

World Cultural Heritage
HISTORIC CENTRE OF
MACAO
State of Conservation Report
2024
(C 1110)

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Abstract

Since the inscription of the Historic Centre of Macao on the World Heritage List, the State Party has been strictly following the requirements of the *Convention Concerning the Protection of the World Cultural and Natural Heritage* (hereinafter referred to as the Convention) and the *Operational Guidelines for the Implementation of the Convention*, while continuing to implement the conservation and management of the Historic Centre of Macao, and continuing to foster convergence with internationally accepted concepts. The State Party has also gradually established an effective heritage management system with a sound legal framework, a smooth institutional system and sufficient resources based on local realities. Since the submission of the last *State of Conservation Report*, the Government of the Macao Special Administrative Region (hereinafter referred to as the “Macao SAR Government” or “SAR Government”) has been actively implementing the recommendations and requirements of the 45th Session of the World Heritage Committee (Riyadh, Saudi Arabia, 2023), to further improve and execute a solid heritage management plan, including the development of an effective heritage monitoring system and a Heritage Impact Assessment (HIA) system, with advance detail studies on the conservation of visual corridors linked to the Guia Lighthouse, in conjunction with the necessary on-going planning and construction studies for the New Urban Zone, while at the same time also upgrading heritage interpretation and presentation systems.

With the promulgation and implementation of the Administrative Regulation no. 4/2024 – *Protection and Management Plan of the Historic Centre of Macao* and the Macao World Heritage Monitoring Centre coming into official operation, a complete planning-implementation-monitoring closed-loop heritage management process has been achieved, elevating the Historic Centre of Macao into a new stage with holistic scientific conservation and management concepts. Fully implementing the requirements of the ICOMOS Technical Recommendations and General Assembly Resolutions, the Administrative Regulation no. 4/2024 – *Protection and Management Plan of the Historic Centre of Macao* has become the core system and effective tool for heritage conservation and management. Making use of the *Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao* and the relevant Monitoring Cloud Mobile APPs, the Macao World Heritage Monitoring Centre has

gradually integrated the existing monitoring efforts into a more systematic, automated heritage monitoring system under an improved heritage conservation and management mechanism that is strongly supported by modern technological means.

Following the recommendation of the Committee, the State Party has also been actively promoting the development of a standard Heritage Impact Assessment (HIA) system in Macao by conducting, in accordance with the *Guidance and Toolkit for Impact Assessments in a World Heritage Context* and local laws and regulations, with HIAs reports on proposed actions that could potentially affect the Historic Centre of Macao. The Macao SAR Government has also integrated heritage impact assessments into the Administrative Regulation no. 4/2024 – *Protection and Management Plan of the Historic Centre of Macao*, completing the legislation on HIAs in line with the existing legal system, which also considers the continued issuing of guidelines for the formulation of HIA reports in the future, to provide a strong legal basis for conducting heritage impact assessments.

The State Party also continues to closely follow development projects in the broader setting of the Historic Centre of Macao while trying to integrate sustainable development strategies into heritage conservation and social sustainability, taking as an example the proactive preservation of the visual corridors linked to the Guia Lighthouse through the continuous optimisation of the institutional system coupled with the development of detail studies. Final approval of the construction permit and project license has now been acquired for the building project at 18-20 Calçada do Gaio, and the study on “Heritage Impact Assessment and Urban Design of the Area around Avenida do Dr. Rodrigo Rodrigues” has been completed. These milestones have laid a good foundation for the scientific and efficient conservation of visual corridors involving the Guia Lighthouse. In addition, the planning and construction of the New Urban Zone, which is closely related to the Historic Centre of Macao, is also progressing in an orderly manner. The Administrative Regulation No. 8/2024 - *Detailed Urban Development Plan for the Eastern District 2*, which involves the New Urban Zone Area A, has been approved for implementation, followed by the New Urban Zone Area B’s planning study and the formulation of the draft detailed urban development plan for Area B, constituting significant milestones. In reference to the main transport projects involving the New Urban Zone, the construction of the East Line of the Light Rail Transit (LRT) that connects Area A and Area E has begun. The concept is based on a function-first design integrating landscape, and the planned overpass projects for the

New Urban Zone Area A and Area B will also fully consider the needs of protecting the “hill-sea-city” linkage and the related holistic landscape of the Historic Centre of Macao.

In view of the latest requirements of UNESCO WHIPIC for the interpretation and presentation of heritage and the urgent need for upgrading the interpretation and presentation of the Historic Centre of Macao, the Macao SAR Government plans to build an integrated, diversified venue called the Macao World Heritage Museum in the buffer zone area, which will link the surrounding heritage elements with existing exhibition halls, creating an effective spatial and content connection to enrich and improve the existing heritage presentation system, more effectively providing heritage interpretation and presentation that will better showcase the intrinsic heritage values. According to relevant studies, the construction of the project will not disturb the heritage site or its setting. Upon completion, the building will have a height, volume, and architecture in harmony with its surroundings, with no negative impact on related heritage values.

