

CHAPTER 7

The City Confined

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Is it possible to imagine a confined space where detainees can find a path of rehabilitation and re-education? Is it possible to imagine a confined space where the prison officers can live without being confined to themselves? These are the main questions that pushed the design team to accept this challenge, through a design contest. The article discusses a project prototype of a medium-security prison for the custody of 200 prisoners, that has been awarded the joint first prize in the competition of ideas organized by the Italian Ministry of Justice in 2001.

Introduction

The project presented has been awarded the joint first prize in the competition of ideas organized by the Italian Ministry of Justice in 2001 for a “prototype of a medium-security prison for the custody of 200 detainees”.

In 2000, a new Penitential Regulation (Italian Presidential Decree, 30 June 2000 No 230: Regulations for the implementation of penitentiary systems and the measures designed to deprive or limit freedoms) was approved. It sought to bring Italian prisons in line with the rules of the United Nations and European conventions. It is a Regulation which gives voice and emphasis to alternatives in detention. The elements of penitential treatment are made explicit in the Regulation’s content; it is pointed out (Article 15) that it must resort “primarily to education, labour, religion, cultural, recreational and sports activities, facilitating appropriate contacts with the outside world and relationships with family. For the purpose of rehabilitation, except in cases where it is not possible, work must be assured for the convicted or the detained.” This project sought to solidify these principles: architecture which considers and builds the space surrounding the person.

The penitential facility is from its conception imagined as a city, or rather, a village. It takes into account all the recognized limits for a penitentiary, however, improving the dignity and life of detainees also formed part of the project. If seen as a community, then the contribution of each person is considered a necessary part. The areas allocated to work, outdoor activities, land (gardens), and sports are thus of central importance. Spaces that do not merely represent the exception of the usual one hour of out-of-cell time, but rather - along with the housing facilities - determine the overall design: the exception is then not to work, to almost exclusively stay locked in a cell, and not to take part in training activities or sports. A relationship with the outside world is also essential, both in overcoming the absolute separation - which often becomes refusal, removal of the very existence of the prison from the world "outside" - both in the articulation of the contact spaces and of the directly functional social contact within the structure.

The prison is designed as a sort of village, divided between empty and constructed spaces and by the functions which shape the activities. The project proposes an environment which establishes a link with its inhabitants and with the local society because it is multi-ethnic, mobile and lively. As in a village, life is regulated by the contribution that each individual provides to the community. It is therefore necessary within the village penitentiary to balance the complexity of the system with a working organization where each inhabitant may contribute to the operation and maintenance of the whole by carrying out activities for its development and maintenance, organization and management.

Project guidelines

The first items of focus, as the vital heart of the building complex, were the minimum detention units, defined in the new Regulation by the term room. They are characterized by the presence of windows without screens and are equipped with toilets, showers and sinks, and an area with cooking facilities. The catering functions were organised with specific spaces intended for food preparation (kitchens for up to 200 people) and consumption, with a space suitable for the accommodation of a limited number of detainees. The Regulation provides a new and different quality of relations between prisoners and family members during the interview or meeting periods, modifying the current criteria and introducing the possibility of conducting these

meetings outdoors and assigning specially designed areas for private family gatherings. The open spaces to be used for recreational activities, sports and cultural activities should preferably not be landlocked between buildings.

Further innovations concern the arrangement of professional and educational training on various levels, the establishment of a library service for detainees, the allocation of areas for intellectual, artistic or craft activities, spaces for various religions, as well as for conducting sports, recreational and cultural activities.

From the initiation of the project, the whole complex was considered to be a part of the territory in which it is located, constituting, with its security features and privacy, a kind of self-sufficient village equipped with its own cultural and social identity.

The solution proposes an aggregation typical of Italian cities: one where the complex of streets, buildings, public spaces and green areas is planned on a preconceived but also occasionally random grid; presenting a totality at once ordered and chaotic, but always on a human scale. The decision to consider the new prison model as a cluster of nuclei, buildings and open spaces was seen as an opportunity to maintain organizational and spatial continuity between the “inside” and “outside”, while making sure that other constraints and limitations are addressed adequately.

Since it is a model, a prototype for a penitentiary institution, it lacks a reference space for its location, and so the project sought to collect aggregate and contextual elements into a single unit, creating an internal environment that, on the one hand may interact with the surroundings (orientation, latitude, vegetation, visuals), and on the other hand represents a constituent element of an organizational model which is repeatable.

The challenge was to meet the needs of the administration announcing the competition by offering a project capable of expressing levels of adaptability related to two fundamental principles: first, through the identification of certain functional modules of approximately 50 x 55 metres, repeatable according to the needs of the specific project with a local aggregation scheme that allows different solutions through the integration or modification of the individual modules and their relationship with others in a final, partially or completely different, transformed facility; second, through the choice of architectural and vegetation forms via the materials utilized. The “personalization” of the project ensures the integrity of and respect for a local identity.

The elements intervening in and influencing the proposal are multiple:

- The choice of vegetation, which cannot be detached from the geographical and environmental characteristics of the location,
- Several architectural features which may require adaptation to climatic and meteorological factors, such as the differentiation of the main buildings with pitched roofs of the traditional type, in accordance with the location, characterizing the surfaces with different materials and slopes,
- The use of other materials such as brick façades, coloured plaster or stone cladding, to achieve a continuity with the local building tradition.

