



# Facility Planning Guide

A Guide to Helping you Plan Facilities for Cal Ripken Baseball, Babe Ruth Baseball and Babe Ruth Softball that are safe, affordable and fun



## *USING THIS PLANNING GUIDE*

**THE BIG PICTURE.** Beyond the facilities and extensive equipment needed to run athletic programs, these spaces play host to countless events, week after week, impacting athletes, volunteers, parents and spectators. It's often what happens in the background that makes for success up front, and a facility that's designed to accommodate the diverse needs of everyone involved can help increase the efficiency and success of local league programs and events.

**Babe Ruth League, Inc. does not require or demand the following guidelines be followed.** The guidelines serve only as suggestions/recommendations for participating leagues, entities and hosts of Babe Ruth League, Inc. competitions. Babe Ruth League, Inc. does not require use or purchase of any of the commercial products referenced in this guideline.

This Guide is for anyone involved in new construction or renovations for athletic facilities and should only be used as a resource in the development of a playing field. This information does not represent the only means and methods of field development. This document is a summary comparison of field establishment processes. These findings may illustrate potential solutions for construction, maintenance and safety for the field of play; however, all areas regarding potential field development may not be identified in this document. Please note that certain country, regional or state laws and standards may apply to the construction of athletic fields. Therefore, the guidelines found in this document do not imply that a specific field does not comply with worldwide baseball standards.

## *Facility Planning Guide*

*In response to questions from leagues intending to construct new ballparks or implement major improvements on existing facilities, Babe Ruth League, Inc. has published the following suggested guidelines to help with the planning process. These guidelines incorporate the most current data available regarding issues that apply to construction of a facility that's safe, affordable and fun.*

*Due to the tremendous amount of variables to consider, including variances in cost across the country, the information in this guide is general in nature. If you need additional information or have questions about a particular phase of a complex design, call Babe Ruth League, Inc. International Headquarters at 609.695.1434.*

### **Thanks to the following professionals for their assistance in developing the original guidelines:**

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Thank you to **Musco Lighting** for their help in gathering information, page layout and printing of this booklet.

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## *Planning Process – Bringing your Field of Dreams to Life!*

### **PRE-PLANNING**

Only through effective planning can a facility be developed and or renovated that meets the greatest current needs and the anticipated future needs. Things to consider during the Planning Process:

- Organize planning committee(s) – should consist of league volunteers and representatives from a broad range of backgrounds and disciplines
- Define goals for the facility
- Conduct a feasibility study
- Develop a potential budget
- Set realistic goals and objectives
- Garner political and community support
- Applying for Grants
- Fundraising Campaigns
- Bring aboard the right people before the project even starts

### **PLANNING AND DESIGN**

Planning and design usually involve one or several design professionals, such as architects, engineers, landscape architects, consultants, facility users, and maintenance staff. Things to consider during the planning/design process:

- Scope of the Project
- New Construction Facility/Field or Existing Facility Enhancements
- Permitting
- Layout and Orientation
- Usage Intent
- Requirements
- Lightning (Musco is the official lighting company of BRL and each year awards a \$15,000 grant each to four Babe Ruth Leagues to use towards the purchase of a new lighting system or to refurbish an existing lighting system.)
- Water Management
- Safety and Security
- Trees and Other Vegetation
- Environmental Design
- Access
- Utilities
- Miscellaneous Amenities – bleachers, scoreboard, concession stand(s), restrooms, turf
- Field Maintenance

## *Field Maintenance*

Providing adequate field maintenance is the key to a safe and quality baseball and softball program and facility. Significant time and resources are required to maintain a field properly. Developing a feasible field maintenance plan is a very important part of any baseball or softball program.

To develop a field maintenance plan, determining answers to the following questions during the planning stage of a renovation or new construction project is critical:

- What organization will be responsible for maintaining the field?
- What experience, expertise and equipment are available?
- What is the annual field maintenance budget?
- What are the funding sources to sustain the annual budget?
- Will the field be used for other sports or events?
- How many games will be played per day, week, month and year?
- Will the field be a site for tournaments?
- Should the field have synthetic or natural turf?

### **STAFFING**

While professional fields are often maintained by a full-time staff, recreational and youth fields often require volunteer help. Providing basic field maintenance checklists to coaches, players and volunteers can ensure proper maintenance of the field. Develop basic checklists to use as a starting point. Once a checklist is developed, it can be laminated and posted in each dugout for the reference of all coaches and players.

### **BUDGET**

Maintenance budgets for recreational and school fields vary widely. Important budget considerations include: competitive level of use, condition of the field, type of field (i.e. natural or sand-based, type of grass, artificial turf), use of the field for other activities and the availability of field lighting. To develop an annual budget, investigate similar, well-maintained fields in the community and inquire about the maintenance budget, equipment and staffing.

### **SUGGESTED MAINTENANCE EQUIPMENT**

Many pieces of equipment are considered necessary to provide adequate field maintenance. The following is a list of suggested tools and equipment to be used by groundskeepers for the maintenance of a field.



## **Tools and Equipment**

- Batter's box, baseline chalker
- Base hole covers
- Batter's box and catcher's box
- outline frames
- Push broom
- Drags (assorted)
- Edge cutter
- Line marker
- Mound and hitting mats
- Rakes (assorted)
- Shovels
- Small backpack-style sprayer
- String line
- Tamp
- Tarpaulins
- Watering equipment - hoses, spray nozzles, sprinkling (watering) can
- Wheelbarrow

## **Materials**

- Calcined clay - granulated
- Diamond dust - ground calcined clay - for drying wet balls
- Fertilizers
- Herbicides and pesticides
- Line marking material
- Stockpile of mound clay - approx. 2 tons per field
- Stockpile of soils for fill and topdressing - approx. 25 tons per field

For Further Information on Field Maintenance, visit:

Field Maintenance Guide - [MLBcommunity.org](http://MLBcommunity.org)

### **Recommended Area**

Ground space is 1.2 acres minimum

### **Dimensions – Minimum recommendations/suggestions**

**Baselines:** 60 feet (Rookie, Minor, or Major League 60' Programs) or 70 feet (Major League 70' Program)

**Pitching distance:** 46 feet (Rookie, Minor, or Major League 60' Programs) or 50 feet (Major League 70' Program) **Pitcher's plate:** 6 inches above home plate level

**Distance down foul line:** Recommend/Suggest 200 feet – 225 feet

**Outfield distance to pocket in center field:** 250 feet

**Backstop:** Distance: Minimum 25 feet from home plate and the foul lines extending from home plate edge to first and third base dugouts. Height: 24 feet with five foot overhang

**Side fencing:** Distance: Minimum of 30 feet from foul lines from home plate to foul pole. Tapering from third base to the foul pole is permitted. Recommended/Suggested Height: 8 feet

**Height of back field fence:** 4 feet with appropriate covering

**Protective fence in front of dugouts:** Recommended/Suggested - 6 feet high

### **Orientation**

Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.

### **Surface and Drainage**

**Infield** – A dirt, clay, and sand mixture surface for the non-grassy areas is easy to maintain and is durable. The infield should be graded so that the base lines and home plate are level.

**Outfield** – Outfields should be grass with a proper irrigation system. Preventive maintenance should be used to minimize "wear spots." A scheduled annual resodding of these areas is recommended. Irrigation systems should be properly monitored to prevent man-induced wet spots. A three percent grade should be constructed through the turf areas to move the water.

### **Recommended Safety Features**

**Warning tracks** – A warning track of at least three running steps (approximately 10 feet) should be planned near each fence. The change in surfaces will warn the fielder he is approaching the fence and is a definite safety feature for the ball park.

The material used is not as critical as that used in the infield. A crushed rock mix that will absorb water is most appropriate – generally the same substance as used around the parking lot, walkways, etc. It is critical, for maintenance purposes that your infield and warning track substances be kept separate.

**Foul poles** – should be at least six feet above the outfield fence.

**Batter's eye** – should be placed in dead centerfield approximately 24 feet wide to provide a field of contrast for the white ball allowing hitters to better see pitched balls.

**Pitcher's eye** – six to eight feet tall behind home plate, allows fielders to better pick up the ball coming off the bat. It also helps avoid pitchers becoming distracted by people behind the fence.

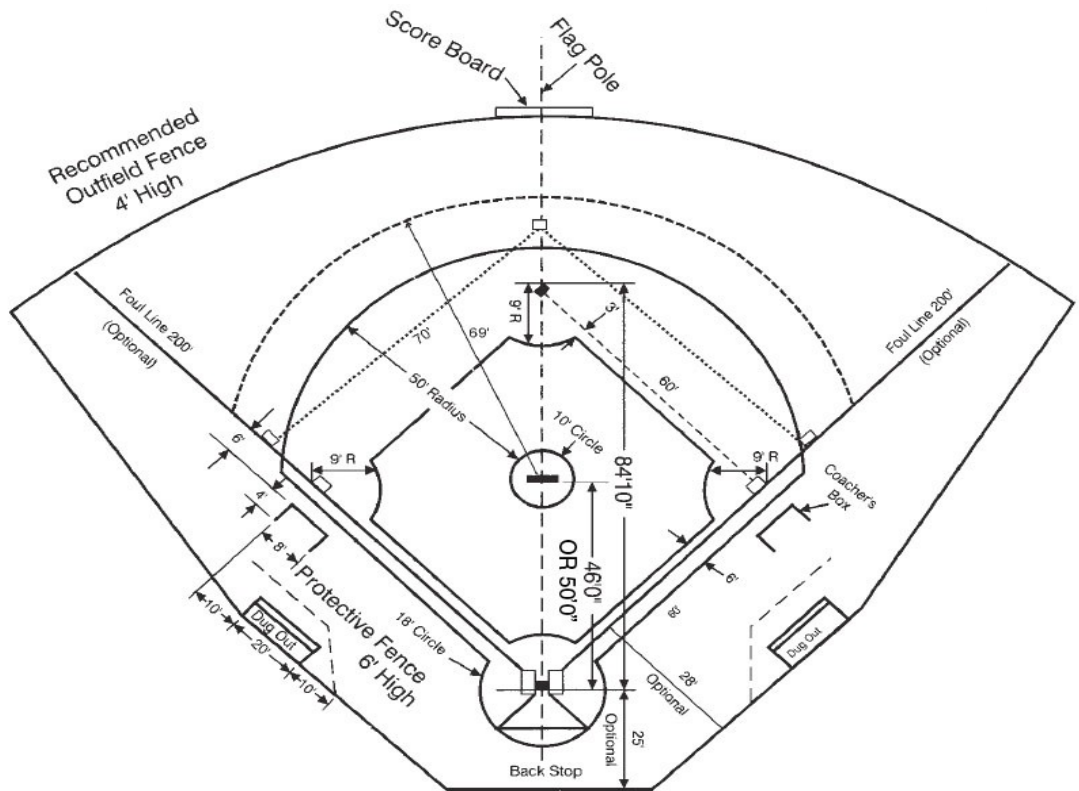
**Dugout** – installing a roof and protective screening in front of the dugout reduces risk of injuries from foul balls.

