

National Archaeological Park

TAK'ALIK AB'AJ



TAK'ALIK
AB'AJ 
PARQUE ARQUEOLÓGICO NACIONAL

World Heritage Nomination
Second Additional Information Request
Republic of Guatemala / Ministry of Culture and Sports



Guatemala, February 14th, 2022
DM-0279-2022

Ms
Gwenaëlle Bourdin
Director
ICOMOS Evaluation Unit
Paris, France

Dear Ms Bourdin,

By this means, I present to you the Information requested on the letter "Interim report and additional information request" dated 20 December 2021 and sent by the ICOMOS Evaluation Unit, as part of the current assessing of the nomination of the National Archaeological Park Tak'alik Ab'aj as a World Heritage site.


Based on the foregoing, clear and brief responses are submitted regarding 4 different topics, as is requested on the mentioned letter

1. Integrity
2. Research activities
3. Site museum
4. Risk management

Thanking you in advance for your attention, I present you my sincere expressions of high esteem and consideration

Yours faithfully,

C.c.: Archivo


Lic. Felipe Amado Aguilar Marroquín
Ministro de Cultura y Deportes



ICOMOS

INTERNATIONAL COUNCIL ON MONUMENTS AND SITES
CONSEIL INTERNATIONAL DES MONUMENTS ET DES SITES
CONSEJO INTERNACIONAL DE MONUMENTOS Y SITIOS
МЕЖДУНАРОДНЫЙ СОВЕТ ПО ВОПРОСАМ ПАМЯТНИКОВ И ДОСТОПРИМЕЧАТЕЛЬНЫХ МЕСТ

Our Ref. GB/AS/EG/1663/IR

Charenton-le-Pont, 20 December 2021

H. E. Mr Francisco Roberto Gross
Hernandez-Kramer
Ambassador Extraordinary and
Plenipotentiary of Guatemala to France,
Permanent Delegate
Permanent Delegation of Guatemala to
UNESCO
Ambassade du Guatemala
7, avenue Niel
75017 Paris

World Heritage List 2022

National Archaeological Park Tak'alik Ab'aj (Guatemala) – Interim report and additional information request

Dear Ambassador,

As prescribed by the revised *Operational Guidelines for the Implementation of the World Heritage Convention* and its Annex 6, the Advisory Bodies have been requested to submit a short interim report for each nomination by 31 January 2022. We are therefore pleased to provide you with the relevant information outlining issues related to the evaluation process.

The ICOMOS technical evaluation mission to the “National Archaeological Park Tak'alik Ab'aj” was carried out by Ms. Maria Ifigenia Quintanilla (Costa Rica) from 8 to 15 August 2021. The mission expert highly appreciated the availabilities and support provided by the experts in your country for the organization and implementation of the mission.

On 27 September 2021, a letter was sent by ICOMOS to request further information regarding the area of nominated property and proposed buffer zone, Site Museum Tak'alik Ab'aj “El Caracol del Tiempo”, and participation and free, prior and informed consent. Please convey our thanks to all the officials and experts for the additional information you provided on 12 November 2021 and for their continued cooperation in this process.

At the end of November 2021, the ICOMOS World Heritage Panel evaluated the cultural and mixed properties nominated for inscription on the World Heritage List in 2022. The additional information provided by the State Party, together with mission and desk review reports were carefully examined by the Panel members. This process will conclude in March 2022.

We thank you for the availability of your Delegation to the meeting held on 25 November 2021 with some representatives of the ICOMOS Panel. The exchanges during this meeting were of great help for the third part of the ICOMOS Panel meeting.

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While the ICOMOS Panel considered that the “National Archaeological Park Tak’alik Ab’aj” might have the potential to meet the requirements for Outstanding Universal Value, this has not yet been demonstrated.

Therefore, we would be pleased if the State Party could consider the following points:

Integrity

The integrity of the nominated property was the main focus of discussions during the ICOMOS panel meeting in November 2021. It was noted that some elements of importance (for example, elements of the hydraulic system at El Escondite) are outside the nominated area. The nomination dossier declares that the nominated property represents the whole archaeological site, but there is very little information on the elements related to the archaeological site outside the nominated area to corroborate this.

ICOMOS would be pleased if the State Party could supply further information on the archaeological remains located outside the nominated area (e.g. maps, photos and concise descriptions). ICOMOS also wishes to understand the relationship of these remains with the proposed Outstanding Universal Value. What was the rationale behind the delineation of the boundaries of the nominated area as presented in the nomination dossier?

ICOMOS recognizes that the negotiations with the property owners are challenging and that they are ongoing. The proposal of an "Initial Protection Zone" as the basis for a potential future buffer zone and the "Protection Islands" presented in the additional information provided in November 2021 is a promising step. However, ICOMOS would appreciate if the State Party could consider providing further details on the following issues:

- What was the rationale behind the delineation of the Initial Protection Zone and the selection of the Protection Islands? What will their legal status be and how will it be different from the nominated area and the rest of the archaeological site in terms of protection measures?
- What is the (potential) impact of the pig-farm on the nominated property?
- Is there a timeframe for the finalization of the discussion on the buffer zone with the owners?

Research activities

From the detailed description in the nomination dossier and the very complete bibliography, it appears that a lot of research, specifically archaeological surveys and excavations, have been conducted. Much of it is described or mentioned in the nomination dossier. ICOMOS would be pleased if the State Party could provide maps that indicate the locations of these interventions, as well as of the conservation / restoration activities. ICOMOS would also be interested in knowing if research is planned for the future and whether there is a clear Research Strategy/Framework related to sustaining the proposed Outstanding Universal Value. Could the State Party please indicate whether there is a Conservation Plan (beyond the description of the threats presented in Annex III.2) for the nominated property and the entire archaeological site?

Site museum

ICOMOS acknowledges that the legal problems holding up the termination of the site museum are resolved and that funds are allocated for the construction to be terminated in 2023. ICOMOS would be interested in understanding what are the steps still necessary to be completed before the construction can resume? Could the State Party please indicate what part of the museum is already constructed, and what part is still missing? ICOMOS would also appreciate if the State Party could provide further information on what the building will include besides the museum installations: spaces for storage, laboratories, archives etc. Will older research and visitor infrastructure at the property be removed, once

the new museum is operational? Could the State Party please provide information showing these changes at the site through maps and plans?

ICOMOS understands that archaeological surveys were undertaken in the southern area of the nominated property and determined that this area has little archaeological evidence. These confirmed that this location was appropriate for the construction of the museum. Could the State Party provide further information on the potential impact the museum complex may have in terms of visual integrity on the nominated property? Could the State Party provide the architectural plans and design details of the museum complex?

Risk management

Finally, in the additional information the State Party supplied, a Risk Management Plan is mentioned. ICOMOS would appreciate if the State Party could explain what issues will be addressed in the Plan and whether this Plan will refer to the entire site or only to the nominated property. Could the State Party please submit the finished Plan or indicate the timeframe for its finalization?

We look forward to your responses to these points, which will be of great help in our evaluation process.

We would be grateful if you could provide **ICOMOS** and the **World Heritage Centre** with the above information by **28 February 2022 at the latest**, the deadline set out in paragraph 148 of the *Operational Guidelines* for supplementary information on nominations to be received. Please note that any information submitted after this date will not be considered by ICOMOS in its evaluation for the World Heritage Committee. It should be noted, however, that while ICOMOS will carefully consider any supplementary information submitted, it cannot properly evaluate a completely revised nomination or large amounts of new information submitted at the last minute. So we kindly ask to keep your response concise and respond only to the above requests.

We thank you for your support of the World Heritage Convention and the evaluation process.

Yours faithfully,



Gwenaëlle Bourdin
Director
ICOMOS Evaluation Unit

Copy to Ministry of Cultural and Natural Heritage
 UNESCO World Heritage Centre

National Archaeological Park

TAK'ALIK AB'AJ

World Heritage Nomination Second Additional Information Request

Republic of Guatemala / Ministry of Culture and Sports



MINISTERIO
DE CULTURA
Y DEPORTES



Delegación de Patrimonio Mundial
GUATEMALA

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ACRONYMS

AGRIP	Risk Management Analysis for Public Investment Projects
AGIES	Guatemalan Association of Structural and Seismic Engineering
ARCAS	Wildlife Rescue and Conservation Association
CECON	Center for Conservation Studies
COLORES	Corridor of Parrots and Reserves
COMUDE	Municipal Development Council
CONAP	National Council of Protected Areas
CONRED	National Coordinator for Disaster Reduction
COVIAL	Road Conservation Executing Unit
DIPRONA	Nature Protection Division of the National Civil Police
DISETUR	Board of Tourist Security
INAB	National Institute of Forest
INGUAT	Guatemalan Institute of Tourism
INSIVUMEH	National Institute of Seismology, Volcanology, Meteorology and Hydrology
MAGA	Ministry of Agriculture, Livestock and Food of Guatemala
MARN	Ministry of Environment and Natural Resources of Guatemala
MCD	Ministry of Culture and Sports of Guatemala
PANTA	National Archaeological Park Tak'alik Ab'aj
PNC	National Civil Police
SE-CONRED	Executive Secretariat of the National Coordinator for Disaster Reduction
SEGEPLAN	General Secretariat of Planning and Programming
USAC	San Carlos University of Guatemala

INTRODUCTION

For the State Party of Guatemala, it is a pleasure to be able to address ICOMOS and the World Heritage Centre in reference to the nomination process for the National Archaeological Park Tak'alik Ab'aj. Likewise, we appreciate the opportunity for deepen the information on the nominated area and its relationship with the rest of the archaeological site, where it is located.

