

Cine Mussi Theater

Conservation Programme Plan

Ariadne Marques de Mendonça

Civil Engineer

IPHAN (National Historic and Artistic Heritage Institute) - Brazil

ariadnemmm@yahoo.com

Abstract

The object of this work, Cine Mussi Theater, is an important example of art-déco architecture of the 40's located in the heart of the historic centre of Laguna, state of Santa Catarina. Laguna is considered the third oldest city of the state, established in 1676, being listed as national heritage in 1985. Cine Mussi Theater is interdicted and out of use since 2005, and the restoration of this building is part of a bigger plan of the city's revitalization. The objective is to propose a Conservation Programme for the building, considering identification of possible sponsorships and joint actions, investigation and documentation, development of designs and building plan, execution and the implementation of maintenance program. In the end, a major timeline plan with all these phases is proposed.

Introduction

The Historic Centre of Laguna is considered a historical heritage of Brazil and is listed in the book "Livro do Tombo Arqueológico, Etnográfico e Paisagístico" since 1985. The city still doesn't have Preservation Guidelines nor a Conservation Management Plan that defines the directives and regulates urbanistic parameters in order to manage the aspects of conservation and sustainable development of the historical area and its integration with other quarters and regions of the city.

The project of restoration and reactivation of Cine Mussi Theater is part of a series of proposals for the management of the historic centre, and this action today is considered of great importance. The city is well known by its artistic vocation, and the Theater has a great potential to shelter presentations of films and of theater's companies, music and dance. The goal is to make the city a dynamic space of cultural production once again.



Figure 1: Front View of Cine Mussi

Background

The city of Laguna was established in July 29th of 1676, to serve as an advanced post of the Portuguese crown. Laguna is considered the third oldest city of Santa Catarina, and in accordance to a treaty firmmed between the Spanish and Portuguese crown in 1494 (“Tordesilhas Treaty”), the line of the meridian passed in Belém of Pará, to the North, and Laguna, to the South. The importance of the city was due, mainly, to the use of the port as occupation strategy and defense of the territory, contributing for the local economic development, becoming the main region of the South region of Brazil at the time.

In 1748, the Portuguese Crown started to encourage Azorean immigrants to the region, which lacked men to work in their projects. As a consequence, the city has always preserved important characteristics of Azorean history, seen in its geographical location, buildings and houses. Laguna is part of the history of the colonization process of the south portion of Brazil by the Portuguese Crown. The old historic center has approximately 600 buildings, forming a set with singular characteristics: houses with Portuguese influence, eclectic, art nouveaux, art deco and modernist buildings .

Some of the main historical buildings are: Church of Santo Antonio dos Anjos, Anita Garibaldi’s House, old “Casa de Câmara e Cadeia” (Old Town Coucil and Jail), all from the 18th century, and Cine Mussi Theater, important art-deco construction of 1947.

Geography

The city is located in the southern state of Santa Catarina, 120 kilometers south of the state's capital, Florianópolis, and north east of Porto Alegre. Its coordinates are 28.48/28°28'57" S and the longitude is 48.779/48°46'51" W. In 2004, the population was 48,956 and the area was 445.24 km². Elevation is 2 m. Laguna is linked with the BR-101 coastal highway.

The Lagoon of Santo Antonio borders the city, and is linked to the Atlantic Ocean. There are innumerable draining and irrigation channels for cattle and agriculture production. The lakes and lagoons are of great economic importance because of the amount of fish and shrimp that they produce.

Climate

Santa Catarina is located in a mild humid climate region, with hot summers and rain uniformly distributed throughout the year. The city has a mild climate where the average yearly temperature is 19,70 Celsius, maximum absolute temperature around 36,30 Celsius e minimum of 16,50 Celsius, however during the winter the lowest temperature registered was 5,2 Celsius. Laguna has very high salinity in the air, due to chlorides from sea spray.



Figure 5: Atlantic Ocean, Santo Antonio's Lagoon and the historic center in red



Figure 2: Tordesilhas Treaty, 1494



Figure 3: Aerial view of the historic center



Figure 4: Location of Laguna in Santa Catarina



Figure 6: Overview of the Historic Center of Laguna

Architecture and Construction

The Cine Mussi Theater is an emblematic construction, established in the 50's, and is located at the border of the Lagoon of Santo Antonio and possesses a unique architectural style. The building towers the Historical Center of Lagoon consisting in an imponent urban monument. With its art déco style, Cine Mussi mirrors the context of a time, by the decades of 30 and 50. In the 40's, Mussi Theater is constructed (1947-50), and becomes the most important example of the art déco architecture.

The building is set in a triangular site, with its three façades occupying the whole site. The main façade (north) is curved, smoothening the visual impact. Its structure is made of ceramic brick masonry, with reinforced concrete beams between one floor and another. The windows are made of wood and are characterized by having a series of “false openings” covered with wooden “venezianas” and glass. There are also steel railings in some external windows.

The three façades have marquees and are coated with “mica” small parts. It has a wooden roof structure distinguished by its sophisticated system of joints and constructive details. The roof has ceramic tiles called “french tiles”. Its main access is composed of a marble staircase that leads to the Main Hall. There are interesting steel railings for the staircases, detailed wooden panels on the walls and ceilings in the whole building.

The total construction size is approximately 970 square meters (m²), and the theatre has capacity for 900 expectators.



