

# 斯波尔丁康复医院，马萨诸塞州，美国 Spaulding Rehabilitation Hospital, Massachusetts, USA, 2013

建筑设计：帕金斯威尔建筑设计事务所  
Architects: Perkins and Will



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这座新建的康复医院坐落在查尔斯顿海军造船厂的一角，显眼又醒目。该项目的设计以患者为先，充当起了加快恢复的治疗角色。玻璃幕墙将阳光引入室内，营造出开阔感，让患者和游客在每一层楼都能欣赏壮丽的港口景色。从病床到康复花园和屋顶露台，这种与自然环境的联系是康复过程中的一个重要部分。

斯波尔丁的每一个角落均为消除障碍而设计。在设计的最初阶段，设计团队在老医院体验了一天的轮椅生活，以便更好地理解患者的想法与痛点。该设计旨在将医院视为治疗工具，为患者打造一个

可以培养自信与独立性的环境。

设计团队与无障碍专家合作，进行了广泛的研究，以创建一家不仅仅只满足《美国残疾人法案》要求的未来医院。医院的设计考虑到了每一个方方面面——街道层的入口、低而圆的前台、带定制橱柜和自动遮阳的病房、病员电梯、私人浴室及私人冰箱、家属就寝设施、病人与访客的无线网络连接等设施。为了帮助病人重建自理能力，康复医院还提供门诊服务、水疗池、两座大型体育馆、日常活动配套设施、过渡期病员公寓以及位于两层住院楼层的卫星健身房。□（王单单译）



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1 外景/Exterior view  
2 鸟瞰图/Aerial view



The new rehab hospital, sited at the tip of the old Charlestown Navy Yard, is a proud, transparent place. The design places the patient first, creating a therapeutic tool that speeds recovery. Its glass façade brings in light to create an open, expansive feel that connects patients and visitors to the remarkable harbor view from every floor. From the patient bed to the healing gardens and roof top terrace, this connection with the natural environment is an important part of the healing process.

Every nook of Spaulding was designed to eliminate barriers. During the initial design phase, our design team spent a day in the old hospital entirely in wheelchairs to better understand the

perspective and challenges of the patients. Our aim was to create a hospital that is instrumental to healing, with an environment that fosters confidence and independence for our patients.

We worked with accessibility experts and conducted extensive research to create a hospital of the future, one that went beyond only meeting ADA requirements. Every aspect of the building design has been considered – the entry is at street level; the reception desk is low and rounded; the patient rooms have custom cabinetry and automated shades, patient lifts, private bathrooms and amenities such as private refrigerators, sleeping accommodations for family members and a wireless connection for patients and

guests. With a clear goal of helping patients regain their independence, the building programme includes outpatient services, a pool for aqua therapy, two large gymnasiums, an activities-of-daily-living suite, transitional patient apartment and satellite gyms embedded on two inpatient floors. □