Reasserting its commitment of establishing an effective heritage management system for the Historic Centre of Macao, the State Party has achieved important practical results in recent years, thereby fulfilling its duties and missions as a member state of the Convention, while striking a balance between conservation and development. The State Party has always maintained good communication with the World Heritage Committee on all matters of concern, including on-time submission of explanatory materials and related documents, as well as full adoption and implementation of offered guidance and recommendations. As requested on the previous session of the Committee, the Administrative Regulation No. 4/2024, “Protection and Management Plan for the “Historic Centre of Macao”, and the research studies of “Heritage Impact Assessment and Urban Design of the Area around Avenida do Dr. Rodrigo Rodrigues” have been submitted together with the relevant technical response prepared in April 2024. Related information on the New Urban Zone and heritage monitoring is provided in Section 1.4 - *Notes on the New Urban Zone and Heritage Monitoring Related Documents* and in Section 5 - *Annexes* of this report, with links to access the full texts and abstracts. In the future, the State Party will integrate subsequent feedback on the abovementioned matters for further improvement, if any, and will also continue to follow proposed actions in the broader setting of the inscribed property, further strengthening heritage research and the interpretation of heritage values, while continuing to develop more actions to safeguard the Outstanding

Universal Value (OUV) of the Historic Centre of Macao through the most efficient means possible.

1. Response to the decision of the World Heritage Committee

Points 4, 5, 6 and 7 of Decision 45 COM 7B.154 of the World Heritage Committee refer to the consolidation of a heritage conservation system for the Historic Centre of Macao and the protection of visual corridors in its wider setting, also communicating the need to finalise the management plan, reiterating the importance of developing Heritage Impact Assessment (HIA) initiatives, reinforcing the protection of the visual corridors linked to the Guia Lighthouse, and developing the careful planning and construction of the New Urban Zone. The State Party's response to the above subjects is as follows:

1.1 Heritage Management Plan

Relevant extracts from Decision 45 COM 7B.154 of the World Heritage Committee:

4. Takes note of the progress made with the 'Administrative Regulation for the Protection and Management Plan of Historic Centre of Macao' and, keeping in mind that it will be revised in line with the technical advice of ICOMOS, requests the State Party to re-submit the amended Administrative Regulation to the World Heritage Centre for review by the Advisory Bodies prior to its adoption and implementation, and encourages the State Party to accelerate its efforts to bring this body of work to its final legal conclusion, through the promulgation of the revised Administrative Regulation in tandem with the final Management Plan for the property;

In March 2023, the State Party responded specifically to the technical advice of ICOMOS on the draft administrative regulation for the *Protection and Management Plan of the Historic Centre of Macao* (hereinafter referred to as the Management Plan) in the Explanatory Materials provided in Reply to the Letter (Ref. no.: CLT/WHC/APA/FJ/AN/22/006) from the World Heritage Centre. Prior to the promulgation of the referred administrative regulation, the State Party adopted the advice of ICOMOS on the draft administrative regulation, in line with the specific realities of the region of Macao, and the content of the regulation has since been adequately modified and supplemented to include, for instance, consideration for

typhoon threats, heritage impact assessments, heritage interpretation activities, tourism and visitor management/monitoring, and sustainable development, in the planning phase. In April 2024, the Macao SAR Government prepared the document ‘Reply regarding the Administrative Regulation for the “Protection and Management Plan of the Historic Centre of Macao” and the Heritage Impact Assessment and Urban Design Study of the area around Avenida do Dr. Rodrigo Rodrigues’, including the attachment of the final draft of the Administrative Regulation No. 4/2024 “Protection and Management Plan of the Historic Centre of Macao”, submitting it to the State Party for transmission to the World Heritage Center and its advisory bodies for review.

On 15 January 2024, the *Administrative Regulation No. 4/2024 - Protection and Management Plan of the Historic Centre of Macao* was officially promulgated and entered into force on 1 June 2024. The Macao SAR Government clearly understands and foresees the need to update the contents of the Management Plan promptly. In this respect, it will review the administrative regulation for the Management Plan at regular intervals, upon its effective date, and will make any modifications as necessary, according to Articles 56 and 57 of the *Cultural Heritage Protection Law*. Additionally, the technical content of the Management Plan shall be implemented progressively in accordance with the upcoming detailed zoning plans, with the aim of creating a more integral planning system for the Management Plan that will serve as the institutional framework and the effective tool for the protection and management of the Historic Centre of Macao.

