SPORT ENGLAND

Athletics

Design Guidance Note
Updated guidance for 2025

Think of the environment. Please avoid printing this A4 document unnecessarily.

sportengland.org

Sport England's design guidance aims to:

- **Increase awareness of good design**
- **Help built environment professionals, volunteers, clients, operators, user representatives and stakeholders follow best practice**
- **Encourage well-designed facilities that meet the needs of sport and physical activity and are a pleasure to use.**

Document accessibility
This document has been designed for comfortable reading at A4 and on a laptop screen, but can also be printed at A3 for large print versions. The pdf is accessible and has been tested to work with text readers.

The guidance is in a new format with a separately downloadable main section and a set of appendices – see page 4. They have been developed to enable the information to be digested and processed easily, with illustrations and tables for quick reference.

User guide
Before using this design guidance for any specific projects, all users should refer to the on-line user guide which explains when and how to use the guidance as well as understanding the limitations of use.

Click here for **User guide** and other **Design and cost guidance**

Cover: Oberhausen, Revierpark, Vonderort, Germany
Image credit: Polytan GmbH

Foreword

Athletics

Sport England believes that good facilities are fundamental to developing opportunities for sport and physical activity for everyone, from the youngest beginners to late starters and elite athletes. Sports and leisure facilities, from the smallest to largest, should be designed to be accessible and inclusive with flexibility to provide equitable sport and activity for everyone.

Good design should be based upon:

- **Stakeholder engagement putting people at the heart of the whole design process.**
- **A sound understanding of current trends and practices within individual sports.**
- **Research and developments in the sport and leisure industry.**
- **Accounting for a diverse spectrum of user needs.**
- **Experience gained from previously built schemes.**

These considerations should be embraced within the earliest vision statement and enshrined in the briefing stages through to the final detailed specifications and operational arrangements.

Sport England's design guidance aims to promote a greater understanding of inclusive design principles, technical and other important considerations to arrive at appropriate solutions that meet a wide spectrum of user needs.

The guidance also signposts to further information, advice and expertise as well as good practice examples.

Image: Friplassen Rykkinn - Norwegian Athletics

How this document relates to other guidance

The Athletics guidance document should be read alongside the latest version of related Sport England guidance and other key statutory and national governing body of sport (NGB) requirements, and the links highlighted below:

Sport England Athletics documents

Part A **Essential reading**

1. Introduction
2. Outdoor Facilities
3. Indoor Facilities
4. NewGen
5. Ancillary Facilities
6. Multi-Sport
7. Refurbishment
8. Innovation
9. Operation
10. Delivery

Other Athletics references

England Athletics NewGen Tracks	Click here
TrackMark	Click here
World Athletics	Click here
SAPCA Codes of Practice	Click here

Other sports guidance

Strategic Outcomes Planning Guidance	Click here
Demographic knowledge	Click here
Dementia-friendly sport and physical activity guide	Click here
Safeguarding	Click here
NGB sport-specific and wheelchair sports requirements (see also Appendices overview)	Click here

Other key references

Equality Act 2010	Click here
Building Regulations/Approved Documents (AD)	Click here
British Standard (BS) 8300 "Design of an accessible and inclusive built environment"	Click here
BSI PAS 6463: 2022 "Design for the Mind - Neurodiversity and the Built Environment"	Click here
Inclusive Design Overlay to the RIBA Plan of Work	Click here

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1 Introduction

This section sets out the aims of the **Athletics guidance.**

This guidance is intended to support anyone planning, designing, operating and maintaining indoor and outdoor sports, leisure and physical activity facilities that support track & field athletics and running activities.

While not exhaustive, it is a comprehensive briefing document designed to prompt the right questions and to inform the decisions that formulate the project and design briefs.

In England, clients who commission new and refurbished athletics facilities are likely to include the following:

- **Local Authorities** – many athletics tracks and facilities are owned and maintained by local councils, who commission upgrades or new builds as part of community sports provision.
- **Schools & Multi-Sport Academies** – primary schools, secondary schools, academies, and independent schools may commission new facilities to support PE and sports provision.
- **Universities & Colleges** – higher education institutions often invest in athletics facilities for student use, elite athlete training, and community access.
- **Professional & Elite Sports Bodies** – High-performance centres invest in top-tier athletics infrastructure.
- **National Governing Bodies** (NGBs) – UK Athletics and Home Country Athletics Federations (England Athletics, Scottish Athletics, Welsh Athletics, Athletics Northern Ireland) may fund or support facility developments.
- **Sports Foundations & Charities** – Organizations like Sport England, Sport Scotland, Sport Wales, and UK Sport provide funding for facility improvements.
- **Private Developers & Sports Clubs** – Some athletics clubs or private organisations commission facilities, often in partnership with local councils or funding bodies.

1.1 Sport England's Commitment to Athletics Facilities

Sport England recognises the importance of providing high-quality facilities for athletics, encompassing running, jumping, throwing and pushing, as a cornerstone of its mission to inspire and support physical activity and community engagement.

By investing in track and field facilities, as well as accessible spaces for recreational running and informal exercise, Sport England aims to enable people of all ages and abilities to participate in athletics. This commitment aligns with its broader goal to ensure equal access to sports infrastructure, targeting areas of socio-economic disadvantage and regions with limited sports provisions. The emphasis is not solely on elite-level performance but also on creating inclusive spaces where beginners, schools, and community groups can thrive.

1 Introduction

1.2 Alignment with the 'Uniting the Movement' Strategy

The **'Uniting the Movement'** strategy underpins Sport England's approach to promoting physical activity as a means of improving mental and physical wellbeing, strengthening communities, and fostering social cohesion. Athletics, with its fundamental activities of running, jumping, throwing and pushing embodies the strategy's emphasis on simplicity and accessibility. These activities are universal and require minimal equipment, making them particularly effective in engaging diverse populations, including under-represented groups.
By prioritising infrastructure for these activities, Sport England reinforces its vision of creating opportunities for everyone to lead an active lifestyle, bridging the gap between grassroots participation and elite professional sport.

1.3 Broadening the impact of Athletics through Partnerships

Sport England also emphasises collaboration with schools, local authorities, and athletics organisations to maximise the impact of its investments in athletics facilities. This collaborative approach ensures that the infrastructure supports not only competitive events but also community initiatives like youth athletics programs and school sports days.

By embedding running, jumping, throwing and pushing into community life, Sport England strengthens the reach of the **'Uniting the Movement'** strategy, inspiring a culture of inclusivity and lifelong engagement with physical activity.

This holistic approach to facility provision helps nurture both individual wellbeing and collective resilience, ensuring athletics remains a vital contributor to healthier, happier communities.

1.4 Reference to England Athletics' Strategy

England Athletics' Strategy for Athletics and Running: 2021-2032 recognises that learning to run, jump, throw and push is the foundation for a lifetime of activity. From playground to podium the sport offers everybody, irrespective of size, shape, cultural background or disability, the opportunity to achieve great things and to live a healthier and happier life.

England Athletics wants to help athletes of all backgrounds and abilities to flourish and reach their full potential.
In order to develop a successful and inclusive talent pathway, a world-class support system of clubs, coaches, officials, and competition needs to be created.

In order for the system to thrive with a continuous supply of athletes, opportunities must be created for more individuals to discover the sport and maintain their participation.
The focus should be on enhancing experiences for all involved and prioritising the needs of athletes and runners.

1 Introduction

England Athletics will support and develop clubs (and facilities they utilise for training and competition) to be safe, sustainable, and welcoming, be the best they can and create vibrant environments for their athletes.

Through the provision of expert advice and guidance England Athletics will collate and share knowledge around facilities such as construction, maintenance, and innovation to support and influence facility operators to safeguard and /or develop athletics facilities in England.

1.5 Sport England Strategic Planning Outcomes Guidance

Sport England's Strategic Planning Outcomes Guidance ensures that investments in sport and physical activity deliver meaningful, long-term benefits by focusing on outcomes such as improved health, social cohesion, and reduced inequalities. By emphasising inclusivity and evidence based decision making, the guidance helps stakeholders address barriers to participation and design interventions tailored to community needs. It also promotes collaboration across sectors, fostering partnerships with health, education, and local authorities to amplify impact. Additionally, the framework supports organisations in demonstrating their contributions to societal goals, strengthening their case for funding and ensuring the sustainability of programs and facilities.

1.6 Sport England Accessible and Inclusive Sports Facilities Guidance

Sport England's Accessible and Inclusive Sports Facilities Design Guidance provides a framework to create sports environments that are welcoming, functional, and accessible to everyone, including individuals with disabilities and those from diverse backgrounds. By prioritising inclusivity in design, the guidance ensures that facilities address the needs of under-represented groups, breaking down barriers to participation. It emphasises practical measures such as accessible entrances, adaptable equipment, and user-friendly layouts that enhance the experience for all users. Additionally, the guidance supports long-term sustainability by fostering spaces that cater to a broad range of community needs, ensuring that facilities remain relevant and widely utilised over time. This approach not only promotes equality but also maximises the social and economic impact of sports infrastructure investments.

1 Introduction

England Athletics is committed to creating accessible and inclusive facilities to ensure that athletics is welcoming and open to everyone, regardless of age, disability, gender, race, ethnicity, sexuality, or socioeconomic status. Their approach includes developing resources such as the Diversity Action Plan, which aligns with governance codes to improve representation and engagement with equality partners and providing inclusive guidance for event organisers to accommodate disabled athletes in competitions. They support clubs in becoming more inclusive by addressing barriers to participation, collecting data on diversity, and adopting clear inclusion policies. Additionally, they align with Sport England's guidance on designing safe and welcoming spaces that meet the needs of diverse communities, demonstrating their dedication to fostering equity and opportunity within the sport.

The range of disabilities, coupled with the variety of athletics disciplines, makes it difficult to provide definitive guidance for all eventualities. It is therefore essential to consult key project stakeholders and the Governing Body (England Athletics) throughout the design process and ensure that the views of end users, athletes and their coaches are considered.

Sport England's successful **'This Girl Can'** strategy is pivotal for inclusivity as it actively challenges societal barriers that prevent many women, particularly from under-represented and lower-income backgrounds, from engaging in physical activity, thereby fostering a more welcoming and diverse sporting environment.

1.7 Sport England Active Design

Sport England's Active Design Guidance promotes the integration of physical activity into the built environment, ensuring that places where people live, work, and play encourage active lifestyles. By incorporating principles such as walkability, connectivity, and access to green spaces, the guidance helps create environments that make physical activity a natural part of daily life. This approach supports improved public health, reduces sedentary behaviour, and fosters stronger community connections. Additionally, active design contributes to sustainability by promoting modes of transport like walking and cycling, which reduce reliance on vehicles. By aligning urban planning with health and well-being goals, the guidance helps create vibrant, inclusive, and health-focused communities.

Image: Sowerby Sport Village, Active Track: Re-form Landscape Architecture

1 Introduction

Sport England's **'Every Move'** strategy is crucial for physical activity as it addresses climate change's impact on sports participation by investing in sustainable infrastructure and practices, ensuring accessible and resilient opportunities for all to stay active.