The combination of these elements, although originating from a common plan, means that there are almost as many local project variations as there are new penitentiary facilities, as each one expresses its own identity.

The project

The environmental factor has such a high qualitative and re-educational value for the project that it is the subject around which the complex is planned. The project proposal, as is evident in the organization of the plan and the character of the individual buildings, identifies a hierarchy of open green space which is divided into four levels:

1. The central park. All major internal relationships in the facility involve the central park, a hub of routes and a compositional element around which the main buildings are distributed. The park should be in view; all the rooms in the detention area and most of the service areas and offices are placed so as to enjoy a glimpse of nature and of attractive trees marking the passage of the seasons. The park is a place to go to and to cross to reach other areas of everyday life. Also a place of spirituality, the centre houses the Temple of Peace.
2. The courtyard. Each group of buildings has its own private garden, a portion of green area which is equipped and planned differently, and which acts as a natural extension of the internal environments. Defined as an “air zone”, it is organized into different areas delimited by metal fences with hedges. Here one may stroll, play, or read outdoors, or eat out in the open in areas next to the dining rooms. The meeting room complex is in a series

of buildings around the protected open spaces, culminating in family meeting areas which are each connected to a small patio. Many of the other buildings are developed around their own open space, in a play of contrasts between the free area of the park and the enclosed borders of the gardens and courtyards.

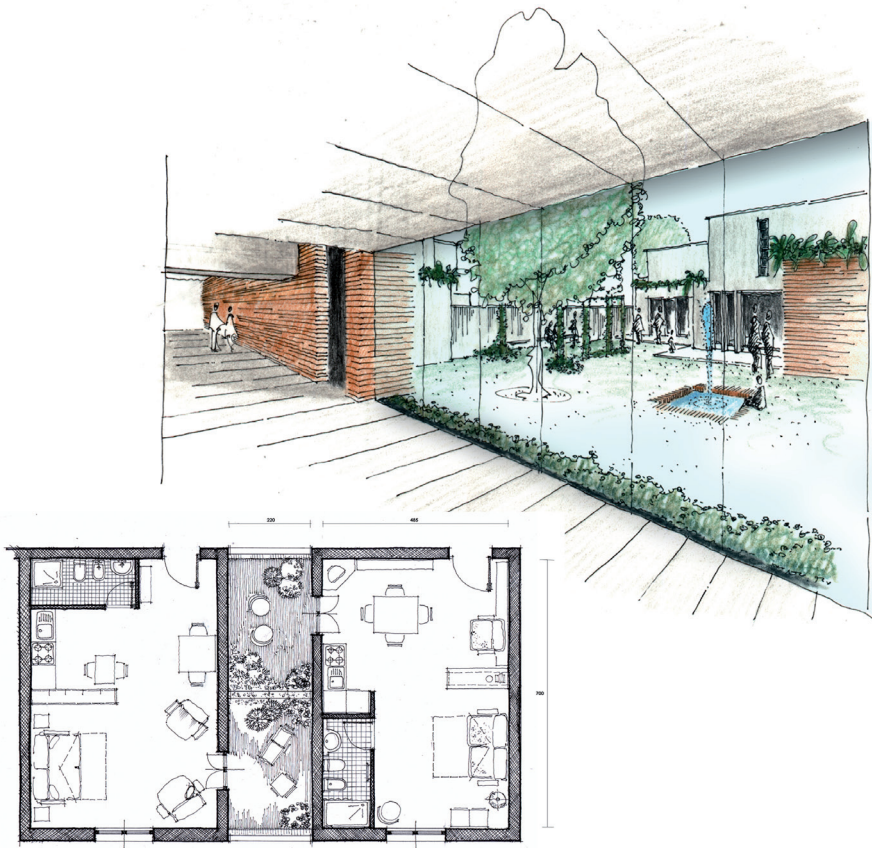


Figure 7.1 The courtyard, meeting room complex. Reproduced with permission; no reuse without rights-holder permission.

3. The urban gardens. The areas limiting the urban zones are in many cases used as gardens. Transition zones between the housing and the agricultural areas: within the institution, along the dividing wall between the detention area and the barracks and housing for prison officers and near the entrance, vegetable gardens have been allowed for, small plots of land

divided by hedges to give a maximum number of prisoners the opportunity to grow their own produce and manage an outdoor space.

4. The sports facilities. Both the penitential area for sports and that for the prison officers are divided into modules aligned with the other spaces for the organization of activities.

The use of suitable and strategic natural energy resources is proposed in order to highlight the energy issue, offering solutions that include the use of alternative technologies, which are more economical and will create opportunities for the training of specialized personnel for an economic sector in constant evolution.

The activities and facilities introduced in the project:

- Special storage areas fitted for the collection of waste for reuse through incineration or composting;
- Collection of rainwater in underground containers for differentiated and alternative use in the toilet cisterns, to supply the lake used as an additional water reserve and for irrigation;
- Differentiated waste and biomass in a thermal plant for the production of heat in combination with the central heating system;
- Use of photovoltaic panels for specialized surveillance, alarm systems and outdoor lighting systems as an alternative, but not a substitute for a traditional energy source;
- Use of thermal panels for production of hot water for direct use, to be placed in particular on the roofs of the detention blocks, the prison officer accommodations, the barracks and on all buildings having an even partial need of hot water;
- Persons and material within the penitentiary shall use electric vehicles for internal transport requirements.