1.2 Heritage Impact Assessments (HIAs)

Relevant extracts from Decision 45 COM 7B.154 of the World Heritage Committee:

5. Welcomes the legislation requiring Heritage Impact Assessments (HIAs) and the integration of the process to assess the potential impacts of projects on the Outstanding Universal Value (OUV) of a property through HIAs to be undertaken in accordance with the Guidance and Toolkit for Impact Assessments in a World Heritage Context;

The State Party emphasises its commitment in protecting the hill-sea-city comprehensive landscape of the Historic Centre of Macao and relevant visual corridors. By achieving convergence with the most updated international concepts of heritage

conservation, with full adherence to relevant requirements, including compliance with local upgraded regulations, the State Party actively carries out heritage impact assessments. After the successful inscription of the Historic Centre of Macao on the World Heritage List, the SAR Government made it explicitly statutory in the *Cultural Heritage Protection Law* and the *Urban Planning Law* that major projects are subject to heritage impact assessments¹. In recent years, the legislative safeguards for conducting heritage impact assessments have been further reinforced alongside with the promulgation of additional regulations, namely the *Master Plan of the Macao Special Administrative Region (2020-2040)* and the *Regulation of the Legal Regime for Urban Construction*². The definition of Heritage Impact Assessment (HIA) and that it is statutorily required to be performed are clearly defined in the provisions of the *Administrative Regulation No. 4/2024 – Protection and Management Plan of the Historic Centre of Macao* promulgated and enforced in 2024, completing local legislation on HIA. Nowadays, Macao has a well-established legal system and various legislative safeguards to serve as the legal basis for carrying out heritage impact assessments, which ensure that any proposed actions in the heritage zones, buffer zones and/or wider setting of the Historic Centre of Macao shall not pose a negative impact on the Outstanding Universal Value (OUV) of the Historic Centre of Macao.

According to Article 12 *Heritage Impact Assessment of Administrative Regulation No. 4/2024 - Protection and Management Plan of the Historic Centre of Macao*:

Heritage Impact Assessment aims to safeguard the values of the Historic Centre of Macao. When the Cultural Affairs Bureau expresses its technical opinions on development plans, architectural designs, projects or proposed works submitted by public departments or private entities, as vested by law, and if it believes that the plans, designs or projects may have a potential negative impact on the Historic Centre of

¹ In the State of Conservation Report submitted by the State Party in 2018, it was mentioned that the Macao SAR Government, in accordance with the *Cultural Heritage Protection Law* and *Urban Planning Law*, demands that projects which may potentially affect the Outstanding Universal Value of the Historic Centre of Macao are required to present impact assessment reports. In fact, for all projects associated with cultural heritage, including the Historic Centre of Macao, the issuance of respective construction work licences by the Land and Public Works Bureau must always be preceded by the issuance of mandatory and binding opinions from the Cultural Affairs Bureau.

² In the State of Conservation Report submitted by the State Party in 2022, there was detailed information regarding the regulations and procedures on heritage impact assessment, as was presented in sections 1.1 “Heritage Management Plan” and 2.1 “Legislation and Policy Development”.

Macao, it shall require the said public departments or private entities responsible for such plans, designs or projects to submit a Heritage Impact Assessment report.

Since the submission of the last State of Conservation Report, the SAR Government has actively carried out Heritage Impact Assessments on proposed actions that may potentially affect the Historic Centre of Macao, based on the requirements of relevant international documents and local regulations, while extending assessments to the wider setting. The launch of the research study, Heritage Impact Assessment and Urban Design project of the Area around Avenida do Dr. Rodrigo Rodrigues, which closely followed the *Guidance and Toolkit for Impact Assessments in a World Heritage Context*, was an important milestone in putting Heritage Impact Assessment into practice locally in Macao.

In the forthcoming period, the Macao SAR Government will carry out heritage impact assessment work by integrating technical analysis reports issued by the Cultural Affairs Bureau and heritage impact assessment reports compiled by professional institutions. Reports on significant projects that could impact the Historic Centre of Macao will be submitted to the World Heritage Centre and its advisory body for review. Furthermore, the Cultural Affairs Bureau will compile and publish specific guidelines for the preparation of heritage impact assessment reports based on the requirements of the *Guidance and Toolkit for Impact Assessments in a World Heritage Context*, taking into account the protection needs of the Historic Centre of Macao in order to ensure the standardisation and applicability of related technical reports.