**Backstop overhead and side screens** – protects spectators from being hit by foul balls.

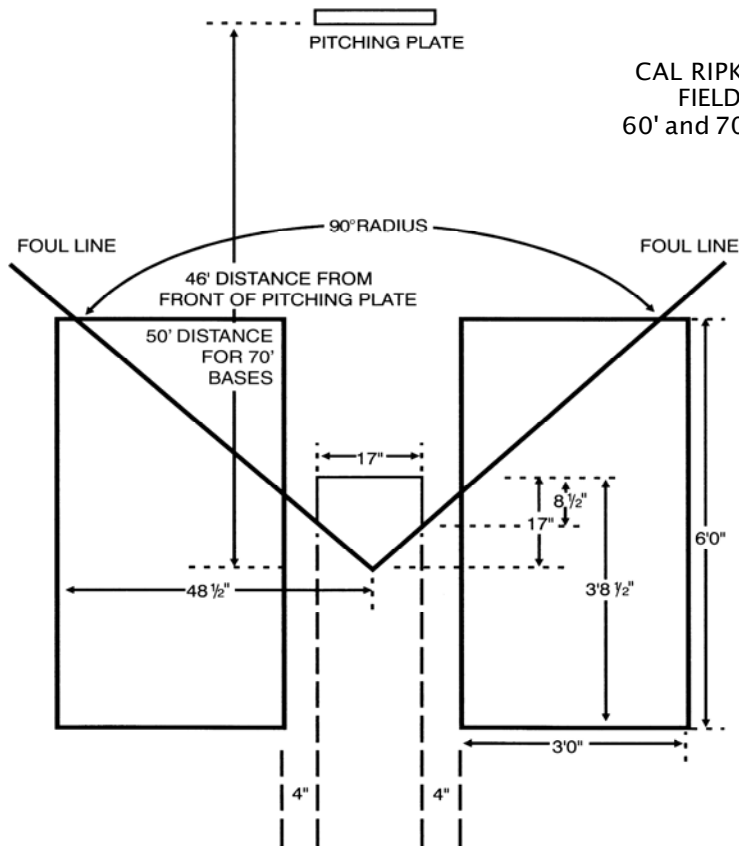
**Fencing** – enclose the top rail of chain link fencing with PVC drainage tile or similar product and install fence caps to reduce risk of abrasions.



**CAL RIPKEN BASEBALL DIVISION (ages 5-12)**



**CAL RIPKEN DIVISION  
FIELD LAYOUT  
60' and 70' PROGRAMS**



**CAL RIPKEN DIVISION  
BATTER' S BOX  
60' and 70' PROGRAMS**

The Bambino Buddy Ball Division was established for organizations who wish to charter a league that encompasses players who are either physically and/or mentally challenged and who yearn to play the game of baseball or softball.

### **Recommended Area**

Ground space is 1.2 acres minimum

Synthetic fields are best for Buddy Ball Division games

- Buddy-Ball games may be played on traditional baseball or softball fields as well
- Fields should be easily accessible and near ample parking

### **COMMON FIELD ADAPTATIONS**

- Dugouts
- Widen entrances
- Areas for wheelchairs
- Protective fencing

### **THE PLAYING FIELD**

No adaptations necessary, although there are several optional adaptations that may improve game play including:

- Level infield (or play on a softball field)
- Widen Base Paths
- Path from dugout to home plate
- Synthetic Surface

### **SEATING**

Install handicapped accessibility in each type of seating (box, reserved, general admission). Meet local, state, and federal building codes.

### **PARKING FACILITIES**

- Make sure handicap accessible restrooms are available
- Paved pathways from parking lots to fields are recommended where possible
- Make sure there is ample handicap parking, or dedicated parking for players on the days of games/practices
- Make sure the concession area is Handicap Accessible

### Recommended Area

Ground space is 3 to 3.85 acres minimum

### Dimensions – Minimum Recommendations

**Baselines:** 90 feet

**Pitching distances:** 60 feet, 6 inches

**Pitcher's plate:** 10 inches above home plate level

**Distance down foul line:** 310 feet minimum; 320 feet preferred

**Outfield distance to pocket in center field:** 385 feet

**Backstop:** Distance: 45 to 60 feet from home plate and the foul lines. Height: 24 feet with 5 foot overhang extending from home plate edge to first and third base dugouts

**Side fencing:** Distance: Minimum of 45 feet from foul lines from home plate the foul pole. Tapering from third base to the foul pole is permitted. Recommended/Suggested Height: 8 feet

**Height of back field fence:** Recommend/Suggested - 6 feet with appropriate covering

### Orientation

Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.

### Surface and Drainage

**Infield** – A dirt, clay, and sand mixture surface for the non-grassy areas is easy to maintain and is durable. The infield should be graded so that the base lines and home plate are level.

**Outfield** – Outfields should be grass with a proper irrigation system. Preventive maintenance should be used to minimize "wear spots." A scheduled annual resodding of these areas is recommended. Irrigation systems should be properly monitored to prevent man-induced wet spots. A three percent grade should be constructed through the turf areas to move the water.

### Recommended Safety Features

**Warning tracks** – A warning track of at least three running steps (approximately 10 feet) should be planned near each fence. The change in surfaces will warn the fielder he is approaching the fence and is a definite safety feature for the ball park.

The material used is not as critical as that used in the infield. A crushed rock mix that will absorb water is most appropriate – generally the same substance as used around the parking lot, walkways, etc. It is critical for maintenance purposes that your infield and warning track substances be kept separate.

**Foul poles** – should be at least six feet above the outfield fence.

**Batter's eye** – should be placed in dead centerfield approximately 24 feet wide to provide a field of contrast for the white ball allowing hitters to better see pitched balls.

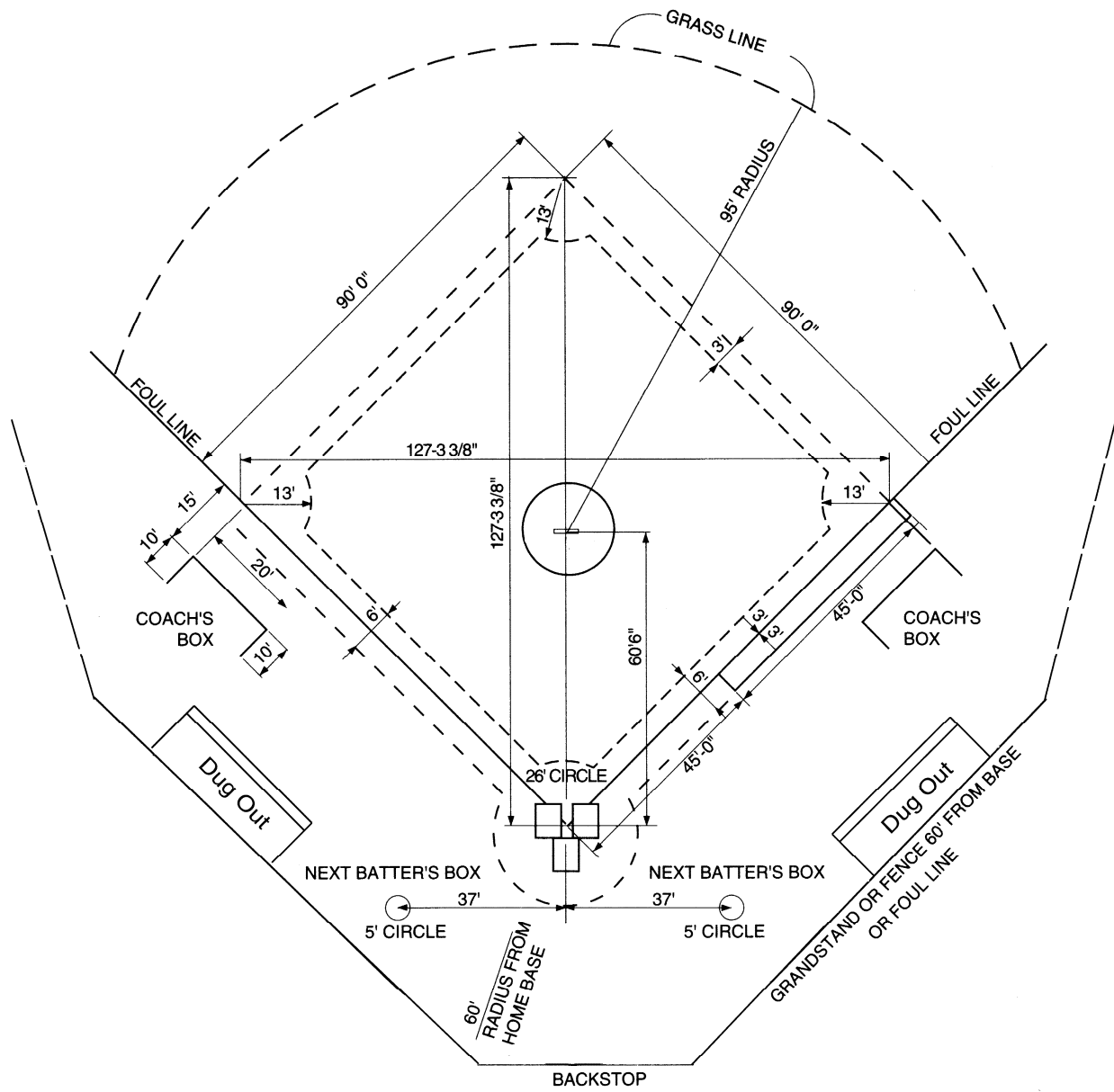
**Pitcher's eye** – six to eight feet tall behind home plate, allows fielders to better pick up the ball coming off the bat. It also helps avoid pitchers becoming distracted by people behind the fence.

**Dugout** – installing a roof and protective screening in front of the dugout reduces risk of injuries from foul balls.

**Backstop overhead and side screens** – protects spectators from being hit by foul balls.

**Fencing** – enclose the top rail of chain link fencing with PVC drainage tile or similar product and install fence caps to reduce risk of abrasions.