The area available for the new penitentiary, as indicated in the competition announcement, is a rectangle of approx. 80,000 square metres (370 x 216), bordered on one side by a street and organized on a modular grid as an ideal continuation of the surrounding agricultural or urban pattern.

The wall, an architectural element with the primary functions of protection and closing, divides the area into two portions, creating a relationship of disjointed involvement between the world of the prison officers and the interior

A	Public street		
	A1	entrance to the prison area	
	A2	entrance to the barracks and prison police quarters	
B	Entrance building		800 mc
	ground floor	entrance to: judges, lawyers, relatives / driveway entrance first floor surveillance	
	B1	entrance to the office and management	
	B2	back entrance	
C	Reception building for new arrivals		1.800 mc
	ground floor	one person buildings, rooms for first procedures, medical check-up and adaptive tests	
D	Personal items storage area		1.300 mc
	ground floor	personal items storage area and first use staff delivery	
E	Meeting house		9.000 mc
	ground floor	relatives entrance, prisoners entrance, separated areas for meetings, open spaces	
	first floor	lawyers meetings area, flats for family meetings, facilities	
	second floor	judge meetings area, educators	
F	Office building and the surveillance centre		5.300 mc
	F1	deck floor educators offices, meeting rooms, archives, facilities	
	F2	deck floor management offices, meeting halls, archives, facilities management tower	
	F3	3 rd \4 th floor	Surveillance tower
	F4	ground floor	Prisoners area entrance
	F5	ground floor	Inner surveillance service
G	Warehouses and general services		14.000 mc
	G1	ground floor	Public warehouse and facilities
	G2	ground floor	Maintenance, laundry, facilities
	G3	ground floor	Garage, workshop, facilities
	G4	ground floor	Kitchen, food preparation, storages, classroom training, facilities
H	Basic custodial units		8.000 mc
	ground floor	Surveillance, canteen, recreation area, meeting rooms, facilities, open space for free time	
	1 st and 2 nd floor	Surveillance, twin rooms, four beds rooms	
	3 rd floor	Surveillance, four beds rooms, art ateliers	
I	Infirmary		2.000 mc
	ground floor	Infirmary	
	1 st floor	Surgery, ward, facilities, open spaces	
	2 nd floor	Ward, facilities	

Figure 7.2 a General plan, detail of all zones, Legend A. Reproduced with permission; no reuse without rightsholder permission.

Figure 7.2 b General plan, detail of all zones, Legend B. Reproduced with permission; no reuse without rightsholder permission.

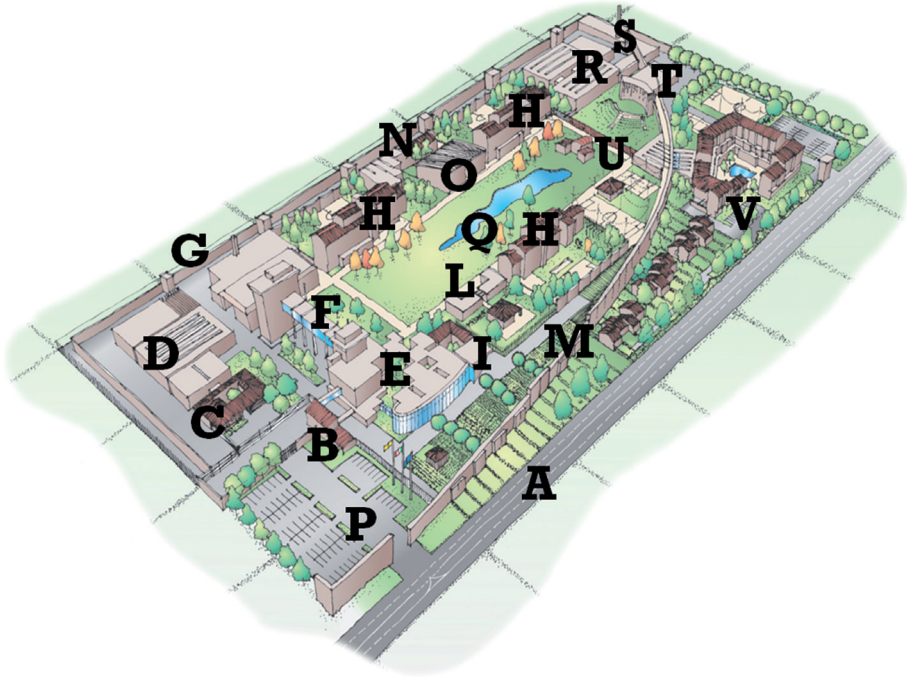


Figure 7.2 c General plan. Reproduced with permission; no reuse without rightsholder permission.

of the facility, the “outside” and the real “inside “. Two distinct areas are thus identified, allowing the barracks and housing for police officers to face towards the public, and the wall to embrace and enclose the detention buildings, which face the central green space.

