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# 崛起之路·北京奥运建设 BEIJING OLYMPIC GAMES

助力双奥城 圆梦冬奥会 TWO OLYMPIC GAMES IN ONE CITY

百年奧运,中华圆梦。2001年7月13日,国际奥委会主席萨 马兰奇宣布,中国北京凭借其过人的优势和完美的陈述报告,在5个 2008年夏奥会申办城市中脱颖而出,夺得2008年夏奥会举办权。

1991年,中国首次申办奥运会,却以一票惜败。2000年,北京再次启动申办奥运会的工作,北京建院承担了申奥场馆的全部设计任务,按照国际奥委会的标准,对30多个场馆进行设计规划。经过一年半的规划、论证、设计和数十遍的修改,在北京奥申委代表团向国际奥委会送交的《申办报告》中,北京建院完成的奥运场馆及奥林匹克公园的设计方案,获得了国际奥委会委员们的好评,为申奥成功做出了突出贡献,更为中国体育建筑奠定了坚实的基础。

2008年, 奥林匹克精神在华夏大地上传播, 中国的国家形象被重新打造, 人们的国家自豪感达到了一个前所未有的高度。在北京夏奥会的场馆建设中, 北京建院承担了35项奥运场馆及配套工程的设计工作, 共完成了270万 m² 的设计任务, 占全部场馆总面积的40%。

而在即将到来的2022年北京冬奥会、冬残奥会的筹办和建设中,北京建院承担了场馆的新建、改扩建设计项目10项,以及前期咨询、服务项目8项,严格按照国际奥委会的标准、冬奥组委和市重大项目办的要求,统筹制定统一的技术和设计标准,以打造"北京冬奥工程质量"金名片为目标,统筹协调推进,确保所有项目高标准、高质量地完成。

With the awarding of the 2008 Summer Olympic Games, China's dream came true. On July 13, 2001, International Olympic Committee (IOC) President Juan Antonio Samaranch announced that among five bidding cities Beijing won the majority of votes and so was awarded the right to host the 2008 Summer Olympic Games as a result of its superior advantages

and perfect presentation.

In 1991, China narrowly lost its first bid to host the Olympic Games by just one vote. In 2002, Beijing restarted the preparation work for a new bid, and BIAD was assigned to do all the design and planning work for more than 30 stadiums for the Olympic Games, according to the standards of the International Olympic Committee. After one and a half years of planning, demonstration, design and revising dozens of times, BIAD finished the design of the Olympic stadiums and Olympic Park, which received positive reviews from IOC members as a winning part in the Bidding Report submitted by the Beijing Olympic Games Bidding Committee, contributed to the success of winning the bid and laid a solid foundation for the future design and planning of sports venues in China.

In 2008, the Olympic spirit spread all over China, rebuilding the national image of China and unprecedentedly enhancing our national pride. Among all the construction work for stadiums for the Beijing Summer Olympic Games, BIAD was awarded 35 design projects for stadiums and supporting facilities, covering 2700,000 m2, or 40 percent of the total area.

In preparation and construction for the coming 2022 Beijing Winter Olympic Games and Winter Paralympic Games, BIAD is responsible for 10 projects that will be newly-built or renovated and eight projects that will require preliminary consulting services. Strictly in accordance with IOC standards, the requirements of the Beijing Organising Committee for the 2022 Olympic and Paralympic Winter Games and Beijing City Major Projects Construction Headquarters Office, BIAD comprehensively set unified technical standards and design requirements, aiming to ensure a high level of quality for all the construction work.



