

Identification

<i>Nomination</i>	Ferrara: a city of Renaissance and of walls permanent system
<i>Location</i>	Emilia-Romagna
<i>State Party</i>	Italy
<i>Date</i>	20 October 1994

Justification by State Party

Ferrara is an ancient capital city whose urban structure is one of the most important in Europe.

Among the great Italian cities it is the only to have an original plan that is not derived from a Roman layout. It did not develop from a central area but rather on a linear axis, along the banks of the river Po, with longitudinal streets and many cross streets around which the medieval city was organized.

The most significant characteristic of Ferrara's urban history rests on the fact that it developed from the 14th century onwards and, for the first time in Europe, on the basis of planning regulations that are in use nowadays in all modern towns. This type of development is known as *addizione*; the third phase was implemented in 1492, making Ferrara the only planned Renaissance town to have been completed. The street network and the enclosing walls are closely linked with the palaces, the churches, and the gardens.

Throughout the 16th century the city was planned with the aim of making it a future "capital." Its evolution came to an end after the 17th century under Papal administration, and it did not undergo any extensions for nearly three centuries. Ferrara was, and remains today, a medieval and Renaissance city to which a suburban zone and open spaces have been added that respect the original 16th century plan.

The city plan (1492) provided for doubling its area, an expansion limited to the south of the castle. This extension was completed with the construction of a new and very up-to-date defensive system made up of large towers, walls, and ramparts. These alterations completely changed the appearance of the city. New streets were created on a grid and buildings in a new style were constructed. The fortifications, which were partially renovated in the 16th century, are unique because they preserve characteristics from the most important period of military architecture. It is not a homogeneous system since it is made up of constructions of different types. As a result it is considered to be the only complete version of the "Italian bastion system." It was not, however, built in conformity with an abstract plan or one that was isolated from its urban context; on the contrary, it was well integrated into the overall scene. In Renaissance Ferrara the symmetry between the city and its territory assumed great importance. The two areas, that within the defences (the street pattern) and that outside (the field layout) "cooperated" with the defensive system.

Criterion i

Ferrara has always exercised great influence in the fields of town and conservation planning. It was the birthplace of the concept of "urban perspective": the value of the architecture was linked with the siting of buildings within the town rather than being restricted to the form project alone. This remarkable attribute has been preserved over time, and it gives Ferrara its specific and spectacular character, even though it has no impressive buildings.

Ferrara was the first city to be planned as a capital on the basis of town-planning principles that were not to be used again until several centuries later, for new or renovated towns such as Paris, Vienna, or Berlin. The urban structure, walls, and fortress of Ferrara also influenced the impressive fortress of Amsterdam. The Ferrara school of architecture exported these new concepts for application in the building of other Italian and European cities. Other architects were to build "new towns" in the Americas, Africa, and Asia.

Architects such as Michelangelo, Peruzzi, Vignola, and Sansovino visited Ferrara to acquire at first hand a practical knowledge of its structure. Leon-Battista Alberti wrote his treatise on architecture there and Luca Barbaro dedicated his commentary on Vitruvius, illustrated by Palladio, to the Este family. After the Renaissance other architects, such as Floriani, studied the city when preparing new fortification projects. **Criterion ii**

During the Renaissance the city's history was intimately linked with that of the Este family and their rule. Ferrara was an important centre in the Middle Ages, a city with its own laws and even its own coinage, but under the rule of the Este it became a world-famous capital. The Este court was undeniably splendid, and for some four centuries it vied with those of cities such as Florence and Venice or the great European royal courts, those of France and Spain. Successive Popes looked upon the Este alternately as dangerous enemies or indispensable friends. The European courts remained in contact with Ferrara throughout this period. The enlightened patronage of the Este attracted all the best artists of the day. The family also played an important role in the political life of Europe because their state formed a screen between northern and southern Italy, between the Empire and the Papacy. The Este displayed an openness of spirit not only in the realm of the arts but also in economy, in ideology, and in religion. The Jewish community always enjoyed relative freedom to establish itself in the city. Duke Ercole I invited the Jews driven out of Spain to set themselves up in Ferrara. Outstanding female personalities of the Este family such as Beatrice and Isabella d'Este or Lucrezia Borgia contributed to the prestige of the court. Queen Renée of France personally protected Protestants and Calvin. Machiavelli was inspired by Ercole I d'Este in writing his famous treatise on the virtues of the perfect Renaissance prince. **Criterion vi**

Category of property

In terms of the categories of property set out in Article 1 of the 1972 World Heritage Convention, Ferrara is a *group of buildings*.

