 of the NRSWA 1991. The Contractor's attention is drawn to the Provision of Section 74 of the NRSWA 1991 whereby the highway authority may levy a charge for the occupation of the highway where works are unreasonably prolonged. Where the Employer as the Undertaker is subjected to charges levied by the highway authority, which are as a direct result of the Contractor's failure to comply with the requirements of the NRSWA 1991, these charges are deemed to be the full responsibility of the Contractor. The Employer may recover the cost of such charges from the Contractor whether in full or in part.

### Recent and Proposed Legislation affecting works on Public Roads/Highways

- 14 The following pieces of legislation have recently been passed, and in part already affect VM's operations and works on the public roads/highways:

- The Traffic Management Act 2004 (applies to England and Wales)
- The Transport (Scotland) Act 2005 (applies in Scotland only)
- The Street Works (Amendment)(Northern Ireland) Order 2007 (applies in N. Ireland only)

**15** Primarily, both (Primary) Acts are pieces of enabling legislation. Whilst there are a number of Sections in the Acts which once commenced will directly affect works by Utilities, and therefore VM, it is expected that much of the detail will be forthcoming through Secondary Regulations under appropriate Section of the Acts.

**16** The following sub-sections are included for information and guidance only. Whilst it is not considered there will be any bearing upon the rates submitted, Contractors should be aware that as legislative changes are introduced, their staff will require education and training to support their responsibilities. It is possible that VM may be able to provide this in parallel with similar education and training provided to VM's Delivery and Compliance Engineers.

#### **The Traffic Management Act 2004**

**17** Thus far for both England and Wales, under the Traffic Management Act 2004, the following changes are known:

- Section 40 and Schedule 1 of the Act have come into force. These provide for increased penalties for street works offences under the New Roads and Street Works Act 1991 from the existing Level 3 (maximum £1,000) to Levels 4 (£2,500) or Level 5 (£5,000). The level for each offence is set out in Schedule 1 of the Act.
- England and Wales have published separate Secondary Regulations, covering the introduction of Permits, changes to Section 74 of NRSWA (Occupation of the Highway), the introduction of Fixed Penalty Notices (FPNs) and of key operational importance a new Noticing Code of Practice.

**18** The Contractor shall note that VM considers that Section 40 fines may be applicable and that there will be the need for closer diligence in the data provided to VM's Noticing Team in Basildon who issue the formal Notices to local Highway Authorities. FPNs substantially target poor Noticing practice, which otherwise prevents or reduced the ability of a local Highway Authority to co-ordinate works, thereby supporting the discharge of their duty to manage the highway's availability, and as such minimise traffic congestion – being a key objective of the TMA.

**19** During the course of the TSAC Contract, as and when other Secondary Regulations (in England and/or Wales) relating to Sections under the Traffic Management Act 2004 come into force, VM will make available all known data, in order for its Contractors to review their operations and assess any impact on rates, whether any increase or decrease. These impacts will be introduced by mutual consent, subject to agreement through negotiations.

**20** Notwithstanding the comments above, in Wales, the Welsh Assembly Government has devolved powers and may introduce its own Secondary Regulations under the Traffic Management Act, as and when it considers them to be necessary. These (Welsh) Regulations cannot change anything in the primary Act, but may introduce matters, allowable under Regulation, in Wales, that are different to those in England. Welsh Assembly Government may also proceed before England. Thus far, at the time of issuing the Tenders, Welsh Assembly Government have shadowed the Consultations in England, and it is expected that any new Regulations introduced in England, will be followed with substantially similar Regulations for Wales.

**21** As per England, where during the course of the TSAC Contract, Secondary Regulations (in Wales) relating to Sections under the Traffic Management Act 2004 come into force, VM will make available all known data, in order for Networks Contractors to review their operations and assess any impact on rates specific to Wales, whether any increase or decrease. These impacts will be introduced for Welsh regions of any Networks Contract(s) area(s) by mutual consent, subject to agreement through negotiations.

### **The Transport (Scotland) Act 2005**

- 22** The Transport (Scotland) Act 2005 was introduced in 2005, and partly reviewed elements contained in the Traffic Management Act for possible application in Scotland. Not all Traffic Management Act elements were considered appropriate for Scotland, whilst some elements unique to Scotland were introduced.
- 23** Thus far, no Sections of the Transport (Scotland) Act 2005 relating to works by Utilities (and therefore VM) have been commenced by the Scottish Executive.
- 24** As per the Traffic Management Act above, where during the course of the Contract, Secondary Regulations relating to Sections under the Transport (Scotland) Act 2005 come into force, VM will make available all known data, in order for Contractors to review their operations and assess any impact on rates specific to Scotland, whether any increase or decrease. These impacts will be introduced for Scottish regions of any Networks Contract(s) area(s) by mutual consent, subject to agreement through negotiations.

### **The Street Works (Amendment)(Northern Ireland) Order 2007**

- 25** In Northern Ireland, the above amendment to the Street Works (Northern Ireland) Order 1995, was passed in Westminster, which will introduced equivalent elements of the Traffic Management Act 2004 into Northern Ireland, albeit, limited to elements affecting Utilities only.
- 26** As per both the Traffic Management Act 2004 and the Transport (Scotland) Act 2005, the Amendment to the Order is a Primary enabling piece of legislation. Whilst there are a number of Articles in the Order which once commenced will directly affect works by Utilities, and therefore VM, it is again expected that much of the detail will be forthcoming through Secondary Regulations under appropriate Articles of the Order.
- 27** However, at the time of issuing this document, the Department for Regional Development in Northern Ireland are monitoring the progress of the Consultations in England, and it is expected that any new Regulations, once eventually introduced in Northern Ireland, will be followed with substantially similar Regulations for under the Amendment Order for Northern Ireland.
- 28** Given the relative lag in timeframe, behind the Traffic Management Act 2004 in England, it is very probable that new Regulations will not be introduced until late 2008, at the earliest. Once again, where during the course of the Contract, Secondary Regulations relating to Articles under the Street Works (Amendment) (Northern Ireland) Order 2007 come into force, VM will make available all known data, in order for Networks Contractors to review their operations and assess any impact on rates specific to Northern Ireland, whether any increase or decrease. These impacts will be introduced for Northern Ireland Networks Contract(s) by mutual consent, subject to agreement through negotiations.

