

# Frampton Cotterell Parish Playing Fields, School Road

**Frampton Cotterell** 

**Bristol BS36 2DA** 

**Tender Document: Employers Requirements** 

The installation of new electrical service supply for floodlighting

Prepared by:-

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Issued by:-

**Frampton Cotterell Parish Council** The Brockeridge Centre **Woodend Road Frampton Cotterell** Bristol. BS36 2LQ2LQ

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## **SECTION 1.0 GENERAL CONTRACT CONDITIONS AND PARTICULARS**

#### 1.1 THE PROJECT

Name and Nature: Provision of new electrical service supply for floodlighting including cabling within existing underground ducting, connection to existing incoming supply, connection to existing static columns and fixing and connection of new underground socket supply positions within existing chambers

Location: Frampton Cotterell Parish Playing Fields, School Road, Frampton Cotterell, Bristol BS36

2DA

**Timescale for construction work:** Completion before 30<sup>th</sup> September 2021.

## 1.2 EMPLOYER (CLIENT)

Name: Frampton Cotterell Parish Council

Address: The Brockeridge Centre, Woodend Road, Frampton Cotterell, Bristol BS36 2LQ.

Contact: Daisy Finniear Telephone: 01454 864442

E-mail: projectofficer@framptoncotterell-pc.gov.uk

### 1.3 CONTRACT ADMINISTRATOR

Name: GLDM

**Contact:** Howard Giddens.

Address: Suite 1, 1 Aubrey Street, Hereford HR4 0BU

Telephone: 07816 226496 Email: howard@gldm.co.uk

## 1.4 CONTRACTOR ROLE AND RESPONSIBILITY

Throughout this document the word 'Contractor' shall read as meaning Electrical Engineering Services Contractor. The Contractor will assume all responsibility for the final preparation and execution of the design and construction project. This document and accompanying drawings represents the minimum acceptable standards / features to be employed in the provision of the identified work. Reference shall be made to the site layout drawings in determining the main features to be included within the design and construction proposals submitted by the Contractor.

The Contractors role and responsibility includes the full design of the electrical service supply and the supply, delivery to site, off-loading, positioning, installation and commissioning of all items of equipment and materials required for the specified works. The provision of all skilled labour and all incidental items necessary for the full completion of the Electrical Services Installation. The completion of all of the specified works ready for handing over to the Employer for use in accordance with the agreed programme.

#### **1.5 INSURANCE**

The following insurances must be held by the contractor.

# CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY

The required level of cover for any one occurrence or series of occurrences arising out of one event:

- Not less than: £5 million.

## PROFESSIONAL INDEMNITY INSURANCE

Provide and maintain insurance in respect of Contractor Designed Works:

Level of cover: Relates to claims or series of claims arising out of one event.

Period of insurance for these purposes: One year.

Amount of indemnity required: £ 2,000,000.

Expiry of required period of CDP Professional Indemnity insurance cover for the works: 5 years from the date of practical completion of the Works.

**Documentary Evidence:** Before starting work on site submit details, and/ or policies and receipts for the insurances required by the Conditions of Contract. - Format: PDF

#### **INSURANCE CLAIMS**

**Notice:** If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, the contractor shall immediately give notice to the Employer/ Client, the person administering the Contract on their behalf and the Insurers.

**Failure to notify:** Indemnify the Employer/ Client against any loss, which may be caused by failure to give such notice.

#### 1.6 CONTRACTOR COMPETANCE

The Electrical Contractor shall be a full member of the NICEIC/ECA with a broad experience of undertaking projects of a similar nature and value.

