

# 沙井街道民主社区九年一贯制 学校新建工程全过程设计

WHOLE-PROCESS DESIGN FOR NEW PROJECT OF SHAJING SUB-DISTRICT MINZHU COMMUNITY NINE-YEAR CONSISTENT SCHOOL

## 设计任务书

DESIGN BRIEF

2023.03

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## 一、项目概况

### 1.1 项目背景

教育是国之大计，党之大计。党的二十大报告把“实施科教兴国战略，强化现代化建设人才支撑”摆在更加重要的位置，凸显了新时代教育的基础性、先导性、全局性地位和作用。宝安区委区政府始终坚持教育优先发展“第一战略”，全力以赴办人民满意的教育，为实现“幼有善育、学有优教”和助力城市发展提供强有力的支撑，进一步增强市民群众对优质均衡教育的获得感、幸福感，进一步扩大宝安教育的影响力与示范性。

民主社区九年一贯制学校位于深圳市宝安区沙井街道。伴随国务院印发《粤港澳大湾区发展规划纲要》和《中共中央国务院关于支持深圳建设中国特色社会主义先行示范区的意见》，深圳市发展中心逐步西移，宝安西部发展不断加速，其发展定位、配套水平、政策优势不断提高，沙井街道逐渐由城市的边缘地区成为城市的战略重点发展地区。未来的民主片区将成为空间品质优良、配套设施完善、国际化服务水平高的国际化示范性城区。

## I. Project Overview

### 1.1 Project background

Education is of critical importance to the future of our country and our Party. The Report to the 20<sup>th</sup> National Congress of the Communist Party of China puts "invigorating China through science and education and developing a strong workforce for the modernization drive" in a more important position, highlighting the fundamental, pioneering and holistic status and role of education in the new era. CPC Bao'an District Committee and Bao'an District Government always adhere to the "first strategy" of giving priority to the education development, and make every effort to develop education that meets the people's expectations, so as to provide strong support for the realization of "excellent preschool education and high-quality education environment" and galvanizing city development, further enhance the citizens' sense of acquisition and happiness for high-quality and balanced education, and further expand the influence and demonstration of education in Bao'an education.

Minzhu Community Nine-year Consistent School is located in Shajing Sub-district, Bao'an District, Shenzhen. With the issuance by the State Council of the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area and the Opinions of the CPC Central Committee and the State Council on Supporting Shenzhen to Build a Pioneering Demonstration Zone of Socialism with Chinese Characteristics, Shenzhen has gradually shifted its development center westwards. With the constant acceleration of western Bao'an, its development orientation, supporting level and policy advantages have been continuously improved. Shajing Sub-district has gradually developed from the city edge to the key strategic development area of the city. In the future, Minzhu area will become an international demonstrative city proper with excellent spatial quality, complete supporting facilities and high international service level.

宝安区政府以“让教育成为宝安的核心竞争力”为目标，落实宝安区教育事业发展“十四五”规划为方向，全力推进民主片区的教育设施建设。本项目希望通过公开公平的设计招标，优中选优，选出既能落实宝安区教育发展理念、又能与周边城市环境融合共生，且面向未来的学校设计方案。未来项目建成投入使用后，将有利于进一步完善宝安区基础教育设施，缓解本地区学位压力，为人才培养和社会发展奠定基础。

### 1.2 项目区位

民主学校位于广东省深圳市宝安区沙井街道。沙井街道作为宝安区下辖的十个街道之一，位于宝安区西北部，与光明区接壤，是粤港澳地区的核心地带。本项目用地位于沙井街道中西面，西侧为海上田园，处于城市工业区与海上田园景区交汇的节点，东北为深圳市第七高级中学，同时向北还有深圳地铁 12 号线海上田园东站。

With the goal of "making education the core competitiveness of Bao'an" and the direction of implementing the "14<sup>th</sup> Five-Year Plan" for education development here, Bao'an District Government has made every effort to promote the construction of education facilities in Minzhu area. The Project hopes to select the optimal design scheme through open and fair bidding, namely select the school design scheme that not only implements the education development concept of Bao'an District, but also realizes the integration and symbiosis with the peripheral urban environment and faces the future. After the Project is completed and put into use in the future, it will further improve the basic education facilities in Bao'an District, relieve the academic degree stress here, and lay the foundation for talent cultivation and social development.

### 1.2 Project location

Minzhu School seats in Shajing Sub-district, Bao'an District, Shenzhen, Guangdong Province. As one of the ten sub-districts under the jurisdiction of Bao'an District, located in the northwest of Bao'an District and bordering Guangming District, Shajing sub-district is the heartland of Guangdong-Hong Kong-Macao area. Located in the middle and west of Shajing Sub-district, the Project sits at the intersection node of urban industrial zone and Waterlands Resort, with this scenic spot in the west, Shenzhen No. 7 Senior High School in the northeast and the Waterlands Resort East Station of Shenzhen Metro Line 12 to the north.



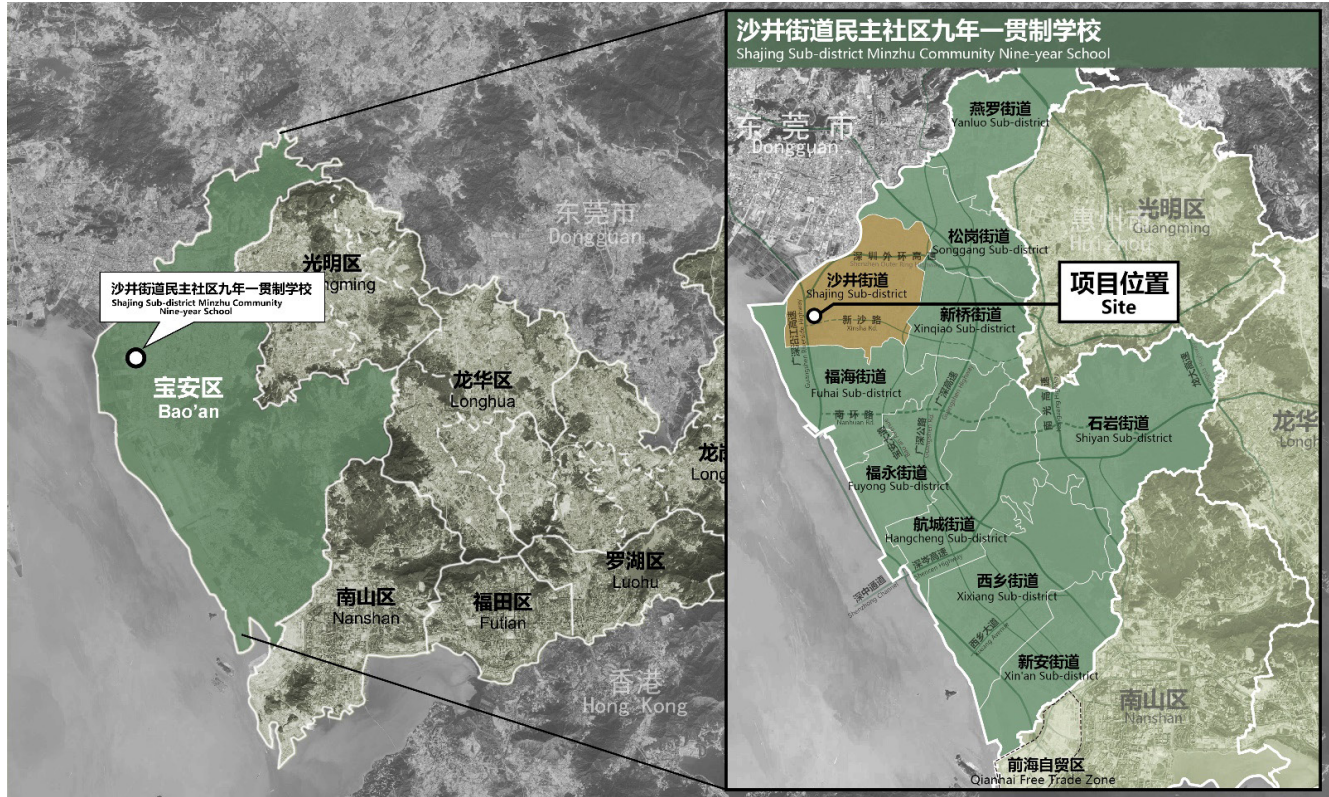


图 1 项目整体区位  
Figure 1 Project overall location



图 2 项目中观区位  
Figure 2 Project mesoscopic location





图3 用地航拍  
Figure 3 Aerial photography of land use

### 1.3 建设规模

沙井街道民主社区九年一贯制学校（暂定名：民主学校）拟用地总面积为 44008.97 平方米，总建筑面积为 81324 平方米。拟办学规模为 81 班 3780 个学位（其中小学 54 班 2430 个学位，初中 27 班 1350 个学位），另配机动教室 12 班（其中小学 6 班 270 个学位，初中 6 班 300 个学位）。

### 1.4 投资限额

按单价 8000 元 / 平方米的限额指标进行控制（具体详见《深圳市基础教育改革发展领导小组办公室关于明确义务教育学校建设投资标准涵盖范围的通知》），项目建设资金来源为政府投资。

### 1.3 Construction scale

Shajing Sub-district Minzhu Community Nine-year Consistent School (tentative name: Minzhu School) proposes to cover a total land use area of 44,008.97 square meters and a gross floor area of 81,324 square meters. The proposed school scale is 3,780 degrees in 81 classes (including 2,430 degrees in 54 classes of primary school and 1,350 degrees in 27 classes of junior high school), and 12 classes of flexible classrooms (including 270 degrees in 6 classes of primary school and 300 degrees in 6 classes of junior high school).