## 102 Description of Works

- 1 The term "Works Area" used in this Specification shall have the same meaning as the term "Section" used in the Conditions of Contract.

- 2 The work in each Works Area will generally comprise of: -

Civils works - the construction and maintenance of chambers, cabinets and associated duct laying together with full and final reinstatement of all surfaces unless directed otherwise by the Engineer.

Cabling and Network Activation works – the installation and maintenance of all necessary fibre, telephony and co-axial cables, including jointing, terminations and splices, all cabinet works including backboard build, delivery and fit and node activation and commissioning.

Multiple Dwelling Units – the installation and maintenance of all necessary internal trunking and cable tray, external trunking and capping, internal and external cabinet enclosures (lock boxes), co-axial and telephony cables and general building repair works as indicated the relevant Series 1200 of this Specification.

Emergency Restoration of Service (ERS) – provision of 24 hour emergency cover to undertake temporary and/or permanent repairs and corrective maintenance to the Virgin Media network to restore service at the earliest opportunity.

- 3 All non ERS work to be as detailed in the Works Package relating to the Section, which shall include the specific layout drawings and details and other information as described in Clause 114 of the Specification. ERS work to be in accordance with Series 1300.

## 103 Provision of Labour

- 1 The Contractor shall at all times provide sufficient and adequate numbers of skilled men and labourers to carry out and maintain each and every part of the Works in a proper and expeditious manner, and shall provide all materials, tools, equipment, plant and everything necessary for the proper execution, completion and maintenance of the Works.

- 2 For the purposes of sub-Clause 1 of this Clause, skilled men shall be deemed to include, but not be limited to: -

Civils works - duct layers, pavers, macadam and asphalt layers, concrete surfacing finishers, and chamber (all different forms of construction) builders;

Cabling and Network Activation works – cable pullers, copper terminators, co-axial jointers, fibre splicers, backboard builders and co-axial/telco technicians;

Multiple Dwelling Unit works - cable pullers, copper terminators, co-axial jointers, installation technicians and general builders (to effect repair works, including plaster repair, painting and decorating).

In addition, a competent project manager, agent(s) and registered supervisors shall be required to service the Contract.

- 3 Where the Contractor elects to Sub-Contract any of the works, there shall be no distinction made between the Contractors and Sub-Contractors workforce. All labour, operatives and management shall be considered as part of the Contractors organisation.

The Contractor must obtain the prior written approval of the Engineer before engaging any Sub-Contractor to undertake works on this Contract.

- 4 For the purposes of this Clause, and in order to also comply with the Street Works (Qualifications of Supervisors and Operatives) Regulations 1992 [S.I. 1992 No. 1687], the Contractor shall maintain a register of all supervisors and operatives employed by the Contractor for works under this Contract. The register shall be available for inspection by the Engineer at all times, and shall include:
  - Name of supervisor and operative;
  - Date started with the Contractor;
  - Date left the Contractor;
  - SWQR registration number;
  - National Insurance Number.
- 5 The Contractor will provide for a system to ensure that every supervisor and operative on site carries an ID card with his photograph and the above details clearly marked.
- 6 The Engineer may request the removal of any supervisors or operatives not conforming to the requirements of these Regulations, or who may have been removed from other Contracts operated by the Employer within the UK.

#### **104 Contractor's Personnel**

- 1 It is the responsibility of each Contractor to provide the Engineer with up-to-date key lists of personnel and contact numbers, together with a detailed list of registered supervisors and operatives, in a form approved by the Engineer.
- 2 With specific regard to the requirements of Clauses 103 and 122 of the Specification, the Contractor shall supply the Engineer with an emergency contact list. The list shall include at least two names of responsible Representatives of the Contractor and telephone numbers at which they can be contacted at all times outside normal working hours.
- 3 When working on the street, the Contractor must supply the Engineer with written expected daily whereabouts and daily completion forms by 10-00am the day before any programmed work. Works programmed for a Monday must be submitted by 10-00am on the previous Friday, irrespective of whether there are any planned works over the intervening weekend. These form(s) shall be in a format to be approved by the Engineer.

#### **105 General Establishment**

##### **Site Establishment**

- 1 The Contractor shall be responsible for finding and obtaining land for offices, sheds, stores and shelters required for the Works, and shall obtain all necessary permissions and licences and bear all expenses connected with the same and arising out of the use of this land. For the purposes of the Contract, public streets or other public areas shall not be used for site establishment purposes.

##### **Contractor's Offices**

- 2 The Contractor shall provide, maintain and clear away on completion all such general offices and huts as are necessary for the execution of the Works. The location of all such offices and huts shall be subject to the approval of the Engineer.

##### **Contractor's Stores**

- 3 The Contractor shall provide, maintain and clear away on completion all such sheds, stores and proper sanitary accommodation as are necessary for execution of the Works, and their location shall be subject to the approval of the Engineer.



- 4 The Contractor shall not use un-adopted streets or other private areas for storage of materials plant, vehicles and the like or as a means of access to other areas of construction.

#### **Contractor's Tipping Areas**

- 5 The Contractor shall ensure that any excavated materials required to be removed from the site, be permanently disposed of at approved Landfill Tips, licensed by the street authority, and that the landfill tax at the appropriate percentage is properly paid. The Engineer may request verification of such tax payments from time to time.
- 6 The Contractor shall ensure that he holds the requisite plant operator's licences, or that any approved sub-Contractors hold likewise. The Contractor should provide the Engineer with evidence when requested from time to time.
- 7 Prior to permanent disposal, the Contractor may temporarily store such excavated materials, at a temporary store obtained in accordance with sub-Clause 1 of this Clause provided always that he has obtained all necessary licences and permissions to do so.

### **106 General Working on the Street**

#### **Road Closures**

- 1 Road closures if required will be arranged by the Contractor, assisted by the Employer as necessary. All costs payable to the relevant street authority shall be initially borne by the Contractor.
- 2 If owing to an emergency a street has to be closed without notice, the Contractor shall notify the Engineer, street authority, emergency services and any public transport operators without delay, in order that suitable diversions may be arranged.
- 3 The Contractor shall be entirely responsible for costs in providing all traffic control and safety measures in order to carry out the work in an expeditious manner during a road closure. The Engineer may agree additional costs for exceptional works.