The State Party of Guatemala wants to ratify that the nominated area meets the conditions of integrity and authenticity. This is because it has all the elements to express Outstanding Universal Value (OUV), since it meets five of the six cultural criteria of the Operational Guidelines for the Implementation of the World Heritage Convention. It is also considered that it has the right size to be representative of the important Pre-Hispanic city.

Research and restoration over more than three decades have been intensive and concentrated in the nominated area, as it is the nuclear part of the city. While in the rest of the site, despite being larger, the investigation has been less and at the polling level. Through comparative analysis it is shown that the nominated area is representative of the entire archaeological site and groups the best exponents of each criterion. Outside only nine sites of interest (Protection Islands) have been identified that may represent some criteria, but that still must meet other requirements, so they were not included in the nomination dossier presented to the World Heritage Centre in January year 2021.

On the other hand, information is included on the progress of the museum's construction, as well as management plans that complement it conservation. Finally, it is indicated that the entire archaeological site is protected by the national legislation, but the nominated area has a more intensive and strategic management because it is an archaeological park open to the public.

The State Party of Guatemala considers that the nominated area has unique characteristics, due to its fascinating and rich archaeological history of more than two thousand years from the Middle Preclassic period, which is why it deserves to be inscribed as UNESCO World Heritage Site.

Felipe Armando Aguilar Marroquín
Minister of Culture and Sports
Republic of Guatemala

Integrity



Integrity

While the ICOMOS Panel considered that the “National Archaeological Park Tak’alik Ab’aj” might have the potential to meet the requirements for Outstanding Universal Value, this has not yet been demonstrated. Therefore, we would be pleased if the State Party could consider the following points:

Integrity

The integrity of the nominated property was the main focus of discussions during the ICOMOS panel meeting in November 2021. It was noted that some elements of importance (for example, elements of the hydraulic system at El Escondite) are outside the nominated area. The nomination dossier declares that the nominated property represents the whole archaeological site, but there is very little information on the elements related to the archaeological site outside the nominated area to corroborate this.

ICOMOS would be pleased if the State Party could supply further information on the archaeological remains located outside the nominated area (e.g. maps, photos and concise descriptions). ICOMOS also wishes to understand the relationship of these remains with the proposed Outstanding Universal Value. What was the rationale behind the delineation of the boundaries of the nominated area as presented in the nomination dossier?

On the Nomination of the National Archaeological Park Tak’alik Ab’aj

The State Party of Guatemala appreciates to ICOMOS the opportunity to clarify the situation regarding the nominated area and the rest of the archaeological site. It further acknowledges that due to a misinterpretation of the previous request, it had not provided the means for ICOMOS to corroborate the nominated area is representative of the entire archaeological site. Therefore, a comparative analysis between the nominated area and the rest of the site is presented below, in terms of integrity and the criteria that justify the proposed Outstanding Universal Value (OUV).

Integrity

The State Party Guatemala wants to ratify that the nominated area meets the conditions of integrity, according to the analysis required in the Operational Guidelines (Paragraph 88). This analysis determines if the property meets the established conditions and to what extent it has been assessed under the following aspects:

a) The property includes all elements necessary to express its Outstanding Universal Value.

In the nomination dossier it is stated that the Outstanding Universal Value (OUV) of the National Archaeological Park Tak’alik Ab’aj has been outlined through intensive research and consolidation work. The nominated area meets five off the six cultural criteria (i), (ii), (iii), (iv) and (vi) for the evaluation of the OUV, which is an indicator of the high importance of the National Archaeological Park Tak’alik Ab’aj.

For each of the criteria there are various archaeological and cultural elements that are represented within the nominated area, which corresponds to 60% of the Central Group or core area of the ancient Pre-Hispanic city. Therefore, the National Archaeological Park Tak'alik Ab'aj has attributes that make it unique and different from the rest of the archaeological site and it is here where the criteria that justify the OUV are concentrated (Fig 1).

In the nominated area, the evolution of sculpture and lapidary art programs, criterion (i), reflects the transition of cultural expressions from the Olmec to the Maya. The concept of Central Group is expressed par excellence in the center of the architectural outline and the urban design, replicating the cosmograma (Schieber de Lavarreda *et al.* 2018), which is part of the criterion (ii). The "Astronomical Observatory", criterion (iii), summarizes and replicates the history of sidereal and solar astronomical observations, as well as the development of the Long Count, throughout the same time space (Poponoe de Hatch 2002; Schieber de Lavarreda and Orrego 2003). The "Open Air Museum", criterion (iv), exhibits an architectural and sculptural composition that represents past times (Schieber de Lavarreda and Orrego 2010), which encompasses a history of a millennium (800 BC -150 AD). The resilience of the sacred rituals represented in the criterion (vi), constitutes an element of incalculable wealth within the nominated property.

b) The property is of adequate size to ensure the complete representation of the features and processes which convey the property's significance.

The nominated area represents 2.35% of the total archaeological site. Even though this area is relatively small compared to the rest of the site, it has a natural concentration of archaeological remains, since it represents the heart and centre of the entire archaeological site. Therefore, the nominated area is considered to be of sufficient size to support the OUV representation.

The selection of the nominated area is based on the research and archaeological evidence developed for more than three decades, which has allowed us to affirm that it is representative of the entire archaeological site in terms of OUV. Intensive research has been concentrated mainly in the nominated area and it is estimated that the percentage achieved to date is 15%.

In the rest of the archaeological site, the investigations have been sporadic and at a polling level, which represents a percentage of investigation of less than 3%. It is considered that approximately more than 99% of the total extension of the rest of the archaeological site is buried and covered by agroforestry crops.

c) Suffers from the adverse effects of development and/or neglect.

The nominated area corresponds to the land that was strategically selected to make a donation in favour of the State of Guatemala, with the aim of creating an archaeological park duly established according to national legislation. This, in order to make the most important and representative elements of the entire archaeological site known to the public. Therefore, the nominated area has the great advantage that it allows for the best management of the conservation that is necessary. Due to certainty of land tenure and other favourable factors. In this sense, within the nominated area, the elements of each criterion are in a good state of conservation.

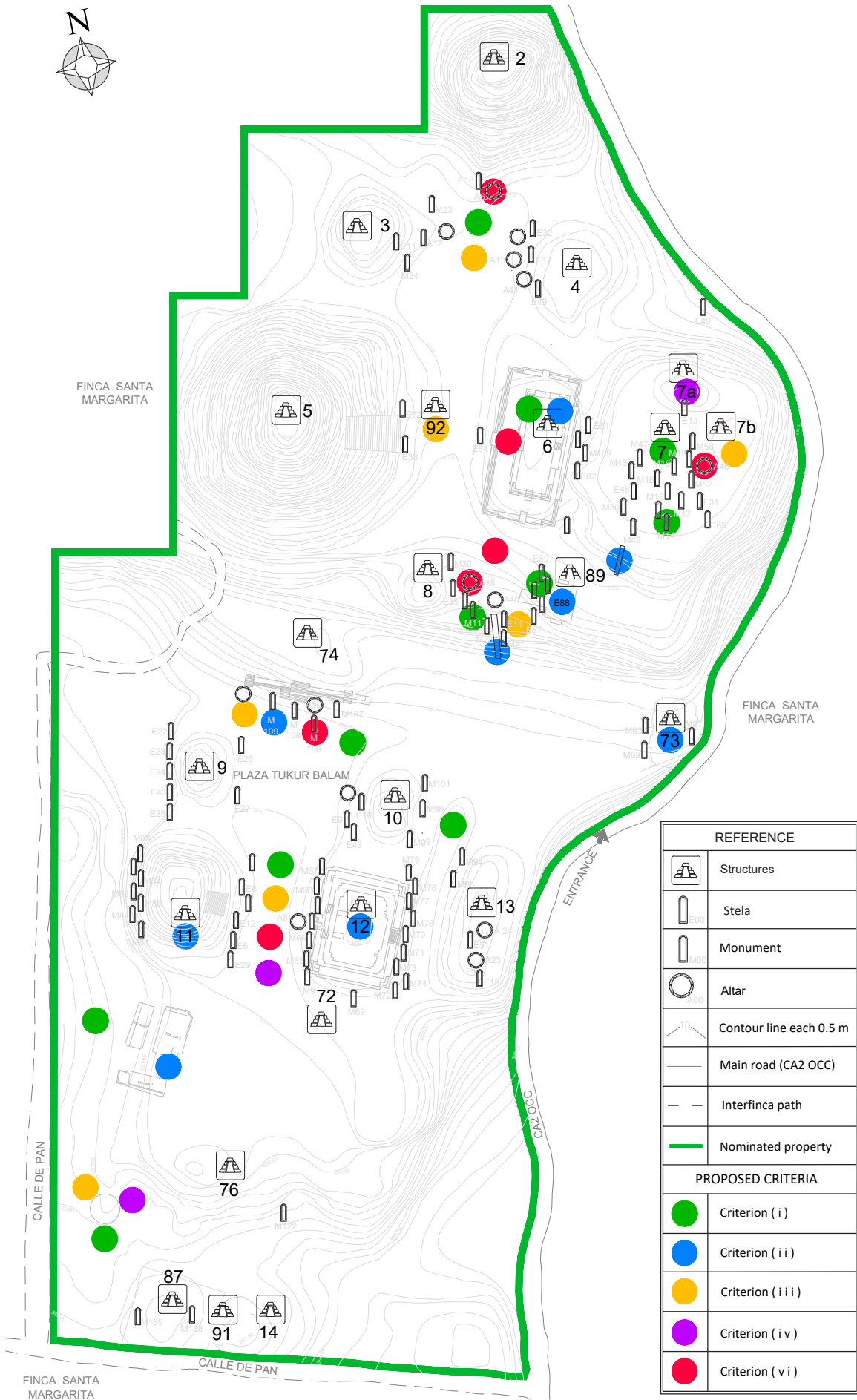


Figure 1: Criteria represented within the nominated property.