### 1.4 Investment limit

The investment is controlled according to the limit indicator with a unit price of 8,000 yuan/square meter (see the Notice of the Shenzhen Municipal Leading Group Office of the Basic Education Reform and Development on Clarifying the Scope of Investment Standards for the Construction of Compulsory Education Schools for details). The project construction funds are from government investment.

### 1.5 项目建设时序

设计方案需充分考虑学校快速建设的需要，本项目需在 2023 年 9 月份完成施工图设计。

## 二、用地条件

### 2.1 上位规划

本项目位于圳市宝安 202-03&07&T4 号片区，[海上田园风光及周边地区]DY01 地块。

本片区的发展目标：建设成为满足高新企业发展需求和居民生活需求的，环境优美、设施完善、交通便利的生态型综合片区。

本片区的功能定位：深圳西部滨海发展轴上的重要节点；深圳西部生态旅游体验区；大空港新城重要的生活配套区。

本片区的发展策略：在充分对接大空港启动区控制性详细规划核心内容的基础上，加强本片区生态文明建设，将低碳生态理念贯穿到规划、建设、管理全过程；妥善处理本片区土地历史遗留问题，优先落实基础设施，为大空港提供空间保障。

### 1.5 Project construction temporal sequence

The design scheme needs to fully consider the need for rapid construction of the school. The construction drawing design of the Project needs to be completed in September 2023.

## II. Land Use Conditions

### 2.1 Superior planning

The Project is located in Plot DY01[Waterlands Resorts and its neighboring areas] of 202-03&07&T4 area, Bao'an District, Shenzhen.

The development objectives of this area: To build an ecological comprehensive area with picturesque environment, complete facilities and convenient transportation to meet the development needs of high-tech enterprises and the life needs of residents.

The dominant function of this area: an important node on the seaside development axis in western Shenzhen; an ecotourism experience area in western Shenzhen; a key living supporting area of Big Airport New City.

The development strategy of this area: On the basis of fully connecting with the core content of the detailed regulatory planning of the Big Airport New City launch area, strengthen the construction of ecological civilization in this area, and integrate the low-carbon ecological concept into the whole process of planning, construction and management; properly deal with the land problems in this area left over by the history, give priority to the infrastructure implementation, and provide guarantee the guarantee for the Big Airport New City.



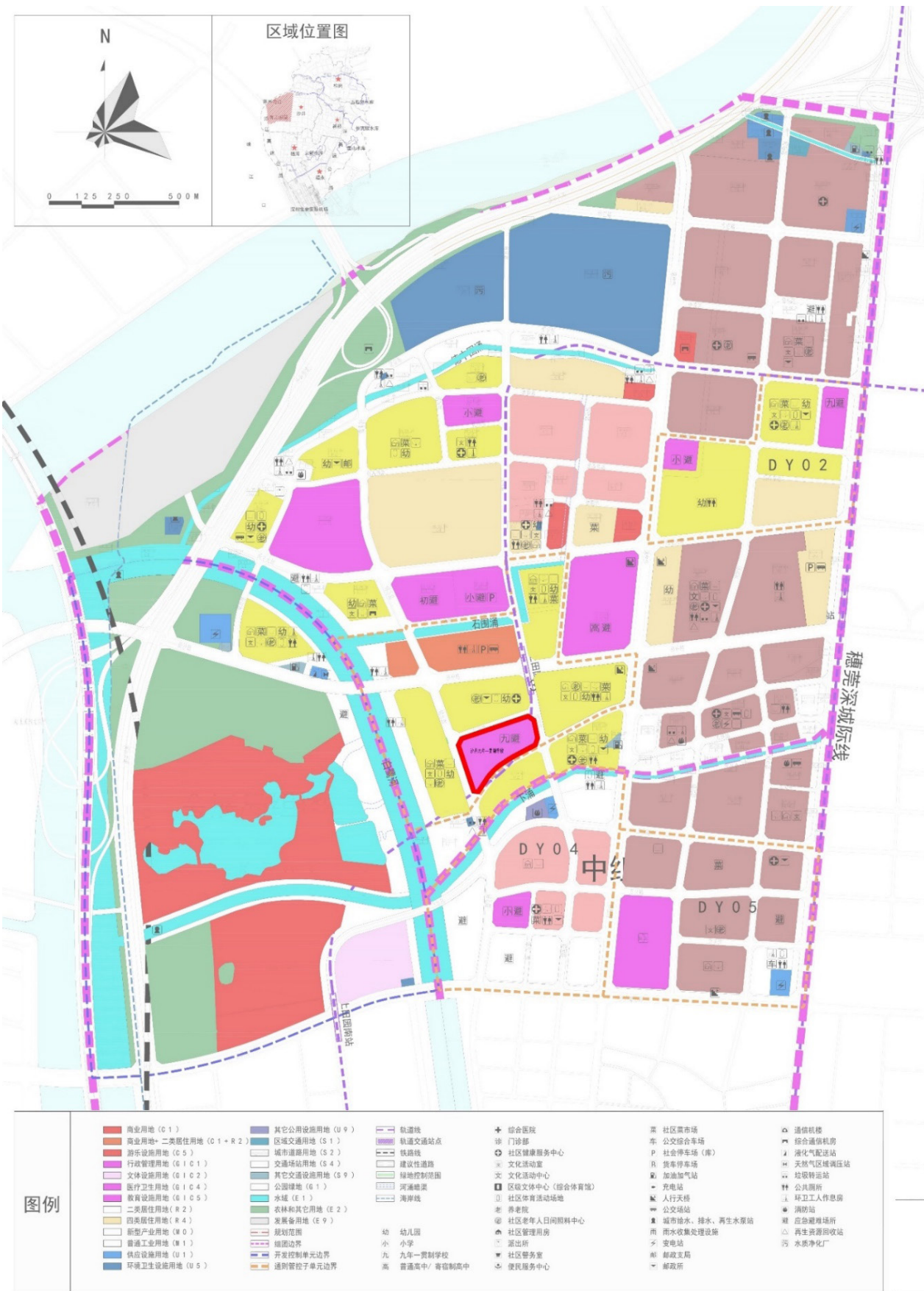


图 4 法定图则  
Figure 4 Statutory plan

## 2.2 现状交通及路网规划

本项目周边区域路网尚未完善，根据上位规划，用地周边四条道路均为规划市政道路（待建），其中西侧为锦乐路，南侧为三间仔路，北侧和东侧分别为为民园路和锦围路。

## 2.2 Current traffic and road network planning

The road network around the Project is not yet completed. According to the superior planning, four roads around the land use are planned municipal roads (to be built), among which Jinle Road is in the west, Sanjianzi Road is in the south, Minyuan Road and Jinwei Road are in the north and east.