The entrance to the prison from the public road is via a break incorporated into the wall, a dominant element of the project which characterizes the size of the village it surrounds and protects, opening to those who are about to enter a view of the entirety of the volumes and of the open spaces that constitute it.

The complex consists of a combination of buildings and developed open spaces, each with its own character and identity according to the assigned activity, and within which the penitentiary village’s inhabitants may move as they need or must.

After entering the compound, a short path flanked by parking spaces leads internally to the entrance building and reception building for new arrivals (C). It is small, welcoming, with individual accommodations, service areas for the reception procedures, and for medical and aptitude testing. Connected to this is the personal items storage area (D) for the custody of the effects and property of each detainee. To the right of the entrance (B), the main path leads

toward the compound's interior. The agents' services and rooms are found here. After passing through the controls, you enter the meeting house (E) near the first entrance point. The two-storied meeting house is structured so as to allow an immediate glimpse of the park and the buildings facing it. The easily accessible location makes it simple for visitors, family members, lawyers and magistrates to use. There are areas planned for individual interviews, differentiated spaces for conversations on various levels, apartments for family meetings, work areas for judges, lawyers, educators, all distributed between indoor and outdoor spaces and integrated with each other.

Behind the meeting house are the office building and the surveillance centre (F) with environments for educators, meeting rooms, offices for the management of the working groups, archives, services, administration and management. Constructed as a "bridge" crossing and overlooking the park, it dominates physically and perceptually.

The central park area is lined with access roads to the various nuclei that limit the green area. The first path near the building leads to the infirmary (I), a small building with two floors housing an outpatient service and small inpatient department with its own green area.

The next building is the shopping centre (L) with shops, a barber, hairdresser, laundry, kiosk, structured so as to be accessible and usable by all the inhabitants of the penitentiary village and directly overlooking the park. Proceeding along the path, after the infirmary the next building is the kindergarten (M) a small, simple building housing spaces furnished for toddlers.

Next to the detainee housing module is the detainees' sports area, equipped with playing fields and locker rooms. At the head of the park, opposite the management and administration building and in a symbolic location, is the Temple of Peace (U), a small building for worship which revives a characteristic element of every village of any ethnicity. It is a place of intimacy with oneself and one's faith, because even its minimum size offers three distinct spaces designated for religions.

On the other side of the park, along with the other detainee housing modules, two centres for collective activities are located: the gym (O) with changing rooms and services for the detainees, and a training and education centre (N). This is also accessible from the internal path which runs along the park. The centre (N) is a building of modest size, on two levels, housing a library with reading rooms and classrooms for training and educational activities.

Within the detention facility, but external to the secured area, there are other service groups: the warehouses and general services section (G) located near the administration, easily accessible via the service road that runs around the collection of buildings and which passes the kitchen with its adjoining spaces necessary for the preparation and distribution of meals to be delivered to the various units. The kitchens also house areas for training activities in the catering and food sector. Other maintenance services such as a central laundry, a garage-workshop, stores and warehouses are provided for.

In the corner diagonally across from the entrance and served by the service road lies the centre of production activities (R): two single-storied buildings with services and a community cafeteria. Work-type production for third parties may be performed here. These activities will vary in the various penitential locations, determined also by the needs of the area surrounding the prison (carpentry, machine shop, assembly workshop, restoration workshop, etc.).

The technology services (S) are located in a position easily accessible from the barracks: the monitoring station, power plant, generators, interruptible power supply units (S₁); the central thermal plant, thermal ventilation, and water station (S₂), and additional core services dedicated and suitably equipped for the collection of waste (S₃).

Ideally situated to be used both by the penitentiary village and the public is the auditorium - theatre (T) with approximately 150 seats, located at the bend in the patrol road with controlled access from the barracks. One part is located in the park and opposite the administration offices, and the other side is outside the wall, overlooking a square near the prison officer barracks. It is planned as a structure that can simultaneously host detainees and the public from outside on two different levels in order to reduce control activities during events. The theatre space could also on occasion function independently and therefore be managed to produce a profit.

Basic administrative units

The basic custodial units (H), are the modules housing the accommodation and ancillary services for about 64 inmates, repeated in this project in the three buildings around the park. The buildings are four-storied with a structure and façade reminding one of the homes commonly found in Italian cities.

