01.	Introduction

02. Use and Maintenance of the Site

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- 03. Site Access and Entry onto the Site
- 04. Protection
- 05. Interference
- 06. Project Meetings
- 07. Submittals
- 08. Quality Assurance
- 09. Materials
- 10. Occupational Health and Safety
- 11. Engineer's Site Facilities
- 12. Contractor's Site Facilities
- 13. Setting Out of the Works
- 14. Temporary Works and Equipment
- 15. Temporary Controls
- 16. Traffic Diversions
- 17. Project Co-ordination
- 18. Other Contractors
- 19. Regulatory Requirements
- 20. Clearance of the Site
- 21. Inspection and Handover Procedures
- 22. New Technologies and Innovations

2- Building Demolition

- 01. General
- 02. Building Demolition
- 03. Hazardous Materials

3- Ground Invest Ground Investigation igation

- 01. GENERAL
- 02. Boreholes
- 03. Pits and Trenches
- 04. Soil Sampling
- 05. In-Situ Testing, Instrumentation and Monitoring
- 06. Laboratory Testing

4- Pilling

- 01. General Requirements for Piling Work
- 02. General Requirements for Concrete Piles
- 03. Precast Reinforced and Prestressed Concrete Piles
- 04. Precast Reinforced Concrete Segmental Piles
- 05. Bored Cast-In-Place Piles
- 06. Bored Piles Constructed Using Continuous Flight Augers and Concrete or Grout Injection through Hollow Auger Stems
- 07. Driven Cast-In-Place Piles
- 08. Steel Piles



- 09. Steel Sheet Piling
- 10. Static Load Testing of Piles
- 11. Alternative Methods for Testing Piles
- 12. Reduction of Friction on Piles

5- Concrete

- 01. General
- 02. Aggregates
- 03. Cement
- 04. Water
- 05. Admixtures
- 06. Property Requirements
- 07. Batching and Mixing
- 08. Transportation and Placing of Concrete
- 09. Formwork
- 10. Curing
- 11. Reinforcement
- 12. Joints
- 13. Inspection and Testing of Hardened Concrete
- 14. Protective Treatments for Concrete
- 15. Hot Weather Concreting
- 16. Miscellaneous
- 17. Structural Precast Concrete
- 18. Prestressed Concrete
- 19. Testing of Water Retaining Structures

6- Road works

- 01. General
- 02. Site Clearance
- 03. Earthworks
- 04. Unbound Pavement Materials
- 05. Asphalt Works
- 06. Concrete Road Pavements
- 07. Vehicle Crash Barriers
- 08. Kerbs, Footways and Paved Areas
- 09. Fencing
- 10. Traffic Signs, Markings and Studs
- 11. Works in Relation to Services
- 12. Road Lighting
- 13. Traffic Signals
- 14. Road Drainage
- 15. Geosynthetics
- 16. Miscellaneous

7- Green Constructions

- 01. Miscellaneous
- 02. Qatar Sustainability Assessment System QSAS



- 03. Energy
- 04. Water
- 05. Indoor Environment
- 06. Cultural & Economic Value

8- Sewerage

- 01. General
- 02. Earthworks
- 03. Pipes and Fittings Materials
- 04. Pipeline Installation
- 05. Valves, Penstocks and Appurtenances
- 06. Metal Works
- 07. Glass Reinforced Plastics
- 08. Painting and Protective Coatings
- 09. Trenchless Pipeline Construction
- 10. Pipeline Cleaning and Inspection Survey
- 11. Sewer Rehabilitation
- 12. Vacuum Sewerage System

9- Mechanical and Electrical Equipment

- 01. General
- 02. Submersible Pumps
- 03. Centrifugal Pumps
- 04. Sump Pumps
- 05. Archimedian Screw Pumps
- 06. Surge Control System
- 07. Lifting Equipment
- 08. Electric and Pneumatic Actuators
- 09. Odour Control Equipment Carbon Type
- 10. Odour Control Equipment Scrubber Type
- 11. Screening Equipment
- 12. Grit Removal Equipment
- 13. Aeration Equipment
- 14. Air Blowers & Compressors
- 15. Settlement Tank Equipment
- 16. Tertiary Treatment Granular Filters
- 17. Sludge Thickening & Dewatering Equipment
- 18. Mixers & Stirrers
- 19. Chlorination
- 20. Washwater Systems
- 21. Miscellaneous Equipment
- 22. Ventilation Systems

10- Instruction, Control and Automation

- 01. General
- 02. Telemetry/SCADA



- 03. Primary Elements
- 04. Panel Mounted and Miscellaneous Instruments
- 05. Control Panels and Control Room Hardware