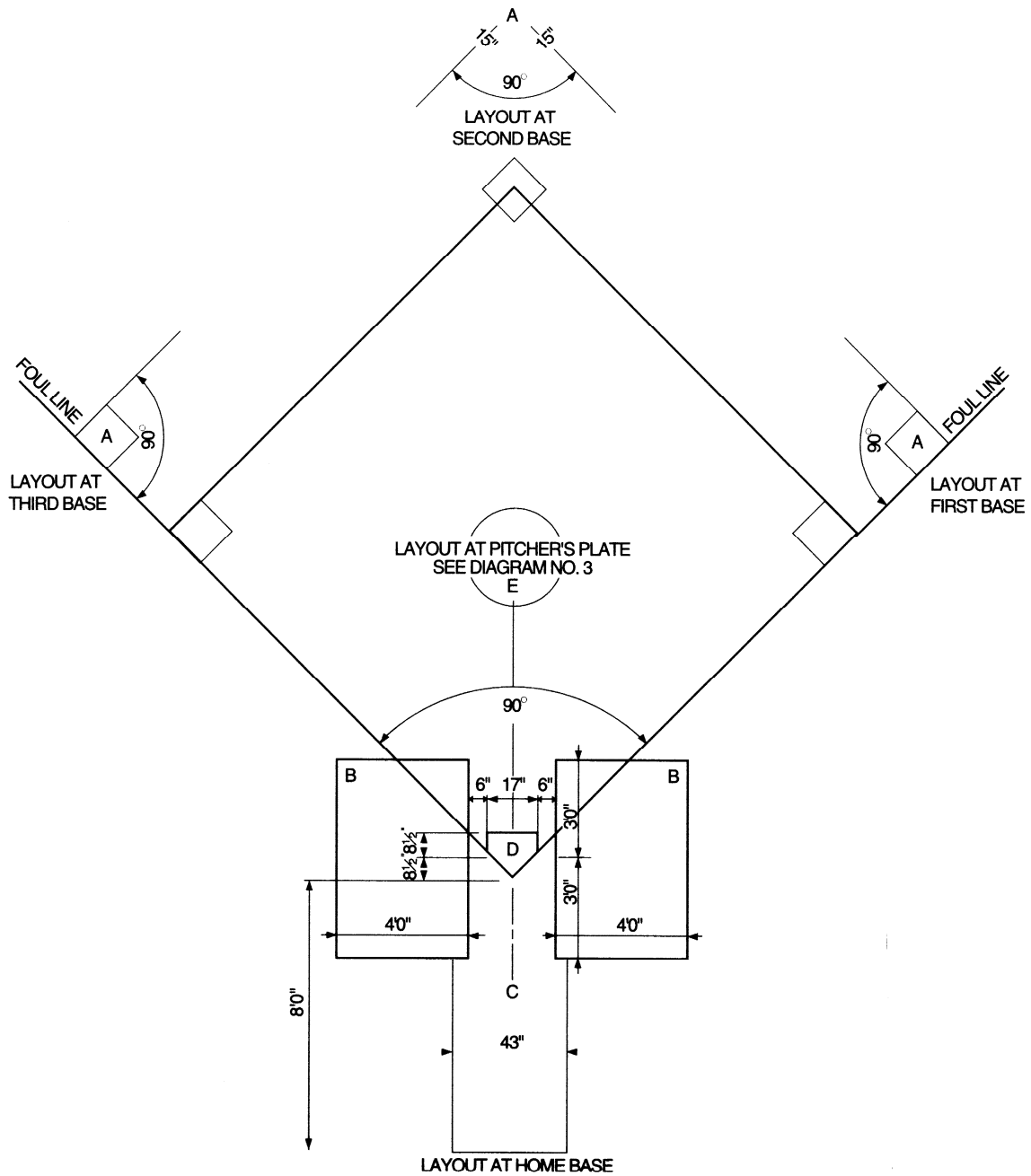
**BABE RUTH BASEBALL (ages 13-18)**



**DIAGRAM NO. 1**

**LEGEND**

- BATTER'S BOX,  
CATCHER'S BOX, FOUL LINE,  
PITCHER'S PLATE, COACH'S BOX
- NEXT BATTER'S BOX
- BASE LINES
- GRASS LINES



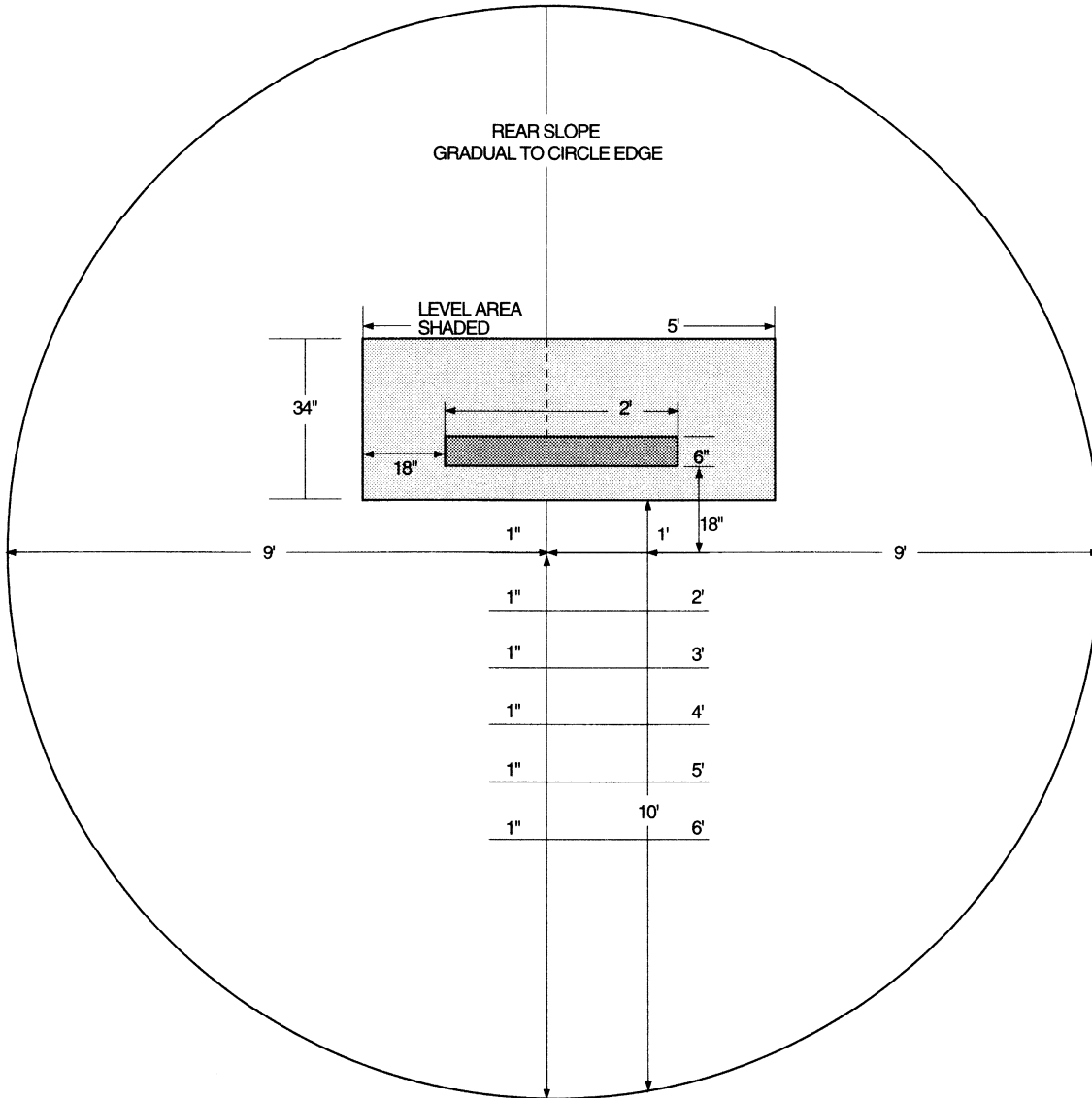
**DIAGRAM NO. 2**

**LEGEND**

- A 1st, 2nd, 3rd BASES
- B BATTER'S BOX
- C CATCHER'S BOX
- D HOME BASE
- E PITCHER'S PLATE

**Suggested Layout of Pitching Mound**

This Diagram No. 3 supplements and, in cases of difference, supersedes Diagram No. 2.



**DIAGRAM NO. 3**

Pitching Mound—An 18' diameter circle, center of which is 59' from back of home plate.

Locate front edge of rubber 18" behind center of mound.

Front edge of rubber to back point of home plate, 60'6".

Slope starts 6" from front edge of rubber.

The degree of slope from a starting point 6" in front of the pitcher's plate to a point 6' toward home plate shall be 1" to 1', and such degree of slope shall be uniform.

Level area surrounding rubber should be 6" in front of rubber, 18" to each side and 22" to rear of rubber. Total level area 5' x 34".

### **Recommended Area**

Ground space is 1.2 acres minimum

### **Dimensions – Minimum recommendations**

**Baselines:** 60 feet

**Pitching distance:** 43 feet for 14U, 16U and 18U; 40 feet for 12U; 35 feet for 10U

**Distance down foul line:** 200 feet

**Outfield distance to pocket in center field:** 200 feet

**Backstop:** Distance: Minimum of 25 feet from home plate and the foul lines extending from home plate edge to first and third base dugouts. Height: 24 feet with five foot overhang

**Side fencing:** Distance: Minimum of 30 feet from foul lines from home plate to the foul pole. Tapering from third base to the foul pole is permitted. Height: Recommended/Suggested Height: 8 feet

**Height of back field fence:** 4 feet minimum with appropriate covering

**Protective fence in front of dugouts:** Recommended/Suggested: 6 feet high

### **Orientation**

Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.

### **Surface and Drainage**

**Infield** – Infield should be skinned. A dirt, clay and sand mixture surface for the infield is easy to maintain and durable. The infield should be graded so that the base lines and home plate are level.

**Outfield** – Outfields should be grass with a proper irrigation system. Preventive maintenance should be used to minimize wear spots. A scheduled annual resodding of these areas is recommended. Irrigation systems should be properly monitored to prevent man-induced wet spots. A three percent grade should be constructed through the turf areas to move the water.

### **Recommended Safety Features**

**Warning tracks** – A warning track of at least three running steps (approximately 10 feet) should be planned near each fence. The change in surfaces will warn the fielder she is approaching the fence and is a definite safety feature for the ball park.

The material used is not as critical as that used in the infield. A crushed rock mix that will absorb water is most appropriate – generally the same substance as used around the parking lot, walkways, etc. It is critical, for maintenance purposes that your infield and warning track substances be kept separate.