1.8 Hierarchy of Athletics Facilities

The England Athletics' Facilities strategy highlights the UK Athletics' Hierarchy of Facilities to help differentiate facilities and venues required to support athletics at various levels. Sport England has also adopted this hierarchy and similar terminology is used in this document to differentiate between different types of athletics facility:

- **NewGen Tracks:** A New Generation of developmental outdoor facilities that provide financially viable, inspiring environments for local communities and developmental clubs. These include PlayTrack, CompactTrack, MiniTrack and ActiveTrack as described in the England Athletics NewGen Tracks New Concepts in the Facility Design document.
- **Club & Community Training venues:** Indoor and Outdoor Track & Field/multi-sport facilities that have a strong anchor club membership and can provide appropriate training and local competition opportunities. These facilities may be provided by local authorities, schools, universities or by athletics clubs.
- **Regional / County Competition Venues:** Regional / County Competition / Training Hub venues: A network of high end, UKA / WA certified indoor and outdoor facilities able to host training and competition across all track & field event disciplines (including para-athletics) at Regional level and above.
- **National Competition Venues:** UKA / World Athletics certified competition indoor and outdoor facilities across all event disciplines (including Para athletics) capable of hosting the highest level of domestic competitions.
- **International Competition Venues:** UKA / World Athletics certified competition indoor and outdoor facilities capable of hosting world class competitions across all event disciplines (including Para athletics).

1.9 Specialist Professional Consultants

UK Athletics Facilities Team and specialist professional track & field consultants should be appointed at an early stage of project development to provide the necessary level of expertise on the design, management and maintenance of athletics facilities.

2 Outdoor Facilities

This section covers the general principles to be considered in the layout of outdoor Club and Community Training Venues and NewGen tracks. **Note:** For guidance on the design and construction of County, Regional, National and International Competition Venues contact UK Athletics' Facilities Team.

2.1 Size, Shape and Topography of the Site

Any proposal to develop new or refurbish existing athletics facilities should include a technical appraisal of the site, carried out by a competent, independent professional.

The appraisal should take account of the expected usage and associated implications for the design and construction of the athletics facilities and identify any potential restrictions or difficulties in developing the site, including the need for any further investigations. The study report should include:

- **Outline proposals for the facilities with outline costs**
- **An indicative programme for the proposed works, and**
- **An estimate of when the facility will be available for use**

This should also indicate the likely maintenance operations and associated costs, including the capital cost of purchasing any equipment necessary to cover this essential work.

The appraisal should highlight the need for specialist surveys required for design development, risk mitigation and approvals such as a topographical survey, site utilities and services survey, site investigation, geotechnical survey, preliminary ecological appraisal, tree survey, biodiversity net gain (BNG) assessment, flood risk assessment, lighting assessment, and noise assessment.

The layout of an athletics facility will be determined by the nature of the available site, that could suit a variety of sites of different shape and size. In each of these examples, consideration must be given to overall space requirements, including any required safety margins.

NewGen facility models allied with traditional Club / Community 400m track & field training venues, enable new facilities to be planned and delivered to suit a variety of sites and budgets. Both Sport England and England Athletics recognise training venues and smaller, developmental NewGen tracks (ideally with basic jumps and throws provision), are a great option for inspiring people of all ages and abilities to run, jump, throw and push which are the fundamental skills behind all physical activity.

NewGen facilities will typically include shared use by other sports and, as they are not restricted by a competition requirements, these can be designed and built to meet local needs and budgets.

Section 4 covers NewGen tracks that aim to provide new generation of innovative, affordable, and inclusive multi-activity facilities.

2 Outdoor Facilities

2.2 Artificial Infields

World Athletics permits artificial grass for the infield, including landing areas for javelin, provided it meets certain performance, safety, and layout requirements.

An athletics infield with an artificial grass surface for rugby, football, and other sports can be accommodated if important technical, safety and performance requirements can be met.

Sport England offers a detailed guide titled "**Artificial Surfaces for Outdoor Sport"**, which covers artificial grass pitch (AGP) design, surface types, technical standards, and maintenance best practices.

Some artificial grass surfaces now carry a warranty that allows for hammer, discus, javelin, and shot put; however, however, the surface must provide sufficient shock absorption, it must safely contain impact from heavy thrown implements, and it must not alter the throw's landing behaviour in a way that affects measurement or athlete safety.

For hammer and discus, special care is needed because of the high energy and forces of the thrown implements. World Athletics' Track and Field Facilities Manual recommends natural grass for these events but acknowledges artificial surfaces may be used if properly engineered.

Infield areas for sports pitch use should comply with National Governing Body design guidance for pitch dimensions, run-offs, and zones for spectators. For example: The infield of a standard 400m track provides ample space for a football pitch. (105m x 68m) The areas should be open plan and free from fencing, curbs or other barriers that would impact use of the athletics track. The requirements for protection of the athletics should be considered together with the need for temporary ball stop netting.

It is important that safe access and egress can be provided to athletics infield to ensure the safety of athletes, other sport participants, and spectators. This may include arrangements for exclusive access to the athletics infield to ensure that there is no conflict between athletics and other sports use.

Specialist advice should be obtained to ensure that the artificial infield is able to meet the needs of all sport, has the correct sub-base and shock pad underlay to absorb impact, has the correct surface type, and includes advice on correct footwear to maintain durability.

2 Outdoor Facilities

2.3 Dedicated Throws Provision

A dedicated throws area is a purpose-built, self-contained zone away from the main track infield, specifically designed for hammer, discus, shot put and javelin events and training. The throws area removes high-risk throws from the infield which frees up space for multi-sport use (including an athletics infield with an artificial grass surface for rugby, football, and other sports) while improving safety and operational management. The specific design and equipment depend on the throwing event (shot put, discus, javelin, hammer) and whether the athlete is standing or seated, according to England Athletics

The benefits of a dedicated throws area include:

- **Safer separation from track events and multi-sport activity**
- **Allows multi-sport infield (football / rugby) without interference**
- **Dedicated landing zones optimised for each throw type**
- **Easier crowd and official management during athletics meets**
- **Less wear and tear on infield grass / turf**

Typical Features of a Dedicated Throws Area:

Feature	Description
Hammer/ Discus Cage	World Athletics certified cage with netting and safety gates
Shot Put Circle & Landing Area	Concrete circle with sector lines and landing zone (natural or synthetic)
Disability Throwing Frame	A frame secured to the throwing circle with straps
Javelin Runway & Landing Area	Synthetic or natural grass runway with marked landing sector
Spectator & Official Zones	Defined areas with safe run-offs and clear viewing positions
Storage	Secure area for implements and equipment
Sports Lighting	For evening or poor-weather use

Table A1: Features of a Dedicated Throws Area

Specialist advice should be obtained to ensure that the dedicated throws area is able to achieve minimum sector distances and provision of safety netting, allow for buffer zones for safety cage, circle and infield. Advice should include layouts, dimensions, safety netting / fencing, lighting, etc.

2 Outdoor Facilities

2.4 School Sites

The provision of facilities for athletics on school sites are the responsibility of the Department for Education (DfE).

The DfE provides design standards and recommendations for outdoor physical education and sports facilities including external grass sports pitches for summer team games and athletics, mown amenity grass markings for seasonal grass athletics tracks (oval tracks, sprint straights) as well as permanent facilities for curriculum use and school sports days: typically High Jump, Long / triple Jump, javelin and shot put.

Schools are encouraged to include grass running tracks and other sports provisions that maximise the use of available space. The world's first ever CompactTrack athletics facility (Stoke Newington) was opened on a school site in London and is a scaled-down athletics area designed to fit within limited space, allowing students to practice basic running, jumping, and throwing athletics skills and is an example of a NewGen track covered in section 4.

Image: Stoke Newington School & Sixth Form, CompactTrack - UK Athletics

2 Outdoor Facilities

2.5 Site Conditions

Crucial to the success of new artificial track construction is a site that is stable, not a landfill site, and where there has not been a substantial degree of cut and fill to achieve the formation level.

Ground condition surveys should be carried out to ensure that the proposed site is appropriate for athletics facilities and that excessive abnormal costs will not be incurred.

The quantity of water run-off from a new impervious track is substantial and can cause flash flooding if due consideration is not given to the adequacy of the outfall provision. It is important to consult the local authority drainage departments at an early stage since they will required that a sustainable drainage system is provided to manage water run off in an environmentally friendly way to reduce risk of surface water flooding, filter potential pollutants before they reach natural water bodies, create habitats for wildlife, increase resilience against extreme weather events (flooding and drought), and reduce pressure on traditional drainage systems.

Sport England's guidance on flood and drought is vital for athletics facilities as it helps them adapt to climate-related risks, ensuring long-term usability, safety, and sustainability of sports infrastructures.

General information on factors to be considered for grassed areas are given in the Sport England Design Guidance Note – Natural Turf for Sport.

An athletics track Club / Community training venue / NewGen track should be:

- **Dimensionally accurate**
- **Of sound construction**
- **Durable**
- **Slip-resistant**
- **Impact-resistant**

2 Outdoor Facilities

2.6 Construction

The Sports and Play Construction Association (SAPCA) , in conjunction with UK Athletics, has developed a Code of Practice for the Construction and Maintenance of Athletics Tracks.

The **World Athletics Track and Field Facilities Manual** publishes detailed guidance on the construction of track and field facilities. Not all tracks are required to conform to World Athletics construction details and so it is important that designers consult with England Athletics to establish the relevant criteria appropriate to the facility type, scale and use of the proposed facility.

2.7 Porous PU Tracks

The most popular synthetic track system in the UK is the porous PU type, which incorporates a base mat of polyurethane-bound rubber granules and a finishing layer of spray-applied coloured EPDM granules in a polyurethane matrix. The top 'structure coat' provides the traction properties of the surface whilst strengthening the base mat and providing protection from the impact of ultra-violet. The polyurethane resins used in these systems are known as 'moisture cure', as opposed to the two-part cure of the 'cast elastomer' systems. The nature of the construction methods ensures that the system remains porous, which is a great advantage in the UK climate.

This construction is not as robust as the solid PU systems, but re-texturing at the appropriate time can ensure an extended lifespan. In the areas of high wear, such as sprint starts and long jump and high jump take-offs, it is possible to strengthen the porous system locally by 'grouting' the pores of the base layer with the cast polymer materials.

All PU systems have environmental issues when they reach the end of their life if they are not being recycled.

