

ISRAEL SPORTS BETTING BOARD



PRODUCT PORTFOLIO

COMMUNITY SYNTHETIC TURF PITCH

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COMMUNITY SYNTHETIC GRASS PITCH

The Israel Sports Betting Board (hereinafter: "the Board") is working to implement the National Facilities Program and seeks to distribute a subsidy for constructing community synthetic grass facilities / pitches throughout Israel, which are intended for community use. The design and construction of the facilities is the responsibility of the entity that is awarded a tender out of the various tenders that the Board shall publish from time to time (hereinafter: "the Authority")

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PART A - PRELIMINARIES AND DEFINITIONS

1. GENERAL DESCRIPTION AND OBJECTIVE OF THE PRODUCT PORTFOLIO

This product portfolio contains the Board's guidelines for the design and construction of a community synthetic grass facility / pitch with the following content, hereinafter: "the facility:

- A pitch from synthetic grass
- Pitch lighting fixture
- Fencing of the pitch

This product portfolio is intended to define the general specification and to set the basic guidelines for the design and construction of the facility, within the budgetary framework of the facilities fund. The diagram attached to this document as Appendix A is a schematic diagram only and is intended only to clarify the specification and the guidelines. In any event, the design and the construction of the facility shall be done subject to all guidelines of this product portfolio, without any deviations, unless explicit approval of the facilities fund has been obtained.

It should be clarified that the professional entity who shall be responsible for the guidance in the course of the detailed design and its approval and in the course of the construction, who shall ensure, from time to time, observance of all the professional conditions, including compliance with timetables and who shall certify by his signature that the design and the execution are in full compliance with the product portfolio, shall be the authorized engineer on behalf of the local authority.

Certification signed by the Authority's engineer shall be submitted to the facilities fund that the design and execution comply with all the conditions of the product portfolio in their entirety.

2. GENERAL GUIDELINES FOR THE DESIGN AND CONSTRUCTION PROCEDURE

2.1 COMPLIANCE WITH LAWS AND REGULATIONS

The design and the construction of the facility shall be done subject to the provisions of any law, to the current Israeli standards (and in their absence – to the standard of the country of origin of the equipment or an accepted European standard) and to all the provisions of the current statutory documents governing to the site where the facility is being constructed, including outline / urban building schemes, building permits, occupancy certificates, guidelines and approvals of statutory authorities, planning and building, safety, accessibility regulations, etc.

The binding specifications for the design and execution of the works, under the responsibility of the Authority, shall be a combination of the general specifications ("the blue binder") and the special specifications that shall be prepared by the team of designers / consultants on behalf of the Authority in light of the guidelines of the facility portfolio.

2.2 THE REQUISITE LEVEL OF DESIGN

It should be emphasized that an inadequate level of design in the early stages shall substantially affect the ability of the facility to survive for a long time and an outcome of an insufficient level shall deter potential users while increasing the current operating expenses. Therefore, appropriate design, management and maintenance are critical to the success of the construction and securing long endurance of the surface.

Furthermore, the Authority must determine which sources shall be available for the facility in order to maintain it and preserve the quality of the grass surface.

2.3 THE REQUISITE DESIGN TEAM

The Authority shall employ for the sake of the design and the construction of the facility a team of designers / consultants, which shall include at least the experts in the professions listed below:

- Architect

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- Synthetic grass and grass drainage consultant - independent
- Project management and on-site supervision
- Soil consultant
- Construction designer
- Electricity and lighting designer
- Additional consultants and designers, if they shall be required by the Authority for the sake of completing the design and the execution of the facility.

2.4 PRELIMINARY TESTS

Before commencing the design, it is necessary to conduct preliminary tests of the soil conditions, an examination of the absorption properties of the soil, the soil stability and the existing drainage regime. In addition, it is necessary to test that this does not involve contaminated soil.

2.5 CONTROL

The Authority shall make available to the control on behalf of the Board any scheme and/or document that it requires, at any time in the course of the design and the construction of the facility.

The contractor / contractors on behalf of the Authority shall be duly registered contractors with appropriate classifications and with experience in performing the works imposed on them.