The Park has everything required to carry out the proper conservation of cultural heritage. An example of this is the permanent staff (scientific, specialized technical, operational and administrative) that is in constant training, as well as adequate equipment and facilities. In terms of operation and maintenance, the Park has an annual budget allocation of approximately USD 900,000.00 (Q 6,000,000.00 in local currency), which constitutes another factor to guarantee the protection, conservation, maintenance and administration of the nominated area. On the other hand, the culmination of the conservation of the construction of the Site Museum, will provide a new indispensable space for the protection and exhibition of important and unique archaeological pieces.

Outside the designated area, the archaeological elements are under the custody and protection of the owners of the private estates, this according to the obligations established by the Law of the Protection of Cultural Heritage of the Nation (Decree 26-97 and its reforms). It should be noted that it is important to keep the pieces *in situ*. However, and according to conservation needs, some pieces can be transferred to the Park's facilities for study and guarantee better conservation management.

Comparative Analysis



The nominated area is the core of the ancient city of Tak'alik Ab'aj and represents a window into its extraordinary and long 1700-years history (800 BC to 900 AD). This city is considered unique for sharing cultural expressions of two ancient, transcendental and revolutionary civilizations in the history of Mesoamerica, such as the Olmec and the Mayan. Likewise, this ancient city is the best representation of the extraordinary cultural region in the geographical corridor of the long-distance trade route to which it belonged.

The nominated area concentrates the exceptional and outstanding characteristics of the richness of the cultural remains of the entire archaeological site, since it has representatives of each aspect of the very particular recreation of ancestral universal concepts, urban, artistic, political, economic and administrative development. As well as innovation and advancement in early writing, mathematics and calendar systems. In this sense, the nominated area contains and shelters the majority of the almost intact material remains that represent the Archaeological Cultural Heritage and Ancestral Sacred Heritage. That is, it concentrates all the criteria and other requirements that define its OUV, for which it is considered representative of the entire archaeological site.

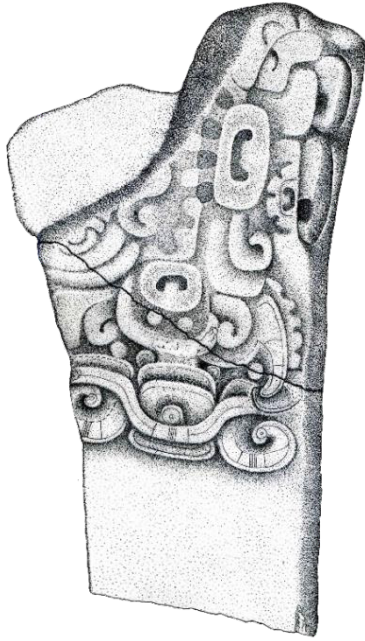
Outside the nominated area, there are also some elements that could represent especially the criteria related to sculpture and architecture. As well as expected, various sculptures and buildings have been found scattered throughout the extension of the ancient city. However, other elements such as the so-called "Open Air Museum" are characteristic and unique to the nominated area. Below is a comparative analysis of the outstanding characteristics concentrated in the nominated area with respect to the rest of the archaeological site, according to each criterion (Table 1). In addition, a list of the main exponents or ambassadors of each criterion is presented (Annex 1).

Table 1. Comparative table for each criterion that meets the nominated area and outside of it, within the archaeological site.

CRITERION (i)

Criterion (i): Represent a masterpiece of human creative genius
<p>“The evolution of sculptures and lapidary art programs, bearers of changing political discourse from the Olmec to the early Maya: testimony of cultural transition”.</p>
NOMINATED AREA
<p>Sculpture Programs:</p> <ul style="list-style-type: none"> • It contains a high concentration of sculptures, which represents one of the richest sources of sculptural art in Mesoamerica with an extraordinary amount of diversity of stone sculptures from the Preclassic period. • Stone sculptures provided the most powerful tool for the political and ideological expression of the rulers. Therefore, these sculptures are part of the most notable artistic heritage that distinguishes Tak'alik Ab'aj from other archaeological sites. • The sculpture was integrated into the design of sacred spaces for the public display of power. • The legacy allows us to recognize in detail, the gradual and uninterrupted evolution from the Middle Preclassic Olmec style to the Early Late Preclassic Maya sculptural style. • The sculptural traditions and styles are grouped as follows: representatives of the cultural transition, the Olmec, Mayan, Barrigón (Potbelly in English), Zoomorphic, Petroglyph, Coastal and Plain styles.
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Zoomorphic Style, Monument 66</p> </div> <div style="text-align: center;">  <p>Potbelly Style, Monument 69</p> </div> </div>

Criterion (i): Represent a masterpiece of human creative genius



Maya Style, Stela 13



Olmeca Style, Monument 67

Lapidary Art:

- The continuous permanence for centuries of the lapidary artistic tradition stands out, as well as the sculptural one, despite the profound changes in the worldview, aesthetics and artistic pattern.
- This has allowed to establish the evolution of the concept of ceremonial miniature heads, insignia of royal power and sculptural corpus.
- It is characterized by jadeite artefacts as royal symbols for the early rulers.
- Applies two particularly important concepts: miniatures and mosaics.
- The two Preclassic royal burials with unique attires or apparel (grave goods) are considered iconic discoveries.
- The antiquity of these burials from the end of Middle Preclassic (350-100 BC, Burial No. 2 in order of discovery) and the final Late Preclassic (50-150 AD, Burial No. 1 in order of discovery), allows to know the evolution of the lapidary art. From the hatchet with the head of a bird as the central pendant of a necklace (Burial No. 2) to the mosaic manifested in the miniature ceremonial heads (Burial No. 1).
- The offering of “The Dolls” is considered unique and it is related to a funeral ritual (Burial No. 2), it represents young women made of clay, placed according to the cardinal points and the path of the sun.

Criterion (i): Represent a masterpiece of human creative genius



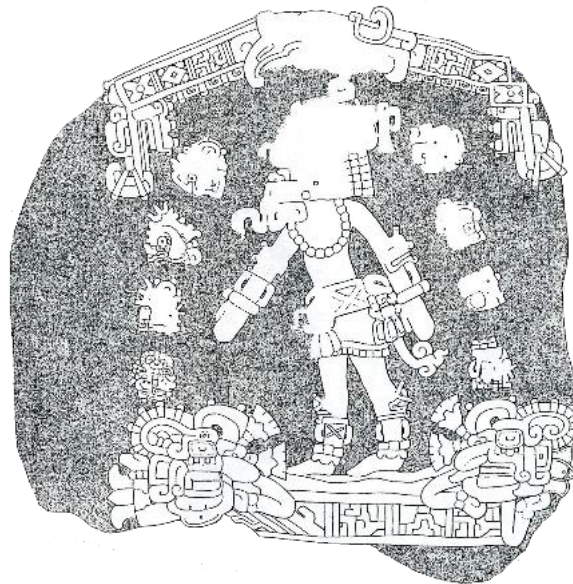
Jadeite offering in Burial No. 2



Miniature ceremonial heads of jadeite mosaics

Cultural Transition, shifting political discourse.

- The transitions of cultural expressions through jadeite sculptures and artefacts, provide a unique opportunity to observe the gradual change of thought (Example: Altar 12 and 13).
- It also allows knowing the deliberate decision of the first rulers to undertake these changes (Altar 12 and 13).
- It is considered exceptional in the history of Mesoamerica.



Altar 12

OUTSIDE THE NOMINATED AREA

- It shares traditions and sculptural styles with the nominated area, but does not have ambassadors of cultural transition or zoomorphic style.

CRITERION (ii)

Criterion (ii): Exhibits an important exchange of human values over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental art, town-planning or landscape design.

“Monumental ceremonial architecture, sculpture, urban design and water management; exponent par excellence of millenary Preclassic at the Pacific littoral: The urban setting of the first rulers”.

NOMINATED AREA

Ceremonial Monumental Architecture:

- The ceremonial structures are characterized by being platforms built with raw mud.
- Associate with these platforms is one of the oldest ball games known in Mesoamerica.
- One of the main and most sacred platforms of the site is the Structure 7, used as a stage to record the history of astronomy. In its interior it keeps the original version of this structure, the magnificent “Stepped Structure” that illustrates the monumental architecture of the Middle Preclassic.
- In addition, this mud structure has a stepped façade that makes it one of the best-preserved examples of this ancient construction technique.
- The Structure 7 also presents one of the richest burials from the end of the Late Preclassic period in the Maya area.
- The monumentality of the buildings is based on horizontal constructions that did not reach greater height, due to the seismic activity of the region.



Stepped Structure inside Structure 7

Criterion (ii): Exhibits an important exchange of human values over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental art, town-planning or landscape design.

Urban Design:

- It is considered particular and sophisticated. It is based on ancient cosmogonic principles, such as the cosmogram (with four sides, with the corners representing the cardinal points and with a center point or “*axis mundi*”, combined with astronomical orientations.
- The design of the Central Group that represents the center of the entire city, is defined by a north-south axis of 21° east of true north that establishes the orientation of the squares and a perpendicular axis from East to West related to the location of the main constructions.
- This design is repeated identically in the squares of Terrace 3 of larger dimensions and on the Terrace 2 of smaller dimensions.
- This provision was established from the Middle Preclassic and was respected throughout the history of Tak'alik Ab'aj.
- This represents the essential design of the sacred place that was the stage where political and religious events took place throughout all the cultural eras of the city.