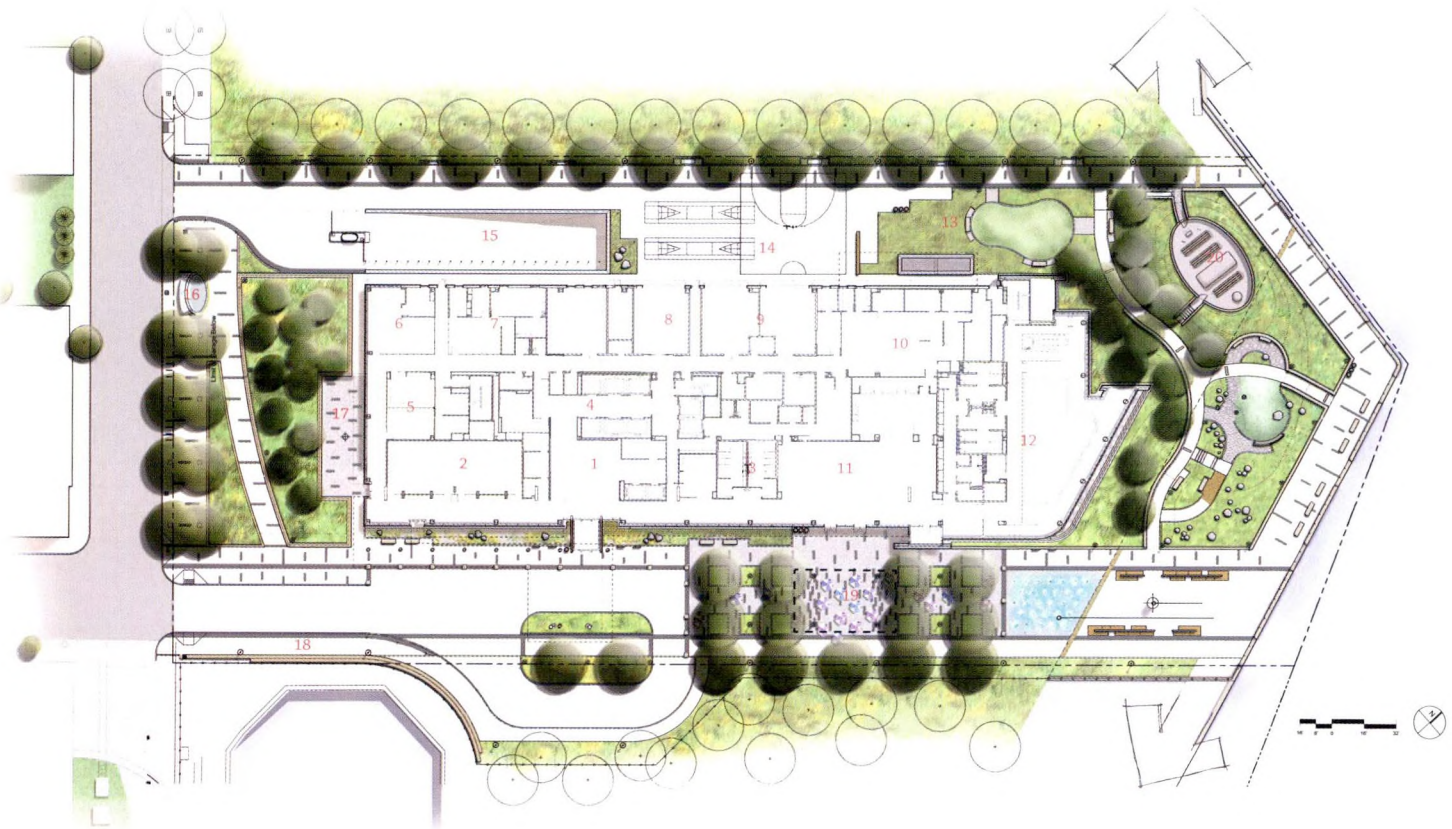
项目信息/Credits and Data

设计团队/Design Team: Ralph Johnson, Robert Brown, Jeff Keilman, Daniel Stubbs

面积/Area: 24,155m<sup>2</sup>

竣工时间/Completion Time: 2013.04

摄影/Photos: James Steinkamp(fig.1), ESTO / Anton Grassl(fig.4-7,12-13)