2.6 ANNUAL MAINTENANCE PLAN

The Authority shall have to prepare a detailed annual plan of the pitch maintenance works, the lighting fixture and the perimeter fences, with timetables that shall ensure regular maintenance of the pitch in compliance with the design requirements.

This plan shall also include recommendations with respect to the requisite equipment, personnel training to perform the maintenance, as well as an assessment of the maintenance costs and costs of the requisite equipment.

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2.7 **LICENSING AND BUSINESS LICENSING**

Consideration should be given during the licensing stages to whether with respect to a facility it shall be required to obtain a business license for the facility.

PART B - FACILITY SPECIFICATION

1. **PURPOSE OF THE FACILITY:**

A synthetic grass pitch for the benefit of the community.

The facility is intended to operate in the daytime and the evening.

The requirements specified below are minimal and an authority may propose additional elements or upgrades, for authorities that so wish, all this subject to the approval of the Israel Sports Betting Board.

The facility is not suited to holding games with ticket sales.

2. **GENERAL CONTENT OF THE FACILITY:**

Synthetic grass football (soccer) pitch with dimensions of 46X26 meters. White line dimensions of 40X20 meters, including a drainage system.

Lighting of the pitch

Fencing of the pitch, including the installation of gates for players and for operations and emergencies.

The Authority may add a public gallery on the grounds of the pitch, provided that it does not compromise the dimensions of the pitch and dimensions of the pitch edges (this section is not included within the budget framework of the facility).

3. **LOCATION OF THE FACILITY:**

The facility location shall ensure compliance with the following requirements:

Ensuring compliance with the site ownership requirement (or other rights – as defined in the tender documents) in the tender conditions;

Full compliance of the proposed facility with the land designation under a valid statutory scheme governing the site;

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Central location accessible to the target populations, allowing an orderly access road and an access road for operation and emergency vehicles.

Potential connection to nearby facilities / educational institutions – according to the conditions of the locality.

The site shall ensure suitable soil quality, a natural drainage option for the area, possible diversion of surface runoff from the pitch area and sufficiently distant nearby foliage – in order to prevent future maintenance problems.

The pitch can be constructed on an existing basic foundation (without reduction of the grant amount), provided that the facility complies with the product portfolio requirements in their entirety in general and with all matters related to what is specified in section 2.4 in the context of the soil conditions, absorbency, stability, drainage, soil contamination, etc. in particular.

4. FOOTBALL (SOCCER) PITCH:

Schematic diagram of the pitch – see Appendix A, which is attached hereto;

General requirements – the execution of the grass pitch shall ensure provision of a quality solution to the drainage problems, to the surface stability and to the efficiency of the regular maintenance by creating a draining system for quick disposal of rainwater outside the pitch and preventing surface runoff to the pitch area.

The upper surface of the pitch shall ensure a stable surface on which to install a synthetic grass surface pursuant to the specification and the guidelines specified below, which shall insure optimal conditions for use during all seasons of the year.

4.1 LAYOUT, PITCH DIMENSIONS AND CLEARANCES

Since this is a community facility, the Board recommends that the layout of the pitch shall be in such manner that the lengthwise axis shall be in a north-south direction, with maximum deviation from the north of 15 degrees.

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Edges required along the lengthwise line and the widthwise line of the pitch from both sides of not less than 3.0 meters on each side of the white line. This distance is a minimum safety distance and it should be maintained up to the nearest obstacle, such as walls, cement belts, fences, gates, gallery, benches, lighting columns, etc.

Correspondingly, dimensions of the open pitch shall not be less than 46X26 meters.

- It shall be possible in special cases to reduce the dimensions of the pitch by 2.0 meters – 1.0 meters (length and width), provided that the width of the edges from the white line around shall not be less than 3.0 meters. As stated, this extenuation shall only be given in exceptional cases and with prior written approval (at the design stage) of the facilities funds. The applicant must provide an affidavit from the Authority's engineer that there is no alternate land for constructing a full size pitch.

