#### **EMPLOYERS REQUIREMENTS**

FOR
THE RENOVATION OF
FOUR POROUS ASPHALT TENNIS COURTS
AND
THE CONVERSION OF
FOUR IMPERVIOUS ACRYLIC TENNIS COURTS
TO
FOUR POROUS ASPHALT TENNIS COURTS
AND
ASSOCIATED WORKS

ΑT

**BOSCAWEN PARK** 

**FOR** 

TRURO TOWN COUNCIL

**NOVEMBER 2017** 

**PREPARED** 

BY



L.T.A. T.S. REF. NR. 2016/020

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### SECTION 1.00

#### PRELIMINARY PARTICULARS

## 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

#### 1.01 General



This document sets out the Employers Requirements to be included in the Conditions of Contract in respect of the Design and Construction of the Works described herein and includes the obligations and restrictions to be imposed upon the Contractor.

#### 1.02 Project

The works comprise the design and construction of various works detailed within Section 2.00 of this document.

#### 1.03 Parties and Consultants

#### **Employer:-**

Truro City Council Municipal Buildings Boscawen Street Truro CORNWALL. TR1 2NE.

#### **Employers Representative:-**

Mr Roger Gazzard Tel. 01872 274766

Email: roger@truro.gov.uk

#### L.T.A. Technical Services Court Surface Consultants :-

Sports Facility Planning & Design Limited 39 Hemwood Road Windsor

BERKSHIRE. SL4 4YX.

Contact: Mr L. West Email office@sfpad.co.uk

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#### **Employers Agent:-**

Truro City Council

Mr Roger Gazzard Tel. 01872 274766

Email: roger@truro.gov.uk

#### 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

#### 1.04 Site Location



The site of the proposed works is located on land at Boscawen Park, Malpas Road, Truro, CORNWALL, TR1 1SG.

#### 1.05 Access to the Site

Access to the site will be from an existing vehicular entrance off Malpas Road and along the public internal access road to the car park adjacent to the court block area. The Contractor shall allow for forming a suitable temporary site access (by removing the existing entrance gates and side panel of railings as necessary) and all reinstatement of this on completion of the works.

The contractor shall allow for obtaining all licences from the Council in this respect.

#### 1.06 Limitations of Working Space

The Contractor shall confine everything pertaining to the Contract within the area of the proposed works and surrounding areas.

The Contractors operations are to be confined to the minimum area required to carry out the works which shall be executed carefully so as to cause minimum nuisance and inconvenience to the users of adjoining facilities.

#### 1.07 Restrictions on Working Hours

Generally no specific restrictions will be placed upon normal working hours other than weekend working (i.e. Saturdays, Sundays and Bank Holidays) which will not be permitted without prior formal approval from the Employer.

The Contractor is required to state within his tender during what hours he proposes to undertake the works.

#### 1.08 Trespass and Nuisance

All reasonable means shall be used to avoid inconveniencing adjoining owners and occupiers.

No persons employed on the works shall be allowed to trespass on adjoining properties.

The Contractor shall indemnify the Employer against any claims or action for damage on account of any trespass or other misconduct of the Contractors' employees.

The Contractor or any of his subcontractors, their staff and workmen will not be allowed to park any vehicles or plant on the surrounding roads.

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#### 1.09 Inspection of the Site



The Contractor is recommended to visit the site and surrounds as no claim due to lack of knowledge which could have been obtained by such a visit will be entertained.

Permission to visit the site may be obtained from the Employer.

#### 1.10 Drawings and Other Documents

One drawing will be issued with these Tender documents and this will indicate the layout of the existing courts.

#### 1.11 Name Boards

Not required.

#### 1.12 Advertisements

All rights of advertising on the site shall be reserved by the Employer and the Contractor shall take all necessary measures to ensure that no unauthorised advertising takes place.

#### 1.13 Publicity

No information, either written or verbal, nor photography or drawings concerning this Contract shall be supplied by the Contractor to any persons without the written authority of the Employer.

#### 1.14 Programme

The Contractor shall before being given possession of the site prepare and submit his proposed programme for the execution of the works for comment by the Employer.

Thereafter the Contractor shall amend and revise the programme as required by the Conditions of Contract or as requested by the Employer.

#### 1.15 Method Statement

The Contractor should provide, at the time of tendering, a statement describing their proposed general and detailed arrangements and methods for carrying out the works.

The Method Statement should include details of how all stages of the works will be executed. It should detail procedures to ensure the specified parameters are obtained, the appropriate climatic conditions in which the surfacing can be laid, the appropriate Health and Safety requirements and training that personnel will undergo prior to working on site.

#### 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

The document should indicate areas of work that will be sub- contracted and detail the company(s) that will be employed.

#### 1.16 Site Meetings

Formal pre-start, monthly progress or stage completion and practical completion hand over meetings will be held by the Employer and minutes will be taken and distributed by the Contractor.