#### **Traffic Control**

- 4 The Contractor shall erect and maintain on all works in highways and on the approaches to the Works, all traffic signs necessary for the warning, direction and control of traffic in accordance with the Code of Practice for "Safety at Street Works and Road Works" published February 2002 and Chapter 8 of the Traffic Signs Manual published by the Department for Transport. The signs shall be illuminated by night and shall be for temporary use during the progress of the work, remaining the property of the Contractor on completion of the Contract.
- 5 Guarding and signing of work on private property shall be in accordance with the requirements of sub-Clause 4 of this Clause and all reasonable requirements of private property owners.

#### **Temporary Works**

- 6 The Contractor shall provide and maintain temporary traffic ramps, bridges, roadways, sleeper tracks, stagings and the like, which may be required but which are not itemised specifically in the Schedules of Rates.

### **Temporary Storage of Materials**

- 7 The Employer requires that the substantial majority of the works shall be undertaken on a first pass basis - sites being visited, worked upon, permanently reinstated and totally cleared away of all Constructional Equipment and materials during the course of the same working day. However, the Employer recognises that from time to time, circumstances change from site to site, which may not allow this to happen. The storage of materials on the street shall therefore be permitted subject to the following limitations:-
- (i) The storage of materials on the street shall be limited to excavated materials and unused or surplus temporary signs and proprietary guarding systems. These may only be stored on the street in a manner and at locations agreed with the Engineer and street authority. For the purposes of signing and guarding, any such temporary storage locations shall be treated as open excavations.
  - (ii) The storage of materials shall be kept to a minimum so as to limit any inconvenience to the public. In any event, other than with the prior agreement of the Engineer and street authority, the storage of materials at any one location shall be limited to 24 hours, the materials to be removed during the course of the next day, with no further storage at the same location at any subsequent time.
  - (iii) For the purposes of this Clause, unless confirmed otherwise by the Engineer, the storage of materials is not permitted on private property which has been the subject of independent wayleave agreements between the Employer and the private property owner.
  - (iv) The Contractor shall limit the loss of some excavated materials from temporary stores, as a result of periods of heavy rainfall, or dry windy periods, by taking appropriate measures to protect the stored excavated materials from these weather actions. Such measures may include the use of tarpaulins.

### **Soiling on Highways**

- 8 Without prejudice to Clause 29 of the Conditions of Contract, the Contractor shall remove and dispose of any mud, debris or spoil deposited on the highways, immediately adjacent to or approaching the Works, before cessation of work on the day of occurrence to the satisfaction of the Employer. Similarly, any spillage of diesel, oils, foamed concrete or other cementitious materials, any toxic materials or bituminous materials shall be immediately cleaned off to the satisfaction of the Employer.
- 9 The Employer reserves the right for the Engineer to request that highways are maintained free from matter outlined in sub-Clause 8 of this Clause. In addition, the Engineer may instruct appropriate measures to maintain the highway free from matter, at the Contractor's expense.

### **Discharge of Water**

- 10 Uncontaminated rainwater and groundwater arising from any pumping operations shall be led to a suitable drainage outlet so as not to cause any pollution, nuisance or damage. In this respect, the Contractor's attention is particularly drawn to Clause S3.2.4 of the Specification for the Reinstatement of Openings in Highways. The Contractor shall ensure that any discharge of water shall be in strict compliance with the Environment Agency's Pollution Prevention Guidelines PPG20: Dewatering of Underground Chambers & Ducts.
- 11 Notwithstanding the requirements of Clause 601, dewatering or other methods of reducing the natural groundwater level within the limits of the highway will not be permitted without the approval of the Engineer.

### **Highway Drainage Systems**

- 12 The Contractor should note that the requirements in respect of highway drainage systems vary. Sub-Clauses 13, 14 and 15 of this Clause are therefore intended to outline requirements, which would be general to each.
- 13 Any drainage systems, culverts and associated apparatus belonging to, or in the control of a street authority, undertaker or person in whom they may be vested, shall at all times be adequately supported during excavation and backfilling of trenches and kept clear of deposits of silt and deleterious materials from excavations and pumping operations.
- 14 In so doing, the Contractor shall:-
  - (i) not place any materials over gulleys and water-entry positions, or if this is not possible, appropriate temporary sheeting should be used;
  - (ii) not wash out or clean concrete trucks, mixers or any other ancillary equipment, where there is any likelihood of wash-out fluids entering the drainage systems, culverts and associated apparatus.
- 15 Any drainage systems, culverts and associated apparatus disturbed or damaged by the excavations shall be reinstated to the requirements of the relevant street authority, undertaker or person in whom they may be vested. The Contractor shall be responsible for all necessary cleaning operations arising out of his methods of working, to the satisfaction of the relevant authority.

### **Road Signs, Road Markings and the like**

- 16 When road signs or road markings are removed during the course of the works, they must be replaced temporarily to their original dimension, width and spacing immediately following either temporary or permanent reinstatement of the excavation. Where the Contractor elects to use peel-on style markings, these shall be to the relevant British Standard (to be confirmed)
- 17 Permanent markings shall be provided by the Contractor, prior to his offering the works to the Engineer, for the Engineer's consideration of their fitness for submission (by the Employer) of the R Notice to the relevant street authority. Notwithstanding this requirement, permanent markings shall be provided within 10 days of permanent reinstatement, prior to any inspection by the street authority at Stage 3, as outlined in the Code of Practice for Inspections. The use of peel-off applied markings shall be subject to the approval of the Engineer.

### **Sub-Surface Traffic Signal Loop Detectors**

- 18 The Contractor shall be responsible for the accurate site-location of the positions of all such loop detectors.
- 19 Prior to commencing and at the end of any physical works close to existing loop detectors, the Contractor shall arrange for the street authority to attend site and carry out all necessary tests, in the presence of the Engineer, in order to verify the operational status of the loop detectors. The Contractor shall obtain written confirmation of the operational status at both stages from the street authority, a copy of which shall be provided to the Engineer, at each stage.