Marking of the pitch – see attached diagram, Appendix A

4.2 DRAINAGE SYSTEM

The minimal drainage system of the pitch shall be designed by creating a bi-directional upper slope of the pitch surface (roughly 0.5% slope), placing two longitudinal corrugated underground drainage pipes, on both side of the pitch, inside an excavated ditch at a depth and slope as shall be determined by the pitch and drainage designer, including type and rating of the gravel fill and geotechnical fabric.

It should be ensured that there is no underground system that is not a part of the drainage system of the pitches, underneath the pitches and within a perimeter range of 4.0 meters beyond them.

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4.3 SUBSOIL

The subsoil level preparation works shall include levelling the terrain at a maximum bi-directional slope of 0.5%, compacting subsoil to the planned heights with a density of at least 96% and renewed levelling.

The structure of the layers under the synthetic pitch shall be executed as follows:

- First layer with a minimum thickness of 15 cm. of washed and clean gravel. Rating shall be determined by the grass consultant.
- Second layer with a minimum thickness of 5 cm. of washed and clean fine gravel. Rating shall be determined by the grass consultant.
- Third top layer with a thickness of 1-2 cm. of fine compacted subbase material, for stabilizing the subsoil surface.

With regard to oily clay soils, give consideration to isolating the natural soil and removing rainwater to prevent swelling.

The subsoil materials, their rating, type, size, thickness, level of cleanliness and washing, dispersal, precision, compacting, the pitch drainage system – shall be specified specifically by the grass and draining consultant.

4.4 THE PITCH

Only grass of one of the producers approved by FIFA as FIFA Preferred Producers shall be approved for delivery and execution.

A link to the FIFA website is attached herewith:

<https://football-technology.fifa.com/en/resource-hub/certified-product-database/football-turf/producers/>

On the top foundation layer and before executing the synthetic grass sheeting, a shock pad layer shall be installed with a minimum thickness of 12 mm. of material, texture and thickness pursuant to specifications of the grass producer.

The pitch piles shall be cut in a "Diamond" or "Olive" formation.

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THE PRODUCTION OF SYNTHETIC GRASS AS DETAILED BELOW SHALL BE ALLOWED:

Grass with pile height of 40-45 mm. filled with granulated rubber sand.

The infill mixture is according to the manufacturer's specification.

Consideration should be given to designing quality methods of fastening to the pitch edgings and to joining by stitching or sticking to one surface.

The grass shall have drainage capacity of at least 60 mm. an hour.

The pitch line marking, the goal areas and the middle of the pitch shall be prepared by the artificial grass manufacturer and shall be fastened with grass sheeting (no color marking shall be allowed on the grass surfaces).

The type of piles (composition of the material), the pile density, the pile quality, the pile colors, the infill materials - shall be specified and determined by the grass consultant.

4.5 LABORATORY TESTS

4.5.1 The pitch must comply with professional requirements of FIFA pursuant to the FIFA Guide to Artificial Surfaces at a FIFA QUALITY level, backed by a field test of the laboratory approved by the facilities fund to perform the test. The cost of the laboratory test shall be at the expense of the allocation recipient.

4.5.2 The Authority will be given a choice: either to provide the Board with required certification (by ordering the necessary tests to be performed by a laboratory recognized by FIFA), or to send a request to the Board to order the test, via laboratories with which it works. In the latter case the test cost shall be offset from the subsidy amount.

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4.6 THE MANUFACTURER'S WARRANTY

An original warranty of the turf surface manufacturer shall be given **for 5 years** from the time of the installation, for use of at least 2,800 hours a year to unlimited sports usages with respect to the areas of use or splitting the warranty for installation and for the product or any split with respect to the various products compiling the grass surface.

The grass manufacturer's warranty shall be given for regular maintenance of the pitch **for 3 years** from the day of installation according to the manufacturer's guidelines; a detailed maintenance plan shall be submitted on behalf of the manufacturer, including the equipment necessary for maintenance.

5. THE FENCING AROUND THE PITCHES:

5.1 FENCING REQUIREMENTS

The pitch shall be fenced with 4 m. high perimeter fencing.