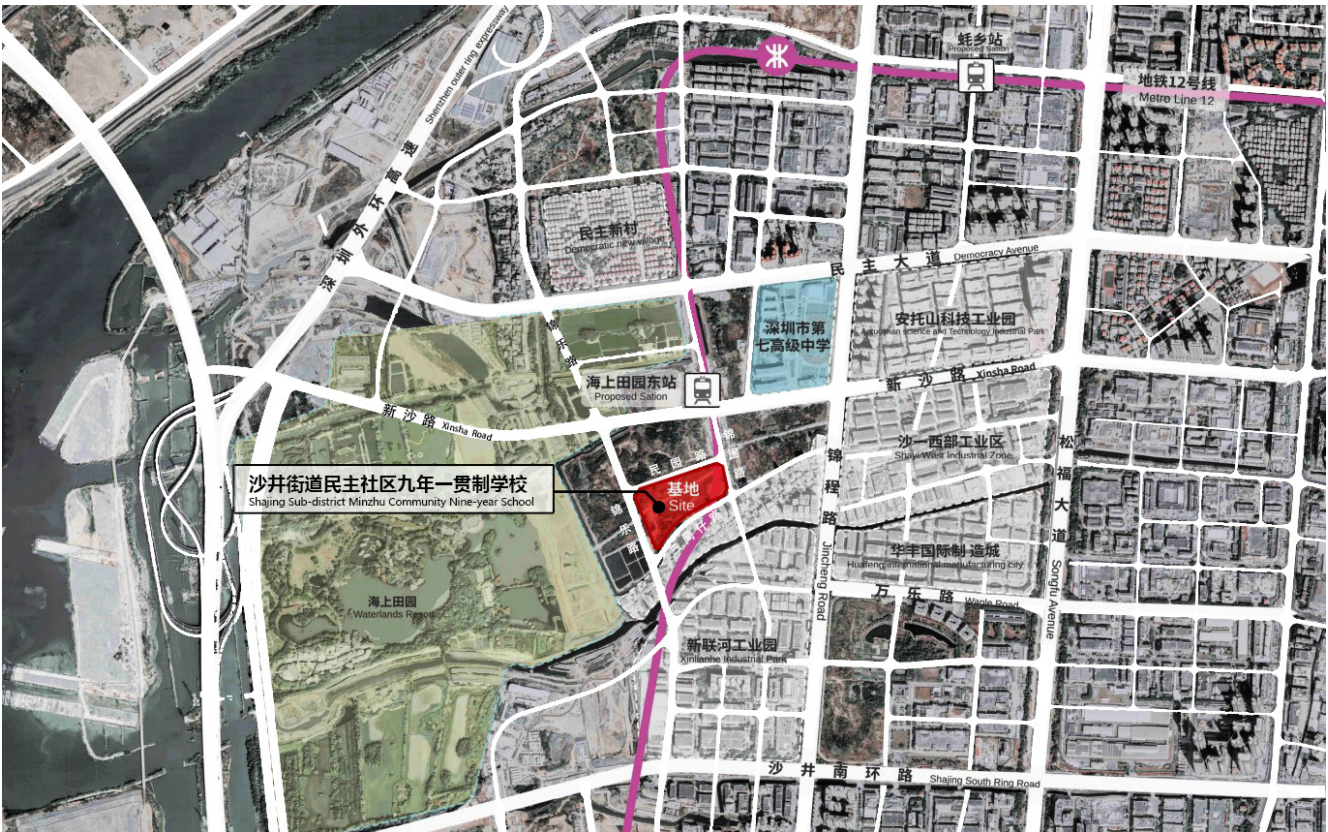


图 5 项目周边规划道路示意图  
Figure 5 Schematic diagram of planned roads around the Project



用地向北还有深圳地铁 12 号线海上田园东站，地铁 12 号线隧道区间从本项目东侧红线内通过。

There is the Waterlands Resort East Station of Shenzhen Metro Line 12 to the north. The running tunnel of Metro Line 12 passes through the red line on the east side of the Project.

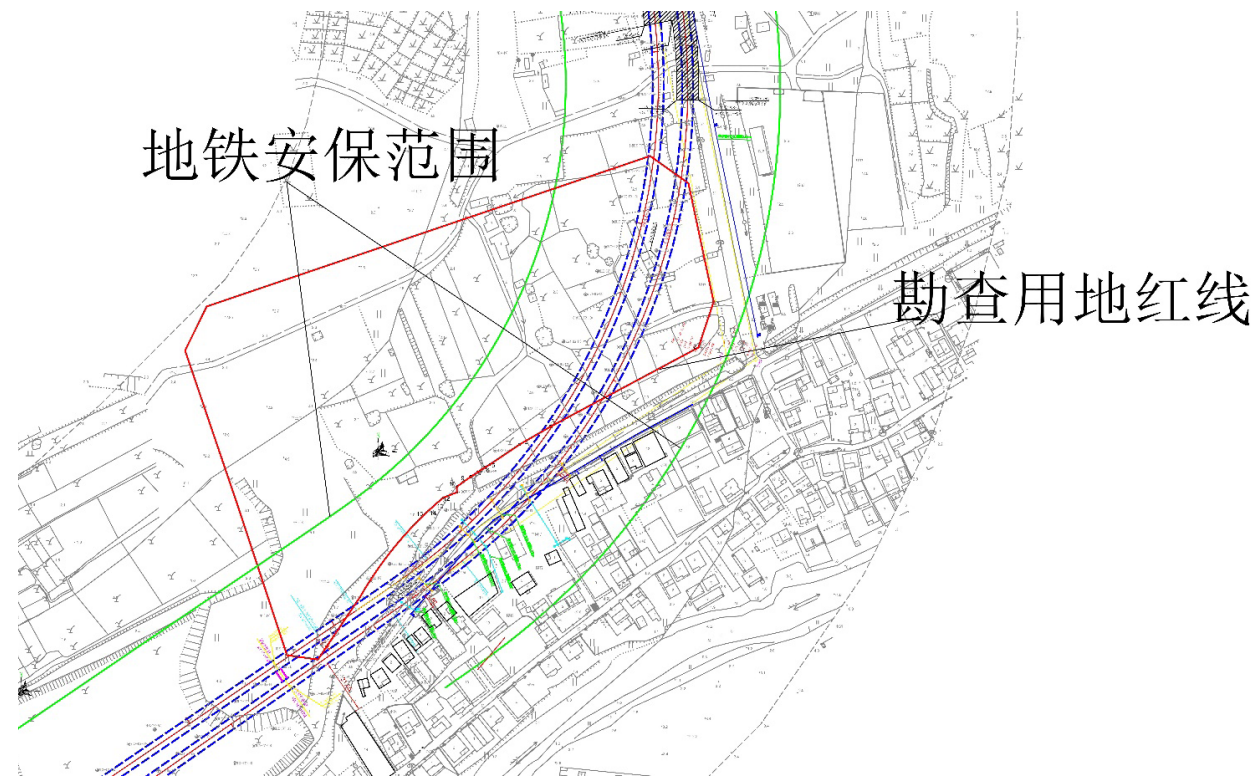


图 6 地铁安保范围示意图  
Figure 6 Schematic diagram of metro security scope

## 2.3 项目用地周边条件

本项目西南角外侧有水塘；场地北侧为空地；东侧为乡村道路和空地；南侧为乡村道路及民房，民房南侧为河涌；西侧为海上田园用地。

## 2.3 Surrounding conditions of Project land use

There is a pond outside the southwest corner of the Project; open space is on the north side of the site; country roads and open space are on the east side; country roads and houses are on the south side and streams are in the south of houses; the Waterlands Resorts stands in the west.

## 2.4 项目用地现状

建设场地原始地貌为冲洪积平原地貌，现状为空地，总体平整。总面积 44008.97 平方米，其中建设用地 43894.37 平方米。

## 2.4 Current status of Project land use

The original landform of the construction site is alluvial-proluvial plain landform. The current site is open space, which is flat as a whole. The Project covers a total area of

44,008.97 square meters, among which the construction land use is 43,894.37 square meters.

用地内部无待拆建筑，有少量苗木。红线内无明显地表水系分布，地表水主要为强降雨时形成的地表径流，沿地势汇入周边排水沟，最终汇入市政管网。在勘探深度范围内未揭露大断裂构造、岩溶之类不良地质条件，现场亦未发现滑坡、崩塌等不良地质现象以及对工程不利的古河道、沟浜、防空洞等不利埋藏物，场地稳定性较好。综合评价场地稳定，适宜作为建筑场地。

No buildings to be demolished are inside the site. There are a few seedlings. There is no obvious distribution of surface water system within the construction red line. The surface water is mainly surface runoff formed during heavy rainfall, flowing into the peripheral drainage ditches along the terrain and finally into the municipal pipe network. Within the prospecting depth scope, no unfavorable geological conditions such as large fault structure and karst were revealed, and no adverse geological phenomena such as landslide and collapse, as well as adverse buried objects such as ancient rivers, ditches, and air raid shelters unfavorable to the Project, are found on the site. The site has good stability. According to comprehensive evaluation, the site is stable and suitable for construction.



图 7 用地现状 -1  
Figure 7 Current land use - 1





图 8 用地现状 -2  
Figure 8 Current land use - 2

## 2.5 气候条件

本项目所在的深圳市属亚热带季风气候区，夏季高温多雨，时有台风；冬季温和湿润。年平均气温 23.0 摄氏度；1 月平均气温为 15.4 摄氏度，7 月平均气温为 28.9 摄氏度；年平均降水量为 1935.8 毫米。春季天气多变，盛行偏东风；夏季长达 6 个多月（平均夏季长 196 天），盛行偏南风；秋冬季节盛行东北季风。

设计时应充分考虑地域性气候特点。运用自然通风、遮阳等手段降低建筑能耗，考虑不同天气条件下建筑的使

## 2.5 Climatic conditions

Shenzhen, where the Project sits, is located in the subtropical monsoon climate region with high temperature and rainy weather in summer and occasional typhoons; and mild and humid weather in winter. The annual average temperature is 23.0 °C ; the average temperature in January is 15.4 °C , and the average temperature in July is 28.9 °C ; the average annual precipitation is 1,935.8 mm. In spring, the weather is volatile with easterly winds prevailing; summer lasts for over six months (196 days on average), with southerly winds prevailing; northeast monsoon prevails in autumn and winter.

Regional climate characteristics should be fully considered during design. Building energy

用状况，创造环保、舒适、便捷的校园环境。因项目用地及周边环境的特殊性，设计时还需要考虑局部微气候对建筑的影响，充分利用场地周边环境优势，体现建筑对周边环境的考量。

## 2.6 设计依据

- 1)《深圳市城市规划标准与准则》（2019 版）
- 2)《深圳市建筑设计规则》（2019）
- 3)《深圳市普通中小学校建设标准指引》（2016）
- 4)《中小学校设计规范》（GB 50099-2011）
- 5)《宝安区普通中小学校建设标准提升指引（试行）》（2020 送审稿）
- 6)《深圳市义务教育学校设施设备配备标准指引》深教函〔2020〕9 号
- 7)《中小学校项目规范》（SJG120-2022）

consumption is reduced by the means of natural ventilation and shading. Considering the use of buildings under different weather conditions, an environmentally-friendly, comfortable and convenient campus environment will be created. Due to the particularity of the Project land and the surrounding environment, the impact of local microclimate on the building should also be considered in the design, and the advantages of the surrounding environment of the site should be fully utilized to reflect the consideration of the building to the surrounding environment.