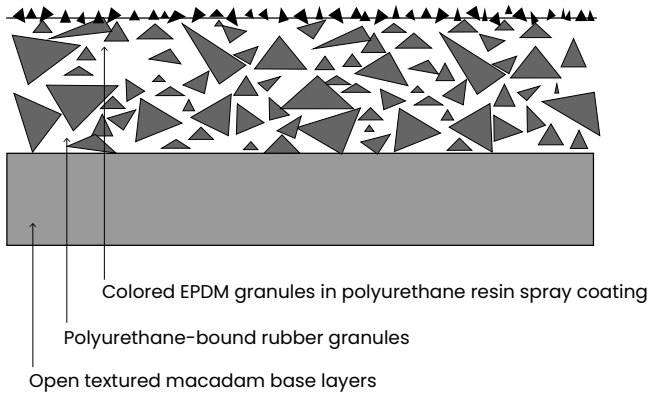

Figure A2: Porous PU Tracks

2 Outdoor Facilities

2.8 Sandwich Systems

By its nature, the solid PU system is a very expensive surface to construct, due to the high percentage of two-part polyurethane in the construction. In the sandwich system this cost is reduced by installing a base mat of bound rubber granules, as in the porous PU system and sealing this with a thin layer of the cast elastomer material as in the solid PU system. The surface texture is achieved by applying rubber granules to the uncured surface. This system provides a solid PU surface at a much-reduced cost, though some of the advantages of the solid system may be lost, particularly on resurfacing.

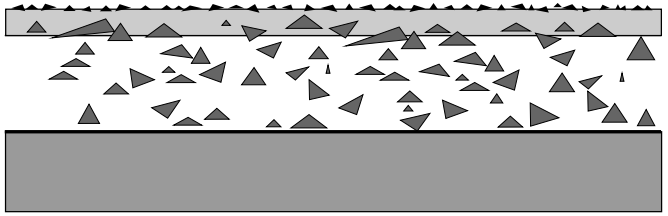

Figure A3: Sandwich Systems

2.9 Solid PU Tracks

The solid PU systems are classified as 'cast elastomers' and incorporate rubber granules in a matrix of two-part polyurethane resin. This material is mixed and cast in-situ to form an impervious resilient system. The overall thickness may be achieved in more than one pass and the surface is commonly given a textured finish by the application of coloured EPDM rubber granules on to the uncured base material. After final cure, the excess granules are removed to leave the finished running surface. As the solid PU surface is impervious, great care and expertise is required to ensure that surface water does not remain on the completed track after heavy rain.

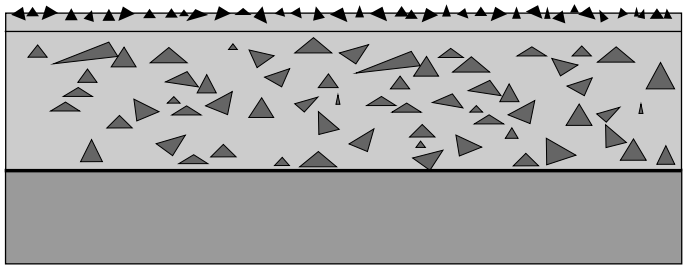

Figure A4: Solid PU Tracks

2 Outdoor Facilities

2.10 Prefabricated Tracks

Prefabricated systems use factory-produced sheet materials based on rubber-type compounds. These sheet materials are usually impervious and have the advantages of consistency in resilience and thickness achieved during manufacture. Since the thickness of the surfacing layer cannot be adjusted on site to accommodate irregularities below, the base layer of dense asphalt must be engineered to a very fine tolerance.

These materials tend to be longer lasting and have lower maintenance costs; likewise, they retain their performance throughout the life of the material. There are also environmental issues that may allow prefabricated systems to be reused if they need to be removed.

The adhesive bond between the prefabricated surface layer and the engineered base is crucial to the performance of this system.

Section 1.9 of the **SAPCA Code of Practice for the Construction and Maintenance of Athletics Tracks.**

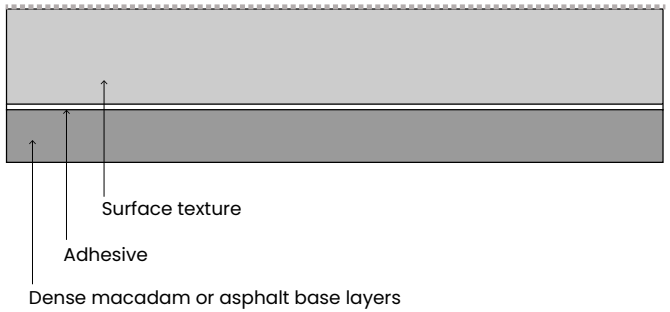

Figure A5: Prefabricated Systems

2 Outdoor Facilities

2.11 Sports Lighting

Sports lighting is essential to maximise the use of tracks and training areas. Sport England provides separate artificial sports lighting design guidance.

Sports lighting provides opportunities to maximise income by allowing greater programming flexibility and optimum use of the facility. However, it is important to balance these benefits against the initial expense, ongoing energy and maintenance costs and the implications for the management and supervision of the facility.

To inform this decision a realistic assessment should be carried out of the probable patterns of use. A simple programme of use will identify when training sessions and events take place and help to determine whether the facility can operate effectively without the extended hours of use that sports lights will provide.

The other major consideration is the requirement and likelihood of obtaining planning permission for sports lights. In some cases, sports lighting may be considered inappropriate by the local planning authority due to proximity to housing, possible increase in noise and traffic or because of the visual intrusion of the lighting columns. A lighting assessment is likely to be required as part of the planning submission to demonstrate that lighting installations minimise environmental, ecological, and community disruptions by controlling glare, light spill, and sky glow while meeting safety and regulatory standards.

LED lighting and modern switching technologies have greatly improved sports lighting by enhancing efficiency, performance and sustainability. LED lights offer superior brightness with minimal energy consumption, therefore reducing electricity costs while providing uniform illumination that enhances visibility for athletes and spectators. Their long lifespan and durability minimises maintenance needs, ensuring consistent performance over time.

Modern switching systems, such as dimmable controls and smart automation, allow for precise lighting adjustments based on event requirements, optimising energy use and reducing light pollution. Instant on/off capabilities remove warm-up times and improve operational flexibility for sports complexes.

An average illuminance level of 75 lux would be sufficient for licensed, non-technical track events, club track & field training and recreational use. For club competition that includes technical track (hurdles and steeplechase), and all field events, this should be increased to average 200 lux. For non-televised licensed competition at national and international level the minimum required average lux level increase to 500lux.

Switching will allow appropriate illuminance to be provided for particular events and will reduce unnecessary use of energy, and low spillage luminaries will minimise light pollution and nuisance.

2 Outdoor Facilities

The Table below gives a partial summary of the recommendations of the World Athletics, as published in the Track & Field Facilities Manual 2019 Edition. For televised events, different standards will apply.

Non-televised Events
Where athletics are to be used for non-televised activities, it is only necessary to provide a horizontal illuminance suitable for the required level of activity.

Activity Level	Horizontal Illuminance	Uniformity		Colour Properties of Lamps	
	Eh ave. (lux)*	U1 Emin./ Emax.	U2 Emin / Eave.	Colour Temperature Tk (K)	Colour Rendering Ra
Club Training / Recreational	75	0.3	0.5**	>2000	>20
County / Regional	200	0.4	0.6	>4000	≥65
International / National	500	0.5	0.7	>4000	≥80

* Illuminance value are minimum average values; initial values are 1:25 times higher

** When only the track is to be used and the in-field lights are switched off, U" should be ≥0.25

Glare Rating (GR)	≤50
Uniformity Gradient (UG) per 5m (Only for National and international Competitions)	≤20%

Table A2: World Athletics sports lighting requirements - Minimum requirements for non-televised events

The lighting design should ensure that the required illuminance levels are achieved throughout the sports facilities, not only on tracks, but also in the centre of the field where it is critical that projectiles can be seen along their full path, for both performance and safety reasons. Lux levels should be checked in the centre of the grass area after the initial fall off.

For Discus, Javelin and Hammer special precautions should be taken to ensure the safety of spectators and other persons in outdoor facilities since the object being thrown may travel above the line of sight and hence be invisible during part of its flight.

Training areas should be available throughout the year and be as low maintenance as possible.

For key advice on sports lighting for athletics tracks, please review the following link **SAPCA Code of Practice CoP.**

3 Indoor Facilities

This section gives guidance on key considerations for the design of indoor facilities for athletics.

3.1 Indoor Athletics Facilities

Dedicated indoor athletics facilities are functional spaces designed in a manner that puts the technical requirements of track and field disciplines ahead of all other demands. These will require both the technical sports spaces, clear safety zones and unobstructed clear heights.

- **National and regional centres;** combining a full range of competitive indoor disciplines, they will ideally provided with additional facilities for coaching, cross training, recovery, judges, competitors and spectators. These may need to provide increased lighting levels and facilities for TV including outside broadcast equipment plus enhanced power.
- These facilities will be developed in close consultation with UK Athletics to ensure they fit within the national strategy and specialist consultants engaged to ensure facilities meet required standards.
- Indoor facilities may cover all field and track disciplines or be specific to a limited number of disciplines.
- Ideally indoor athletics facilities should be adjacent to similar outdoor facilities for shared use of ancillary accommodation, management, parking and access.

For national and international indoor venue guidance, see the Technical Information—follow the link.
World Athletics Technical Information