#### 1.17 Plant, Tools and Vehicles

The Contractor shall allow for providing all plant, tools and vehicles necessary for the completion of the Works.

#### 1.18 Site Administration

The Contractor shall allow for all necessary site administration for the proper execution of the Works. Prior to commencing the works on site the Contractor shall confirm to the Employer the name of the person in charge of the site together with brief details of his experience. This person is not to be changed without the prior agreement of the Employer, which will not be unreasonably withheld.

The Contractor shall ensure that the works and the site are properly protected and secured at all times, including any works outside the site boundary, and that the Employer is indemnified against any claim for loss, damage, theft or the like. The use of guard dogs will not be allowed.

#### 1.19 Site Security and Temporary Fencing

The Contractor shall provide all temporary and permanent fencing as necessary.

The Contractor must provide for situating his temporary buildings and offices and the storing of materials etc. within the site boundaries.

The site is to be maintained in a secure state until completion at which time all temporary fencing, building materials and equipment is to be removed and all works made good. The site is also to be left in a safe and tidy state at the end of each working day.

#### 1.20 Water for the Works

The Contractor shall allow for providing water for the whole of the Works including all temporary arrangements for storing and distributing.

#### 1.21 Lighting and power for the works

The Contractor shall allow for providing all necessary artificial lighting and supplying electric power for mechanical tools and plant for the whole of the Works to a standard not inferior to that laid down in the Institute of Electrical Engineers' Regulations.

## 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

#### 1.22 Temporary Roads, Hard Standings etc.



The Contractor shall allow for providing all temporary roads, hard standings, crossings and the like necessary for carrying out the whole of the Works and removing the same on completion.

#### 1.23 Temporary Accommodation for Use by the Contractor

The Contractor shall allow for providing and maintaining all necessary temporary offices or storage for materials for his own requirements.

No offices, stores or temporary buildings shall be erected on site without first obtaining the consent of the Employer as to the position in which they are to be erected.

#### 1.24 Temporary Telephone

Not required.

#### 1.25 Safety, Health and Welfare of Work people

The Contractor shall allow for providing and maintaining all welfare and safety measures to a standard not inferior to that laid down in statutory instruments, rules and orders and subsequent amendments thereto for all workmen employed on the site including the employees of Subcontractors.

Sanitary accommodation for workmen and staff shall be provided, connected to existing drainage where practicable, and maintained in a thoroughly clean, deodorised and orderly condition.

All huts and other temporary facilities shall be removed, and contaminated soil disinfected and all damage made good on completion of the Contract.

The Contractor must provide industrial safety helmets complying with the latest BS for the use of all personnel including subcontractors and authorised visitors attending the site. He will be expected to use his best endeavours to ensure that the helmets are worn by all such personnel on site in accordance with current legislation.

The Contractors' attention is particularly drawn to his obligations under the Health and Safety at Work Act etc.., 1974.

#### 1.26 Maintenance of Roads Etc.

The Contractor shall maintain all public and private roads, footpaths, paved areas, boundary walls and fences on or adjacent to the site in their present condition and on completion, make good any damage arising from the works and reinstate to the satisfaction of the Employer.

The Contractor is to make good any damage caused to any land, public and private roads, footpaths, services under, kerbs, paved areas, boundary walls, and fences etc.. by his own and by subcontractors and suppliers plant, transport and activities, at his own expense or pay the cost and charges in connection therewith.

#### 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

The Contractor is to carry out a photographic survey of the site boundaries, footpaths and roads and agree this with the Employer prior to works commencing.

No storage of materials will be allowed on the adjoining roads or pavements.

#### 1.27 Keeping Roads, etc. Clean

The Contractor shall keep any public, private and existing roads, footpaths and paving on or adjacent the site or used by traffic entering or leaving the site in a clean and unobstructed and safe state to the satisfaction of the Employer, the Police and the Local Authority. He shall use all means to prevent mud or rubbish of any kind being carried on to such roads, footpaths and paving, by vehicles belonging to himself or any other subcontractor to the reasonable satisfaction of the Employer.

Where, however, in spite of such precautions, mud or rubbish is carried on to the roads, footpaths or paving, he must immediately clean up such mud or rubbish at his own expense by scraping, brushing, shovelling and removing to tip. Special attention must be given to prevent mud becoming embedded in the road and footpath surfaces.

#### 1.28 Removing Rubbish etc.. and Cleaning Works on Completion

The Contractor shall allow for removing all rubbish, protective casings, coverings and debris from the site.

#### 1.29 Police Regulations

Police regulations shall be ascertained and the Contractor shall allow for complying with any such regulations or requirements concerning pedestrian or vehicular traffic control, the loading and unloading of or waiting by vehicles on the public highway, site ingress and egress, safety precautions and other matters affecting the works.