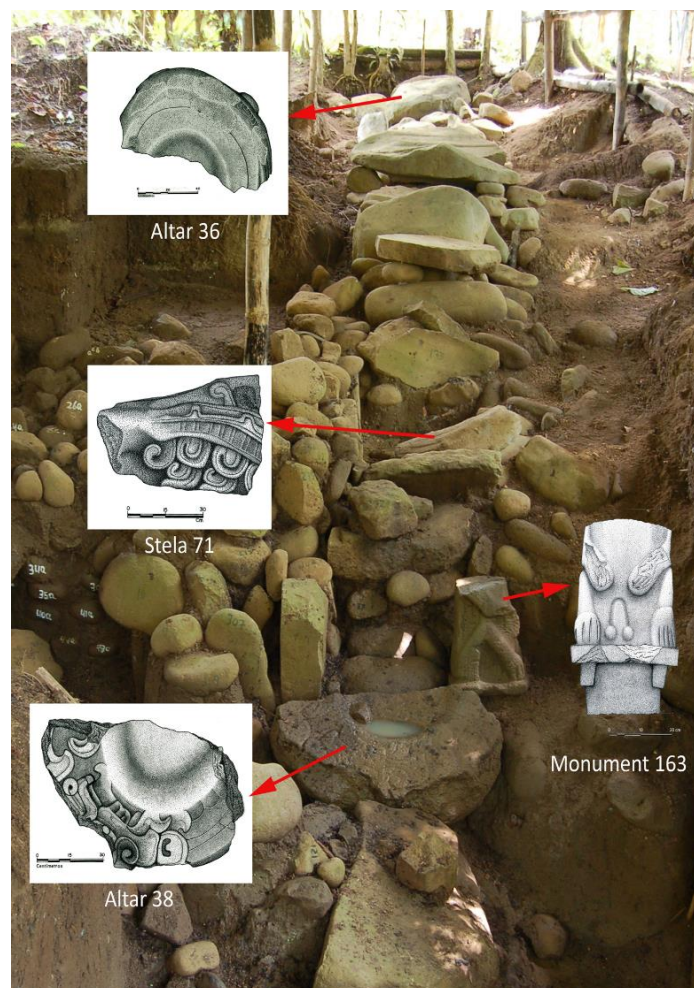


Monument Ombligo-Mux (Navel-Mux in English) central point or *axis mundi* for the city

Criterion (ii): Exhibits an important exchange of human values over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental art, town-planning or landscape design.

Hydraulic engineer (water management):

- The canal “Guacalitos” (Late Classic) discharged excess rainwater from public ceremonial places. From the Terrace 3 to the Terrace 2 flowing to Ixchiyá river. This canal is restored and it continues working.
- The canal “David” (Late Classic) had a sacred connotation as well as practical. The sacred act of reusing ancient Preclassic sculptures to integrate them into floors, walls and evacuation channels is evidenced.



Canal David

OUTSIDE OF THE NOMINATED AREA

- Another example of hydraulic system is located, and it is called “El Escondite” (“The Hidden Place” in English), which is a system of canals for the establishment of water in residential areas. To this date it is still in operation.

CRITERION (iii)

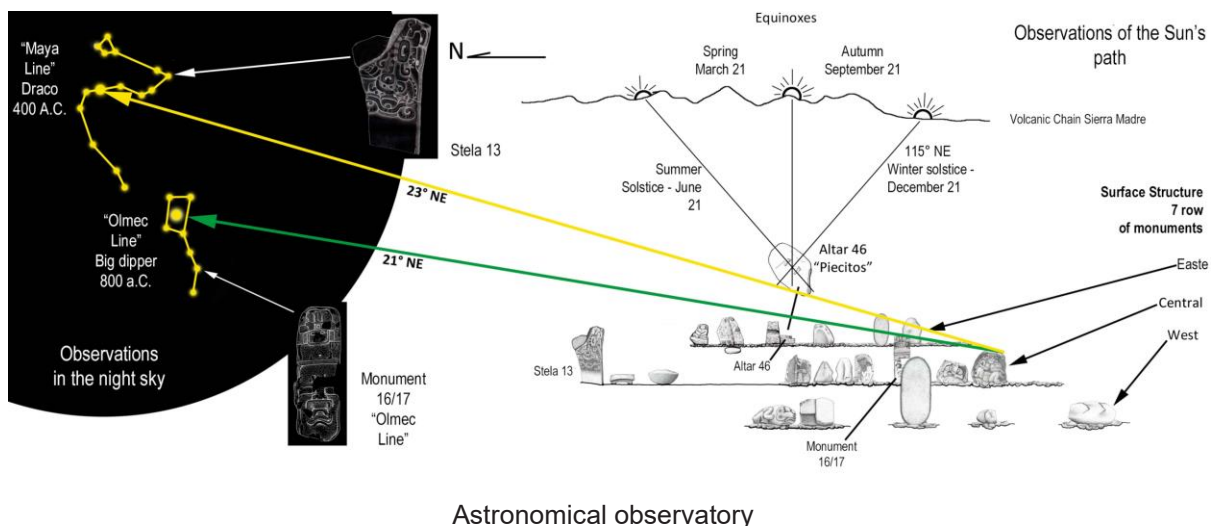
Criterion (iii): Bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

“History of Science in Public Space and Ritual at the Astronomical Observatory: Development of Astronomy, Writing and Calculation of time (Long Count system)”.

NOMINATED AREA

Astronomy:

- It stands out for the early astronomical scientific development, in addition to the sculpture and record of time. There are archaeological records of astronomical observations, as well as the Long Count system (stela 50).
- There is an amazing historical record of observations of the journey of the constellations and the daily course of the sun, symbolized in the rows of sculptures of the sacred platform of Structure 7, as well as placements and massive cyclical rituals on specific dates.
- The astronomical north-south orientation of the urban plan creates at the intersection with the east-west axis, the central point (*Axis Mundi*) or “navel”. It is known as “Ombligo-Mux” (“Navel-Mux” in English) located exactly in the middle of the plaza (square). This point was the scene of commemorative ritual activities.



Writing:

- Tak'alik Ab'aj is ranked among the earliest archaeological sites showing intellectual achievements during the Preclassic period, such as the development of hieroglyphic

Criterion (iii): Bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

- writing depicted and sculpted on stone sculptures (Monument 11, Altar 12, Altar 48, Stela 87, Stela 5).



Stela 87



Stela 5

Time Calculation:

- Stela number 13 in front of sculpture 7A, was erected as part of a massive ritual offering, containing more than 600 vases, indicating that a huge ritual event occurred around 100 AD. This manifests the magnitude and importance of its relationship with this astronomical orientation.
- Altar 46 or “Altar Piccitos” (“Little Feet Altar” in English) features a pair of sculptured footprints at 115 east of true north toward sunrise on the winter solstice, December 21th.
- It is considered that before, during and after this event, massive rituals were performed most likely cyclical to commemorate this winter solstice date.
- During the early Mayan cultural flowering beginning of the late Preclassic period, in its second part (50 - 150 AD). The development of the Long Count system is reached, that is, the Mesoamerican vigesimal system created by the Mayans to record time.

OUTSIDE THE NOMINATED AREA

- There are Stela 1 and 2, an example of the text with dates from the Long Count.

CRITERION (iv)

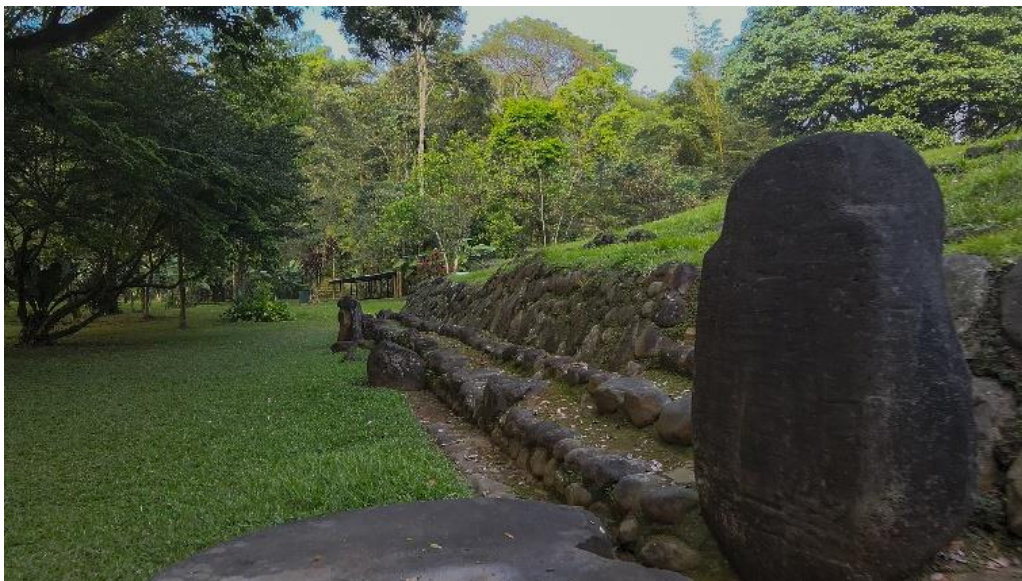
Criterion (iv): Be an outstanding example of building, architectural or technological ensemble, or landscape which illustrates (a) significant stage(s) in human history.