- 20 Whether loop detectors are shown to be fully operational or non-operational, the Contractor shall provide the Engineer with a brief method statement, outlining his proposals for carrying out the works close to the loop detectors. Once the proposals are agreed as being reasonable with the Engineer, the Contractor shall commence the works and proceed with all necessary care and expediency. The Engineer shall closely monitor these works.
- 21 Any physical or apparent damage caused to the loop detectors during the course of construction, shall be reported immediately to street authority and the Engineer, in order for the street authority to affect repairs at their earliest discretion. The resultant costs of damage repairs shall be borne by the Contractor, unless the Contractor demonstrates that he has proceeded with all necessary care and expediency, and that the damage was an unavoidable consequence of the works.
- 22 Damage repair costs outlined in sub-Clause 21 of this Clause shall apply for any physical damage to the loop detectors discovered by the street authority at the post-construction testing.

## 107 Protection Measures on the Street

### Protection of Property

- 1 The Contractor shall take every precaution to preserve from damage any property, trees and shrubs, farm stock or crops situated on or near the Site of the Works and shall indemnify the Employer against all claims in connection thereto.

### Protection of Trees

- 2 The Contractor shall not physically damage the trunk, roots or branches of any trees. When working in the vicinity of trees, as defined in the Preamble to the Bill of Quantities, the Contractor shall work within the guidelines given in the NJUG publication - Volume 4: NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees November 2007. This document provides practical guidelines when working close to trees, which require the Contractor to ensure that only appropriate works are undertaken within the tree protection zone.
- 3 For the duration of the Works, the Contractor shall appoint and retain an arboriculturist, approved by the Engineer and the appropriate Local Authority, more often a separate department within the street authority. The arboriculturist is expected to liaise on the Contractor's behalf with the Local Authority and provide specialist skills in relation to tree-working, prior to:-
  - (i) working close to trees and their root structures;
  - (ii) possible root and branch spread pruning of mature trees;
  - (iii) excavating close to immature trees;
  - (iv) working close to listed trees, under Tree Preservation Orders and the like.
- 4 Notwithstanding the requirements of sub-Clauses 2 and 3 of this Clause, the Employer requires the following minimum precautions to be taken when working close to trees:-
  - (i) Pilot holes must be taken to establish position of roots;
  - (ii) Procedure video available;
  - (iii) No mechanical excavation in vicinity of root bowl;

- (iv) All damages to be recorded and notified to the Engineer the same working day or by 9.00 am the following day.

### Protection of Existing Services

- 5 With regard to existing services, which for the purposes of the Contract are referred to as other undertakers' apparatus and plant, and which shall be deemed to include all pipelines, cables, chambers and components of telecommunications, gas, water supply and disposal, whether surface water or foul, street lighting, electrical and other networks operated by a street authority or undertaker as defined in the New Roads and Street Works Act 1991, the Contractor shall:-
  - (i) ensure that where drawings indicating the position of other undertakers' apparatus and plant, are made available to the Contractor by the Engineer, these drawings are made available to his site personnel prior to commencing any exploratory excavations;
  - (ii) ensure that where drawings indicating the position of other undertakers' apparatus and plant, are **not** made available to the Contractor by the Engineer, such drawings shall firstly be obtained from the relevant authority or undertaker, and are made available to his site personnel prior to commencing any exploratory excavations;
  - (iii) be entirely responsible for locating on site the positions of all other undertakers' apparatus and plant and fully satisfy himself as to their exact position as they affect the proposed Works;
  - (iv) allow in his rates for locating on site the positions of other undertakers' apparatus and plant, which shall be deemed to include the carrying out of all necessary exploratory excavations in carriageways, footways, verges, grassed areas, unmade ground and elsewhere where other undertakers' apparatus and plant are likely to be encountered, so as to ensure that no damage or interruption to service(s) is caused;
  - (v) provide adequate protection and support to all existing services and plant below and above surface level (lamp standards, signposts and the like) exposed during the course of works.
- 6 Where paint markers are used to mark positions of existing services the paint shall be soluble, non-toxic and non-permanent.
- 7 The Contractor shall, during the progress of the Works take all measures required by any authority or undertaker for the support and full protection of all such apparatus and plant, but subject to any instructions or contrary directions by the Engineer.
- 8 No interruption to service(s) shall be caused without the written consent of the appropriate authority or undertaker, and subsequent approval by the Engineer.
- 9 All other undertakers' apparatus and plant encountered in the course of excavation shall be adequately supported and protected from damage to the satisfaction of the street authority, undertaker or person in whom they may be vested. Allowance must be made in the excavation rates for the cost of providing such support and protection.
- 10 Other undertakers' apparatus and plant shall not be moved or disturbed in any way until it has been inspected and agreed by the Engineer.
- 11 The Contractor shall be responsible for all costs, including consequential and interim replacement service, incurred to repair any damage whatsoever to other undertakers' apparatus and plant, to the complete satisfaction of and in accordance with the instructions of the concerned street authority, undertaker or person in whom they may be vested. As

part of the Conditions of Contract, the Contractor shall keep the Employer indemnified at all times from claims in connection with such damage.

- 12 Existing surface water or foul drains shall not be used for the discharging of groundwater without the written consent of the Engineer.
- 13 The Contractor shall maintain on site at all times an up to date damage register, which shall contain all pertinent details of damage to other undertakers' apparatus and plant, including times and dates, together with the names and number of contacts made with the relevant street authority, undertaker or person concerned. In so doing, the Contractor shall:-
  - (i) notify the Engineer in writing within 1 hour of any such damage occurrence;
  - (ii) report the damage incident to the Health and Safety Executive, where the incident is deemed to be 'reportable' under the RIDDOR Regulations 1995 (see also Clause 112 of the Specification);
  - (iii) in the event of a local private service connection, and where directed by the Engineer, make contact with the affected resident(s)/owner(s).
- 14 The Employer reserves the right to request, at any time, appropriate details in relation to this damage register, and to review the Contractor's records of remediation of defects, and/or attendance in writing to such matters, with the relevant street authority, undertaker or person concerned.

#### **Protection of Existing Footways and Carriageways**

- 15 In addition to the requirements of Clause 107 (sub-Clauses 8 and 9) of the Specification, the Contractor shall take all reasonable steps to protect existing surfaces not directly excavated, which shall be maintained in their original condition, prior to the commencement of the Works. Any damage caused shall be the responsibility of the Contractor and he shall ensure that the area so damaged is reinstated in accordance with the street authority's requirements.

#### **Protection of Works**

- 16 The Contractor shall carefully cover up or otherwise protect all work liable to damage from the weather, storm water, or any other cause during construction.
- 17 The Contractor shall allow in his rates for any contingencies or extra temporary works which may be necessitated by adverse site conditions or which may be required by the Engineer for the protection of the Works.

