

Sheikh Kamal Sports Complex.

Abahoni ground, Shat Mosjit Road, Dhanmondi, Dhaka

BY

MD. SHAIKUR RAHMAN

10308014

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ABSTRACT

Sheikh Kamal Sports Center is designed to accommodate different types of sports easily. While any center could potentially host more than one type of sport or event, this concept usually refers to a specific design philosophy that stresses multi-functionality over specificity. While building in this way, both the sports teams and government can share costs. If a building is multi-use, a planner should be asking what kind of surface it has (meaning of what product), and thinking about what type of roll the ball will take as a result. It is also helpful to ask what types of sports are being played on the arena. Keeping in mind about the uncontrolled growth of the population with the proportional decrease in open space, to build a sports complex so that the need within limited land area can be accommodated by the efficient use of the land are the main area of exploration of this paper. The aim of the paper is to set an example of the possible solutions of the government proposed Sheikh Kamal Sports Complex within the context of Dhaka, Bangladesh – which is one of the most densely populated city as well as country and also facing the issue of sports facility badly.

Acknowledgement

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CHAPTER 01:

BACKGROUND OF THE PROJECT

- 1.1 Projects Brief is designed to.....
- 1.2 Project Introduction is designed to.....
- 1.3 Aims and Objectives: These parts will explain.....
- 1.4 Proposed Program is designed to.....

This chapter contains the overview on the proposed project stating its potentiality, aims and objectives, proposed program of getting chosen to give a brief idea on it.

1.1 Project Brief:

Project Title: Sheikh Kamal Sports Complex.

Site Location and Area: Abahoni ground, Shat Mosjit Road, Dhanmondi, Dhaka

Client: Abahoni Ltd.

Site area:

1.2 Project Introduction:

We stand at the very verge of 21st century where everything changes within the blink of an eye and as a result to meet the demand everything has to be spoon apart. People are being captivated by their own sphere of life trying to push them self towards a new heights every day to become more successful which is termed as “urbanization”. The urbanized life is producing a mechanical life where being successful is everything, creating mechanical beings. Therefore this paper focuses to bring a balance by promoting well-being of an athlete, by proposing a sports complex. A sports complex is inevitable, because they cover many factors that cannot be reproduced. Therefore, an integration of plans from economic and architectural views before the construction is very necessary, keeping mind about the nature of the environment it should blend with.

Dhaka city which is considered as one of the busiest cities in the world with a population of 15.391 million within a living parameter of 815.8 km² and thus resulting as of the densest urban area in the world. Finding a place to breath in out at leisure time is getting impossible day by day people. Living in such community an athlete is mostly deprived of sports complex facilities. It is said that in order to build sportsmanship one need to flex with the practice ground at first .Due to the shortage of open and suitable spaces, the city is unable to provide enough opportunities to the athlete. According to the club’s plan, the Sheikh Kamal Krira Complex will be divided in five sections, built on the total 25 bighas of land owned by the Abahani club. The 726,665 square-foot complex will include a 69,223 sq-ft area set aside for the Abahani Club, an exclusive members-only health club covering 140,357 sq-ft, a convention centre covering 155,585 sq-ft, and a car parking area of 361,500 sq-ft, according to previous media reports.

Sheikh Kamal was a man with multidimensional talents and he could have given many things to the nation yet had he been alive. Sheikh Kamal used to lead a simple life and one of his only goals was giving scope for sports and games to the youth and setting an example before the nation. In his honorable memories this complex has been proposed at Dhanmondi, the home ground of Abahani, one of the Bangladesh sports club giants. At press conference the chairman of this complex stated “By building this complex, the standard of sports in the country can meet international standards, which will also pave way to gain sound health and sports facilities along with social recreation at one place. Not only in cricket and football, the Abahani club wants to meet the international standard in every game by building this world-class sports complex,” quoted from Salman F Rahman. Currently, the Abahani field in Dhanmondi is used by the club players as a practice venue. The locals also use the field to exercise and play different sports throughout the day but the space incorporated is insufficient. With the proposal of Sheikh kamal Sports complex (SKSC) the vivid view of the limitless opportunities shovels in, now as it will bloom into life, the complex becomes more efficient to its purpose of creation as the Abahani

sports club members can have all the academic sports facility along with other clubs for those who wants to use facility, available upon hire basis.

1.3 AIMS & OBJECTIVES:

- To promote and enhance the prospects of sports.
- To give the academic members and outsiders a way of recreation.
- To provide all sportsmen a variety of enjoyable leisure opportunities those which are accessible being safe and physically attractive.
- To provide the player a proper academic facility.
- To add up such auxiliary facilities; as to earn more revenue therefore making sports center more financially feasible.
- To enhance a sense of national cohesion and common interest, as this would act as a major building force in society as a whole.
- To access the requirement of multi-sports center in the light of regional potentials and aspirations of and for the athlete.
- To create opportunities to find out the real talents in sports.

1.4 Proposed Programs:

Outdoor:

- Proper Football field and Cricket field for the academic practice along with multi court space for community people playing.

Indoor:

- 7 a side football pitch, Tennis court, Basketball Court, Squash court, Sports hall, Table tennis, Billiard, Bowling, Carom, Card games, Chess, Badminton court, Swimming pool, Gym and Cricket indoor pitches.

General Facilities:

-Food court, Souvenir Shops, Medical facility, Hall of fame, Multipurpose Hall, Car parking.

CHAPTER 02:

SITE APPRAISAL

- 2.1 Site Location: This part will explain.....
- 2.2 Site and Surroundings: This part will explain.....
- 2.3 Climatic condition: This part will explain.....
- 2.4 Population analysis is designed to.....
- 2.5 SWOT Analysis is designed to.....

2.1 Site Location:

Abahoni Ltd. decided to make Sheikh Kamal sports complex on their own ground at Dhanmondi. There are no other open spaces in Dhanmondi like this. Abahoni ground is situated at on Shat Mosjid Road.



Fig 1: Location of the site. Source: Google Earth Map

2.2 Site and surroundings:

Location: Abahoni Ground, Shat Moshjid road, Dhanmondi, Dhaka

Area: 13.78 Acres

The site is a very renowned place, not only in that particular area but also among the whole Dhaka city. This is one of the biggest play ground in the Dhaka city. This is one of the biggest reasons for this site to be very well known by countless sports lovers. There is a basketball and an indoor cricket facility at the North West side of the ground providing the people with different sports facilities. It has a proper 11 a side and a proper sized cricket field in the South East part. Abahoni arranges various club matches on that ground giving the ground on rent so different company or group of people can hire the ground to set matches. Another reason for this place to be known by the people is that many sports academy provide cricket and football coaching.

Apart of the fact that Shat Moshjid Road is on the opposite side, there are numerous commercial buildings, whereas the other three sides are surrounded by residential buildings.

BUILDING TYPE AND ROAD PATTERN

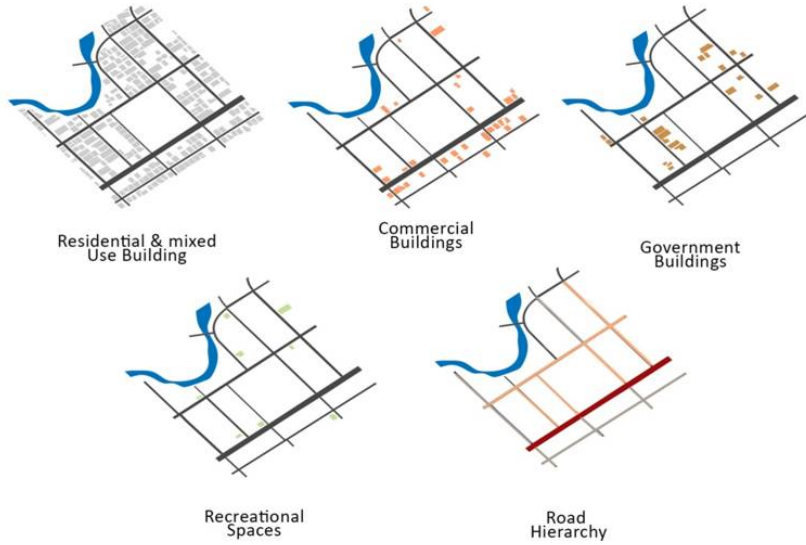


Fig 2: Site Analyzes of building pattern

BUILDING HIEGHTS

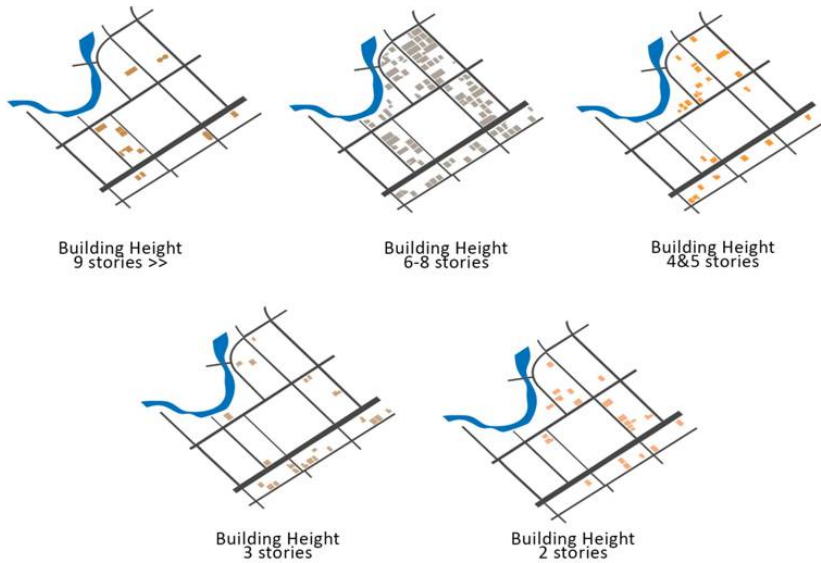


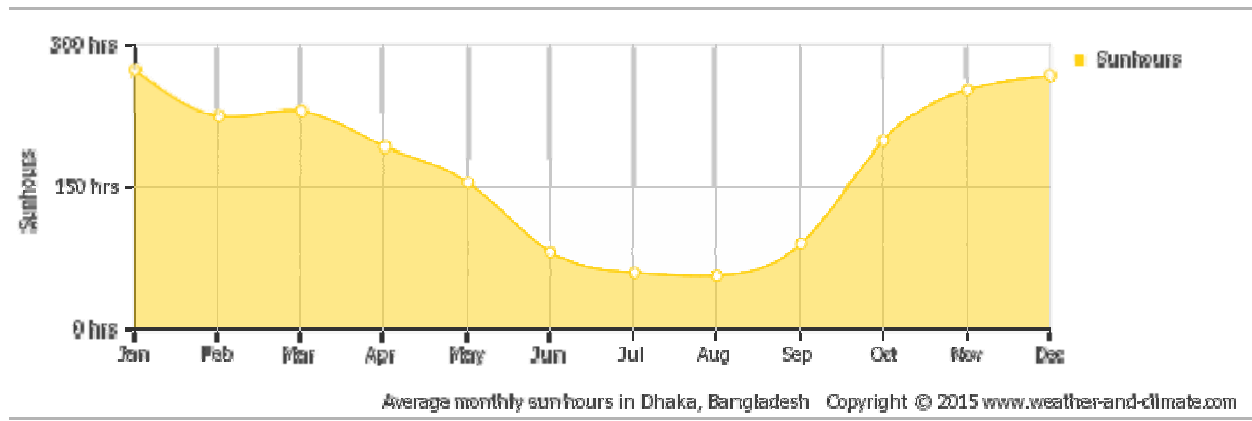
Fig 2: Site Analyzes of building heights

2.3 Climatic condition

This city has a tropical climate. In winter, there is much less rainfall in Dhaka than in summer. The Köppen-Geiger climate classification is Aw. The temperature here averages 25.8 °C. About 1983 mm of precipitation falls annually.

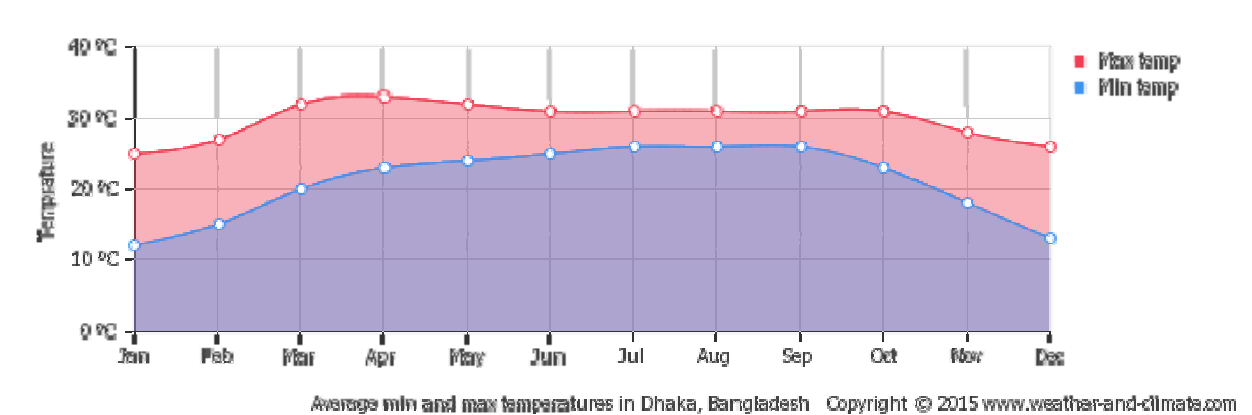
Average monthly hours of sunshine over the year

This is the monthly total of Sun hours



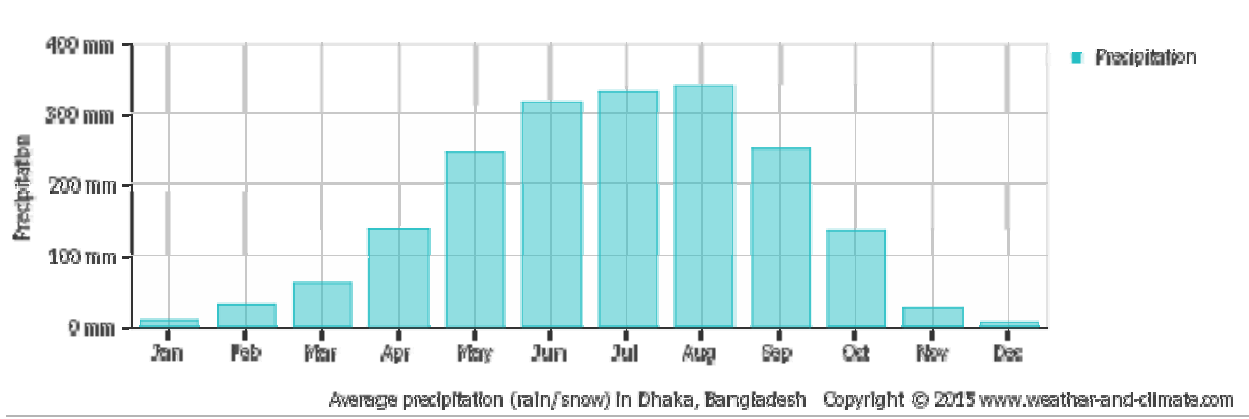
Average minimum and maximum temperature over the year

The monthly mean minimum and maximum daily temperature follows below



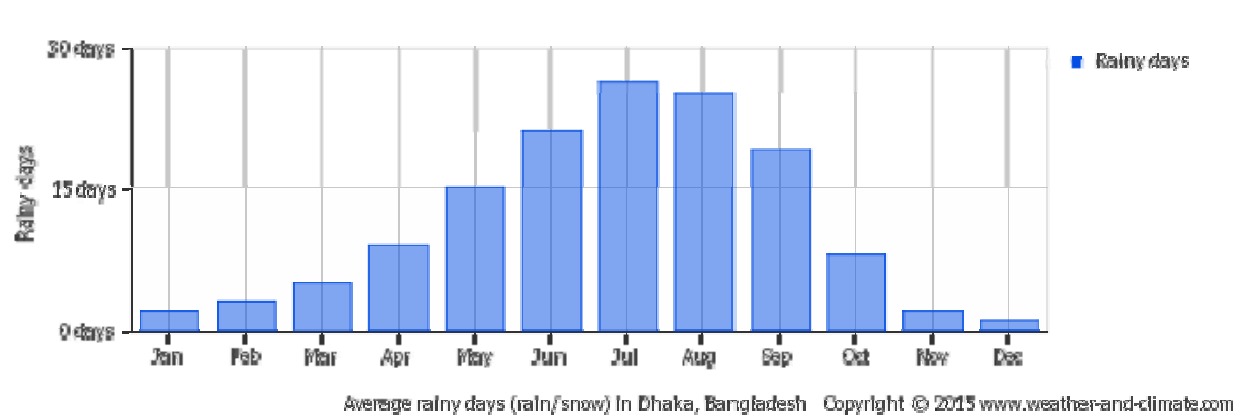
Average monthly precipitation over the year (rainfall, snow)

This is the mean monthly precipitation, including rain.