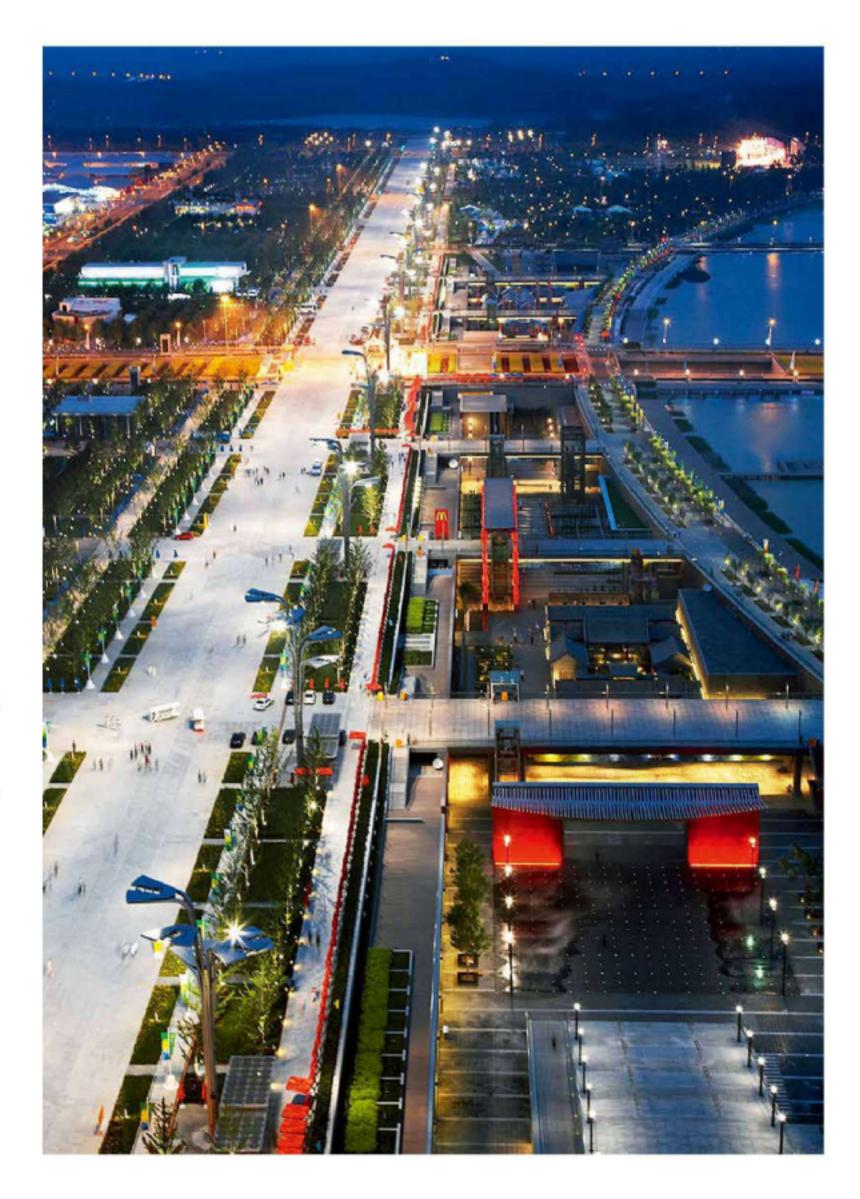
#### 北京奥林匹克公园中心区景观设计

The Landscape Design of the Beijing Olympic Park Central District

建成时间Completion Year: 2008

建设面积Construction Area: 11 122 488m² 合作公司Partner:北京市市政工程设计研究总院有限责任公司 BMEDI/北京水利规划设计研究院BIW/北京中国风景园林规划设计研究中心China Research of Landscape Architectural Design and Planning/北京城建设计发展集团股份有限公司 UCD/清华大学建筑设计研究院有限公司THAD/中国建筑设计院有限公司CADG/北京市文物建筑保护设计所Beijing Heritage and Relics Preservation Design Institute/北京齐欣建筑设计咨询有限公司 Beijing Qixin Architectural Design Consulting Co.,Ltd