5.2 THE FENCING STRUCTURE

The fence shall be in one of the following alternatives:

- A fence of welded steel mesh within modular frames connected using clamps and screws to bearing posts, such as a **Savionit – Kat Regel** model fence of Yehuda Fences or an equivalent.
- A rigid mesh fence of steel construction and welded steel mesh coating, **Migrash** model of Yehuda Fences or an equivalent.
- An institutional fence, **Tzabar** model of Yehuda Fences or an equivalent.

The fence shall be galvanized according to the Israeli standard and painted with corrosion resistant industrial paint. On site welding shall not be allowed when assembling the fences in the field.

The fence shall be installed on a foundation and wall / perimeter reinforced concrete belt around the pitch. The minimum thickness of

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the wall / concrete belt is 30 cm. The level of the belt surface shall be a minimum of 30 cm. above the pitch level. The visible corner of the concrete belt within the pitch grounds shall be processed in such manner that it shall be truncated or rounded.

The fence shall be designed and executed in such manner that it shall have ball stopping durability.

5.3 **ENGINEERING DESIGN**

Approval should be obtained from a construction engineer for the post and frame sections, the wall thickness of the post and frame sections, the diameter of the steel mesh rods and for the density of the steel mesh, for the distance between the posts, dimensions of the posts and for the necessary support for the fencing system structure, for the posts and for the entry and exit gates.

Consideration should be given to the feasibility of installing signs and/or cover sheeting on the fences and their implication in terms of wind loads for the stability of the fencing.

6. **SITE DEVELOPMENT:**

6.1 **GATES**

In the perimeter fencing of the grass pitch gates are to be installed according to a detailed design.

Gates should be installed as follows:

- Main entry gate that shall ensure continuous entry of users into the complex.
- Emergency vehicle and maintenance vehicle entry gate into the pitch complex.
- Additional emergency gates subject to the safety and security directives;

7. **ELECTRO-MECHANICAL SYSTEMS:**

7.1 **PITCH LIGHTING**

- A lighting system shall be installed in the pitch with minimum horizontal intensity of 200 lux
- On average.
- The lighting shall be on 4 galvanized lighting poles at least 8.0 m. high.
- The foundation bolts for the poles shall be installed in an indiscernible manner.
- The poles shall be installed outside the fencing with climbing rungs and convenient climbing access, protected and controlled for trays and light bulbs.
- Accessories shall be installed on the poles commensurate with the quantity of lamps required and with the possibility of convenient and easy accessibility for their convenient and safe maintenance and care.
- Approval should be obtained from a construction engineer for the lighting poles , for the foundations and for the support details of the lighting poles .
- The lamps shall be asymmetric **LED** flood lamps from aluminum casting with epoxy finish, for protection against any weather conditions. IP 66 waterproof rating.
- The lamp shall be of a recognized international make with certification of compliance with Israeli Standard 20 for LED lamps.
- The color of the lamp shall not be less than 4,000 kelvin.
- The lifespan of the lamp is not less than 50,000 hours.
- Maximum uniformity shall be 0.6.
- Photo-biological safety should be maintained at a level of GR=0.

7.2 **OUTDOOR LIGHTING AND EMERGENCY LIGHTING**

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An outdoor lighting system (in addition to the pitch lighting) shall be installed, which shall ensure safe and secure movement throughout the facility after dark.

Emergency lighting shall be executed in accordance with the regulations.

7.3 ELECTRICAL PANEL

An electrical panel shall be manufactured and installed according to the standard, with a locking system and it shall be vandalism proof. An automatic system shall be installed in the electrical panel for turning the facility lighting on and off, in order to save energy.

8. ACCOMMODATION FOR DISABLED PERSONS:

Disabled accessibility to the facility shall be ensured – all the entries and walkways in the facility shall ensure compliance with all the binding regulations and standards for accessibility and use of persons with disabilities.

If it is decided to construct a gallery in the facility, the gallery design shall ensure places for disabled persons with accessibility and seating arrangement.

9. SPORTS EQUIPMENT

Requisite equipment list:

A pair of standard compliant goals (2*5 m. goals) fastened to the ground and removable.

****נגיש****