**Documentary Evidence:** Before starting work on site submit details, and/ or policies and certificates for the membership required by the Employer. - Format: PDF

## 1.7 DESIGN STANDARDS

The installation shall be installed in accordance with good current practice and shall comply specifically with the following:-

CIBSE Codes, Technical Memoranda and Guides

BS 7671:2018 (18th Edition)

All relevant British Standards/Codes of Practice, whether mentioned or not

Health and Safety at Work Act 1974 and all current amendments

Electrical Supply Regulations 1988 and all current amendments

Electricity at Work Regulations 1989

The Provision and Use of Work Equipment Regulations 1998 (PUWER)

#### 1.8 SITE VISIT AND CONDITIONS

The Contractor shall be deemed to have visited the site during the tender period, acquainting themselves fully with local conditions and to obtain all information required to accurately formulate the tender including existing building / installation details and arrangements and site topography. The Contractor shall liaise with the Employer to gain access to the property. Any apparent discrepancies or queries shall be referred to the Employer for clarification prior to submission of tender.

Notwithstanding any information which the Employer may make available to the contractor, either verbally or by the production of record plans purporting to show the position of existing water, gas,

telecommunications, electricity, service connections, private pipelines etc., it shall be the responsibility of the contractor to satisfy their self by their own independent observations and enquiries as to any omission from or the accuracy or otherwise of the information provided, in so far as it affects the identified working area. Claims for lack of knowledge shall not be considered by the Employer.

## 1.9 INSTALLATION REQUIREMENTS

All services shall be installed to achieve reliability and disruption free operations. All components shall be fully accessible for maintenance and replacement. Items requiring regular adjustment or affording isolation facilities, where located in concealed positions shall have removable access covers, tiles, or other suitable provision made to afford ease of access. The Contractor must satisfy themselves that all plant spaces are adequate to house all items of plant and equipment as described. All services shall be installed with all aspects of Health and Safety at Work fully considered. All systems shall be installed to be economical in operation and particular emphasis shall be placed on the use of energy conserving design techniques and reliable components. When preparing installation design proposals and drawings, the Contractor shall have due regard for all aspects of the existing components, location of all proposed services and shall make themselves aware of any co-ordination problems which need to be resolved before the installation commences. Any dimensions given on drawings shall be verified by the Contractor on site before the installation commences.

## 1.10 STRIPPING OUT OF REDUNDANT SERVICES AND PROTECTION OF EXISTING SERVICES

The contractor shall include for the isolation and stripping out of any existing services that become redundant as part of the project works. Stripping out shall include plant and equipment, wiring and associated containment, isolation and control devices etc. The full extent of any stripping out will be ascertained during the installation phases of the works. The contractor shall undertake their own investigation of the site to determine the potential for the existence of any previous cabling or fittings to the existing floodlight columns, still to be 'live'. Before commencing work the contractor must undertake a "cat scan" to identify if any such services exist. If found, the contractor shall immediately inform the Employer and advise of the necessary remedial or preventative action required to isolate and disconnect the redundant cabling or fittings.

## 1.11 DELETERIOUS MATERIALS

The use of the following materials or components is not acceptable on this project:

Asbestos or asbestos based products.

Urea formaldehyde foam.

Silicone bricks or tiles.

Re-wireable fuses.

Halon/CFCs.

Any other material generally known or thought to be deleterious to health or in contravention of any relevant British or European Standard Specification, Code of Practice or EEC Legislation.

In addition, the contractor shall not install (without written permission from the Employer) any materials which emit any environmentally damaging elements where alternatives, less damaging to the environment are readily available.

## 1.12 CONTRACTOR'S DESIGN INFORMATION

General: Complete the design and detailing of parts of the Works as specified.

**Provide:** Production information based on the drawings, specification and other information.

Programme: Make reasonable allowance for completing design/ production information,

submission, comment, inspection, amendment, resubmission and reinspection.

**Information required:** As necessary to meet Employer's Requirements.

Format: PDF.

Submit: With tender submission.

#### 1.13 TESTS AND INSPECTIONS

**Timing:** Agree and record dates and times of tests and inspections to enable the Employer to be represented.

**Confirmation:** Two working days prior to such test or inspection.

Records: Electrical testing certification in accordance with BS7671. Submit a copy of test certificates

to Employer upon completion.

Format: PDF.

#### 1.14 AS-BUILT DRAWINGS AND INFORMATION

**Contractor designed work:** Provide as built drawings and records of the installation.

Submit: Upon completion.