奥林匹克公园中心区的景观设计延续了北京城市的 棋盘格网布局,设计风格简约、现代、宏大,三条相 互渗透的轴线和一座下沉花园成为设计的最大特 征。三条轴线分别是体现庄重理性的中轴、体现人 文自然的绿轴、体现生态科学的水轴, 在一个相对 紧密的空间内相互联系、交融, 形成统一整体。设计 将城市空间作为整体考虑,将"科技、人文、绿色"的 理念融入其中, 形成一个大景观空间的概念, 是中 国传统文化与现代景观设计手法的充分结合。北京 奥林匹克公园的建设使北京城市的古老轴线向北延 伸并使其更为丰富,翻开了北京城市建设的新篇章。 The landscape design of the Olympic Park Central District was modeled on the layout of the chessboard-grid form in Beijing. "Simple, modern, and grand" correctly describe this style. Three axes which are intersected, and a sunken garden form the main features of the design. The three axes are the central axis, which symbolizes solemn rationality, the green axis which symbolizes nature, and the water axis, which symbolizes ecological science. All these three axises connect, communicate, and are integrated with each other, becoming a unified whole. The design puts into consideration the urban space as a whole, integrating the concepts of "science, technology, and green" to form a larger landscape space. It is the embodiment of the combination of Chinese traditional culture and modern landscape design. The construction of the Beijing Olympic Park extends and enriches the ancient south-north axis further up north, opening a new chapter in the architectural history of Beijing.







## 国家体育馆

National Stadium

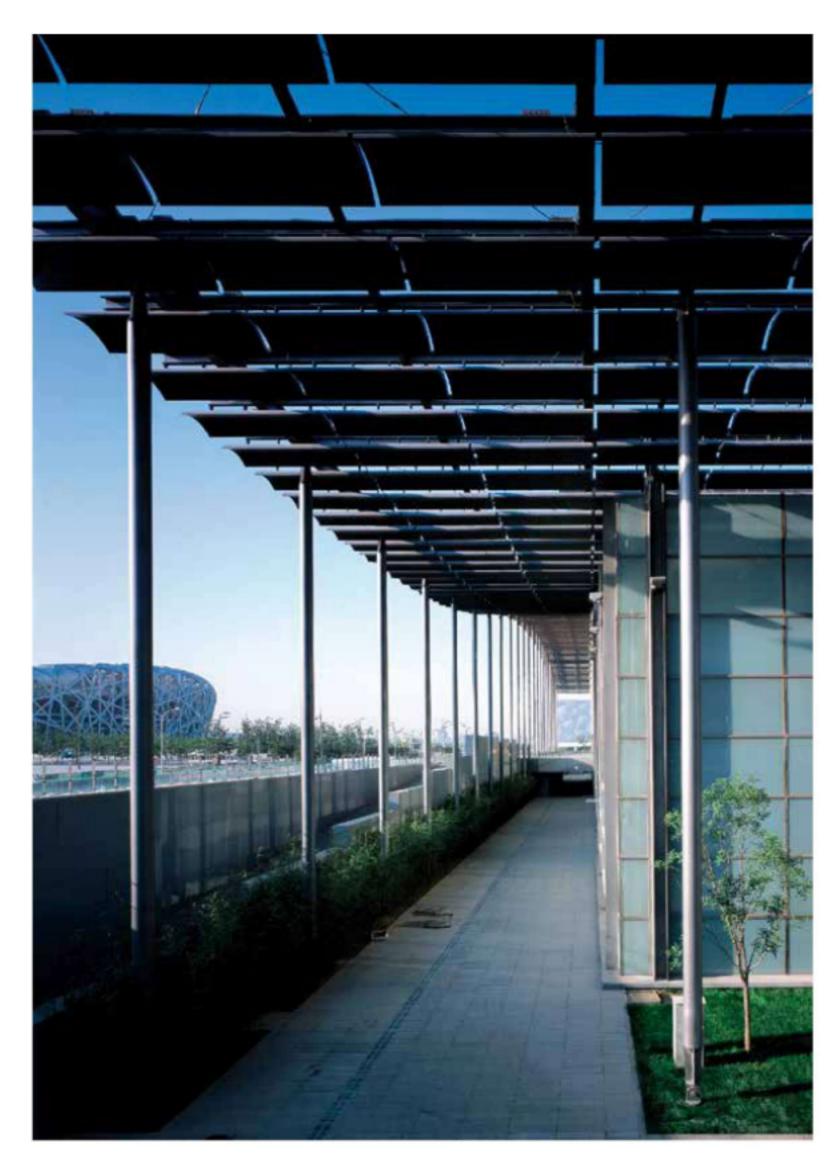
建成时间Completion Year: 2008 建设面积Building Area: 80 890 m²