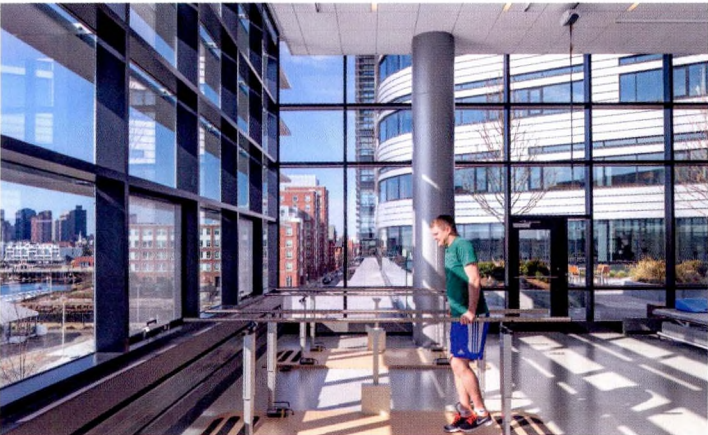
3 总平面/Site plan

- |                          |                         |   |
|--------------------------|-------------------------|---|
| 1-大堂/Lobby               | 8-救护车/Ambulance         | 14-第二大街活动/服务广场/2nd Ave activity/service plaza   |
| 2-会议中心/Conference centre | 9-装卸处/Loading dock      | 15-通往地下停车场的坡道/Ramp to sub-surface parking       |
| 3-卫生间/Restrooms          | 10-厨房/Kitchen           | 16-合作伙伴穿梭车站/Partners shuttle stop               |
| 4-电梯厅/Elevator hall      | 11-咖啡厅/Café             | 17-户外会议空间/Outdoor conference space              |
| 5-医学图书馆/Medical library  | 12-水池/Pool              | 18-第一大街与港口步道连接/1st avenue harborwalk connection |
| 6-家庭间/Family resource    | 13-运动角/Multi-sport node | 19-美食广场/Dining plaza                            |
| 7-医药零售/Medical retail    |                         | 20-氧气罐/Oxygen tank                              |





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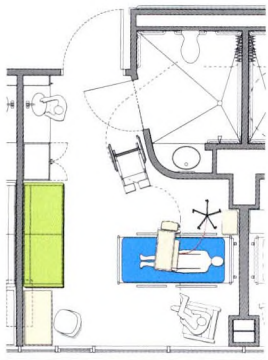
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4 可供病人和医护人员使用的屋顶花园/Roof Garden for Patients and Staff  
 5 康复大厅一角/View of Inpatient Gym  
 6 标准病房层走廊/Patient Floor Corridor

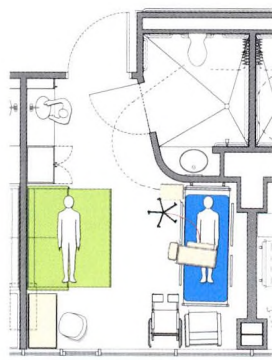




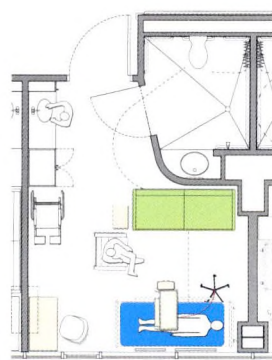
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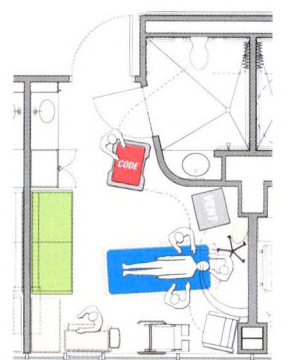
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7 标准病房/Typical Patient Room

8 病房标准布局/Typical configuration

9.10 病房夜间布局方案/Night configuration

11 紧急情况下病房布局/Emergency condition





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## 评论

**吕小泉：**无障碍设施齐全的美国斯波尔丁康复医院无障碍设计，可以称为现代无障碍设计理念从关注残疾到关注消除障碍的实例。美国无障碍设计是全世界最早以人体测量学、人体工程学和人类行为学的实测数据为标准依据的。斯波尔丁康复医院总体规划、单体建筑与构造设计都考虑了人的无障碍需求与实际尺寸，仅从其洗手台高度、容膝空间、水龙头等的无障碍设计可见一斑。良好的室内外无障碍环境、舒适的住宿条件、完善的康复设备设施拓展了人体功能，极大地便利功能障碍者的治疗与康复。