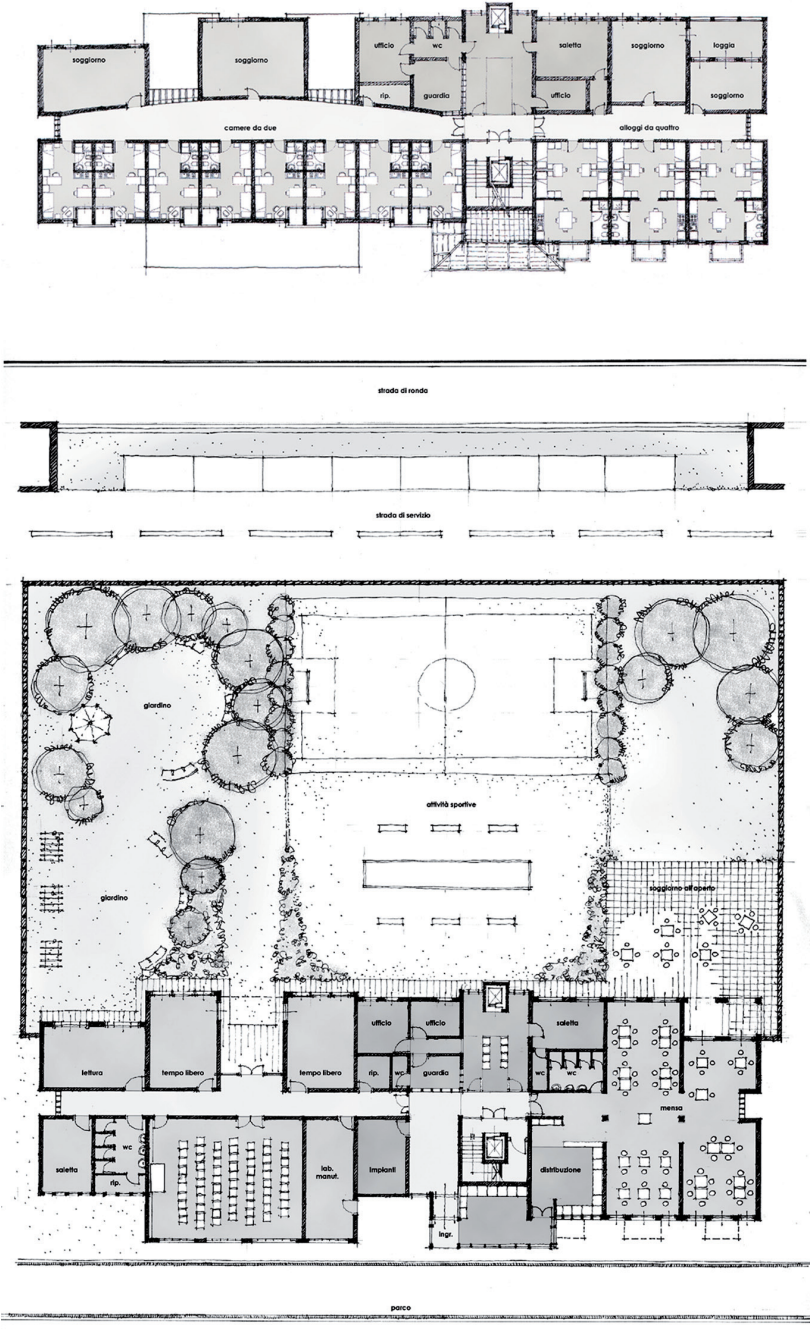


Figure 7.3 Basic administrative units, ground floor and first floor. Reproduced with permission; no reuse without rightsholder permission.

The entrances are on the ground floor, where a monitoring and control point located in the front lobby filters the various functions: common areas, game rooms, training areas, reception and events, as well as a canteen space divided into several small rooms that can be used for group activities. Inside this building a certain degree of freedom of movement may be imagined, not only between the inner spaces but also through to the outdoor garden. The green space is accessed by the common spaces on the ground floor. It is an area appropriately defined, organized and equipped in three areas: a space for outdoor seating outside of the cafeteria, an area for outdoor play, for example with a bowling green and soccer field, and an area to read or chat in peace. The upper floors are accessed from the lobby area, with the possibility of separate paths for detainees and for those visitors who have access to the unit. The first and second floor contain the living spaces for detainees, rooms with two or four beds designed to offer each detainee privacy. It is here that detainees will meet after their workday.

The room for two people has its own bathroom, fitted with the usual facilities, hot and cold water, and artificially ventilated. A mobile equipped mini-kitchen will allow the independent cooking or heating of food, and for washing dishes.



Figure 7.4 Basic custodial units, room for two people (section). Reproduced with permission; no reuse without rightsholder permission.

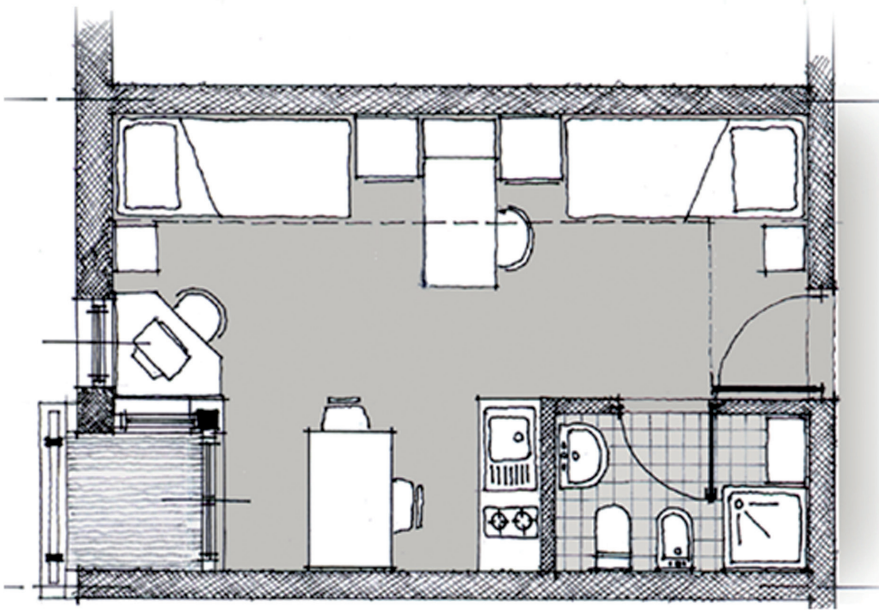


Figure 7.4 Basic custodial units, room for two people (plan). Reproduced with permission; no reuse without rightsholder permission.