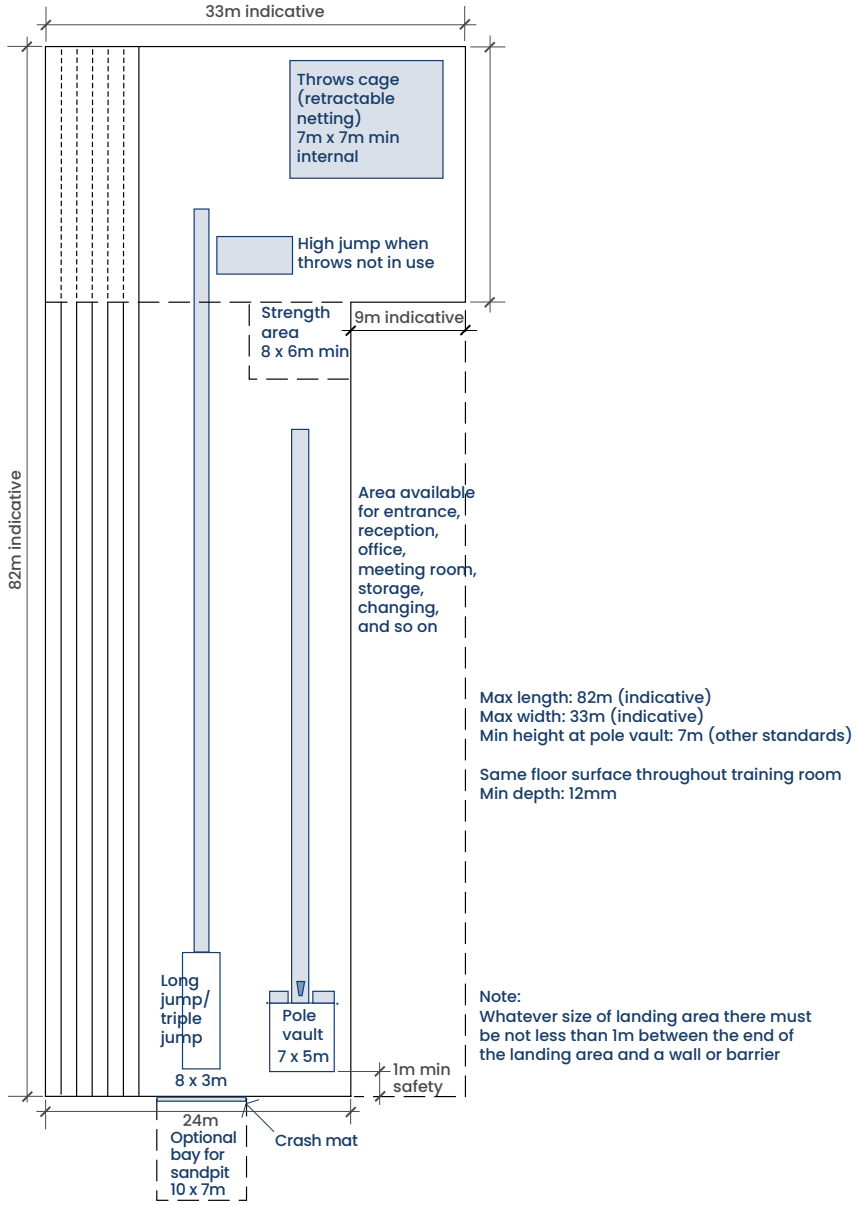

Figure A6: Regional indoor athletics training centre

3 Indoor Facilities

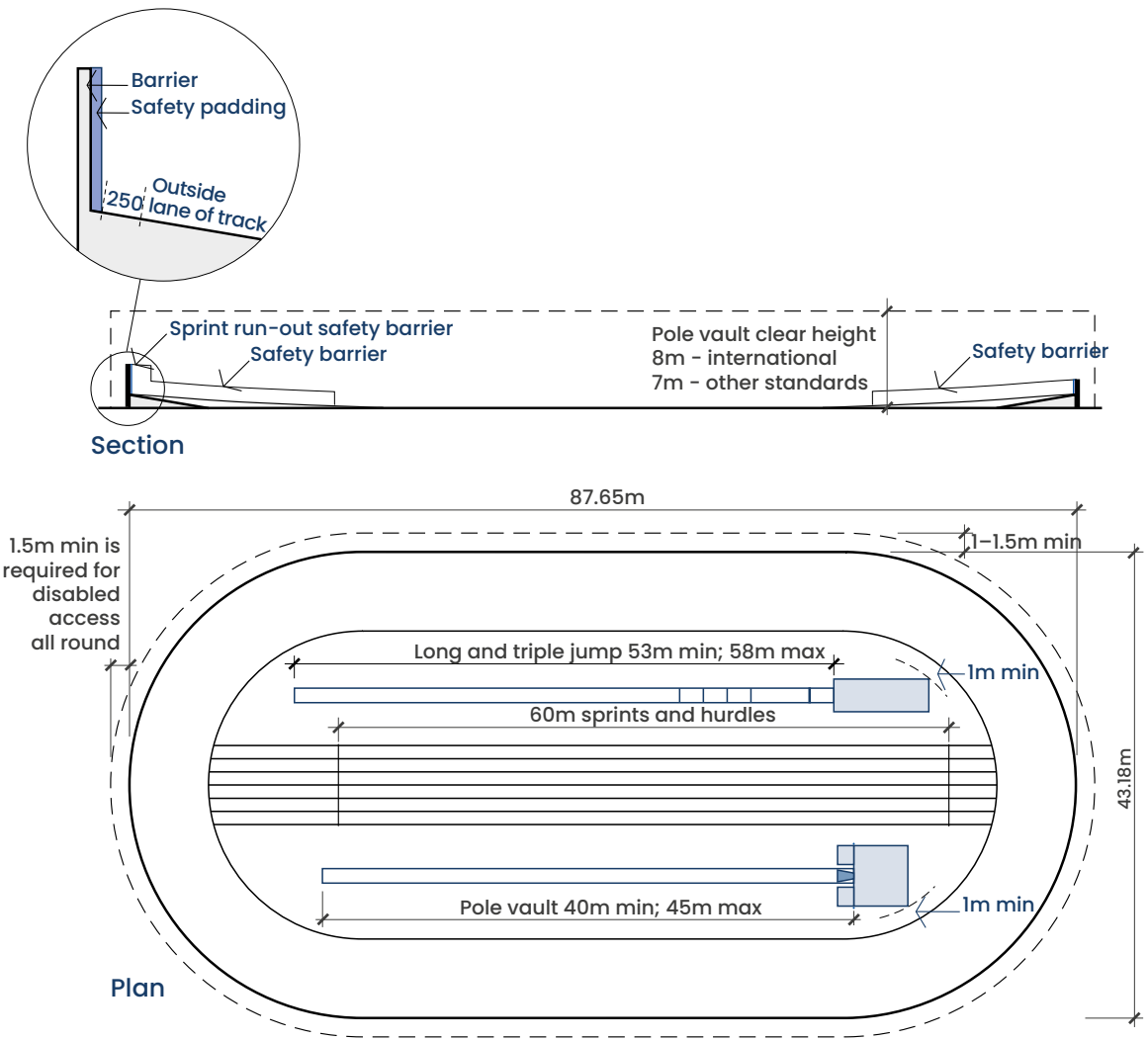

Figure A7
Plan & Section: Athletics space diagram for a 200m four-lane oval track

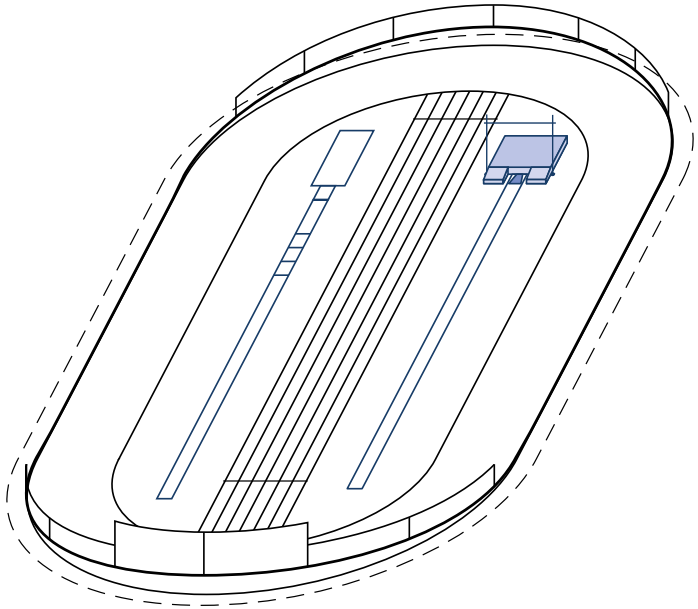

Figure A8
Athletics space diagram for a 200m four-lane oval track

3 Indoor Facilities

3.2 Multi Sport Indoor facility with Athletics Provision

A further important distinction is between specialist and multi-sports indoor facilities, for the latter athletics is one of many sports sharing spaces. Sports facilities: It includes a sports turf, an athletics track, and a show field. Witton Park is a great example of a multi-sport facility, featuring a multi-sport indoor centre with dedicated athletics provision.

In most centres, even performance centres, indoor athletics is seasonal, and consideration should be given to maximising the benefit from the financial investment. This may include planning for a range of sports, school and community uses, plus potentially commercial activity such as boxing, music and holiday clubs.

These may well impact on the design, acoustics, building services and ancillary accommodation. The range of uses should be established early on and be included in the business plan and incorporated in the design from the outset.

3.3 Multi-Sports Halls

Generally multi-sports halls are located within schools or local authority owned sports centres, however they do have the potential to provide indoor opportunities, particularly in the winter. Sport England provide separate sports hall design guidance.

3.4 Critical Design Factors for Indoor facilities with Athletics Provision

The space requirements and safety clearances of each individual field and track discipline, relevant to the competence of the athletes, should be as recommended by UK Athletics.

Indoor athletics spaces need to respond to the functional requirements of each individual discipline and take cognisance of performance improvements in the future.

Image: **Witton Park - England Athletics**

3 Indoor Facilities

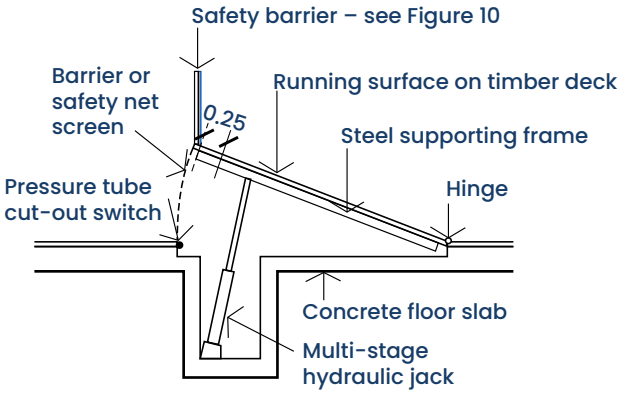

Figure A9
Typical section showing hydraulic bend

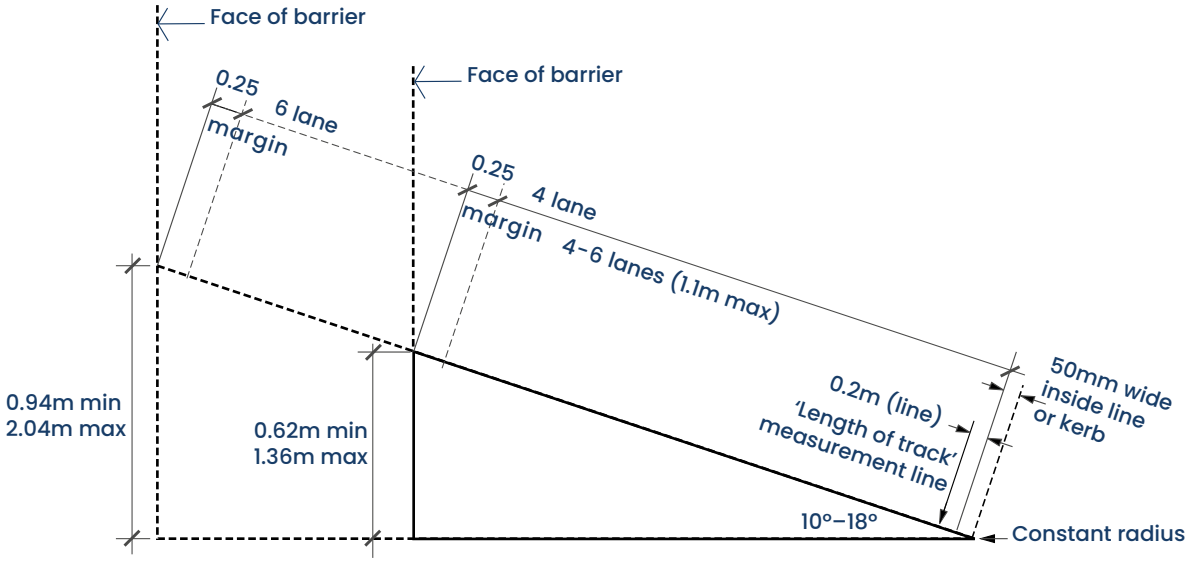

Figure A10
Profile through the summit of a banked bend

3 Indoor Facilities

3.5 Structure

- Elements of structure should not be located within the sports activity space nor the adjacent safety clearance zone.
- Adequate clear height should be provided for jump disciplines, note additional height over the pole vault facility.
- Provide adequate height and support for throwing cages.
- Secondary steelwork may be required to support the rigs, cages and nets and need early co-ordination into the design.
- Consider sight lines for coaches in training facilities and judges and spectators in competition venues.
- Structural slabs should be reinforced concrete.
- Include recesses in the structural slab for pits, hinged curves to tracks.