Average monthly rainy days over the year

This is the number of days each month with rain, snow, hail etc.



2.4 Population analysis:

Dhanmondi Thana (Dhaka metropolitan) area 4.34 sq km, located in between 23°43' and 23°45' north latitudes and in between 90°21' and 90°23' east longitudes. It is bounded by mohammadpur thana on the north, new market and hazaribagh thanas on the south, sher-e-bangla nagar, kalabagan and New Market thanas on the east, Hazaribagh thana on the west.

Population Total 128942; male 74368, female 54574; Muslim 110729, Hindu 16836, Buddhist 770, Christian 564 and others 43.

Water bodies Dhanmondi Lake is notable.

Administration Dhanmondi Thana was formed in 1976.

Thana						
Ward and Union	Mahalla and Mouza	Population		Density (per sq km)	Literacy rate (%)	
		Urban	Rural		Urban	Rural
1+2 (Part)	17	98942	-	29710	70.90	-
Ward						
Ward	Area (sq km)	Population		Literacy rate (%)		
		Male	Female			
Ward no 47 (Part)	0.49	18459	13718	61.63		
Ward no 48 (Part)	0.98	23859	16887	72.89		
Ward no 49	2.87	32050	23967	78.17		

2.5 SWOT Analysis

Strengths:

- It is situated in the midst of a quad road formation where one includes 60' wide main road on the south west side of the site.
- It is mostly surrounded by residential buildings on its north, east and south side making it easily accessible for the all the people living around.
- There are lots of commercial buildings on the south west side upon Shat Masjid road.
- So a noise attenuated atmosphere is created due to surrounded by residential area.
- Pedestrian conditions are satisfactory as pavements are mostly.
- Good amount of existing vegetation.

Weakness:

- Main road on the South West side often face traffic congestion.
- Existing car parking issue.
- High land value

Opportunities:

- Providing parking space to solve the existing parking issue
- Can become a very effective sports hub.
- Helping to preserve vegetation while increasing the efficiency of the land
- Place for recreation and healthiness.

Threats:

- Nearby buildings may face noise disturbance
- Becoming a point of attraction can cause more traffic congestion in the existing roads

CHAPTER 03:

LITERATURE REVIEW

- 3.1 Sports: This part will be explained...
- 3.2 Back Ground: This part will be explained...
- 3.3 Importance of Sports: This part will be explained...
- 3.4 Advantage of Sports: This part will be explained...
- 3.5 Different sports and requirements are designed to...

3.1 SPORTS

Sport (or sports) is all forms of usually competitive physical activity which, through casual or organized participation, aim to use, maintain or improve physical ability and skills while providing entertainment to participants, and in some cases, spectators. Hundreds of sports exist, from those requiring only two participants, through to those with hundreds of simultaneous participants, either in teams or competing as individuals.

Sport is generally recognized as activities which are based in physical athleticism or physical dexterity, with the largest major competitions such as the Olympic Games admitting only sports meeting this definition, and other organizations such as the Council of Europe using definitions precluding activities without a physical element from classification as sports. However, a number of competitive, but non-physical, activities claim recognition as mind sports. The International Olympic Committee (through ARISF) recognizes both chess and bridge as bona fide sports, and Sport Accord, the international sports federation association, recognizes five non-physical sports, although limits the amount of mind games which can be admitted as sports.

Sports are usually governed by a set of rules or customs, which serve to ensure fair competition, and allow consistent adjudication of the winner. Winning can be determined by physical events such as scoring goals or crossing a line first. It can also be determined by judges who are scoring elements of the sporting performance, including objective or subjective measures such as technical performance or artistic impression.

In organized sport, records of performance are often kept, and for popular sports, this information may be widely announced or reported in sport news. In addition, sport is a major source of entertainment for non-participants, with spectator sport drawing large crowds to venues, and reaching wider audiences through broadcasting.

The precise definition of what separates a sport from other leisure activities varies between sources. The closest to an international agreement on a definition is provided by Sport Accord, which is the association for all the largest international sports federations (including association football, athletics, cycling, tennis, equestrian sports and more), and is therefore the de facto representative of international sport.

3.2 Background

There are many organized sports such as football, cricket, hockey, tennis, badminton, volleyball, handball, chess, carom, wrestling, weightlifting, squash, billiards and snooker. Most of the country's sportsmen and women compete at district levels and there are university, armed forces and public sector sporting teams. In response to the country's interest in sporting activities, a large number of sporting clubs have been developed. Some of the most prominent clubs are the Dhaka Wanderers, the Abahani Sports, the Dhaka Mohammedan, the Arambag, the Ajax, the Brothers Union, the Azad, the Dilkusha, the GMCC, the Muktijoddha Sangsad, the Suryatarun, the Kalabagan, the Victoria and the Wari sporting clubs. Often these clubs host national and sometimes even international tournaments, so many of their facilities are kept in the best condition possible. Overall, Bangladeshis are fond of sport and there is a good sporting infrastructure in the country.

Among them The Abahani club already has a glorious space in the country's sports history. Since being founded 43 years ago by Sheikh Kamal, the eldest son of Father Of the Nation Bangabandhu Sheikh Mujibur Rahman, the Abahani club has so far won 15 football titles, 17

cricket silverwares, and 16 hockey trophies.

In the 32 years between 1973 to 2005, Abahani played a number of times in the finals of the first division & Premier division football league. It finished as champion eleven times and as runner up on as many occasions. The club was champion in the Federation Cup Football in 1982, 1985, 1986, 1988, 1997, 1999, 2000 and 2010 and runner up in 1981, 1983, 1989, 1994, 1995, 2008 and 2009. In the Asia Cup Club Tournament held in 1985 in Sri Lanka, Abahani was the runner up and got the Championship of Nagji Trophy Football Tournament held in (Kerala) India in 1989.

They won the charms cup at Kolkata in 1994 and Bardolui trophy at Gouhati, Assam in 2010. Abahani won the Champions trophy of the first ever professional football league in 2007. They have also won the second and third B. League Tournament, in 2008–09 and 2009–10 respectively, as well as achieving a hat-trick championship for the second time after twenty five years in Bangladesh football history. In 2012 they won professional league trophy again.

3.3 IMPORTANCE OF SPORTS

The importance of sports and games in encompasses more than just the benefit of physical activity. Increases in self-esteem and mental alertness make school sports and games necessary for every school age child. Although the benefits of school sports abound, with a diminishing economy, many schools are cutting out sports and physical education programs to the detriment of students nationwide.

Benefits

According to Theodore Hesburgh, author of "The Importance of School Sports and Education," it is imperative for school age children to have access to sports and games. Not only does it empower youth and promote higher self-esteem, it also motivates students, enables them to earn better grades, especially in schools where obtaining certain grades is a pre-requisite to staying on the team. Numerous physical benefits include maintaining a healthy weight, preventing chronic diseases and learning the skills necessary to maintain a healthy lifestyle after graduating.

Considerations

Promoting physical activity should start from the nursery room, according to Jean Zimmerman and Gil Reavill, authors of "Raising Our Athletic Daughters." Promoting athletics as a parent is a crucial factor in determining whether your child will be interested in participating in sports. Playing with your child, whether throwing a football or baseball with your son, or teaching your daughter how to swim, teaches them the importance of being active. Encouraging your school-age child to participate in a sport of their choice may be the reason they continue to play when they enter school.

3.3.1 Social and physiological benefits of playing sports

A growing body of research literature finds that in addition to improved physical health, sport plays a primarily positive role in youth development, including improved academic achievement, higher self-esteem, fewer behavioral problems, and better psychosocial. Many studies focus on the effects of sport on the five "C's"—competence, confidence, connections, character, and caring—which are considered critical components of positive youth development. It has long been thought that the many facets of playing sport—the discipline of training, learning

teamwork, following the leadership of coaches and captains, learning to lose—provide lifelong skills for athletes.

Sports do not build character. They reveal it. *John Wooden, Legendary UCLA Basketball Coach*
The literature on youth sport stresses the positive effects of participation in learning the important life skills of goal setting and time management combined with enjoyment; the development of a strong sense of morality; and the development of an appreciation of diversity. Longitudinal studies have shown that children and youth participating in sport, when compared to peers who do not play sport, exhibit:

- Higher grades, expectations, and attainment;
- Greater personal confidence and self-esteem;
- Greater connections with school— that is, greater attachment and support from adults;
- Stronger peer relationships;
- More academically oriented friends;
- Greater family attachment and more frequent interactions with parents;
- More restraint in avoiding risky behavior; and
- Greater involvement in volunteer work

These outcomes are thought to be related to the contribution of sport to learning values and skills associated with initiative, social cohesion, self-control, persistence, and responsibility.³⁶ Theories of positive youth development stress the importance of sport in acquiring skills that are beneficial in other domains (e.g., school, family, work) that lead to better adaptive skills.

People who work together will win, whether it be against complex football defenses, or the problems of modern society. *Vince Lombardi, American Football Coach*

Sport provides opportunities for children and youth to engage in valuable and positive relationships with adults, which is especially important when such benefits are not available at home. Thus, it is a missed opportunity for children who are “gated”—or not included in sport—during early stages of childhood because they are less well behaved than other children. These children are being prevented from participating in the very thing that could help them learn to control and regulate their behavior. Sport provides an opportunity for children to safely navigate and negotiate between right and wrong as they learn to interact with peers and adults. Research by Taliaferro et al. suggests that playing sport can even protect against suicide risk in youth. Compared to non athletes, male athletes exhibit lower levels of hopelessness and suicidal ideation. Young males involved in multiple sports seem to garner even more protection in this regard. Similar results were found for girls. Research on the role of exercise in adults confirms that it improves mood and alleviates many forms of depression. Bartko and Eccles⁴² found that youth who are highly involved in sport are more “psychologically resilient,” that is, better able to recover from problems. Eccles et al. found that sport participation protects young athletes against social isolation.

Taliaferro et al. propose that youth who play sport have higher levels of social support, which provides higher levels of resilience. Becoming a member of a community that includes teammates, coaches, family, and the greater community provides “fertile ground for adolescent self-esteem development because teams provide opportunities for youth to engage with adults and peers to achieve collective goals” (p. 545). In addition, physical activity enhances one’s self-perceptions of body, competence, and self-worth. The assumed association between playing sport and improved psychological and behavioral outcomes (or character) is at times challenged, despite the overwhelming directionality of the positive associations. Skeptics also say that many studies have failed to examine whether athletes had specific character traits

before playing sport. Moreover, many studies do not account for variations in sport participation by level of competition, type of sport played, and other contextual factors. Linver et al. caution that participating in other types of nonsport activities also can produce many of these benefits—for example, the performing arts, school clubs, and other prosocial activities. However, sport participation stands out over other activities as a confidence builder, showing a consistent advantage in building self-esteem and improved psychological functioning. This is particularly true during the later adolescent years (around 11th grade). Hansen et al. Found that youth who play sport reported higher rates of self-knowledge, managing emotions, and physical skills compared to peers in academic and leadership activities.

Playing Sport Leads to Improved Academic Performance

I figure practice puts your brains in your muscles. *Sam Snead, Professional Golfer*

Numerous studies have demonstrated the positive effects of playing sport on academic achievement, in large part because of the positive influence of identity formation and emotional development. So, to flip Sam Snead's perspective, practice figuratively puts muscles in your brain.

Data show that high school students who play sport are less likely to drop out. Participation in sport also has been associated with completing more years of education and consistently higher grades in school.

CDC synthesized and analyzed the scientific literature on the association between school-based physical activity and academic performance and found that the majority of the studies found positive associations. CDC's report notes, "There is a growing body of research focused on the association between school-based physical activity, including physical education, and academic performance among school-aged youth" suggesting that such activity "may have an impact on academic performance through a variety of direct and indirect physiological, cognitive, emotional, and learning mechanisms" (p. 5). Similarly, research aimed at discovering whether sport participation can detract from academic performance found that participation in interscholastic sport and other team or individual sport, as well as other after-school physical activity programs, does not have a detrimental impact on students' academic performance.

Research has shown that physical movement can affect the brain's physiology by increasing cerebral capillary growth, blood flow, oxygenation, production of neurotrophins, growth of nerve cells in the hippocampus, neurotransmitter levels, development of nerve connections, density of neural network, and brain tissue volume. These changes may be associated with improved attention; improved information processing, storage, and retrieval; enhanced coping; enhanced positive affect; and reduced sensations of cravings and pain. Linder's research suggests that increased energy levels and time outside of the classroom—both byproducts of playing sport—may give relief from boredom, resulting in higher attention levels during classroom time. Research by the Canadian Fitness and Lifestyle Research Institute has shown that physical exercise causes short-term relaxation, accompanied by improved concentration, enhanced creativity and memory, improved mood, and enhanced problem-solving abilities.

Believe me; the reward is not so great without the struggle. *Wilma Rudolph, Track and Field Olympic Gold Medalist*

3.3.2 Physical and Psychological Benefits of Sport for Girls

As described above, sport participation conveys myriad psychological, physiological, and sociological benefits. In recent years, research has begun to explore the particular benefits of

sport for girls and young women, who are increasingly playing more sport at all levels. Studies are beginning to tease apart the issues that contribute to girls electing to play, factors that keep them playing, and reasons for their dropping out.

A 2007 study found that women who played sport in high school were 73 percent more likely to earn a college degree within six years of graduating high school than those who did not play sport. This advantage held up even for students facing socioeconomic challenges to graduating college.

Playing sport also conveys other beneficial outcomes: Girls and young women engaged in sport are less likely to be overweight or obese, depressed, smoke, use illicit drugs, or have unwanted teen pregnancies. This may possibly be related to the goal of maximizing athletic performance or the goal of protecting sport eligibility or scholarships. Suicide and sexual victimization also is lower in girls and young women engaged in sport.

Sports psychology research has shown that girls gain confidence and self-esteem through participation in sport and physical activity. A positive team sport experience may mediate the risks of low social acceptance and dissatisfaction with one's body. Determining the relationship between selfconcept and sport participation is complicated by the measurement models used across studies, but greater participation in sport has been found to be relational to greater emotional and behavioral wellbeing. Donaldson and Ronan's findings suggest that for girls the psychological benefits of participation are not related to the level of competence but rather to the act of participating.

Sport participation also may meet the developmental needs of adolescent girls, including having a sense of belonging, a sense of mastery over one's body, the experience of generosity, and the sensation of mattering. Life skills such as persistence, teamwork, goal setting, leadership, and character development may transfer from sport to academics, family life, and the work setting. Sport involvement, in addition to making college attendance more likely, correlates with greater levels of overall extracurricular and community involvement. This is true for both boys and girls.

