

## **CHAPTER II. GENERAL SPECIFICATIONS**



## TABLE OF CONTENTS

1. GENERAL INFORMATION .....	5
2. BASIS FOR PREPARING THE TECHNICAL SPECIFICATIONS .....	5
3. METHOD STATEMENTS TO BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL .....	18
4. SUBCLAUSE 1.1 OF THE CONDITIONS OF CONTRACT .....	20
5. ADDITIONAL COSTS AND EXTENSION TO THE TIME FOR COMPLETION OF THE WORKS .....	20



## 1. GENERAL INFORMATION

The contract package subject to this procurement process is Package 2 of DQEP.

The contract packaging for the project is as follows:

Table 1: Contract Packaging for the Project

Contract Packaging					Fund	
Items	Jurisdiction	No.	Station	Length	JICA	WB
Civil Works	Danang	PKG1	KM000+000 - KM008+000	8.00 km	●	
	Quang Nam	PKG2	KM008+000 - KM016+880	8.88 km	●	
		PKG3A	KM016+880 - KM018+100	1.22 km	●	
		PKG3B	KM018+100 - KM021+500	3.40 km	●	
		PKG4	KM021+500 - KM032+600	11.10 km	●	
		PKG5	KM032+600 - KM042+000	9.40 km	●	
		PKG6	KM042+000 - KM052+000	10.00 km	●	
		PKG7	KM052+000 - KM065+000	13.00 km	●	
		PKGA1	KM065+000 - KM081+150	16.15 km		●
		PKGA2	KM081+150 - KM099+500	18.35 km		●
	Quang Ngai	PKGA3	KM099+500 - KM110+100	10.60 km		●
		PKGA4	KM110+100 - KM124+700	14.60 km		●
		PKGA5	KM124+700 - KM131+500	6.80 km		●
			KM131+500 - KM139+204	7,704km		●
	Expressway Total			131.50 km		
	Linking road Total			7.704km		
Electrica I/O&M/I TS	All	PKG13	KM000+000 - KM131+500 (thruway)	131.50 km	●	
			KM131+500 - KM139+204 (linking)	7.704km	●	
Traffic Safety/ Lighting		PK14A	KM000+000 - Km065+000	65Km	●	
		PK14B	Km065+000 - KM131+500 (thruway)	66.5Km		●
KM131+500 - Km139+204 (linking)	7.704km					

## 2. BASIS FOR PREPARING THE TECHNICAL SPECIFICATIONS

Wherever reference is made in the Contract to specific standards and codes to be met by materials, Plant and other supplies to be furnished and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be accepted subject to the Engineer's prior review and written approval. Differences between standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's approval. In the event the Engineer determines that such proposed deviations do not ensure substantially equal performance, the Contractor shall comply with the standards specified in the documents.

The Basic Design was approved by MOT under cover of letter reference 1534/QD-BGTVT concerning “DECISION – Approving of Modification of Basic Design – Danang-Quang Ngai Expressway Project dated 5 June 2013.

The Technical Specification is generally based on the Standards approved by Ministry of Transport.

The approved Standards, to be applied to the Works, were approved by the MOT in Decision No. 362/QD-BGTVT dated on 20 February 2009 and Decision No. 727/QD-BGTVT dated 6 April 2012 and are listed below:

Technical Standards to be Applied to the Works according to Decision No. 362/QD-BGTVT dated 20 February 2009

No.	Standards to be applied	Code	Status
I.	TO BE APPLIED FOR SURVEY		
1	Specification for measuring and drawing	96TCN43-1990	
2	Specification for drawing topographical maps	96TCN42-1990	
3	Geodesy works in engineering - general	TCXDVN309-	
4	Specification for measuring and analyzing GPS	TCXDVN364-	
5	Specification for boring survey	22TCN259-2000	
6	Specification for geotechnical investigation of	22TCN260-2000	
7	Specification for surveying and designing the highway embankment on the soft ground	22TCN262-2000	
8	Specification for surveying highway	22TCN263-2000	
9	Specification for geotechnical investigation and design solution for roads in land sliding areas	22TCN171-1987	
10	Specification for Static Penetration Test (CPT	22TCN317-2004	
11	Specification for site vane shear test	22TCN355-2006	
12	Construction soil site testing method SPT	TCXD226-1999	
13	Construction soil-physic-mechanical test	TCVN4195-1995	Superseded
14	Surveying works for design and construction of	20TCN160-1987	
15	Construction soil exploiting packing	TCVN2683-1991	Superseded
16	Specification for checking bridge on highway	22TCN243-1998	
17	Specification for testing elastic modulus of the pavement by deflection measurement	22TCN251-1998	Superseded
18	Specification for testing and evaluating	22TCN335-2006	
19	Specification for analyzing water used in	22TCN61-1984	
20	Specification for geotechnical investigation for	TCXDVN366-	