“Open-Air Museum: architectonic and sculptural scenario for political, ideological and historical discourse, Sculpture Bearer of the Ancestor”

NOMINATED AREA

Open Air Museum:

- The so-called open-air museum is one of the unique features of the National Archaeological Park Tak'alik Ab'aj.
- It consists of the exhibition of sculptures of different styles placed in front of the façades, always under the concept of veneration to the ancestors.
- The west façade of Structure 12 (Late Preclassic) shows a composition of multiple sculptural styles of monuments developed over a period of almost a millennium.
- In the center is Late Preclassic Maya-style Stela 5 depicting two Mayan rulers.
- On both sides of Stela 5, there are two zoomorphic - style monuments that represent two aquatic animals (a toad and a crocodile).
- At both ends of the west façade are Olmec-style monuments (a jaguar and an owl) from the Middle Preclassic, exhibited in the Late Preclassic. In allusion these elements, the name was given to the square “Plaza Tukur-Balam”, in the K'iche language (“Owl - Jaguar Plaza” in English).

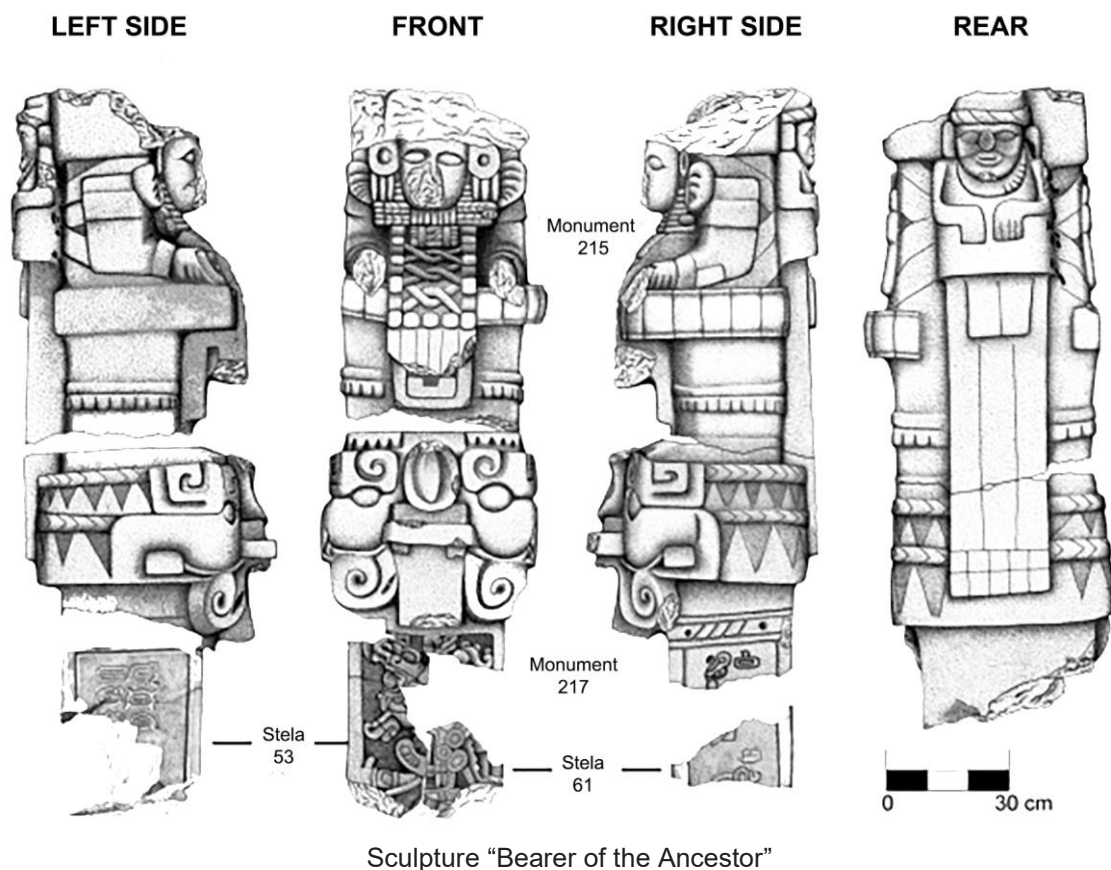


Open-Air Museum

Criterion (iv): Be an outstanding example of building, architectural or technological ensemble, or landscape which illustrates (a) significant stage(s) in human history.

Sculpture “Cargador del Ancestro” (“Bearer of the Ancestor” in English):

- It consists of a piece of sculpture that represents an early Mayan ruler who carries his Olmec cultural ancestor, that is, he carries his ancestor.
- It is a unique sculpture that represents in a single piece, different traditions (techniques) and concepts (styles).
- Which could be an allusion to the relationship of one of the first Mayan rulers with the cultural ancestor of Olmec connotation.
- The construction of historicity and ancestor worship through public display as part of the sculpture and ritual program is particularly conspicuous in Tak'alik Ab'aj.
- This is a central element in its long history of 1700 years of occupation.



OUTSIDE THE NOMINATED AREA

- There are no representatives of this criterion.

CRITERION (vi)

Criterion (vi): Be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic or literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria).

“Resilience of the Sacred Rituals: current ceremonial life, survival of ancient sacred calendars and Mesoamerican ancestral cosmogonic symbols”.

NOMINATED AREA

Current Ceremonial Life:

- The Park is recognized and identified by the current indigenous people as a sacred place of the ancestors
- In addition, specific places have been designated for the performance of ritual ceremonies.
- There are six alternative altars. This model originated in the Park has been replicated in other archaeological sites in Guatemala.
- The Park is an ancestral sacred place visited from many people of different regions of Guatemala. In here, the Mayan people can safety and freely perform their ceremonial rites.
- In this way they can perpetuate their deep-rooted ancestral spiritually.



Ceremonial Altar

Criterion (vi): Be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic or literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria).

Ancient cosmogonic symbols:

- The Monument 253b presents carved in stone the drawing of the cosmogram or the K'an cross.
- This monument is an ambassador of the Olmec sculptural style, of the criterion (i).
- Currently the rituals begin with the realization of the drawing of the cosmogram using sugar.



Monument 253b Ka'n Cross

OUTSIDE THE NOMINATED AREA

- There are currently no representatives of this criterion.

Archaeological remains located outside the nominated property

Outside the nominated area three architectural groups are located (North, West and South Groups), while the nominated property is 60% of the Central Group (Fig. 2). The OUV of Tak'alik Ab'aj, is located par excellence within the nominated property, however, some archaeological remains of interest are scattered throughout the rest of the archaeological site.

In the nomination dossier, it was considered not to emphasize these elements located outside the nominated property. The foregoing, by virtue of the necessary and extensive research work, socialization, and the consensus based on the conservation criteria with the different actors, as well, the fulfilment of other necessary requirements.

The Strategic Plan that includes the “Initial Protection Zone” for the nominated property and the outline roadmap “Categories of Protection of the Archaeological Site” is considered a medium to long-term project. The foregoing is based on the current conditions of socialization, technical work tables, workshops that are currently being developed, as well as the consensus to be reached with the landowners.

These archaeological remains located outside the nominated area, have been called “Protection Islands” (Table 2) and are also included in said Strategic Plan. As a result of the constant analysis and revision of the Protection Island proposal, there are currently nine elements: three Current Protection Islands and six Potential Protection Islands (Fig. 3). This proposal must be completed systematically as progress is made in the different stages of the project.

Current Protection Islands

There are three archaeological elements and they are the result of the investigations and consolidation work carried out. Said work is based on the consensus reached with the owners, and is composed of: “El Escondite” (in English “Hidden Place”), “El Patio Hundido” (in English “Sunken Patio”) and the group “Stela 2 and Altar 5”. In these three islands, the Park Administration periodically carries out conservation and monitoring work, likewise, they have a high percentage of authenticity (95%) and integrity (100%)

According to the studies, investigations and negotiations planned in the future, it could be considered that these islands could eventually be annexed to the property already registered as World Heritage. The foregoing according to the mechanism of expansion or modification of limits, as long as they meet all the necessary requirements already established in the Convention.

Potential Protection Islands.

There are six elements that are partially documented, that is, they need a more in-depth study and meet other additional requirements, such as conservation and management work, among others. These elements were selected as they may be representative of any of the justification criteria of Outstanding Universal Value.

However, not all have a high percentage of authenticity and integrity, for example, the sculptures located in the garden of the San Isidro Farm that have been classified under criterion (i), but their authenticity and integrity is 40% respectively. In addition, it is necessary to reach consensus on extensions of research, conservation and management that can be achieved in the future.