### **108 Pollution**

- 1 The Contractor shall have due regard for, and adhere to the Environment Agency document 'Working at Construction & Demolition Sites: PPG6 Pollution Prevention Guidelines, and the NJUG document 'Volume 5: NJUG On-site Environmental Good Practice Guidelines.'

#### **Drains, Water Course and the like**

- 2 In addition to the requirements of Clause 107, the Contractor shall take all reasonable precautions in connection with drains, watercourses and the like to prevent:-
  - (i) Silting;
  - (ii) Erosion of beds or banks;

- (iii) Contamination of the water so as to adversely affect the quality or appearance thereof or cause injury or death to animal and plant life;
- (iv) Spillage of oil, diesel, cable lubricants or other toxic chemicals.

### Noxious Fumes and Air Pollution

- 3 The Contractor shall ensure that all mechanical plant emitting any exhaust fumes is maintained in good working order and that emissions are limited at all times. In addition, the Contractor shall make all endeavours to ensure that exhaust fumes from static or temporarily parked mechanical plant are directed away from pedestrian areas.
- 4 Compliance with these requirements shall not relieve the Contractor of any of his other obligations and liabilities under the Contract, the Control of Pollution Act 1974, or the Health and Safety at Work Act 1974.

### 109 Control of Noise

- 1 The provisions of Clauses 29(2), 29(3) and 29(4) of the Conditions of Contract generally apply, but the Contractor shall also comply with the remaining sub-Clauses of this Clause, during the construction of the Works.
- 2 Without prejudice to the generality of the Contractor's obligations under the preceding paragraph the Contractor shall comply in particular with the following requirements:-
  - (i) All vehicles and mechanical plant used for the purpose of the Works shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order.
  - (ii) All items of Contractor's Equipment, including compressors, generators and the like, shall be "sound reduced" models fitted with properly lined and sealed acoustic covers which shall be kept closed whenever the machines are in use, and all ancillary pneumatic percussive tools shall be fitted with mufflers or silencers of the type recommended by the manufacturer. In so doing, the Contractor shall employ the best practical means to minimise noise produced by his operations and shall also have due regard to the recommendations in BS 5228 (2009), Noise & Vibration Control on Construction and Demolition Sites.
  - (iii) All machines in intermittent use shall be shut down in the intervening periods between work or throttled down to a minimum. Noise emitting equipment, which is required to run continuously, shall be housed in a suitable acoustic enclosure (see BS 5228 (2009)).
  - (iv) Items of Contractor's Equipment shall be maintained in good and workmanlike condition so that extraneous noises from mechanical vibration, creaking and squeaking, are reduced to a minimum.
  - (v) Where practicable rotary drills and bursters actuated by hydraulic or electrical power shall be used for excavating hard material.
- 3 The Engineer shall have the authority to instruct the Contractor to remove un-silenced plant from the Site.
- 4 The Contractor shall not execute any of the works or carry out maintenance of Contractor's Equipment in such a manner as to cause nuisance save when the work is absolutely necessary for the saving of life or property or for the safety of the works, in which case the Contractor shall immediately advise the Engineer.
- 5 The Contractor shall have due regard at all times for the need to reduce the noise level of plant to a minimum. This is particularly necessary where work is carried out in close proximity to hospitals, schools, housing, churches and office developments.



- 6 The Contractor is expected to liaise with the local Department of Environmental Health to confirm their acceptance to his proposed methods of work and to the steps he proposes in order to minimise noise. In so doing, the noise levels indicated in Table 1/1 may be taken to be reasonable ambient and maximum levels which the local Department of Environmental Health might be expected to allow Contractors to operate, although under the terms of the Contract, the obligation remains with the Contractor to confirm such levels with the street authority.

Period	Hours	Total Noise Levels at Control Stations		
		Ambient Noise Level, Leq measured at Control Station: dB(A)	Period of Hours over which Leq is applicable	Max. Sound Level (see Note (iv) below) measured at Control Station: dB(A)
Mondays to Fridays	0700-1800	78	11	85
Mondays to Fridays	1800-2030 *	68	2½	70
Saturdays	0700-1200	78	5	85
Saturdays	1200-1700 *	78	5	85
Saturdays	1700-2030 *	68	3½	70
Sundays	0830-1600	68	7.5	70

**Table 1/1: Schedule of Noise Levels**

**Table Notes:**

- (i) The ambient noise level, Leq, is the total Leq from all the noise sources in the vicinity over the specified period, when measured 2.0m above the ground at 1m from any facade of any occupied dwelling. This shall not exceed the appropriate level given in the Schedule or not exceed by more than 3dB(A) the existing ambient noise level, measured over the same period, whichever is the greater. The maximum sound level measured 2.0m above the ground at 1m from any facade of any occupied dwelling shall not exceed the level given in the Schedule
  - (ii) Noise levels relate to free field conditions. Where noise Control Stations are located 1 metre from building facades, permitted noise levels can be increased by 3dB(A).
  - (iii) The existing ambient noise level, Leq, is the total Leq from all the noise sources in the vicinity over the specified period prior to the commencement of the Works.
  - (iv) Maximum sound level is the highest value indicated on a sound level meter which meets the requirements of BS 5969 Type 1 or 2 set to SLOW response and frequency weighting A.
  - (v) Hours marked are not related to working hours permitted under the Contract.
- 7 Noise levels for periods outside the scheduled hours in Table 1/1 will need to be agreed with the street authority on a case-by-case basis.

## 110 Conservation Areas

- 1 Where Conservation Areas or interested Bodies such as English Heritage, CADW , Historic Scotland and the like exist inside the Contract Area (see Contract Term Services Agreement), the Contractor, shall assist in the liaison with the Conservation Officers for these Areas or Bodies with respect to the timing and method of working. Details of the Conservation Areas or interested Bodies shall be made available, and information will be given prior to the Works commencing.