Figure 7: Cine Mussi location



Figure 8: View of the street boarded by the lagoon, the Theater at the back (2007)

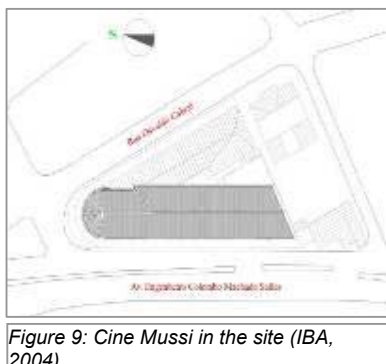


Figure 9: Cine Mussi in the site (IBA, 2004)



Figure 10: West façade view (2007)

Problems

The construction currently presents itself inadequate for use, representing risk to the public. The building was interdicted by the Fire Department in 2005 because of the bad condition of the electrical installation. But before that the building already had problems such as infiltrations from the roof (broken and missing tiles), bad condition of the wooden flooring, broken glasses on the windows and termite infestation.

The theatre is currently private property, and the owner doesn't carry out maintenance actions, nor have interest in using it as a theater. The owner wants to sell the building, and some offers have been, but never resulted in a deal. Some offers are from supermarkets and department stores that want to install themselves in the building.

There are other issues related to the site and the whole city that must be also considered:

- The legislation regarding land use are totally outdated, they were never reviewed since the site was listed as national heritage;
- There are illegal settlements and inadequate interventions in the city buildings, although authorities have always worked to contain such illegalities;
- Right after the site was listed, the real state value of the buildings in the protected area has decayed considerably, and that had an impact in development of the historical center. During the past 20 years, municipality and IPHAN have been working on educational actions to show the population the importance of the cultural heritage and its preservation. Today, the real state value of the buildings is increasing slowly;
- The municipality administration and its staff are insufficient to take care of the needs of urban planning integrated with preservation management of the site;
- The city has poor infrastructure: insufficient draining system, lack of central sanitation system, lack of waste disposal management;

Past interventions:

In 2005, the National Institute (IPHAN) realized some emergencial interventions in the building, after it was interdicted, to prevent further damage. The emergency actions were: revision and restoration of the roof structure, substitution of the asbestos-cement roofing tiles for French ceramic roofing tile, and the restoration of the wooden floor. The resources were limited, so it wasn't possible to carry on a complete restoration project.

Hypothesis

The restoration of the theatre cannot be seen as an isolated action, it has to be developed in accordance to the master plan¹ of the city and its historical center.

Like it was said before, the city doesn't have a management conservation plan since it was listed, but in 2007 the preparation of a document called "Preservation Guidelines of the Historic Centre" has begun, and it will be finished until the end of 2008. The goal is to establish guidelines for preservation and conservation of the historic site, defining soil usage regulation, preservation zones, rules for construction, reconstruction and reformation of buildings, rules for intervention on public spaces, in order to promote the process of urban rehabilitation, leading to economical, social and cultural development.



Figure 11: View of the city, Cine Mussi on the right (2007)



Figure 12: Detail of the front door



Figure 13: View of the auditorium

¹ The Master Plan of the city is being developed by the municipality, but the progress is slow



Figure 14: Main entrance – Lobby (2007)

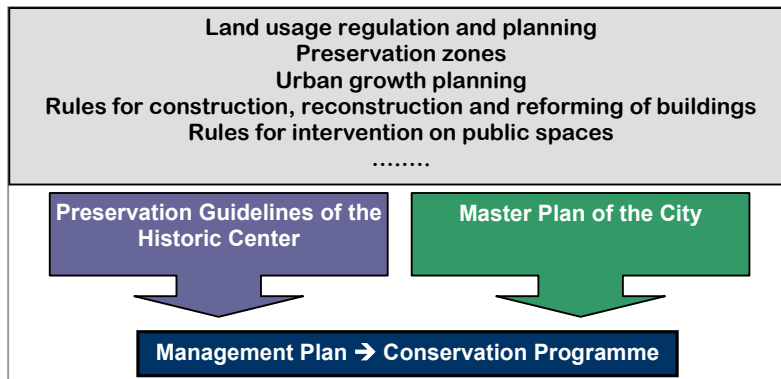


Figure 15: Integration of Preservation Guidelines, Master Plan and Conservation Programme of the building

The conservation programme should follow the main aspects of the Preservation Guidelines, and must not ignore the needs and complaints of the local community, nor the support of the local government to implement the project.

According to the Burra Charter: “*Conservation means all the processes of looking after a place so as to retain its cultural significance².*”

So, the proposed work is to prepare a plan of a Conservation Programme for the building, considering the problems of the site and the lack of financial resources, in order to execute the project in the most successful way. I’m considering that the Conservation Programme includes: restoration, rehabilitation and maintenance plan of the building.