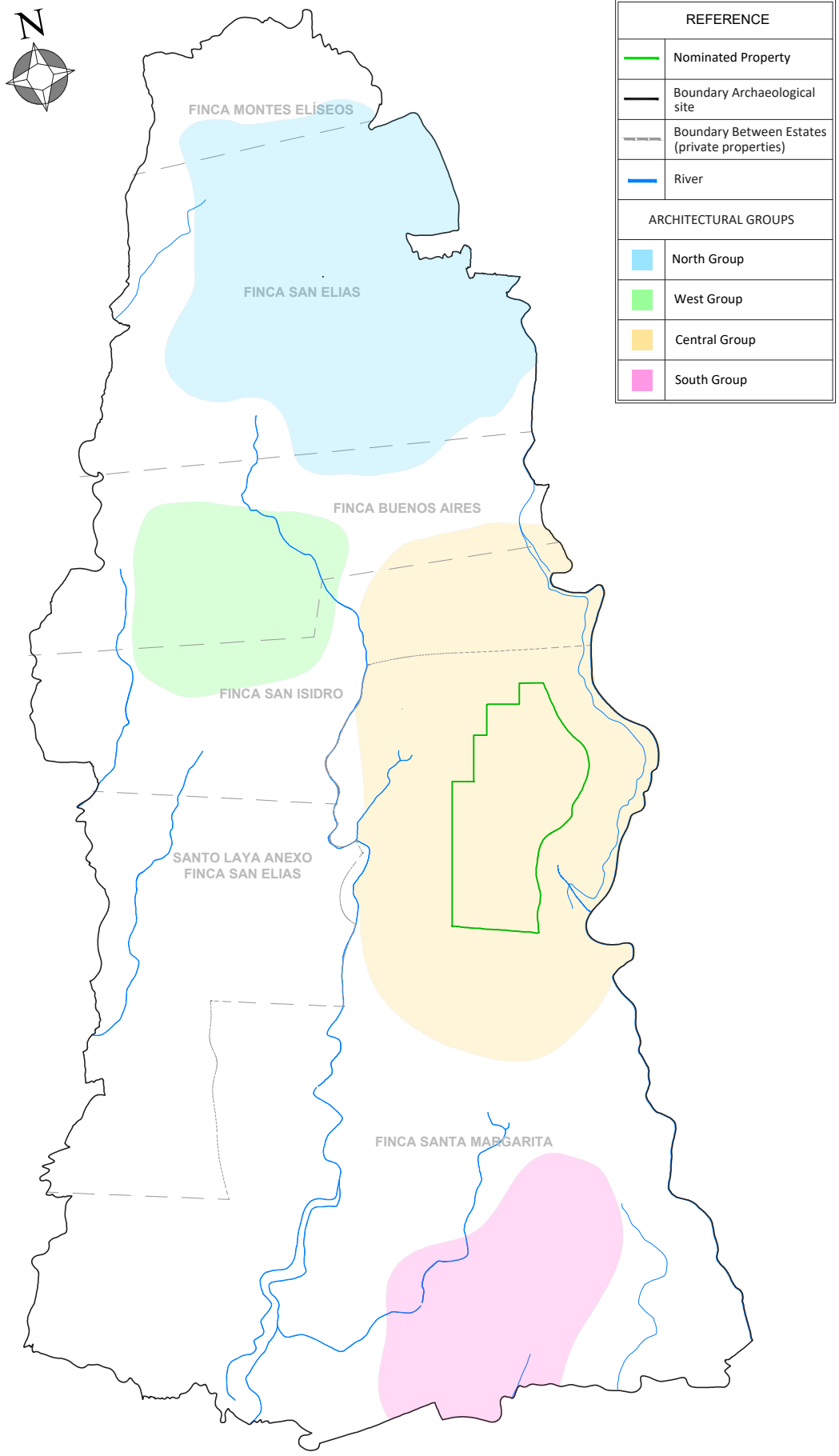


Figure 2: Architectural groups distributed in the archaeological site

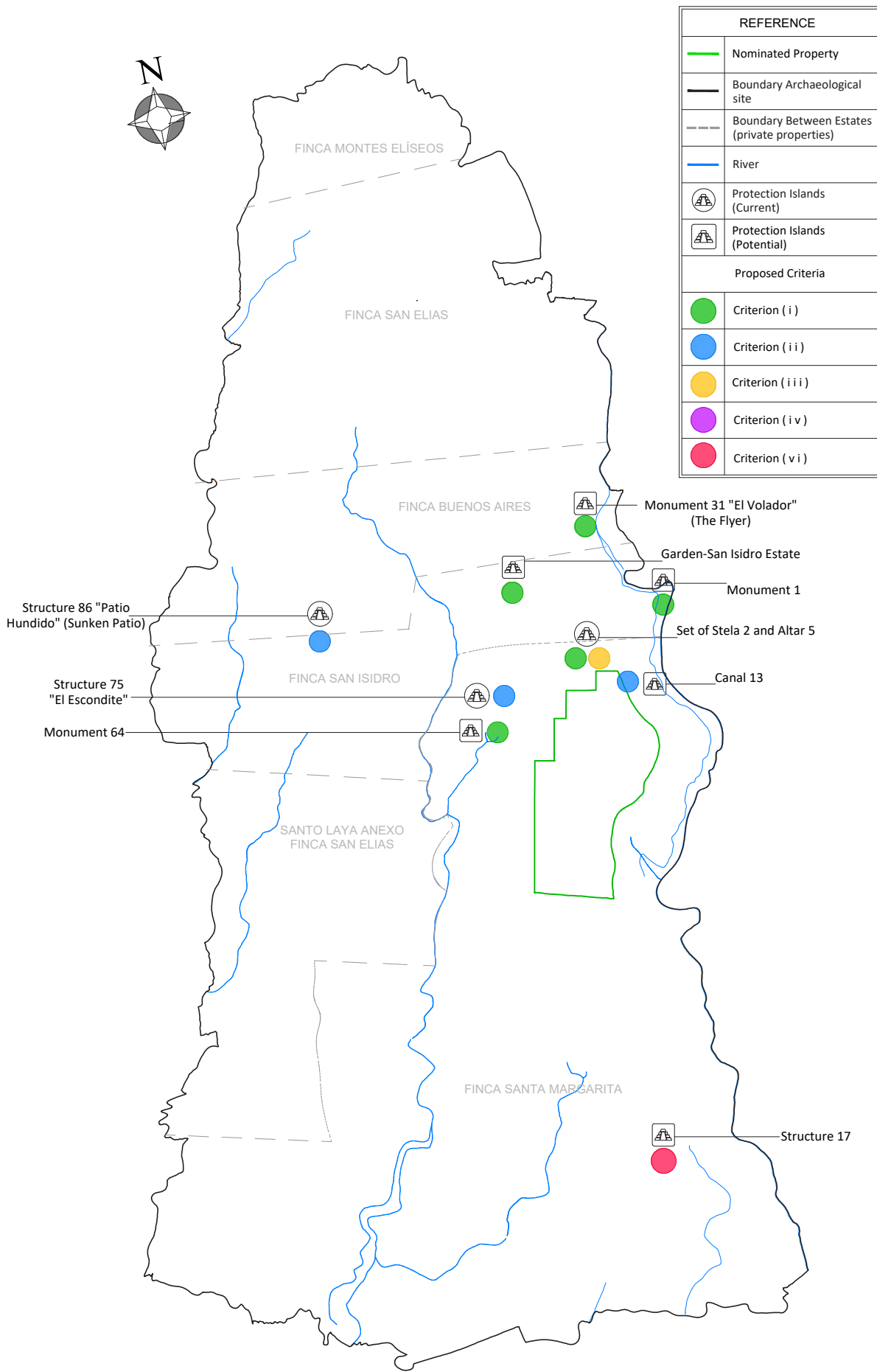
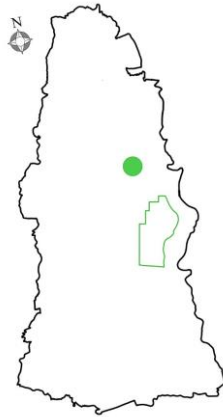












Figure 3: Archaeological remains outside the nominated property “Protection Islands”

Table 2. Informative technical sheets of the Protection Islands.

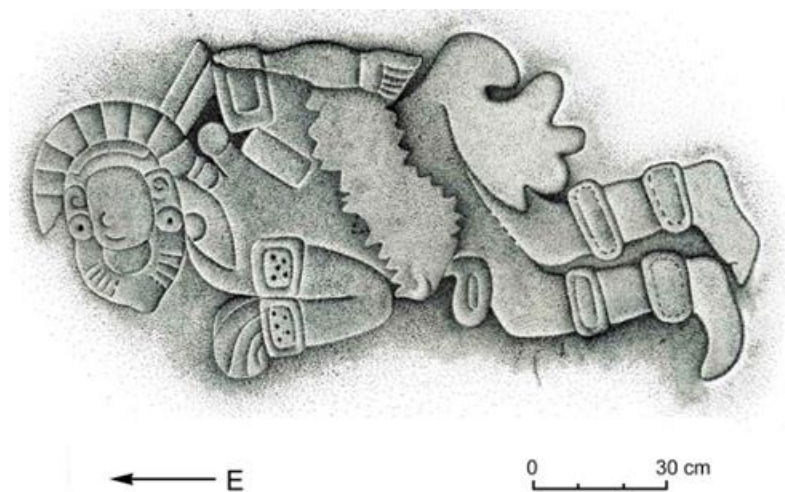
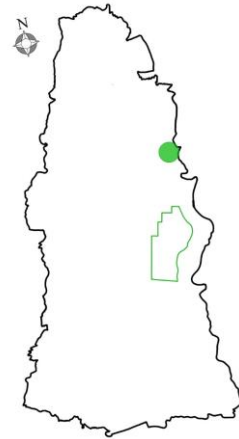
<p>1. Name: “Garden – San Isidro Estate</p> <p>Potential criterion represented: Sculptural tradition (i)</p> <p>Location: San Isidro Estate</p>	
<p>Description: Set of nine sculptures that are relocated within the Garden of the San Isidro Estate. They represent the richness of manifestations of the Preclassic sculpture tradition (800 BC - 150 AD) from Tak’alik Ab’aj and the Pacific Coast.</p> <ul style="list-style-type: none"> - Olmec sculptural style: Monuments 44 y 116 (prisoners). - Maya sculptural style: Stela 4 (1st. generation), Stela 1 (2nd. generation writing). - Potbelly sculptural style: Monuments 40 and 41. - Zoomorphic sculptural style: Altar 2 “Anillo” (“Ring”). 	
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Monument 44</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Monument 40</p> </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Stela 4</p> </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  <p>Stela 1</p> </div> <div style="text-align: center;">  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Monument 116</p> </div> <div style="text-align: center;">  <p>Altar 2 “Anillo” (“Ring”)</p> </div> </div>	

2. Name: “Monument 31, “El Volador” (“The Flyer”)

Potential criterion represented: Sculptural tradition (i)

Location: Buenos Aires Estate

Description: Petroglyph showing an anthropomorphic figure in profile. Defined by some researchers as a possible “boxer” (Chinchilla 2009).