Peer and parental support also influence girls' enjoyment and learning of sport. Girls develop important social relationships through the physical activity of sport, both with their teammates and with their adult physical activity leaders, but girls may suffer negative psychological consequences if their developmental needs for feedback and encouragement are not considered by instructors or coaches.

Sport as an Agent for Social Change

Some research has shown that sport contributes to the development of social capital.

Longitudinal studies, such as the National Longitudinal Survey of Youth, have found that men at age 32 who played high school sport were paid 31 percent higher wages than men who had not played sport. The National Longitudinal Study of the High School Class of 1972 found that men at age 31 who played high school sport were paid 12 percent higher wages than those who did not. Of course, there could be other explanations for these findings. Barron et al. suggest that higher-ability individuals or individuals with lower preferences for leisure are more likely to play sport. These same people are then also more likely to seek higher achievement in the workforce. Athletic competition might serve as an excellent training activity for individuals who are already highly motivated to succeed.

Research has shown that the longer youth play sport, the greater attachment they have to their community, according to a series of measures. Studies using data from the University of Maryland's National Youth Survey of Civil Engagement show that sport participants, compared to those who do not participate in sport, are more likely to register to vote (66 percent versus 44 percent) and to follow the news (41 percent versus 27 percent).

Studies by Eccles and Barber show that youth sport participation is positively related to adult involvement in community activities that can last a lifetime. Youth who participate in sport are more likely to make friends, including those of different races.⁵⁸ Young athletes are better able to acquire emotional control, learn the value of teamwork, and exhibit initiative,⁵⁹ all social skills that can contribute to a better community. However, with many of these findings, the associations could be correlative rather than causal, because youth who choose to be highly engaged in sport also may chose to be highly engaged in other community activities.

There is no question that providing opportunities for youth to play sport provides community benefit—if for no other reason than idle time can be filled with activities that are healthy and positive. For example, when Phoenix, Arizona, basketball courts and other recreational facilities were kept open until 2 a.m. during summer hours, juvenile crime dropped 55 percent.⁶⁰ Similarly, crime rates dropped by 24 percent after late night recreation programs were started in Cincinnati, Ohio.

Finally, Jamieson and Ross suggest that sport can even serve as a useful intervention in international peace-building activities. Organized sport efforts in the Middle East have provided youth with positive and constructive experiences, creating peaceful and productive relations with neighbors. "Youth and youth sport leaders play vital roles in transforming dangerous and violent conflict situations associated with terrorism across the world" (p. 28).

Sport Alone Does Not Build Character—Context and Environment Matter

The benefits of sport do not necessarily always accrue. Positive outcomes are more likely to occur when a sport program emphasizes mastery, includes positive adult behaviors and supervision, and focuses on personal skills.

In fact, some studies have found that young athletes in some sports are more likely to be involved in risky behaviors— such as alcohol use—than those who do not participate in sport.^{46,64,65} Research also has found that in addition to physical injury, sport can create stress and anxiety and even promote heightened aggressiveness. ⁵⁹ These outcomes can be shaped by the nature of the athlete's experience—for example, the attitudes and behaviors of coaches, teammates, and parents. Research by Zarrett et al.³⁶ highlights the importance of not only the quantity of participation, but also the quality of the experience.

Several researchers have found that some male youth who are highly engaged in sport actually engage in more delinquent behaviors, such as lying and substance use, compared to youth who are more involved in school-based clubs and school work and youth who are involved in multiple, diverse activities. For example, well-known studies by Barber et al., Eccles et al., and others have found that student athletes reported drinking more frequently than non athletes.

Rutten et al. tried to understand the possible reasons for and consequences of these findings. They investigated the contribution of organized youth sport to antisocial and prosocial behavior in adolescent athletes and found that "coaches who maintain good relationships with their athletes reduce antisocial behavior, and that exposure to relatively high levels of sociomoral reasoning within the immediate context of sporting activities promotes prosocial behavior" (p. 263). Thus, high-quality coach-athlete relationships can protect against antisocial behavior.

Gardner et al. also tried to understand the complexities of context and the relationship between an apparent association between sport participation and juvenile delinquency. They found that previous studies had compared behavior of athletes against behavior of students who participate in other nonsport activities (e.g., school clubs, theater). In those comparisons, athletes are more likely to exhibit delinquency than students in nonsport activities, but still less so than youth not involved in any activities.

Gardner's review of the literature found that several factors mediate the apparent delinquent behavior of athletes, including peer pressure, urban setting, opportunities for unstructured socializing, and prior problems—particularly during childhood. Thus, as in all aspects of adolescent and teen development, the complexity and diversity of context plays an important role. Gardner concluded that participation in organized sport neither protects against delinquency nor increases its risks. However, the social stature gained by participation in certain sports can result in more social opportunities that can lead to problem behaviors (e.g., drinking). There is also research suggesting that certain sports can influence a tendency toward delinquency (e.g., contact, team) and that the nature of the sport in which a high school athlete participates may have more influence on violent and delinquent behaviors outside of sport than any other variable. For example, students who play in the more highly publicized and physically aggressive sports are more likely to be involved in antisocial acts off the field or court than athletes in other sports.

Thus, playing sport does not automatically build character. Hodge argues that character must be “taught” not “caught.” When fair play and sportsmanship are part of the game, character can be enhanced. And when sport is played in a caring environment, social, emotional, and psychological benefits for youth are enhanced. Many factors influence a young person's experience in sport, such as the training of the coach; the support that the young person receives from that coach, family members, and peers to participate in that sport; and perhaps even the type and competitive level of sport being played. Researchers also suggest that the competitive nature of youth sport is a key factor that drives both the positive and negative effects of participation.

Optimizing the Potential Benefits of True Sport

The Sport in America research found that, overall, sport is delivering on what most parents expect their child will learn, particularly the values deemed most important by the majority of parents—having fun and doing your best. Indeed, nearly all parents who hoped that sport would teach their children to have fun also say this expectation has been exceeded or met. However, the Sport in America data indicate that, despite their children's relatively strong engagement in sport, adults perceive sport generally as having limited positive influence on youth today. Those adults who are personally engaged in sport-related activities or who work directly with children perceive sport as having relatively greater positive influence. Respondents were asked to rank the actual and potential influence of eight factors, including sport, on today's youth. Although this survey ranks sport ahead of only music and social networking sites in terms of its potential positive influence, general population adults perceive sport as having less actual positive influence on youth than all elements listed, including parents/family, friends/peers, and school.

Despite the perception that sport has a relatively soft influence on youth, adults recognize many positive benefits of sport to society. Four out of five adults agree that sport provides a source of fun and enjoyment and can reduce youth crime and delinquency—and that losing in sport can teach valuable life lessons. However, almost two-thirds of adults also agree that sport

overemphasizes the importance of winning, a belief most strongly felt by older adults (ages 45 to 64) who are significantly more likely than adults overall to agree that sport overemphasizes winning.

3.4 Advantage of sports

The first advantage of sports for people is that they help people be healthy, and be fit. Throughout history, people can't give up their interest at their body. I believe that now many people love themselves no matter how beautiful or ugly they are. Naturally, people's first aim should be healthy and fit with the benefits of sports. Due to this fact that Sports keep our body healthy. and as a possible example, imagine that there is a car which has not worked for years. If you try to run the motor engine, it will not work anymore since it has been rusted and its engine may be broken down. As a result, people are similar to engines and motors. If we don't do sports, we will be forced to rust, in other words, decomposition of our body; afterwards, we may have some problems with our body when we even need to small walk. In addition, sports balance our body's blood pressure and circulation. According to many research's which have been done by scientists, we can prove the importance of sports for our health because 70% middle aged people who did not do sports in their youth are now struggling with the problems such as high tension, trouble with blood circulation, easily become tired due to the lack of sports.

The second advantage of sports for people is that they are required for our daily lives and competing at the international area because of enjoyment of sports. For many years, sports have been done by people. For example, have you ever thought why people want to play football or other games? The answer may be easy since sports are entertaining. They are sometimes magic's as they catch our attention and give us pleasure as much as we need. Sometimes overwhelming life conditions may be unfair and make us unhappy. However, if there is a sport activity when we are unhappy, we will probably be motivated and be refreshed again after the sport activity. This should be the most important benefit of sports because many people do sports for this reason. In addition, have you ever thought why millions of people watch World Cup match without breathing? There might be some reasons behind the action of watching football match. The most important one might be the excitement and enjoyment of sport. Football match is exhilarating because it gives us pleasure to watch. In the pitch and near the pitch, there are more than 18 men, and they are the representative of our sport culture. Within the excitement of sports, countries are able to compete in the international area. Due to this fact people like sports since they and their countries are able to compete and beat opponent countries and this is the most important reason to take pleasure from sports.

The final and least advantage of sports is that they are the huge market for countries' economy. First of all, if we look at only football industry, there are more than a thousand professional teams and at least these teams have 25 players. If this is calculated, there are approximately 25000 players without working staff, scouts, coaches and managers. This should be the largest industry which employs many people in Turkey. In addition, countries and clubs have to establish new facilities for sports game. Some of them are the largest buildings in the entire country that represent countries, for example Ataturk Olympic Stadium in Turkey. Supplying funds for these buildings may be the publicity of countries since constructing well designed stadiums help country prepare or organize big competitions such as World Cup, Olympics, and Tennis Tournaments. Finally, sports allow advertisement companies to make publicity of strong brands. For example, sponsorship is one of the best publicity of one company. Everyone watch's there favorite team or athlete, and audience will probably see the sponsor of team or athlete. For example, in England, Manchester United which is one of the most powerful clubs in

international area has a sponsor called Vodafone. This will probably show the effectiveness of sponsorship in sports.

3.4.1 Social and Economic benefits of sports center

Economically, building a sports Center can increase aggregate demand of the economy, creating new jobs, thus increasing employment. Based on the multiplier effect, this could lead to an economic growth. In the long run, this may lead to economic development. Building a stadium also increases competition, opens new business opportunities. Therefore there'll be an increase in investment, which also helps increase the total income of the country or city. The Complex will lead to an increase of exports, because people will want to come to your city and view matches

Social benefits are qualitative. It may increase marginal utility of the population (happiness). It will boost a moral of the city if a team wins a championship. It could even motivate the younger population to become superstars, thus perhaps increasing the need for education. The complex will attract visitors from around the world who will boost tourism, which in turn will help our neighboring small businesses. Prestigious global investors and corporations will have yet another compelling reason to visit our county and consider it as a site for revocations or expansion.

Having players and fans from all over the world will significantly enrich the fabric of the local community. I believe the complex will become an exciting visitor destination and meeting spot where people watch the action, stroll through shops and dine at nearby restaurants.

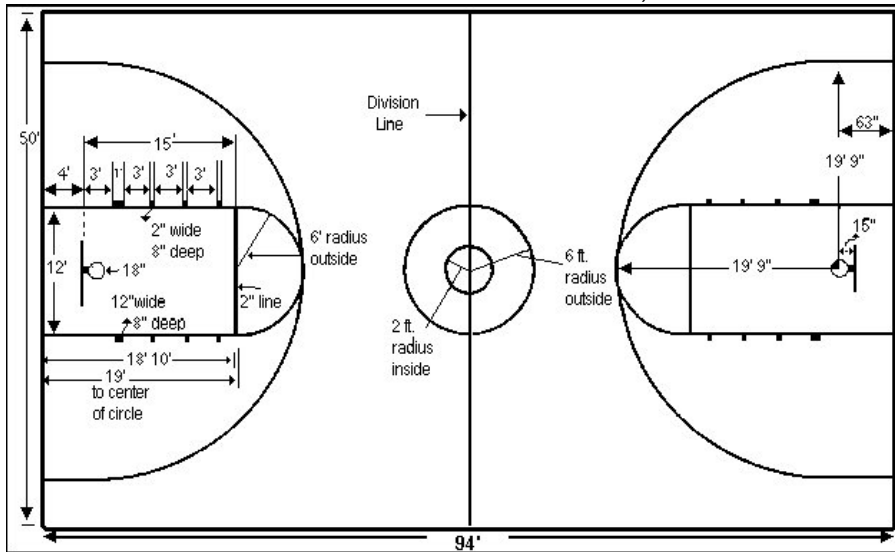
Multi-purpose (or multi-sport) field, a facility with dimensions and markings to accommodate a variety of sports. Increasingly, schools, universities, parks and more are moving to this model of athletic facility. It allows fields to host more games, and in the case of artificial turf fields, more often. Within the sports planning industry, we can expect to see an increasing number of fields marked for multiple.

3.5 DIFFERENT SPORTS AND REQUIREMENTS

Basketball

Basketball is a team sport. Two teams of five players each try to score by shooting a ball through a hoop elevated 10 feet above the ground. The game is played on a rectangular floor called the court, and there is a hoop at each end. The court is divided into two main sections by the mid-court line. If the offensive team puts the ball into play behind the mid-court line, it has ten seconds to get the ball over the mid-court line. If it doesn't, then the defense gets the ball. Once the offensive team gets the ball over the mid-court line, it can no longer have possession

of the ball in the area in back of the line. If it does, the defense is awarded the ball.



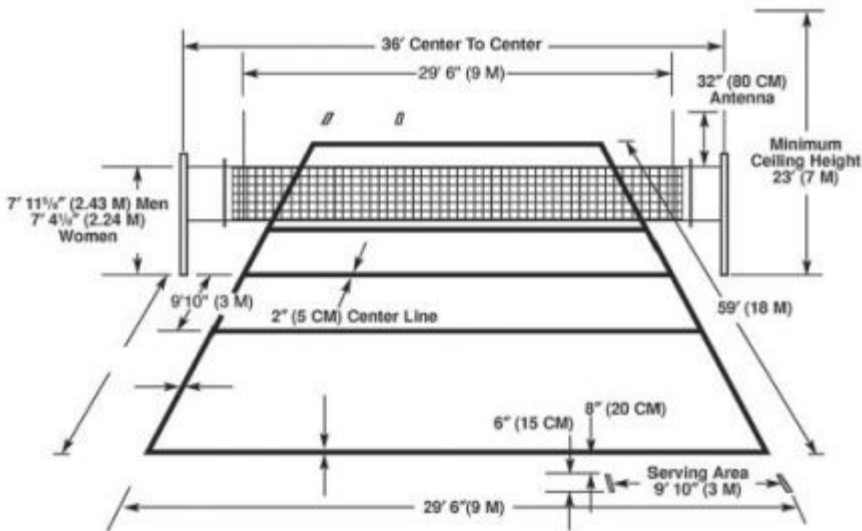
Volleyball

The volleyball court specifications require the court to be 18 meters (60 feet) long and 9 meters (30 feet) wide.

The volleyball court has a centerline that divides each teams side into a 9 by 9 meter area of court space. The volleyball net is one meter wide and is placed in the center of the court running sideline to sideline.

For men's volleyball competition, the height of the net measures 2.43 meters (about 7 feet, 11 5/8 inches) from the court ground at the center.

For women's volleyball competition, the net is placed at the height of 2.24 meters (about 7 feet, 4 1/4 inches).