No.	Standards to be applied	Code	Status
II.	TO BE APPLIED FOR DESIGN		
1	Expressway highway design requirements	TCVN5729-1997	
2	Highway Design Requirements	TCVN4054-2005	
3	Standard for designing highway (junctions)	22 TCN273-2001	
4	Soft soil treatment with wick drains	22TCN244-1998	
5	Geotextile applying for embankment of soft soil	22TCN248-1998*	
6	Specification for designing of flexible pavement	22TCN211-2006	
7	Specification for rigid pavement design	22TCN223-1995	
8	Standard of bridge design	22TCN272-2005	
9	Standard for design culverts with limit state (applying for culvert design and auxiliaries)	22TCN18-1979	
10	Pile foundation design standard	TCXD205-1998	
11	PC concrete nail T13 T15 & D13 D15	22TCN267-2000	
12	Rubber bearings	AASHTO M251-06-UL, ASTM	
13	Standard for expansion joints	AASHTO M297-	
14	Specification for design of bridges and	22TCN200-1989	
15	Calculation of flood flow features	22TCN220-1995	
16	Transport works in earthquake zone design	22TCN221-1995	
17	Regulations of traffic signals on highway	22TCN237-2001*	Superseded
18	Guiding board on expressway	22TCN331-2005*	
19	Drainage design standard	22TCN51-1984	
20	Standard for design lighting of roads and	TCXDVN259-	
21	Lighting outdoor of public works and infrastructure in urban construction design standards	TCXDVN333-2005	
22	Specification for environment impact assessment in preparing FS and design for transport works	22TCN242-1998	
23	Design earthquake bearing facilities	TCXDVN375-	
24	Concrete and reinforced concrete	TCXDVN356-	
III.	TO BE APPLIED FOR CONSTRUCTION AND ACCEPTANCE		
1	Block bricks, construction and acceptance	TCVN 4085-1985	

No.	Standards to be applied	Code	Status
2	Specification for construction and acceptance of	22TCN 266-2000	
3	Specification for testing CBR for crush stones	22 TCN 332-2006	
4	Specification for compaction of crushed stone	22 TCN 333-2006	
5	Specification construction and acceptance of crushed stone layers in highway pavement	22 TCN 334-2006	Superseded
6	Specification for checking compaction of	22 TCN 346-2006	
7	Specification for measuring the smoothness of	22 TCN 16-1979	Superseded
8	Specification for checking and evaluating	22 TCN 277-2001	Superseded
9	Specification for testing roughness of pavement	22 TCN 278-2001	Superseded
10	Painting traffic signals in liquidity on concrete cement pavement and asphalt pavement	22 TCN 282-285	
11	Specification for checking compaction of embankment in transport works	22 TCN 02-1971 and Decision 4313/2001/QD-	
12	Construction soil - construction and acceptance	TCVN 4447-1987	
13	Specification for construction and acceptance of	22 TCN 249-1998	Superseded
14	Standard for construction and acceptance of	22 TCN 271-2001	Superseded
15	Concrete drainage pipe	TCXD VN	Superseded
16	Aggregates used for concrete and mortar	TCVN 7572:2006	
17	Specification for taking samples of asphalt	22 TCN 321-2006	
18	Specification for testing AC	22 TCN 62-1984	
19	Dense asphalt - technical requirements and	22 TCN 279-2001	Superseded
20	Specification for testing mineral powder used	22 TCN 58-1984	
21	Bored piles - specification for construction and	TCXDVN 326-2004	Superseded
22	Bored piles - sonic logging method to test the homogeneity of concrete	TCXDVN 358-2005	Superseded
23	Portland cement - methods of determining physico-mechanical criteria	TCVN -4029-1985 TCVN-4030-2003 TCVN-4031-1985 TCVN-4032-1985 TCVN-6016-1995 TCVN-6017-1995	Superseded
24	Portland cement - technical requirements	TCVN-2682-1999	Superseded
25	Mixed Portland cement - technical requirements	TCVN-6260-1997	