**Foul poles** – should be at least six feet above the outfield fence.

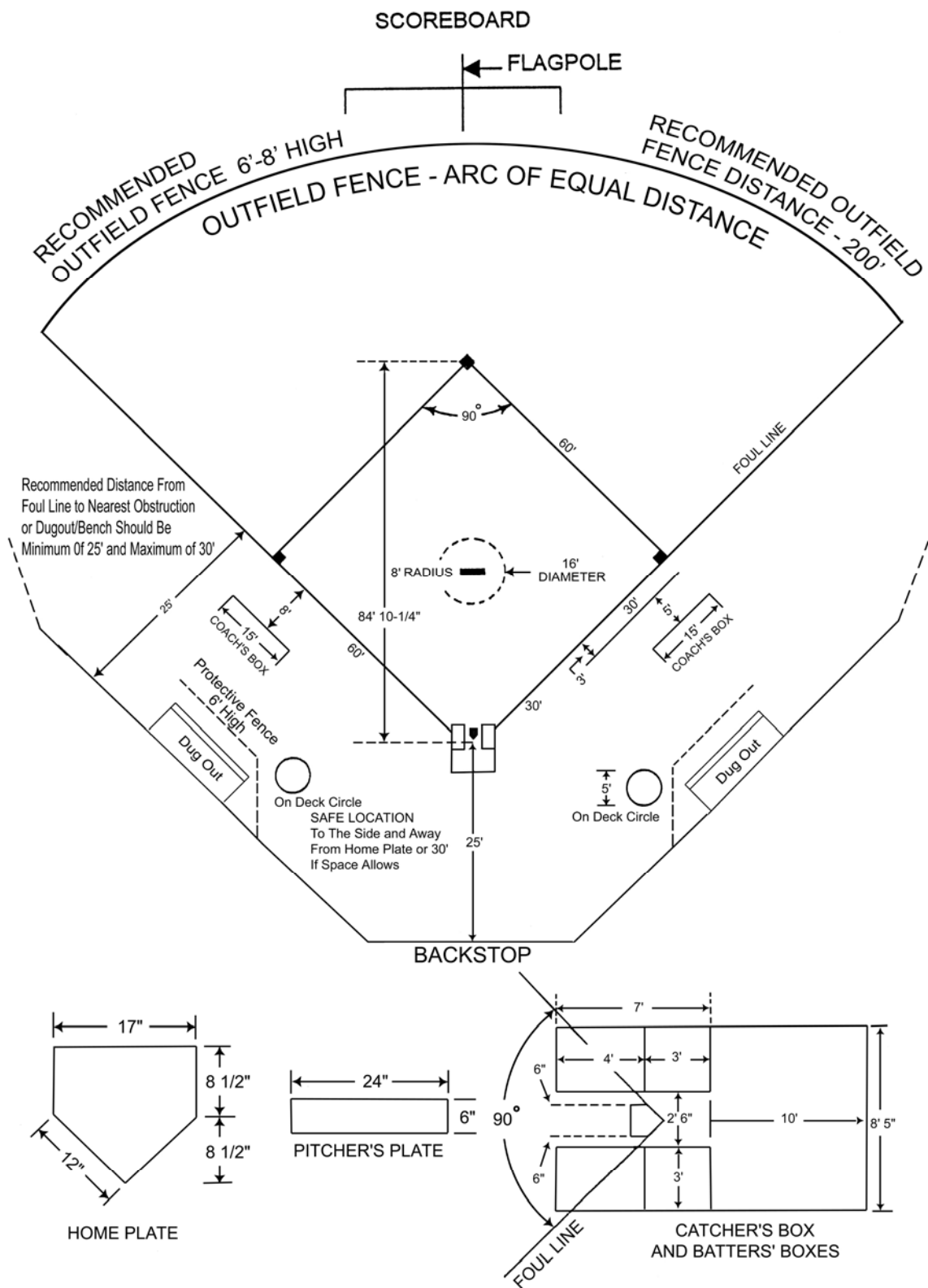
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**Dugout** – installing a roof and protective screening in front of the dugout reduces risk of injuries from foul balls.

**Backstop overhead and side screens** – protects spectators from being hit by foul balls.

**Fencing** – enclose the top rail of chain link fencing with PVC drainage tile or similar product and install fence caps to reduce risk of abrasions.



### Measuring Arc for Skinned Infield

Measure a 60-foot arc from the *front center* of a pitching rubber which has been placed *46-feet* from the apex of home plate.



# Standards for Lighting

## I. Required Minimum Recommendations

These minimum standards are required for all lighting installations after the date of adoption of these standards. Any modification in existing lighting systems after this date should be done so as to result in a lighting system in compliance with these standards. To be in compliance, a system must meet all required minimum standards.

### Part 1 - GENERAL

#### 1.1. LIGHTING PERFORMANCE

##### A. Light Levels – Optic System Performance

The quantity of equipment needed to produce the target light levels on a field is determined by the efficiency of the lighting system. Selection of appropriate light levels impacts the safety of the players and the enjoyment of the spectators. Newest metal halide technology is capable of delivering equal or better results with as little as half the amount of equipment as common metal halide systems. This generation of lighting has high performance optic characteristics that enable reductions in the quantities of luminaires needed to meet design targets. The lighting designs for the specified field will show a reduced fixture count for systems using a high-performance optic system. Manufacturers should provide assurance that target light levels will be met over the life of the system.

As light emitting diode (LED) technology improves and costs decrease, LED lighting systems become more viable for sports facilities. LED light sources can have a much greater lifespan than metal halide light sources with significantly less lumen depreciation over typical sports lighting operating hours. For example, a metal halide light source may reach 70% lumen maintenance in as little as 2,100 – 3,000 hours while an LED light source may take 100,000 hours or more.

##### B. Light Levels – Sustaining Targets Over Time

The two methods of design to meet specified light levels are: to provide a constant light level during the guarantee period, or to apply a recoverable light loss factor to the initial design.

###### 1. Constant Light Level Method

###### a. Metal Halide Light Source

The basics of this method are described under “Lumen Maintenance” in the IESNA Lighting Handbook Reference and Application, Tenth Edition, page 16-8: “Lumen maintenance control strategy calls for reducing the initial illumination of a new system to the designed minimum level. As lumen depreciation occurs, more power is applied to the lamps in order to maintain constant output.”

The term constant is intended to include any system that provides target light levels at 100 hours and maintains the target light levels throughout the system life. Light levels should be guaranteed with this technology. Manufacturers should provide an independent test report signed by a licensed professional engineer certifying the lumen maintenance strategy and field performance of any constant light system.

###### b. Light Emitting Diode (LED) Light Source

Due to the increased lifespan of LED light sources the lumen maintenance strategy will need to be considered based on the expected operating hours. For low annual usage hours applying an appropriate recoverable factor to account of lumen maintenance is likely the preferred approach. For high annual usage hours applying a lumen maintenance strategy to adjust the power to the LEDs as depreciation occurs may be the better option to maintain constant light levels. When using lumen maintenance strategy based on power adjustments the TM-21-11 reports will not apply.

Level of Play/Description	Average Constant or Target Light Levels (Horizontal)	Maximum to Minimum Uniformity Ratio	Maximum Rate of Change
Standard - Competition	50 footcandles - Infield 30 footcandles - Outfield	2:1 - Infield 2::1 - Outfield	10% per 10 feet

## 2. Recoverable Light Loss Factor Method

### a. Metal Halide Light Source

Computer designs are done using two sets of values. One shows the calculated “initial light levels” when lamps are new. The other predicts “target maintained light levels” after the lamps have passed through depreciation in light output. It is important to have the lighting designer use a maintenance factor adequate to account for this depreciation in light output throughout the life of the lamp.

According to best sports lighting practices, the recoverable light loss factor, or the value applied to the initial light level to predict the maintained light level values, should be in accordance with recommendations in the Pennsylvania State University report “Light Loss Factors for Sports Lighting,” published in IES’s Leukos, Vol. 6, No. 3, Jan., 2010, pages 183-201. The report’s findings show a recoverable light loss factor of 0.65 should be used if lamps will be replaced at 3000 hours. Quality manufacturers are willing to provide guarantees of lighting performance.

### b. Light Emitting Diode (LED) Light Source

The life of an LED is significantly longer than metal halide, and depreciation is more gradual early in life. If the amount of lumen depreciation will impact the target light levels during the system life then an appropriate lumen maintenance factor should be applied. It is recommended to obtain the lumen maintenance report per TM-21-11, of the fixture being proposed.

Level of Play/Description	Initial Light Levels (Horizon)	Average Constant or Target Light Levels (Horizontal)	Maximum to Minimum Uniformity Ratio	Maximum Rate of Change
Standard - Competition	77 footcandles - Infield 46 footcandles - Outfield	50 footcandles - Infield 30 footcandles-Outfield	2:1 - Infield 2:5:1 - Outfield	10% per 10 feet

### c. Performance Requirements - Quantity

Playing surfaces shall be lit to an average target light level and uniformity as specified in the above charts. Lighting calculations shall be developed and field measurements taken on the grid spacing with the minimum number of grid points specified beginning on page 11 of these standards with the light meter held horizontally 36 inches above the field surface. Measured average illumination level shall be measured at the first 100 hours of operation.

### d. Performance Requirements - Quality

The uniformity of the lighting helps ensure the playing surface is uniform in appearance and there is the proper amount of light for the players. The comparison of the highest measure of quantity of light on the field to the lowest measurement shall not be greater than the ratios listed in the above charts. On the entire field area, the change in the quantity of horizontal footcandles should not occur at a greater rate than 10 percent per 10 feet, except for the outside perimeter readings which may change at a greater rate.

### e. Glare for Participants

To achieve placement of lights in positions that enhance playability, pole heights, pole locations and fixture placements should be as shown on the layouts in the appendix. Aiming angles are a function of both pole height and the distance from fixture to aiming point. Babe Ruth minimum pole heights and minimum aiming angles must both be met to be in compliance.

1. Light fixtures which are set back from the foul lines between home plate to third base and between home plate to first base shall be mounted at a height above the playing surface such that a line from the lighting fixture to the point on the field where its maximum intensity is aimed is a line that is at least 25 degrees below horizontal.
2. Light fixtures positioned beyond the outfield fence or along the foul line beyond third base and first base shall be mounted at a height with a minimum aiming angle of 25 degrees below horizontal for fixtures aimed toward the infield and 21 degrees for fixtures aimed across the outfield.

## **1.2 ENVIRONMENTAL LIGHT CONTROL**

Many facilities are located near residential or commercial properties or roadways, creating the possibility of spill and glare onto adjoining properties. Consideration should be given to this issue during the initial lighting design stage to minimize this effect. Some communities are implementing ordinances designed to minimize light pollution. Contact your local planning committee or zoning board.

The lighting equipment manufacturer can assist in assessing this issue and provide drawings showing maximum footcandles and candela at any points of concern on adjacent properties. Do not hesitate to investigate a manufacturer's reputation, abilities, and past experiences in working with local authorities and private property owners regarding glare and spill issues.

When considering lighting equipment that uses an LED light source, the offsite light control should be at least as good as that of a metal halide source. Typically an LED light source can provide lower spill light values, but the glare from the fixture can end up being worse than a metal halide source if not properly designed.

## **1.3 LIFE-CYCLE COSTS**

Leagues continue to struggle with operating budgets. Because the efficiency of lighting systems currently available can vary greatly, a life-cycle operating cost analysis should be considered when evaluating lighting systems. Owners should expect a quality lighting system to last many years. Regardless of source technology, the basics of lighting maintenance remain the same: relamping (metal halide), cleaning, monitoring, aiming alignment, and troubleshooting.

These standards provide a 10-year Life-Cycle Operating Cost Evaluation form to assist with the process. Items that should be included are energy consumption based upon the facility's expected usage, cost for spot relamping and maintenance, and any additional savings in energy or labor cost provided by automated on/off control systems. Contract price and life-cycle operating cost should both be considered in determining a lighting manufacturer for the project.