The room for four persons has a sleeping area organized into four autonomous areas, its own bathroom, ventilated externally and with all the usual fittings, and a living area with a fully equipped kitchen. Both the two and four-bed rooms have a balcony overlooking the park.

Each detainee has their own bed, a bedside table and shelves for personal items. A small work/study table is foreseen, as well as a table for those who choose to dine in their room.

The decision of the planners to position all the rooms so that they face the park, providing each with a small terrace for watching the passage of the seasons or simply to hang washing, responds to the need to condition the lives of the detainees via their environment, and to promote re-education and rehabilitation, making the living and work spaces their “own” and allowing for the personalization of the spaces.

The corridor leading to the rooms in the longest wing, purposely limited in length, has a curved wall to eliminate the dramatic effects of anxiety and distress produced by long, straight corridors. This choice has positive effects,

especially for prison officer controls. The curved wall opens onto the living room spaces which face outwards, towards the courtyard of each unit, offering direct light and views. Each floor is equipped with service areas: an office and contact room, a surveillance zone and a small storage area.

The top floor houses two large studios equipped for arts and crafts activities, for business-type activities, for personal hobbies or educational purposes. Included are rooms that can be reserved for detainees who are kept under special conditions or in isolation.

The spaces for other activities

For a logical optimization of resources, and with the objective of re-education, all prisoners are to follow some form of employment. In accordance with the logistics determined by the administration, as well as on the basis of personal vocations and the length of stay, each inmate, after an initial period of analysis and adaptation, is to be inserted into one of the areas of activity.

In addition to specialized fields dedicated to production, detainees, supported by educators, will contribute to the management and maintenance of the entire system by performing services as required, such as within the library, laundry, kitchen, storage, park maintenance, cleaning, etc.

The organization of work activities foresees workteam groups providing services at various levels and in various fields:

1. The maintenance and cleaning sector - in turn divided into maintenance and cleaning of public spaces, cleaning and maintenance of outdoor spaces, involving several workteams assigned to the core services.
2. The maintenance of power plants (solar panels, photovoltaic) and plant engineering.
3. Agricultural sector employees for park maintenance and the care of the gardens located along the wall.
4. The service sector - employed in the collection and recycling of waste, in activities related to the operation of the kitchen, laundry and other services.
5. Building maintenance and repair sector.
6. Productive activities - organized as a genuine business activity linked to the local economy.

The organization of these activities will influence the facility's operation and maintenance costs, which can then be optimized by searching for the best balance between the efficiency of the activities and the self-sufficiency of the village system for a solution that offers the greatest efficiency and profitability. The project, as a part of an urban and building model, necessarily proposes a model of life and organization which may prove effective from the point of view of rehabilitation, while maintaining security levels.