1.3 Visual Corridors Linked to the Guia Lighthouse

Relevant extracts from Decision 45 COM 7B.154 of the World Heritage Committee:

6. Welcomes the approach to deal with the unfinished buildings at 18-20 Calçada de Gaio, the suspension of new building projects on Avenida do Dr. Rodrigo Rodrigues, and the instigation of the new study 'Heritage Impact Assessment and Urban Design of the area around Avenida do Dr. Rodrigo Rodrigues', and requests that a draft of this study be submitted to the World Heritage Centre for review by the World Heritage Centre and the Advisory Bodies before it is finalised and implemented;

The State Party attaches great importance to the protection of the visual corridors linked to the Guia Lighthouse. It has already successfully solved the high-rise building

at Calçada do Gaio, which prompted much concern in recent years, also having diligently addressed the new building projects on Avenida Dr. Rodrigo Rodrigues, with due caution and prudence. Moreover, the requirements and recommendations raised by the Committee and ICOMOS over the years have been fulfilled and adopted by the State Party with proactiveness. The construction permit and project license for the building project at 18-20 Calçada do Gaio were approved by the Land and Urban Construction Bureau in February 2023. At the same time, the “Heritage Impact Assessment and Urban Design of the Area around Avenida do Dr. Rodrigo Rodrigues” also had a significant improvement, which was presented in the respective public consultation process, jointly organised by the Land and Urban Construction Bureau and the Cultural Affairs Bureau of the Macao SAR Government in May 2023. The ‘Reply regarding the Administrative Regulation for the “Protection and Management Plan of the Historic Centre of Macao” and the Heritage Impact Assessment and Urban Design Study of the area around Avenida do Dr. Rodrigo Rodrigues’ was submitted by the State Party in May 2023, and provided the detailed study results of the “Urban Design of the Area around Avenida do Dr. Rodrigo Rodrigues”, including the respective web link for the respective public consultation data. The Macao SAR government will further refine the mentioned relevant study according to the technical advice communicated by the World Heritage Centre, which will in fact constitute the professional reference basis for the protection of the visual corridors of the Guia Lighthouse.

Regarding the actions that have been implemented to protect the visual corridors linked to the Guia Lighthouse, the State Party has responded to the requirements specified in the Decision of the Committee. It is now researching a solution that will systematically improve the current condition of the visual corridors, while putting in place the necessary planning-control guidelines to ensure their sustainability in the long run. In the balance of heritage protection and urban development, the SAR Government always gives priority to the conservation of the local World Heritage. The institutional framework now in place makes it possible to fulfil the commitment towards heritage conservation with strong determination. At the same time, the upgraded framework also allows to address the special issues arising from the transition period with an all-around broad perspective and dynamic thinking that considers best-practices for heritage conservation and the sustainable development of society. With the benefit of experience and well-researched actions, the institutional system has now been brought up to date, coupled with an accumulation of technical knowledge earned through the handling of

previous cases. All these factors provide a concrete basis and valuable reference for the scientific conservation and management of the Historic Centre of Macao.

1.4 New Urban Zone and Heritage Monitoring Related Documents

Relevant extracts from Decision 45 COM 7B.154 of the World Heritage Committee:

7. Requests the State Party to submit to the World Heritage Centre key management and planning documents for the New Urban Zones, along with documents pertaining to the monitoring of the property, for review by the World Heritage Centre and the Advisory Bodies, including:

- a) the planning study of the New Urban Zone Areas A and B,***
- b) the proposed design of the Light Rail Transit East Line project connecting the New Urban Zone Areas A and E,***
- c) up-to-date information about the ‘Plan for the Establishment of the Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao’, and***
- d) information about the ‘Macao World Heritage Monitoring Centre’;***

1.4.1 Planning and Development of the New Urban Zone

The State Party has already provided detailed information on the development of the New Urban Zone and the progress of the *Urban Planning Study of the New Urban Zone Area A* in the State of Conservation report of 2018, 2020 and 2022. The realistic planning conditions of the New Urban Zone and its implementation is pivotal to the healthy urban development, while alleviating the effects of development pressure on the Historic Centre of Macao. It is in fact a win-win solution for the necessary urbanisation and achieving the effective conservation of the World Heritage of Macao through an objective and scientific approach. Since the submission of the last State of Conservation Report, the SAR Government has stepped up its efforts to finalise the detailed planning of the New Urban Zone Area A, to be presented to the public. Moreover, it has already launched the *Urban Planning Study of the New Urban Zone B* and is drafting detailed zoning plans, with promising results at this stage.

The 60-day public consultation of the *Detailed Urban Development Plan for the Eastern District 2* lasted from 7 October to 5 December 2022, and the information and results from that public consultation were uploaded to the Macao SAR Government

Portal and the exclusively dedicated webpage of the Land and Urban Construction Bureau. The uploaded information included the consultation document and respective infographic, a final report of the public consultation, and a compilation of gathered opinions, among other information. In February 2024, the Macao SAR Government promulgated the *Administrative Regulation No. 8/2024 - Detailed Urban Development Plan for the Eastern District 2* and the full text of the *Technical Report on the Detailed Urban Development Plan for the Eastern District 2* was uploaded to the webpage of Urban Planning Information of the Land and Urban Construction Bureau for public reference.