## **1.4 WARRANTY AND GUARANTEE**

Product warranties are a good gauge of a manufacturer's confidence in their products. Prior generation equipment can range from 5 years to 10 years, and details of covered items and conditions vary greatly. New generation technology comes with warranty periods that may extend up to 25 years and includes guaranteed light levels, parts, on-site labor, lamp replacements, energy usage, monitoring and control services, spill light control, and structural integrity. The manufacturer should provide specially-funded reserves to ensure fulfillment of the warranty for the full term. It is highly recommended you consider these all-inclusive warranties to limit your league's future exposure to escalating costs and maintenance hassle. LED products also range from 5 year to 10 year warranties. While the diodes themselves will typically outlast the length of the warranty, it is the other components that need to be covered in order to provide a system that will be operational for the length of the warranty. The basics of lighting maintenance remain the same: cleaning, monitoring, aiming alignment, and troubleshooting.

## **PART 2 - PRODUCT**

### **2.1 LIGHTING SYSTEM CONSTRUCTION**

A lighting system should consist of lighting, electrical, and structural components designed to work together as a system that is durable and provides safety features.

#### **A. Outdoor lighting systems should consist of the following:**

1. Galvanized steel poles and crossarm assembly. Wood poles are not allowed after September 1, 1994. Poles should be hot-dip galvanized to ASTM A123 standards. All accompanying hardware shall be galvanized or stainless steel. If direct bury steel poles are used, leagues should have a foundation design completed by a structural engineer.
2. Reinforced concrete pole foundation. Foundations should provide for pole attachment a minimum of 18 inches above ground to avoid corrosive deterioration. Concrete should cure a minimum of 28 days to develop adequate strength before stress loads are applied unless a shorter cure time is approved by the structural engineer of record.
3. All ballasts, or drivers, and supporting electrical equipment shall be mounted onto the pole, away from the fixtures and crossarm to avoid problems of misalignment caused by the weight of these components. It is recommended that this equipment be placed in aluminum enclosures mounted remotely approximately 10 feet (3 meters) above grade. The enclosures shall be lockable and include safety disconnect per circuit for each pole structure. Enclosures should be kept locked except during times of maintenance.
4. All wiring conductors above ground must be enclosed in rigid cover. It is recommended that the lighting system include a wire harness complete with an abrasion protection sleeve and strain relief.
5. The approved metal halide lamp for Babe Ruth play is a 1500-watt ANSI code - M48/E-150.
6. For an efficient LED system the diodes should have a minimum color temperature of 5700 K and a CRI of 65+.

#### **B. Manufacturing Requirements**

It is recommended that all components be designed and manufactured as a system. All luminaires, wire harnesses (if provided), ballast/driver and other enclosures should be factory assembled, aimed, wired and tested for reduced installation time and trouble-free operation.

### **C. Durability**

It is recommended that all exposed components be constructed of corrosion resistant material and/or coated to help prevent corrosion. Look for items like hot dip galvanizing for steel poles, stainless steel fasteners, powder coat painted aluminum, and wiring enclosed within the crossarms, conduit, pole, or electrical enclosure.

### **D. Lightning Protection**

All outdoor structures need to be equipped with lightning protection meeting NFPA 780 standards. If lightning grounding is not integrated into the structure, it may be necessary to supplement with grounding electrodes, copper down conductors, and exothermic weld kits.

### **E. Safety**

All system components need to be UL Listed for the appropriate application. All electrical conductor wires for distribution of power around the playing field should be buried underground at depths provided by local code.

### **F. Maximum total voltage drop**

Voltage drop to the disconnect switch located on the poles should not exceed 3% of the rated voltage per IESNA RP-6-15, Annex D.

## **2.2 STRUCTURAL PARAMETERS**

### **A. Location**

Poles shall be located as shown on the drawings in the appendix to these standards. Whenever possible, poles should be located outside of fences to avoid causing an obstruction or safety hazard to the participants.

### **B. Foundation Strength**

Project specific foundation drawings stamped by a licensed structural engineer shall be required, illustrating that the foundation design is adequate to withstand the forces imposed from the pole, fixtures, and other attachments to prevent the structure from leaning.

### **C. Wind Load Calculator**

Windload of poles and other support structures, fixtures, brackets, arms, bases, anchorages, and foundations shall be determined based on the 50-year mean recurrent isotach wind maps for the appropriate municipality per the state building code.

### **D. Structural Design**

The stress analysis and safety factor of the poles shall conform to AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.

### **E. Soil Conditions**

The design criteria for these specifications are based on soil design parameters as outlined in the geotechnical report. If a geotechnical report is not provided by the school, the foundation design shall be based on soils that meet or exceed those of a Class 5 material as defined by 2015 IBC, Table 1806.2.

## **PART 3 - EXECUTION**

### **3.1 FIELD QUALITY CONTROL**

#### **A. Illumination Measurements**

Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, League Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA RP-6-15, Annex B.

## **B. Correcting Non-Conformance**

If, in the opinion of the Owner or his appointed Representative, the actual performance levels including footcandles, uniformity ratios, and maximum kilowatt consumptions are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer shall be liable to any or all of the following:

1. Manufacturer shall, at his expense, provide and install any necessary additional fixtures to meet the minimum lighting standards. The Manufacturer shall also either replace the existing poles to meet the new wind load (EPA) requirements or verify by certification by a licensed structural engineer that the existing poles will withstand the additional wind load.
2. Manufacturer shall minimize the Owner's additional long term fixture maintenance and energy consumption costs created by the additional fixtures by reimbursing the Owner the amount of \$1,000 (one thousand dollars) for each additional fixture required.
3. Manufacturer shall remove the entire unacceptable lighting system and install a new lighting system to meet the specifications.

## **3.2 ONGOING QUALITY ASSURANCE**

**A.** Full light and safety audits should be performed every year. See Facility Checklist at the back of these standards.

## **II. Desirable Features**

The following practices are recommended for increasing the lighting system performance.

### **4.1 CONTROL AND MONITORING SYSTEM**

Lighting A remote control and monitoring system will provide ease of operation and management for your facility. Manufacturers providing systems with a long-term warranty of at least 10 years will use this system to ensure your lighting performs as required.

#### **A. Remote Monitoring**

Monitoring systems can check the lighting system each time it is turned on for luminaire outages. When an outage is detected, the manufacturer should notify the owner so that appropriate maintenance can be scheduled.

#### **B. Remote Lighting Control**

Lighting control systems allow owners and users with a security code to schedule on/off system operation in a variety of methods including web sites, phone, app, fax, or email. Look for manufacturers that provide trained staff available 24/7 to provide scheduling support. Also evaluate features such as memory back up in the event of power outages.

#### **C. Management Tools**

Some manufacturers provide a web-based database of actual field usage and provide reports by facility and user group.

#### **D. Communication Costs**

Leagues should request that manufacturers include communication costs for operating the control and monitoring system for the life of the lighting system.

### **4.2 AUXILIARY BRACKETS**

Sports lighting manufacturers can provide accommodations for mounting auxiliary equipment, such as speakers and security lights, on sport lighting poles. This ensures poles will be sized to accommodate the weight, dimensions, and EPA of the additional equipment. Brackets shall be welded to the pole and fabricated from hot-dip galvanized steel with a covered hand hole access and internal wiring in the pole.

### **4.3 FIELD PERIMETER LIGHTING**

The parking areas, major areas utilized for passage, and areas immediately bordering the facilities should be lighted. The spill light from the playing field may provide illumination for some of these areas when the field is in use. When a sports field is not in use its sports lights should be turned off. Then other security lighting would be needed. For appropriate levels, see local codes. Care should be taken to eliminate darkly shadowed areas.

## Life Cycle Operating Cost Evaluation

This form will assist you in comparing 10-year life-cycle operating costs from multiple manufacturers. Bid proposals should be evaluated based upon compliance with the specifications, contract price, and the following life-cycle operating cost evaluation.

### BID ALTERNATE A:

A.	Energy consumption ___ Number of luminaires x ___ KW demand per luminaire x ___ kWh rate x ___ annual usage hours x 10 years		
B.	Demand charges, if applicable	+	
C.	Spot relamping and maintenance over 10 years (relamping not applicable for LED) Assume ___ repairs at \$ ___ each if not included	+	
D.	Group relamps during 10 years (relamping not applicable for LED) ___ annual usage hours x 10 years / <u>lamp replacement hours</u> x \$125 lamp & labor x number of fixtures	+	
E.	Extra energy used without control system ___% x Energy Consumption in item A.	+	
F.	Extra labor without control system \$ ___ per hour x ___ hours per on/off cycle x ___ cycles over 10 years	+	
G.	TOTAL 10-Year Life-Cycle Operating Cost	=	

### BID ALTERNATE B:

A.	Energy consumption ___ Number of luminaires x ___ kW demand per luminaire x ___ kWh rate x ___ annual usage hours x 10 years		
B.	Demand charges, if applicable	+	
C.	Spot relamping and maintenance over 10 years (relamping not applicable for LED) Assume ___ repairs at \$ ___ each if not included	+	
D.	Group relamps during 10 years (relamping not applicable for LED) ___ annual usage hours x 10 years / lamp replacement hours x \$125 lamp & labor x number of fixtures	+	
E.	Extra energy used without control system ___% x Energy Consumption in item A.	+	
F.	Extra labor without control system \$ ___ per hour x ___ hours per on/off cycle x ___ cycles over 10 years	+	
G.	TOTAL 10-Year Life-Cycle Operating Cost	=	



# Sports Lighting Submittal Information

## Design Submittal Data Checklist and Certification

This form will assist you in comparing proposals from various lighting manufacturers. All items listed below should comply with your project's specification and be submitted according to your pre-bid submittal requirements.