## 2.6 Design basis

- 1)Shenzhen Urban Planning Standards and Guidelines (2019 version)
- 2)Shenzhen Architectural Design Rules (2019)
- 3)Guidelines for the Construction Standard of Ordinary Primary and Secondary Schools in Shenzhen (2016)
- 4)Code for Design of Primary and Secondary Schools (GB 50099-2011)
- 5)Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (Tentative) (2020 draft for review)
- 6)Guidelines for Compulsory Education School Equipment and Facility Standard in Shenzhen SJH [2020] No. 9
- 7)Code for Projects of Primary and Secondary Schools (SJG120-2022)



8)《关于明确义务教育学校建设投资标准涵盖范围的通知》	8)Notice on Clarifying Investment Standards Scope for Construction of Compulsory Education Schools
9)《绿色校园设计标准》（SJG97-2021）	9)Green Campus Design Standard (SJG97-2021)
10)《政府投资公共建筑工程 BIM 实施指引》（SJG78-2020）	10) Guidelines for Implementation of BIM for Government-Invested Public Building Projects (SJG78-2020)
11)《无障碍设计标准》深建标【2021】19 号	11) Barrier-Free Design Standard (SJB [2021] No. 19)
12)《建筑设计防火规范》(GB 50016-2014 (2018 年版))	12) Code for Fire Protection Design of Buildings (GB 50016-2014 (2018 version))
13)《建筑工程设计文件编制深度规定》（2016）	13) Regulations on Preparation Depth of Architectural Engineering Design Documents (2016)
14)《深圳市房屋建筑工程海绵设施设计规程》（SJG 38-2017）	14) Design Specification for Sponge Facilities in Shenzhen Building Construction Engineering (SJG 38-2017)
15)《车库建筑设计规范》（JGJ 100-2015）	15) Code for Design of Garage Buildings (JGJ 100-2015)
16)《汽车库、修车库、停车场设计防火规范》（GB 50067-2014）	16) Code for Fire Protection Design of Garage, Repair Shop and Parking Lot (GB50067-2014)
17)《深圳市 A 级餐饮单位建设标准》（2020）	17) Standard for Construction of Class A Catering Units in Shenzhen (2020)
18) 深圳市《绿色建筑评价标准》（SJG 47-2018）	18) Shenzhen Green Building Evaluation Standard (SJG 47-2018)
19)《深圳房屋建筑面积测绘技术规范》（SZJG 22-2015）	19) Shenzhen Technical Code for Floor Area Surveying and Mapping (SZJG 22-2015)

20)《建筑节能与可再生能源利用通用规范》（GB 55015-2021）	20) General Code for Building Energy Conservation and Renewable Energy Utilization (GB 55015-2021)
21)《工程结构通用规范》（GB 55001-2021）等相关结构规范	21) General Code for Engineering Structures (GB 55001-2021) and other relevant structural codes
22)《建筑抗震设计规范》（GB 55011-2020）	22) Code for Seismic Design of Buildings (GB 55011-2020)
23)《宝安区立体绿化实施细则》	23) Implementation Detailed Rules for Three-Dimensional Greening in Bao'an District
国标排水、电气通用规范	GB general codes for drainage and electricity
国家及地方其他相关法律、法规与规范要求	Other relevant national and local laws, regulations and codes
如有深圳市或宝安区提出新的标准要求，按有关标准执行	If Shenzhen City or Bao'an District puts forward new standard requirements, relevant standards shall prevail

### 三、设计目标

• 学校建设以全面贯彻义务教育课程为核心，以人文、科技、低碳、绿色生态为导向，建成具有标杆引领性、现代化的公办九年一贯制学校。

### III. Design Objectives

• Centered on comprehensive implementation of compulsory education curriculum and guided by humanistic culture, sci-tech, low-carbon idea, and green ecology, the school construction aims at building a pace-setting and modern public nine-year consistent school.



• 校园设计应能符合师生对场所设计的需求，能满足城市与环境的发展变化、实践双碳战略，体现人文理念和创新精神，探索面向未来的深圳特色学校建设模式。

• Campus design should meet the needs of teachers and students for site design, fit the urban and environmental development changes that implement dual carbon strategy, reflect humanistic concept and innovative spirit, and explore the future-oriented school construction model with Shenzhen's characteristics.

四、设计原则

IV. Design Principles

4.1 需求为本、功能优先、彰显品质的原则。设计方案须符合师生教与学的需求，在满足使用功能的前提下，紧密结合教学模式，合理组织各功能板块空间关系创造充满活力的空间氛围，彰显校园空间品质与特色。

4.1 Principle of demand-oriented, function priority and quality demonstration. The design scheme must meet the needs of teachers and students for teaching and learning. On the premise of meeting the use function, it should closely combine the teaching mode, reasonably organize the spatial relationship of each functional block, create a dynamic space atmosphere, and highlight the quality and characteristics of the campus space.

4.2 环境协调原则。充分考虑深圳的地域气候特点，结合现状与规划条件，与城市环境以及自然环境协调，塑造新型校园建筑形态。

4.2 Environmental coordination principle. Fully consider regional climate characteristics in Shenzhen, combine current situation and planning condition, coordinate with urban environment and natural environment, and shape new campus architectural form.

4.3 可实施性原则。整体设计方案需要在具备可实施性的前提下进行创新，包括技术可行性、经济性、施工便利性等多方面。

4.3 Implementability principle. Overall design scheme needs to be innovated premised on implementability, including technical feasibility, economy, construction convenience and other aspects.

4.4 后期运营管理费用合理控制的原则。在建筑设计、园林、室内的材料选择以及设备设施的选型上，要考虑经久耐用、低成本、少维护、节能等方面降低后期的运营管理费用。

4.4 Principle of reasonable control over subsequent operating and management expenses. Regarding architectural design, garden, indoor material selection and equipment and facilities selection, consider durability, low cost, low maintenance, energy conservation and other aspects to reduce subsequent operating and management expenses.

4.5 限额设计，投资控制原则。项目从方案开始即应从实际出发，确保本项目最终的投资控制不突破工程概算批复的金额。

4.5 Principle of quota design and investment control. The Project should proceed based on reality from the scheme's beginning to ensure that the Project's final investment is controlled within approved amount of the budgetary estimate.

五、设计内容

V. Design Content

5.1 主要控制指标

5.1Planning control indicators

项目名称 Project name	沙井街道民主社区九年一贯制学校新建工程 New Project of Shajing Sub-district Minzhu Community Nine-year Consistent School
建设地点 Construction site	宝安区沙井街道民主社区 ZB-BA-2018-022 号地块范围内 Within Plot ZB-BA-2018-022 of Minzhu Community, Shajing Sub-district, Bao'an District
用地总面积 Total land use area	44008.97 平方米 44,008.97 square meters
总建筑面积 Gross floor area	不大于 81324 平方米，（参照《深圳市义务教育学校设备设施配备标准指引》和《中小学校项目规范》，结合《宝标》，满足相应标准要求） ≤ 81,324 square meters, (referring to Guidelines for Compulsory Education School Equipment and Facility Standard in Shenzhen and Code for Projects of Primary and Secondary Schools, in combination with the Bao'an Standards, to meet corresponding standard requirements)
建筑高度 Building height	≤ 50 米 ≤ 50m



建筑退线 Building setback	满足《深标》8.4.1 条建筑退线规定 As per provisions of Article 8.4.1 in the Shenzhen Standards on building setback
建筑间距 Building interval	按《宝标》控制 Control as per the Bao'an Standards
建筑覆盖率 Building coverage rate	满足《宝标》、《深标》相应标准及规范性文件 Meet the corresponding standards and normative documents of the Bao'an Standards and the Shenzhen Standards
绿化覆盖率 Green coverage rate	≥ 30%
绿色建筑 Green building	应达到《绿色建筑评价标准》GB/T 50378 评价等级二星级 Reach evaluation grade of two-star in Green Building Evaluation Standard (GB/T 50378)
停车位 Parking spaces	教职工车位：278； Faculty parking spaces: 278; 校车车位：小学、中学各不少于 4 个 School bus parking spaces: ≥ 4 for primary school and secondary school respectively
<div>注： Notes:</div> <div>① 与“总建筑面积”和“规定建筑面积”有关的建筑技术经济指标计算方式及相关规定详见《深圳市建筑设计规则》； ① For calculation method and relevant regulations of building technical and economic indicators related to "gross floor area" and "specified floor area", please refer to Shenzhen Architectural Design Rules;</div> <div>② 项目建设时可结合发改批复意见、校园规划建设方案和场地条件对规划设计条件（包括用地范围、建设规模、分项指标、配套设施内容等）等进行适当优化和微调，不视为对已批准规划进行调整； ② During the Project's construction, the planning and design conditions (including land use scope, construction scale, sub-indexes, supporting facilities content, etc.) may be properly optimized and fine-tuned in combination with approval comments of the Development and Reform Bureau, campus planning and construction scheme and site conditions, and that's not deemed an adjustment to the approved planning;</div> <div>③ 上述“深标”为《深圳市城市规划标准与准则》（2019），“宝标”为《宝安区普通中小学校建设标准提升指引（试行）》（2020 送审稿）。 ③ The aforementioned Shenzhen Standards refers to Shenzhen Urban Planning Standards and Guidelines (2019), and the Bao' an Standards refers to Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (Tentative) (2020 draft for review).</div>	