11- Health and Safety

- 1.1 QATAR LEGISLATION AND MANAGEMENT
- 1.2 OCCUPATIONAL HEALTH AND HYGIENE
- 1.3 WORKING AT HEIGHTS
- 1.4 SAFE USE OF PLANT EQUIPMENT
- 1.5 OTHER HAZARDOUS ACTIVITIES
- 1.6 HUMAN FACTORS
- 1.7 FIRE AND FLAMMABLE SUBSTANCES
- 1.8 MISCELLANEOUS
- 2.1 SAFETY, HEALTH AND ENVIRONMENT (SHE) MANAGEMENT SYSTEM
- 2.2 SAFETY, HEALTH AND ENVIRONMENT PROCEDURAL AUDIT CHECKLISTS
- 2.3.1 Risk Identification and Management
- 2.3.2 COSHH (CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH)
- 2.3.3 SAFE WORKING IN THE VICINITY OF BURIED AND OVERHEAD SERVICES
- 2.3.4 ELECTRICITY AT WORK
- 2.3.5 POWERED WORK EQUIPMENT PROCEDURE
- 2.3.6 SAFETY, HEALTH AND ENVIRONMENTAL TRAINING FOR ALLEMPLOYEES, NEWLY ASSIGNED EMPLOYEES, PROMOTEES AND SUB-CONTRACTOR PERSONNEL
- 2.3.7 CONTRACTORS INITIAL SAFETY, HEALTH AND ENVIRONMENTAL MEETING
- 2.3.8 THE REPORT AND INVESTIGATION OF ACCIDENTS AND INCIDENTS
- 2.3.9 PERSONAL PROTECTIVE EQUIPMENT (PPE)
- 2.3.10 THE SAFE USE OF CRANES & OTHER LIFTING APPLIANCES (EXCAVATORS, TELE HANDLERS AND LORRY LOADERS)
- 2.3.11 PERMIT TO WORK SYSTEMS
- 2.3.12 CONTROL OF WORKING AT HEIGHTS
- 2.3.13 FIRE PRECAUTIONS DURING CONSTRUCTION WORKS IN BUILDINGS
- 2.3.14 ASBESTOS
- 2.3.15 ENVIRONMENTAL PROTECTION
- 2.3.16 LEARNING EVENT REPORTING
- 2.4 RISK ASSESSMENT GUIDES

12- Earthworks Related to Buildings

- 01. GENERAL
- 02. EXCAVATION
- 03. FILLING
- 04. UTILITY TRENCHES
- 05. INSTALLATION OF PROTECTIVE MEMBRANES

13- Masonry

- 01. GENERAL
- 02. MORTAR AND GROUT
- 03. ACCESSORIES
- 04. UNIT MASONRY



05. MASONRY LAYING

14- Roofing

- 01. GENERAL
- 02. MEMBRANE ROOFING
- 03. METAL AND PLASTIC ROOFING
- 04. ROOF AND DECK INSULATION
- 05. GENERA

15- Thermal Insulation of Building

- 01. GENERAL
- 02. BUILDING INSULATION
- 03. COLD STORES

16- Structural Steelworks

- 01. GENERAL
- 02. MATERIALS
- 03. DRAWINGS
- 04. FABRICATION
- 05. WELDING
- 06. BOLTING
- 07. ACCURACY OF FABRICATION
- 08. ERECTION
- 09. ACCURACY OF ERECTED STEELWORK
- 10. PROTECTIVE TREATMENT

17- Metalwork

- 01. GENERAL
- 02. MATERIAL TYPES AND FINISHES
- 03. METAL DOORS AND WINDOWS
- 04. ARCHITECTURAL METAL WORK
- 05. LIGHT METAL SUPPORT AND CLADDING SUPPORT
- 06. WORKMANSHIP

18- Carpentry, Joinery and Ironmongery

- 01. GENERAL
- 02. WOOD TREATMENT
- 03. STRUCTURAL TIMBER
- 04. ARCHITECTURAL TIMBER
- 05. JOINERY
- 06. FASTENERS AND ADHESIVES
- 07. IRONMONGERY

19- Plumbing Work

- 01. GENERAL
- 02. WATER DISTRIBUTION



- 03. PLUMBING PIPEWORK IN TRENCHES
- 04. COLD WATER STORAGE
- 05. HOT WATER STORAGE
- 06. COMMISSIONING OF SYSTEMS
- 07. PLUMBING FOR GASES