Table 1 – Links to information on the New Urban Zone Area A accessible to the public

Name of document	Link to the full text
<i>Urban Planning Study of the New Urban Zone Area A</i>	https://urbanplanning.dsscu.gov.mo/cn/ZonaA_melhoria.php https://urbanplanning.dsscu.gov.mo/pt/ZonaA_melhoria.php (Chinese and Portuguese only)
<i>Technical Report on the Detailed Urban Development Plan for the Eastern District 2</i>	https://urbanplanning.dsscu.gov.mo/download/e2_tech_ch.pdf https://urbanplanning.dsscu.gov.mo/download/e2_tech_pt.pdf (Chinese and Portuguese only)
<i>Administrative Regulation No. 8/2024 - Detailed Urban Development Plan for the Eastern District 2</i>	https://bo.io.gov.mo/bo/i/2024/12/regadm08_cn.asp https://bo.io.gov.mo/bo/i/2024/12/regadm08.asp (Chinese and Portuguese only)
<i>Webpage on Public Consultation on the Draft Detailed Urban Development Plan for the Eastern District 2</i>	https://www.dsscu.gov.mo/uopge2/zh/home1/home1 https://www.dsscu.gov.mo/uopge2/pt/home1/home1 (Chinese and Portuguese only)

In November 2022, the SAR Government promulgated the *Chief Executive Order No. 211/2022* and initiated the preparatory work to develop the Detailed Plan of the

Outer Harbour District-1 and the *Outer Harbour District-2*³. In April 2024, the SAR Government accomplished the various tasks of the initial phase and collected opinions from various sectors of the government before moving on to the next phase of revision and improvement. Both the Outer Harbour District-1 and the Outer Harbour District-2 are located alongside the coastline on the southern side of the Macao Peninsula, occupying a total area of approximately 3 square kilometres. According to the *Detailed Plan of the Outer Harbour District-1 and of the Outer Harbour District-2*, a Historic Tourism Belt in the Coastal Zone, a green corridor, and a new commercial district shall be constructed, and new public facilities will be in place to upgrade the overall layout of the urban fabric in those areas.

1.4.2 Major transportation projects involving the New Urban Zone

To meet the traffic flow needs of the New Urban Zone and provide necessary transportation links and support for its sustainable development, the Macao SAR government has planned the project of the Light Rail East Line, connecting the New Urban Zone A and Zone E, as well as the project of the overpass, connecting the New Urban Zone A and Zone B. Both projects are far from the core zone and buffer zones of the Historic Centre of Macao.

The State Party reported on the *Macao LRT East Line Conceptual Design Proposal* in detail in the State of Conservation Report of 2020. As this project corresponds to an essential mode of transport, linking the New Urban Zone Area A and Area E, the project adopts the form of an undersea tunnel, in order to avoid potential impacts on the “hill-sea-city” visual connections and the landscape setting of the Historic Centre of Macao. During the subsequent public consultation and detailed design phases, the need to preserve the visual corridors of the Historic Centre of Macao and to closely follow developments in the wider setting was also fully considered. *The Preliminary Design of the Macao LRT East Line* was completed at the end of 2022 and embodies a function-first design concept that is well-integrated within the urban landscape, and as requested by the Committee, its core content is included in Section 5.1 - *Annex* of this report. At present, the construction of the LRT East Line is underway. From August to September

³ The New Urban Zone Area B lies within the Outer Harbour District-2. Considering that the Outer Harbour District-1 and the Outer Harbour District-2 are interrelated in their urban contexts and transport systems, as well as in other aspects, the preparation of the respective detailed plan for both districts was carried out at the same time.

2023, geological tests and tidal flat maintenance work were carried out in the northern section of the project, in line with the preliminary design needs. The East Line project officially started in October 2023 and is expected to be completed in 2028.

The flyover project connecting the New Urban Zone Area A to Area B is currently in the planning and design phase. The flyover, located between the Macao Peninsula and the New Urban Zone Area A, connects with the roundabout in front of the Macao Science Centre and with Avenida Dr. Sun Yat Sen to the west and runs over the Macao-Taipa Friendship Bridge and the existing waterway on the east, to the end at the New Urban Zone Area A, connecting with the fourth Macao-Taipa Bridge. The approximate 3.2 km-long flyover project includes a flyover, a road network connecting to both ends of the flyover, a footbridge and a foot tunnel. The main structure has a length of approximately 1,550 meters, with a cross-sea section of roughly 900 meters, which features four elevated spans allowing for vessel navigation underneath. The largest span is around 130 meters, and the highest point is 25.8 meters.