#### 1.30 Control of Noise and Pollution

The attention of the contractor is drawn to the provision of Section 60 of the Control of Pollution Act 1974 with references to the control of noise in relation to any construction works, and must comply therewith.

The Contractor is recommended to confer with the Chief Environmental Officer in relation to proposed method and noise level resultant.

#### 1.31 Planning Consent & Building Regulations Approval

The Contractor is to allow for any liaisons with the relevant planning authority, for any fees due and for complying with any requirements of the planning authority.

The Contractor shall obtain formal Building Control approval for the works from the Local Authority before the works commence on site.

## 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020

#### 1.32 The Construction (Design and Management) Regulations 2015



This Contract will be executed strictly in accordance with the Regulations.

The Contractor named in the Articles of Agreement of the Contract will be deemed the Principal Contractor.

The Principal Designer will be as stated below, or his successor as confirmed in writing by the Employer.

The Health and Safety Information document that has been established for this project by the Principal Designer is attached to these Employers Requirements, and the Contractor shall incorporate this in their own Health and Safety Plan.

The Contractor shall, if formally requested, submit their Health and Safety Plan for the project with his tender and shall execute the whole of the Contract strictly in accordance with this.

The Contractor shall allow the Principal Designer access to the Works and afford him every reasonable facility for the performance of his duties.

The Contractor shall co-ordinate with the Principal Designer, execute the Health and Safety Plan and contribute as required to the Health and Safety File.

Principal Designer: Truro City Council in conjunction with JNC Safety Services

Contact: Mr Roger Gazzard

#### 1.33 Shared Use of the Site

During the construction period the existing public Park will remain operational utilising the areas not directly affected by these Contract Works.

The Contractor shall allow and make necessary arrangements for the joint use of access roads, parking, paths, surfaces etc.., to the areas which remain in use including providing temporary diversions, facilities etc., as may be required to maintain the operation of the public Park.

The contractor shall ensure that the public internal access road is left unobstructed at the end of each working day.

## 1.00 PRELIMINARY PARTICULARS SFPD REF NR 2016 020





It is the responsibility of the Contractor to satisfy themselves as to the nature of the existing ground, the bearing capacity and the required court sub-base design for this project.

The responsibility for the court sub-base design must lie entirely with the Contractor and no increase in the tender price or subsequent Contract Sum will be allowed for any costs of whatever nature.

On the award of the contract the successful Contractor will have been deemed to have undertaken their own site investigation prior submitting their tender for the works. No claims will be accepted for lack of information or inaccuracies in this respect.

#### 1.35 Tender Submission

The Contractor is to provide the following within his Contractors Proposals :-

- i) Detailed specifications for all aspects of the court works
- ii) General Method Statement for the overall execution of the works
- iii) CV's for all site supervisory personnel (Site & Contracts Manager's)
- iv) Programme for the Works
- v) Information as requested by the CDM Co-Ordinator
- vi) Working hours (Monday Friday only)
- vii) List of Proposed Construction and As Built Drawings for the works
- viii) Performance information in respect of the court colour coatings and line markings
- xi) Indicative maintenance schedule and requirements for court surfaces
- x) Anticipated design life of court surfaces
- xi) Details of any warranties provided.

#### **SECTION 2.00**

#### **DESCRIPTION OF WORKS**

**FOR** 

**POROUS ASPHALT** 

**TENNIS COURTS** 

#### 2.01 General

A general description of the works is given below, the items do not include all activities required and the Contractor is to allow for all works necessary.

The Contractor will be responsible for all aspects of the design of the scheme, the following are only to be used as descriptions of the Employers Requirement.

The Employer requires the renovation of four porous asphalt tennis courts and the conversion of four dense macadam tennis courts to four porous asphalt tennis courts.

The new porous asphalt courts will be used for competitive tennis and general training.

The intention of the Employer is not to restrict the type of footwear used, but the manufacturer's recommendations in this respect will be followed so far as is reasonably practicable.

The completed facility is to provide a durable facility requiring the minimum of maintenance.

The facility is expected to be used for up to 12 hours per calendar day.

The Contractor is to check all dimensions and is to notify the Employer of any discrepancies prior to any work commencing.

#### 2.02 Materials

Subject to more detailed information given elsewhere in this section the following basic standard requirements shall apply.

Materials and components shall be new, shall comply with European and British Standards where such exist or other equivalent standards, and shall be delivered to the site in the manufacturer's wrapping where provided.

Handling and storage shall be in accordance with manufacturer's instructions.

Prior to the contract being awarded the contractor shall supply reference samples of all materials, as requested by the employer, that they propose to use during the works.

The contractor shall furnish such information as to the quality, weight, strength or origin of materials as the Employer may require.

The contractor, on request, shall supply at their own expense certificates and test sheets, signed by a test house, maker or supplier, giving the results of the tests applicable to the materials used. (This applies to all materials supplied by the contractor.)