20- Drainage Works for Buildings

- 01. GENERAL
- 02. INTERNAL DRAINAGE WORKS
- 03. EXTERNAL DRAINAGE WORKS
- 04. DRAINAGE PIPES IN TRENCHES
- 05. STRUCTURES RELATED TO DRAINAGE WORK
- 06. SURFACE WATER DRAINAGE
- 07. COMMISSIONING OF SYSTEMS

21- Electrical Works

- 01. GENERAL PROVISIONS FOR ELECTRICAL INSTALLATION
- 02. MV FACTORY BUILT ASSEMBLIES (FBA'S)
- 03. PROTECTIVE DEVICES
- 04. MOTOR STARTERS
- 05. VARIABLE SPEED CONTROLLERS
- CABLES AND SMALL WIRING
- 07. CONDUITS AND CONDUIT BOXES
- 08. TRUNKING
- 09. CABLE TRAYS
- 10. WIRING ACCESSORIES AND GENERAL POWER
- 11. LIGHT FITTINGS
- 12. EMERGENCY LIGHTING
- 13. TELEPHONE INSTALLATIONS
- 14. STRUCTURED CABLING SYSTEMS
- 15. ELECTRIC MOTORS
- 16. POWER FACTOR CORRECTION CAPACITORS
- 17. STANDBY DIESEL GENERATOR SET
- 18. UNINTERRUPTIBLE POWER SUPPLY SYSTEMS
- 19. SOUND AND CALL SYSTEMS
- 20. ELEVATORS/ESCALATORS
- 21. LIGHTNING PROTECTION
- 22. EARTHING AND BONDING
- 23. INSPECTION AND TESTING
- 24. DOCUMENTATION FORMAT
- 25. ELECTRICAL IDENTIFICATIONS
- 26. ELECTROMAGNETIC COMPATIBILITY
- 27. BATTERY AND BATTERY CHARGER
- 28. SMALL ENCLOSURES
- 29. UNDERFLOOR DUCTS
- 30. DUCT BANK AND MANHOLES



Contents

- 31. POWER DISTRIBUTION TRANSFORMERS
- 32. 11 KV SWITCHGEAR
- 33. ACTUATORS

22- Air Conditioning, Refrigeration and Ventilation

- 01. GENERAL
- 02. CENTRAL REFRIGERATION & AIR CONDITIONING EQUIPMENT
- 03. UNITARY EQUIPMENT
- 04. AIR HANDLING EQUIPMENT
- 05. CHILLED WATER PIPEWORK
- 06. DUCTWORK AND AIR-SIDE EQUIPMENT
- 07. THERMAL INSULATION
- 08. EXHAUST FANS
- 09. ACCESSORIES

23- Fire Fighting and Fire Fighting System

- 01. GENERAL
- 02. FIRE ALARM AND DETECTION SYSTEMS
- 03. ANALOGUE ADDRESSABLE FIRE ALARM SYSTEM
- 04. FIRE FIGHTING SYSTEM
- 05. TESTING AND COMMISSIONING

24- Finishes to Building

- 01. GENERAL
- 02. LATH AND PLASTER
- 03. DRY LINING (WALLBOARD
- 04. SPECIAL WALL SURFACES
- 05. TILES
- 06. TERRAZZO
- 07. STONE FLOORING
- 08. UNIT MASONRY FLOORING
- 09. FLOOR SCREEDS AND TREATMENTS
- 10. JOINTS, CAULKING AND SEALANTS
- 11. RECESSED DUCT COVERS
- 12. CARPETING
- 13. OTHER FLOOR COVERINGS
- 14. CEILINGS

25- Glass and Glazing

- 01. GENERAL
- 02. GLASS
- 03. WORKMANSHIP
- 04. GLAZED CURTAIN WALLING SYSTEMS

26- Painting and Decorating

01. GENERAL



O2. SURFACE PREPARATION FOR PAINTING
O3. PRIMERS, PAINTS AND COATINGS
O4. DECORATIVE PAPERS AND FABRICS

27- External Works

- 01. GENERAL
- 02. BLOCK PAVED AREAS
- 03. FENCES AND GATES
- 04. FOUNTAINS AND AQUATIC FEATURES
- 05. SITE FURNITURE
- 06. FLAG POLES
- 07. PROTECTIVE OR SHADE COVER SYSTEMS
- 08. PLAY FIELD AND PARK EQUIPMENT
- 09. MISCELLANEOUS OTHER EXTERNAL WORKS

28- Landscaping

- 01. LANDSCAPING PLANTING
- 02. IRRIGATION SYSTEM SPECIFICATIONS
- 03. PLAY EQUIPMENT GENERAL SPECIFICATION