5.2 规划设计要求

民主学校作为宝安区重点建设新校，在总体规划设计时，应统筹考虑如下几点要求：

1、规划布局

- 规划布局合理紧凑，集约高效利用土地。
- 探索性的新型运动场地，充分考虑室内外运动场地的设置，按规范布置环形跑道（其中含不小于 100 米的直跑道及缓冲区）。鼓励进行创新性的探索。

2、功能和流线

- 功能布局：  
宜动静分区、小学部和初中部分区、主要教学与专业教学分区等；考虑学校实际使用及安全管理，建议同一个年级在同个楼层，楼层包含相应机动教室及年级教师办公室；部分设施与社会共享（主要为运动场地）
- 人员流线：  
需考虑校外至校内流线、小学内部流线、初中内部流线、教师行政流线、垂直交通流线等；  
  
需考虑外部交通组织及出入口，满足教职工及学生步行、家长车行接送、教职工车行、后勤货运的交通需求。

5.2 Planning and design requirements

As a key new school in Bao'an District, the following requirements should be considered in the overall planning and design of Minzhu School:

1. Planning layout

- The planning layout should be reasonable and compact with intensive and efficient land use.
- For exploratory new sports field, setup of indoor and outdoor sports grounds should be fully considered, with circular running track (including a straight running track of ≥ 100 meters and buffer zone) laid out as per the specifications. Innovative exploration is encouraged.

2. Function and flow lines

- Functional layout:  
It is recommended to separate dynamic and static zones, primary and junior high school zones, main teaching and specialized teaching zones, etc.; considering the school's actual use and safety management, it is recommended to set the same grade on the same floor, which should be equipped with corresponding flexible classroom and teacher's office of that grade; some facilities are shared with the society (mainly sports venues)
- Personnel flow line:  
The flow line from outside to inside the school, flow line inside the primary school, flow line inside the junior high school, administrative flow line of teachers, vertical traffic flow line, etc. need to be considered;  
  
External traffic organization and entrance/exit should be considered to meet transportation needs of teachers' and students' walking, parents' pick-up/drive-off vehicle lane, teachers' vehicle lane and logistics freight transport.



• 关于接送区：

既给家长提供便利，又要避免给学校带来较大影响。出入口的设计时需适当结合项目特点综合考虑接送和交通组织，充分考虑接送流线的组织及等候空间的设置，必要时可结合地下停车场进行设置。内部交通应做到人车分流。

• 流线分析：

需提供流线分析图及相应说明。

### 3、群体连接

建筑群体的连接应高效、便捷。考虑深圳气候条件（多雨天和阳光强烈）及使用方便，鼓励在建筑底层及其他楼层公共区域设置架空活动空间，并通过连廊连接，满足师生校内全天候通行的需求。

### 4、多样空间

应为师生营造随时随地、轻松愉悦的环境氛围，创造更具灵活性的校园空间。充分利用建筑室内外空间，提供丰富多样的交流场所，希冀以建筑空间的创新探索教育模式的改革。

• Regarding pick-up/drive-off area:

It offers convenience to parents without much impact on the school. The design of entrance/exit should, in appropriate combination with the Project's characteristics, give comprehensive consideration to pick-up/drive-off and traffic organization, take into account pick-up/drive-off flow line organization and waiting area setup, and the setup may be carried out in combination with underground parking garage if necessary. Internal traffic should ensure separation between pedestrian and vehicle.

• Flow line analysis:

Flow line analysis diagram and corresponding description should be provided.

### 3. Complex connection

Architectural complex connection should be efficient and convenient. Considering climate conditions (frequent rainy days and intense sunlight) in Shenzhen and use convenience, it is encouraged to set up overhead activity space at ground floors and public areas of other floors, and connect them through corridors to meet the all-weather passage demand of teachers and students in the school.

### 4.Diverse space

A relaxing and pleasant environment anytime and anywhere should be created for teachers and students, along with a more flexible campus space. Make full use of indoor and outdoor architectural space and provide various communication places in hope of exploring reform of educational model with the innovation of architectural space.

## 5.3 建筑设计要求

### 1、主要设计要求

• 设计应从学生及教职员工实际使用需求出发，以人为本，提供人性化的校园环境。

• 传承历史，通过空间设计融合所在片区的历史文化内涵。

• 建筑形象及风貌应和谐统一，与周边环境相协调，有鲜明的校园特色，符合校园的学习氛围。

• 建筑设计应考虑无障碍使用的要求。主要空间应满足无障碍通行的需求，配置数量合理的无障碍卫生间。办公用房应配置母婴室。

• 建筑构造需考虑管线及空调、机电设备的安装与维护需求。一方面考虑其在立面或室内空间美观度，另一方面方便日后的维护与扩容。

• 考虑教师厕所与学生不共用、厕所指标可适度提升，解决女生排队现象。

### 2、全方位互联互通的“智慧校园”

智慧校园建设应遵循安全性、超前性与实用性相结合和具备可扩充、易维护为原则，通过信息的交互，最大限度地共享资源，实现教学管理智能化，办公管理自动化以及学生服务便捷化的要求。主要建设的智能化系统应包括：信息化应用系统（各类应用平台）、智能化集成系统、信息设施系统（信息接入系统、综合布线系统、

## 5.3 Architectural design requirements

### 1. Main design requirements

• The design should be based on actual use needs of students and faculty and oriented toward people to provide a user-friendly campus environment.

• Inherit history and integrate the regional historical and cultural connotations through space design.

• Architectural image and style should be harmoniously unified, coordinate with surrounding environment, demonstrate distinctive campus characteristics, and conform to the campus learning atmosphere.

• Architectural design should consider the requirements of barrier-free use. Main space should meet the demand of barrier-free passage and be equipped with a reasonable number of barrier-free washrooms. The office room should be equipped with mother and baby room.

• The installation and maintenance requirements of pipelines, air conditioners and electromechanical equipment shall be considered in the building construction. given the aesthetics of its facade or indoor space on the one hand, and given the convenience of future maintenance and expansion on the other.

• Considering that teachers have exclusive washrooms, washroom indicators may be moderately improved to solve the queuing problem faced by female students.

### 2."Smart campus" with all-round connectivity

The construction of smart campus should follow the principle of combining safety, advancement and practicality, and should be expandable and easy to maintain. Through information interaction, resources should be maximally shared to realize requirements of intelligentized teaching management, automated office management and convenient student service.



移动通信室内信号覆盖系统、用户电话交换系统、无线对讲系统、信息网络系统、有线电视系统、公共广播系统、会议系统、信息导引发布系统）、建筑设备管理系统（建筑设备监控系统、建筑能效监管系统）、安全技术防范系统（入侵报警系统、视频安防监控系统、出入口控制系统、电子巡查系统、停车场管理系统）、安全防范综合管理平台系统和机房工程等。

### 3、装配式建筑建设要求

校园建筑应结合投资、建设周期、使用要求等因素因地制宜地推行装配式技术。其设计应符合国家及地方的有关规定。根据学校外立面和大空间功能使用特点，用工业化的设计理念，选择建筑适合的部位进行工厂的预制，提高整体工程效率和工程成本。主要装配式技术措施包括主体结构工程，围护墙和内隔墙，装修和机电，信息化应用。

### 4、BIM 技术应用

运用 BIM 信息化技术对项目的设计、生产、施工及运维进行统筹管理。在设计各阶段进行全面梳理，逐步完善各专业 BIM 模型，确定构件、机电管线的原则。报建各阶段需提供 BIM 文件。

Main intelligentized systems to be constructed should include: Informatization application system (various application platforms), intelligentized integrated system, information facilities system (information access system, generic cabling system, mobile communication indoor signal coverage system, user telephone exchange system, wireless intercom system, information network system, cable television system, public broadcast system, conference system, information guidance and release system), architectural equipment management system (architectural equipment monitoring system, architectural energy efficiency monitoring system), security technology prevention system (intrusion alarm system, video security monitoring system, access control system, electronic patrol system, parking lot management system), comprehensive security management platform system and computer room engineering, etc.

### 3. Construction requirements for prefabricated buildings

Campus buildings should promote prefabricated technology based on local conditions in combination with investment, construction cycle, use requirements and other factors. Its design should comply with relevant national and local regulations. According to use characteristics of the school facade and large space functions, with the industrial design concept, select appropriate parts of the buildings for factory prefabrication to improve overall engineering efficiency and cost efficiency. Main prefabricated technical measures include major structure engineering, enclosure wall and internal parting wall, decoration and electromechanics, and informatization application.

### 4. Application of BIM technology

The BIM informatization technology is adopted to manage the design, production, construction and operation/maintenance of the Project overall, as well as comprehensively sort out design stages, gradually improve BIM of each discipline, and determine principles

of components and electromechanical pipelines. BIM documents should be provided at each stage of construction application.