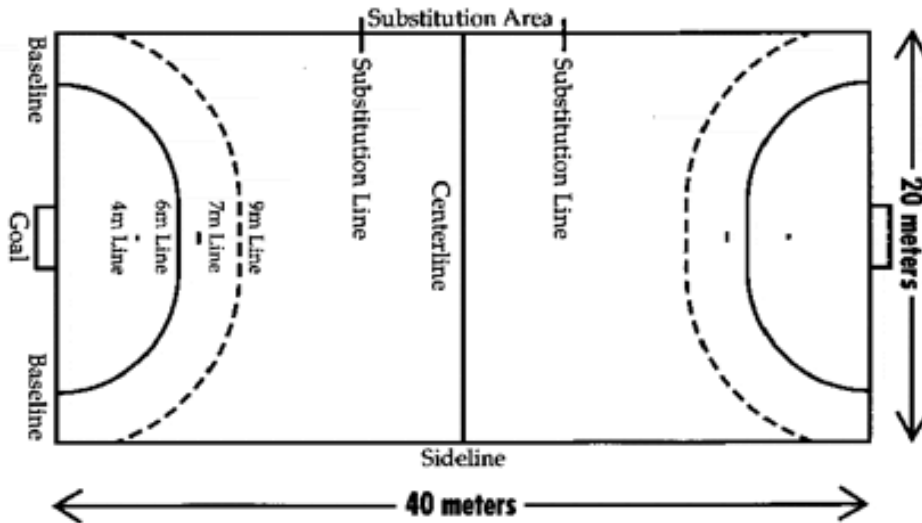


HAND BALL

Handball is a team sport in which two teams of seven players each (six outfield players and a goalkeeper) pass a ball using their hands with the aim of throwing it into the goal of the other

team. A standard match consists of two periods of 30 minutes, and the team that scores more goals wins.

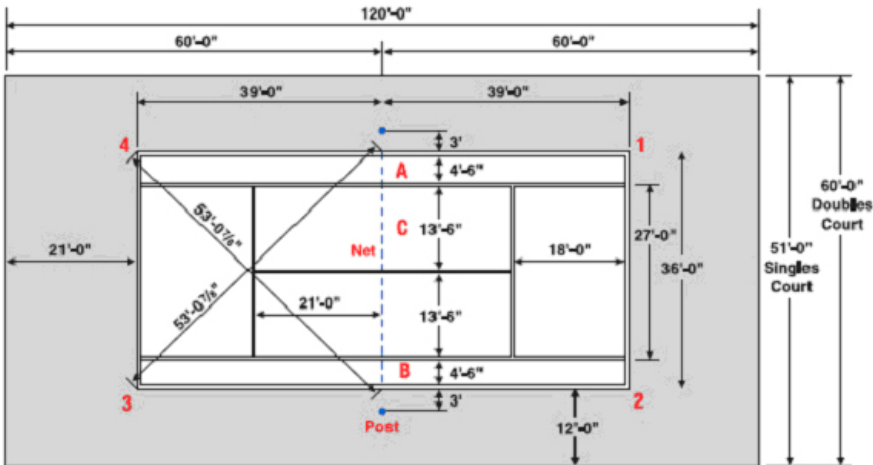
Modern handball is played on a court 40 by 20 meters (131 by 66 ft), with a goal in the center of each end. The goals are surrounded by a 6-meter zone where only the defending goalkeeper is allowed; the goals must be scored by throwing the ball from outside the zone or while "jumping" into it. The game is quite fast and includes body contact, as the defenders try to stop the attackers from approaching the goal.



TENNIS

Tennis is played on a rectangular flat surface, usually of grass, clay, concrete (hard court) or a synthetic suspended court. The dimensions of a tennis court are defined and regulated by the International Tennis Federation (ITF) governing body and are written down in the annual 'Rules of Tennis' document. The court is 23.78 meters (78.0 feet) long, 10.97 meters (36.0 feet) wide. Its width is 8.23 meters (27.0 feet) for singles matches and 10.97 meters (36.0 feet) for doubles matches. The service line is 6.40 meters (21.0 feet) from the net.

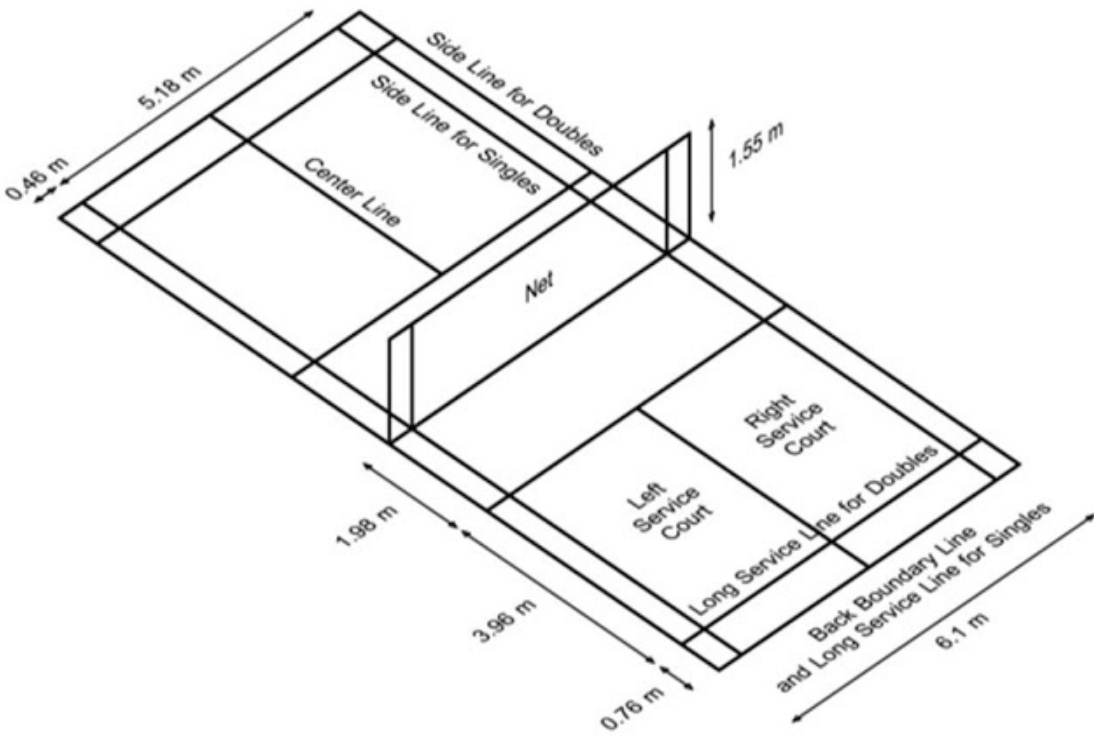
Additional clear space around the court is needed in order for players to reach overrun balls for a total of 18.3 meters (60 feet) wide and 36.7 meters (120 feet) long. A net is stretched across the full width of the court, parallel with the baselines, dividing it into two equal ends. The net is 1.07 meters (3 feet 6 inches) high at the posts, and 0.914 meters (3.00 feet) high in the center. The net posts are 3 feet (0.91 m) outside the doubles court on each side or, for a singles net, 3 feet (0.91 m) outside the singles court on each side.



BADMINTON

The Badminton Court shall be a rectangle laid out with lines of 40mm wide, preferably in white or yellow color. The Badminton Court Dimensions are of 13.4m in length and 6.1m in width. The post shall be 1.55m in height from the surface of the court and shall remain vertical when the net is strained. The net shall be made of fine cord of dark color and even thickness with a mesh of not less than 15mm and not more than 20mm. The net shall be 760mm in depth and at least 6.1m wide.

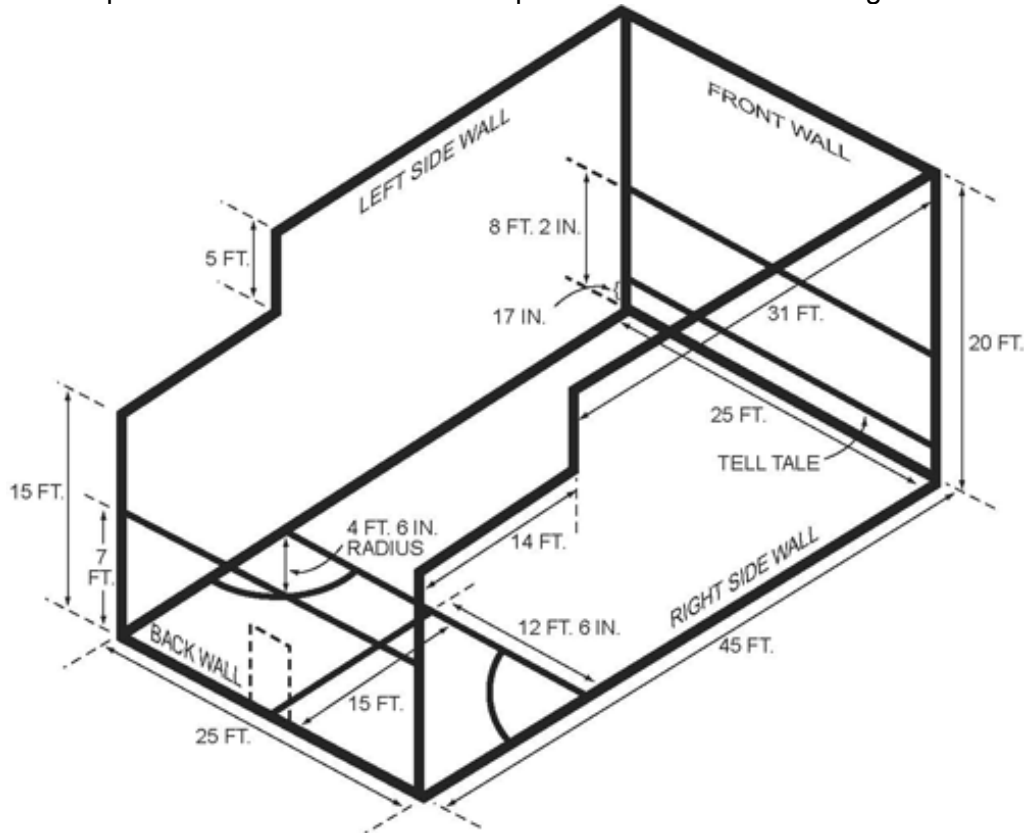
The top of the net shall be edged with a 75mm white cloth. The top of the net from the surface of the court shall be 1.524m (5ft) at the centre of the court and 1.55m (5ft 1in) over the side lines for doubles. There shall be no gaps between the ends of the net and the posts. If necessary, the full depth of the net should be tied at the ends.



SQUASH

An International squash court measures 21' wide by 32' long and requires a minimum ceiling height of 18' 6" for lighting. An optimum design would allow for ceiling/lighting height of 20' as a lob ball off the front wall (15' high out of bounds height) will have less chance of hitting the ceiling and the striker losing the point.

The choice of Court Wall System will be decided based on the owner's preference and budget. Anderson Courts will guide owners on the benefits of each system and work with architects and General Contractors in areas of layout, floor transitions, lighting, colors, and overall budget costs. Specifications and details will be provided as well for Flooring and Glass Walls.

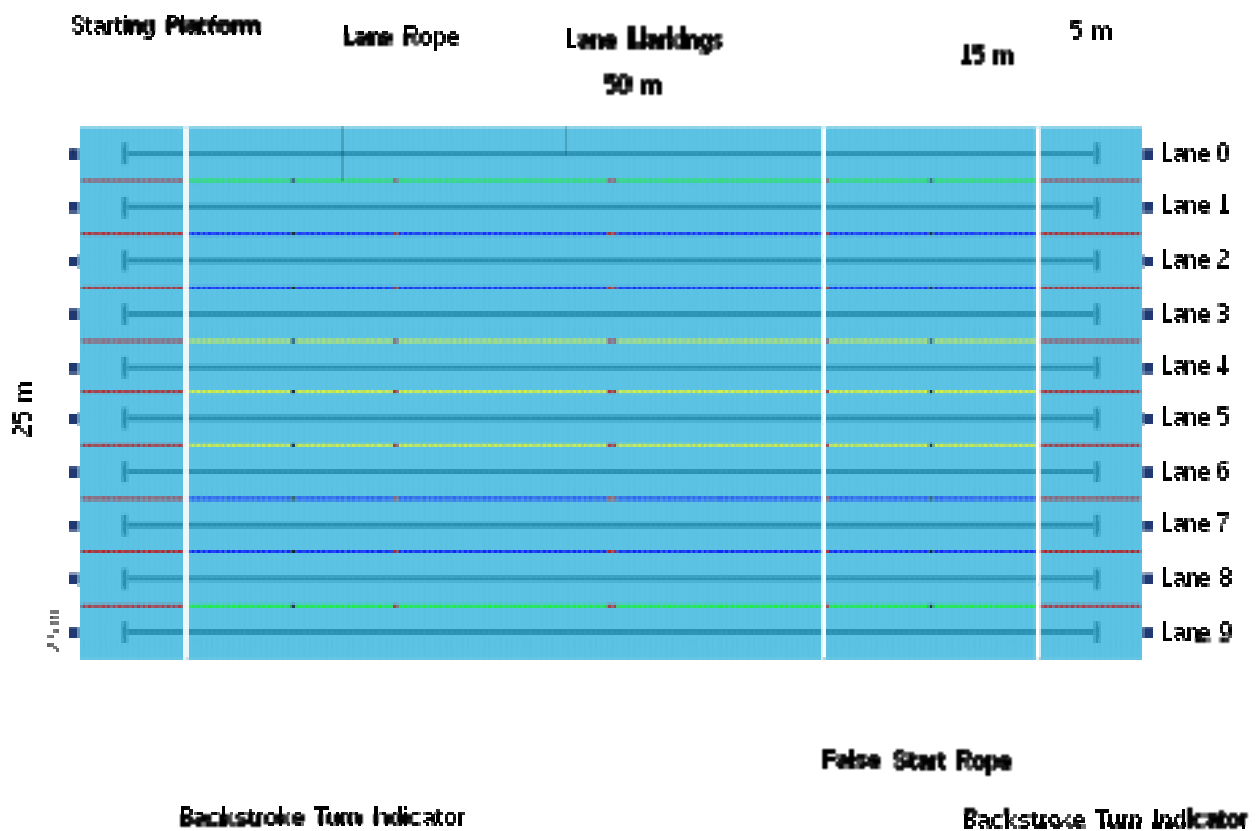


SWIMMING POOL

Olympic-size swimming pool is the type of swimming pool used in the Olympic Games, where the race course is 50 metres in length. This is typically referred to as "long course", distinguishing it from "short course" which applies to competitions in pools that are 25 metres in length. If touch panels are used in competition, then the distance between touch panels should be either 25 or 50 metres to qualify for FINA recognition.

This means that Olympic pools are generally oversized, to accommodate touch panels used in competition.

Length	50 m (164 ft 1 in)
Width	25 m (82 ft 0 in)
Depth	<i>FR 2 Swimming Pools:</i> ^[2] minimum 1.35 m (4 ft 5 in) between 1 m and 6 m from ends; minimum of 1.0 m (3 ft 3 in) elsewhere <i>FR 3 Swimming Pools for Olympic Games and World Championships:</i> ^[3] minimum 2.0 m (6 ft 7 in); recommended 3.0 m (9 ft 10 in)
Number of lanes	10
Lane width	2.5 m (8 ft 2 in)
Water temperature	25–28 °C (77–82 °F)
Light intensity	minimum 1500 lux (140 footcandles)
Volume	Based on a nominal depth of 2 m, this is 2,500,000 L (550,000 imp gal; 660,000 US gal) or, in terms of cubic volume, 2,500 m ³ (88,000 cu ft), as is commonly quoted.



CHAPTER 04:

Contextual analysis

4.1 Sports IN Bangladesh: This part will be described

4.2 Sports in Dhaka: This part will be explained

4.1 SPORTS IN BANGLADESH

Sport in Bangladesh is a popular form of entertainment as well as an essential part of Bangladeshi culture. Kabaddi is the national sport of Bangladesh. However, cricket and football are considered as the most popular sports in Bangladesh. Traditional sports like Kabaddi, Kho kho, BoliKhela, LathiKhela are mostly played in the rural areas while foreign sports like cricket, football, hockey, volleyball, handball, golf, badminton etc. are more popular among the urban folks. The National Sports Council (NSC) is the governing body to control all the sports federations and councils in the country and is responsible to the ministry of youth and sports. There are a total of 42 different sports federations affiliated with the NSC.[1] Bangladesh Games is the largest domestic multi-sport tournament in the country where athletes and sports teams from all the districts participate.