#### 2.03 Site Clearance & Weed Killing Operations

The contractor shall break out and remove from site any existing perimeter edge kerbing including the insitu haunching to existing court Nrs 1 - 8.

The contractor shall carefully take down and remove from site the existing perimeter surround and dividing chainlink mesh together with straining wires and straining wire rollers (including chainlink mesh infill to access gates) to court Nrs 1 – 8 inclusive.

The contractor shall break out and remove from site all the existing court fittings to court Nrs 1 - 8 inclusive.

The existing metal grid covers to the surface water drainage channels shall be take up and disposed off site. The drainage channels shall be cleared of all dirt and debris.

The contractor is to allow for any further site clearance required to carry out the works and also is to carry out any weed killing operations required.

The Contractor shall specify the type and manufacturer of the weed killer and the dosage rates intended to be use. The contractor shall confirm the stage during the works when the weed killer is to be applied.

All excavated material arising from the works shall be disposed off site by the Contractor

## 2.04 Renovation of Porous Asphalt Tennis Courts & Conversion of Impervious Acrylic Tennis Courts to Porous Asphalt Tennis Courts

The Employer requires the renovation of four porous asphalt tennis courts (Nrs 1-4) and the conversion of four impervious acrylic tennis courts to four porous asphalt tennis courts (Nrs 5-8) all as indicated on the site layout drawing.

The new porous macadam tennis courts shall comprise four block's of two doubles courts.

The new porous asphalt court Nrs 1 -2 shall retain the proposed court run back, intermediate and side run dimensions as setout within drawing Nr 2016 020 005 i.e. court Nrs 1 - 2: two court block with overall dimensions 35.55m long x 36.58m wide (maximum) & 36.56m wide (minimum).

The new porous asphalt courts shall retain the existing court run back, intermediate and side run dimensions i.e. court Nrs 3-4: two court block with overall dimensions 34.17m long (maximum) & 34.00m long (minimum) x 31.14m wide; court Nrs 5-6: two court block with overall dimensions 34.10m long (maximum) & 33.90m long (minimum) x 31.20m wide (maximum) & 31.04m wide (minimum) & court Nrs 7-8: two court block with overall dimensions 33.95m long (maximum) & 33.74m long (minimum) x 31.00m wide (maximum) & 30.95m wide (minimum).

The Contractor shall allow for all preparation and remedial works to the existing porous asphalt and impervious acrylic court surfaces. This shall include, but not be limited to, rolling with vibrating compaction equipment and repairs to any cracks to the existing macadam surfaces and the repair of any dips, hollows or bumps to provide a stable base for the conversion and a level surface as described in Clause 2.05 below.

The new porous asphalt courts must meet the porosity requirements of Clause 2.06 and the Contractor shall allow in their tender for any works required including (but not limited to) piercing the existing porous asphalt or impervious acrylic court dense macadam subbase surfacing in all areas to a depth of 200mm and at a maximum spacing of 450mm centres, the holes (minimum 25mm - 37mm diameter) are to be filled with clean free draining non-frost susceptible aggregate chippings.

The detailed composition and the diameter of the aggregate chippings shall be stated by the Contractor.

The filling aggregate material is to be well consolidated and finished flush with the existing surface and shall be bound in place with an application of bitumen emulsion.

All of the existing porous asphalt court surfaces to court Nrs 1 - 4 shall be coated with an application of bitumen emulsion. *Details of bitumen emulsion to be submitted by the Contractor within his proposals documentation.* 

The Contractor shall allow for all necessary cleaning and power washing of the existing macadam sub-bases surfaces to remove all residual sand infill, vegetation, dirt and debris present.

All court dimensions shall be agreed with the Employer before the Contractor commences the Works.

The Contractor is to allow for all works necessary to ensure that a stable base is provided for the renovated courts.

#### 2.05 Gradients and Levels

The levels provided must ensure that no bumps, hollow ridges, joints, texture variations that would effect ball bounce are present within the total playing area.

It is anticipated that the new porous asphalt playing surface of court Nrs 1 - 4 will finish 25mm above the existing court playing surface.

It is anticipated that the new porous asphalt playing surface of court Nrs 5 - 8 will finish 115mm above the existing court playing surface.

Subject to the above the permitted tolerance in levels will be a maximum of 8mm under a 3m straightedge.

The existing falls of the court block area shall be retained in the renovated courts. *The existing fall of the courts shall be stated within the Contractors Proposals.* 

#### 2.06 Porosity

On the date of practical completion the courts shall have an infiltration rate that exceeds 180mm/h when tested in accordance with ITF CS/06/01.

The new playing surface must also be free draining and should be clear of surface water within 15 minutes of rain ceasing for a further period of at least two years from the date of practical completion.

#### 2.07 Geotextile Membrane

Clause not used.