Format: PDF.

### **1.15 TECHNICAL LITERATURE**

**Information:** Provide to Employer for reference upon completion.

Manufacturers' current literature relating to all products to be used in the Works. Relevant British,

EN or ISO Standards.

Format: PDF.

### 1.16 MAINTENANCE INSTRUCTIONS AND GUARANTEES

**Components and equipment:** Obtain or retain copies, register with manufacturer and hand over to Employer on or before completion of the Works.

**Guarantees:** The contractor will be required to guarantee all workmanship and materials for a minimum period of 5 years following the date of completion. During this period, the Contractor will be responsible for rectifying any areas of the work which are not up to standard and may deteriorate or fail from other than normal use.

Format: PDF.

# 1.17 OCCUPIED PREMISES

**Extent:** Existing facilities will be occupied and/ or used during the Contract as follows: The playing fields and pavilion buildings.

**Works:** Carry out without undue inconvenience and nuisance and without danger to occupants and users.

**Employers Rules and Regulations:** All personnel shall wear company logo' d clothing / PPE / identification badges so that they are easily identified when working on the site. The Works are being undertaken at a publically accessible open space which is used by children, and at all times contractors personnel shall conduct themselves appropriately: - no bare chests - no swearing or bad language - no contact with any children - no alcohol or drugs.

**Protection:** Appropriate signing and guarding will be required in throughout the duration of the work.

## **1.18 EXISTING FEATURES**

**Protection:** Prevent damage to existing buildings, fences, gates, walls, roads, paved or grassed areas and other site features, which are to remain in position during execution of the Works. The contractor must report in writing any existing damage situations to the Employer prior to work starting

**Removal:** Minimum amount necessary. **Replacement work:** To match existing.

#### **1.19 WASTE**

**Waste:** Includes rubbish, debris, spoil, containers and packaging, and surplus material requiring disposal.

**Requirement:** Minimise production and prevent accumulation of waste. Keep the site and works clean and tidy.

**Disposal:** Collect and store in suitable containers. Remove from site and dispose of in a safe and competent manner, as approved and directed by the waste regulation authority.

**Recyclable material:** Sort and dispose of at a materials recycling facility approved by the waste regulation authority.

#### **1.20 WORKING HOURS**

**Specific limitations:** 8 am to 6 pm Monday to Friday 8 am to 1 pm Saturday. No Sunday or Public Holiday working.

#### 1.21 COMMENCEMENT AND COMPLETION

Works commencement date: To be agreed.

Date for Completion: Before 30th September 2021.

## 1.22 DRAWINGS AND EQUIPMENT SPECIFICATION

Together with this document, the Contractor shall refer to drawings and referenced equipment specification literature to ascertain the general site layout and requirements: Drwg. No. FCPC -01/FS FCPC -02/FS, FCPC -03/FS and FCPC-04/FS. A link to the proposed portable floodlighting product specification is as follows:-

Evopower LT600-LED-I 600W LED Mobile Lighting Tower - ThePowerSite.co.uk

#### 1.23 QUANTIFICATION AND SETTING OUT

The contractor shall assume full responsibility for the quantification and setting out of all of the works to achieve the required scope and extent referred to within this document.

## **1.24 FIXED PRICE TENDER**

The Tender shall be a fixed price Tender and no adjustments will be made for fluctuations in price of materials, rates of wages or contributions, or any other matter whatsoever, and such fluctuations will be at the sole risk of the Contractor. This requirement shall also apply should the completion date for the works extend by formal agreement between the Employer and the Contractor beyond the stipulated completion date.

#### **SECTION 2.0 GENERAL SCOPE OF WORKS**

**2.1** The Contractor will assume all responsibility for the final preparation and execution of the design and construction project. This document and accompanying drawings represents the minimum acceptable standards / features to be employed in the provision of the identified work. The work includes but shall not be limited to, the supply and installation of new electrical equipment, switch gear and SWA cabling into existing underground ducting to provide power for existing floodlights. In addition this is also include a new plug in system via existing underground ducting and inspection covers, for the subsequent use of portable floodlight units.