Included	Tab	Item	Description
	A	Letter/Checklist	Listing of all information being submitted must be included on the table of contents. List the name of the manufacturer's local representative and his/her phone number. Signed submittal checklist to be included.
	B	On-Field Lighting Design	Lighting design drawing(s) showing: a. Field Name, date, file number, prepared by, and other pertinent data b. Outline of field(s) being lighted, as well as pole locations referenced to the center of the field (x & y), or home plate for baseball/softball fields. Illuminance levels at grid spacing specified c. Pole height, number of fixtures per pole, as well as luminaire information including wattage, lumens and optics d. Height of meter above field surface e. Summary table showing the number and spacing of grid points; average, minimum, and maximum illuminance levels in foot candles (fc); uniformity including maximum to minimum ratio, coefficient of variance, and uniformity gradient; number of luminaires, total kilowatts, average tilt factor; light loss factor. f. Manufacturers shall provide constant light level or provide both initial and maintained light scans using a maximum 0.69 Light Loss Factor and lamp replacement interval at 2100 hours to calculate maintained values as shown in section 1.1.B.2 of these standards.
	C	Off Field Lighting Design	Lighting design drawings showing spill light levels in footcandles as specified.
	D	Photometric Report (glare concerns only)	Provide photometric report for a typical luminaire used showing candela tabulations as defined by IESNA Publication LM-35-02. Photometric data shall be certified by laboratory with current National Voluntary Laboratory Accreditation Program or an independent testing facility with over 5 years experience.
	E	Life-Cycle Cost calculation	Document life-cycle cost calculations as defined on the Life-Cycle Operating Cost Evaluation. Identify energy costs for operating the luminaires, maintenance cost for the system including spot lamp replacement, and group relamping costs. All costs should be based on 25 Years.
	F	Luminaire Aiming Summary	Document showing each luminaire's aiming angle and the poles on which the luminaires are mounted. Each aiming point shall identify the type of luminaire.
	G	Structural Calculations (if required)	Pole structural calculations and foundation design showing foundation shape, depth backfill requirements, rebar, and anchor bolts (if required). Pole base reaction forces shall be shown on the foundation drawing along with soil bearing pressures. Design must be stamped by a structural engineer in the state where the project is located.
	H	Control and Monitoring	Manufacturer shall provide written definition and schematics for automated control system to include monitoring. They will also provide examples of system reporting and access for numbers for personal contact to operate the system.
	I	Electrical distribution plans	If bidding an alternate system other than the base design, manufacturer must include a revised electrical distribution plan including changes to service entrance, panels and wire sizing, signed by a licensed Electrical Engineer in the state where the project is located.
	J	Performance Guarantee	Provide performance guarantee including a written commitment to undertake all corrections required to meet the performance requirements noted in these specifications at no expense to the owner. Light levels must be guaranteed per the number of years specified.
	K	Warranty	Provide written warranty information including all terms and conditions.
	L	Project References	Manufacturer to provide a list of project references of similar products completed within the past three years.
	M	Product Information	Complete set of product brochures for all components, including a complete parts list and UL Listings.
	N	Non-Compliance	Manufacturer shall list all items that do not comply with these lighting standards.
	O	Compliance	Manufacturer shall sign off that all requirements of the specifications have been met, and that the manufacturer will be responsible for any future costs incurred to bring their equipment into compliance for all items not meeting specifications and not listed in item N – Non-Compliance

Manufacturer: \_\_\_\_\_

Signature: \_\_\_\_\_

Contact: \_\_\_\_\_

Date: \_\_\_\_\_

## Illuminance Measuring Points

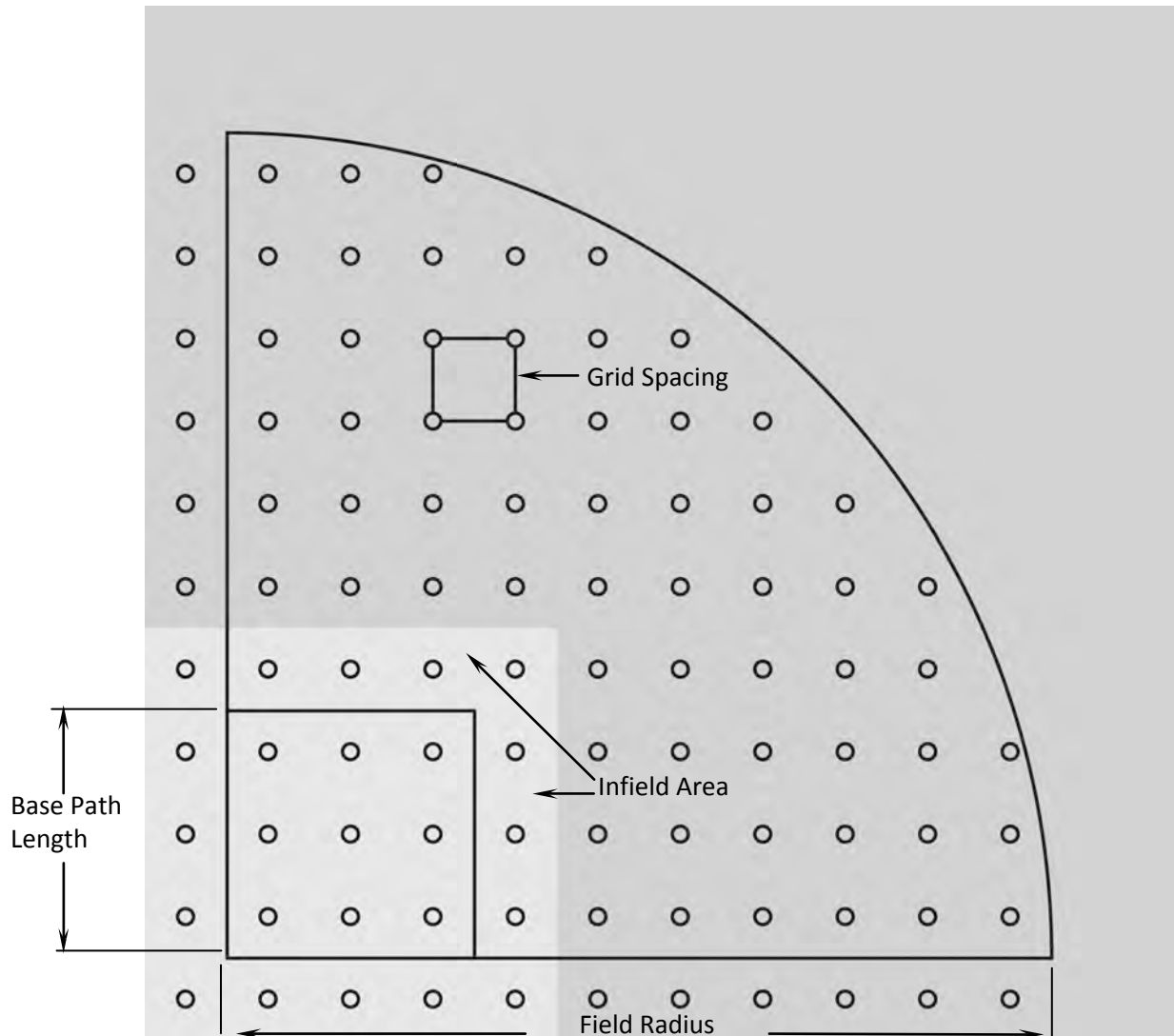


Fig. B4. Illuminance measuring points for baseball and softball. **Illuminance Engineering Society of North America Sports Lighting-RP-6-15**

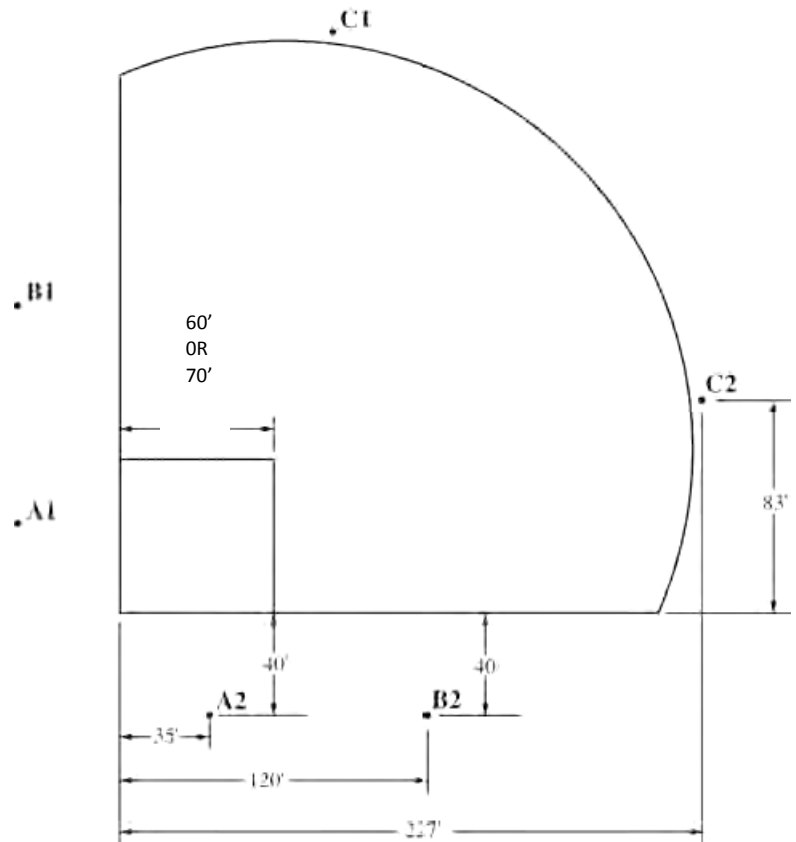
Field Radius	Base Path Length	Grid Spacing	Total Number of Grid Points	
			Infield	Outfield
175 feet	60 feet	20 feet x 20 feet	25	54
200 feet	60 feet	20 feet x 20 feet	25	75
300 feet	90 feet	30 feet x 30 feet	25	73

Light meter should be held horizontally at 36 inches above the surface.

# Lighting Diagrams

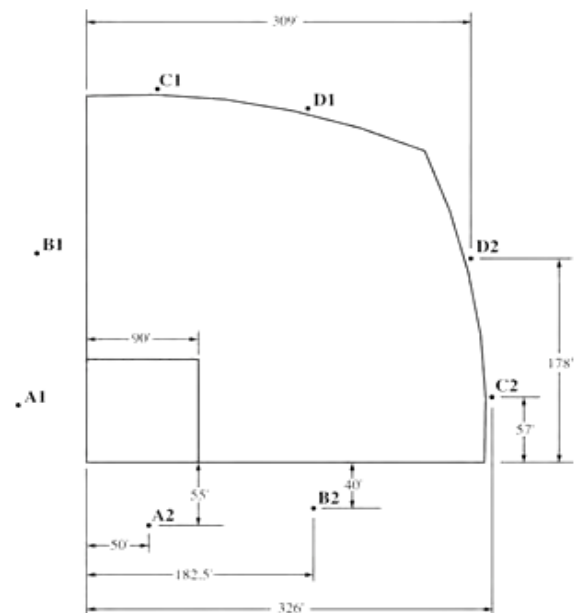
## CAL RIPKEN DIVISION (ages 5-12)

Layout for 210' / 250' / 210' field		
Poles		
Location	Minimum Quantity	Minimum Mtg. Ht. *
A	2	60'
B	2	60'
C	2	60'



## BABE RUTH BASEBALL (ages 13-18)

Layout for 320' / 340' / 385' field		
Poles		
Location	Minimum Quantity	Minimum Mtg. Ht. *
A	2	70'
B	2	80'
C	2	70'
D	2	70'

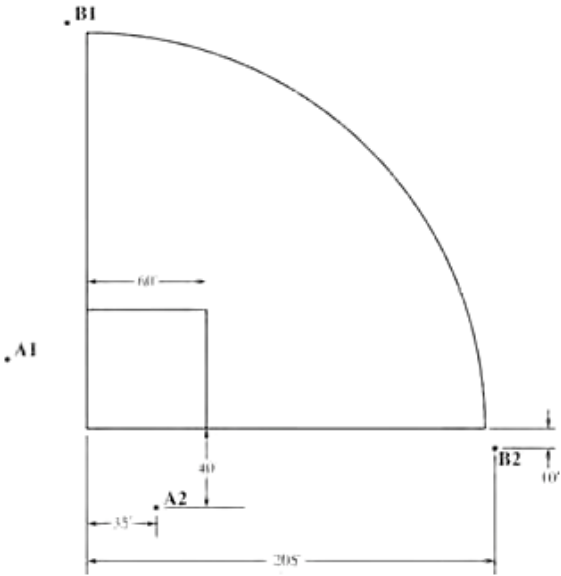


### NOTE:

For glare control, taller fixture mounting heights may be required. Also, if obstructions or common poles for multiple fields require poles to be set back farther from the field, then taller poles may be required.