合作公司 Partner: 德国慕尼黑集团 Munich Group /

北京城建设计研究总院 Beijing Urban

Engineering Design & Research Institute 国家体育馆位于北京奥林匹克公园中心区的南部,以 中国"折扇"为设计灵感,是国内最大的双向张弦钢 屋架结构体系,采取由南向北的波浪式造型,屋面轻 盈而富于动感。国家体育馆是北京夏奥会三大主场 馆之一,在2008年北京夏奥会中,国家体育馆先后 承担了体操、蹦床、手球项目的比赛。该馆经改造, 在2022年冬奥会中将作为男子冰球比赛场馆。

The National Stadium is located in the south of the Beijing Olympic Park Central District. The design of the stadium was inspired by the Chinese folding fan. The building has the largest scale two-way string steel truss structure system in China. Adopting the waving shape from south to north, the roof gives people the feeling of lightness and action. The National Stadium was one of the three main venues of the Beijing Summer Olympics, which held competitions in gymnastics, trampolining and handball. This venue will be renovated for the 2022 Winter Olympics and will be the venue for men's ice hockey competition.



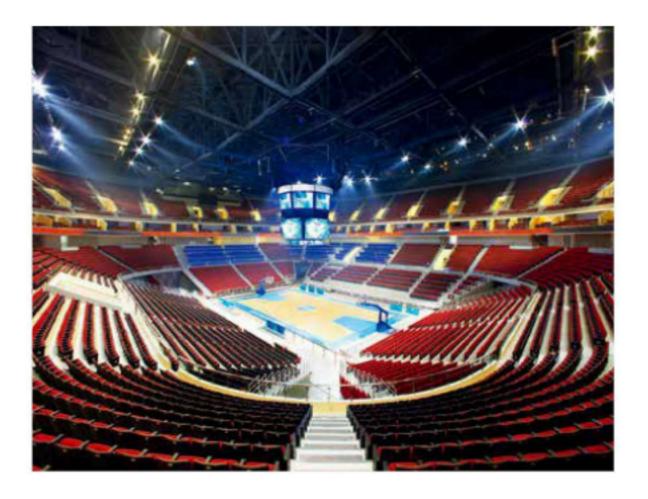
#### 五棵松体育馆

Wukesong Stadium

建成时间Completion Year: 2008

建设面积Building Area: 63 000m2

五棵松体育馆建筑为一个金色方形体, 其外立面由一块块的铝合金板围合而成。建 筑巧妙地利用先进的分层进出场馆的方式, 实现了观众与运动员、官员和管理人 员的分流。同时在"节俭办奥运"原则的指导下,设计优化后的五棵松体育馆造 价大幅下降, 而且施工难度降低, 安全性能提升。 五棵松体育馆曾为2008年 北京夏奥会篮球比赛场地,在2022年北京冬奥会中将作为女子冰球比赛场馆。 Wukesong Stadium is a golden square cube, with the façade enclosed by pieces of aluminum plates. The design smartly divides the flow of movement among audience, athletes, officials and management personnel by adopting separate levels for entering and exiting, the attendees enter the competition hall from the platform outside. At the same time, under the principle of "economical operation for Olympics", the cost of Wukesong Stadium was greatly reduced by optimized the design, reducing the difficulty of construction, and enhancing the safety of the structure. The Wukesong Stadium was the basketball venue of the 2008 Beijing Summer Olympic Games, and it will be the venue for women's ice hockey at the 2022 Beijing Winter Olympic Games.