History and Description

History

At one time the lands of Ferrara were crossed by the unstable water network of the Po and its meanders. The bed of the river that traversed the city moved several kilometres away in the 12th century, leaving behind no more than a modest stream, which disappeared in its turn in the 17th century.

Ferrara grew up along the banks of the Po on the Roman road leading to Padua round a ford. When threatened by the Huns the Bishop of Voghenza moved his episcopal see to the right bank of the river and, to ensure his protection the exarchs of Ravenna built a fort on the opposite bank in the 8th century. A river port grew up on both banks round the fort and the bishop's establishment.

The Pope granted jurisdiction over the city to Tebaldo de Canossa in the 10th century and built the Castel Tebaldo on the left bank, to the west of the Byzantine fort. It spread between these two poles, along a street parallel to the river (the present-day Via delle Volte and Via Ripagrande). At the beginning of the 12th century the city was in full growth and the commercial axis moved to the north, along a new highway (present-day Via Garibaldi and Via Mazzini), an ancient defensive line, to which new suburbs became attached.

This bipolar system of development was abandoned in the 12th century in favour of a single centre of which the cathedral was the pivot. The centre of communal power (Palazzo Comunale, the Tower of the Lions which preceded the castle, and the quarter inhabited by the ruling class) collected around this monument, which was linked to the river by a network of perpendicular streets. Guglielmo II degli Adelardi organized the defences to the north of the town, an earthen bank protected by a ditch and eighteen towers, whilst to the south the river continued to provide natural protection. The city went on developing along both banks of the river until the House of Este came to power.

This family first came to prominence in the communal government of Ferrara at the end of the 12th century, but another century was to elapse before it became the arbiter of the city's fate. The Pope appointed the family to rule the city in 1332, first as a marquisate and then as a duchy, a title retained until 1598. The Este family gave Ferrara a place among the states, both large and small, in Italy.

Niccolo II d'Este succeeded in consolidating the institutions of the domain, making it into a true principality. He gave special attention to matters relating to planning and in 1386 undertook the first of a series of extensions to the city (*addizioni*), all following the same lines. He enlarged the city by pushing the walls further away to the north. The open area created in this way became a quarter through the construction of a longitudinal axis street with streets opening out of it at right-angles and so linking with the existing street pattern. Niccolo invited his loyal supporters to move into this quarter, which became centre of the city's elite.

During the difficult period for the Italian states at the beginning of the 15th century Niccolo III d'Este (1393-1441) followed a skilful policy. He received the popes John XXII and Martin V and hosted the Ecumenical Council of 1438. The arrival at the court of the Veronese humanist Guarino Guarini conferred prestige upon Ferrara. He was made responsible for the education of the young Leonello, destined to succeed Niccolo III as Duke (1441-50). The new impetus that he gave to the university, founded in 1391, attracted many men of letters and scientists, who gave form to the Renaissance culture of Ferrara.

Borso d'Este (1450-71), Leonello's younger brother, modernized the administrative structure of the state; he was made Duke of Modena and Reggio, and followed in Leonello's footsteps in cultural matters. He repeated Niccolo II's experiment by creating the second *addizione* on the same lines (1450), reserving this quarter in the south-east of the city for merchants.

The long alliance between Ferrara and the Venetian Republic was brought to an end by Ercole I (1433-1505), who moved closer to France. His wife, Eleanora of Aragón, and their daughters Isabella and Beatrice played an important part in the political life of the Duchy and its relations with Naples and the neighbouring Duchies of Mantua and Milan. In 1492 he began the largest and most famous *addizione* in Ferrara as protection against Venice. The work was carried out by the architect Biagio Rossetti, assisted by Pellegrino Prisciani. Working with Alessandro Biondo he extended the defensive walls on the north of the city, whose area was doubled. In this enormous new area he applied the plan that had already been tried in the earlier *addizioni*. However, Biagio Rossetti used perspective in defining urban space. The main street, which linked the castle with the villas and parks to the north continued to be a private road for the princely family, along which faithful supporters built their *palazzi*.

Conflict with Venice continued under Alfonso I (1476-1534), along with a dispute with Pope Julius II, who wanted to govern the Papal States directly. Relations with the Papacy became more complicated under Alfonso II, whose mother, Renée of France, protected persecuted Calvinists. In 1557 he began to introduce the principle of bastions into the city's fortifications. On his death in 1597 the Este family left Ferrara for Modena, and Pope Clement VIII took back possession of the city, which became a distant province of the Papal States. The economic situation of the city deteriorated, with the walls being attacked by flooding from time to time and the countryside becoming impoverished. Nevertheless, a pentagonal fortress was built in 1608 to the south-east of the city (it was demolished after 1869).