Kabaddi

Kabaddi is recognized as the national sport in Bangladesh. The sport is played all through the country. Bangladesh has been regularly participating in Asian Games for Kabaddi. However, the recent rise of other sports has led to the decline in its popularity. Bangladesh was once considered as a formidable side to play against in this sport but has now been weakening due to lack of funds and other reasons.

Cricket

Main article: Cricket in Bangladesh

Cricket is arguably the most popular sport in the country. The popularity began to rise significantly when the national team went on to win the ICC Trophy in 1997 and for the first time qualified for the Cricket World Cup in 1999. In 2000, Bangladesh became a full member of International Cricket Council which allowed it to play Test cricket. Bangladesh regularly hosts many international One Day matches, Test matches and Twenty20 Internationals. In 2011, Bangladesh hosted the 2011 Cricket World Cup along with India and Sri Lanka. Bangladesh is also elected to host the 2014 ICC World Twenty20. Bangladesh Cricket Board is the premier governing body to manage the development of the sport in the country.

In 2015 world cup Bangladesh have beaten England incredibly and reached the quarter final for second time in the history.

Football

Main article: Football in Bangladesh

Throughout history, football has been the most popular sport in Bangladesh.[2] Although it is under neglect from both the government and authorities including the country's football federation, known as Bangladesh Football Federation (BFF).

Compared to the past, the standard of Bangladeshi football has degraded due to mismanagement, lack of support and poor investment. An interest in cricket resulting from the nation's success in Test Cricket and participation in the Cricket World Cup overshadowed the past fame in the nation's football. But however this did not affect football's popularity: more football tournaments are organized in and outside Dhaka than of any other sports and football fever grips the nation during every FIFA World Cup. Federation officials and experts are still hopeful about the development of football in the country in the next ten years despite financial obstacles and lack of professionalism.

Hockey

Hockey has been one of the most popular sports in Bangladesh. It comes right after Cricket and football considering the popularity. However, lack of responsible officials and maladministration has led this sport to decline as well. Bangladesh, even though, regularly participates in the

Hockey Asia Cup and also hosted its edition of 1985. The Bangladesh Hockey Federation, the national governing body for the sport, every year organizes some domestic competitions in the country, most notably the Premier Division Hockey League.

Chess

Chess is a popular indoor game in Bangladesh and the country has given birth to many talented chess players. Bangladeshi chess player NiazMurshed is the first Grandmaster to emerge from South Asia in 1987.[4] Bangladesh Chess Federation has become a member of the FIDE in 1979. Every year it arranges some 15 to 20 tournaments at the national and international levels. The Bangladeshi Chess Championship is the annual individual national chess championship in the country.

Golf

Golf has recently seen an increase in its popularity in Bangladesh. The sport was not much notable until Siddikur Rahman became the first Bangladeshi golfer to win an Asian Tour event at the Brunei Open in 2010.[5] Subsequently, the sport began to get enough media coverage in Bangladesh and also succeeded to acquire sponsors to ensure its financial sufficiency.

Handball

There is Bangladesh Handball Federation (BHF) to develop this sport in the country which has been a member of International Handball Federation since 1986. Both men's and women's teams from Bangladesh represent the nation in various international events most notably the South Asian Games. In addition, BHF, in assistance with the ministry of education, holds annual inter-school championships for both boys and girls throughout the country.

Volleyball

Volleyball is very popular in Bangladesh and practiced throughout the country but still struggles to have pleasant performance at the international arena. Bangladesh Volleyball Federation (BVF) was formed in 1972 and got its affiliation from FédérationInternationale de Volleyball and Asian Volleyball Confederation in 1976. So far Bangladesh participated twice in the Asian Games, twice in the Asian Youth Volleyball Championship and thrice in the Asian Volleyball Championship. Bangladesh Volleyball Team achieved Runners-up Trophy of International Volleyball Championships held in Pakistan from 28–30 January 2009. There are also annual inter-school and national championships for the sport.

Basketball

Basketball is a popular sport in Bangladesh mostly in the urban areas. Bangladesh Basketball Federation has been affiliated with FIBA since 1978. Bangladesh has never qualified for Basketball at the Summer Olympics or the FIBA World Championship. The national team's best finish at the FIBA Asia Championship was 13th in 1979. The other notable achievement was winning a bronze at the 2010 South Asian Games.

Squash

Bangladesh shows a bright future in squash, with a flourishing amount of tournaments arranged recently. Many promising players is coming up from this country. Recent measures taken by the government as well as the efforts made by the officials of the Bangladesh squash racket federation have resulted in the growth of popularity of squash in Bangladesh. The Government has proposed to provide a land where the main Federation headquarters will be built. Grameenphone Open Squash Tournament is a major tournament in Bangladesh. Some

promising squash players from Bangladesh include SwapanParvez, Raju Ram, Iman, Tamim, HabbarterRibhu etc.

Tennis

Tennis is mostly played in the urban areas of Bangladesh. The Grand Slam tournaments like the US Open, Wimbledon are very popular among the urban people but so far nobody represented the country in a grand slam as very few take the sport professionally. Since 2008, the Bangladesh Tennis Federation has been holding an annual International Junior Tennis Tournament to promote and develop the sport in the country.

Bangladesh Davis Cup team made its Davis Cup debut in 1986. Bangladesh succeeded to reach the semi-finals three years later in Davis Cup 1989 in Asia/Oceania Zone Group II that was held in Singapore.

Table Tennis

Table tennis has been played in Bangladesh since the 1950s. Although the game is very popular in schools, colleges and universities, tournaments outside educational institutions are not rare. The Bangladesh Table Tennis Federation (BTTF) was created in 1972. The same year it became a member of the Asian and World Table Tennis Federations. Many national and international competitions are held by BTTF as well as some major sponsors.

Bangladesh takes part in different international table tennis tournaments and achieved some success too. In 1997, Bangladesh boys' team got the third place in the first junior competition among 12 countries of the SAARC and ASEAN regions. Bangladesh also won some medals in South Asian Games. Bangladesh successfully hosted the Asian Cup Table Tennis Tournament in 1991. Bangladeshi table tennis player Zobera Rahman Linu has won the national table tennis championships in the individual category 16 times, which is the most by any sports-person in any country of the world.

Cycling

Bangladeshi Cyclists is a cycling group in Bangladesh that (as of 2013) is the largest cycling community in the country.

Swimming

Bangladesh is riverine country, having more than 250 rivers flowing through it. Hence swimming has always been a part of the lives of Bangladeshis. Bangladesh has produced a legendary swimmer Brojen Das, who was the first Asian to swim across the English Channel and the first person to cross it four times. He is also the only person outside United Kingdom and Australia to win the title of King of the Channel.

Athletics

Bangladesh has been participating at the Olympics, Asian games and other multinational competitions for athletics but hasn't really pleased with its performance. Bangladeshi athletes have won some medals at the South Asian Games. Bangladesh Athletics Federation is the national governing body for athletics.

Shooting

Shooting is a promising sport in Bangladesh. The only two gold medals at the Commonwealth Games for Bangladesh came from Shooting. Bangladesh have also won many gold medals at the South Asian Games. Shooting in Bangladesh came to spotlight when Asif Hossain Khan clinched the 10 metre air rifle gold medal in Commonwealth Games in 2002 and repeated his

success in South Asian Games in 2004. The National Shooting Federation Bangladesh is the governing body for shooting sport in Bangladesh.

Archery

Archery is a new but promising sport in Bangladesh. Archery was introduced in Bangladesh in 2000 and the Bangladesh Archery Federation was formed in 2001 and got affiliated with the World Archery Federation in 2003.[15] Having won some gold and silver medals at some multinational Archery championships, EmdadulHaqueMilon is the most promising young archer in Bangladesh.

4.2 Sports in Dhaka

Pursuing a sport in Dhaka can be a cumbersome task, given the lack of parks, pockets of green space or even a designated sidewalk for pedestrians. Picking up a sport can also be a tough decision, the amount of physical labour you are willing to put in, the proximity of the location where you can practise and your overall dedication to the game.

With the advent of the potato-couch like lifestyle that us Dhakaiites are becoming more and more accustomed to, it has become exceedingly important to partake in some kind of physical excursion to keep the doctor's visit at bay.

To guide you in this endeavour, Star Lifestyle has put together some go-to destinations in your quest for a fitter you.

Cricket

Although not on the top list of calorie burners, cricket lovers do not really consider that a drawback owing to their love for the game. A game of passion and love in Bangladesh, you will find matches being played in every street corner and rooftop with cola crates sufficing for stumps.

Although there are countless options when looking for a place to learn this sport now ubiquitous in Bangladesh, Abahani Kira Chakra located in Dhanmondi Road 12/A is one of the more reputed ones. Admission starts at Tk.1000 and the monthly fees is Tk.500.

Basketball

High in energy, loads of fun and a good way to rid yourself of that double cheese-burger you downed at lunch, basketball is the go-to sport for many. Learn how to shoot that ball at the Basketball Federation beside Abahani Maath on Road 13/A of Dhanmondi with monthly fees falling at only Tk.400 a month. You can also learn basketball at the Women's Complex situated at Road 11/A, Dhanmondi R/A, where the admission is Tk.500 and the monthly fee is Tk.1,000.

Karate

Influenced by Chinese martial arts, this is one of the most popular self-defense sports as well as recreational activities in the world. After all who has not grown up watching Karate Kid as a child?

Taught in many places throughout the city, find a place that is best suited for you. Women's Complex provides a good option where you can learn karate with admission and monthly fees of Tk.500 each. Karate is also taught at the Russian Centre of Science and Culture in Dhanmondi.

Tennis

Enjoyed worldwide for its recreational value, tennis is also extremely popular as a spectator sport with the four Grand Slam tournaments tuning in huge numbers of viewers. Incredibly physically demanding, this sport packs in a lot of fun moments.

You can choose to play tennis at the National Tennis Federation located near Ramna, Gulshan Club, Uttara Club and Dhaka Club.

Swimming

In the harsh Dhaka summers, nothing can be more relaxing than a dip in the pool. It is time to pack your towels and head over to the nearest swimming pool and flex those muscles in the water.

Swimming is taught at Women's Complex where the admission fee is Tk.500 and the monthly fee is Tk.1500. Many gyms and clubs such as Uttara Club, Gulshan Club and Dhaka Club also have swimming facilities for their members.

Along with the above mentioned sports there are many different sports you can pursue here. Badminton in winter and football throughout the year are commonplace in the urban scene of Dhaka. So play on!

CHAPTER 05:

CASE STUDY

5.1 Introduction is designed to....

5.2 Chosen Projects will be explained....

5.2.1 Sports and leisure center / ACTX: This part will be explained....

5.2.2 Multi sports complex competition winning proposal This part will be explained....

5.2.3 Tucheng Sports Center / Q-Lab This part will be explained....

5.2.4 Neighbourhood Sports Centre Kiel / UR architects This part will be explained....

5.1 Introduction

Real life projects both inside and outside the country related to the project development are to be studied for outlining the project program and set it's concept. The chapter will focus on the projects that are built already and are to be built picked as the subject of study.

5.2 Chosen Project

5.2.1 Sports and Leisure Centre / ACXT



Fig 3: photograph of sports and leisure centre / ACTX

Architects: [ACXT](#)

Location: **Langreo, Asturias, [Spain](#)**

Project Architect: **Javier Pérez Uribarri**

Project year: **2002 – 2006**

“La Ciudad de Langreo”, Asturias: Capital of the coal mining industry in Spain, the town is a very dense conglomerate surrounded by mountains, with a mix of housing, industrial buildings, mineshafts, large cooling towers, heat generating plant, etc. The town centre twists and turns along the banks of the river Nalón.

The project has been developed within a plan to transform and regenerate the coal-mining area of Asturias, following a deep crisis in a sector that until now had been its main source of wealth: its coal mines.

Within this context, the building should have a symbolic, turn-of-the-century appeal, marking a turning point in the life of the coalfields of Asturias. A final decision as to the exact location of the site was yet to be taken at the competition stage. The project brief asked for an idea, a design concept.

In Langreo, the general impression is that there is little land available. The existing space was taken up by the surrounding mountains, the hitherto booming industrial area and the homes of all those who had found work there.

The idea submitted was based on this concept: to propose a new landscape rather than a new building. To waste nothing of the existing available land.

A composition made up of folds, green waves, in which each of these correlated with the different interior spaces: the swimming-pool, a sports hall which could be converted for concerts, gymnasia, etc

After the competition, the Town Hall told us where the complex was to be sited. A piece of land in the form of an "L". A restricted space and with a certain air of a "backyard", between the three largest population centres in Langreo, Sama and La Felguera. A space bordered by: a railway track used by local train services run by Spanish Railways, the Civil Guards barracks, the river Nalón, the football ground of the local team and the visual impact of a major road junction: the Sama exit on the Nalón corridor motorway.

Having resolved the functional fit of the programme and organised the layout and levels, the external volumes were designed (according to our proposal submitted at the

as the direct expression of the volumetric requirements of the complex: greater height for the sports hall, even more height for the rhythmic gymnastics area, less height for the swimming pool, with the exception of the high-diving area, etc. The roof was given the form of folds in the terrain.

The aim of the design was to provide a model for the redevelopment of the most immediate area. The surface area of the green roofs could be extended to form plazas and gardens in adjacent areas currently occupied by ruined buildings.

The initial idea of designing the roofs for people to walk on them was abandoned due to the danger of accidental falls and the high maintenance costs. These were finally

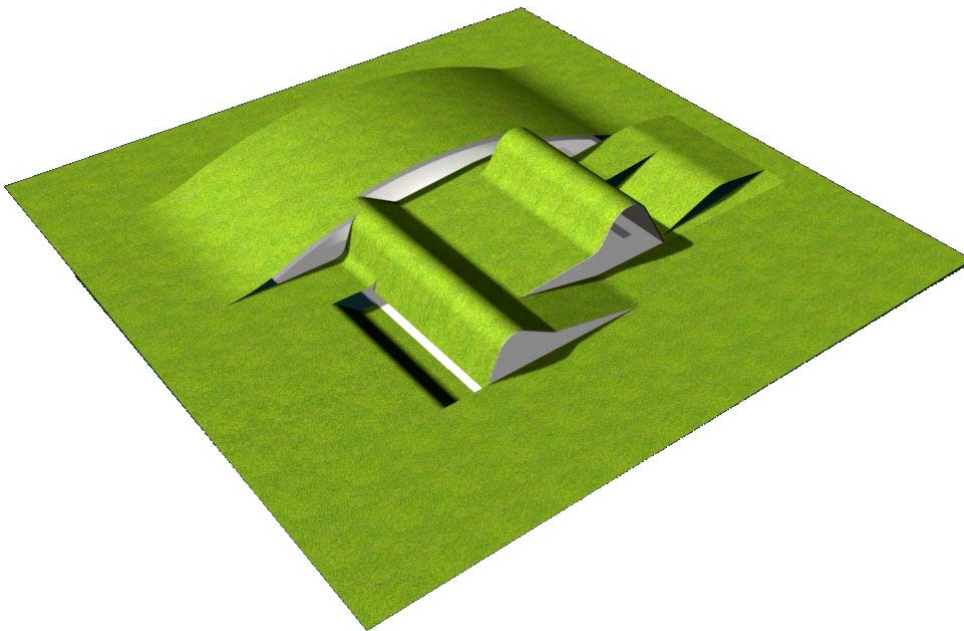


Fig 4: conceptual 3d render of sports and leisure centre / ACTX

covered with artificial grass.