**BABE RUTH SOFTBALL (ages 5-18)**

Layout for 200' radius field		
Poles		
Location	Minimum Quantity	Minimum Mtg. Ht. *
A	2	60'
B	2	60'



## Musco Lighting



Musco Lighting is proud to be a partner of **Babe Ruth League, Inc.** Each year, Musco awards a \$15,000 grant each to four Babe Ruth Leagues to use towards the purchase of a new lighting system or to refurbish an existing lighting system.



**We Make It Happen.**

When it comes to ball field lighting, you'll find that Musco makes it easy. Musco's problem-solving capabilities will address every aspect of your lighting project. From funding to volunteer installation, Musco can help you make it happen with Light-Structure Green™ - a complete lighting system from foundation to poletop that's always ready to play.

Musco will design a lighting system that's exactly right for your field, making your project one you can be proud of for many years. Their experience with thousands of successful projects assures great results, and saves you time and money - today and tomorrow.

For a free copy of *Sports Lighting: 9 Common Questions*, or for help developing a plan to meet your lighting needs, call Musco toll-free at **800/825-6030** or visit <http://www.musco.com/aboutus/partners/baberuthform.html>.

# *Operating and Maintaining Your Facility*

## *General Facility Considerations*

### **Parking**

Capacity –  
1 parking space per 3 seats;  
Parking Surface –  
should meet local code;  
Handicapped Accessibility –  
parking closest to and  
accessibility to facility entrance;  
Bus Spaces – within reasonable  
walking distance

### **Ticket Window**

1 per 1,500 seats

### **Rest Room Ratios**

1 location per sex  
1 stall per 80 women  
1 stall per 350 men  
1 urinal per 100 men

### **Lavatory Ratios**

1 per 150 women  
1 per 250 men

### **Handicapped Accessibility**

Meet local, state, and federal  
code Adequate accessibility per  
sex

### **Drinking Fountains**

Meet local, state, and federal  
code

### **Public Telephones**

Meet local, state, and federal  
code

### **Seating**

Handicapped accessibility in  
each type of seating (box,  
reserved, general admission)  
Meet local, state, and federal  
building codes

### **Concessions**

1-2 locations per 1,500 seats  
1 serving station per 350 seats  
Meet local, state, and federal  
code

### **Souvenir area**

1 per 1,500 attendance

### **Sound system**

Acoustically balanced for  
capacity and seating  
arrangements

### **Press/Score Booth**

Accommodate scorer, public  
address announcer,  
scoreboard operator

### **Baseball Playing Field**

Tarps: Circle cover for pitcher's  
mound; covers for plate area;  
base area covers or infield cover

### **Softball Playing Field**

Tarps: Infield cover

## *Facility Inspection Checklist*

*To ensure the safety of participants and spectators – each facility should be checked prior to each use.\**

### **On Field**

- Surfaces – proper grading; no holes; check for high/low spots.
- Bases – properly secured posts; no holes; bottom of home plate flat on playing surface.
- Fencing – bottom rail or properly buried; no holes or breaks; properly covered.
- Dugouts – screened; roofed; bat and helmet racks installed and secured.
- Pitcher's mound – proper height and grading; no holes.
- Backstop – base properly buried; no holes or breaks.
- Warning track – minimum 10 feet from fence; no holes; no large rocks.

### **Off Field**

#### **Concession stand**

- In compliance with local/state/federal codes.
- Appliances in working order.
- CO2 tanks secured.
- Smoke alarms/fire extinguishers working. Barbeque grills located away from exits. Barbeque grills propane tanks inspected.
- Cleaners/chemicals stored away from foods.
- Boxes stored on shelves – off the floor and out of walkways.
- Customer doors or windows checked for safety.
- Pricing signs correct and well stocked.
- Breaker boxes locked and grounded.
- Signage posted for proper emergency first aid in prominent area.
- Emergency phone numbers posted in prominent area.

### **Bleachers**

#### **All bleachers**

- In compliance with local/state/federal codes.
- Vertical opening between guardrails, footboards, and seatboards should not exceed four inches.
- Cross bracing and footings on fixed bleachers should not “move”.
- Painting a 1"-2" contrasting color across the nose thread of each step will help the view of the steps for people coming down.

#### **Aluminum**

- New bleachers must meet ASTM Guidelines.
- Electrically grounded.
- Endcaps checked.
- Hand and back rails checked.
- Protective fencing along back and sides.

#### **Wood**

- Rotted and splintered wood replaced – Besides a visual inspection, any wood that can be easily entered with a pointed object such as an ice pick, screw driver or pen-knife is suspect and should be cause for immediate repair.
- Single board bleachers should be no higher than six feet.

## **Other**

- First-Aid Kits stocked.
- Public address system working.
- Rest rooms – cleaned, stocked and in working order.
- Scoreboard in working order, properly grounded and locked.

## **Closing for the season**

Waterpipes drained.

Sprinkler system properly winterized.

Concession stand – perishable goods removed; winterized.

\* Installation of all equipment must meet manufacturers' requirements



## *Tournament Considerations*

This checklist contains facility items that should be considered when hosting a tournament. Like the rest of the information in this booklet, these items are intended to provide a starting point from which to develop your facility appropriate to your individual needs.

Field layout (See pages 8-16)

Facility must meet ADA (Americans for Disability Act) guidelines.

Spectator Seating – Estimate spectators for tournaments:

District: 500; State: 1,000; Regional: 1,500; World Series: 3,000

Rest Rooms – Adequate rest rooms for expected spectators and participants.

Concession Stand – Easy, convenient access to spectators and participants. Safety considerations include, but are not limited to, overhead protection from foul balls for customers, barbeque grills away from exits, restraints on CO2 tanks.

Lights – Should meet minimum Babe Ruth League guidelines of 50/30 footcandles.

Scoreboard – Recommended location is behind left or right center field. Score and the inning should be clearly displayed. Balls, strikes, hits and errors are optional.

Parking – One parking space per 3-4 spectators is recommended. Safety for participants and spectators should be the number one priority when considering parking facilities and traffic flow.

Public address system.

Telephones – At least one public telephone should be available.

Flag pole(s)

First aid kits

Press/Score Box/Area – Adequate space for minimum personnel of announcer, scorekeeper, scoreboard operator.

SECURED AREA for collecting tickets or gate fee.

## Developing an Emergency Plan

**List Emergency Numbers** - One of the most important pieces of your safety plan, an emergency phone numbers list must be placed where anyone can find it in an emergency. Make sure you include local numbers for the fire department, hospital and/or ambulance service, police and even poison control. If you have utilities such as electrical, gas or water services, include the local and emergency numbers to call if you were to discover a problem with any of these, as well. Describe or illustrate where the main disconnects for these services are located also, so trained personnel can shut off the utility in question as quickly as possible. Give a copy of this list to each manager and coach.

Keep a copy by every indoor phone as well (concession stand, press box, etc.) and laminate copies for exterior structures like the equipment storage shed or batting cages, where emergency help could be sought quickly.

### EMERGENCY

Police/Fire/EMT:..... 911  
Hospital Ambulance: ..... 555-3333  
AAPCC Poison Control Center: ..... (800) 222-1222

### NON-EMERGENCY CONTACT NUMBERS

Police - Non-Emergency:..... 555-0000  
Fire Dept. - Non-Emergency:..... 555-1111

### UTILITIES - EMERGENCY

Gas Dept.: ..... (800) 555-0001  
Electric Co.: ..... (800) 555-0002  
Water Dept.: ..... (800) 555-0003

**Give Emergency Procedures** - When someone is upset and desperate for assistance, they need all the help they can get. If you develop a list of procedures to follow when an accident or injury occurs, you give the person summoning aid a big helping hand. Just reading over the list during a training session will help them calm down and give good information if the time ever comes when they have to make a call for emergency aid.

**Finish with a Site Map** - When an emergency occurs, a site map can locate all the important places for anyone needing to know something in a hurry. Make this available at all phones and submit it to your local 9-1-1 Center in case of an emergency, so the caller can quickly locate the field name, access points (gates or openings in the fences) and closest roads. Include in it:

1. Fields, correctly named and placed with nearest roads, access gates, and any unique features (ex: large first aid station, score booth, equipment shed/box, fire extinguishers, water hoses, etc.)
2. First aid stations, whether part of a larger area or a stand-alone facility.
3. Restrooms, mark handicap access, as well as water shut-off valves.
4. Concession stands, with shut-off valves for gas, propane, water, electric main, etc. clearly marked and labeled.
5. Telephone locations.
6. Parking areas; label no-parking areas.
7. Walkways for pedestrian crossing of roads, parking areas, etc.
8. Warm-up and practice sites, including bullpens, batting cages, practice fields.

For emergencies such as concession stand fire, gas leak, or earthquake, locate a place at your facility where teams and spectators should gather away from structures, like in the middle of an outfield or in a parking lot. For weather emergencies such as lightning or tornadoes, designate a safe indoor structure or outdoor procedure.

### **Emergency Contact Procedures**

The most important help you can provide to a victim who is seriously injured is to call for professional medical help. Make the call quickly, preferably from a cell phone near the injured person. If this is not possible, send someone else to make the call from a nearby telephone. Be sure that you or another caller follows these steps.

1. **First dial 9-1-1.**
2. **Give the dispatcher the necessary information.**  
Answer any questions that he or she might ask. Most dispatchers will ask:
3. **The exact location or address of the emergency?**  
Include the name of the city or town, nearby intersections, landmarks, etc. as well as the field name and location of the facility, if applicable.
4. **The telephone number from which the call is being made?**
5. **The caller's name?**
6. **What happened** – i.e., a baseball-related accident, bicycle accident, fire, fall, etc.?
7. **How many people are involved?**
8. **The condition of the injured person** – i.e., unconscious, chest pains, or severe bleeding?
9. **What help is being given** (first aid, CPR, etc.)?
10. **Do not hang up until the dispatcher hangs up.**  
The dispatcher may be able to tell you how to best care for the victim.
11. **Continue to care for the victim until professional help arrives.**
12. **Appoint someone to go to the street and look for the ambulance** or fire engine and flag them down if necessary. This saves valuable time. Remember, every minute counts.