### 5.4 Landscape design requirements

- 注重建筑与景观的互动与融合。景观设计需考虑兼顾一定的使用需求，可结合学生活动空间进行设计。
- 打造生态、友好的街道空间与城市界面，促进校园文化与社会环境共融共享。
- 采用复层绿化、屋顶绿化、垂直绿化、植物花池等设计手法，建设花园式学校，体现学校特色与文化品味。
- 校园景观、绿地、铺装等的设计应与校园海绵设施结合设计。校园海绵设施设计应符合附件《深圳市房屋建筑工程海绵设施设计规程》（SJG 38-2017）的规定。
- Focus on interaction and integration between architecture and landscape. The landscape design should take into account certain use needs, and may be carried out in combination with student activity space.
- Create an eco-friendly sub-district space and urban interface to promote the integration and sharing of campus culture and community environment.
- Adopt design methods of multi-storied planting, roof greening, vertical greening and plant flower pond to build a garden-style school, reflecting the school's characteristics and cultural taste.
- The design of campus landscape, green space and pavement should be combined with the design of campus sponge facilities. The design of campus sponge facilities should comply with provisions of the appendix Design Specification for Sponge Facilities in Shenzhen Building Construction Engineering (SJG 38-2017).

### 5.5 建筑功能及面积指标

本节所列举的功能及面积指标仅供参考。设计时可根据自身方案特点合理调整，并进行相关可行性研究，使其满足 81 班九年一贯制学校的使用需求与政府相关部门的审批要求。另外，实施过程中如有新的标准颁布或者新的审批结果，则按新的依据执行。

### 5.5 Architectural function and area indicators

The function and area indicators listed in this section are for reference only. Reasonable adjustments may be done during the design according to characteristics of its own scheme, with relevant feasibility study carried out to meet the use needs of the 81-class nine-year consistent school and approval requirements of relevant government departments. In addition, in case of new standards issued or new approval results during the implementation process, the new basis shall prevail.



项目综合考虑“拓展活动空间、提高土地利用率、足额配建教师宿舍、高值配置运动场地”等原则，鼓励增加公共教学用房、体育活动场地等空间的面积配比，提升校园品质。

本节列举的“使用面积”以《深圳市普通中小学校建设标准指引》（2016）和中《宝安区普通中小学建设标准提升指引》（深宝教〔2020〕278号）规定的数值为主要依据，“建筑面积”是以使用面积及使用面积系数K进行估算的结果。

未列举的功能面积要求及技术经济指标以《深圳市普通中小学校建设标准指引》（2016）和中《宝安区普通中小学建设标准提升指引》（深宝教〔2020〕278号）以及其余相关法律、法规及规范为依据。

The Project comprehensively considers the principles of "expanding activity space, improving land use rate, building teachers' dormitories with adequate capacity, and allocating sports venues with high value," and encourages the increase of area ratio of public teaching rooms, sports venues and other spaces to improve campus quality.

The "usable area" listed in this section is mainly based on values specified in the Guidelines for the Construction Standard of Ordinary Primary and Secondary Schools in Shenzhen (2016) and Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (SBJ [2020] No. 278). The "floor area" is the estimated result based on usable area and usable area coefficient K.

The non-listed functional area requirements and technical and economic indicators are based on Guidelines for the Construction Standard of Ordinary Primary and Secondary Schools in Shenzhen (2016) and Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (SBJ [2020] No. 278) and other relevant laws, regulations and specifications.

5.5.1 主要经济指标

5.5.1 Main economic indicators

功能类别 Functional category	功能用房 Functional rooms	建筑面积（平方米） Floor area (square meters)
必备校舍用房 Compulsory school buildings	教学及辅助用房 Teaching and auxiliary rooms	38753
	办公用房 Office rooms	4358
	生活服务用房 Living service rooms	8400
	合计 Total	51511
	生均建筑面积：13.63 平方米 Average floor area per student: 13.63 square meters	
选配校舍用房 Optional school buildings	教职工宿舍 Faculty dormitory	6510
	多功能厅 Multi-functional hall	1733
	微格教室 Microteaching classroom	364
	架空层、风雨连廊 Overhead floor, wind-and rain corridor	7560
	地下车库 Underground garage	12510
	设备用房及其他（含特色教育用房） Equipment room and others (including characteristic education room)	1136
	合计 Total	29813
总计 Total		81324
活动场所 Event venues	深圳学校的用地面积很小，难以设置足够的运动场地，需多考虑活动场地，利于满足体育课和课后活动需求。 The land use of Shenzhen school covers an excessively small area, thus it is difficult to set up enough space for sports. More event venues should be considered to meet the demands of P. E. lessons and after-school activities.	



1、必配校舍用房的建筑面积依据《宝安区普通中小学校建设标准提升指引（试行）》（2020 年）（以下简称《宝标》）中列举的使用面积及使用面积系数 K 进行估算。

2、教职工编制测算说明：根据《深圳市普通中小学校建设标准指引》（2016）（以下简称《深标》）的要求，小学教职工与学生比为 1:19，初中教职工与学生比为 1:13.5。九年制学校小学部的教师编制按教职工编制 92% 计算，九年制初中部、初级中学的教师编制按教职工编制 89% 计算。经测算，本项目 81 班九年一贯制学校 1680 学位所需教职工人数约为 232 人。

3、教职工宿舍面积测算说明：教职工宿舍面积依据《宝标》按教职工在编人数的 80% 建设教师宿舍，且单间宿舍建筑面积按 35 m<sup>2</sup> 取值。

4、多功能厅计算：《宝标》为满足一个年级全员（含机动班级）+ 部分辅助教师活动的需要，人均 2 m<sup>2</sup>，使用面积为 1300 m<sup>2</sup>。

5、厕所指标：根据需求调研，在《宝标》数据的基础上提升了 30% 至 2262 m<sup>2</sup>，主要解决女生排队现象，无障碍厕间和教师厕所不与学生共用等问题。

6、地下车库面积测算说明：根据《宝标》，应配置不少于教职工编制总人数 1.0 倍的机动车停车位，并可根据实际需求及研究提出 1.2~1.5 倍配建方案。暂按 1.2 倍配置，按照 45 平方米 / 人（辆）进行估算。

1. The floor area of the compulsory school buildings is estimated according to the usable area and the usable area coefficient K listed in the Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (Tentative) (2020) (hereinafter referred to as the "Bao'an Standards").

2. Calculation explanations on faculty staffing: According to the requirements of the Guidelines for the Construction Standard of Ordinary Primary and Secondary Schools in Shenzhen (2016) (hereinafter referred to as the "Shenzhen Standards"), the ratio of primary school staff to students is 1:19, and the ratio of junior high school staff to students is 1:13.5. The number of teachers in the primary school department of a nine-year school is calculated by 92% of the faculty staffing, and the number of teachers in the junior middle school department and that of teachers in junior middle school is calculated by 89% of the faculty staffing. It is estimated that there are 232 teaching staff required for the 1,680-degree-in-81-class nine-year consistent school in this Project.

3. Calculation explanations on faculty dormitory area: The area of faculty dormitory is constructed as 80% of the number of teaching staff stipulated in Bao'an Standards, with the floor area of a single dormitory of 35 m<sup>2</sup>.

4. Multi-functional hall calculation: In accordance with Bao'an Standards and to meet the needs of holding activities for the entire grade (including flexible classes) + some auxiliary teaching activities, it should be set as 2 m<sup>2</sup> per capita, with a usable area of 1,300 m<sup>2</sup>.

5. Washroom indicators: According to the demand survey, the area is added by 30% to 2, 262 m<sup>2</sup> on the basis of data stipulated in Bao'an Standards, mainly solving the problems such as long queue in women's washrooms, and barrier-free washrooms and teachers' washrooms not sharing with students.

6. Calculation explanations on underground garage area: According to the Bao'an Standards, motor vehicle parking spaces should be equipped no less than 1.0 times the total number of faculty staffing. Based on the actual demands and research, a supporting plan for 1.2~1.5 times of

parking spaces could be proposed. The underground garage area temporarily adopts 1.2 times and is estimated at 45 square meters per person (vehicle).