## 111 Safety Precautions for Road Users and Pedestrians

- 1 The safe passage of road users and pedestrians should be maintained by:-
  - (i) Complying with the Code of Practice for "Safety at Street Works and Road Works" published February 2002 and Chapter 8 of the Traffic Signs manual published by the Department of Transport.
  - (ii) Keeping obstructions to public and private thoroughfares to a minimum, consistent with the execution of the Works.
- 2 The Contractor shall take all necessary precautions at all times to ensure the safety of the Public and Personnel, throughout the execution of the Works.
- 3 All open trenches, draw chambers and cabinets shall be protected by appropriate signing and guarding. No chambers or cabinets are to be left open at night guarded or unguarded.
- 4 Cabinets shall not be left open and unattended on completion of works, Contractors shall ensure that the cabinet is secured and correctly locked. Any damage or faults to the door or lock must be notified immediately to the Engineer, or his appointed representative.
- 5 Chamber covers shall not be left off and unattended on completion of works, Contractors shall ensure that the chamber covers are correctly secured. Any damage or faults to the chamber covers (and frames) must be notified immediately to the Engineer.
- 6 All rubbish, packaging materials and the like should be removed from site regularly except where on-site facilities have been made available. Rubbish, packaging materials and the like shall not be disposed of by burning.
- 7 Before the site is vacated each day the Contractor shall ensure that:-
  - (i) Loose tools, materials and the like are removed to a safe and secure place.
  - (ii) Ladders are removed and stored in a safe place.
  - (iii) The site is rendered safe and secured.

## 112 Work Packages

- 1 Each Work Package will generally comprise of the following:-

Works Package Elements	Type of Works		
	Minor Network Maintenance	New Network Build or Extension	Diversionary Works
Works Order/Instruction	✓	✓	✓
Construction Drawings	✗	✓	✓
Due dates for Start & Completion	✓	✓	✓
Bill of Quantities	✗	✓	✓
Utility Information	✗	✓	✓
Health & Safety Information	✗	✓	✓

which will have been previously agreed with the Engineer.

### **113 Instructions (including Variations)**

- 1 During the course of the Works the Contractor may encounter situations which may require deviations from the intended design/drawings/works order. These shall be confirmed to and authority to proceed received from the Employer before continuing with the Works.
- 2 The Contractor may also receive Instructions from the Engineer's Representative that may require deviations from the intended design/drawings/works order. The Engineer's Representative will inform the Employer and seek authority to proceed from the Employer, and provide the relevant details to the Contractor as part of the Instruction.
- 3 Should the Contractor proceed and implement with any deviation to the Works without first seeking and receiving the prior authority of the Employer, then any such works will be deemed to be at the Contractor's risk and the Employer may decline payment.

### **114 Pre-Construction Survey**

- 1 Notwithstanding the requirements of Series 200 of the Specification, a Pre-Construction Survey of each work area may be undertaken at the Contractors request with the Engineer's Representative, the Contractor and the representative of the street authority. Alternatively, the Engineer may instruct the Contractor to undertake such a survey, similarly attended.
- 2 This survey should include:-
  - (i) Video tape, with date and time recorded on the Visual Record. This record will be held by the Engineer;
  - (ii) Pre Construction surface details i.e. number of broken flags agreed with the street authority;
  - (iii) Photographs of specific locations where the interested parties feel a photographic record will be of benefit;
  - (iv) Written notes of any observations, relevant data.
- 3 The Contractor will be responsible for providing and obtaining the photographic and video records including all equipment, materials and the like.

### **115 Order of Works**

- 1 For Local Build Network Construction, the Contractor shall ordinarily give priority to complete the work area package in accordance with the construction sequence, agreed beforehand with the Engineer. This will generally comprise the following:-
  - (i) Construction of and works at the Nodal Cabinet (MUX and BNP) positions;
  - (ii) Route from adjacent Nodal area to new Nodal cabinets (Fibre Route);
  - (iii) Route from Nodal cabinets to Amplifier cabinets;
  - (iv) Cabinets and associated chambers.
- 2 For Multiple Dwelling Unit (MDU) works, the Contractor shall ordinarily give priority to complete the work area package in accordance with the construction sequence, agreed beforehand with the Engineer. This will generally comprise the following:-
  - (i) Works at local Distribution Amplifiers (DA) and Distribution Points (DP);

- (ii) Route from the DA or DP to the MDU being installed;
- (iii) Internal MDU Installation works.

- 3 The Contractor shall agree with the Engineer the gang density per work area that will be permitted.
- 4 The Contractors shall at all times promptly inform the Engineer of any restrictions, which are likely to affect the agreed programme.

## **116 Working Hours**

- 1 The Contractor shall not be required to undertake any works outside the normal working hours unless specifically instructed to do so by the Engineer, or otherwise agreed with the Engineer.
- 2 For the purpose of this clause, normal working hours are to be taken as 0700 to 1900 hrs, Monday to Saturday inclusive. The intention of providing the Contractor the opportunity to work six days a week is substantially intended to allow flexibility to work Saturdays for the following reasons:-
  - to undertake Works instructed by the Engineer;
  - to undertake Works which can only be carried out on Saturdays, possibly as directed to the Engineer by the street authority;
  - to undertake maintenance, defect and snagging works, including testing.

The Contractor shall not be allowed to undertake substantial works (i.e. those ordinarily undertaken on weekdays) on Saturdays, unless specifically agreed by the Engineer.

Saturday or Sunday work shall not take place during or for half an hour either side of the hours of service, within 400 metres of any place of worship.

- 3 No mechanical plant shall operate outside these normal working hours except in the case of emergency and/or with the written approval of the Engineer. In such circumstances it shall be the Contractor's responsibility to inform the street authority and the Police and obtain the necessary licences as appropriate.
- 4 Rates included in the present Schedules of Rates are deemed to be inclusive of all necessary costs associated with working outside of normal hours, whether at the Contractor's determination, or as a result of instructions issued by the Engineer.

## **117 Working Restrictions**

### **General**

- 1 Various engineering and construction difficulties, which cause restrictions on day-to-day working operations, are more fully described in the Preamble to the Bill of Quantities. The Contractor is reminded that costs associated with these difficulties are deemed to be fully included in the rates, and that requests by the Contractor for payment of additional monies will only be considered where such conditions are extraordinary and encountered on a Nodal order of scale.
- 2 Outline information with regard to construction difficulties including Traffic Sensitive and Traffic Prohibited Areas is given in the following sub-Clauses of this Clause.