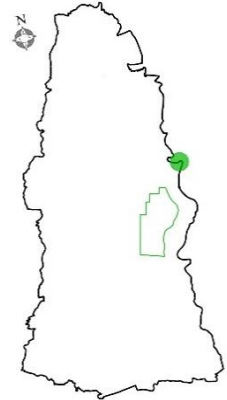
3. Name: "Monument 1"

Potential criterion represented: Sculptural tradition (i)

Location: San Isidro Estate

Description: Low relief petroglyph of a character in profile wearing all his regalia, in ball player position.

- Middle Preclassic Olmec Style (500 - 350 BC).



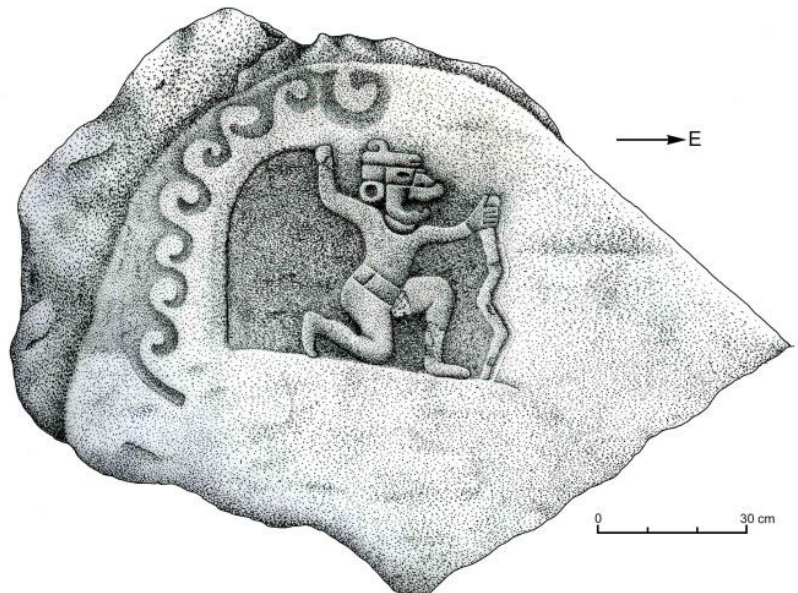
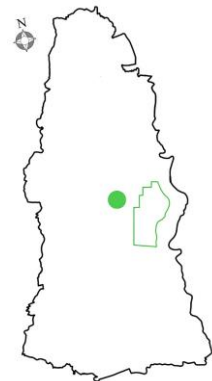
4. Name: "Monument 64"

Potential criterion represented: Sculptural tradition (i)

Location: Santa Margarita Estate

Description: Low relief petroglyph featuring the profile of a character with mask and zigzag ray in hand, positioning as a ball player inside a niche surrounded by water volutes (God of rain).

- Middle Preclassic Olmec Style 500 - 350 BC.



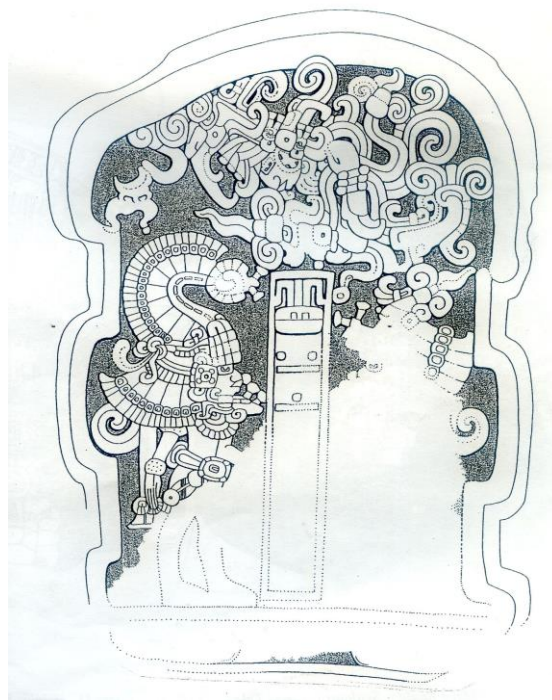
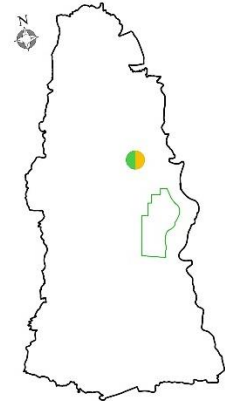
5. Name: "Set of Stela 2 and Altar 5"

Potential criteria represented: Sculptural tradition (i), Writing and Long Count (iii)

Location: Santa Margarita Estate

Description: Early Maya stela 2nd. generation with elaborate frame. Represents two profile characters with elaborate headdress and glyphic panel at the center with Long Count date B'aktun 8, under ancestral/celestial theme.

- Late Preclassic 50 - 150 AD.
- Drawing by Graham and Benson (2005).



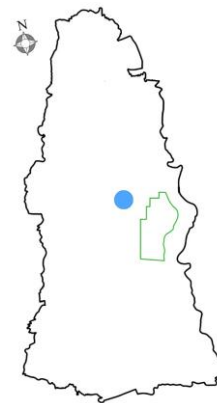
6. Name: “Structure 75 “El Escondite” (“The Hidden Place”)

Potential criteria represented: Urban Design and Public Works - Hydraulic Engineer (ii)

Location: Santa Margarita Estate

Description: Ceremonial enclosure with a plain stela and altar dedicated to a seven-canal system (five exposed and two buried) for water supply distribution.

- Late Preclassic (100 BC – 150 AD)



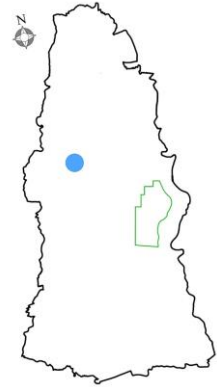
7. Name: “Structure 86 “Patio Hundido” (“Sunken Patio”)

Potential criteria represented: Urban Design and Public Works (ii)

Location: Buenos Aires Estate

Description: It is another example of a sunken plaza with incoming grandstands. It is a ceremonial enclosure with a series of offerings of Tradition Solano ceramics and massive offering of mosaics and jadeite beads deposited in a vase.

- Classic Early Phase Alejos 150-300 AD.



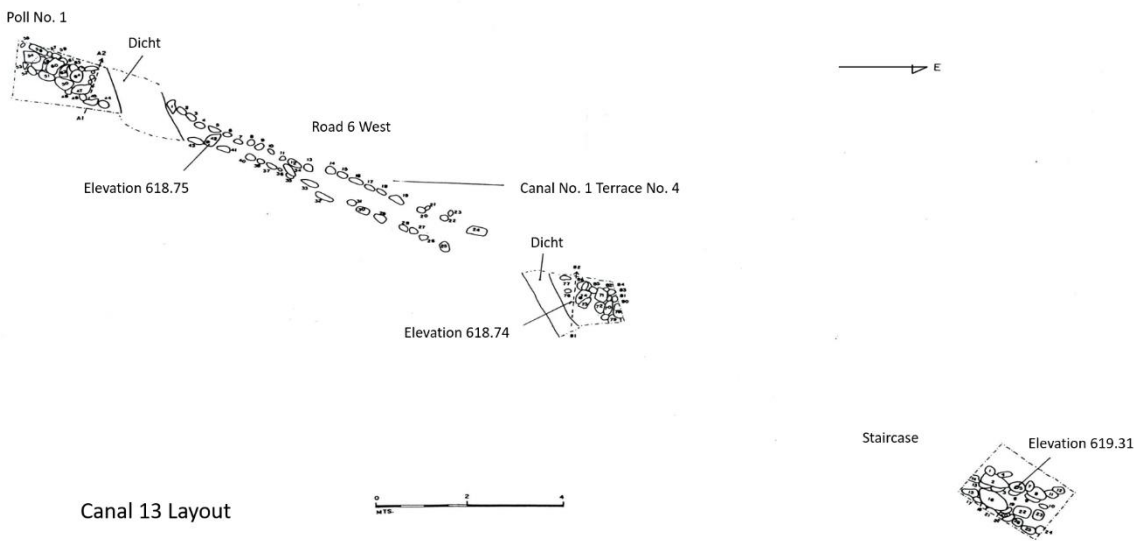
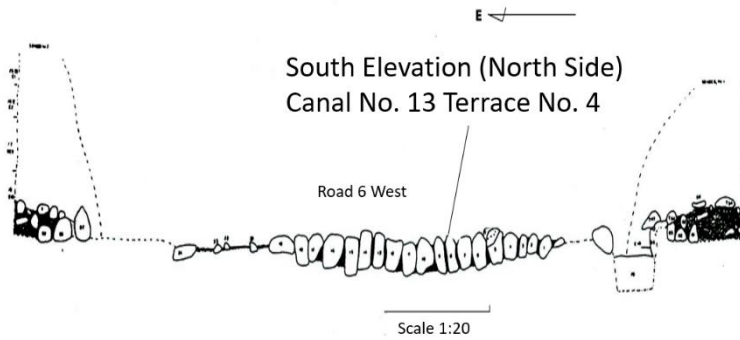
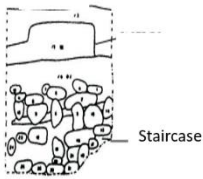
8. Name: "Canal 13"

Potential criteria represented: Urban Design and Public Works - Hydraulic Engineer (ii)

Location: Buenos Aires Estate

Description: Evacuation canal to drive the rain water from the Plaza of Terrace 4 to the ravine of the river Ixchiyá located east. It crosses the CA2-Occ road.