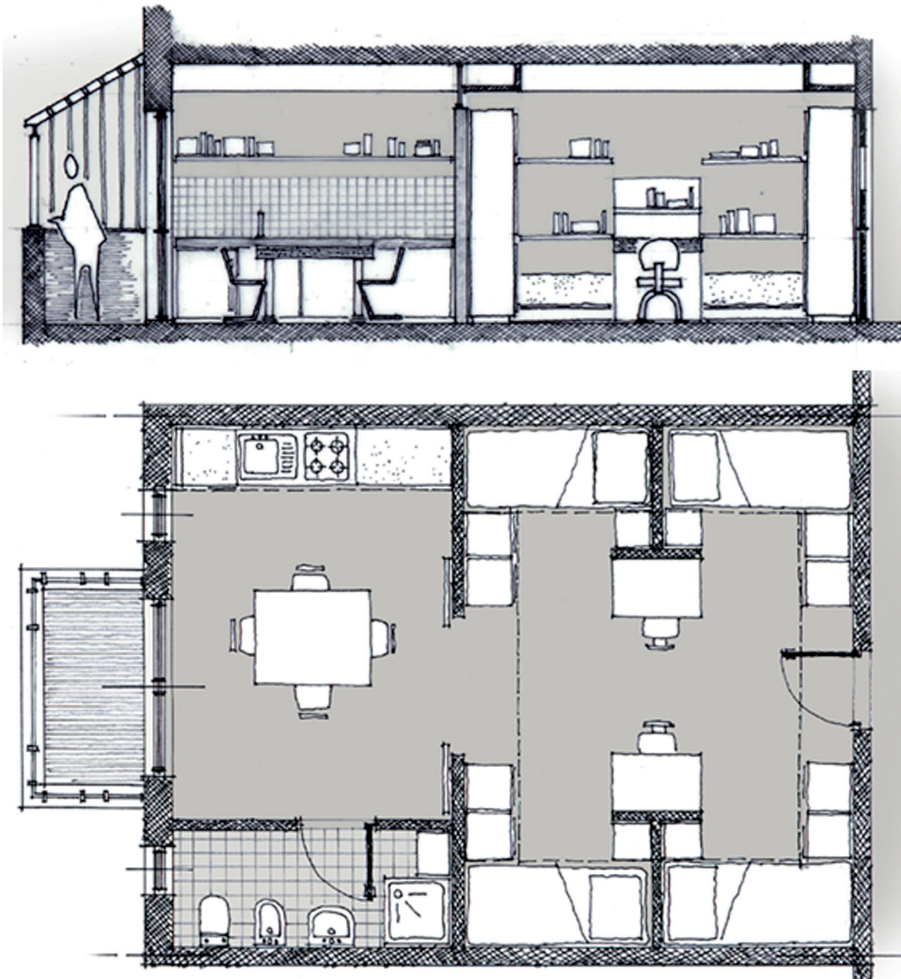


Figure 7.5 Basic custodial units, room for four persons. Reproduced with permission; no reuse without rightsholder permission.

Staff and operator accommodation

The wall that delimits the detention area separates the area designed for the prison officers, creating its own dimension, involved in the complex yet functionally autonomous. The area (V) is organized along the public access road with a separate entrance (A₂) which leads to the accommodation, the barracks, the theatre and the technological plant.

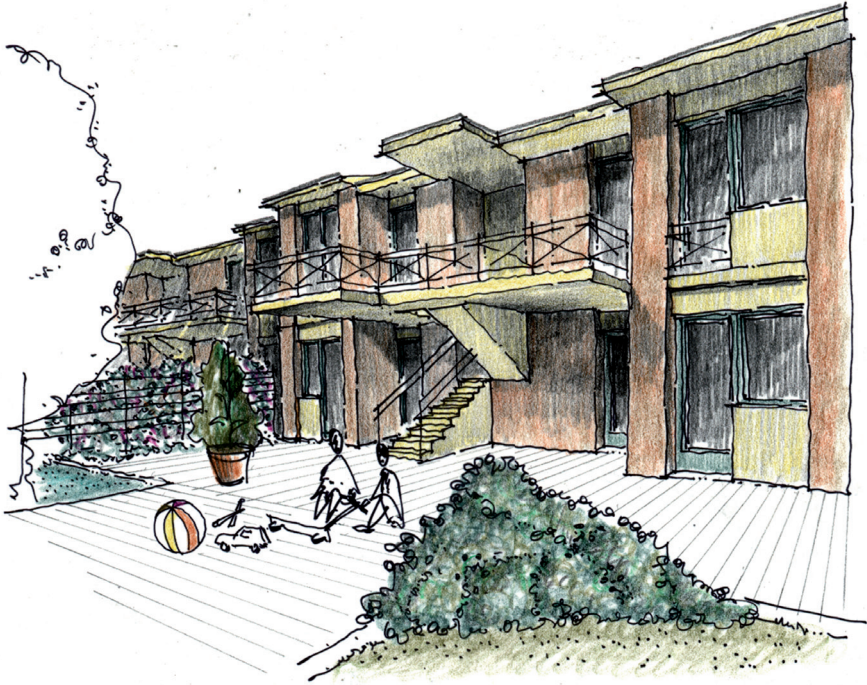


Figure 7.6 Operator accommodation. Reproduced with permission; no reuse without rightsholder permission..

The barracks (V₁) are arranged on four levels and built around a central courtyard with a swimming pool. General services, a gym reserved for staff, a canteen with indoor and outdoor spaces, offices, classrooms, and meeting rooms are all located on the ground floor. On the upper floors, the rooms are organised as doubles for 70% of the staff and single rooms for the remaining 30%. They are planned as small studios, with a bathroom, a kitchenette, a work desk, table, and a bed area. The rooms for two people maintain an acceptable degree of privacy for each occupant.

Townhouse accommodation (V2), 8 of 120 square meters and 8 of 60 square meters, are located in small groups, along the exterior of the wall. Built in continuity with the typical urban fabric and almost as if created, as often happens in the fortified cities, as part of the fortified wall, these are independent of each other with their own outdoor space.

The plant systems

The heat required for hot water production will be obtained from waste incineration. During any thermal plant maintenance periods, heat will be produced by a central gas plant using natural gas; the boiler room must also be able to supplement the production from thermal treatment during peak usage that may occur in the winter months. In each room, including of course inside the cells, at least one fan-coil with a special thermostat must be installed to allow the heating of the environment to be adjusted as required.

An air exhaust system for the elimination of odours is planned for: the kitchens connected to the staff and detainee canteens; kitchenettes in the detainee housing modules and in the staff accommodations; windowless bathrooms. One or more exhaust fans is to be installed within each of the areas mentioned. A system of centralized air treatment for the detainees' rooms is not provided for as the degree of natural ventilation is deemed suitable to ensure sufficient air exchange.

The power supply will be provided for by the national grid in medium voltage. A transformer station will reduce the medium to low voltage. A generator is provided to ensure the complete self-sufficiency of essential services within the detention facility in the event of a power failure, while all electronic equipment related to monitoring will be connected to an uninterruptable power supply. In the case where even this unit fails, power from photovoltaic panels will be used for the outdoor lighting systems.