### **Traffic Sensitive Areas**

- 3 The Contractor should be aware of the potential under the Works for working within Traffic Sensitive Areas. Such areas may be defined as such, when the street authority or the Police or any other body determines that construction has to be restricted to approved hours on traffic sensitive routes.
- 4 For guidance purposes, these are generally between the hours of 0730 and 0900 hrs, and also between 1530 and 1830 hrs. However, these will be subject to local conditions and should be confirmed on an individual basis with the relevant street authority, or the Police, or any other body, prior to the Works Commencement Date of any Section.
- 5 These hours are typically intended to be indicative of both rush hour (Peak) periods UK-wide. However, it may be the case that some Traffic Restricted roads are only restricted in particular directions, during either one of the Peak periods. The Contractor should be always be aware of the fact that locally agreed periods are subject to change.

### **Traffic Prohibited Areas**

- 6 Traffic Prohibited Areas shall be deemed to be all areas where access by conventional road going vehicles is prevented, whether by Statute, or by physical restrictions, constrictions, barriers and the like. Such areas would prevent the conventional use of normal Contractor's Equipment and would result in an uneconomic rate of progress.

## **118 Construction Handover**

- 1 In accordance with Clause 115 of the Specification, the construction of the Works should be agreed beforehand with the Engineer. In so doing, the Works shall be programmed to proceed in such a way that discreet sections can be completed and handed over to the Engineer at intervals agreed by the Engineer.
- 2 With prior agreement with the Engineer, discreet sections for handover may comprise:-
  - (i) completed Catchment Areas;
  - (ii) completed Nodal Areas;
  - (iii) dedicated Fibre Routes on Rings;
  - (iv) discreet lengths of Trunk Route;
  - (v) Areas of Locked-Out Construction (LOCs);
  - (vi) Areas of Additional Works.
  - (vii) Minor Works Packages
- 3 In so handing over, the Contractor shall also have due regard to Clause 117.
- 4 In agreement with the Engineer, these discreet sections may form the basis for payments in accordance with Clause 60(1) of the Conditions of Contract.

## **119 Working Drawings and Record Drawings**

- 1 The Contractor will normally be issued with working drawings for major packages of work at least two weeks prior to the Works Commencement Date stated in the Work Package for the relevant Section. Working drawings for minor packages of work may be issued less

than two weeks prior to the Works Commencement Date. Working drawings may not be required for maintenance tasks, depending upon the nature of the works. Subsequent amendments or changes required due to Site conditions will be issued as and when the need arises. These may comprise part amendments of plans or sketches given by the Engineer in Site Instructions or Variation Orders.

- 2 The Contractor should ensure that all relevant staff are made aware of the changes. On completion of the Work Area or Section the Contractor will provide record drawings of the as-built details. The most up to date set of drawings will be issued to the Contractor for this purpose.
- 3 The as-built details will include:-
  - (i) Key route changes i.e. footway into carriageway;
  - (ii) Key apparatus changes i.e. chamber size, cabinet position, road crossing position;
  - (iii) House connection Swept 'T' details;
  - (iv) Location of stubs from boxes
  - (v) Key dimensions from track to kerb edge on each street to enable future location. Deviations greater than the track width must be detailed;
  - (vi) Limited or incomplete construction;
  - (vii) Incidence of Other Utilities Apparatus and Plant apparatus;
  - (viii) Any change of depth due to obstructions;
  - (ix) Details of protection where required where depth of cover cannot be achieved.
- 4 The Contractor is to provide as-built details to the Employer within five working days of the completion of the works on site. Payment of monies under the Contract for the Work Area, detailed in the as-built drawings, is partly conditional on the receipt and subsequent approval of the drawings by the Engineer.
- 5 **The Virgin Media National As-Built Record Specification document includes** typical As-Built drawings and associated commentary, which reflects the requirement of sub-Clauses 1 to 4 (inclusive) of this Clause. Notwithstanding these typical requirements, the Contractor's attention is also drawn to the requirements of Series 1000 of the Specification.

- 6 The VM GIS Team As-Built Park Requirements document sets out the expected format of documents to be submitted to the VM GIS Team as part of the payments process

#### **Base minimum As-Build/Testing requirement for the bulk of works**

- 7 Under normal circumstances, the Contractor is to provide As-Builds and Testing records that conform with all the above documents. This should cover the bulk of Work Orders (including ERS, where As-Builds are required for ERS works), that generally comprise:
  - (i) civils works only
  - (ii) cabling only *[copper and co-axial records in hard copy only; fibre test records to be electronic on CD/DVD, with hard copy to follow]*
  - (iii) combined civils and cabling works *[cabling records in format as per above]*

## **120 Defect Maintenance & Network Duct Blockages**

### **Network Duct Blockages**

- 1 Further to the requirements of Clause 103 of the Specification, the Contractor shall provide sufficient skilled resources to rectify any problems that arise from construction defects which prevent or limit further completion of the Employer's communications network, including cabling and customer installs. The resource shall be agreed locally with the Engineer (see Clauses 103 and 105) and, as a minimum, shall be capable of the following:-
  - (i) Highway work including all signing and safety equipment, compressors, and the like;
  - (ii) Proving main ducts using a brush and mandrel, proving customer spurs using a cobra and the like.
- 2 The response to such defects will be generally within 2 hours, subject to confirmation by the Engineer. Any costs or losses incurred by the Employer as a result of the defect, such as standing time of cabling contractors, will be recharged to the Contractor.

### **NRSA Defect Maintenance**

- 3 In addition to the attendance of defects which affect the Employer's network, outlined in sub-Clauses 1 and 2 of this Clause, the Contractor shall also provide sufficient skilled resources to rectify any problems that arise from construction defects within the street, during the Defects Correction Period. These resources shall be sufficient to attend to defects within times required under the Code of Practice – Inspections (the Pink Book).
- 4 In instances where the Contractor has failed to provide a suitable and/or timely response to the rectification of defects, the Employer may elect to arrange for others to attend the Site and carry out remedial works as necessary. In so doing, any costs incurred as a result of this action will be recharged to the Contractor. At the Engineer's discretion, any additional administration costs incurred by the Employer may also be recharged to the Contractor.
- 5 The requirements of this Clause shall be deemed applicable for the whole period of the Contract Term Services Agreement and the full period of the Defects Correction Period, together with any extensions of the Defects Correction Period.