**邵磊：**通用设计有明确的原则，但并没有一成不变的标准。实现通用设计的全过程是一个产品和需求互动、设计不断优化、产品性能螺旋式的循环上升的创作结果。斯波尔丁康复医院的设计很好地诠释了这一点。无障碍的实现没有仅仅停留在规范基础标准层面，而是以用户为中心，通过设计创作不断优化建筑空间与功能。作为康复医院，面对大量行为或者感知有障碍的群体，设计上需要深入地了解他们在医院中的行为需求，了解康复治疗所需要的最佳环境，斯波尔丁康复医院的设计在这两方面都成为亮点。从室外环境到室内家具，从功能空间的尺度到交通动线，都很细致地考虑了轮椅、康复以及多功能使用的需要。建筑空间本身的品质已经和促进康复的目标有机融合在一起——无障碍就是康复的一个重要组成部分。

12 护士站及病房层公共等候空间/Nurses' Station & Waiting Space



Comments

LYU Xiaoquan: The accessible design for the well-equipped and accessible Spaulding Rehabilitation Hospital can be regarded as a living example of the modern accessible design philosophy when it comes to caring for both the disabled and the elimination of barriers. The barrier-free design in the United States is the world's first accessible design that was based on the measured data of anthropometry, human engineering and praxeology. The master plan, individual building and mechanical design of the hospital have taken into account the accessibility requirements and actual size of users. These considerations can be seen in the barrier-free design for the height of the wash bins, the knee space and the water faucet. The nice accessible design for both the indoor and outdoor environments, the comfortable accommodation and the complete rehabilitation facilities have helped to develop the patients' body functions, and have greatly contributed to both therapy and recovery for people with disabilities. (Translated by Dandan Wang)

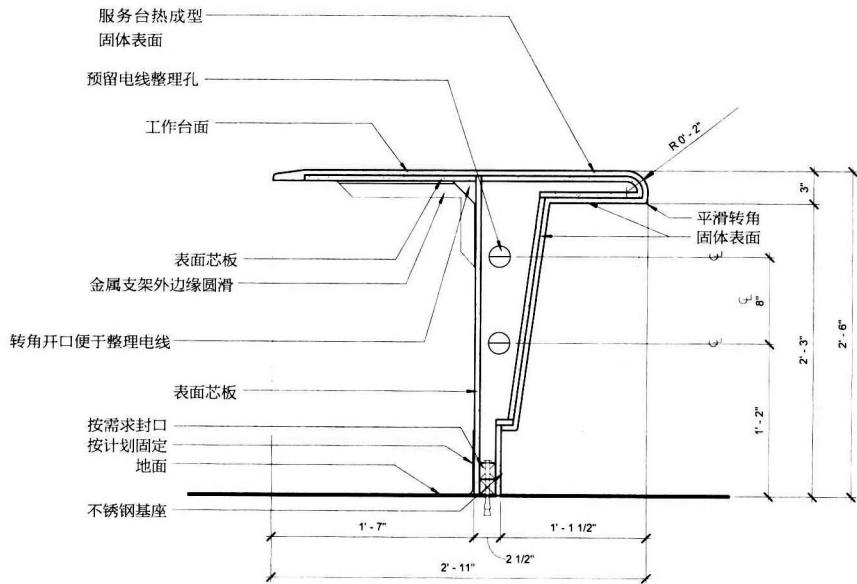
SHAO Lei: Universal design has clear principles, but there are no unchanging standards. The whole process of realising universal design is the result of a product and demand interaction, the continuous design optimisation, which pushing the performance of the product spiraling upward. The design of the Spaulding Rehabilitation Hospital is a good example. The realisation of accessibility does not only stay at the standard level of the common standard, but is user-centered, and continuously optimises the building space and functions through design creation. As a rehabilitation hospital, faced with a large number of behaviours or groups with perceived impairments, it is necessary to have an in-depth understanding of their behavioral needs in the hospital and understand the optimal environment for rehabilitation treatment. The highlights of Spaulding Rehabilitation Hospital are in both aspects. From the outdoor environment to the interior furniture, from the scale of the functional space to the circulation, the need for rehabilitation and multi-functional use is carefully considered. The quality of the building space itself has been organically integrated with the goal of promotion of rehabilitation – accessibility is one of the key issues.



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13 便于轮椅病人使用的洗手台/Special-Designed Sink

14 桌子容膝空间节点图/Knee space detail



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