5.5.2 教学及辅助用房

5.5.2 Teaching and auxiliary rooms

用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
教室 Classrooms					
小学普通教室 Ordinary classroom in primary school	80	54	6615	0.55	12027
中学普通教室 Ordinary classroom in secondary school	85	27			
机动教室 Flexible classroom	85	6	990		1800
	80	6			
教室 合计 Classrooms in total					13827
专用教室 Special classrooms					
科学教室 Science classroom	100	9	900	0.55	1636
科学教室辅助用房 Auxiliary room for science classroom	48	5	240		436
理化生实验室 Physical, chemical and biological laboratory	100	9	900		1636
探究实验室 Exploratory laboratory	150	2	300		545
准备室 Preparation room	24	5	120		218
仪器室 Instrument room	24	2	48		87



用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
药品室（生化） Medicine room (biochemistry)	24	2	48	0.55	87
音乐教室 Music classroom			900		1636
器乐排练室 Instrumental music rehearsal classroom	100	2	200		364
音乐器材室 Musical instrument room	24	2	48		87
舞蹈教室 Dance classroom	157	6	942		1713
舞蹈更衣室 Dance changing room	24	12	288		524
美术教室 Art classroom			900		1636
美术器材室 Art equipment room	24	5	120		218
史地教室 History and geography classroom	100	2	200		364
计算机（语言）教室 Computer (language) classroom	100	10	1000		1818
计算机（语言）教室辅助用房 Auxiliary room for computer (language) classroom	24	5	120		218
劳动技术教室 Labor skill classroom	100	6	600		1091
劳动技术教室辅助用房 Auxiliary room for labor skill classroom	24	3	72		131
专用教室 合计 Special classrooms in total					14445
公共教学用房 Public teaching rooms					

用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
合班教室 Combined-teaching classroom	150	9	1350	0.55	2455
图书馆 Library	—				1680
社团活动室 Club activity room	40	12	480		873
心理咨询室 Psychological counseling room	—	—	120		218
德育展览室（校史馆） Moral education exhibition room (School History Museum)	—	—	200		364
体质测试室 Physical fitness test room	50	1	50		91
体育馆（含器材室） Stadium (including apparatus room)	—	—	3600	0.75	4800
公共教学用房 合计 Public teaching rooms in total					10481
教学及辅助用房 合计 Teaching and auxiliary rooms in total					38753

1、普通教室、机动教室

考虑学校实际使用及安全管理，建议同一个年级在同个楼层，楼层包含相应机动教室及年级教师办公室等。

2、专用教室

需根据中小学设计规范等标准要求设置，各种教学辅助用房应按照规定、标准设置。

1. Ordinary classroom and flexible classroom

Considering the actual use and safety management of the school, it is recommended to set up classrooms of the same grade on the same floor, which includes the corresponding flexible classroom and teacher's office of that grade.

2. Special classroom

It should be set up according to the design specifications of primary and secondary schools and other standards, and various auxiliary teaching rooms should be set up according to the specifications and standards.



4、多功能厅

多功能厅 1300 m²，满足一个年级全员（含机动班级）及部分辅助教师活动的使用需要。根据《深圳市义务教育学校设备设施配备标准指引》等相关标准，学校的多功能报告厅需要满足进行学术报告、节目演出、电影放映及现场录播等活动的需求。

5、合班教室

- 当合班教室兼用于唱游课时，室内不应设置固定课桌椅，并应附设课桌椅存放空间。
- 宜附设 1 间辅助用房，储存常用教学器材。

6、体育场地

根据《深圳市城市规划标准与准则》（2019）及《深圳市普通中小学校建设标准指引》（2016），体育场地配备标准如下：

功能 Function	数量 Quantity
300 米 6 道环形跑道 300 m 6-lane circular running track	1-2 处（有条件的话中小学分设） 1-2 (Set the running track in primary and secondary schools respectively if conditions permit)
室内体育馆 Indoor stadium	1 座 1
篮球场 Basketball courts	3-5 个 3-5
排球场（兼羽毛球场） Volleyball courts (as well as badminton courts)	2~3 个 2-3
器械场地 Apparatus site	200~270 平方米 200~270 square meters

4. Multi-function hall

The 1,300 m² multi-functional hall should meet the needs of holding activities for the entire grade (including flexible classes) and some auxiliary teaching activities. According to the relevant standards such as the Standard Guide for Equipment and Facilities of Shenzhen Compulsory Education Schools, the multi-function lecture hall of the school needs to meet the needs of academic reports, program performances, film screening and live recording and broadcasting.

5. Combined-teaching classroom

- As the combined-teaching classroom is also used for singing game class, no fixed desks and chairs should be set here, and the storage space for desks and chairs should be attached.
- One auxiliary room should be attached to store common teaching equipment.

6. Sports ground

According to the Shenzhen Urban Planning Standards and Guidelines (2019) and the Guidelines for the Guidelines for the Construction Standard of Ordinary Primary and Secondary Schools in Shenzhen (2016), the standards for sports ground are as follows:

体育场地应考虑以下要求及建议：

- 跑道：初中及九年一贯制学校须设置不少于 6 跑道的百米直道（100M 直跑道 +10M 缓冲区）。
- 体育活动场地：可适度提高相应面积指标，尽可能多地设置体育活动场地，有选择余地时，优先考虑篮球场设置。
- 在深圳的气候条件下，半室外、自然通风的风雨操场通常比全封闭的室内体育馆利用率更高，维护成本低，鼓励利用建筑底层，尽可能多地设置风雨操场。

The following requirements and recommendations shall be considered for the stadium site:

- Running track: The junior high school and the nine-year consistent school must set up a 100-meter straight track (100m straight track+10m buffer zone) with no less than 6 running tracks.
- Sports event venues: The corresponding area indicator could be appropriately increased, and more sports event venues should be set. When there are options, the setting of basketball courts should be given priority.
- Under the climate conditions of Shenzhen, compared with fully enclosed indoor stadium, the wind-and-rain playground that is semi-outdoor and naturally ventilated usually has higher utilization rate, lower maintenance cost. It is encouraged to set up more wind-and-rain playgrounds on the ground floors of the buildings.



5.5.3 办公用房

5.5.3 Office rooms

用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
教师办公室 Teacher's office	—	—	1810	0.65	2785
行政办公室 Administrative office	—	—	543		835
广播室 Broadcasting room	30	1	30		46
卫生保健室 Healthcare room	—	—	80		123
团队室 Group activity room	40	2	80		123
会议接待室 Conference reception room	100	2	200		308
网络控制室 Network control room	30	1	30		46
安防控制室 Security control room	30	2	60		92
办公用房 合计 Office rooms in total					4358

1、教师办公室

- 应分层或分年级靠近班级就近设置，以便教学管理；同时其位置应有一定的独立性，避免学生课间活动时的干扰。
- 考虑学校实际使用及安全管理，建议同一个年级在同一个楼层，楼层包含相应机动教室及年级教师办公室。

1. Teacher's office

- The office should be set up in different floors or in accordance with grades close to the classes for teaching management; at the same time, its location should be somewhat independent to avoid the interference of students' activities between classes.
- Considering the actual use and safety management of the school, it is recommended to set up classrooms of the same grade on the same floor, which includes the corresponding flexible classroom and teacher's office of that grade.

5.5.4 生活服务用房

5.5.4 Living service rooms

用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
总务用房 General affairs room	—	—	650	0.65	1000
教职工和学生食堂 Faculty and student canteen	—				3360
后勤服务用房 Logistics service room	—	—	324	0.65	498
厕所 Washroom	—	—	2262		3480
传达值班室 Reception and duty office	—	—	40		62
生活服务用房 合计 Living service rooms in total					8400

1、教职工和学生食堂

厨房应设在合理区域，需提供划分后的功能分区。

1. Faculty and student canteen

The kitchen should be set in a reasonable area, and the divided functional zones should be provided.

2、公共卫生间

- 应充分考虑其服务半径，方便就近使用。

2. Public washroom

- The service radius shall be fully considered facilitating the use nearby.
- Teachers' washrooms and students' washrooms are not shared. The washroom indicator was added 30% on the basis of that stipulated in Bao'an Standards.

- 教师卫生间与学生卫生间不共用，卫生间指标已在宝标基础上提高了 30%。



5.5.5 选配校舍用房

5.5.5 Optional school buildings

用房名称 Room name	单间使用面积 Usable area of a single room (m²)	数量 Quantity	使用面积 Usable area (m²)	使用面积 Usable area 系数 K Coefficient K	建筑面积 Floor area (m²)
教师宿舍 Faculty dormitory	—	186	—	—	6510
多功能厅 Multi-functional halls	1300	1	1300	0.75	1733
微格教室 Microteaching classroom	100	2	200	0.55	364
架空层、风雨连廊 Overhead floor, wind-and rain corridor	—				7560
地下车库 Underground garage	—	278	—	—	12510
设备用房及其它 (含特色教育用房) Equipment room and others (including characteristic education room)	—				1136
选配校舍 合计 Optional school buildings Total					29813

1、教师宿舍

《宝安区普通中小学校建设标准提升指引（试行）》为选配，但本项目应设置。

2、风雨连廊、架空层

考虑深圳气候条件（多雨天和阳光强烈）及使用方便，风雨连廊和架空层可适度提升建设。

1. Faculty dormitory

Despite an optional building stipulated in the Guidelines for the Construction Standard Improvement of Ordinary Primary and Secondary Schools in Bao'an District (Tentative), the faculty dormitory should be set up in this Project.

2. Wind-and-rain corridor and overhead floor

Considering the climatic conditions in Shenzhen (it rains a lot and the sunlight is strong) and convenience of use, the construction of wind-and-rain corridor and overhead floor could be moderately improved.

3、地下车库、设备用房及其他

- 机动车停车场所新能源汽车充电桩车位的设置应符合深圳市相关规定。
- 学校大门口及人流量较大的出入口宜设置有遮阳防雨措施的共享单车场地。

3. Underground garage, equipment room and others

- The setting of parking space with NEV charging pole in motor vehicle parking lot shall comply with relevant regulations of Shenzhen.
- A shared bicycle area with shading and rainproof measures should be set at the school gate and the entrance and exit with a large flow.

六、成果要求

VI. Requirements of Deliverables

1、资格预审阶段

资格预审阶段内容及提交形式详见《资格预审文件》。

1. Pre-qualification stage

See the Pre-qualification Documents for the contents and submission form of the pre-qualification stage.