System protection shall include Mccbs, rated for the prospective load of the proposed installation and selected to match the required fault level. The arrangement of the power distribution at the distribution point shall provide short circuit and excess current protection for all sub-circuits. Adequate discrimination between main Mccb and sub-circuit protective devices shall be included.

All necessary earthing and cross bonding shall be provided in accordance with the current edition of the IEE Wiring Regulations. Cabling at the identified distribution point (switchgear pillar) and to all columns and socket plug in ducting chambers shall be carried out in correctly sized SWA cable. A set of manual override switches shall be provided for test and emergency control of the lights.

- **2.2** The wiring system will be installed as two separate circuits. Circuit 1 will supply the existing fixed floodlight columns. Circuit 2 will supply the proposed plug in sockets for the portable floodlight units.
- **2.3** The requirements of each circuit are broadly defined as follows. The contractor will be responsible for the final quantification, design and installation of the cabling and equipment necessary to operate the proposed floodlighting provision.

#### Circuit 1

- Supply and install 16mm 3 Core SWA into existing duct. Quantification by contractor.
- Connect cable into 4no. Existing flood light C/U's. Quantification by contractor.

**NOTE:** It is understood that the existing lights are 600w per light and 3-4 lights are used at a time. Therefore cable to power over 2400w for the existing lights that need reconnecting. Quantification by contractor.

• Install cable into meter/switchgear pillar – Quantification by contractor.

#### Circuit 2

- Supply and install 10mm 3 Core SWA into existing duct—Quantification by contractor.
- Supply and connect cable into 2no. power socket boxes mounted within existing chamber to allow subsequent plug in connection by portable 2 no. floodlight units. Quantification by contractor.

**NOTE:** The proposed mobile floodlighting unit 92 no.) is the Evopower LT600-LED-I mobile lighting tower which incorporates LED light heads to provide illuminance of 12500 lumens at 600W (150w x 4) power consumption. A link to the proposed portable floodlighting product specification is as follows:-

Evopower LT600-LED-I 600W LED Mobile Lighting Tower - ThePowerSite.co.uk

• Install cable into meter/switchgear pillar – Quantification by contractor.

## Meter/Switchgear pillar

The contractor will be required to supply and install suitable switch gear and metering equipment within the existing site feeder pillar unit. Based upon initial appraisal the following is likely, however the contractor will assume full responsibility for the design and installation of the necessary equipment:

- Hager Metal Clad Garage Unit with 4A RCD with 6A & 32A MCB
- Hager 32A Single Pole 10kA C Curve MCB
- Hager 16A Single Pole 10kAC Curve MCB
- Hager 25A 1 Module Contactor 2 NO contacts

Quantification by contractor.