The supervision and management systems

The surveillance system is planned for the various levels relative to the different functional areas of the complex. As mentioned above, the area of the facility is bordered by a patrol road enclosing the perimeter and skirting all the locations to be kept under surveillance. The entrance building (B1) together

with the building along the wall (F5) are the points of first intervention for the management of security.

The whole surveillance system is linked to the tower where the central telematics and information nerve centre is located in a strategic position relative to the entire facility. A fully computerized system for optimal management of the detention facility has been devised in line with the organizational requirements expressed in the project description. Every occupant of the penitentiary village, both staff and detainees, will have their own badge linked to a personal code.

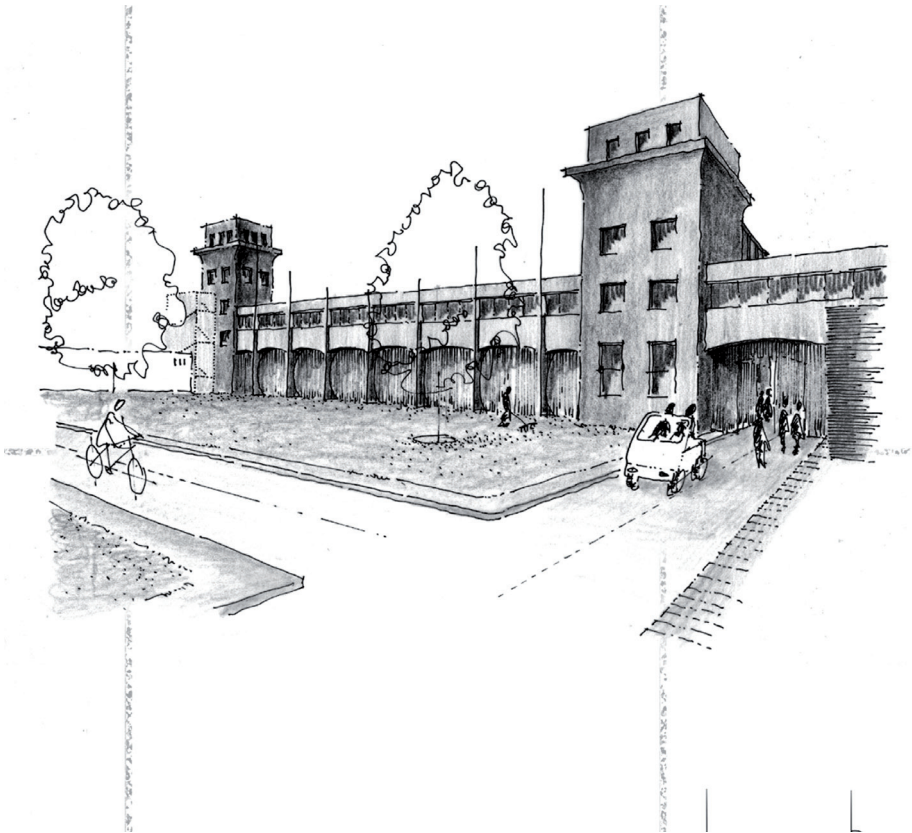


Figure 7.7 Office building and the surveillance centre. Reproduced with permission; no reuse without rightsholder permission.

A central unit programmed by the management of the prison will indicate guard duty shifts, the places where the service is to be carried out, the passage times (varied from day to day) of surveillance patrols, the activities planned for each individual detainee (interview with attorneys, visits to other detainees, sport etc.).

In every room and within each cell a badge reader capable of fingerprint checks will be installed.

The central unit will verify through analysis of the badge data that the detainees and guards are in the predetermined locations and that there have been no unplanned changes to activities. The presence of elements not provided for will trigger an alarm prompting a check on the incident. Monitoring will be carried out by CCTV, recording patrol routes, accesses, and the corridors in front of the cells.

The prison guards will use electric vehicles; recharging the batteries will be by means of special photovoltaic panels.

There will be at least two each of the surveillance and the management centres, in case of failure.

Light poles with independent photovoltaic accumulators will ensure that in the event of the system being tampered with, illumination of the strategic points is assured.

The outer surface of the perimeter wall is punctuated by bastion-type constructions containing plant surveillance and remote monitoring systems. Access to the facility compound through the barracks is controlled by an independent monitoring system capable of commanding the technological and energy systems. Access to the barracks and housing from the public highway is monitored by a control point.

To optimize the work of the staff employed in controlling the individual internal locations, each building has been designed with a simple layout organized around connective spaces which remain linear as far as possible. Each zone is equipped with rooms dedicated to the surveillance personnel and telematics to control movement, opening and central locking of the doors.

Design team: Daniele Desii, designer and team leader; Raffaella Fagnoni, designer; Pier Matteo Fagnoni, designer, economic evaluation; Giorgio Spiga, assistant designer; Gherardo Montano, designer installations; Gianni Seracini, designer installations; Marco Podrini, graphic elaboration; Maurizio Messa, graphic elaboration; Guido Di Spigna, graphic elaboration; Stefano Benini, graphic elaboration. Consultants: Elio Satti, sociological studies; Olivia Fagnoni, psychological studies; Ornella Favero, interviews with detainees redazione; Ristretti Orizzonti, personal stories and experiences.

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