There are three roofs corresponding to the three well-differentiated areas into which the programme is divided: 1. Multi-purpose sports hall (sports + concerts), 2. Swimming pool area (walls formed by technical curtain walls), 3. Area for the remaining services (offices, multi-purpose rooms, sauna, etc).

As occurs inside mines, we designed buildings within the building: such as the volume that houses the offices; folds and faults: like the slanting planes under the stands that make up the ceiling of the dressing-rooms; bridges to span spaces and faults, like the walkway that connects the entrance and the swimming pools, and so on.

The materials used for finishing the interior are hard, long-lasting and restrained: painted concrete blocks, plasterboard painted with epoxy resin, flooring made with epoxy resin, visible structure on ceilings; the wood used for the court in the sports hall is the warmest of all the finishes.

Around the perimeter of the court and in order to improve its acoustic quality for concerts and similar activities, some of its faces are clad in perforated mini-corrugated sheet, painted black, with rock wool panels at the back. Apart from the artificial grass, the roof has 10 cm of rock wool insulation, which provides this with excellent thermal and acoustic insulation



Fig 5: photograph of sports and leisure centre / ACTX

strips with an absorbent veil, which does a great deal to attenuate the unpleasant echo typical of these structures.

This is the only area in the whole building designed with a transparent skin, a curtain wall.

The design of the roof is such that the installation of any air-conditioning or ventilation units would be totally incompatible. A number of units, such as those used for the sports hall, were designed to be installed against the façade (next to the railway line run by Spanish Railways). For the remaining installations, including the boiler room, we designed a kind of patio or pit (under the gradient) in those areas where the roofs “touch” the ground. Although the machines are concealed, their adequate ventilation is guaranteed.

The interior lighting is largely resolved with “lines of light”, luminaires with fluorescent lamps mounted in continuous lines, drawing in the air the direction of the main circulations or the curvature axis of the vault-hills.

The building has two well-differentiated areas: A sports hall and an indoor swimming-pool area. The sports hall consists of the following: Sports court with a stand for seats for approximately 2088 spectators and a maximum audience for concerts (on the court) of 5088 spectators, with a central playing area (longitudinal) for 5-a-side football, basketball, volleyball and handball; 3 courts for training and unofficial championships (crosswise); 6 changing-rooms for equipment and referees, 2 changing-rooms for general use (male and female), storerooms for general use and for sports equipment.

The swimming-pool area consists of the following: 1 indoor, multi-purpose 8-lane swimming pool (16.70 m x 25 m) for regional competitions, 1 indoor pool for teaching purposes and for children (6 m x 16.70 m), male and female changing rooms and a public stand. Between both pools, a rhythmic gymnastics area has been provided (the area with the highest roof in the whole building); a muscle-building and aerobics room; a multi-

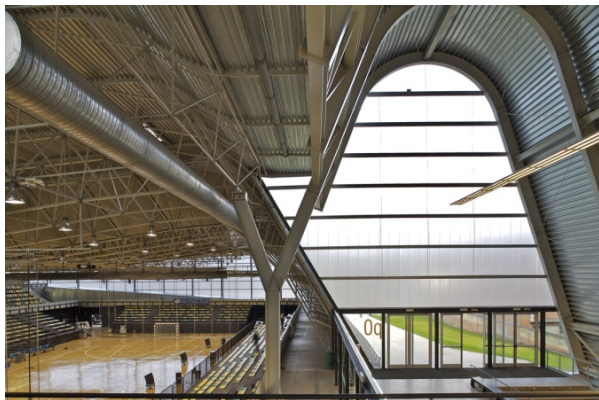


Fig 6: photograph



Fig 7: photograph

purpose space (artificial rock climbing wall, archery, warm-up area, etc.); multi-purpose space (with access for non-members) for vending machines, cultural meetings, exhibitions, miscellaneous public events, etc.; sauna and massage room with separate access to that of the centre (for non-members – this area could be rented off and therefore the project does not include any installations for this); medical centre and first-aid room; and offices, staff changing-rooms, cleaning materials room, installations and utility rooms.

5.2.2 Multi-Sports Complex Competition Winning Proposal



Fig 8: Render mage of Multi-Sports Complex Competition Winning Proposal

Architects: **Archi5 + Tecnova Architecture**

Location: **Antony, France**

Program: **Construction of a multi-sport complex includes a sports center for associations and schools, a sports center for the College La Fontaine, two gymnasiums, a climbing wall, dojo, boxing gym, multipurpose room, administrative offices. Landscaping. Parking for 100 cars**

Area: **5200 sqm GFA**

Date: **October 2012 Contest Winners – Delivery July 2015**

The winning proposal for the multi-sports complex in the city of Antony, France responds to the strong political will of a new urban ambition for the neighborhood. The context is heterogeneous linear collective housing on one side and unique botanical heritage of the Park on the other. Designed by Archi5 + Tecnova Architecture, this project includes a theme for each function including gathering, meeting, sports activities, and events. This becomes evident in all aspects of the building at all levels. More images and architects' description after the break.



Fig 9: Render mage of Multi-Sports Complex Competition Winning Proposal

The building makes its own vocabulary of public space and complements the urban landscape elements, imprinting a new impulse to the site. It becomes an attractive landmark for residents throughout the neighborhood. The project sharpens the curiosity and the mystery. It is the choice of this mineral form, fractured largest monolith: a precious and mysterious rock placed in the landscape, which contrast and fits the context. This magnetic block, like a nugget copper hues is framed greenery.



Fig 10: Render image of Multi-Sports Complex Competition Winning Proposal

It is a landscape which emerges signal's urban climbing gym. The building is one with the environment and plant stands out from the surrounding buildings. The nature here is not

expressed by the plant: not cover that had been planted out of scale and without force in the context of the plant site. Its boundary is its identity, value mark. It clearly separates the two poles of the sports complex and ensures natural lighting gymnasiums and corridors. This flaw, like a canyon, plays on the scale of the building. It is an invitation to discover the secret of the precious rock, it begins the subtle permeability between inside and outside. It is the key to building close reading reveals its transparency as we approach.



Fig 11: Render image of Multi-Sports Complex Competition Winning Proposal

The sports complex is structured by a set of vistas. Blur the boundaries between the front exterior and interior environment where nature is always present. Framed the openings highlight the outstanding features of the integrated interior and outside. The analogy with nature is not only formal. It is rooted deeply in the structure of the frame by the choice of noble materials and integrity who are only capable of improvement over time. The skin is made of an alloy of copper, aluminum and titanium. It does not oxidize, and keep his win bronze color patina with a more matte appearance.

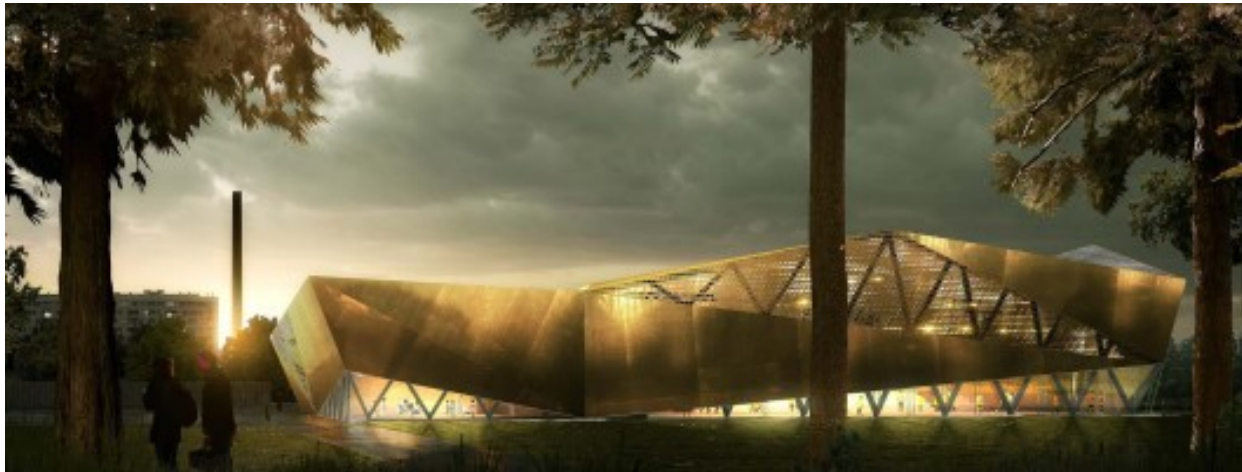


Fig 12: Render image of Multi-Sports Complex Competition Winning Proposal

By the interplay of facets, the perception of the building changes according to the sun and the seasons. The glass surfaces transform the monolithic crystal sparkling in the light. Its homogeneity and the choice of natural materials and sustainable, the building is in keeping with its envelope. The walls are lined with wooden planks and canvas stretch ceilings meet the

volume of the facets. Natural lighting, generous volumes, the atmosphere generated by the matter bluntly, are conducive to serenity necessary for learning sportsmanship.



Fig 13: Render image of Multi-Sports Complex Competition Winning Proposal

To distinguish course, a partial mezzanine is created for the use of public (visitors). It is located in the balcony on the double height volume and gives insights into the gyms. With regard to those who practice and alongside the building offers a lovely landscape surrounding buildings, such as a hill. By choosing a quiet place, anchored, sensitive to the nature that surrounds it, clear in its management function, this building is the balance between balance and strength; these values are those of sports objectives. It evokes the power of nature at the same time it calls the simplicity and economy. Contemporary and timeless, poetic as well as practical, this equipment will be able to inspire the imagination of those who use it.



Fig 14: Render image of Multi-Sports Complex Competition Winning Proposal



Fig 15: Render image of Multi-Sports Complex Competition Winning Proposal



Fig 16: Render image of Multi-Sports Complex Competition Winning Proposal

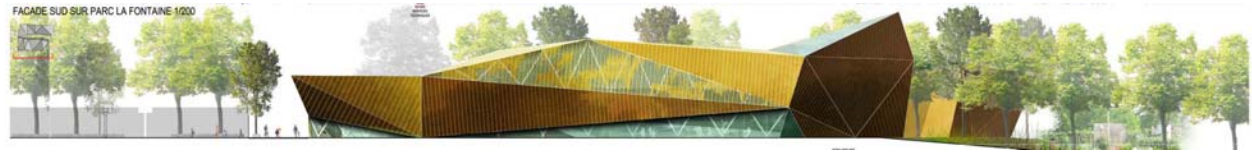


Fig 17: Render image of Multi-Sports Complex Competition Winning Proposal



Fig 18: Render image of Multi-Sports Complex Competition Winning Proposal

5.2.3 Tucheng Sports Center / Q-Lab



Fig 19: Photograph of Tucheng Sports Center / Q-Lab

Architects: Q-Lab

Location: Tucheng District, New Taipei City, Taiwan 236

Architects In Charge: Sense Tseng, Borden Tseng

Area: 13791.0 sqm

Year: 2014

From the architect. Tucheng Sports Center is composed of three interlocking volumes that stack on top of each other. Both the red (basketball courts) and the grey massing (ice hockey rink) cantilever 9 meter out from the blue massing (swimming pool) which create a continuous walkway beneath for semi-outdoor activities such as casual strolling, rock climbing and street dancing.



Fig 20: Photograph



Fig 21: Photograph

The exterior of the building is clad with a composite window/wall system that incorporates perforated aluminum in the front and glass/insulation in the back, which allows sunlight to be filtered gently into the interior space. With this cladding system, one is able to look out from within with maximum transparency, but at the same time provides privacy when looking from outside inwards with maximum opacity.

Moreover, the design of exterior is composed with an array of gradient colors which reflects the analysis of heat gain/loss (using lighter color panels for the most heat gain area, darker color panels for the least heat gain area).

With three volumes intersecting each other, interior is created with maximum visual connectivity that allows visitors to see beyond their own sports space. For example, when inside the swimming pool, one is able to see the other space such as fitness gym, snooker room, yoga rooms, and spinning bike rooms located on the second floor, and vice versa.



Fig 22: Photograph of Tucheng Sports Center / Q-Lab

Tucheng Sports Center embraces both horizontality and verticality in design. It explores the opportunity of engaging visitors with height differences in building section and at the same time brings people together with open floor plan layout. It is a building with delightful surprises at every turn of the corner as well as on every change of levels.



Fig 23: Photograph of Tucheng Sports Center / Q-Lab



Fig 24: Render image of Tucheng Sports Center / Q-Lab

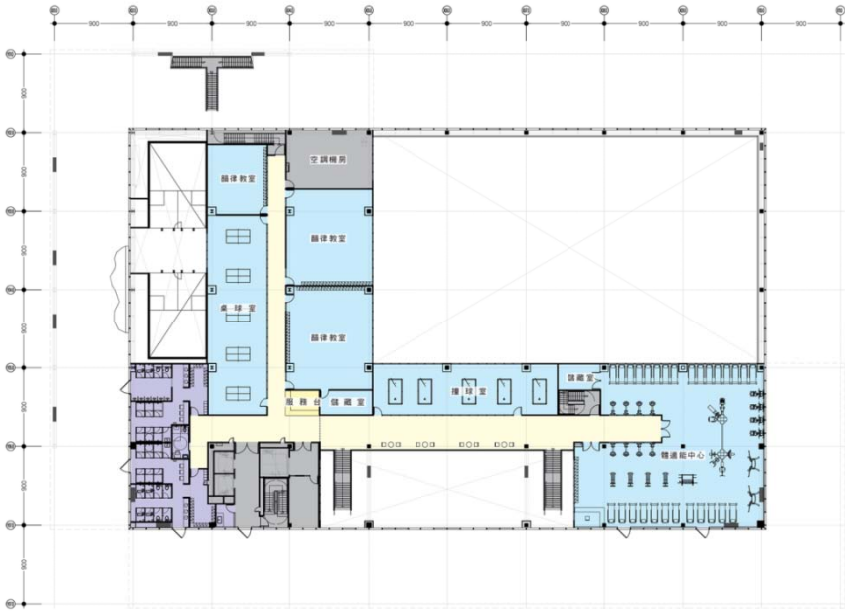


Fig 25: Render image of Tucheng Sports Center / Q-Lab

5.2.4 Neighbourhood Sports Centre Kiel / UR architects



Fig 26: Photograph of Neighbourhood Sports Centre Kiel

Architects: UR architects

Location: August Leyweg 2, 2020 Antwerp, Belgium

Architects In Charge: Nikolaas Vande Keere, Regis Verplaetse, Ana Pontinha

Area: 2024.0 sqm

From the architect. The site has a strategic position in the socially mixed Kiel district of Antwerp. This low-budget sports centre with a sports gear rental depot fulfills a social role in the neighborhood, edging the gateway to the school campus.

The building looks out to all sides. The traditional sports hall typology is inverted: large sports hall, dancing hall and rental depot face outward, interconnected by a service area. The simple, industrial architecture reflects the modernism of the surrounding buildings. The roofscape is conceived as a fifth facade visible from the nearby housing blocks by architect Renaat Braem.



Fig 27: Photograph of Neighbourhood Sports Centre Kiel

The ephemeral halls with facades in translucent multi-layered polycarbonate, white steel structure and colored floors contrast with the chiaroscuro service area in concrete and black laminate. The facades communicate the play of shadows and combine diffused daylight with good insulation and air tightness, resulting in low energy use.