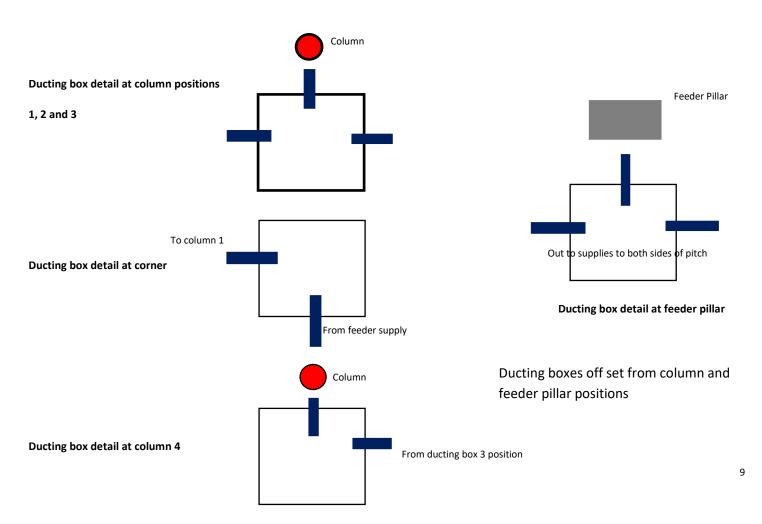
## **SECTION 3.0 PRICING SCHEDULE**

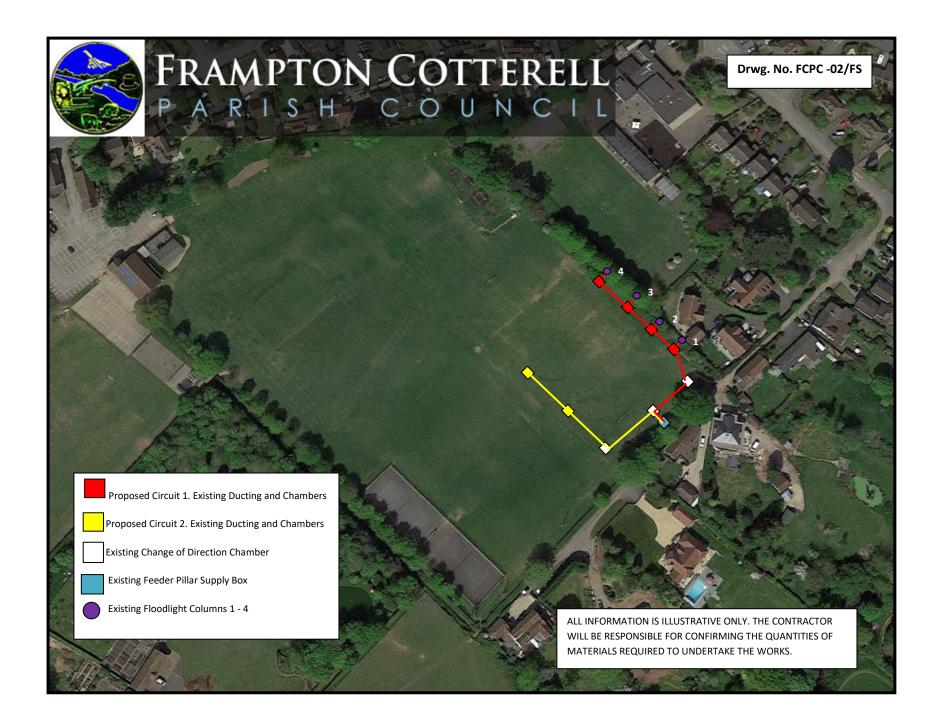
All works in accordance with Employers Requirements. The contractor will assume full responsibility for the design and installation of the necessary materials and equipment.

Item	Description	Price	
		£-	р
1.0	Circuit 1  Supply and install 16mm 3 Core SWA into existing duct. – Quantification by contractor.  Connect cable into 4no. Existing flood light C/U's. – Quantification by contractor.  Install cable into meter/switchgear pillar – Quantification by contractor.		
2.0	Supply and install 10mm 3 Core SWA into existing duct—Quantification by contractor.     Supply and connect cable into 2no. power socket boxes mounted within existing chamber to allow subsequent plug in connection by portable 2 no. floodlight units. — Quantification by contractor.     Install cable into meter/switchgear pillar — Quantification by contractor.		
3.0	Meter/Switchgear pillar Supply and install:  Hager Metal Clad Garage Unit with 4A RCD with 6A & 32A MCB  Hager 32A Single Pole 10kA C Curve MCB  Hager 16A Single Pole 10kAC Curve MCB  Hager 25A 1 Module Contactor 2 NO contacts Quantification by contractor.		
4.0	Testing and Certification  Electrical testing certification in accordance with BS7671. Submit a copy of test certificates to Employer upon completion.  Provide Copies of all guarantees, warranty, operations and service manuals.		
	SUB TOTAL		
5.0	Contingency Sum. Include sum equivalent to 10% (ten per cent) of Items 1.0 – 4.0 above. To be expended or deleted in whole or in part at the sole discretion of the Employer		
	TOTAL TENDER SUM		

# Drwg. No. FCPC -01/FS

















**DUCTING BOX DETAIL** 