Attempts to relaunch the economy of Ferrara in the 18th century by creating a canal to link up with the Po and a new port did not have the effects anticipated. In 1796 the city was occupied by the French, who made it part of the Cisalpine Republic. Ferrara was occupied again by the French in the 19th century, and then by the Austrians. When it became part of the Kingdom of Italy in 1859 major reclamation works began on the marshlands, the city's gates were enlarged, and new infrastructure was added (railway, hospitals, etc). Damage during World War II was limited.

In the 15th-16th centuries the Este court was one of the main centres for the development and practical application of the new humanism in Italy. From the end of the reign of Niccolo III (1393-1441) it became an artistic centre where the greatest artists of the day were invited to decorate the *palazzi* and villa (*delizie*) of the Este family, both in the city itself and in the neighbourhood - artists such as Piero della Francesca (1499), Jacopo Bellini (1441), Mantegna (1449), and Roger van der Weyden (who brought the Flemish technique in 1449). Cosme Tura (1430-95), whose style was developed by Francesco del Cossa and Ercole de' Roberti, founded the Ferrara school of painting.

Ferrara also played host to great humanists such as Pietro Bombo (1470-1547), who dedicated *Gli Asolani* to Lucrezia Borgia, wife of Alfonso I, and poets such as Boiardo (1441-94), Ariosto (1474-1533), and Tasso (1544-95), the creators of a new form of Italian poetry, the epic and the *Commedia dell'arte*. The poetic dreams of Ariosto were given material form in the development of the concept of the Italian Renaissance garden. The Barco, the hunting reserve of the Este family to the north of the town, which was divided into several sectors according to

function (zoological garden, *giardino dei semplici* or herb garden, ancestor of the botanical garden), was a model for the Villa d'Este at Tivoli and the Villa Taranto on Lake Maggiore.

The university, founded in 1391, was the scene of important scientific developments. Copernicus (1473) and Paracelsus (1493-1541) were among the famous scientists who studied or taught there.

Description

The defences of Ferrara are made up of elements belonging to the various extensions carried out over several centuries (ramparts, keeps, semicircular towers, bastions, barbicans, etc) and are cut by five ancient gates.

Archaeological excavations in the historic centre of the city have provided information about the medieval settlement, which consisted of wooden houses that were gradually replaced by bricks structures during the 12th-15th centuries. The most important monument surviving from this period is the cathedral.

The building of the Cathedral of San Giorgio began in 1135 and went on until the 15th century. Following the 1570 earthquake the interior was rebuilt by the architect Francesco Mazzanelli. This created a contrast between the interior and the exterior: the facade on which the master builder and sculptor Niccolò worked in the first half of the 12th century, influenced by Benedetto Antelami, the 15th century Portico of the Merchants on the south side, and the campanile, construction of which began in 1451 to a design attributed to Leon Battista Alberti.

With the building of the Cathedral the centre of the city was reorganized and took on a monumental appearance. The 13th century Palazzo Communale was the first residence of the Este family and was joined in the late 15th century to the Castello San Michele or Castello Estense. This massive, four-towered fortress was built by the court architect of Niccolò II d'Este following a violent popular revolt (1385). Work went on until 1570 with the creation of large halls to receive the court.

The new quarters resulting from the successive enlargements of the city were embellished with *palazzi* and churches, in the building of which the architect Biagio Rossetti (1465-1516) was involved to a considerable extent.

The Casa Romei was built in 1442 for the banker husband of an Este princess, in the centre of the *addizione* of Niccolò II (1386). It was bequeathed to the Order of the Poor Clares, and Cardinal Ippolito d'Este carried out some alterations. It is oriented on two arcaded courtyards and loggias decorated with paintings, which open on to halls that have retained part of their interior decoration, such as the Hall of the Sibyls.

The Palazzo Schifanoia (*sans souci*), built in 1385, was first remodelled in 1465-67 for Borso d'Este by the architect Piero Benvenuti degli Ordini assisted by the young Biagio Rossetti, who was responsible alone for the work in 1493. The *palazzo* has a long brick facade with a marble portal bearing the arms of the commandery, the work of Ercole de' Roberti. It is, however, the decoration of the halls, and in particular of the Hall of the Months, which best illustrate the humanist culture of Ferrara. This ceremonial hall is covered with frescoes by the most important representatives of the Ferrara School, Francesco della Cossa and Ercole de' Roberti, no doubt under the supervision of Cosme Tura. These frescoes are in praise of Borso d'Este, the master of the city, but they are also an epitome of humanism as disclosed in the treatises of Piero d'Abano and Manilius.