No.	Standards to be applied	Code	Status
26	Aggregates for concrete and mortar - technical	TCVN-7570-2006	
27	Water for concrete and mortar - technical requirements	TCVN 4506 - 1987	Superseded
28	Heavy concrete - method testing physio-mechanical criteria	TCVN 3105-3120:1993	
29	Heavy concrete - method of nondestructive sonic logging and rebound hammer to check the compressive strength	TCXD 171-1989	Superseded
30	Heavy concrete - Method of testing cylinder strength and elastic modulus of static compression	TCVN 5726-1993	
31	Specification for construction and acceptance of	22 TCN 247-1998	
32	Specification for construction and acceptance asphalt pavement using polymer asphalt.	22 TCN 356-2006	
33	Specification for construction and acceptance asphalt pavement with high roughness cover	22 TCN 345-2006	
34	Temporary specification for construction and acceptance of super thin cover layer for roughness n highway	QD 3287/QD-BGTVT of 29 Oct 2008	
35	Finishing works - construction and acceptance	TCXD 303-2006	Superseded
36	Mass concrete, specification of construction and	TCXDVN 305-2004	Superseded
37	Bored pile - construction and acceptance	TCXDVN 326-2004	
38	Specification of construction and acceptance of	22TCN 236-1997	
39	Specification for testing bridges	22TCN 170-1987	
40	Specification of testing density by sand pouring	22TCN 13-1979	
41	Specification of construction and acceptance of	22TCN 252-1998	
42	Technical requirements and testing method for	22TCN 319-2004	
43	Acceptance of construction quality	TCXDVN 371-2006	

Technical Standards to be applied to the Works according to Decision No. 727/QD-BGTVT dated 6 April 2012

No.	Standards to be applied	Code	Status
I.	TO BE APPLIED FOR SURVEY		
1	Practical standard for soil and other reinforced materials	BS8006	

No.	Standards to be applied	Code	Status
2	Paint for traffic signal: Solvent road marking paint – Specification and testing method	22TCN 283-2002	Superseded
II.	TO BE APPLIED FOR DESIGN		
3	Hazardous solid waste landfills – Design standard	TCXDVN320-2004	
4	Load and Effect	TCVN 2737-1995	
5	Steel bridges and steel structures	TCXDVN 338-2005	
6	Guidance for determination of dynamic component of the wind load under TCVN 2737-1995	TCXD 229-1999	
7	Standard for railway tunnel and highway tunnel	TCVN4527-1988	
8	Tunnel Design Standard: Mountain Tunnel	JSC 2007	
9	Navigation clearance requirements of rivers	TCVN 5664-2009	
10	Regulation on navigation aids of Vietnam inland waterways	22TCN 269-2000	
11	Drainage & Sewerage – External Network & Facilities – Design Standard	TCVN7957-2008	
12	Standard for design of rural roads	22TCN 210-1992	
13	Office buildings – Design standard	TCVN 4601-1988	
14	Dwellings – Design standard	TCVN 353-2004	
IV.	TO BE APPLIED FOR CONSTRUCTION AND ACCEPTANCE		
15	Specification for High-Strength Bolts for Structural Steel Joints	AASHTO M164	
16	Standard for construction and acceptance of cement consolidated stones sub- grade in highway pavement structure	22TCN 245-1998	Superseded
17	Cement - Classification	TCVN 5439-2004	
18	Mortar – Technical specifications	TCVN 4314-2003	
19	Concrete - Requirement for natural moist curing	TCXDVN 391-2007	Superseded
20	Chemical admixtures for concrete	TCXDVN 325-2004	
21	Steel scaffolding	TCVN 6052-1995	
22	Scaffolding-Safety Requirements	TCXDVN 296-2004	