#### 2.08 Free Draining Aggregate Sub-base

An aggregate sub-base shall be laid to a minimum consolidated depth of 50mm to the entire area of court Nrs 5-8 inclusive. This item shall include for filling the existing drainage channels with aggregate sub-base.

The sub-base base shall comprise of clean, free draining carboniferous limestone or granite, angular in shape (10mm, 14mm, 20mm or 28mm diameter no fines).

The specification, aggregate diameter and detailed composition of the aggregate subbase shall be stated within the Contractors Proposals.

The source of supply of the aggregate shall also be stated.

Crushed concrete or other recycled materials / aggregates shall not be used as an aggregate sub-base material.

All materials shall be certified non-frost susceptible.

The sub-base shall be consolidated using a powered steel tandem roller or equivalent.

A suitable weed killer shall be applied to prevent weed growth. Note: Glyphosate only permitted to be used by Newham Council: application rate to be stated.

The Contractor shall specify the type and manufacturer of the weed killer and the dosage rates he intends to use.

Sockets for tennis posts and centre band sockets shall be installed and set in in-situ concrete.

The dimensions of the concrete surround to the tennis post and centre band socket shall be stated within the contractors proposals.

#### 2.09 Asphalt Surfaces

The contractor shall provide a binder course of porous asphalt laid to a minimum compacted depth of 40mm to court Nrs 5 – 8 inclusive. The asphalt surfacing shall consist of open grade binder course coated asphalt, laid hot, produced in accordance with Clause 2.14.2. of the Code of Practice for the Construction and Maintenance of Tennis Courts (C.P.C.M.T.C.) issued by The Sports and Play Contractors' Association published March 2007.

A surface course of porous asphalt shall be laid to a minimum compacted depth of 25mm to full size court Nrs 1 – 4 inclusive. The asphalt surfacing shall consist of nominal 6mm open grade surface course coated asphalt laid hot.

The surface course asphalt shall be specially formulated and formally certified by the manufacturer for use in tennis court construction and produced in accordance with Clause 2.14.3. of the Code of Practice (C.P.C.M.T.C.) issued by The Sports and Play Contractors' Association.

The Contractor shall provide fully detailed specifications for both the binder course and surface course asphalt's within the Contractors Proposals.

Cold lay asphalt's and asphalt's containing recycled aggregates or quartzite shall not be used for either the binder or surface course. Prior to the manufacture of the asphalt the Contractor shall confirm the aggregate type to be used by the manufacturer for the asphalt surface course.

Cut-back oils shall not be used.

There shall be no ridges or changes in the surface texture or bay joints that result in erratic ball behaviour.

The surfacing shall have a uniform and consistent texture and bay joints shall, so as is reasonably practicable, accord with play lines.

Asphalt surface course bay joints to be longitudinal with no discernible cross joints.

Both asphalt courses shall be well rolled and consolidated over the entire court areas.

#### 2.10 Porous Asphalt Colour Coating & Court Markings

The porous asphalt surfacing shall be coloured with proprietary textured paints, the court shall be coloured and the run-backs and side runs. Both shall be in accordance with reference colours supplied at the time of tender. The paint shall contain a fungicide to inhibit the growth of moss.

The Contractor shall allow for two colours to the full size court areas.

Eight sets of tennis court doubles markings shall be applied to the court block's. Tennis court markings shall be proprietary textured non-slip white paint set out in accordance with the Rules of Tennis issued by the International Tennis Federation (I.T.F.). Court markings shall be 50mm wide except base lines which may be up to 100mm wide. When measured with a calibrated steel tape all permanent markings are to be within 10mm of their true position as specified in the Rules of Tennis.

Lines shall not deviate by more than 25mm from a line joining their ends, nor deviate by more than 5mm over a distance of 3.0 metres, nor include any sudden steps.

The slip resistance of the court, including line markings, shall be greater than 60, when measured using test procedure ITF CS 02/01 as detailed in the I.T.F.'s *Initial ITF Study on Performance Standards for Tennis Court Surfaces, International Tennis Federation*, dated June 1997.

The value of slip resistance shall be obtained within one month of Practical Completion and for a period of twelve months thereafter.

The value shall be obtained during this period in all climatic conditions in which the court might reasonably be expected to be used.

The Contractor shall state the manufacturer and reference numbers of the court colour coating and the line marking paints.

Final colour selection to be formally agreed with the Employer at least twenty one days prior to the coating works commencing on site.

#### 2.11 Perimeter Edgings

New precast concrete kerbs shall be laid to the perimeter of court Nrs 1 - 8 inclusive.

Kerbs shall be 914mm x 150 / 200mm x 50mm pin kerbs (manufacturer, type of kerbs to be stated within Contractors Proposals).