Biagio Rossetti also worked on the plan for the Palace of Ludovico il Moro, built in 1500 for Antonio Costabili, ambassador of Ercole I d'Este at the court of Ludovico il Moro, lord of Milan, who had married Beatrice d'Este. The courtyard, unfinished on two sides, reflects a sure understanding of the architecture of Brunelleschi. Benvenuto Tisi, known as Il Garofalo, painted scenes of court life on the ceiling of the Treasure Hall (150508). The Palazzo Roverella, residence of Alfonso I's secretary, is one of the last works of Rossetti (1508), with an elegant street facade decorated with terra cotta.

The Palazzo di Marfisa d'Este is a single-storey building of around 1559 situated within the area of gardens and *delizie*.

The intersection of the streets coming from the castle (Corso Ercole I) and the main axis of Ercole I's *addizione* (Corso Rossetti, Corso Porta Mare) linking two of the city gates is one of the most important elements in the 1492 city plan. Around it are four *palazzi* that are contemporary with it, the Palazzi Castello-Prosperi-Sacratì,

the Palazzo Bevilacqua, the Palazzo Turchi-Di Bagno, and the Palazzo dei Diamanti, which contribute to the perspective of the townscape. Work on the Palazzo dei Diamanti began in 1492 for Sigismond d'Este, but was not completed until 1565. The regular rustication over the entire height of the facades give it a special appearance.

Biagio Rossetti was also responsible for the reconstruction of the Church of San Francesco (1494) and perhaps also for that of Santa Maria in Vado, one of the oldest places of worship in Ferrara, the layout of which was changed by using the ancient nave as a transept (1495-1518).

Management and Protection

Legal status

The elements making up the property nominated to the World Heritage List belong variously to public and private institutions, private owners, or the Church.

The historic centre of Ferrara is made up of the historic city within the walls, the fortifications, and the Borgo Boaria at the south-east corner of the city. The buffer zone consists of the territory of the commune surrounding the city, which includes the municipal park to the north and the open spaces to the south-east.

Ferrara benefits from four levels of protection at municipal, regional, and State level:

- a The historic centre, as defined above, is protected by the General Master Plan approved in 1975 and reconfirmed in 1985. It has been applied for twenty years and its efficacy is proven. It has undergone some modifications since it was adopted, but the necessary adjustments and changes have been presented regularly every ten years for approval by the municipal council. The park to the north of the city, an ancient hunting reserve of the Este family, has a special historical value. This park and the open spaces to the south are protected by virtue of their landscape values and create a link between the city and the surrounding countryside.
- b The city has recently completed the complete evaluation of the entire municipal lands. All the buildings in it have been inventoried using the same method as that for the historic centre. These buildings are classified according to value, potential use, and type of treatment proposed. This evaluation forms the basis for a new management plan and detailed conservation policy. This plan constitutes the second level of protection, and as a result the entire municipal territory is in effect the buffer zone protecting the fortified city.
- c Ferrara is situated in the only region of Italy with an overall regional and inter-commune plan in force. The existing cultural, physical, industrial, and economic resources are systematically taken into account in the planning process, which involves the identification and documentation of the geophysical characteristics of the territory as the basis for physical planning.
- d The inventoried historical monuments are protected by the State under the provisions of the 1939 Law on the Protection of the Cultural Heritage. This applies to some one thousand properties, both large and small, of which about 650 are in private ownership.

Management

The restoration and rehabilitation of historic buildings are carried out with the assistance of local and regional authorities. This applies to project preparation and financing and the search for grants or loans. The city Planning Bureau gives provisional building permits for work on historic buildings, which entails technical examination of the buildings and detailed study of their historical significance with the object of checking the appropriateness of the proposed interventions. Special efforts have been made in the study of the use of traditional materials and building systems for the conservation of historic properties.

Conservation and Authenticity

Conservation history

The conservation of the historic centre of Ferrara has been and remains a major objective, which involves the inhabitants and private bodies as well as the official services.

The earliest restoration works were undertaken in the 16th century following an earthquake in 1570. Since the 17th century specialist services, such as the Civil Board for Decoration (1860) and the Regional Bureau for the Conservation of the Monuments of Emilia-Romagna (beginning of the 20th century), and private organizations, such as Ferrariae Decus (1906), have undertaken the restoration of monuments and streets, and also the urban fabric. During the same period the Municipal Council produced a plan which defined interventions for monument conservation (1915-49), whilst the Government was preparing the earliest legislation on this subject. Demolition projects prescribed in the revised rehabilitation plan for San Romano (1935-37) were not brought to a halt until 1970, thanks to new regulations of the General Master Plan. The directorates (*Soprintendenze*) for monumental properties, responsible for the protection of private and State-owned properties, were created in 1939 by Law No 1089. Bombardment in 1944-45 led to the destruction of many historic buildings and the State services implemented a reconstruction plan (1946).