In the planning and construction of the flyover project, the Macao SAR government will take into consideration the protection needs of the “hill-sea-city” landscape setting of the Historic Centre of Macao, fully analysing all aspects and evaluating all eventual impacts of the project.



Figure. 1 Preliminary design plan of the flyover connecting the New Urban Zone Area A to Area B

1.4.3 Updates on heritage monitoring

The State of Conservation Report submitted by the Macao SAR Government in 2022 addressed the preparation of the *Plan for the Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao* (hereinafter referred to as the Monitoring Plan) and on the construction of the Macao World Heritage Monitoring Centre (hereinafter referred to as the Monitoring Centre). The Monitoring Plan meets the protection needs of Macao's Historic Centre and lays a good foundation for the smooth construction and operation of the Monitoring Centre. The respective critical

contents and drawings are presented in Section 5.2 of this report, as requested by the Committee. Based on the Monitoring Plan, the Macao SAR Government has already been operating a monitoring centre in the premises of the Cultural Heritage Department, of the Cultural Affairs Bureau, since November 2022. Since then, the *Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao* (FIG. 1) and the monitoring cloud mobile APPs (FIG. 2) have been functioning and supporting the daily monitoring needs, with existing monitoring tasks being gradually integrated in the management procedures of the overall monitoring system. These important technical support systems have been crucial for the modernization of heritage monitoring tasks, which have been effectively upgraded and optimized, enabling efficient, systematic and reliable heritage monitoring.

The *Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao* effectively monitors the status and condition of the 22 immovable properties, the eight public squares and the 72 streets and lanes of the Historic Centre of Macao. The system includes very diverse and rigorous monitoring and scientific equipment, such as inclinometers, crack gauges, terrain settlement gauges and pedestrian flow sensors, located in certain buildings, as well as other outdoor environmental data collection instruments, namely to monitor ambient temperature and humidity, weather information and data related to people circulation flows, including data provided by the local meteorological, environmental protection and tourism authorities. The Monitoring Centre is, therefore, able to collect, analyse, interpret and record various types of data and issue timely early warnings to facilitate the Cultural Affairs Bureau's full grasp of the conservation status in order to enable immediate follow-up actions when needed. A full summary of the abovementioned monitoring data will be sent to the Chinese National Platform for World Cultural Heritage Monitoring and Early Warning System under the State Administration of Cultural Heritage for comprehensive evaluation and processing, sharing information for integration with the national platform and driving convergence with updated international heritage monitoring standards.

Apart from the described monitoring system, the Macao SAR Government also conducts more specialised direct studies and targets specific case-by-case monitoring objectives on certain heritage sites with special needs. In reference to monitoring and research, the Cultural Affairs Bureau and the University of Macau have collaborated to analyse and evaluate the data collected by the monitoring system and conduct academic

research, namely on structural health monitoring, based on the data collected by the monitoring system and additional information gathered from direct inspections, in order to assess the status of individual buildings. As an example of special monitoring tasks, the Macao SAR Government has completed the "Research and Design Plan for the Protection of the Architecture and Mural Paintings of the Chapel of Our Lady of the Snows in Macau" and is now researching the most adequate technical solutions and respective implementation plan, based on the monitoring data collected.