The kerbs shall be laid on edge (preferred) or flat (subject to formal agreement of the Employer) and be well bedded and haunched in concrete. The rear insitu concrete haunching shall be finished sloping backwards with smooth steel trowelled uniform 45 degree slope.

The insitu concrete bed and haunching shall incorporate movement joints at appropriate intervals. The specification and dimension for the centre spacing of movement joints shall be stated within the Contractors Proposals.

#### 2.12 Perimeter Drainage (Extra Over Cost)

The contractor shall install a perimeter drain to the entire court block perimeter of new court Nrs 5 - 8.

The perimeter drainage will be positioned under the courts (i.e. under the aggregate sub-base) and not exposed at the surface.

The drain shall contain suitably sized perforated corrugated drainage pipes. The drain shall be lined with geotextile membrane and be back filled with clean, certified non-frost susceptible, rounded gravel or appropriately graded free draining crushed rock.

The perimeter drain shall be a minimum of 300mm wide and follow uniform gradient.

The outlet of the drains shall be into a suitably designed and constructed soakaways or surface outer outfall system to the full size court block. The outlet drain pipe shall be suitable polymer corrugated drainage tube.

The soakaways as a minimum shall be lined and covered with geotextile membrane and filled with appropriately graded free draining crushed rock or gravel rejects.

The contractor shall state the proposed dimensions and construction of the soakaway (minimum 2.00m x 2.00m x 2.00m per two court area) within the Contractors Proposals.

An extra over cost shall be provided for two suitably designed and constructed pre-cast concrete ring soakaways 1.80m diameter x 2.00m depth. The pre-cast concrete soakaway shall incorporate an opening to the cover slab for the provision heavy duty manhole access cover. One set of manual lifting keys shall be provided for the manhole cover.

#### 2.13 Fencing – Existing

The existing perimeter fence posts and top rails to the court blocks shall be generally retained.

The contractor shall state within his proposals the extent to which the existing fencing will be dismantled to the courts to allow satisfactory access for the works to take place.

The contractor shall allow for the full removal of the existing chainlink mesh together with all the associated straining wires to court Nrs 1-8 inclusive. New fencing is to be installed to the Southern run back elevation to court Nrs 1-2 to create a 1.20m wide pathway.

All the existing fence posts and top rails shall be rubbed down to remove all rust and existing flaking paint, primed with etching solution and coated with green bitumastic paint. The contractor shall allow for the replacement of all existing straining wire winders and lacing bars and other associated fixings.

New roll weld mesh and straining wires shall be installed to the existing fence posts.

Fencing to comprise 2.75m high x 50mm x 3.50/3.00 mm gauge, galvanised core, green plastic coated roll weld-mesh suitably threaded and clipped with stainless steel clips to high tensile steel galvanised line wires (3.15mm gauge).

The contractor shall allow for the replacement of 5 Nr intermediate fence posts as directed by the Employer.

Corner, gate and intermediate posts to comprise steel tubular sections.

The Contractor shall state the tubular section sizes (minimum 60mm diameter for intermediate posts, corner, two way straining and gate posts), proposed thickness and nominal centres for spacing of the fence posts within his contractors proposals.

All new steel posts, struts, etc shall be galvanised after cutting, welding, fabrication and drilling. Posts shall be primed with etching solution and coated with green bitumastic paint (colour reference to be stated by Contractor).

Careful attention shall be given to the details of all fencing elements to ensure a high visual standard is achieved.

Fencing and post footings are to be suitably sized for the future installation of windbreaks on the fencing. All posts to be set in concrete.

Provision must be allowed for the fixings of windbreaks. The contractor shall state the maximum design wind loading for the fencing within the contractors proposals.

Fence mounted court numbers shall be erected for each court. Numbering as instructed by the Employer.

#### 2.14 Gates - Existing

The contractor shall allow for altering the height of all of the existing access gates to suit the new finished level of the courts.

The contractor shall submit his detailed proposals in this respect.

#### 2.15 New Roll Weld Mesh Fencing

New 2.75m high roll weld mesh panel proprietary fencing system shall be erected to the Southern run back elevation of court Nrs 1 - 2 as the site layout plan.

Fencing to comprise 50mm x 3.50/3.00 mm gauge, galvanised core, green plastic coated roll weld-mesh suitably threaded and clipped with stainless steel clips (5 Nr per linear metre) to seven (2.75m) high tensile steel galvanised line wires (3.15mm gauge).

Corner, gate and intermediate posts to comprise rectangular hollow sections.

The Contractor shall state the rectangular hollow section sizes (minimum 60mm x 40mm x 3mm for intermediate posts and 60mm x 40mm x 3mm for corner, two way straining and gate posts), thickness and nominal centres for spacing of the fence posts within his contractors proposals.

All steel posts, struts, etc shall be **hot dipped galvanised** in accordance with BSEN ISO 1461 after cutting, welding, fabrication and drilling and polyester powder coated in accordance with BSEN 6497 : colour to be dark green (RAL 6005).