3.6 Floors

- The extent and areas of floor to be provided with spike resistant finishes should be agreed at the outset and extensive in specialist and elite centres.
- Off activity floor finishes can be of a different material.
- The finish of running tracks and run-ups should provide a smooth uniform surface suitable for the standard of athletics to be accommodated.
- Floors in throw enclosure should be protected with flame retardant PVC covered gym matting min. 40mm thick. If not permanent the mats will need storage.
- Pressure plates, sockets and service boxes in floors should be robust, secure and flush to avoid a trip hazard.
- Floors may need local reinforcement to accommodate fixings for gymnastics, disabled athlete's equipment and safety barriers.
- Consider the position of the long jump pit and the control of sand spread.
- If covers are provided to pits these should be walkable and robust, with consideration given to size and weight for removal.
- Careful consideration must be given to the specification of compatible finishes in multipurpose areas used for both athletics and other sports.

3 Indoor Facilities

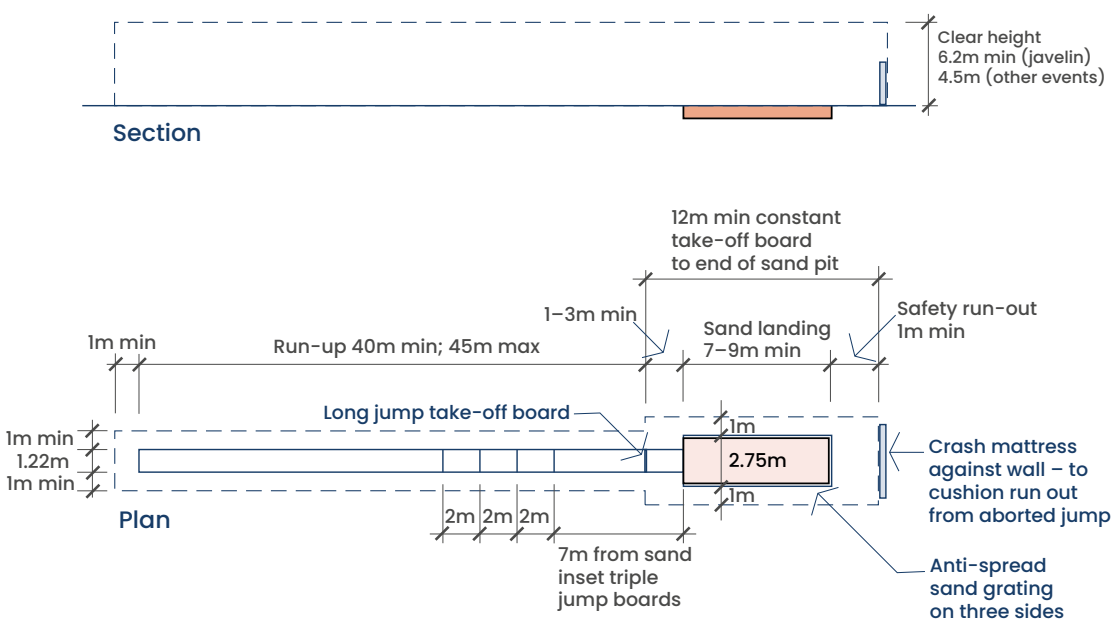

Figure A11
Indoor jump facilities

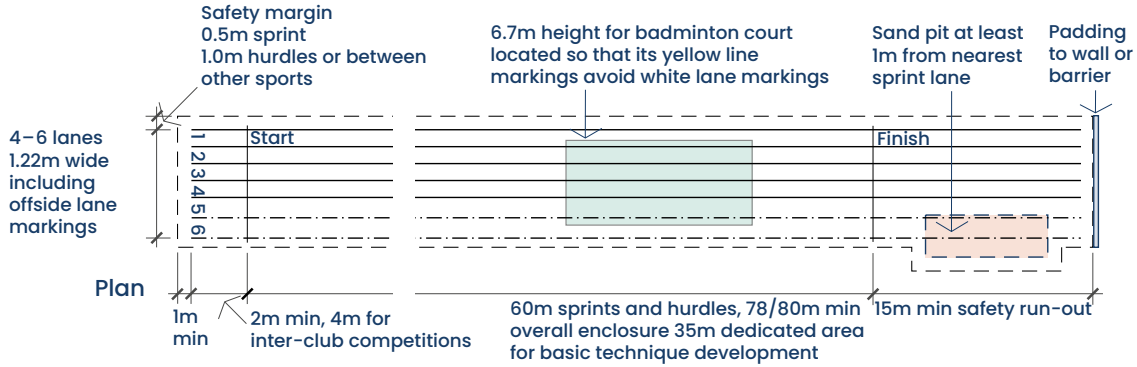

Figure A12
Indoor training areas for sprint, hurdles and high jump

3 Indoor Facilities

3.7 Walls and Ceilings

- Walls and ceilings in sports facilities receive strong mechanical impact and should have appropriate material construction and surface finish to withstand these.
- Walls and roof must be designed to support rigs for special apparatus and nets.
- Mechanical and electrical services, sports equipment, and nets suspended from soffits must all be carefully coordinated with the roof structures. A structural engineer may be required.
- Wall surfaces must be flush, with no projections or indentations and be closed, non-splintering and smooth.
- Doors, sports equipment, fixtures and installations of all kinds (hinges, door handles, escape panic bars, switches and accessories such as break-glass alarm points) must be flush fitted.
- Should wall bars be located in the main activity areas, they must fold away clear of the flush wall zone or be protected with flush panelling whist other sports activities are taking place.
- Access doors should not open into sports competition or training areas or sports halls in a manner that might constitute a risk to athletes.
- Glass must be impact resistant toughened and include manifestations in floor level glazed screens.
- Fire extinguishers and other hand-held firefighting apparatus in sports activity areas must be housed in flush wall cabinets or otherwise so as not to constitute a risk to athletes.
- Make provision for acoustic absorbency. Reverberation time should not exceed 2 seconds at mid-frequency for sports use. Specialist advice should be taken where non-sports events are proposed.
- Protective Netting, Boarding and Safety Padding.
- Adequate protective netting suspended from the roof structure for throwing enclosures must be provided.
- Flame retardant safety padding should be provided to safety barriers, brake walls at the end of straights and run-throughs, and unavoidable exposed corners or projections.
- Beyond the finishing line of the sprint track there should be a minimum safety run-through zone of 15m with a padded brake wall or barrier capable of withstanding the horizontal impact stresses of athletes.
- Consider the additional requirements of a throws wall for indoor athletics training that comprises of a layer of impact absorbing and acoustic deadening rubber material bonded to the wall with additional cushioned matting at floor level to prevent damage to the floor surface.

3 Indoor Facilities

3.8 Indoor Throwing Enclosures

The exact size and specification of an indoor throws training enclosure will depend on the layout of the building and specifically the available clearance height where the cage is to be located. Consultation with UK Athletics' Facilities Team before installation is highly recommended.

General guidance

- Enclosures may be circular or square,
- Minimum internal measurements must be 7m x 7m.
- Minimum ceiling / clearance height = 4.50m / Javelin 6.20m
- Ensure that netting is sufficiently loose to prevent implements from rebounding.
- The centre of the circle should be at least 3.50m to the inner netting.

Positioning of Throwing Circles

- The location of the throwing circle will depend largely on the dimensions of the throwing enclosure. It should be positioned in such a way that:
- The thrower will not damage the tracking or runners.
- The implement will not rebound on to the thrower.
- The implement will not damage any object outside the netting. i.e. walls.

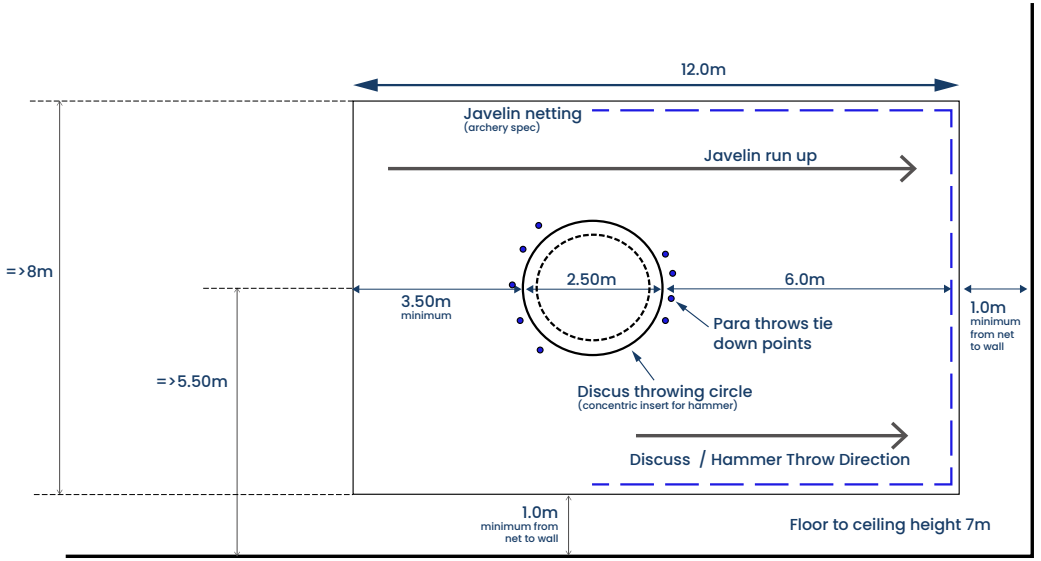

Figure A13
Example of an indoor throwing enclosure: Birmingham High Performance Centre

3 Indoor Facilities

In general, the higher the roof netting the further from the front netting the throwing circle can be. Conversely the lower the roof netting the closer to the front netting the throwing circle will be.

As a guideline if the roof netting is 7.0m the centre of the throwing circle should be located 6m from the front inner netting (see Birmingham HPC example). For a facility with a lower clearance height the inner netting will need to be located nearer to the front of the circle to prevent implements striking the net runners/trackway.

For example, in a building with a clearance of only 4.50m

(the minimum height requirement), the front inner netting would need to be located 3.50m from the front of the circle.

If the throws enclosure includes provision for javelin there needs to be a minimum height of 6.20m and there should be a hatched area for the release of the javelin 5m to 6m from the front netting. Care should be taken that throwers do not follow through closer than 4m to the front netting.