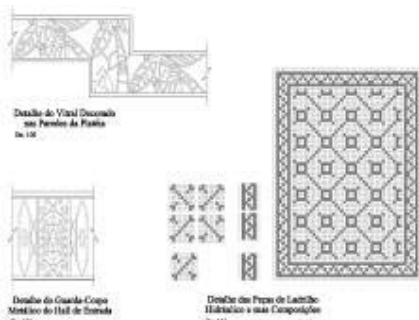


Figure 16: Details of tiling, wall finishing and railings (IBA, 2004)

Method

The Conservation Programme will be prepared to serve as a reference document guiding the development of the whole project, and prepare it to be submitted for sponsorship support. The proposed methodology to develop the Programme is the following:

1. POTENTIAL STUDIES	2. INVESTIGATION	3. PROJECT / PROGRAM
<ul style="list-style-type: none"> ▪ Follow the preparation of the “Preservation Guidelines”; ▪ Check acquisition status of the building; ▪ Research possibilities of the future use (IPHAN, local authorities and community) ▪ Study possible joint actions and partnerships. Convention Center? Museum? Opera House? Music Society? Theater Company? What else? ▪ Check possibility of integrating the Theater in other city projects: obtain resources more easily ▪ Assessment of value 	<ul style="list-style-type: none"> ▪ Historical, structural and architectural investigations: <ul style="list-style-type: none"> ▫ Analyze previous documentation of the building, uses and past interventions; ▪ Survey of the building: <ul style="list-style-type: none"> ▫ Investigate current conservation status of the building; ▫ Identify decay and damage (survey drawings); ▫ Photographic report; ▪ Laboratory testing (if needed); ▪ Diagnosis: <ul style="list-style-type: none"> ▫ Report on the diagnosis results and considerations; 	<ul style="list-style-type: none"> ▪ Intervention Guidelines and Building Programme: <ul style="list-style-type: none"> ▫ Determine levels of intervention; ▫ Check the technical demands and adaptations necessary; ▫ Future use, functions and building programme; ▪ Develop needed designs/projects: <ul style="list-style-type: none"> ▫ Accordance with Preservation Guidelines; ▫ Summary of projects needed; ▪ Building Plan / Execution: <ul style="list-style-type: none"> ▫ Estimated budget for the project; ▫ Timeline for construction; ▫ Operational specifications; ▫ Building execution; ▪ Maintenance Program and Plan <ul style="list-style-type: none"> ▫ Documentation analysis; ▫ Preparation of Program/Plan; ▫ Training and education of the staff

Figure 17: Proposed methodology

² ICOMOS, Australia. Burra Charter, 1999.

1. POTENCIAL STUDIES

What is happening:

The Preservation Guidelines of the historic center of Laguna are being elaborated, and the first phase of the work is complete, which includes a documentation research of available cartography maps, legislation and iconography of the area; analysis of criteria and intervention demands in listed buildings and interview with local actors about the procedures interventions approvals in listed buildings of Laguna. The continuation of the work will result in thematic maps (volumes, occupation rates, uses, natural environment and preservation conditions of the buildings), analysis of the data and the final proposition of the Preservation Guidelines.

The city is currently under a huge reurbanization project, with investments from the Ministry of Tourism, IPHAN and BNDES. The project aims to revitalize the city, by organizing the public space, improving the accessibility of pedestrians with the installation of ramps, pedestrian stripes, new sidewalks, new and resized bus stops, execution of a plaza by the docks and renewing the pavement of the main street with concrete blocks.

Possibilities:

In 2007, the Board of Banco Nacional de Desenvolvimento Econômico e Social [BNDES – The Development Bank] approved the choice of the municipalities of Salvador (State of Bahia), Marechal Deodoro (State of Alagoas) and **Laguna (State of Santa Catarina)** as reference cities in the biennium lasting from July 2007 to July 2009. These cities will be given priority in the application of BNDES's funds for investment in the restoration of monuments, so as to create a synergy resulting in social, cultural, urban or touristy benefits. The funds will be made available by the Rouanet Act, pursuant to the Regulation for Sponsorship of Projects Related to the Brazilian Historical and Archeological Heritage.

There are the following possibilities to receive support from third party sponsors/investors in the project:

- Submitting the project to the Ministry of Culture, through the “National Program for the Support of Culture” (PRONAC), based on the Federal Act of Culture (Law No. 8.313/91), the Rouanet Law. The program channels resources to the development of the cultural sector, with the objectives of: encouraging the production, distribution and access to cultural products; protect and preserve the historical heritage and artistic; stimulate the dissemination of Brazilian culture and regional diversity and ethnic-cultural, among others.
- Submitting the project to BNDES (The Development Bank), that supports conservation of architectural heritage. This activity, held in the ambit of Law no. 8313/91(Rouanet), takes place through financial collaboration, in the form of sponsorships, exclusively for restoration and conservation projects of the historic architectural heritage that is declared by the Union.

So the best option to implement Cine Mussi’s restoration and reopening, is submitting a project to BNDES, but, as mentioned earlier, the current owner doesn’t have any interest in keeping the theatre, and that’s why the Institute is negotiating it’s purchase, so that the building can also become a space for dissemination of the national culture.

The Theater is destined to be a **Convention Center** of the city (theatre, museum, information center), so that it can become sustainable, and there



Figure 18: Pedestrian stripes being executed (2007)



Figure 19: Pavement renewal with concrete blocks (september, 2007)



Figure 20: Finished new pavement with concrete blocks (january, 2008)



Figure 21: Window detail with missing glass



Figure 22: External hydraulic brick flooring is dirty, spent and presenting many missing tiles



Figure 23: View of exterior wall and window with missing steel railings

are possible partnerships between IPHAN and Commerce and Industries Association of Laguna, Hotels Association, Restaurants, City Hall, University, etc. The partnership can be made by offering the space to be rented for any events or shows, with the administration of an association, for example.