After World War II the Ferrara Municipal Council developed urban plans and started restoration programmes in collaboration with the regional and central government authorities:

- Urban Plan (1957-60), which laid down precise rules for conservation and restoration;
- Special plan for the restoration of the fortifications (1947);
- Recording of all the streets and buildings in the historic centre (1963-68);
- Plan for the Historic Centre (1968);
- Plan for the conservation of the fortifications and open spaces (1974-75);
- Plan for the creation of an urban park of c 1000 ha to the north of the city;
- "Ferrara and the Este: the ducal gardens" plan for restoration of the northern section of the fortifications, the Palazzo Schifanoia, and the Palazzina Marfisa (1982);
- "Walls and Park" plan for the restoration of the Barco tower and the Gate of the Angels and creation of the urban park;
- Completion of work on the fortifications and the historic buildings provided for in the large project of 1988-89.

Authenticity

In the case of Ferrara, authenticity should be seen first of all in relation to the urban fabric representing the Renaissance city. The city planning office has carried out extensive comparative studies on the changes in form of the city over the centuries since the Middle Ages and the Renaissance, through the 19th and 20th centuries. This shows that the urban fabric has maintained all its significant features over the centuries.

Although the city suffered during World War II, it survived reasonably well. The layout of the Renaissance garden city of Ferrara was extensive for the needs of the time, and has been sufficient until recently. Its population has remained around 100,000, making it a moderate-sized settlement. Industrial and more recent building developments have been carried out according to approved master plans outside the walled city, mainly to the west in the area between the town and the motorway.

Ferrara contains a large number of important historic buildings, including the Cathedral, the Este castle, and palaces and churches for which Biagio Rossetti was the principal architect in the late 15th and 16th centuries. These buildings have been conserved and form the architectural structure of the historic town; they have been reasonably harmoniously continued with subsequent constructions. The overall urban image can be well understood as still reflecting the authenticity of the Renaissance planning ideals, and the citizens are clearly proud of this inheritance.

Although the palaces have undergone many successive alterations - their decorated painted exteriors in particular have suffered - there are still extensive artistic remains *in situ* today. The general architectural layout of the palaces has also been largely retained, and recent restorations have made it possible to reveal some historical qualities that had been obscured.

The city administration and the State authorities exercise control over all restoration activities. Work generally respects commonly accepted guidelines, both in relation to historic material and aesthetic form. Recent restoration work on the historic city walls has revealed some interesting features, previously hidden under accumulated layers of soil, but without undermining the historicity of significant later constructions. The treatment of the brick wall itself has been carried out with the utmost care, avoiding any reconstruction but at the same time not facilitating future maintenance.

Evaluation

Action by ICOMOS

An ICOMOS expert mission visited Ferrara in January 1995. ICOMOS also consulted its International Committee on Historic Towns and Villages.

Qualities

The principles of town planning of the Italian Renaissance were implemented for the first time and on a grand scale at Ferrara. The city plan put into action in 1492 on the orders of Ercole I d'Este was based on concepts of the Ideal Renaissance town developed by Leon Battista Alberti, Vincenzo Scamozzi, and Filareti. The urban fabric was based on the main open spaces within the city which reflected the different aspects of the social structure and the power centres. Biagio Rossetti made the *palazzi* and churches the foci of the views and perspectives within the city plan. In so doing he made a vital contribution to the development of modern town planning.

The fortifications of Ferrara, which date back to the 13th century, were rebuilt on several occasions by engineers of the Este family and their successors, but they have retained certain elements of each of these interventions. The system of bastions represents a technical innovation known as the "permanent bastion system" which was studied by the leading engineers of the period.

The court of the Este family at Ferrara became one of the main centres for the development and application of the new humanism in Italy.

Comparative analysis

Italy is the home of 15th century humanism, the Italian Renaissance, which was essential for the development of the modern world in all its aspects. This new humanism was developed and found its first expression in many of the courts of northern Italy, such as Florence, Urbino, Pienza, and Sabbioneta, as well as Venice, Vicenza, and Rome. All these centres have their special role and significance in this development and are not easily comparable. Ferrara differs from the other centres principally because of its significance in the development of the concept of Renaissance town planning: it was the first large-scale realization of the new planning ideals in the Renaissance.