Sun and outdoor climate form the backdrop of sports and play. At night the building becomes a glowing beacon in the neighborhood. The terrain will become an ecological flowering prairie dotted with trees and a grass island for informal play



Fig 28: photograph



Fig 29: photograph

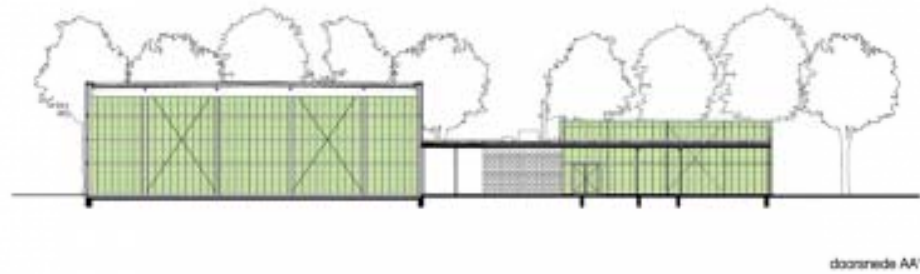


Fig 30: Render image of Neighbourhood Sports Centre Kiel

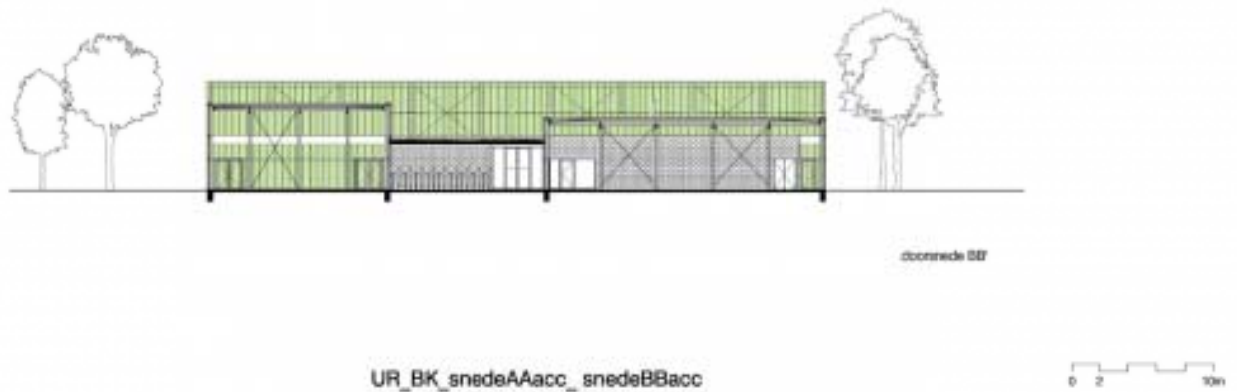


Fig 31: Render image of Neighbourhood Sports Centre Kiel

Sustainable and energy saving measures:

- Translucent facades allow playing by daylight, gradually replaced by artificial lighting (sensors).
- Floor heating in the large hall (payback period 6 years vs. local air heating).
- Air treatment system D (with heat recuperation) and adiabatic cooling with rain water in summer. Extra summer cooling through the floor heating system.
- Rain water use for showers with UV-filter. Only 1 year payback period.
- Extensive green roof on the service area for rain water storage and thermal inertia, light gray FPO-roofing on the halls for less warming-up

CHAPTER 06:
PROGRAMME AND DEVELOPMENT

6.1 Proposed Program and Rationale of the Program is designed to.....

6.1 Proposed program

Entrance 12,697 sq.ft.

Main lobby

Information desk

Floor Lobbies

Hall of Fame 13,000 sq.ft.

Administration (x2) 4,226 sq.ft.

Admin Lobby

Waiting Room

Director's office + washroom
General office

Board room
Washroom

Service 6400sq.ft.

Maintenance staff room

Security room
Mechanical, Electrical,
Generator Storage
Loading/Unloading

Food Court 5,869 sq. ft.

- Eating zone
- Service counter
- Food storage
- Food preparation
- Washing area
- Trash storage

Sports Facilities

<input type="checkbox"/> <u>Multi-sports court</u>	<u>25,967 sq. ft.</u>
- Gallery	
-tennis court	
-7 aside football pitch	
-Basketball court	
-Badminton court	
<input type="checkbox"/> <u>Football (x 1)</u>	<u>86,400 sq. ft.</u>
- Pitches	
- Runoff area	
<input type="checkbox"/> <u>Cricket Field</u>	<u>1,39,009 sq. ft.</u>
- Ground	
<input type="checkbox"/> <u>Badminton (x 4)</u>	<u>4,828 sq. ft.</u>
- Courts	
- Sitting area	
<input type="checkbox"/> <u>Squash (x4)</u>	<u>4,883 sq. ft.</u>
- Courts	
- sitting area	
<input type="checkbox"/> <u>Locker Area (Men and Women)</u>	<u>3,214 sq. ft.</u>
- Shower	
- Changing room	
- Lockers	
- Toweling	
<input type="checkbox"/> <u>Indoor games</u>	<u>19,809 sq. ft.</u>
- Bowling zone	
- Pool zone	
- Carom zone	

- Table tennis

- Table soccer

- Card games

- Chess games

Gymnasium 6,043 sq. ft.

- Exercise room

- Toilet

- Changing and lockers

- Store room

Swimming Facilities 19450 sq. ft.

Swimming Pool (Adult)

Sauna and Massage Room

Changing Room

Locker Room

Maintenance

Shops 1,100 sq. ft.

Souvenir shop

Retail sports shop

CAR PARKING 41,126 sq. ft.

CHAPTER 07:

Design and development

7.1 concept, inspiration and form generation....

7.1 concept, inspiration and form generation....

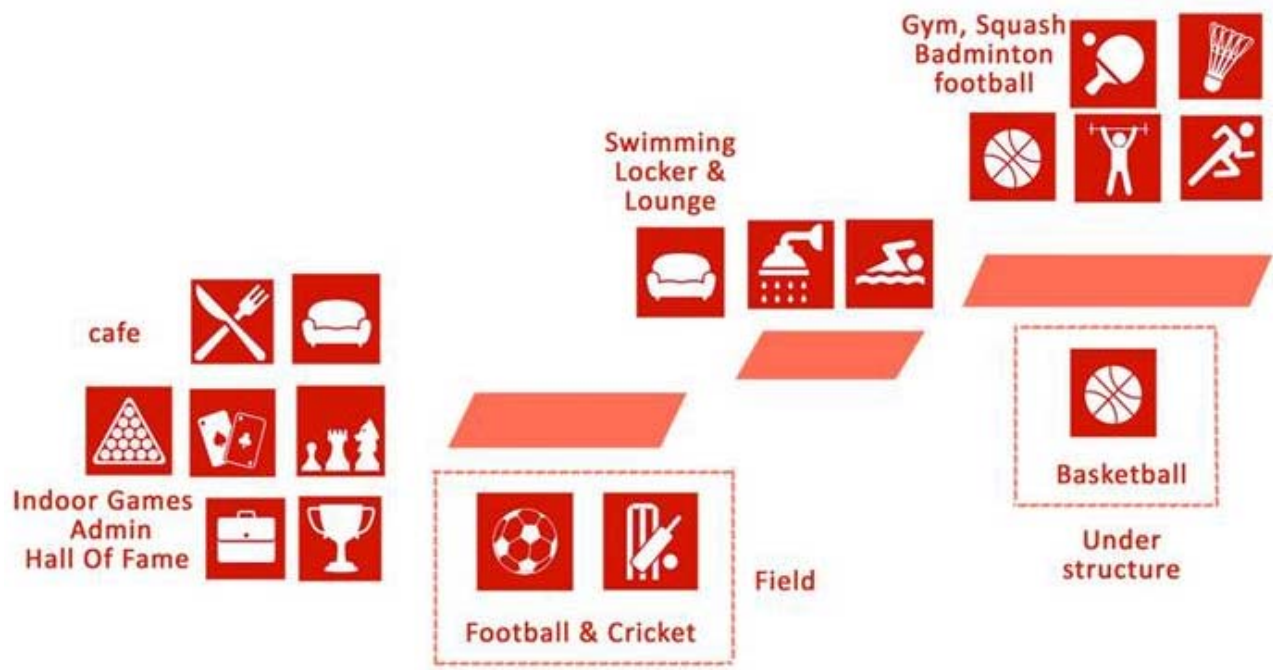
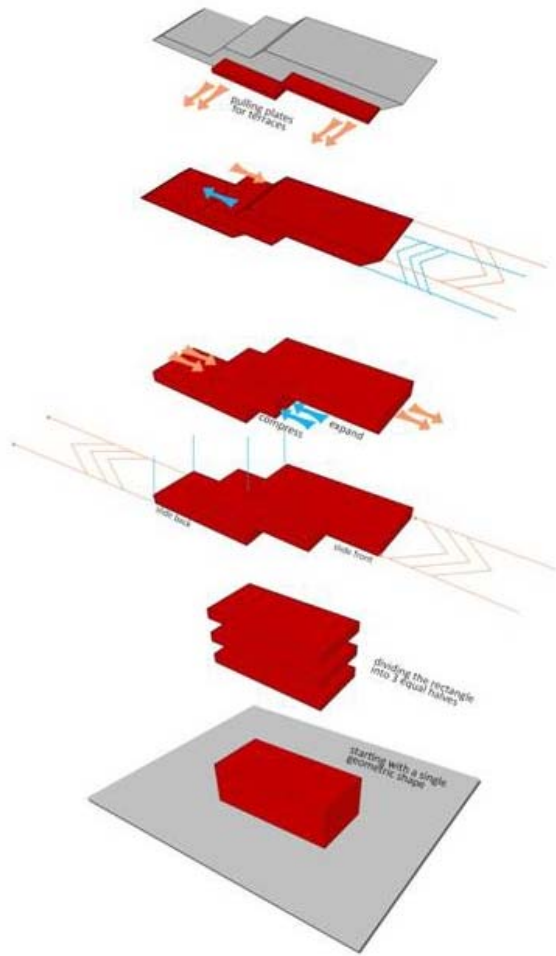
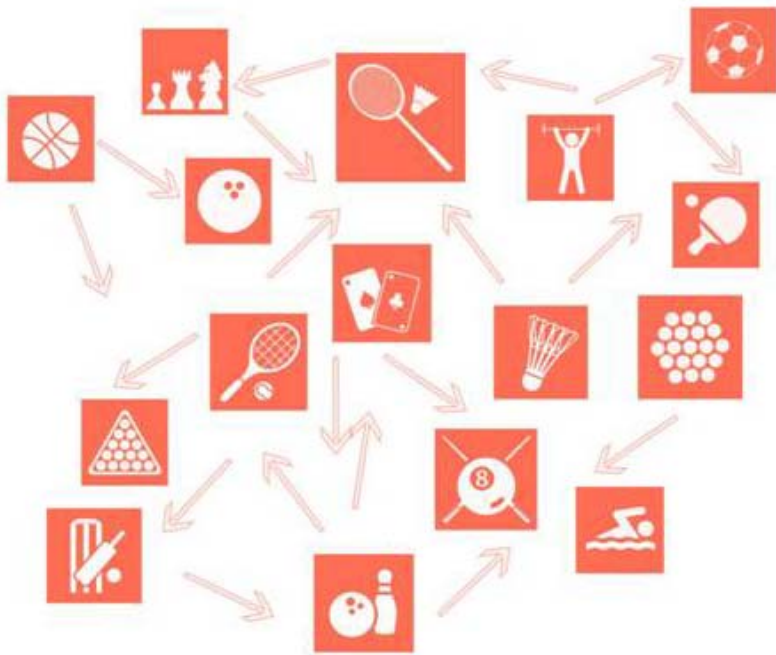
Sports come in all forms of mainly competitive physical activity which, through casual or organized participation, aim to use, maintain or to improve physical ability and skills while providing entertainment to participants, and in some cases, spectators. Sport is generally recognized as activities which are based in physical athleticism or physical dexterity. Sports are usually governed by a set of rules or customs. Aside from these differences all sports are on the same line connecting each other with Agility, Motion, Energy level and Strength. To instill sportsmanship an intense level of dedication is required in the form of a cycle which includes community, club and most importantly the country itself.

“If we look at the world with a love of life, the world will reveal its beauty to us.” ~Daisaku Ikeda.

From my early life I am always huge fan of paintings and playful shades of color which is somewhat inherited from my father, like wise in this run Shahabuddin Ahmed has been one of my inspiration .In his work there shows the capability to overcome the constraints of time and space. In this dynamism his paintings depict fearless human figures that cut through the difficulties of life. The vibrancy and force of his brushwork highlights this aspect and creates a strong sense of movement. Above all his compositions are unmistakably musical and rhythmic. Shahabuddin’s figures seem to be enthralled in the cosmic dance at times merging with the ethereal forces.

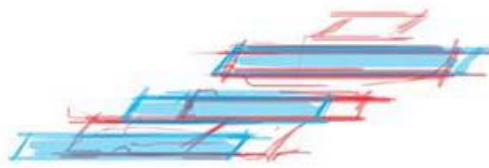
From his famous victory series collection, "Departure 1" is my the main motivational theme which depicts all the four elements that I was looking for which includes objective or subjective measures such as technical performance in this artistic impression. While designing I tried to incorporate the motivational inspiration of the core elements within the structure itself. The way I view a sports complex is rendition of athlete from different anatomy binding by different rules, while performing under the same roof might not be verbally connected but they are inter linked visually through the admiration in their mind. In a sum it produces a different ambience of respect and the urge to know more about the other game. As a whole in my view of sports complex while designing I visualized each sports as a single sportsman and many sports visually linked like while people playing cricket also watches volleyball. There might not be any physical connection but by watching other sports the mutual respect for the other sportsmen and the sports increases and the urge to explore new parameters within the sports rekindles. So I consider the whole sports com. Parameter within the sports rekindles. So I consider the whole sports com.



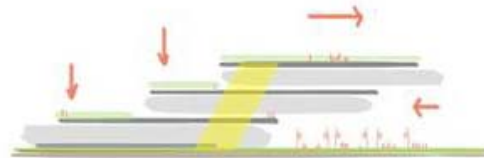




Shahabuddin Ahmed depicts a masculine, agile and progressive person in motion.



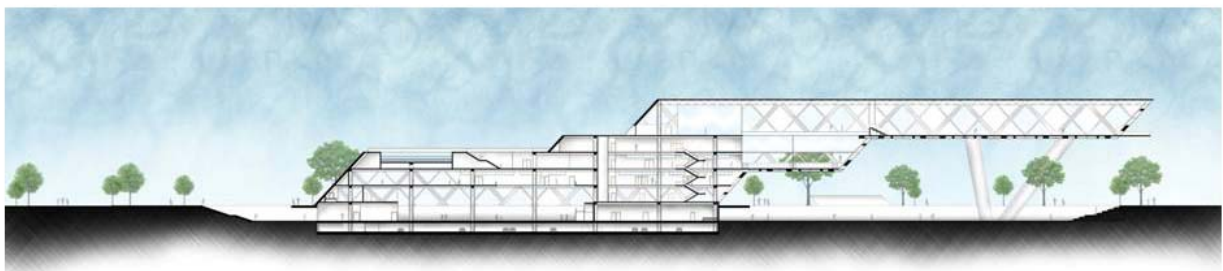
The painting contains characteristics of the abstract of the idea of 'sports' itself, and has inspired a form of the same qualities the painting conveys



The idea for a sports academy to resemble the said qualities have been evolved as shown. This is from a vision that such qualities will aspire the sportsmen in training and set permanent standards of both teaching and learning in this academia.