Objective of the project and assessment of value:

The first step of a Conservation Programme is to define the objective of the project, and then identify the values in the building, placing them in order of priority³. Cine Mussi Conservation Programme has the objective of restore and rehabilitate Cine Mussi Theater to serve as a Convention Center of the city.

In a brief consideration⁴, the values that can be identified in Cine Mussi Theater are the following:

- **Emotional values:** identity → the theater is part of the population's memory because it has been a place of social encounters and leisure (today the city doesn't have a place like this anymore);
- **Cultural values:** historic, architectural, aesthetic, technological, townscape → the building marks the arrival of modernity in the city; it is the most important example of art-déco in the state; it represents the cinema's era of the 40's and 50's; it is located in the most important street of the historic center, making it unmistakable;
- **Use values:** functional, economic, social → it was the most important point of cultural activity in Laguna, and it can continue to be so, bringing economic and social growth.

2. INVESTIGATION

Historical, structural and architectural investigations:

The building doesn't have a specific documentation research and such is needed to find out more about its past construction history and iconography. The purpose of this research is to understand the conception of the building, its constructional techniques, the subsequent changes in both the structure and its environment and any events that may have caused damage. This should result in a reconstruction of the history of the building, providing information such as⁵:

- definition, description and understanding of the building's historic and cultural significance;
- a description of the original building materials and construction techniques;
- historical research covering the entire life of the structure including both changes to its form and any previous architectural/structural interventions.

Survey of the building:

The next phase is the direct observation of the building, which main objectives are: identifying decay and damage, determining whether or not the phenomena have stabilized and identifying any ongoing environmental effects on the building. Detailed survey drawings should map different kinds of materials, noting any decay, irregularities and damage. Drawings with plans and sections were already made (*"Inventário de Bens Arquitetônicos"*):

³ FEILDEN, M. Bernard. Conservation of Historic Buildings. Architectural Press, 2003.

⁴ Following directions of Ingela Skarin's classes.

⁵ Based on ICOMOS "Recommendations for the analysis, conservation and structural restoration of architectural heritage", 2003.

Inventory of Architectural Assets “IBA”, elaborated in 2004), and the new survey should update and complement the information available about the condition of the building. Also, a detailed photographic report must be prepared in order to document the condition of the building.

In a recent and brief observation of the building, it is visible the following problems:

- Exterior plaster superficially damaged by the excess of moisture;
- Paint of exterior walls is peeled in some points and the color has vanished slightly;
- Reinforced concrete deterioration on the beams of the marquee (corrosion due to chlorides from sea spray);
- Wooden floor (“parquet”) damaged because of “synteko” application;
- Broken and scratched stone floorings;
- Internal hydraulic brick flooring darkened due to lack of maintenance;
- External hydraulic brick flooring is dirty, spent and presenting missing tiles;
- Lobby’s rounded lamps fixtures are damaged due to past infiltrations (one of them fell down right before the building was interdicted);
- Broken or missing glasses on windows and doors;
- Termite infestation all over the building;
- Occasional problems of infiltration;
- Wall panels and ceiling panels dirty and with some missing parts;
- Inadequate electrical installations.

Laboratory testing:

If needed, important phenomenas of decay should be investigated with laboratory testing to identify mechanical (deformability, strength), physical (composition, etc) or chemical (composition, etc) characteristics of the materials. The tests may be used to identify, for example, the composition of masonry mortar and plaster used in the building.

Diagnosis:

After the surveys, a diagnosis must identify the causes of damage and decay, on the basis of the acquired data. It is important to prepare a report on the diagnosis results and considerations, so that it will be useful to decide the intervention procedures applied in each kind of material and situation.

3. PROJECT / PROGRAM

Intervention Guidelines and Building Programme:

In order to guide the development of the projects, intervention guidelines for the building should be compiled, based on an assessment of value of the various elements of the building to determine levels of intervention. Also, it is important to determine a building programme and identify modern facilities and adaptations necessary for the proposed programme. These reports should be presented to the team of designers so that all the projects meet the basic guidelines.

Some basic principles are suggested below:

- Intervention must be carried out in order to remove the sources of the problems of deterioration and its signs;
- Retain, as much as possible, the original materials and craftwork;
- Minimum interference must be applied on original materials and craftwork;
- Avoid damage to other parts of the structure when working;



Figure 24: Bad condition of internal hydraulic bricks (2007)



Figure 25: Lobby's rounded lamps fixtures (2007)



Figure 26: Stairs - Lobby (2007)



Figure 27: Details of wood and glass on the theater walls (2007)

- Always protect architectural elements from dust, damage or humidity during the execution.

Designs

The designs are going to be developed by a team of professionals according to each specialization needed. The expected products are the following⁶:

1. Architectural project (Restoration and Rehabilitation Proposal) ➤ descriptive report on the definition of use, technical feasibility, specifications of materials and procedures proposed, situation plan, plan of all the levels of building (indicating the interventions proposed), façades and sections;
2. Structural project ➤ structural analysis, proposition of solutions to structural problems, specifications of materials and procedures, structural plan and drawings;
3. Drainage/Rainwater disposal system project ➤ plan and drawings with proposed solution (redesign or renewal of rainwater disposal), specifications of materials, procedures and recommendations;
4. Electrical and Telephone Installations Project ➤ this project has been already developed, but not executed; a revision will be needed according to the new architectural plans;
5. Protection from atmospheric discharges (lightning) Project ➤ plan and drawings with proposed solution (lightning rods and/or electrical charge dissipators), specifications of materials, procedures and recommendations;
6. Lightning Project ➤ plan and drawings with proposed lightning system, specifications of materials, procedures and recommendations;
7. Hydraulic Installations Project (Sewage and Water Supply) ➤ plan and drawings proposing renewal and/or adaptation of existing installations, specifications of materials, procedures and recommendations;
8. Fire Protection/Prevention Project ➤ plan and drawings with proposed solution (installation of automatic warning devices and sprinklers, resize access for fire fighting service, increase fire resistance of doors, fire extinguishers and fire hydrant, etc.), specifications of materials, procedures and recommendations;
9. Air-conditioning System Project ➤ plan and drawings proposing solution, specifications of materials, procedures and recommendations;
10. Sound, Communications and Projection System Project ➤ plan and drawings proposing renewal and/or adaptation of existing equipments, restoration of the old projection equipment, specifications of materials, procedures and recommendations.
11. Security System Project ➤ plan and drawings proposing security system (cameras, alarms, etc) specifications of equipments, procedures and recommendations.

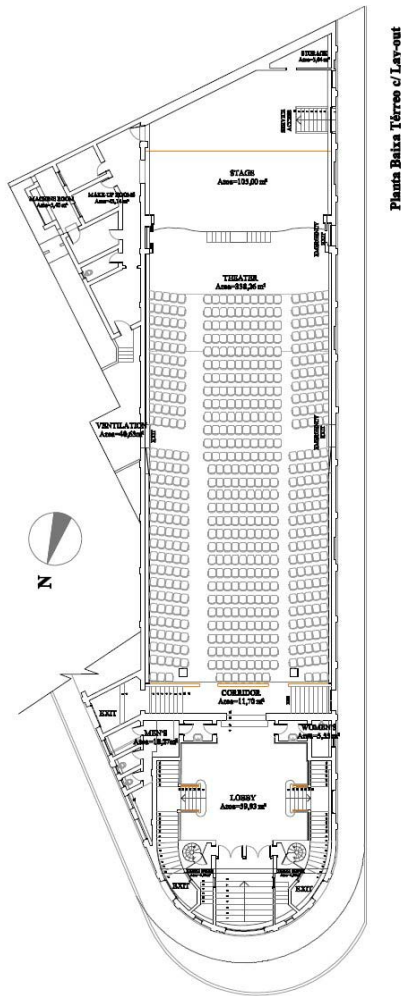


Figure 28: Ground Floor Plan (IBA, 2004)

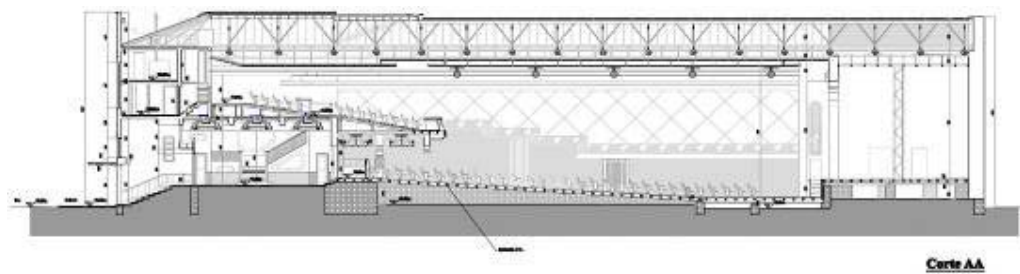


Figure 29: Section A (IBA, 2004)

⁶ Projects 4, 5 and 6 will probably be object of one contract (Electrical installations) and Projects 7 and 8 (Hydraulic installations)

Building Plan / Execution

After the elaboration of all the plans and drawings, it is possible to start planning the execution and preparing a total cost estimate for the execution of the projects, to be used in the tender process. The building plan will also contain a timeline for all the restoration work as well as an operational specification, “which gives the general order of work on a room-by-room basis for the interior or for each feature externally, under five headings – removals, repairs, alterations, services and decoration or finishing – and describes each operation in detail”⁷.

Below is a preliminary summary of the works that should be considered in the execution:

Nº	DESCRIPTION
1. PRELIMINARY SERVICES	
1.1	Building site (Initial cleaning, removal of rubble, provisional facilities, signs)
1.2	Protection of the site (Sheets of wood, plastic canvas for protection of floors and walls, security of workers)
1.3	Scaffolding and shoring (Steel or wooden scaffolds, and shoring if needed)
1.4	Equipments (Drills, hydraulic jacks, etc)
2. INITIAL WORKS	
2.1	Withdrawal of elements, facilities and other, in order to facilitate work (in the case of elements that are going to be reinstalled in its original places, withdrawal must be made cautiously with numbering, classification and proper storage, for later reassembly)
3. INFRASTRUCTURE	
3.1	Foundations (consolidation/reinforcement, if needed)
4. STRUCTURE	
4.1	Reinforced concrete or concrete (Repair / consolidation)
4.2	Review/restoration of wooden structure
5. ROOFING	
5.1	Review of wooden structure
5.2	Review of ceramic tiles
6. MASONRY	
6.1	Brick wall - consolidations/restorations
7. FLOORING	
7.1	Restoration of wooden floor, ceramic tiles, hydraulic bricks, stone floor, cement floor
8. PLASTER / WALL FINISHING	
8.1	Interior (restoration / consolidation / crack repairs)
8.2	Exterior (restoration / consolidation / crack repairs)
8.3	Ceramic tiles (restoration consolidation)
9. WATERPROOFING	
9.1	Waterproofing of bathrooms
10. CEILING	
10.1	Restoration of wooden ceiling / wood and paper details
11. WINDOWS, DOORS, RAILINGS AND GLASSES	
11.1	Wooden doors and windows (review / restoration)
11.2	Steel railings (review / restoration)
11.3	Restoration of hinges, lockset
11.4	Glasses
12. PAINTING	
12.1	Interior and exterior (repainting with appropriate specification and colors defined in the project)
13. HYDRAULIC INSTALLATIONS	
13.1	Sewage (pipes, connections)
13.2	Water supply (pipes, connections)
13.3	Fixtures, sinks, bathroom, faucet
14. DRAINAGE/RAINWATER DISPOSAL	
14.1	Drainage/rainwater system (gutters, downspouts, splash blocks, pipes, drains,)
15. AIR-CONDITIONING	
15.1	Ducts, chillers, cabinets, equipments
16. ELECTRICAL, TELEPHONE AND LIGHTNING INSTALLATIONS	
16.1	Conduit, detector, light fixture, post fixture, switch, wall fixtures, wiring
16.2	Telephone installations wiring and fixtures
17. FIRE PROTECTION AND SECURITY SYSTEM	
17.1	Smoke detector
17.2	Sprinklers
17.3	Fire extinguishers and fire hydrant
17.4	Fire resistant doors
17.5	Security system (cameras, alarms, ducts, wiring)
18. PROTECTION FROM ATMOSPHERIC DISCHARGES	
18.1	Lightning rods, electrical charge dissipators
19. SOUND, COMMUNICATIONS AND PROJECTION SYSTEM	
19.1	Sound equipments, computer network
19.2	Projection equipments (new and restoration of the old one)
20. DECORATION AND VISUAL COMMUNICATION	
20.1	Furniture and visual elements
20.2	Visual signs
21. TERMITE CONTROL	
21.1	Application of selected termite control solution (Treated-Zone Termiticides, baits, treated wood, physical barriers, etc)
22. CLEANING	
22.1	Final review and cleaning

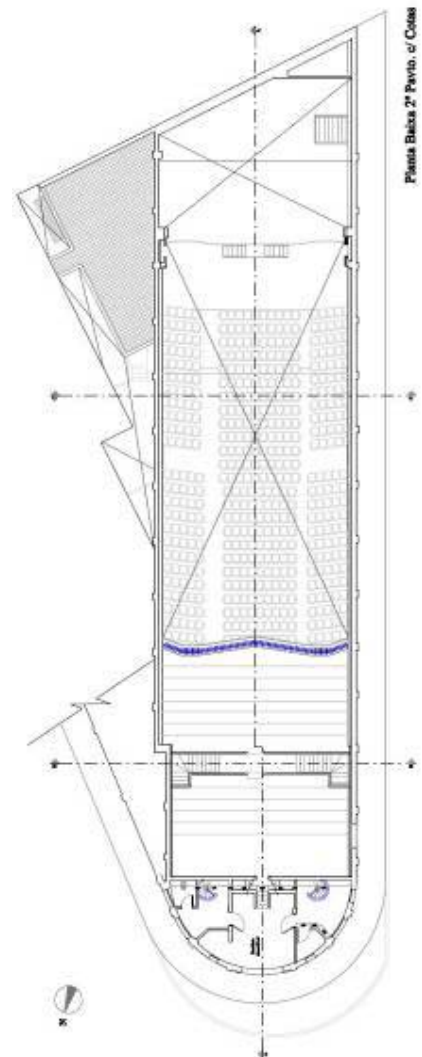


Figure 30: Second floor plan (IBA, 2004)

This summary will guide the preparation of the building plan, and can be used as check-list of the project.

⁷ FEILDEN, M. Bernard. Conservation of Historic Buildings. Architectural Press, 2003.

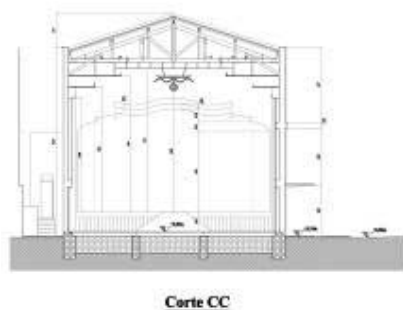


Figure 31: Section C (IBA, 2004)

Maintenance Program and Plan:

The last phase of the proposed Conservation Programme is to implement a Maintenance Program and Plan, which definition is the following⁸:

- Maintenance Program ⇨ it describes what to do and how to do it, based on protection regulations and previous restorations.
- Maintenance Plan ⇨ it describes when to do, by whom, to what cost and with what resources.

Its preparation should include the steps listed below:

1. Documentation analysis
2. Preparation of Maintenance Program
3. Preparation of Maintenance Plan
4. Training and education of the staff

Results

Considering the needs described in the methodology, a timeline plan⁹ is proposed for the execution of the Conservation Programme, starting with the final arrangements of Cine Mussi's acquisition by IPHAN until the preparation of the Maintenance Program and Plan. The plan includes the time needed with tender processes and the sponsorship process in order to execute the programme. The need of contracting professionals outside the Insitute is justified by the fact that IPHAN lacks staff, and it would take longer if all the work was made by our staff.