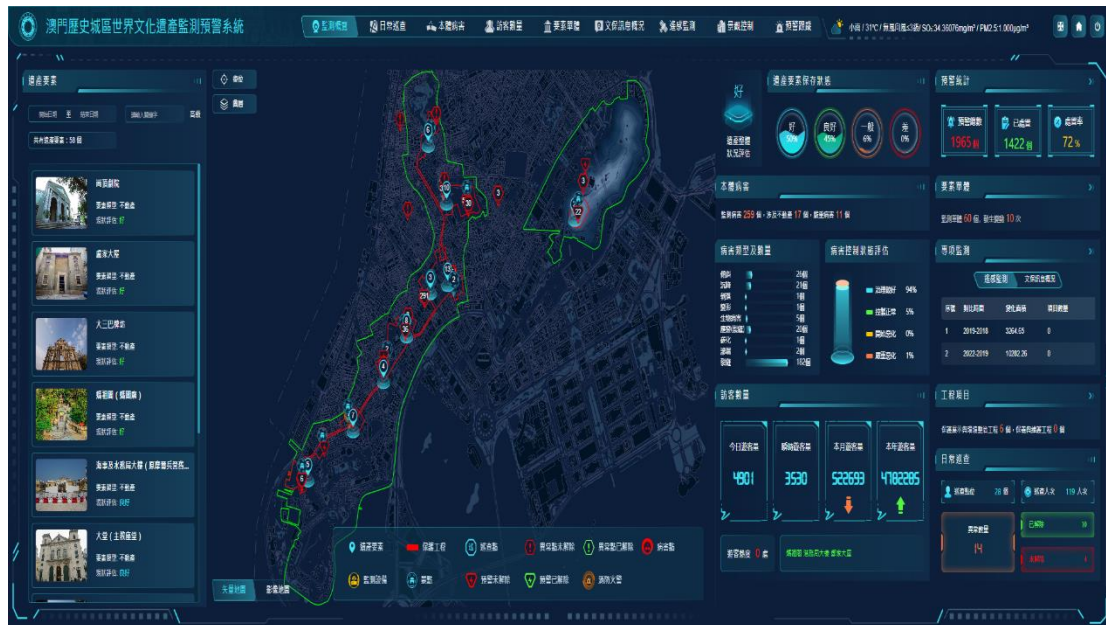


Figure 2 – View of the very large screen monitor displaying The Early Warning System for the Monitoring of the World Heritage of the Historic Centre of Macao



Figure 3 – Monitoring cloud mobile APP login interface and monitoring task interface

2. Other reportable matters

Since the inscription of the Historic Centre of Macao on the World Heritage List, the Macao SAR Government has been using the Macao Museum as the main venue for heritage interpretation and presentation. In response to the new requirements for World Heritage interpretation and presentation as set out in the UNESCO WHIPIC guiding documents, namely the Definitions and Concepts of Heritage Interpretation and Presentation and Research on the World Heritage Convention and Interpretation Policy, as well as to meet the public's growing demand for heritage interpretation and presentation, the Macao SAR Government plans to build a Macao World Heritage Museum (hereinafter referred to as the new Museum) next to the Macao Museum. The new Museum aims to become a comprehensive, diversified, thematic venue for interpreting and presenting World Cultural Heritage, creating synergy with the existing exhibition halls by complementing each other in content and forming a spatial linkage.

2.1 Plan for the Macao World Heritage Museum project

The new Museum is located at No. 16-22, Rua de D. Belchior Carneiro, in the buffer zone of the Historic Centre of Macao, adjacent to such heritage sites as Ruins of St. Paul's and Mount Fortress as well as the Macao Museum, which currently

serves as a heritage presentation venue. It is located along the visual corridor from the Mount Fortress towards the Luís de Camões Garden.⁴ The new Museum covers an area of 7,600m² with a construction height of 19.45m, which is controlled to be lower than the floor of the garden of the Mount Fortress, as well as to be lower than the general height of the existing constructions, in order that the significant visual corridor will not be blocked. Intended to connect to the Macao Museum via an overpass, the new Museum will adopt an overall transparent design to minimise visual intervention, with the exhibition space basically hidden under a slope for pedestrians. By retaining the old, treasured trees in the land plot in combination with greening designs and with a facade in plain colour featuring rock texture materials, the new Museum will be built to ensure that upon completion, it will be in harmony with the surroundings, without any negative impacts on the landscape involving the core area of the World Heritage property.