2、竞标阶段设计成果内容

本次招标阶段的成果设计深度为建筑方案设计深度，包括文本、展板、实体模型、电子文件，一律采用中英文形式（若中英文表达出现不一致的情况，以中文为准），计量单位一律采用公制计量单位。

2. Contents of deliverables in bidding stage

The design depth of the deliverables in the bidding stage is the design depth of the architectural scheme, including the text, display boards, physical model, and electronic documents, which are all in Chinese and English (in case of any discrepancy between the Chinese and English versions, the Chinese version shall prevail), and the measuring units invariably adopt metric units.

1) 文本

文本包括（但不限于）以下内容：

- ① 总体规划设计理念或愿景表达、建筑与景观效果表现（包括总体鸟瞰效果图、校园入口透视效果图、主要建筑单体效果图、建筑外立面效果图及重要室内外空间效果图、重要公共空间效果图、重要景观节点效果图）等，能清楚表达建筑与周边的环境关系，表达方案设计主要构思内容；

1)Text

The text includes (but is not limited to) the following contents:

- ① The overall planning and design concept or vision expression, the architectural and landscape effect performance (including the overall bird's-eye view rendering, the perspective view renderings of the campus entrance, the rendering of the main single building, the rendering of the building facade and the rendering of the important indoor and outdoor space, the rendering of the

important public space, the rendering of the important landscape node), etc., that clearly express the relationship between the building and the surrounding environment as well as the main idea content of the scheme design;

② 设计分析图：提供总体规划分析图、区位分析、场地分析、规划及功能布局分析、道路交通规划及流线组织分析（包含人行及车行流线）、竖向分析、内部流线分析图、消防分析图；建筑设计概念分析图等其他能表达设计意向的分析图；

③ 技术图纸：总平面图（需标明主要建筑名称、层数、出入口位置、各主要建筑物的相对标高等）及技术经济指标；单体建筑技术图纸：包含各层建筑平面、主要立面及剖面图等；

⑤ 相关技术说明要求：设计概念简要说明、投资估算和材料选择等说明（包括结构选型、外墙（幕墙）体系等）、结构机电等专业设计策略的描述、绿色建筑、海绵城市概念及其他专项设计概念方案等，辅助分析建筑方案的必要文字和分析图等，以及方案主要技术经济指标；

⑥ 文本的提交形式：文本 1 正 9 副，副本内容应与正本完全一致（副本文件及包装不得出现任何公司标识，不得在投标文件内标注名称、印章、商标等标记符号，不得出现能够辨认出投标人或其专业技术人员身份的相关信息），文本规格为 A3 尺寸（420mm×297mm），横版，装订成册（彩色打印，软皮封面，推荐胶装），页数不超过 100 页（页数限制不含封面、封底、扉页），文件密封具体要求查阅招标文件。

② Design analysis diagram: Provide overall planning analysis diagram, location analysis, site analysis, planning and functional layout analysis, road traffic planning and flow line organization analysis (including pedestrian and vehicular flow lines), vertical analysis, internal flow line analysis diagram, and fire protection analysis diagram; architectural design concept analysis diagram and other analysis diagrams that express design intention;

③ Technical drawings: Master plant (marked with the name of main buildings, number of floors, location of entrances and exits, relative elevation of main buildings) and technical and economic indicators; technical drawings of single building: including floor plan, main elevations and sections of each floor;

⑤ Relevant technical description requirements: A briefing of design concept, investment estimation and material selection (including structural selection, outer wall (curtain wall) system, etc.), the description of MEP and other professional design strategies, green building, sponge city concept and other special design conceptual scheme, etc., necessary text and analysis drawings to assist in the analysis of the architectural scheme, as well as main technical and economic indicators of the scheme;

⑥ Submission form of the text: one original and nine copies, the and the contents of the copy shall be completely consistent with the original (the copy and package must not contain any company logo, and must not mark company name, seal, trademark and other signage and symbols marked in the bidding documents, and must not display the relevant information that can identify the identity of the bidder or its professional and technical personnel). The text is bound into a volume (color printing, soft leather cover, recommended glue binding) in A3 size (420mm × 297mm) and horizontal version, with no more than 100 pages (the number limit does not include the front, back cover, and title page).

Please refer to the Bidding Documents for the specific requirements for document sealing.

## 2) Display boards

① No more than three display boards (in A0 size), vertical version, KT board mounting, black edge sealing. The display order of display boards should be marked in the lower right corner. An area (50 mm \* 50 mm) at the upper left corner is reserved for pasting sequence number. The contents of the display boards should include the master plan, the overall bird's-eye view, and other contents are not limited to: the renderings of the main entrance of the campus, the renderings of key single buildings and key space nodes, the plans, elevations, and sections of major buildings, important creative expressions, and relevant analysis diagrams. The bidder can determine the typesetting at its own discretion.

② The display boards must not contain any company logo, name, seal, trademark and other signage and symbols, as well as the relevant information that could identify the identity of the bidder or its professional and technical personnel. The boards are numbered in the lower right corner of the boards with Arabic numerals.

## 3) Electronic documents

① Electronic files with the same contents as the design text, display boards and project renderings submitted should be provided in two CDs and one USB flash drive respectively (the contents in the CD and USB flash drive must be consistent). The design description text adopts word format. The design drawings must be provided with both PDF and dwg files (AutoCAD2010 or below). The typesetting file of the deliverables brochure with blended pictures and texts must be provided with both PDF and editable typesetting files (ID format or other typesetting software format), and the renderings are in jpg format.

② Multimedia presentation files  
The multimedia presentation file will be automatically played. The presentation time should be controlled within six minutes, with Chinese VO and bilingual subtitles in Chinese and English.

## 2) 展板

① 展示图板 (A0 展板) 不超过 3 张，竖版，KT 板裱板，黑色封边。展板应在右下角标注展板展示顺序。预留左上角 50mm\*50mm 位置粘贴编码；展板内容应包括总平面图、总体鸟瞰图，其他内容不限于：校园主入口效果图、重要建筑单体及重点空间节点效果图、重要建筑平、立、剖面图、重要创意表达及相关分析图等。投标人可自行决定排版方式。

② 展板内容不得出现任何公司标识，不得标注名称、印章、商标等标记符号，不得出现能够辨认出投标人或其专业技术人员身份的相关信息，并应用阿拉伯数字在展板的右下角排序编号。

## 3) 电子文件

① 提供与其所递交的设计文本、展板及项目效果图等内容相同的电子文件 2 套光盘及 1 个 U 盘（光盘内容和 U 盘内容须一致），设计说明文字部分采用 doc 文件格式，设计图纸必须同时提供 PDF 和 dwg 格式（AutoCAD2010 或以下版本）文件，图文混排的成果册子的排版文件必须同时提供 PDF 和可编辑的排版文件（ID 格式或其他排版软件格式），效果图采用 jpg 文件格式。

② 多媒体演示文件  
自动播放多媒体演示文件，演示时间控制在 6 分钟以内，中文旁白，中英文双语字幕。



### ③ 三维动画

三维动画演示，时间不少于 1 分钟，包含在多媒体汇报文件的 6 分钟之内。

### ③ 3D animation

The presentation time of 3D animation should be no less than 1 minute, which is included in the 6-minute presentation of the multimedia reporting document.

### ④ 电子三维模型

设计方案的三维模型可编辑文件，文件格式自定。本设计任务书的解释权属于招标人。解释语言以中文为准。

### ④ Electronic 3D models

The 3D model of the design scheme should adopt editable self-determined format. The Tenderer reserves the right for the interpretation of this Design Brief, with Chinese as the language of interpretation.

### ⑤ 实体模型

模型比例 1:400，模型基座尺寸 900 mm× 1100 mm，模型形式（材质）自定，能直观地反应用地及周边关系。建筑模型制作范围如下：

### ⑤ Physical model

Model scale is 1:400, with the model base size of 900 mm × 1100 mm. The model forms (materials) are self-determined, intuitively indicating the land use and its relationship with surrounding areas. The building model production scope is as follows:



本设计任务书的解释权属于招标人。解释语言以中文为准。

The Tenderer reserves the right for the interpretation of this Design Brief, with Chinese as the language of interpretation.

## 七、附件文件列表

### 1、法定图则：

### 2、用地预审与选址意见书

- 1) 中华人民共和国建设项目用地预审与选址意见书；
- 2) 市规划和自然资源局宝安管理局关于确定沙井街道民主社区九年一贯制学校新建工程用地红线范围的复函；
- 3) 建设项目规划选址范围图（地上）。

### 3、用地红线（DWG）、含地铁

### 4、初勘报告

### 5、现状照片和航拍视频

### 6、相关规范合集

## VII. List of Appendixes Documents

### 1. Statutory plan:

### 2. Opinion letters on land pre-qualification and site selection

- 1) Opinion Letter on Project Land Pre-Qualification and Site Selection of the People's Republic of China;
- 2) Reply of Bao'an Administration of the Shenzhen Bureau of Urban Planning and Natural Resources to Determine the Land Use Red Line Scope for New Project of Shajing Sub-district Minzhu Community Nine-year Consistent School;
- 3) The Diagram of the Construction Project Planning and Site Selection Scope (Above Ground).

### 3. Land use red line (DWG), including metro lines

### 4. Preliminary survey report

### 5. Photos of current situation and aerial videos

### 6. Collection of relevant codes