No.	Standards to be applied	Code	Status
23	Pre-cast reinforced concrete box culvert technical requirements and testing method	TCXDVN 392-2007	Superseded
24	Monolithic concrete and reinforced concrete structures – Codes for construction, check and acceptance	TCVN 4453-1995	
25	Specification for underwater concrete construction by cavity-fill method	22TCN 209-1992	
26	Precast pre-stressed concrete products - Technical requirements and acceptance	TCXDVN 389-2007	Superseded
27	Assembled Concrete and reinforced Concrete Structures - Code of Practice for construction and acceptance	TCXDVN 390-2007	Superseded
28	Concrete and Reinforced concrete structures-Guide on technical measures for prevention of cracks occurred under the action of local hot humid climate	TCXDVN 313-2004	Superseded
29	Welding specifications for steel bridge and steel structure	22TCN 280-01	
30	Pile driving and static jacking works - Standard for construction, check and acceptance	TCVN 286-2003	
31	Protection against corrosion in construction. Concrete and reinforced concrete structures. Classification of corrosive medium	TCVN 3994-1985	
32	Specification for construction and acceptance of paint used for steel bridge and steel structures	22TC 253-98	Superseded
33	Piles - Standard test method for piles under axial compressive load	TCXDVN 269-2002	Superseded
34	Foundation Piles - Method of detection of defects by dynamic low-strain testing	TCXDVN 359-2005	
35	Standard Test Method for High-Strain Dynamic Testing of Deep Foundations	ASTM D4945	
36	Standard Specification for Steel Strand Uncoated Seven-Wire for Pre-stressed Concrete	ASTM A416	
37	Standard Specification for Uncoated High-Strength Steel Bars for Pre-stressing Concrete	ASTM A722	
38	Steel for reinforcement of concrete	TCVN 1651-2008	
39	Paint for construction – Classification	TCXDVN 321-2004	

No.	Standards to be applied	Code	Status
40	Paint used for steel bridges and steel structures - Technical requirements and testing method	22TCN 235-97	Superseded
41	Paint and metal protective coating	22TCN 300-02	Superseded
42	Bridge construction specification	TCCS 02:2010/TCDBVN	
43	Specification for construction and acceptance of pavement structure by natural grading	22TCN 304-2003	
<b>TO BE APPLIED FOR ELECTRICAL SURVEY and DESIGN</b>			
44	Standard for electric system- electric line system	11TCN 18,19 & 20-2006	
45	Specification for lighting	TCVN 259-2001	
<b>Lighting design standard</b>			
<b>V.</b>	<b>TO BE APPLIED FOR BUILDING SURVEY and DESIGN</b>		
46	Toll station	TCCS 01-2008/VRA	
47	Electrical Installation for Buildings - Protection for Safety	TCXDVN 394-2007	
48	Electric distribution network in dwellings and public building – Design standard	TCXD 27-1991	Superseded
49	Installation of electric wire in dwellings and public buildings – Design standard	TCXD 25-1991	Superseded
50	Protection of Structures Against Lightning - Guidance for design, inspection and maintenance	TCXDVN 46-2007	Superseded
<b>VI.</b>	<b>TO BE APPLIED FOR OPERATION and MAINTENANCE (O&amp;M)</b>		
51	Concrete and Reinforced concrete Structures - Guide on Maintenance	TCXDVN 318-2004	Superseded

Subsequent to MOT in Decision No. 362/QD-BGTVT dated on 20 February 2009 and Decision No. 727/QD-BGTVT dated 6 April 2012 the Technical Standards to be applied to the Works were updated and extended in MOT to Decision No. 994/QD-BGTVT dated 16 April 2013. These updates and additional Standards are summarized in the Tables below:

Technical Standards to be applied to the Works according to Decision No. 994/QD-BGTVT dated 16 April 2013

Updated Standards:

