

## **GENERAL TS 3.10.01**

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## **GENERIC TECHNICAL SPECIFICATION FOR CIVIL, STRUCTURAL AND BUILDING ENGINEERING**

### **GENERAL TS 3.10.01**

This document shall be read in conjunction with Generic Technical Specification Civil, Structural and Building Engineering – Introduction, ref: TS 3.10.00 and CESWI7 Document.

The clause numbering system relates to the numbering system in CESWI7 Specification.

## **TABLE OF CONTENTS**

<b>GENERAL .....</b>	<b>3</b>
<b>1.1 DEFINITIONS .....</b>	<b>3</b>
<b>1.5 TIDINESS OF SITE .....</b>	<b>3</b>
<b>1.7 SURVEY OF HIGHWAYS, PROPERTIES AND LANDS .....</b>	<b>3</b>
<b>1.8 LEVELS AND REFERENCE POINTS .....</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>1.10 INTERFERENCE WITH LAND INTERESTS .....</b>	<b>3</b>
<b>1.17 APPARATUS OF STATUTORY UNDERTAKERS, HIGHWAY OR ROADS AUTHORITY AND OTHERS .....</b>	<b>3</b>
<b>1.25 QUALITY ASSURANCE AND DOCUMENTATION .....</b>	<b>3</b>
<b>1.26 METHOD STATEMENTS .....</b>	<b>4</b>
<b>1.28 TEMPORARY WORKS .....</b>	<b>5</b>
<b>1.29 MANUALS .....</b>	<b>5</b>
<b>1.30 COMMISSIONING .....</b>	<b>5</b>
<b>AMENDMENTS RECORD .....</b>	<b>6</b>

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## GENERAL

### 1.1 Definitions

- 1.1.7 “Contract Administrator” means the person, firm or company named in the contract as appointed by the Client to supervise, inspect, witness and where necessary give consent to all construction works on site on behalf of the Client.
- 1.1.8 Where reference is made to the Highway Agency’s ‘Specification for Highway Works’, the Overseeing Organisation shall be the Client. **1.4 British Standards and other documents**
- 1.4.3 ‘Other documents’ and ‘Specification of another body’ in the clauses in this section shall be taken to include European Standards referred to in the Contract.

### 1.5 Tidiness of Site

- 1.5.5 All roads affected by the works shall be kept clean and maintained.

### 1.6 Entry onto the Site

- 1.6.6 Prior to the commencement of operations, the Contract Administrator shall supply the names and addresses of relevant owners and occupiers. The Contract Administrator shall be notified in writing 14 days in advance of the intention to start work within each area of ownership or occupation.

### 1.7 Survey of Highways, Properties and Lands

- 1.7.5 Where site clearance or demolition is to occur, the survey and reporting shall comply with the requirements of BS 6187. This is a **Hold Point**.

### 1.10 Interference with Land Interests

- 1.10.4 The *Contractor* shall carry out work in such a manner in order not to interfere with or impede the operations of the *Client*.

### 1.17 Apparatus of Statutory Undertakers, Highway or Roads Authority and Others

- 1.17.5 The written approval of the *Contract Administrator* shall be obtained prior to connections to or works affecting any existing apparatus.
- 1.17.6 The plan positions and invert levels of existing chambers and pipes/ducts to which connections are to be made, shall be verified by the *Contractor* before pipe/duct laying commences with any discrepancies notified to the *Contract Administrator*. This is a **Hold Point**.

### 1.25 Quality Assurance and Documentation

- 1.25.1 The Quality Assurance arrangements shall conform to the relevant requirements of BS EN ISO 9001. The systems and procedures which the *Contractor* shall use to ensure that the Works comply with the *Contract* requirements shall be defined in the *Contractor's* Quality Plan for the Works.
- 1.25.2 A Quality Plan for the Works shall be submitted to the *Contract Administrator* for approval prior to commencement of the Works. This is a **Hold Point**. The Quality Plan shall give a description of the Quality System for the Works and shall include the following:

- (i) An outline of the proposed work and programme sequence
- (ii) The structure of the *Contractor's* organisation for the Contract, both on site and at head office, particularly identifying the individuals responsible for site safety, inspection and testing
- (iii) A schedule of the *Contractor's* procedures for ensuring quality of workmanship and materials. These procedures shall be made readily available to the *Contract Administrator* for inspection on request
- (iv) A schedule of Inspection and Test Plans
- (v) The arrangements for the *Contractor's* Quality Assurance auditing, including that for sub-contractors

1.25.3 The prime responsibility for inspection and testing shall rest with the *Contractor*. The inspection or its waiver by the *Contract Administrator* shall not release the *Contractor* of any obligations or responsibilities to carry out the work in accordance with the Contract. The inspection and testing shall be documented such that it is possible to verify that it has been performed. In order to comply with this requirement the *Contractor* shall draw up and operate Inspection and Test Plans for each section of the work. These shall be made readily available to the *Contract Administrator* for inspection on request. The *Contractor* shall develop the Inspection and Test Plans with input from manufacturers as required to reflect specific details of the particular element.