A summary of the timeline plan, with estimated duration, start and finish dates and responsibility is shown below:

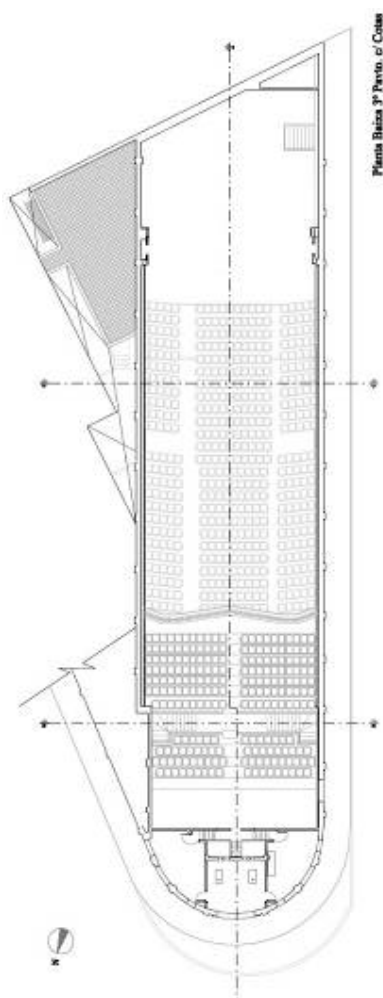


Figure 32: Third floor plan (IBA, 2004)

	TASK NAME	DURATION	START	FINISH	RESPONSIBLE
2008	1. POTENCIAL STUDIES <ul style="list-style-type: none"> ▫ Acquisition of the building and solving legal issues ▫ Start-up meeting with team: definition of the objectives of the project and assessment of values (IPHAN) 	27 days	01/07/08	06/08/08	IPHAN
	2. TENDER PROCESS 1 (INVESTIGATION, DOCUMENTATION AND DIAGNOSIS)	42 days	07/08/08	03/10/08	IPHAN
	3. INVESTIGATION AND DOCUMENTATION	30 days	06/10/08	14/11/08	Contracted team
	4. DIAGNOSIS	45 days	27/10/08	26/12/08	Contracted team
2009	5. TENDER PROCESS 2 (PROJECTS)	54 days	29/12/08	12/03/09	IPHAN
	6. PROJECT/PROGRAM <ul style="list-style-type: none"> ▫ Architectural project finished ▫ All projects finished 	123 days	29/12/08	17/06/09	Contracted team
	7. BUILDING PLAN	37 days	14/05/09	03/07/09	IPHAN
	8. SPONSORSHIP PROCESS - PRONAC/BNDES	114 days	06/07/09	10/12/09	IPHAN
	9. TENDER PROCESS 3 - BUILDING CONTRACTOR	47 days	11/12/09	15/02/10	IPHAN
2010 2011	10. BUILDING EXECUTION	385 days	16/02/10	08/08/11	Contracted team
	11. MAINTENANCE PROGRAM/PLAN	140 days	17/05/11	28/11/11	IPHAN

The total estimated time is 890 days (approximately 2 years and a half), considering that the programme is put into practice in July this year.

⁸ According to Dick Sandberg's Practical Binder and class

⁹ The timeline was elaborated with the help of a project management tool (see Appendix 1)

This plan, along with the other considerations described in the methodology aims to guide the implementation of the Conservation Programme of Cine Mussi, working as a tool for planning and control of this project within the Institute.

Conclusions

During the preparation of this work, it was possible to observe that any action in a building within a historic centre can not be seen as a isolated question, being necessary to examine and consider the conditions of the city as a whole, and the sustainability of this action. There has been some attempts of restoring Cine Mussi, but they have never worked out, sometimes because of lack of resources, lack of a consistent proposal for its use and partnerships, and, I believe, that the most important point is lack of a comprehensive programme of restoration/rehabilitation, ready for sponsorship support, for example.

The planning of the Conservation Programme was a good exercise of critical analysis, and resulted in a material that will certainly be used by the Institute for the execution of this project. Besides, I also hope that this culture of prior planning will be gradually implemented in all the Institute's actions.

References

- IPHAN. *Inventário de Bens Arquitetônicos (IBA) do Cine Teatro Mussi*, 2004.
- IPHAN/MONUMENTA/BID. *Cadernos Técnicos 1 - Manual de Elaboração de Projeto*. Brasília: 2005
- FRANCO, Luis Fernando P. N.. *Centro Histórico de Laguna*. In: *Caderno de Documentos nº 2 Estudos de Tombamento*. Ministério da Cultura/IPHAN. Rio de Janeiro: 1995.
- MUNARIM, Ulisses et al. *Restauração do Cine-Teatro Mussi Ltda-Memorial Descritivo*, 2005.
- FEILDEN, M. Bernard. *Conservation of Historic Buildings*. Third Edition, 2003.
- ICOMOS. *Recommendations for the analysis, conservation and structural restoration of architectural heritage*, 2003.