Additional Information

- Consideration must be given to the protection of runners, track way and other net fittings.
- The throwing circle must be positioned in such a way that any implement thrown will release into the front or side netting rather than the roof netting or the netting protecting the runners and track way.
- The javelin release point should be approximately 5m from the receiving netting or at a distance such that the javelin will strike the front netting rather than the roof netting or the netting protecting the runners and track way.
- Ensure that there are no gaps between the runners and the netting.
- Flush para throws tie down points must be provided for disabled athletes.

Netting for Enclosures

- Double netting must be used for front and sides with a minimum 1.0m safety margin between the outer netting and any surrounding walls.
- Single netting should be used for the roof if this is required.
- The netting, which forms the entrance into the circle or enclosure, must not be exactly opposite but should be offset to each other and the entrance netting should overlap by a minimum of 1m.
- In addition, there should be an effective method of preventing a gap forming at the entrance.

3 Indoor Facilities

Specification of Netting

- Min. 4mm synthetic, knotless, or woven.
- 40 x 40mm - 45 x 45mm mesh size.
- Flame retardant BS 5867: Pt.2 type B performance.
- Front netting receiving javelins should be special blanket or archery netting which conforms with BS 1892: Pt.2 section 2.11.
- Roof netting should only deflect by one half the distance between the netting and the nearest obstruction.
- There should be a safety zone of at least 1m beyond the outer netting.
- Consideration must be given to the protection of runners, track way and other net fittings.
- Ensure that there are no gaps between the runners and trackway and the netting.
- Both inner and outer nets should be weighted at the bottom and must be secured either by permanent fixings on the floor or by heavy objects such as sandbags.
- It is recommended that the inner netting should be sufficiently loose to prevent implements from rebounding and that the outer netting should be angled out such that the gap between the nets is maintained with a minimum distance of 30cm and secured such that minimum deflection is possible.

Floor Protection

- The floor protection should be 40mm minimum flame-retardant PVC covered gym matting.

Equipment

- No outdoors javelins should be used indoors; only indoor javelins or javelins specifically modified for indoor use.
- Shots must be indoor shots.
- Modified hammers may be used.
- Outdoor discus may be used.
- All equipment should be checked before use.
- Track and lifting equipment must confirm to industry standards and be annually certified.

3 Indoor Facilities: Important Considerations

3.9 Environment for Indoor Athletics

The main purpose of indoor training provision is to protect athletes from climatic extremes, but it is critical that all indoor facilities are developed in a manner that reduces the energy required to maintain the internal environmental. Consideration should be given to envelope thermal performance, airtightness, controlled natural ventilation and natural light, managing solar gain and overheating, along with heat recovery, high efficiency equipment and low energy lighting. Energy input should be from renewable sources eliminating the use of gas, oil and other carbon fuels.

The likely large roof offers an excellent opportunity for photovoltaic electricity generation and the structure should ideally be designed to accommodate future installation if not possible during the initial development phase.

A minimum ambient design temperature of 15°C in winter is generally acceptable for athletes with humidity kept at a reasonable level and 40-50% relative humidity will generally be acceptable.

Satisfactory ventilation is essential to maintain a fresh environment, but it must not give rise to high air velocities near to high jump and pole vault bars.

In multi-sport centres, other temperatures and ventilation rates may apply, and air velocities across badminton playing areas must not exceed 0.1 metres per second.

A general lighting level of 200 lux is adequate for athletics training requirements but the layout of luminaries must be planned to avoid glare, particularly for athletics field disciplines such as throwing, high jump and pole vault. Competition venues will differ from this value as will facilities hosting high-definition TV broadcasts.

Additional requirements apply in multi-sport centres. Illuminance levels and layout of luminaires must be suitable for the particular sport to be played, and so careful consideration must be given to lighting at an early design stage to ensure that there are no clashes with other services, and structures, tracks and equipment at high level.

The levels of illuminance required for many sports is influenced by the standard of play and is set out in: BS EN 12193 (2018) and CIBSE Lighting Guide LG04: Sports Lighting (2023).

Lighting luminaires and other services must be carefully positioned to allow adequate clearance of track and field disciplines so as not to pose a safety risk to athletes. Consideration must be given to the safe access to, and maintenance of, high level luminaries and other services.

The Chartered Institute of Building Services Engineers publishes detailed guidance on building services.
Follow Link **www.cibse.org.**

3 Indoor Facilities

3.10 Daylighting

When developing a new indoor centre, natural lighting should be considered an integral part of the overall illuminance strategy. The utilisation of daylight within a sports area will reduce energy costs and have a positive psychological effect upon participants.

The sun or bright sky seen through glazing or by reflection from a glossy surface can cause unacceptable levels of disability or discomfort glare that can affect participants' concentration and performance.

The use of daylight in activity areas requires careful consideration and skilful design. It may be necessary to introduce special design features to create a glare-free daylit environment, and cost, maintenance and Health & Safety implications should be considered whilst integrating it into the building design.

Images: **HPC Building, Alexander Stadium - England Athletics**

4 NewGen Tracks

This section gives guidance on NewGen tracks that aim to encourage the development of innovative, affordable, and accessible facilities that support core running, jumping and throwing activities.

Providing facilities for athletics that encompass running, jumping, and pushing, is a cornerstone of Sport England's mission to inspire and support physical activity and community engagement at all levels of the sport.

England Athletics have previously launched the **'NewGen'** facility concept to encourage the development of innovative, affordable, and accessible facilities. These are designed to inspire greater participation in athletics by providing opportunities for people of all ages and abilities to engage in running, jumping, and pushing. NewGen tracks can be provided in educational settings, parks and open spaces, clubs, or leisure facilities. The initiative aims to inspire creative approaches to facility development, ensuring athletics remains inclusive and widely available.

There are four types of NewGen tracks aimed and different demographics, user groups and site locations:

4.1 Playtrack

Playtrack is a series of surface markings designed to transform hardstanding areas into visually dynamic spaces that encourage children to engage in physical exercise.

These markings are specifically created to stimulate children's interest and participation in games focused on running, jumping, and throwing - key athletic activities that promote fitness and coordination.

Playtrack can be installed in a variety of settings. In school playgrounds, it is particularly valuable for children aged 4 to 11, enriching play spaces for Key Stage 1 and 2 students. Public parks and community play areas also benefit from Playtrack, providing children with engaging spaces to practice athletic activities during open hours. Additionally, Playtrack is a less conventional innovative and cost-effective way to create temporary play areas in diverse locations.

Image: Friplassen Sarpsborg - Norwegian Athletics

4 NewGen Tracks

4.2 CompactTrack

CompactTrack is an affordable, space-efficient athletics facility designed to create a fun and inspiring environment for physical activity. It provides an entry-level solution for developing fundamental skills in running, jumping, and throwing, making it ideal for school, community, or club settings. The concept builds on Sport England's Compact Athletics Facilities Design Guidance Note that is based on an innovative approach to athletics provision that takes the main elements of full-size athletics facilities and scales them down into affordable solutions for smaller sites. Compact Athletics Facilities are made up of a 'kit of parts' that can be creatively pieced together to give facility solutions that will fit almost any site or budget and enable the essential athletic skills of Run, Jump and Throw to be taught, enjoyed and developed.

CompactTrack includes essential features such as a sprint straight with a minimum of four lanes and a 40-meter length, multiple long jump runways with a landing pit, and painted shot put circles with designated landing areas.

Image: Westway Sports Hub, Chorley - England Athletics

4 NewGen Tracks

4.3 MiniTrack

MiniTrack is a aesthetically attractive and inspiring mini-oval athletics facility designed to support the development of fundamental skills in running, jumping, and throwing. Affordable and entry-level, MiniTrack provides an age and ability appropriate environment, making it an excellent choice for both school and community settings.

At the heart of MiniTrack is a synthetic oval track, ranging from 100m to 200m, with sports lighting to enable usable hours during winter evenings. The facility also features a flexible infield area, which can accommodate a wide range of activities, including:

- Long Jump / High Jump / Shot Put / Jumps rainbow
- Mini-football
- Basketball
- Netball
- Volleyball
- Hockey quicksticks / Hockey 5s
- Tennis / padel
- Parkour
- BMX pump tracks
- Skate parks
- Outdoor gyms
- Fitness zones
- or dedicated play areas.

Image: **Friplassen Sarpsborg - Norwegian Athletics**

MiniTrack is designed for young people and adults taking their first steps into athletics. It is a financially viable option, offering multi-sport, year-round usage with an accessible and age-appropriate layout. Its compact design requires less space and is more affordable than a full-size 400m athletics track, making it ideal for schools and community settings looking to maximise their budget and available space.

The inclusion of sports lighting enhances its usability, allowing clubs, schools, and community groups to extend activities into the evening. Infield options may define the specific lighting requirements, ensuring suitable and sufficient illumination tailored to the chosen activities.

4 NewGen Tracks

4.4 ActiveTrack

ActiveTrack is a fitness loop designed for walking, jogging, running, and cycling, offering an attractive, accessible, and inclusive environment that encourages communities and families to stay active. It also serves as an ideal base for Harrier and recreational community running clubs. It is ideal for parks and open spaces and provides an all-weather fitness trail with a choice of macadam or synthetic surfaces, tailored to the available space. Additional features, such as a sprint straight can be included as well as lighting columns or low level reflectors to enhance functionality and usability.

It serves as a multi-use facility, integrated into the local environment, that supports a wide range of activities, making it accessible and enjoyable for everyone. An ActiveTrack can complement existing sport and recreation infrastructure such as playing pitches, while being environmentally sympathetic to benefit local biodiversity and ecology.

Sport England's Active Design Principles set out how the design of our environments can help people to lead more physically active and healthy lives and includes an ActiveTrack case study.

Image : Sowerby Sports Village ActiveTrack - Re-form Landscape Architecture

5 Ancillary Facilities

This section gives guidance on ancillary facilities required to support the main athletics activities.

The previous sections of this document focus on the specific requirements of facilities for athletics, but these will require support ancillary facilities for operations and management. Typically, these would include a reception area, changing facilities, management facilities, storage, etc. but may extend to tuition spaces, social spaces and accommodation shared with other activities on the site.

The requirements of these facilities and their extent should be identified at the project brief development stage and size appropriate to meet the overall needs.

5.1 Main Entrance and Reception

The design of the athletics facility should allow staff to closely control those using the venue, particularly if spectators are to be catered for.

5.2 Changing and Toilet Facilities

Changing provision is preferable in all athletics facilities and should be designed and built at the same time as the main facility. The provision should be appropriate to the size and expected use of the facilities.

The provision needs to be accessible and inclusive to provide equitable sport and activity for everyone.

The changing facilities should be based on the user need, offering choice and flexibility for users, the type of use and level of activity associated with the demands of the facility.

Providing flexibility and choice is essential to maximise the benefit of any facility and to meet the needs of the intended users and uses. For example, designing the changing and toilet layouts so that they can allow rooms to be allocated for male or female use to suit the programming needs, or providing adjacent rooms that can be linked together as buffer areas to give flexibility to accommodate more people.