No	Technical Standard	Standards approved in Decision No.362/QD-BGTVT dated 20/2/2009 and No. 727/QD-BGTVT dated 6/4/2013 by MOT	Updated/Approved Standards
1	Asphalt Concrete Pavement – Specification for Construction and Acceptance	22TCN 249-1998	TCVN 8819:2011
2	Graded Aggregate Base and Subbase Pavement - Specification for Construction and Acceptance	22TCN 334-2006	TCVN 8859:2011
3	Bituminous Surface Treatment – Specification for Construction and Acceptance	22TCN 271-2001	TCVN 8863:2011
4	Standard Test Method for Measuring Road Pavement Surface Roughness Using a 3m Straight Edge	22TCN 16-1979	TCVN 8864:2011
5	Method for Measuring and Assessment Roughness by International Roughness Index (IRI)	22TCN 277-2001	TCVN 8865:2011
6	Standard Test Method for Measuring Pavement Macrottexture Depth Using a Volumetric Technique	22TCN 278-2001	TCVN 8866:2011
7	Flexible Pavement – Standard Test Method for Determination of Elastic Modulus of Pavement Structure Using Benkelman beam	22TCN 251-1998	TCVN 8867:2011
8	National Technical Regulation on Road Signs and Signals	22TCN 237-2001	QCVN 41:2012/BGTVT

No	Technical Standard	Standards approved in Decision No.362/QD-BGTVT dated 20/2/2009 and No. 727/QD-BGTVT dated 6/4/2013 by MOT	Updated/Approved Standards
9	Soil - Methods laboratory of determination of specific weight	TCVN4195:1995	TCVN4195:2012
10	Soil - Methods laboratory of determination of volume weight	TCVN4202:1995	TCVN4202:2012
11	Soils - Sampling, packing, transportation and curing of samples	TCVN2683:1991	TCVN2683:2012
12	Bored Piles- Construction, check and acceptance	TCXDVN 326:2004	TCVN 9395:2012
13	Bored piles – Determination of homogeneity of concrete - sonic pulse method	TCXDVN 358:2005	TCVN 9396:2012
14	Piles - standard test method in situ for piles under axial compressive load	TCXDVN 269:2002	TCVN 9393:2012
15	Cement Treated Aggregate Base for Road Pavement – Specification for Construction and Acceptance	22TCN 245-1998	TCVN 8858:2011
16	Painting Traffic signal – Road marking by thermoplastic reflective material – Specification, testing method, construction and acceptance.	22TCN 283-2002	TCVN 8791:2011
17	Painting for protection of steel structure – Specification and testing method	22TCN 235-97	TCVN8789:2011
18	Painting for protection of steel structure – Construction and acceptance	22TCN 253-98	TCVN8790:2011
19	Paint and metal covering – Testing method in natural conditions	22TCN 300-02	TCVN8785-1:2011 TCVN8785-14:2011
20	Concrete structure and precast reinforced concrete	TCXDVN 390:2007	TCVN 9115:2012
21	Drainage reinforced concrete culvert pipe	TCXDVN 372:2006	TCVN 9113:2012

No	Technical Standard	Standards approved in Decision No.362/QD-BGTVT dated 20/2/2009 and No. 727/QD-BGTVT dated 6/4/2013 by MOT	Updated/Approved Standards
22	Reinforced concrete box culvert	TCXDVN 392:2007	TCVN 9116:2012
23	Product of pre-prestressed concrete – Technical specification and acceptance	TCXDVN 389:2007	TCVN 9114:2012
24	Cement – Testing method – Determination of durability	TCVN 6016:1995	TCVN 6016:2001
25	Portland cements – Specifications	TCVN 2682 – 1999	TCVN 2682 - 2009
26	Portland blended cements – Specifications	TCVN 6260 – 1997	TCVN 6260 - 2009
27	Water for mixing concrete and mortar – Technical Specification	TCVN 4506:1987	TCVN 4506:2012
28	Heavy concrete – Nondestructive method by using both ultrasonic counter and rebound hammer for determining compressive strength	TCXD 171-1989	TCVN 9335:2012
29	The finalization works in construction – Construction and acceptance	TCXD 303-2006	TCVN 9397-2:2012 TCVN 9397-3:2012
30	Mass concrete – Specification for construction and acceptance	TCXDVN 305-2004	TCVN 9395-2012
31	Bitumen – Testing method for physico-mechanical characteristic	22TCN 279-01	TCVN 7493:2005 ÷TCVN 7405:2005
32	Bitumen –Method for sampling	22TCN 231-96	TCVN 7494:2005
33	Installation of conduct line in house and public works – Design specification	TCXD25:1991	TCVN 9207:2012
34	Installation of electric facilities in house and public works – Design specification	TCXD27:1991	TCVN 9206:2012
35	Anti-lightning for civil works – Instruction of design, inspection and maintenance for its system	TCXDVN 46:2007	TCVN 9385:2012