Figure 33: Original projectors of the 40's are still inside the building



Figure 34: Old picture (date unknown)



Figure 35: Old picture from inside the auditorium (date unknown)

Appendix 1

	Duration	Start	Finish
CONSERVATION PROGRAMME FOR CINE MUSSI	890 days	01/07/08	28/11/11
1. POTENTIAL STUDIES	27 days	01/07/08	06/08/08
1.1. Acquisition of the building and solving legal issues	20 days	01/07/08	28/07/08
1.2. Start-up meeting with team: definition of the objectives of the project and assessment of values (IPHAN)	7 days	29/07/08	06/08/08
2. TENDER PROCESS 1 (INVESTIGATION, DOCUMENTATION AND DIAGNOSIS)	42 days	07/08/08	03/10/08
2.1. Preparation of tender process to contract professionals	7 days	07/08/08	15/08/08
2.2. Processing in legal sector / administrative sector for publication	25 days	18/08/08	19/09/08
2.3. Tender process results and signed contracts	10 days	22/09/08	03/10/08
3. INVESTIGATION AND DOCUMENTATION	30 days	06/10/08	14/11/08
3.1. Historical, structural and architectural investigations	15 days	06/10/08	24/10/08
3.2. Survey of the building	20 days	13/10/08	07/11/08
3.3. Photographic report	15 days	16/10/08	05/11/08
3.3. Report and Photographic documentation finished	5 days	10/11/08	14/11/08
4. DIAGNOSIS	45 days	27/10/08	26/12/08
4.1. Development of Current condition drawings	25 days	27/10/08	28/11/08
4.2. Conservation status analysis	15 days	17/11/08	05/12/08
4.3. Laboratory testing	15 days	01/12/08	19/12/08
4.4. Final diagnosis report with drawings and laboratory results	5 days	22/12/08	26/12/08
5. TENDER PROCESS 2 (PROJECTS)	54 days	29/12/08	12/03/09
5.1. Preparation of tender process to contract professionals	14 days	29/12/08	15/01/09
5.2. Processing in legal sector / administrative sector for publication	30 days	16/01/09	26/02/09
5.3. Tender process results and signed contracts	10 days	27/02/09	12/03/09
6. PROJECT/PROGRAM	123 days	29/12/08	17/06/09
6.1. Definition of guidelines of intervention (IPHAN meeting with professionals involved)	7 days	29/12/08	06/01/09
6.2. Definition of brief building programme (IPHAN meeting with professionals involved)	7 days	07/01/09	15/01/09
6.3. Start-up meeting with team of professionals	7 days	16/01/09	26/01/09
6.4. Definition of building programme	5 days	27/01/09	02/02/09
6.5. Development of Architectural project	75 days	03/02/09	18/05/09
6.6. Architectural project finished	5 days	19/05/09	25/05/09
6.7. Structural project	15 days	28/04/09	18/05/09
6.8. Hydraulic Installations (Sewage and Water Supply) / Drainage/Rainwater disposal / Fire Protection Projects	20 days	28/04/09	25/05/09
6.9. Electrical and Telephone Installations Project (REVIEW)	15 days	28/04/09	18/05/09
6.10. Lightning project	30 days	28/04/09	08/06/09
6.11. Protection from atmospheric discharges (lightning) Project	30 days	28/04/09	08/06/09
6.12. Air-conditioning system project	30 days	28/04/09	08/06/09
6.13. Sound, Communications and Projection System Project	30 days	28/04/09	08/06/09
6.14. Security System project	30 days	28/04/09	08/06/09
6.15. All projects finished	7 days	09/06/09	17/06/09
7. BUILDING PLAN	37 days	14/05/09	03/07/09
7.1. Preparation of Cost estimate based on all the projects	25 days	14/05/09	17/06/09
7.2. Preparation of building Timeline and operational specifications	7 days	18/06/09	26/06/09
7.4. Finished building plan	5 days	29/06/09	03/07/09
8. SPONSORSHIP PROCESS - PRONAC/BNDES	114 days	06/07/09	10/12/09
8.1. Preparation of sponsorship documents to be sent to PRONAC (Ministry of Culture)	7 days	06/07/09	14/07/09
8.2. Sending to PRONAC / waiting for processing/result	30 days	15/07/09	25/08/09
8.3. Process approved on PRONAC	5 days	26/08/09	01/09/09
8.4. Sending process to BNDES sponsorship	7 days	02/09/09	10/09/09
8.5. Waiting for captation of resources	60 days	11/09/09	03/12/09
8.6. Results of sponsorship / captation of resources	5 days	04/12/09	10/12/09
9. TENDER PROCESS 3 - BUILDING CONTRACTOR	47 days	11/12/09	15/02/10
9.1. Preparation of tender process' documents	7 days	11/12/09	21/12/09
9.2. Processing in legal sector / administrative sector for publication	30 days	22/12/09	01/02/10
9.4. Tender process publication/results	5 days	02/02/10	08/02/10
9.5. Signed contract with building contractor	5 days	09/02/10	15/02/10
10. BUILDING EXECUTION	385 days	16/02/10	08/08/11
10.1. Start-up meeting with building contractor	5 days	16/02/10	22/02/10
10.2. Execution (according to building plan to be defined)	360 days	23/02/10	11/07/11
10.3. Final inspections / finished building	20 days	12/07/11	08/08/11
11. MAINTENANCE PLAN	140 days	17/05/11	28/11/11
11.1. Documentation analysis	20 days	17/05/11	13/06/11
11.2. Preparation of Maintenance Program	60 days	14/06/11	05/09/11
11.2. Preparation of Maintenance Plan	30 days	06/09/11	17/10/11
11.2. Training and education of the staff	30 days	18/10/11	28/11/11

Figure 36: List of all planned tasks: complete timeline