## **121 Public Relations**

- 1 The Employer considers that it is essential for the success of the total Network Implementation that inconvenience to the general public shall be kept to a minimum. In particular, good public relations shall be maintained by the Contractor through:
  - (i) Personal contact, including the meeting of members of the public in person, not purely by telephone;
  - (ii) Responding promptly to complaints received directly or through the Employer's Customer Service organisation;
  - (iii) Maintaining clean and tidy sites at all times;
  - (iv) The Employer reserves the right to review its public image and make adjustments to its Public Relations policy in respect of badges, identification, clothing and the like. The Contractor will be expected to co-operate in such changes;

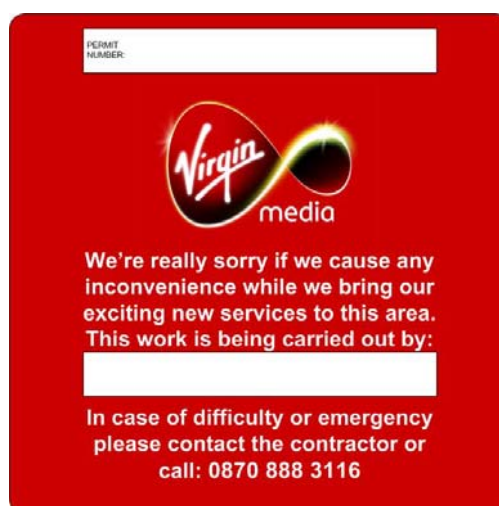
- (v) All the Contractor's commercial vehicles permanently working on the Contract working on behalf of the Employer should include the Employer's livery, which should be prominently displayed, in agreement with the Engineer.
  - (vi) In addition to the statutory requirements outlined in Clause 103 of the Specification, all members of the Contractor's workforce must be carrying current identification cards bearing the individual's name and photograph, Company name and a local telephone number for verification. This card is to be carried at all times, and must be produced on demand.
  - (vii) Vehicles being parked correctly and footways and driveways not being obstructed. A safety zone must be established at the rear and side of each vehicle to ensure no hazard is presented to the public from activities in the vehicle.
  - (viii) Not using verges or footways for parking vehicles.
- 2 The form of sign may be magnetic board or decal. The artwork will be supplied by the Employer to enable the Contractor to hire the signs produced.
- 3 If vehicles are to be used on other contracts (i.e. non-Contract works) the sign should be removable and should be removed/covered when not working on behalf of the Employer.

## 122 Employer's Road Signs (Information Boards)

- 1 Notwithstanding the requirements of Clause 106 of the Specification, the Contractor is to display road signs in accordance with the Code of Practice for Safety at Street Works and Road Works and as directed by the Engineer. The signs will be supplied by the Contractor and the format and wording of the signs shall be as indicated below.



**Standard Information Board**



**Variation for use in Permit Areas**

### Notes

This information board must be displayed at all street works undertaken for Virgin Media under this contract.

All boards shall be reflectorised to BS 873:Part 6 1983, Class 3.

## 123 Materials - General



- 1 The Employer reserves the right to specify the manufacture and to inspect any materials during the execution of works. Any materials found to be damaged or not in accordance with the Specification shall be rejected at no cost to the Employer. Any free issued materials from the Employer, found to be damaged will be recharged to the Contractor.
- 2 The Contractor shall provide all Cabinets purchased from the Engineer's nominated approved suppliers, unless otherwise instructed by the Engineer.
- 3 All materials supplied by the Contractor shall meet with the Specifications and/or approved supplier's requirements and be subject to the approval of the Engineer. Alternative materials to those detailed will not be permitted without the prior written approval of The Engineer. Manufactured materials supplied by the Contractor for civils work shall include:-
  - Ducts, all types and bends.
  - Swept 'T' moulding 96mm / 54mm.
  - End caps for duct.
  - Draw rope.
  - Termination Boxes.
  - Prefabricated Chambers.
  - Frames and covers for surface access chambers.
  - Foundation bolts.
  - Cable bearer brackets (channel type).
  - Cable bearers and pins.
  - Steps for chambers.
  - Anchor irons for chambers.
  - Sump grate.

Details of materials for Cabling and Network Activation and Multiple Dwelling Unit works are given in Series 1100 and 1200 of this Specification respectively.

- 4 Upon commencement of the Contract the Engineer will provide the Contractor with details of the expected minimum levels of materials stores. Where appropriate this shall be divided into two lists, one for standard Works and the other for emergency Works. The Contractor is expected to maintain the agreed level of materials stores for the duration of the Contract, unless expressly agreed by the Engineer in writing.
- 5 In addition to the provisions made in sub-clause 1, and the materials stock controls operated by the Contractor, the Employer may with forty-eight hours prior written notice, carry out a full stock check and materials quality audit at any of the Contractors Yards, Stores or Offices. To enable this to be undertaken all work shall cease at 4.00 p.m. on that day and all free issue materials will be returned to the yard by 5.00 p.m. Other arrangements may be made subject to the approval of the Engineer.

## **124 Materials – Disposal of Surplus Cable**

- 1 All free issue cables shall remain the property of Virgin Media.
- 2 The Contractor shall be responsible for the proper disposal of any lengths of surplus cable that are deemed to be unsuitable for use within the Virgin Media network. Surplus cable may only be disposed of upon the written instruction of the Engineer. For any free issue cables the cost of disposal shall be met by Virgin Media, whereas if cable is supplied by the Contractor on a supply & fit basis the Contractor shall be liable for all disposal costs.
- 3 The Contractor shall provide the Engineer with details of all regional Disposal Points (3<sup>rd</sup> party waste disposal companies, scrap dealers etc.) including those of their Cabling sub-Contractors, and ensure that all disposed cables are only sent to these nominated Disposal Points.



- 4 Virgin Media may confidentially share this information on Disposal Points with the local Police Authorities. In so doing, the source of any other cables subsequently disposed of at non-approved Disposal Points, can be investigated as being suspicious, thus supporting the anti-criminal activity undertaken jointly by the Police and Virgin Media's Group Security team.
- 5 Periodically, the Engineer may require the Contractor to maintain a segregated stockpile of cables for disposal for the purposes of inspection and audit. A register of individual cable lengths and their associated Work Orders (including ERS Remedy identifiers) shall be maintained. Cable lengths should be tagged for ease of identification. Where requested by the Engineer, the Contractor shall submit the register each month. The Contractor will be expected to keep the stockpile for a period of 2 weeks after the submission of the monthly register.