Careful attention shall be given to the details of all fencing elements to ensure a high visual standard is achieved.

Fencing and post footings are to be suitably sized for the future installation of windbreaks on the fencing. All posts to be set in concrete. The front face of the fence posts shall be no more than 15mm away from the rear face of the perimeter edgings.

Provision must be allowed for the fixings of windbreaks. The contractor shall state the maximum design wind loading for the fencing within the contractors proposals.

Fence mounted court numbers shall be erected for each court. Numbering as instructed by the Employer.

Note: Fencing manufacturers design drawings and production schedules shall be provided to confirm compliance with the above as a minimum part of the Contractors Proposals. Also a formal statement shall be provided in respect of the proposed method of galvanising of the fence posts.

#### 2.16 New Access Gates & ClubSpark Gate Framed Opening

Two full height single disabled access gates (minimum 1.20m width x 2.00m high), rectangular hollow section framing with roll weld mesh infill as item 2.13 above (with sliding latch mechanism which can be secured with padlock) shall be provided within the existing common run back fencing elevations to court Nrs 5-8 in locations to be agreed.

Two full height single access gate opening frames (minimum 80mm x 50mm x 4mm) with lintel and mesh infill panel above (minimum 1.40m width x 2.20m high), rectangular hollow section framing as item 2.13 above shall be provided within the existing court fencing elevations (one frame to court Nr 1 and one to court Nr 3 for the installation of electronic access gate system in locations to be as indicated within the layout drawings.

All gates shall be hot dipped galvanised in accordance with BSEN ISO 1461 after cutting, welding, fabrication and drilling and polyester powder coated in accordance with BSEN 6497.

Gates shall be suitably primed and power coated dark green (RAL 6005 or 6009).

All fencing works to be carried out in accordance with the SAPCA Code of Practice for Fencing Works.

hee<mark>lchair tennis</mark>

All single access gates shall be of a width (minimum 1.20m) to allow whee chair tennis player entry and exit.

#### 2.17 Root Barriers (Extra Over Cost)

The Contractor shall construct any root barriers that he considers necessary to ensure that the courts are not disturbed by root penetration at any time in the future (following prior formal approval by the Employer that no Tree Preservation Orders apply to the trees that may be affected by the installation of the root barriers).

Root barriers shall comprise in-situ concrete to a minimum of 1 m depth and 300 mm width or proprietary root membrane sheet of minimum 1m depth. The root barriers shall be positioned outside or inside (with the Employers Prior formal approval) the court area.

#### 2.18 Tree Surgery

Carefully carry out surgery to the existing trees as necessary following prior formal approval by the Employer that no Tree Preservation Orders apply to the site and the proposed works have been formally approved by the Newham Council arborist.

The Contractor shall also carry out such all cutting and trimming operations to trees, hedging and the like to enable the works to be undertaken.

This item shall also include for the severing and removal of tree roots.

The voids created within the court area by the removal of tree roots shall be filled with D.O.T. Specification for Highway Works Class Type 3 (Clause 805) or appropriately graded free draining crushed rock and thoroughly compacted.

#### 2.19 Court Equipment

Supply and install 8 Nr sets of net post sockets, net posts (complete with singles sticks), heavy duty green or black nylon nets, centre band swivels and centre ground anchors.

The Contractor shall specify the manufacturer and type of net post sockets, centre net ground anchors, nets, singles sticks and net posts to be installed.

Sockets for tennis posts and centre band sockets shall be installed and set in in-situ concrete.

The dimensions of the concrete surround to the tennis post and centre band socket shall be stated within the contractors proposals.

Existing net post sockets and all other court fittings shall be broken out and removed from site.

#### 2.20 Floodlight Services Duct and Draw Pits

Clause not applicable.



#### 2.21 Draw Pits, Manholes and Inspection Chamber

The contractor shall allow for raising the any existing draw pit covers, manhole covers or inspection chamber lid or covers to suit the raised finished level of the new macadam surface course.

#### 2.22 Access Ramp

The Contractor shall allow for construction of two access ramps 2.50m x 1.20m wide to the new pedestrian gate framed opening gates of the existing two court block's.

The access ramp and highest landing to the court block shall be finished level with the playing surface to permit disabled access.

The link pathway shall be designed in compliance with Building Regulations Part M (2004 Edition) in terms of gradient and provision of landings.

The access and link pathways, as a minimum, shall be constructed with a D.O.T. Type 1 aggregate sub-base of 300mm compacted depth laid on a geotextile membrane and two layers of either dense, medium or porous grade macadam providing 65mm overall compacted depth and be edged with precast concrete kerbs to both sides.

The pathways area shall be edged with precast concrete kerbs to both sides. Handrails shall be incorporated all as indicated within the layout drawings.

The Contractor shall submit detailed proposals for the access pathways.