The forces put into motion are progressiveness, motion and masculinity



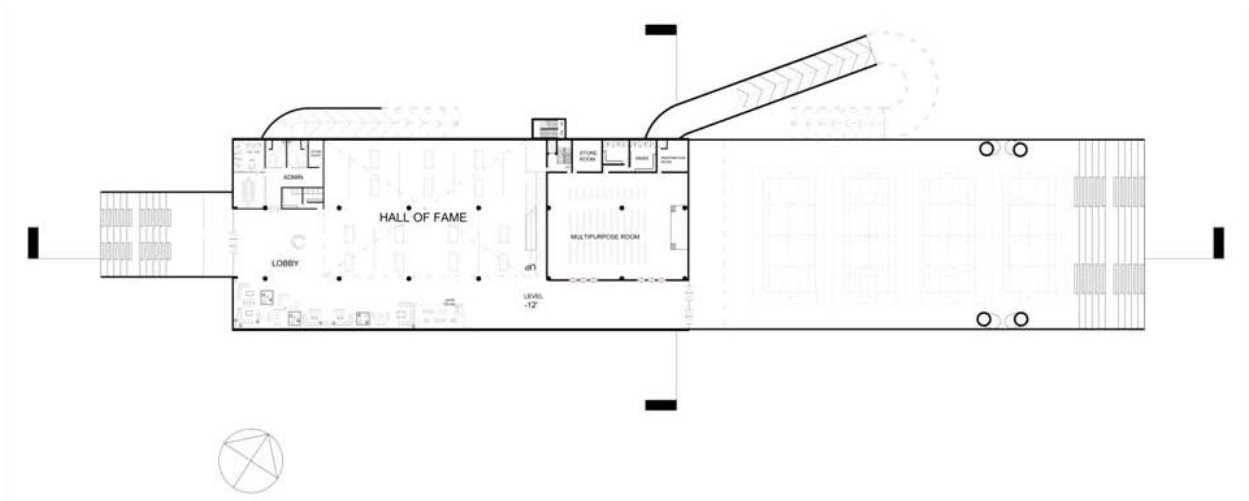
SECTION AA'



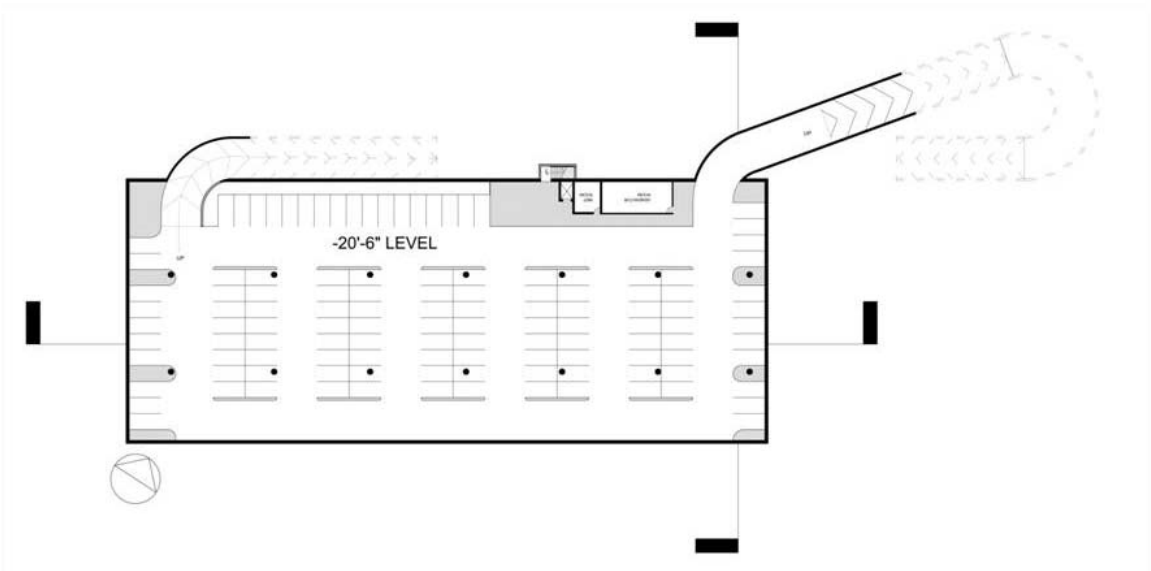
MASTER PLAN



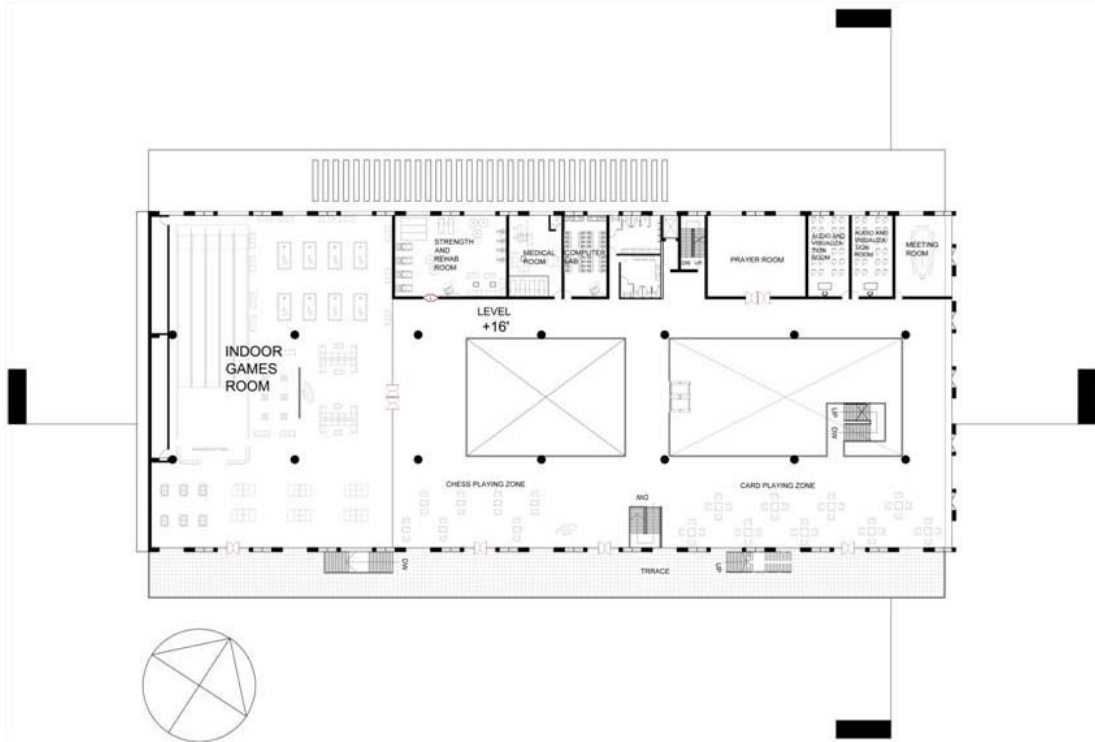
GROUND FLOOR PLAN



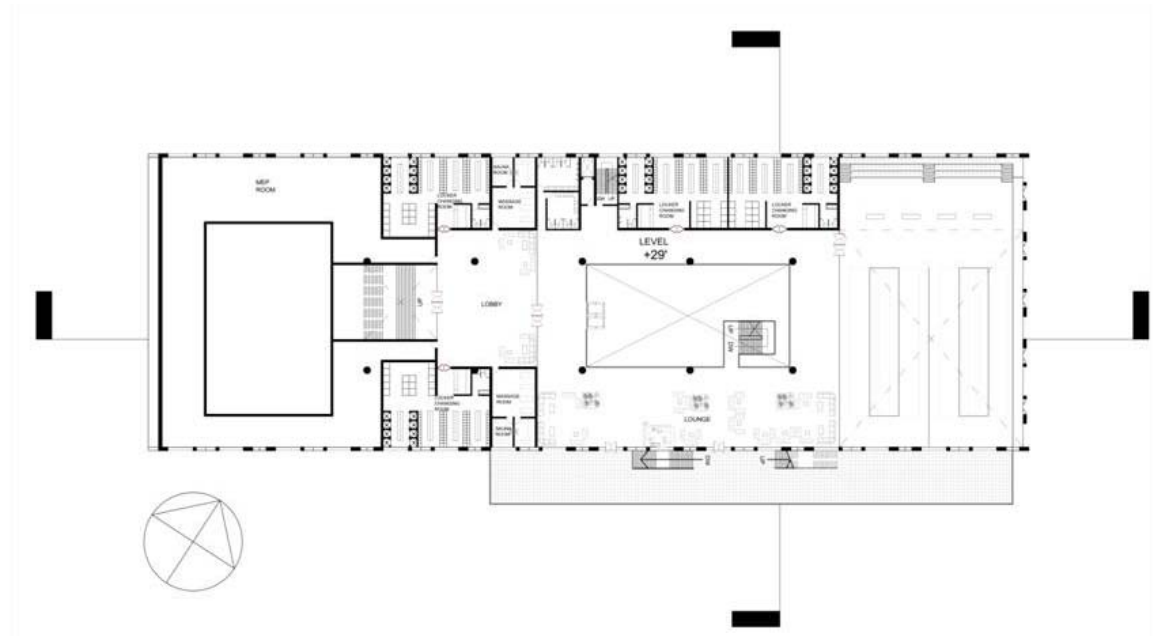
UNDERGROUND 1 PLAN



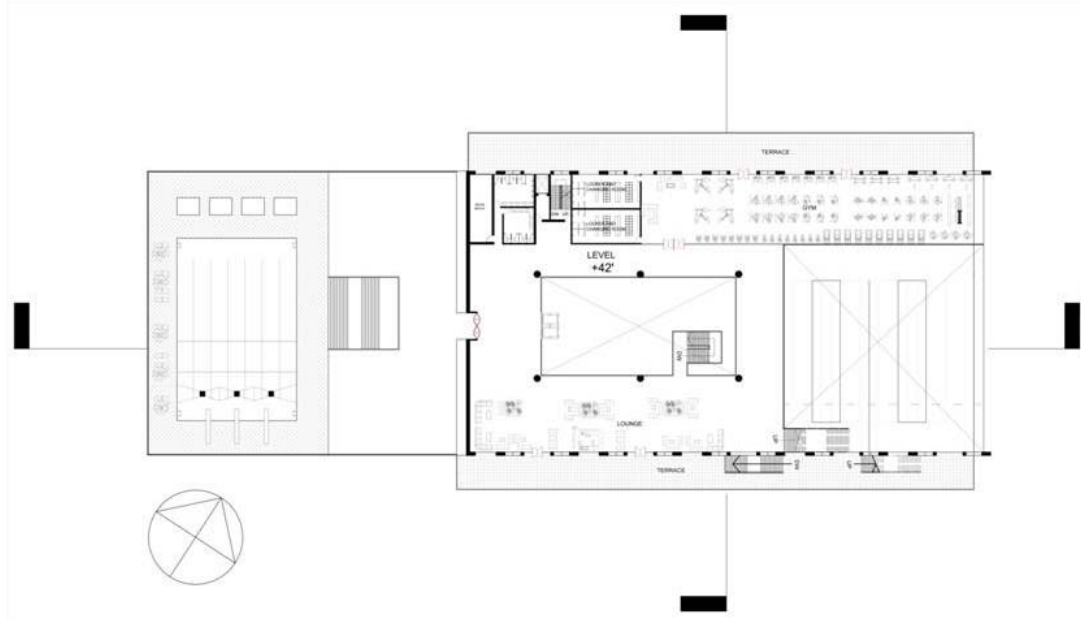
UNDERGROUND 2 PLAN



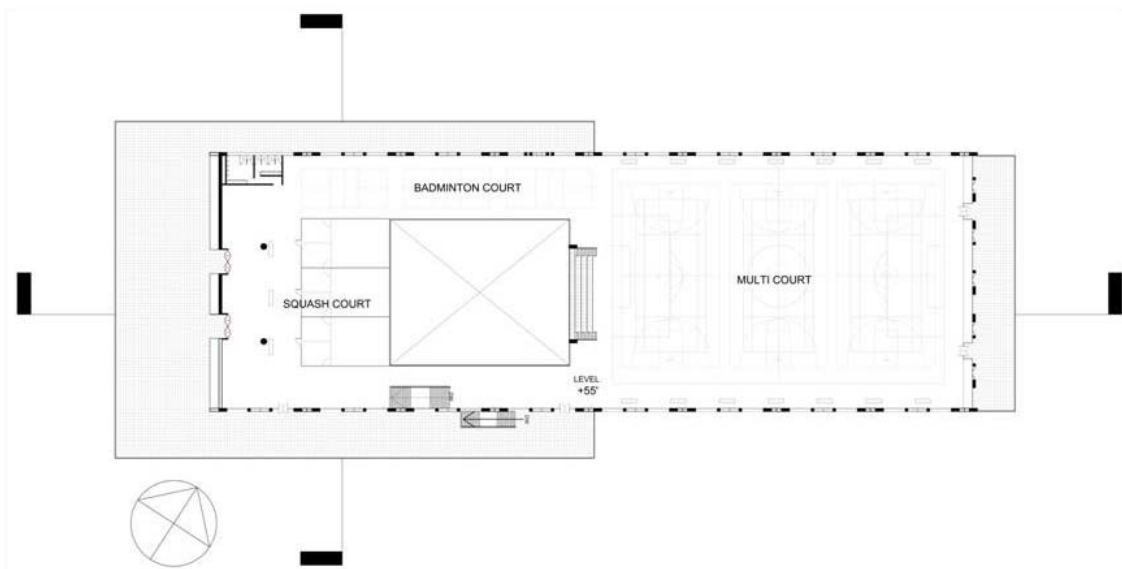
1ST FLOOR PLAN



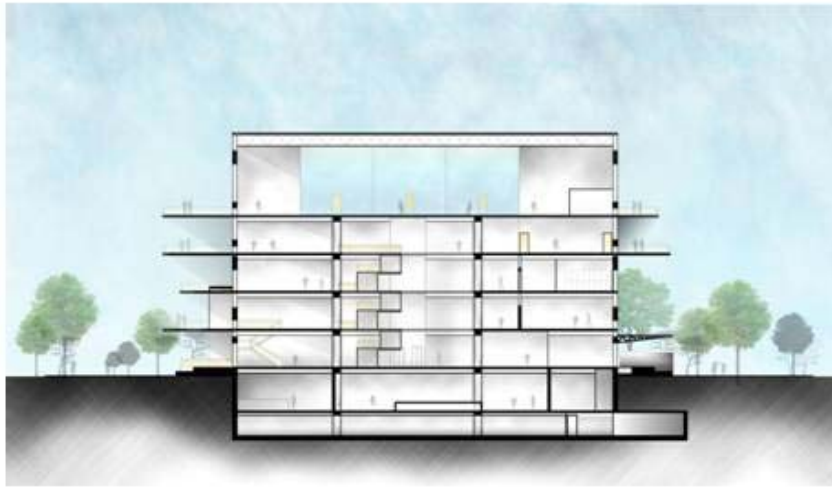
2ND FLOOR PLAN



3RD FLOOR PLAN



4TH FLOOR PLAN



SECTION BB'



Conclusion

Given the considerable amount of open spaces on major sports facilities, the non-economic benefits provided by these projects must be significant to warrant this level of spending. Studies confirm that, from the perspective of most stakeholders and users this money was well spent. A particular individual understanding of sportsmanship cannot be easily identified, as one's experiences, thoughts, values and beliefs that form their view of community is unique and impossible to replicate. The idea of sports complex constitutes a community belief is subjective and based on what is important and relevant to the demand therefore cannot easily be defined. Sport complex tended to view community benefit in terms of providing an accessible sporting venue that provides an extensive range of quality facilities and programs for people of all ages and abilities. Athletes shall agree that multi sports center provides social, health and fitness opportunities for the community and an identified range of community benefits which are attributed to the development of the sports center, such as: increased participation and social cohesion; creation of a better lifestyle for the community; as well as increasing the number of visitors to the municipality. This study also confirms that sports centers provides a range of noneconomic benefits such as increased community visibility, enhanced community image and a range of social/psychic income benefits. Benefits associated with the development of Sports center outweigh any costs, supporting the assertion that the non-economic impacts that have justified the spending of public money on sport agenda and arenas.

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