No	Technical Standard	Standards approved in Decision No.362/QD-BGTVT dated 20/2/2009 and No. 727/QD-BGTVT dated 6/4/2013 by MOT	Updated/Approved Standards
36	Chemical admixture for concrete	TCXDVN 325-2004	TCVN 8826:2011
37	Concrete – Requirements on natural moisture curing	TCXDVN 391:2007	TCVN 8828:2011
38	Structure of concrete and reinforced concrete – Technical instruction on preventing cracks under impact of hot-moist climate	TCXDVN 313:2004	TCVN 9345:2012
39	Structure of concrete and reinforced concrete – Instruction on maintenance works.	TCXDVN 318:2004	TCVN 9343

New Standards:

No	Technical Standard	Code
1	Standard test method for CBR (California Bearing Ratio) of soils and unbound roadbase in place	TCVN 8821-2011
2	Steel for the reinforcement of concrete – Threaded coupler splice	TCVN 8163:2009
3	Water-stop membrane used in construction joints - Requires in using	TCXDVN 290:2002
4	Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink)	ASTM C1107
5	Materials, Equipment, and Procedures for Mixing Standard Compounds and Preparing Standard Vulcanized Sheets - Evaluation of Rubber for Bridge bearing.	ASTM D3182÷D3190; D3192
6	Reflective membrane for road signalling	TCVN 7887:2008
7	Temporary regulation on normal cement concrete formation with joint in construction of traffic works.	Decision No.3230/QD-BGTVT dated 14/12/2012.
8	Temporary regulation on construction engineering and acceptance for cement concrete pavement in construction of	Decision No.1951/QD-BGTVT dated



No	Technical Standard	Code
	traffic works.	17/08/2012.
9	Flexible pavement – Determination of elastic modul of ground base and pavement structure courses by using hard steel plates	TCVN 8861:2001
10	Water supply – Network of pipe and structures – Specification for design	TCXDVN 33:2006
11	National technical codes on safety for fire for house and structures	QCVN 06:2010/BXD
12	Regulations on earthing connection and neutral connection for electric facilities	TCVN 4756:1989
13	Geotextile fabric – Testing method	TCVN 8871-1:2011- TCVN 8871-6:2011
14	Painting for traffic signal	TCVN 8786:2011 TCVN 8788:2011
15	Structure of stone brick – Regulations on construction and acceptance	TCVN 4085:2011
16	Asphalt concrete – Testing method	TCVN 8860-1:2011- TCVN 8860-12:2011
17	Hot asphalt concrete mixing plant – Specification and checking method	22TCN 255-99
18	Pavement for highway – Construction and acceptance	TCVN 9436-2012
19	Polymer Modified Cationic Emulsified Asphalt	TCVN 8816:2011
20	Cationic Emulsified Asphalt	TCVN 8817-1:2011 - TCVN 8817-15:2011
21	Cut-back asphalt	TCVN 8818-1:2011 - TCVN 8818-5:2011

The Contractor shall use the most current Vietnamese Standards available and should be aware that most of the Vietnamese Standards are in Vietnamese language only. The Contractor shall arrange at his own risk and cost for translation of these standards.

The Contractor shall provide an English translation of relevant section(s) of the Vietnamese Standards, which he proposes to use, for Engineer's information. Where no suitable Vietnamese Standard is available, the Contractor shall use the relevant international Standards. Application of any international Standards in replacement of

the Vietnamese Standards shall be subject to the Engineer's and the Employer approval.