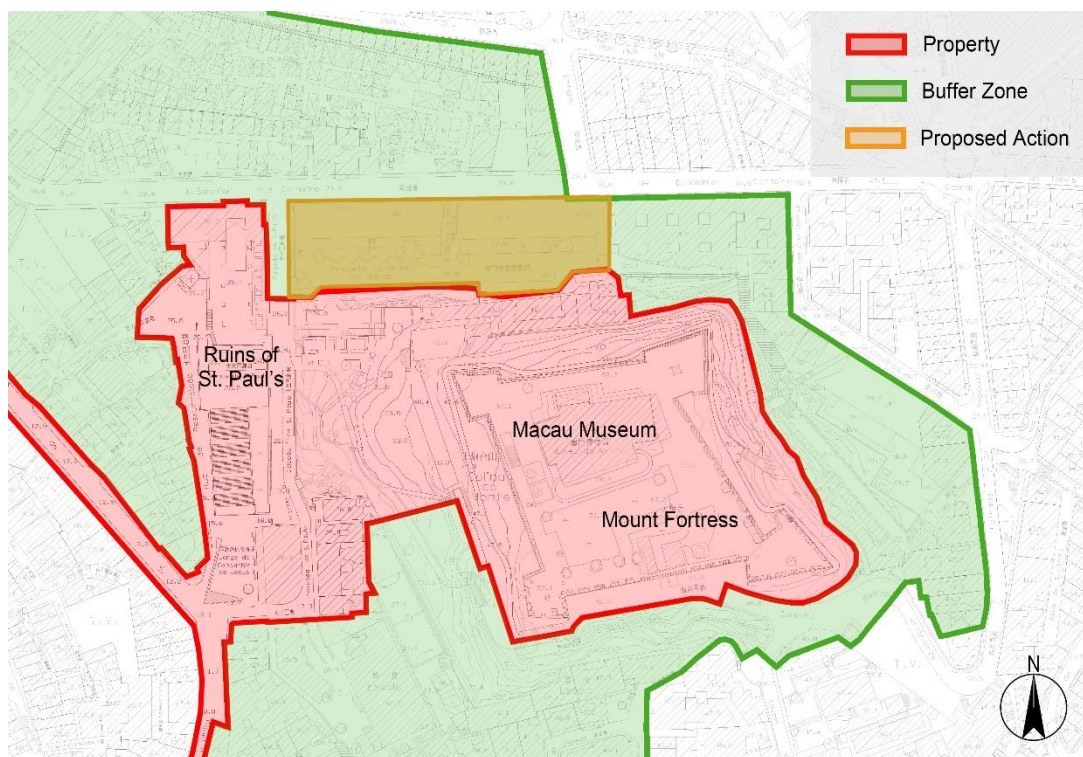


Figure 4 Schematic diagram of the relationship between the proposed project and the heritage zoning, heritage elements and the current exhibition hall for heritage presentation

⁴ Visual Corridor F: from the Mount Fortress towards the Luís de Camões Garden, one of the eleven significant visual corridors stated in the Management Plan.



Figure 5 A Rendering of the Macao World Heritage Museum



Figure 6 Bird's eye view of the Macao World Heritage Museum

The new Museum will comprehensively demonstrate the Outstanding Universal Value (OUV) of the Historic Centre of Macao through various presentation formats and means such as physical objects, multimedia interaction, dynamic electronic landscapes,

Kinect technology, interactive games, promotional videos, simulation environment, and 3D models and maps. It includes a ground floor which contains a collection storage house, a parking lot and a public space open to the public; a first floor with the Macao World Heritage Exhibition Hall and a reading room; a second floor, which encompasses the exhibition hall(s) reserved for the Macao Museum and a multi-function room; lastly, a third floor comprising a lecture hall, with a footbridge designed to connect with the Macao Museum to enhance people flow between the two venues. At the same time, the remains of St. Paul's College in the lot - the Man-made Pit on Rua de D. Belchior Carneiro, will be included in the new Museum for in-situ conservation and display to enrich further the interpretation and presentation of heritage values of the Historic Centre of Macao. In addition, the new Museum will utilise a raised platform to create a semi-open gathering space for public members to rest, meet and socialise while effectively directing visitor flow in the area and easing the load and pressure on the crowded zone.



Figure 7 Conservation presentation of the Man-made Pit on Rua de D. Belchior Carneiro

The SAR government has carried out a technical analysis of the new Museum plan, concluding that the height, volume and style of the proposed new venue all meet the requirements of the Management Plan for the protection of heritage elements and visual corridors and that with necessary archaeological exploration and excavation having been done on the project site and its surrounding areas⁵, it would not potentially damage underground remains associated with the Historic Centre of Macao. In addition, as the main facility to protect, publicise, present and promote the Outstanding Universal Value (OUV) of the Historic Centre of Macao, upon completion, the new Museum will connect the surrounding core heritage sites and exhibition spaces, such as the Ruins of St. Paul's, Mount Fortress, the Macao Museum, creating a core display and presentation area of World Heritage featuring more in-depth, comprehensive contents shown in more diversified forms and by more varied means. Hence, the overall interpretation and interpretation of Macao's Historic Centre will improve significantly in quality compared with the original system. All in all, the construction of the project will not have any negative impacts on the heritage's OUV but will enrich and upgrade the original exhibition and display system and enhance the effects of heritage interpretation and presentation so as to present intrinsic heritage values better.

3. Public Access to the State of Conservation Reports

Consent is required to upload the present report (without annexes) to the State of Conservation Information System of the World Heritage Centre (<http://whc.unesco.org/en/soc>).

⁵ In 1995, during the construction of the Macao Museum, an overall archaeological fieldwork was conducted at Mount Fortress, and archaeological excavations were carried out at the foot of the Mount Hill and on the east side of St. Paul's Ruins, leading to the discovery of the architectural remains of the old St. Paul's College. Following the demolition of the Civil Service Quarters on Rua de D. Belchior Carneiro in 2010, archaeological exploration and excavation works were carried out on the plot, including the Man-made Pit on Pit on Rua de D. Belchior Carneiro, the leisure area and the square lot at the east side of the car park. And only archeo-geophysical exploration using electromagnetic methods has been conducted at the Macao Museum Square adjacent to the Mount Fortress Administrative Building, thereby clearing No. 35 Rua de D. Belchior Carneiro and hence partially uncovering the St. Paul's College Site (the wall remains, the section on D. Belchior Carneiro), while excavation on the Well at Pátio do Espinho is underway.

4. Signature of the representative of the State Party