Where athletics facilities form part of a larger scheme involving other sports and activities, the requirements of the athletes must be carefully integrated into the project to ensure best use of the accommodation. The patterns of use of specialist athletics centres differ from multi-use facilities which may be used by school and other community groups, playing a range of sports within closely managed timetables.

It is important to produce a rationale to identify those activities that create the greatest demand and regular use to ensure appropriate changing provision while achieving best value.

Further information is given in Sport England design guidance which includes changing and toilet provision.

5 Ancillary Facilities

5.3 Religious and Cultural Considerations

It is important that designers consider carefully the religious and cultural implications in the design proposals, taking into account close consultation with appropriate local user groups.

5.4 Protection & Safeguarding

It is very important for customers to feel safe and be able to maintain their privacy while using the changing and toilet provision. Safeguarding considerations are essential factors in the design of any changing and toilet provision to ensure everyone including children, young people and adults are protected.

5.5 First Aid

First aid provision should be appropriate to the scale and use of the facility. While larger buildings may include a dedicated room for treatment with space to manoeuvre a stretcher, ideally located away from the main entrance, this may not be practical in smaller facilities such as MiniTrack, CompactTrack or ActiveTrack. In these cases, a flexible, multi-use space that allows for privacy and basic first aid care should be identified and clearly signed or alternative arrangements to manage emergencies be put in place by the operator.

In larger sports centres and facilities used by large numbers of participants or spectators, a dedicated, fully equipped first aid room should be provided.

It is helpful to know where the nearest defibrillator is located and provide one in easily accessible, clearly signposted areas with high footfall, such as entrances, reception areas, main corridors, or near first aid stations, so they can be quickly reached in an emergency.

The Health and Safety (First-Aid) Regulations 1981 'Approved Code of Practice and Guidance' governs management obligations for first aid provisions.

5.6 Indoor and Outdoor Storage

Adequate, secure storage space must be allowed for the design stage for the range of outdoor and / or indoor equipment, (e.g. javelin, shot, discus, landing mats, nets, overlay rollout strips, etc). Provision must include any associated transport carts and trolleys. In multi-purpose halls the security of weights and equipment should be considered.

Storage should also be provided to meet the needs of the specialist disciplines, as well as for the needs of schools and community groups / clubs to avoid operational problems. Training items should be kept separately from competition equipment and there may be a need for separate storage for schools and community groups.

5 Ancillary Facilities

Storage should be light, airy, temperate and dry. For new provision the minimum ceiling height is 4m. Racks should be provided for bulky items. Doorways must be large enough to accommodate the largest equipment.

Ample storage space for hurdles and bulky equipment is essential and should be separate from storage supplied for groundsman's equipment.

Separate secure storage for maintenance equipment (including tractors, mowers and materials) is an important consideration. The space requirements for this type of equipment will need to be determined by the scale and mix of the proposed facilities and the maintenance schedule.

For indoor facilities, adequate storage space is important to avoid safety hazards that could arise if equipment were left out around playing courts or on circulation routes; and minimise access difficulty within the store.

Schedules of equipment should be prepared to determine the storage space requirements for athletics.

The SAPCA Code of Practice for the Construction and Maintenance of Athletics Tracks provides information on the maintenance and storage of equipment and includes an equipment list for an eight lane track. Very bulky soft-landing beds for high jump and pole vault, and other mats contain foam filling, which is a potential fire hazard.

For outdoor facilities, soft-landing beds may be stored in secure outhouses, steel containers or cabins. Specialist mobile covers are available, but it is important to consider health and safety issues and how the covers will be moved away from the mattresses prior to use. The covers must be completely clear of the landing area and there must be sufficient room to 'park' them. It is also important that the surface can withstand the weight of any roll-over covers, as they often "sink" into the synthetic surface if not reinforced.

It is essential, particularly for indoor facilities, for separate fire-resisting ventilated storage to be provided for floor matting. The minimum recommended fire resistance for indoor facilities is 60 minutes. Foam beds must not be 'stored-out-in-use' in multi-purpose halls.

Pole vault and high jump beds need approximately 50m^2 of space and should be stored no more than 1.5m from fire sprinkler nozzles.

For comprehensive guidance on maintaining inclusive and accessible environments, please refer to Sport England's **Accessible and Inclusive Sport Facilities (AISF)** design guidance. This resource offers essential best practices to ensure all spaces effectively accommodate the diverse needs of all users.

6 Multi-Sport Sites

To encourage the construction and use of more athletics facilities throughout the country, Sport England, England Athletics and UK Athletics are keen to demonstrate the practicality of various multi-sport site configurations and layouts.

Co-location of sports facilities promotes efficiency by sharing infrastructure, reducing costs, and optimising space usage. It enhances athlete development through cross-training opportunities and encouraging a competitive and collaborative environment. Additionally, it boosts community engagement, attracting more visitors, events, and economic benefits while encouraging multi-sport participation.

Multi-sport provision can include a short running straight located next to an artificial 3G pitch, benefiting from the shared sports lighting, as well as dual use of a single surface for tennis courts and incorporating a small oval running track. As long as the athletics facilities comply with appropriate standards for spatial and performance requirements, these provisions can be a significant benefit to the growth of athletics and also health and wellbeing outcomes generally.

Through the use of more space efficient installations, shared facilities and shared playing surfaces, athletics can be introduced cost effectively to a wider section of the population. Better outcomes can be achieved by creating interest in a wider range of sports and stimulating participation when running, jumping or throwing activities are seen as easily available and accessible by other sports users on site.

Storage facilities in multi-sport buildings can also offer weather protection for warm up / shelter and covered stretch areas or simple viewing spots for spectating. Storage sheds can have simple overhangs, and this is a cost-effective route to providing shelter and protection without providing a separate building.

Multi-sport facilities that include athletics provision typical fall into two categories: co-location where facilities for athletics are located adjacent to facilities for other sports, and shared surfaces where the same facility and surface is suitable for use for athletics and other sports. Examples of multi-sport are as follows, although not an exhaustive list, some key examples of how the initiative could be put into practice.

6 Multi-Sport

6.1 Co-location

A sprint straight or CompactTrack straight or compact track with throws area can be located adjacent to an artificial football, rugby or hockey pitch and benefit from shared sports lighting to both areas. The long sides of these pitches can accommodate a 60m running straight with a start zone and safely run off space alongside.

The site preparation and ground levelling can be more cost effective when areas are prepared at the same time. Rugby and football pitches make an ideal colocation partner due to the long sides making an obvious starting point for a track.

Other examples of co-location with athletics and other sports are a 400m running track with either an artifical grass or hard court infield for ball sports (eg. Rugby, Football, Hockey, Netball, Basketball, Tennis).

Where non turf infields/hard courts are in place consideration will need to be given to the inclusion of an external, sports lit, throws area for Hammer, Discus, Shot Put and Javelin if this is deemed by England Athletics as a strategic priority.

Thought will also need to be given to any fencing to the facilities in the central area and how these will be located to ensure that all the facilities can operate satisfactorily.

Image: Centre Sportif du Fayet, Saint-Gervais-les-Bains - Polytan GmbH

6 Multi-Sport

6.2 Shared Surfaces

Some polymeric sports surfaces used for tennis, basketball, and netball can also accommodate athletics training, particularly when athletes wear trainers rather than spikes. The potential for these facilities to support athletics should be considered at the earliest stages of developing the project brief. A group of tennis or netball courts can be marked out to offer a short oval running track or short straight to help teach basic running skills and support a wide variety of training activities such as sprints, hurdles, baton changing and runs between turning boards.

Other synthetic turf surfaces may also be used for training; however, these may not be recommended by sports governing bodies and advice from experienced professional should be sought.

Sites that have natural turf pitches for seasonal football or rugby or cricket are able to accommodate athletics with markings for a grass athletics track in summer months. Sites with multiple sports pitches should consider providing an ActiveTrack around the perimeter of the site. This is a cost-effective addition to any playing fields site and gives numerous alternative athletic activities.

Follow Link **World Athletics Information on natural grass surfaces – T&F Manual 2003**

The ActiveTrack described in Section 4 of this document encourages the provision of a multi-functional facility that encourages communities and families to be active. The all-weather facility is intended to support walking, jogging, running and cycling and the length of track can be tailored to space available.

7 Refurbishment

This section sets out the things to consider when redeveloping or refurbishing existing athletics facilities.

7.1 Redeveloping or refurbishing existing Athletics Facilities

The refurbishment of existing athletics facilities can bring benefits in terms of improving and updating sites more relative to the cost of new facilities.

However, the ability to do so depends upon a number of considerations. A detailed assessment of the existing facility is essential, to ascertain whether this would be practically or economically viable and be able to deliver the specific outcomes required by the project brief.

Any assessment should be detailed and undertaken by a qualified consultant team and the assessment reports must identify all significant limitations and potential costs for the proposals.

Image: Footes Lane stadium, Guernsey - Agripower Ltd/CONICA Ltd

Image: Julie Rose Stadium, Ashford - Smith Construction (Heckington) Ltd/ CONICA Ltd

7 Refurbishment

7.2 Selection of a Consultant Team

The selection of the right project team for an athletics project is critical. Choosing the right people will save time and money and bring real added value to the design, construction and future maintenance. It is important to review the roles, responsibilities and competencies that are required for the key stages of the project.

For athletics refurbishment projects UK Athletics strongly recommend that an independent World Athletics accredited and SAPCA Track & Field consultant is used throughout the project journey from initial condition survey to scope of works and from Key Stage Inspections to Completion testing.

- **The following are critical issues that need to be considered:**
  - Relevant qualifications and experience.
  - Involvement in previous projects?
  - A recognised land based, sports surface qualification?
  - References from at least two clients for similar work?
  - Sufficient expertise to cover all the work required? (i.e. ecology and drainage as well as surface works).
- **Ensure that the consultant:**
  - Is independent without any formal association or understanding with commercial organisations that could influence his or her impartiality.
  - Holds an appropriate level of professional indemnity insurance.
  - Demonstrates a clear understanding of the brief and your requirements.
  - Has the ability and the resources required to meet the necessary deadlines.
  - Confirms the total cost of the professional services and if there are likely to be any additional costs.
  - Demonstrates a willingness to attend an interview and / or present their submission.
  - Provides ongoing support following the completion of the main works.

7 Refurbishment

7.3 Scope of works

The following cover the most significant considerations, further site-specific issues should be identified at the earliest stage of any design:

- Age and condition of the existing facility surfaces, fittings and equipment.
- Affordability of replacing existing synthetic surfaces with cheaper alternative surfaces to minimise costs associated with maintenance and replacement.
- Changes to provision – additional facilities, to take into account new innovative outdoor multi-activity uses that are affordable, accessible and inclusive. Refer to section 7 ancillary accommodation.
- Programme – seasonal (weather / temperature) limitations on resurfacing work.
- Health & safety issues
- Limitations due to updated sports standards
- Scope of provision (e.g. Competition, community and club requirements).
- Condition of existing utilities and services.
- Ground conditions and topography
- Condition of existing drainage (including surface and land drainage).
- Site access limitations.
- Site location and orientation.
- Updated access and inclusion guidance.