## Grants

Several organizations offer grant funding to youth baseball and softball programs. They provide support to expand programs and deal with equipment and facilities. In many cases, the funding can be used to build or maintain the baseball fields essential for these youth sports programs to thrive. This list is not all-inclusive, but does provide a place to start. Please check each website for the most current and accurate information.

**The Baseball Tomorrow Fund** (BTF) awards grants to non-profit and tax-exempt organizations involved in the operation of youth baseball and/or softball programs and facilities. Organizations operating in the U.S. and international locations are eligible to apply. To date, an average of 400 requests are received annually; approximately 10 percent are awarded grants. Grants are awarded on a quarterly basis.



**The Baseball Tomorrow Fund** Grants are intended to provide funding for incremental programming and facilities for youth baseball and softball programs, not for normal operating expenses or as a substitute for existing funding or fundraising activities. The funds may be used to finance a new program, expand or improve an existing program, undertake a new collaborative effort, or obtain facilities or equipment necessary for youth baseball or softball programs. Grants are designed to be flexible to enable applicants to address needs unique to their communities.

### Grant Review Process

Grants are awarded on a quarterly basis after a thorough and selective review process. Please review the following timeline before submitting a request:

Review Cycle	The last date a request may be submitted for consideration during the Review Cycle	Requests Are Approved in this month*	If approved, the grant payment process takes place in this month**
January-March	January 1	April	May
April-June	April 1	July	August
July-September	July 1	October	November
October-December	October 1	January	February

\*Subject to change. Grants will not be approved prior to this month and may be delayed under special circumstances.

\*\*This is the estimated time frame in which grant payments are disbursed. Grant funds will not be available to the recipient prior to this month. The grant payment process takes at least four weeks after the request is approved. **IMPORTANT NOTE:** Grant funds are not awarded for past orders, work or expenditures. Please review the following examples:

Example 1: Your organization submits a request for the January-March review cycle. The request to BTF is for funding to purchase uniforms and equipment. You plan to place an order for uniforms and equipment in February. Your request will not be considered by BTF.

Example 2: Your organization plans to begin a field renovation project in September. Your organization submits a request for the July-September review cycle. Your request to BTF includes funding for site work scheduled from September-October as well as other work that follows. Your request to fund the site work will not be considered by BTF.

For more information or to begin the application process, please visit The Baseball Tomorrow Fund website.

### **Cal Ripken, Sr. Foundation**

This non-profit organization was created in 2001 by the sons and family of Cal Ripken, Sr. following his death. The Cal Ripken, Sr. Foundation funds partnerships with schools and organizations across the United States, using baseball as a way to reach disadvantaged youth. It offers three major programs, one of which places state of the art baseball facilities in communities around the United States. The foundation website shows 12 completed projects with many others in the works. It also offers programs that pair members of local law enforcement in baseball programs with troubled youth and another that uses baseball as a medium to teach young people important life lessons through the mentoring and coaching available through youth baseball. To contact the foundation about any of these programs, email [info@ripkenfoundation.org](mailto:info@ripkenfoundation.org) or call 410-823-0808.

### **SNY Play Ball!**

This grant supports youth baseball and softball programs in New York's tri-state area with \$5,000 in funding. It awards six of these grants each year. Money can be used to purchase equipment and to pay for field maintenance and other associated costs of youth sports programs. Download a copy of the grant application online or contact SNY by email at [snyplayball@genzmarketing.com](mailto:snyplayball@genzmarketing.com) to inquire about the program. Leagues selected for the program are invited to attend a New York Mets game and will receive on-air coverage during the broadcast of the attended game.

### **Twin Fields for Kids Program**

While this program only helps those in the Upper Midwest and Southwest Florida, it has provided almost \$2.5 million to over 500 projects to renovate baseball and softball facilities since 1999. Supported by the Minnesota Twins baseball franchise, the Twins Community Fund will match any funding raised locally dollar for dollar up to \$10,000 to build or renovate a baseball field used by youth programs. These programs must be able to provide normal operating expenses to be considered for the grant. Applications are handled through three yearly rounds with deadlines of March 15, May 24, and August 16. To inquire about the Twin Fields for Kids Program, email [stephaniejohnson@twinsbaseball.com](mailto:stephaniejohnson@twinsbaseball.com) or call 612-659-3505.

# Lightning Safety

## WHEN THUNDER ROARS, GO INDOORS!



Each year in the United States, more than 400 people are struck by lightning. On average, between 55 and 60 people are killed; hundreds of others suffer permanent neurological disabilities. Most of these tragedies can be avoided with a few simple precautions. When thunderstorms threaten, get to a safe place. Lightning safety is an inconvenience that can save your life.

The safety of the players, parents, coaches, officials and spectators is of great importance to Babe Ruth League, Inc. When *Mother Nature* calls, knowing what to do is an important step in enforcing safety. All leagues should have a plan in place for such emergencies.

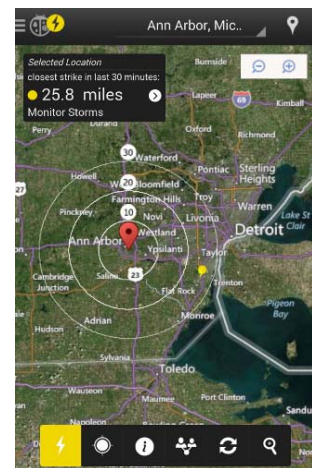


Babe Ruth's partnership with WeatherBug® helps leagues obtain early warnings to lightning and severe weather, pinpoint forecasts, highlight heat index information, and show current conditions to

help alleviate some of the concerns caused by severe weather.

WeatherBug® provides coaches, managers, parents, commissioners and volunteers with mobile apps with real-time weather, extended 10-day forecasts, weather cams, severe weather alerts and personalized lightning detection to help you stay safer during practice and ballgames during the season.

WeatherBug's Spark Tool delivers personalized minute-by-minute, mile-by-mile lightning strike information so players can stay safer. Spark uses real-time lightning strike information from WeatherBug® and your device's GPS location to provide color-coded warnings for lightning danger near you at that moment and in other places.



You may also follow the suggested safety guidelines below:

- If you do not have a lightning detector:
  1. **Be aware of weather patterns.** Most thunder/lightning storms occur between May and September and between the hours of 10 a.m. and 7 p.m.
  2. **Hearing Thunder and Seeing Lightning.** Thunder can usually be heard for a distance of about 10 miles provided there is no background noise. The ability to see lightning varies depending on the time of day, weather conditions and obstructions such as trees and hills. In clear air, and especially with dark skies, lightning can be seen from storms more than 10 miles away provided there are no obstructions. If thunder can be heard or lightning seen, carefully monitor the progress of the storm, as it must be close.
  3. **Flash to Bang Theory.** Count the number of seconds between seeing lightning and hearing thunder. Divide the number of seconds by five to estimate the distance of the storm in miles. A "flash-to-bang" of 30 seconds or less is an indication to postpone the activity and to move athletes and spectators to a safe area. Or, heed the warnings of your lightning detection device as regards to when it is time to evacuate. A pre-assigned individual should be responsible for the decision to evacuate.
  4. **Keep An Eye on the Sky.** Other warning signs of impending weather include darkening skies, sudden change in temperature and/or humidity, and increase in air movement. Not all people struck by lightning are in the rain.
- **Evacuation – Seek Safe Shelter.** No place **OUTSIDE** is safe in or near severe weather.
  - Evacuation should be pre-planned, having means of communication to notify individuals of the danger and to provide directions to safe shelters. Have signs available that will provide direction to the nearest safe area.
  - Be sure to know the approximate number of players and spectators and the size of the available shelters so that the proper number of individuals can be directed to a given location.
  - Safe shelters are optimally an enclosed building with telephone, and/or electrical wiring and/or plumbing that will aid in grounding and dispersing the electrical impact. Enclosed automobiles with a metal roof and school buses are sources of shelter but no contact should be made with metal. Showers, plumbing facilities, utilities, telephones with cords and headsets should not be used. Cordless and cellular phones can be used for communication.
  - If no safe shelter is available, avoid sheds, picnic shelters, dugouts, bleachers, open fields, antennas, towers, poles, metal fencing, golf carts, standing water, hilltops, and high areas such as hill or ridge tops. Avoid single or tall trees, tall objects and standing in a group. It is better to find a thick grove of small trees. Never lie flat on the ground during a lightning storm.
  - As a last resort and/or if you feel your hair stand on end (indicating lightning is about to strike), assume the lightning-safe position Crouch on the ground with your weight on the balls of your feet, your feet together, your head lowered and ears covered. Some experts recommend placing your hands on your forehead and your elbows on your knees to create a path for lightning to travel to the ground through your extremities rather than through your core (heart).
- **Resuming Activities.** The designated responsible individual must determine when activity can be resumed and safe areas should not be left unless direct instruction is provided. As electrical charges can linger in the clouds after a thunderstorm has passed, experts agree that you should wait at least 30 minutes after the storm before resuming activities. If a game cannot resume because of weather, don't even try. Safety is always your first priority and erring on the side of caution is never an error.



## **ACT FAST IF SOMEONE IS STRUCK BY LIGHTNING!**

- Lightning victims do not carry an electrical charge, are safe to touch, and need urgent medical attention. Cardiac arrest is the immediate cause of death for those who die. Some deaths can be prevented if the victim receives the proper first aid immediately.
- Call for help. Call 9-1-1 or your local ambulance service.
- Give first aid. Do not delay CPR if the person is unresponsive or not breathing. Use an Automatic External Defibrillator if one is available. Continue to monitor the victim until medical help arrives.
- If possible, move the victim to a safer place. Lightning can strike twice.

### **Safety First!**

- Most tragedies from extreme weather conditions can be avoided if you plan ahead. Don't become a victim. Babe Ruth League, Inc. urges all leagues to have a safety plan in place. Plan and practice evacuation procedures. Establish specific guidelines where people will go for safety and how much time it will take for them to reach shelter. Establish guidelines for postponing or canceling an event so everyone is safe and/or has time to reach safety. Post these guidelines around your facility and provide handouts of the guidelines to umpires, coaches, volunteers, participants and parents. **Follow the plan without exception. Prompt appropriate action can prevent injuries and death.**

**When minutes matter (and they do when severe weather strikes), get more time, and Know Before™. Download WeatherBug® today!**

#### Sources:

- [weatherbug.com](http://weatherbug.com)
- SafeSport (U.S. Olympic Committee)
- NOAA National Weather Service





Babe Ruth League, Inc. is a non-profit, educational organization dedicated to developing better citizens by providing supervised baseball and softball competition for players 4 through 18 years of age.

Babe Ruth League believes that every child with a desire to play baseball or softball be afforded that opportunity. We stand behind the conviction that childhood is the time of development that molds the type of adults we become. Youth baseball and softball are the perfect avenues by which to teach the game of life. Every child deserves to have special moments, and Babe Ruth League has always been about providing a positive environment so youth can develop their skills with an optimistic outlook and with respect for the game, each other, and most importantly, themselves.

**For additional information contact:  
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