The power of the Renaissance prince was expressed in the culture of the society, and could be seen as a modern interpretation of the ancient Greek *polis*. The spirit of humanism was here reflected in all fields and found a physical expression in the city, its architecture, its fortification system, its gardens, and its waterways. In Urbino and Pienza the efforts were concentrated on the improvement of an existing centre for the purposes of the court without an overall urban design. Another example is Sabbioneta, which was built in the form of an ideal city plan for the Gonzaga family in the 16th century. While it undoubtedly offers an interesting example, it remains a more modest undertaking compared with Ferrara and had more the character of a fortification. Rome and Florence, on the other hand, represented the requalification of existing towns.

In terms of fortifications, Ferrara is distinguished from other contemporary examples by the emphasis on the urban character of the city walls. Although the Prince invested substantially in building the fortification system, his aim went beyond simple defence in having political and social significance. Ideally, the aim was to provide citizens with a safe urban settlement where the fortifications not only indicated an extended limit to the ensemble but also constituted an important element in the urban communication system. The walls of Ferrara offered an early reference for the design and further development of fortification engineering.

ICOMOS recommendations for future action

The ICOMOS expert mission discussed the name of the nominated property with the responsible officials. It was apparent that the proposed name does not sufficiently well express the significance and the universality of Ferrara. At the end of these discussions a new formulation was proposed: Ferrara, city of the Renaissance.

Recommendation

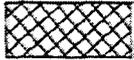
That this property be inscribed on the World Heritage List on the basis of *criteria ii, iv, and vi*:

Ferrara is an outstanding planned Renaissance city which has retained its urban fabric virtually intact. The developments in town planning expressed in Ferrara were to have a profound influence on the development of urban design throughout the succeeding centuries. The brilliant court of the Este family attracted a constellation of outstanding artists, poets, and philosophers, particularly the new humanists of Renaissance Italy, during the two seminal centuries of the Renaissance.

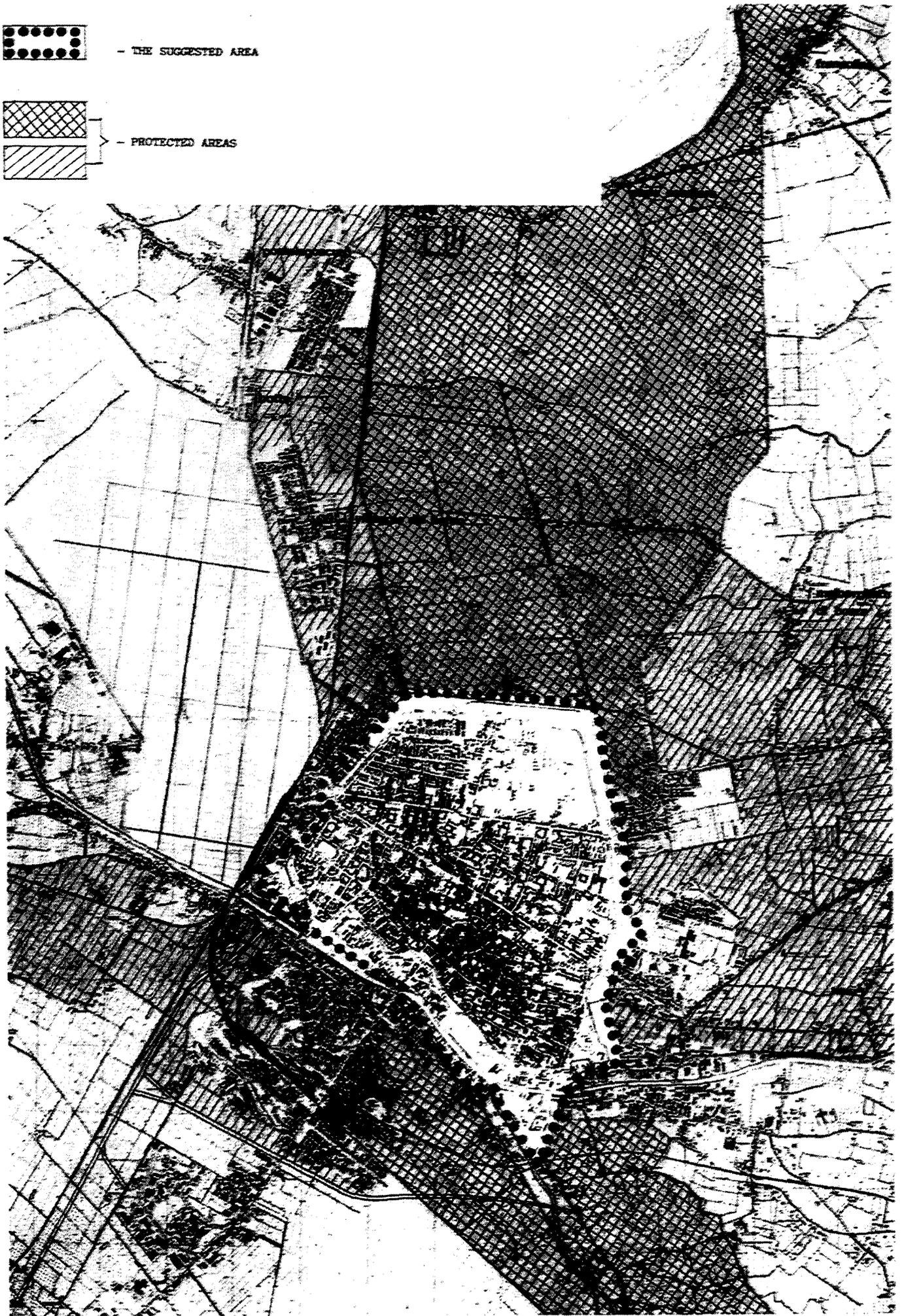
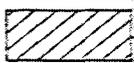
ICOMOS, September 1995