For further information, refer to the appropriate parts of Sport England Design Guidance note Accessible and Inclusive Sports Facilities.

For projects that involve the relocation or refurbishment of athletics facilities, continuity of provision will be a consideration where the primary activities are required to be retained during the works. This may mean the facilities are unavailable, but it is over a managed time period ideally when there is limited or no impact.

8 Innovations

This section gives guidance on innovations for athletes.

8.1 Innovations

The range of technology innovations that support the athletics community has increased massively over recent years and will only continue to grow as technology continues to develop.

Technology innovations are having a big impact on the running market and 'wearable tech' equipment including fitness trackers together with online applications including training apps and sports-specific platforms, provide valuable tools for athletes of all levels. These apps allow athletes to monitor their progress, analyse performance data, set measurable goals and allow runners to upload routes for others to use. For teams and coaches, these apps simplify scheduling, communication, and performance review, nurturing collaboration and accountability.

Access to expert training programmes and virtual coaching through apps also helps athletes improve their skills, making specialised resources available even to those in remote locations. This accessibility removes barriers to participation and improves athletic development for both beginners and seasoned competitors. Social media and online apps contribute to building community and promoting inclusivity in athletics. For youth athletes, these platforms offer spaces to join challenges, find role models, and engage with others who share their passion, which motivates continued participation.

8 Innovations

Initiatives that utilise digital connectivity to drive participation include the following:

- **This Girl Can:** is Sport England's nationwide campaign to get women and girls moving, regardless of shape, size and ability.
- **RUN:EA** is a membership provided by England Athletics created for runners and providing access to a like-minded sporting community, advice, offers, and discounted event entry.
- **RunTogether** provides fun, friendly, supportive and inclusive running opportunities for everyone.
- **Find a Guide** is England Athletics' commitment to true accessibility partnered with British Blind Sport to provide training and license schemes and to help the visually impaired search, contract, and gain support on their running journey.

9 Operation

This section gives guidance on the operation of athletics facilities including management, maintenance and safety considerations.

9.1 Management

Effective operation and management are crucial for the successful functioning of athletics tracks because they ensure:

- **Safety of Athletes and Users** – Proper management ensures regular inspections, timely repairs, and adherence to safety protocols to prevent injuries.
- **Optimal Performance of the Track** – Routine maintenance, resurfacing, and upkeep ensure the track remains in excellent condition, providing consistent grip, shock absorption, and drainage.
- **Long-Term Cost Savings** – Proactive management helps prevent costly repairs and extends the track's lifespan, reducing the need for frequent resurfacing or reconstruction.
- **Efficient Scheduling and Usage** – A well-managed track ensures fair access for athletes, schools, clubs, and events, avoiding overuse or conflicts in scheduling.
- **Compliance with Standards and Regulations** – Ensures that the track meets World Athletics or other governing body regulations, allowing it to host competitions and official events.
- **Environmental Sustainability** – Proper operation includes responsible water drainage, material selection, and waste management, reducing the track's environmental impact.
- **Energy Efficiency** – To reduce environmental impact, lower operating costs, and create sustainable, high-performance facilities for athletes and spectators alike.
- **Revenue Generation** – A well-managed facility attracts athletes, events, and sponsors, boosting its reputation and financial sustainability.
- **Sinking Fund** – A planned, financial reserve specifically set aside over time to cover the future replacement of the athletics surface.
- **Improved Access and Increased Usage** – Digital systems such as ClubSpark, QR code entry, and remote booking platforms make it easier for users to access the facility, encouraging wider community use and helping to maximise track occupancy.

Proper operation and management ensure that an athletics track remains safe, high-performing, and financially sustainable, benefiting athletes and the broader community.

Ideally, athletics facilities should be located at multi-sport sites where their use can be maximised and they can be used by one or more local athletics clubs.

9 Operation

As part of the development of the strategic outcomes planning process and the project brief, a clear understanding of the relationship between the interested parties needs to be set out to ensure that roles and responsibilities are understood. If necessary, a joint management committee may be required, with a clear, negotiated partnership agreement that represents all the user groups, to manage the facilities jointly.

It is important that training facilities are well used and well managed and this may mean clubs sharing of facilities. Consequently, links between athletics clubs, other sports clubs and educational establishments should be encouraged.

Where management of the facility is by a third-party operator, it is important that clubs work closely with both the local authority and operator to agree access, events timetables and create joint programmes for youth development and to promote athletics. A Sport England Community Use Agreement aims to ensure public access to sports facilities, particularly outside school or private use, promoting community participation in physical activity. It also sets out terms for affordability, scheduling, and maintenance to support long-term, inclusive community engagement in sport.

An Emergency Action Plan (EAP) for a community athletics facility should include the identification and coordination of procedures to effectively respond to a range of potential emergencies, such as medical incidents, fires, severe weather, accidents, and security threats.

It outlines the roles and responsibilities of staff, communication protocols, evacuation routes, access for emergency services, and the location of key equipment like first aid kits and defibrillators. The EAP ensures that all users, including staff, athletes, and spectators, are protected through clear, practiced procedures that minimise risk and support a rapid, organised response to emergencies.

9.2 Maintenance

The main purpose of athletics track maintenance is to ensure the safety, longevity, and performance of the track surface. Proper maintenance helps to:

- **Ensure Athlete Safety** – Prevents injuries by keeping the surface free from cracks, debris, and uneven areas.
- **Maintain Track Performance** – Ensures consistent grip, shock absorption, and drainage to support optimal running conditions.
- **Extend Track Lifespan** – Reduces wear and tear, preventing costly repairs or premature resurfacing.
- **Enhance Aesthetic Appeal** – Keeps the track looking professional and well-maintained for competitions and training.
- **Comply with Regulations** – Ensures the track meets standards set by governing bodies like World Athletics.

9 Operation

Regular maintenance involves cleaning, repairing cracks, checking drainage, and reapplying coatings as needed. It is important that appropriate funding is put in place to ensure that day-to-day maintenance is undertaken and that there is a sinking fund put in place to replace the track, throws area, jumps area and equipment at the end of their life.

Regular inspections and maintenance extend the lifespan of all athletics facilities, ensuring safety and performance. The typical life expectancy of athletics tracks and related facilities depends on the material, usage, and maintenance quality.

The SAPCA Code of Practice provides general guidelines for maintenance procedures; however, it is essential to follow the specific advice and maintenance programme provided by the installer or manufacturer of the synthetic surface.

Adhering to this guidance is often a condition of the installer's warranty, and failure to do so may invalidate any claims.

The Code of Practice includes a sample maintenance schedule for polymeric athletics tracks, along with recommendations on equipment maintenance and storage.

The need for, and secure storage of, tractors, mowers and other maintenance equipment and materials is an important consideration. The requirement for this type of equipment is determined by the scale and mix of proposed facilities and the maintenance schedule.

Specialist consultants should prepare a maintenance schedule that will ensure that all sports areas, including tracks, track equipment, equipment for field events, throwing walls and cages are maintained in accordance with design requirements.

9 Operation

9.3 Regular Checklists and Inspections / Reporting any Safety Concerns to the Governing Body Immediately

Safety is crucial in the daily management of athletics tracks and facilities to prevent injuries, ensure compliance with health and safety regulations, and maintain a secure environment for athletes, staff, and spectators. Proper maintenance, risk assessments, and clear safety protocols help create a safe and inclusive space for training and competitions.

It is essential that recommended safety margins, safety run-offs and other safety measures be achieved in the design of facilities. It should be noted that safety clearance recommendations are the minimum to be achieved.

Adequate safety measures are imperative at all times. This applies particularly to throwing and jumping events. For example, although the safety distance for throws may be less than the requirement at national level, safety arcs must remain constant. Ample space should be left at the end of the straight for runners to pull up after passing the finish line.

Care should be taken to ensure that there are no obstructions inside or outside the running tracks or in close proximity to the jumps areas including the pole vault box.

Sites should include a secure perimeter with appropriate access control. Where spectator accommodation is part of the facility and where spectators have access to the track area, a protective barrier should be erected around the track to comply with requirements for barriers.

Management procedures ensure areas for the throwing disciplines remain clear, including safe margins. Risk assessments and safety procedures must be regularly reviewed to ensure they meet current guidance. Safety equipment and barriers must be tested on a regular basis.

9.4 Protection and Safeguarding

Protection and safeguarding are important factors in the planning and management of facilities, to ensure that everyone (including children, young people and adults) is protected.

Further information is given in **Sport England AISF design guidance.**

10 Delivery

This section highlights the process of project delivery, the importance of selecting the right specialist consultants, the need for testing and certification and environmental considerations.

The Sport England **Natural Turf for Sport Design Guidance Note** includes relevant sections on project planning that includes key project stages, the importance of specialist consultants, understand use profile, importance of location, the needs for appropriate feasibility studies and site surveys, and the requirement for planning permission and other considerations.

The Natural Turf for Sport document includes details for the selection of specialist consultants, their scope of service, and the typical project stages for the delivery of sports facilities.

Early project works will focus on strategic outcomes planning, the development of the project brief and obtaining planning permission for the athletics facility. The Sport England AISF guidance includes a section on Planning Permission and the key milestones in the project journey through the RIBA stages and the formal consents.

Local Planning Authority's publish a list of required documents and information that must be submitted with a planning application to ensure it meets legal and policy requirements before being processed. Typically, a planning application would be supported by ecological and biodiversity reports, flood risk assessment (if in a flood zone), sustainability and energy statements, transport and parking assessment, and a Biodiversity Net Gain Assessment that evaluates the impact of a development on biodiversity and calculates the necessary measures to ensure a net increase in biodiversity value post-development.

10.1 Testing and Certification

All new and refurbished athletics facilities are likely to require testing and certification to demonstrate that they comply with minimum standards and performance criteria. TrackMark is UK Athletics' minimum standards scheme for WA for Regional / National and internal Venues. World Athletics have their own certification criteria and process, however, it should also be noted that it is not a requirement for every track to be certified to World Athletics standards.

Installers of synthetic athletics surfaces provide recent independent test data to verify durability and performance. These tests assess the material's suitability over time, considering the UK's climate and temperature variations. Track surfaces must withstand spike damage, with limits on spike length. Synthetic materials come from a limited number of manufacturers, so sourcing from reputable suppliers listed by SAPCA is essential. Additionally, World Athletics certifies synthetic surfacing products to ensure quality and compliance with international standards. Proper testing and certification help maintain high-performance and long-lasting athletics tracks.

Document accessibility

This document has been designed for comfortable reading at A4 and on a laptop screen, but can also be printed at A3 for large print versions. The pdf is accessible and has been tested to work with text readers.

Contributors

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User guide

Before using this design guidance note for any specific projects all users should refer to the User Guide to understand when and how to use the guidance as well as understanding the limitations of use.

Click here for **User guide** and other **Design and cost guidance**

Disclaimer

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