#### 2.21 Drawings and Manuals

The Contractor shall provide detailed construction and 'as built drawings' (comprising A3 plan layouts and A4 cross sections for all works) and manuals for the maintenance of the courts.

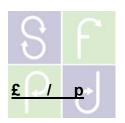
The Contractor shall list the drawings he proposes to provide within his contractors proposals.

#### **SECTION 3.00**

## TENDER SUM ANALYSIS AND

FORM OF TENDER

#### 3.01 TENDER SUM ANALYSIS



- 1. Preliminaries
- 2. Contract Conditions
- 3. Tennis Court Nrs 1 8
  - 3.1 Site Preparation
    - 3.1.1 Preparation of Existing Porous Asphalt
       & Impervious Acrylic Court Areas
       to court Nrs 1 8
    - 3.1.2 Excavation & Disposal
    - 3.1.3 Removal and disposal of existing chainlink
    - 3.1.4 Removal and disposal of drainage channel covers
    - 3.1.5 Weed Killing Operations :-

Name of product	
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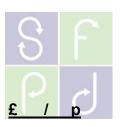
- 3.2 Porous Macadam Courts
  - 3.2.1 Aggregate Sub-base (court Nrs 5 8 only)
  - 3.2.2 New perimeter edge detail
  - 3.2.3 Asphalt binder course (court Nrs 5 8 inclusive)
  - 3.2.4 Asphalt surface course (court Nrs 1 8 inclusive)
  - 3.2.5 Colour Coating Two Tone
    - 3.2.5.1 Doubles Tennis Courts
  - 3.2.6 Court markings
    - 3.2.6.1 Eight Doubles Tennis Courts (Colour White)

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CARRIED TO COLLECTION

£

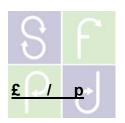
#### 3.01 TENDER SUM ANALYSIS



#### 3. Tennis Court Nrs 1 - 8

- 3.3 Fencing Existing Court Nrs 1 8 Retained
  - 3.3.1 Dismantle & re-erect to allow access
  - 3.3.2 Installation of new roll weld mesh 2.75m high Including straining wires, lacing bars and rollers
- 3.4 New Fencing
  - 3.4.1 R.H.S. Posts & Rigid panel weld mesh
    - 3.4.1.1 2.75m high: Run back elevation Of court Nrs 1 2
  - 3.4.2 Framed Opening for Gate
    - 3.4.2.1 Framed opening for retro fitting of an L.T.A. 'ClubSpark' electronic gate 2 Nr
  - 3.3.2 Gates
    - 3.4.3.1 Single Gate 1.20m x 2.00m with sliding latch 2 Nr
- 3.5 Tree Surgery
- 3.6 Court Equipment
- 3.7 Raising existing drawpit & manhole covers
- 3.8 Access ramps
- 3.9 Construction and As Built Drawings& Operation and Maintenance Manuals

#### 3.01 TENDER SUM ANALYSIS



#### **COLLECTION**

1) Porous Macadam Court Nrs 1 - 8 :-								
	<b>PAGE 3/1</b> £ }							
	PAGE 3/2 £ }	£						
	TOTAL CARRIED TO FORM OF TENDER	£						
EXTRA OVER ITEMS - COURT NRS 1 - 8								
A)	Increase depth of surface course asphalt depth To 32mm minimum compacted depth to court Nrs 1 – 8 inclusive (Details to be submitted by Contractor)							
B)	Eight sets of temporary doubles court markings applied in In white non-slip paint to existing macadam sub-base (Details to be submitted by Contractor)	£						
C)	Wax oil or latex modified macadam surface course to court Nrs 1 – 8 (Details to be submitted by Contractor)	£						
D)	Application of polyurethane binder to court Nrs 1 - 8 (Details to be submitted by Contractor)	£						

#### 3.02 TENDER SUM ANALYSIS

# S F

#### **EXTRA OVER ITEMS - COURT NRS 1 - 8**

E)	Resurfacing of 1.20m wide a to Southern run back area o with 25mm depth of dense a application of tack coat and (Details to be submitted by 0	of court Nrs 1 – Asphalt includir perimeter edg	- 2 ng	£		
F)	Installation of perimeter drai and two pit soakaway (Details to be submitted by 0		Nrs 5 - 8		£	
G)	Installation of precast concrete soakaway and cover £ (Details to be submitted by Contractor) – 1 Nr					
H)	Installation of root barriers :- Membrane barrier :-					
	Court Nr	m @ £ /	per m			£
	Insitu concrete barrier :-					
	Court Nr	m @ £ /	per m			£



THE FOLLOWING INFORMATION SHALL BE ISSUED WITH THIS EMPLOYERS REQUIREMENTS DOCUMENT:-

**DRAWINGS:-**

S.F.P.D. DWG 2016 020 003 / 004 / 005