The Inspection and Test Plans shall set out the testing and inspection requirements in the sequence in which they shall be performed and unless agreed otherwise with the *Contract Administrator*, shall include the following:

- (i) **Hold and Notification Points** as defined in TS 3.10.00
- (ii) Submission of Engineering documents required by the Specification
- (iii) Inspection on receipt of materials, during fabrication/construction and on completion stating the identity of the inspector/tester, date, acceptance criteria and acceptability

1.25.5 The *Contractor* is required to give the *Contract Administrator* the minimum period stated in Appendix IX of document TS 3.10.00 for **Hold Points** and **Notification Points**.

1.25.6 The *Contract Administrator* shall be responsible for review and disposition of non-conforming products in accordance with BS EN ISO 9001.

1.25.7 During the course of the Contract, the *Contract Administrator* may monitor the implementation of the Quality Assurance arrangements. Monitoring shall be by surveillance of activities at work locations and/or by formal audits of the adherence of the *Contractor* to the systems and procedures which constitute his Quality Assurance arrangements. The *Contractor* shall provide any facilities, including access, which may be required by the *Contract Administrator* for monitoring activities. The *Contract Administrator* may participate on an agreed basis in the *Contractor's* monitoring of a sub-contractor's Quality Assurance arrangements. Corrective actions shall be agreed and implemented in respect of any deficiencies.

1.25.8 The *Contractor* shall ensure that the Quality Assurance requirements of this Specification shall be followed by any sub-contractor appointed by him under the Contract. The *Contractor* shall assess the sub-contractor's Quality Assurance arrangements prior to his appointment to ensure their compliance with this Specification. The *Contractor* shall provide Quality Plans for all works that shall be carried out by sub-contractors. This is a **Hold Point**.

## 1.26 Method Statements

1.26.1 The *Contractor* shall submit to the *Contract Administrator*, method statements for all works affecting the Site and its users. This is a **Hold Point**.

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## **1.27 Workmanship - General**

- 1.27.1 In addition to the requirements of the *Specification*, materials shall be fabricated, installed, erected and treated in accordance with the manufacturer's instructions and where applicable, European, British and International Standards. The *Contractor* shall submit the manufacturer's instructions to the *Contract Administrator*. This is a **Hold Point**.
- 1.27.2 No damaged or non-compliant materials shall be incorporated in the works without the approval of the *Contract Administrator*. This is a **Hold Point**.
- 1.27.3 Construction works shall be protected to avoid harmful effects of weather, mechanical damage, splashes/droppings and other contact with contaminants as well as other detrimental effects to the aesthetics or final performance requirements. The works shall be cleaned prior to handover.
- 1.27.4 Any conflicts between the manufacturer's instructions and Standards shall be brought to the attention of the *Contract Administrator*. This is a **Hold Point**.

## **1.28 Temporary Works**

- 1.28.1 Any temporary works provided by the *Contractor* shall be totally removed and disposed of unless otherwise agreed by the *Contract Administrator*. This is a **Hold Point**.

## **1.29 Manuals**

- 1.29.1 Prior to commissioning as well as prior to handover but after commissioning, the *Contractor* shall supply the following documents in their final forms:
- (i) Installation, operation and maintenance manual
  - (ii) Commissioning Manual
- 1.29.2 The quantity and format of manuals shall be as specified by the *Contract Administrator*.

## **1.30 Commissioning**

- 1.30.1 The *Contractor* shall undertake commissioning of all elements constructed or installed in conjunction with National Grid representatives. The *Contractor* shall produce detailed, specific Civil Commissioning Test Schedules (CCTS) for elements of the work. Details of the commissioning programme and proposed Civil Commissioning Test Schedules shall be submitted by the *Contractor* to the *Contract Administrator* for approval. This is a **Hold Point**.
- 1.30.2 The *Contractor* shall apply to the *Contract Administrator* for permission to commence commissioning giving a minimum of three full working days notice of his preferred start. Commissioning shall not commence until instructed to do so by the *Contract Administrator*. This is a **Hold Point**.

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## AMENDMENTS RECORD

Issue	Date	Summary of Changes / Reasons	Author(s)	Approved By (Inc. Job Title)
1	09/07/10	First issue. Document numbered to align with CESWI6 and replaces NGTS2.10	Andy Finn Jacobs	Ursula Bryan Asset Policy Manager
2	April 2017	Alignment with CESWI7 and Eurocodes	Gibson Bhunu Policy Development Engineer – Civil Engineering	Stewart Whyte Asset Policy Manager

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