#### 国家会议中心

National Conference Center

建成时间Completion Year :2008 建设面积Building Area :269 991m²

合作公司Partner:RMJM

国家会议中心位于鸟巢和水立方之北,2008年夏奥会期间作为击剑馆、国际广播中心使用。建筑外形优美,立面设计取意中国古代建筑屋檐的曲线,将传统的建筑形式进行现代的演绎,同时又象征一座桥梁,与奥运公园的其他建筑遥相呼应,体现人文、信息的沟通和交流,跨向未来。

Located to the north of the Bird's Nest and the Water Cube, the National Convention Center was used as a Fencing Hall and an International Broadcasting Center during the 2008 Summer Olympics. The architectural outline is elegant, and the design of the façade is based on curves found in the eaves of ancient Chinese buildings. The design concept is a modern interpretation of traditional architectural forms. At the same time, it symbolizes a bridge relating to surrounding buildings in the Olympic Park. The building reflects the communication of humanities and information, also represents the future.



### 北京冬奥村人才公租房

Beijing Winter Olympic Village Public Housing for Athletes

设计时间Design Began: 2018 建设面积Building Area: 140 000m<sup>2</sup> 北京冬奥村位于北京奥体中心南侧,在2022年冬奥 会和冬残奥会期间为运动员公寓,赛后转化为北京市 高端人才公租房。北京冬奥村规划与建筑设计体现了 可持续发展的奥运精神,服务设施尽量由既有建筑改 造而成,采用装配式钢结构满足空间的灵活转换,将 传统文化与当代生活相结合。同时,智能化无障碍设 施在赛时和赛后践行了以人为本的宗旨。

The Beijing Winter Olympic village is located to the south of the Beijing Olympic Center. It will serve as living quarters for athletes during the 2022 Winter Olympic Games and Winter Paralympic Games, and will later be transformed into public rental housing for athletes. The planning and architectural design of the Beijing Winter Olympic Village embodies the Olympic spirit of sustainable development. The service facilities, which include the renovation of existing buildings using fabricated steel structures to meet the flexible space transformation, also combines traditional culture with contemporary design. In the meantime, intelligent barrier-free facilities implement the people-oriented principle.



#### 国家速滑馆

National Speed Skating Oval

设计时间 Design Began: 2017

建设面积Building Area: 96 000m2

国家速滑馆是2022年北京冬奥会的标志性工程, 也是唯一的新建场馆。建筑以"冰"和"速度"为设计 主题,创新的曲面幕墙、超大跨单层索网双曲屋面、 集约的全冰面设计,以及智能化的数字运维,呈现出 面向未来的"冰丝带"。

The National Speed Skating Oval is the only new venue that will be built, and will be a landmark project for the 2022 Beijing Winter Olympic Games. The design theme derives from the "ice" and "speed". Innovative curved curtain walls with super large-scale hyperbolic roof span with single-layer cable net, intensive ice ground and intelligent digital operation and maintenance represent the "Ice Ribbon" towards the future.



#### 国家游泳中心改造

Reconstruction of the National Swimming Center

设计时间 Design Began: 2018

建设面积Building Area; 140 000m2

合作公司Partner: Populous

国家游泳中心在2022年冬奥会期间将被改造成冰 壶场馆。通过可拆卸场地、室内环境实时控制等技 术,将"水立方"转换成为"冰立方",在冬奥会历史 上第一次实现可转换的冰壶比赛场地。同时保留夏 奥、冬奥遗产,更好地实现奥运场馆的可持续发展。

The National Swimming Center will be transformed into a curling venue for the 2022 Winter Olympic Games. During this period, the "Water Cube" will be converted into an "Ice Cube" through detachable structure and real-time technological control of the indoor environment. Water Cube will be the first Winter Olympic Stadium to create curling ice in a swimming pool, simultaneously preserving two Olympic venues.