- THE SUGGESTED AREA

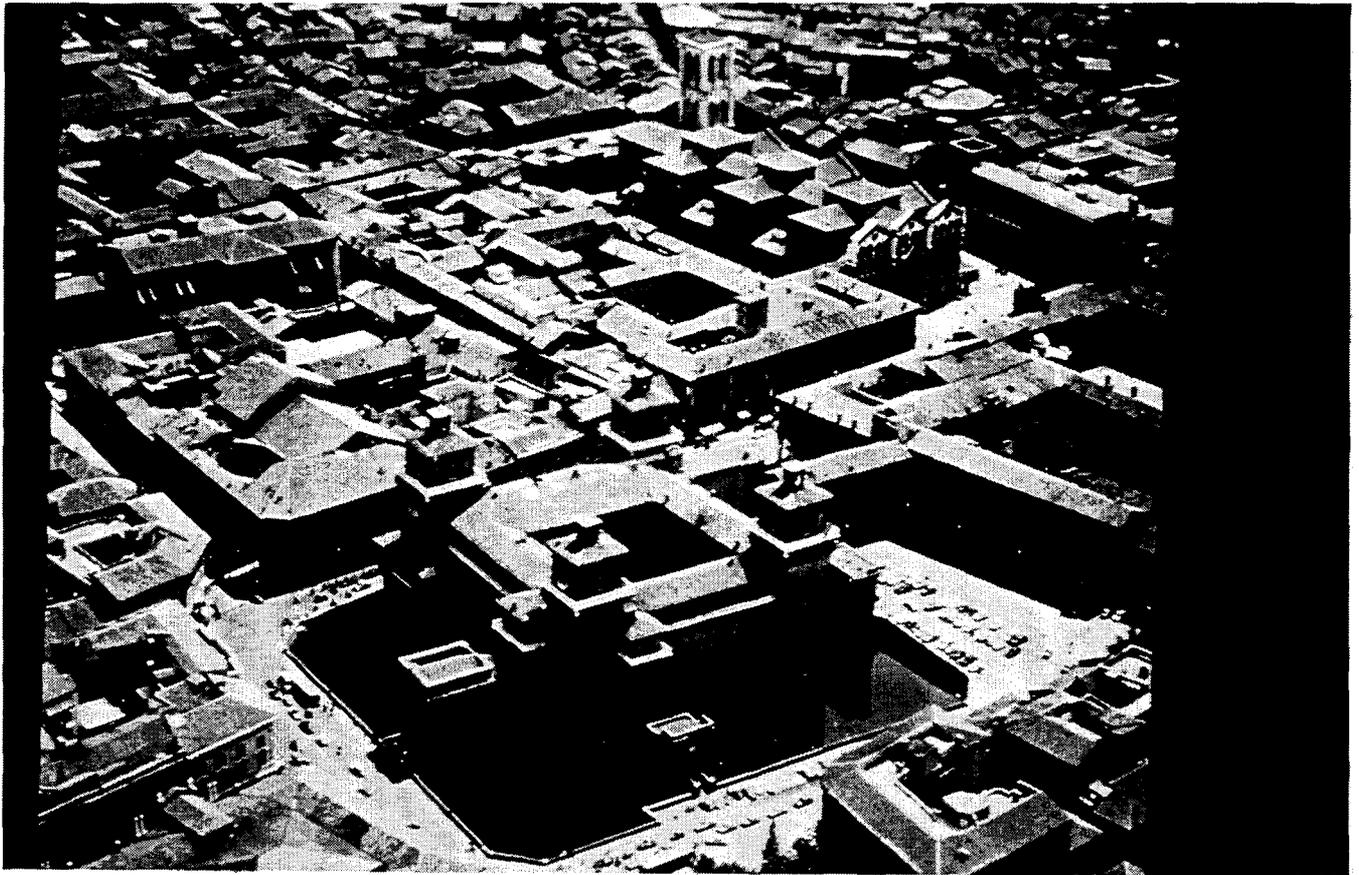


- PROTECTED AREAS

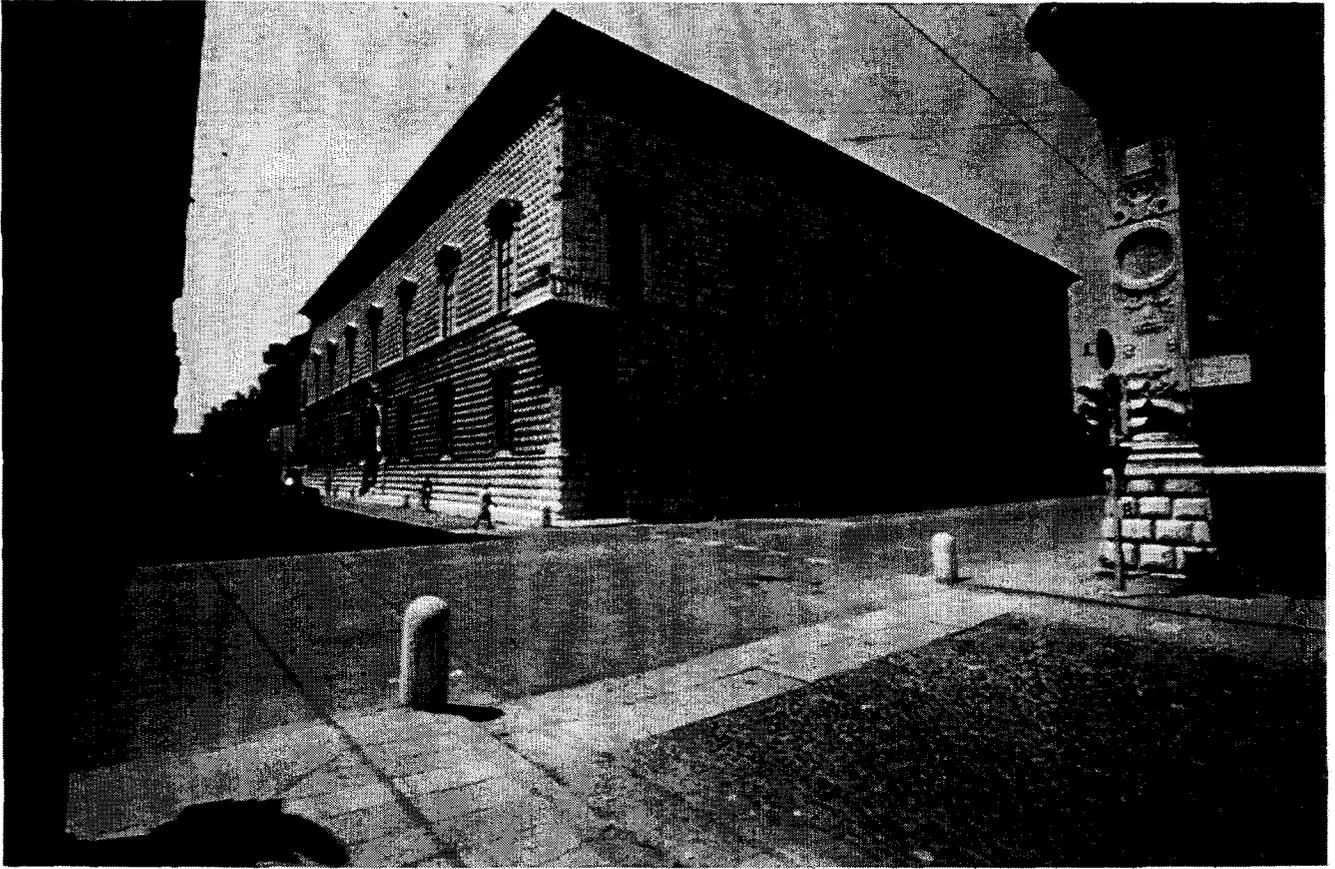


Ferrare : carte indiquant la zone proposée pour inscription et la zone tampon /

Ferrara : Map showing the nominated area and the buffer zone



Ferrare : vue aérienne avec le château au premier plan /
Ferrara : aerial view with, in the foreground the Castle



Ferrare : le palais des Diamants /
Ferrara : The Palazzo dei Diamanti