### **3. METHOD STATEMENTS TO BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL**

A method statement is a document detailing how a particular part or parts of the construction process (including Temporary Works) will be carried out. This statement shall describe how the construction/installation/preparatory work will be carried out and identify the risks and dangers associated with that particular part of the Works, the methods of control and the management of safety.

Method statements shall be stand alone documents which, inter alia, set out:

The basic contract/job information, contract/job detail, i.e. name/number, etc.

The contract/job details including; details of company performing the work, intended start and finish dates, nature of the work, number of operatives, equipment, names and designations of supervisors and person responsible for safety, etc.

Method of work; which describes how it will be carried out, location, subcontractors affected by the work, risks and emergency procedures, etc..

Specific safety issues.

The Contractor shall submit method statements for the work described in the Specification Sections and/or set out below for approval of the Engineer. Certain Specification Sections may require the production of several separate method statements. The precise split of the work between method statements will be instructed by the Engineer on Site. The requirement for the production of method statements is generally identified in the applicable Specification Section and is therefore measured and paid for under that Specification Section. In the event a method statement is only identified in this Chapter then the production of the same shall be deemed to be Inherently Paid Work. However, if in the opinion of the Engineer either the nature of the work or the competence of the Contractor or the approach adopted by the Contractor require the production of method statements, which have not been specifically identified as required by the Specification then the costs arising from the production of such additional method statements shall be deemed to be Inherently Paid Work and not subject to separate payment.

The Contractor shall identify in his Program the dates for the submission of the method statements and shall submit these in due time to allow the Engineer at least twenty eight days from the date of receipt to approve and return the same. The Contractor shall make allowance in the Contract Price and in the Program for submitting and resubmitting method statements as many times as is required to obtain the Engineer's approval.

Section No.	Section Title
01700	Environmental Control and Protection
02100	Clearing & Grubbing
02200	Demolition and Removal of Existing Structures & Obstructions
02300	Protection of Existing Utilities
03050	Removal of Topsoil
03100	Common Soil Excavation
03150	Rock Blasting
03200	Structural Excavation
03300	Borrow Material
03400	Embankment
03500	Softsoil Improvement Measure
04100	Precast RC Pipe Culverts & Box Culverts
04120	Improvement and Relocation of Existing Irrigation Channels
04200	Ditches
04300	Catch Basins, Manholes, Inlets and Outlets
04400	Mortared Stonework
05100	Subbase and Base Courses
05200	Asphalt Treated Base Course
05300	Cement Treated Base Course
06100	Prime Coat & Tack Coat
06200	Asphalt Concrete Binder and Surface Courses
06500	Portland Cement Concrete Pavement
07100	Concrete & Concrete Structures (split into concrete production, substructure and superstructure work)
07250	Borings for Pile Bearing Capacity
07300	Bored Pile
07400	Prestressed Concrete
07500	Reinforcing Steel
07700	Waterproofing

07950	Cast Insitu Box Culverts
08400	Bridge Drainage
12200	Sodding, Grassing, and Planting
12300	Topsoiling
12400	Slope Protection
12600	Curb, Gutter & Median

#### **4. SUBCLAUSE 1.1 OF THE CONDITIONS OF CONTRACT**

The Contractor's attention is drawn to the words and expressions in subclause 1.1 of the Conditions of Contract. Where these words and expressions appear in the Specification the meaning and intent of those words or expressions shall be the same as defined in subclause 1.1 of the Conditions of Contract.

#### **5. ADDITIONAL COSTS AND EXTENSION TO THE TIME FOR COMPLETION OF THE WORKS**

The Contractor's attention is drawn to the fact that there is no entitlement to be paid additional costs or to receive extensions to the Time for Completion of the Works for the work required to bring any part or parts the Works, which are not in accordance with the Drawings or Specification or Standards, into a condition which fulfils the Drawings or the Specification or Standards required by the Contract. For the avoidance of doubt no payment will be made for rectifying defective Works nor will the Time for Completion be extended to cover the time taken to rectifying the Works or parts thereof. This applies to every part of the Works.