- Late Preclassic 100 BC - 150 AD.

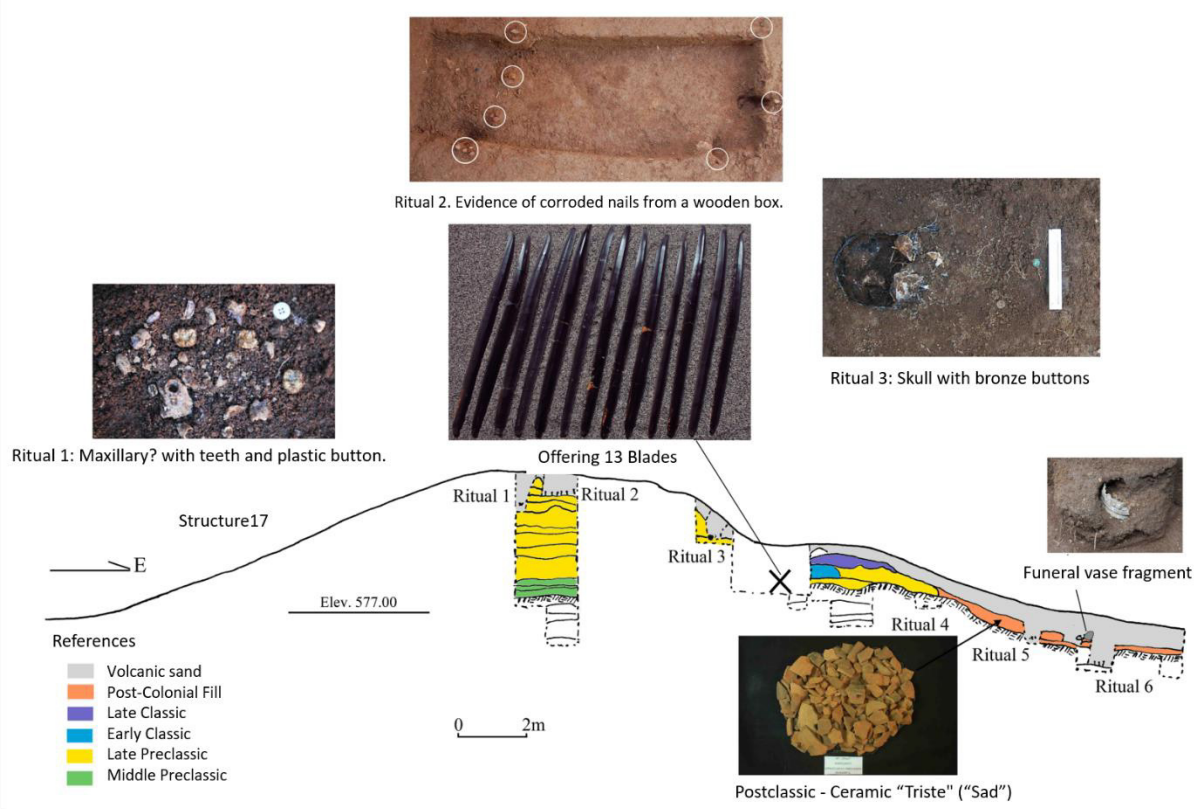


9. Name: "Structure 17"

Potential criteria represented: Mayan Spirituality (vi);

Location: Santa Margarita Estate

Description: Ceremonial architecture with ritual evidence from the Preclassic - Ofrenda "13 Navajas Prismáticas" (Offering "13 Prismatic Blades") to Postclassic - Ceramic "Triste" ("Sad") of the post-conquest impact and modern spirituality with series of rituals before the volcanic eruption in 1902 (birth of the Volcano Santiaguito).



It is important to mention that all the criteria that justify the OUV of the nominated property - (i), (ii) (iii), (iv) and (vi) - are made up of sets of elements that coexist in harmony within it. The Current Protection Islands have been classified under the criteria (i), (ii) and (iii). However, these criteria are already represented in an extraordinary way within the nominated property through outstanding elements. Examples of them are El Canal “David” and El Canal “Guacalitos” which are elements related to technological development associated with water management, through hydraulic canals for evacuation of rainwater, while outside there is “El Escondite” it is also representative of this technological development, in this case a system of canals for water supply to residential sectors.

In the rest of the archaeological site, the potential protection islands have been identified as bearers of certain criteria (i), (ii) and (vi) (Table 3). In this sense, it is important to clarify that the criterion (vi) represented by Structure 17 is associated with the manifestation of Mayan spirituality. The foregoing, prior to the eruption of the Santiaguillo Volcano in 1902. Currently said demonstrations and the celebration of Mayan ceremonies are carried out exclusively within the nominated property.

Table 3. Archaeological remains located outside the nominated area (Protection Islands) and its relationship with the proposed Outstanding Universal Value.

Protection Island	Condition	Criteria	Integrity	Authenticity	State of Conservation
Structure 86 (Patio Hundido)	Current	(ii)	95%	100%	90%
Structure 75 (El Escondite)	Current	(ii)	95%	100%	95%
Set Stela 2 and Altar 5	Current	(i), (iii)	95%	100%	95%
Garden Finca San Isidro	Potential	(i)	40%	40%	70%
Monument 31 (El Volador)	Potential	(i)	90%	100%	90%
Monument 1	Potential	(i)	95%	100%	95%
Monument 64 (Petroglifo)	Potential	(i)	90%	100%	90%
Canal 13	Potential	(ii)	50%	70%	50%
Structure 17	Potential	(vi)	90%	100%	90%

Source: National Archaeological Park Tak'alik Ab'aj

Justification of the delineation of the boundaries of the nominated area as presented in the nomination dossier

The delimitation of the limits of the nominated area presented in the nomination dossier, is focused and corresponds to the area donated to the State of Guatemala to develop The National Archaeological Park Tak'alik Ab'aj based on three main reasons:

- **Strategic Selection.** It offers the greatest intensity and diversity of archaeological remains concentrated in the Central Group, this has allowed and promoted the enhancement of The Park, through the exhibition of its extraordinary characteristics, such as the sculptural and architectural composition in the heart of the archaeological site.
- **Intensive Research.** Thanks to the exhaustive studies, iconic discoveries have been made, such as the two royal burials practiced with unique grave goods. The foregoing has made it possible to establish the evolution of the concept of miniature ceremonial heads, badge of royal power and sculptural corpus for this discovery, it has been possible to clarify the transition between the middle to late Preclassic period and the continuity of the basic concepts of the Mesoamerican worldwide.

It has also been possible to advance in the study and knowledge of the beginnings of writing, the development of the Long Count and astronomy. All this is summarized in series of contributions in the investigation of the development of early societies, particularly the birth of Pre-Classical cities and kingdoms on the Pacific coast. It was described above is summarized in the Annex III.8 of the nomination dossier (Background and synthesis of essential research contributions of the archaeological site Tak'alik Ab'aj during 1987-2021)

- **Delimitation and legal certainty of the nominated property.** This has allowed the property to be a representative and an open window for visits to the history of the entire archaeological site. This, at the same time, is a guarantee for the protection and conservation of the OUV and allows freedom of decision on the management categories for this conservation and due protection.

ICOMOS recognizes that the negotiations with the property owners are challenging and that they are ongoing. The proposal of an “Initial Protection Zone” as the basis for a potential future buffer zone and the “Protection Islands” presented in the additional information provided in November 2021 is a promising step. However, ICOMOS would appreciate if the State Party could consider providing further details on the following issues:

- ***What was the rationale behind the delineation of the Initial Protection Zone and the selection of the Protection Islands?***

Initial Protection Zone

The fundamental reason is a buffer zone proposal that meets the main requirement of bordering the nominated area. The extension was based on the northern limit of the Santa Margarita Estate, which is surrounding the nominated area. Another fundamental reason is its natural environment and geographical location between two rivers, to the east and west, as well as the presence of streams and water sources.

All this provides a layer of implicit protection based on national legislation, which requires the conservation of vegetation on the banks of water bodies. Likewise, the presence of agroforestry crops around the nominated area, that is, activities considered relatively low impact, is also another factor in favour of a potential buffer zone.

According to the Operational Guidelines, there are no defined specification on the extension of the buffer zone. The proposal for this buffer zone is part of the high-level negotiations with the new administration of the Santa Margarita Estate. Therefore, if necessary, a reduction in the extension of this proposal could be carried out, as long as it borders the nominated area.

Originally the nominated area corresponded to coffee plantations, but through process of substitution and natural regeneration, it is currently covered by native vegetation. It is important to emphasize that the original objective of the creation of the National Archaeological Park Tak'alik Ab'aj was to establish an archaeological park immersed in a natural setting. This contributes fully to historical, cultural and natural protection, not only at the local level, but also regionally. In this sense, it is considered necessary to carry out a brief analysis of the importance of the conservation of the natural component associated with the archaeological park, especially for endemic or endangered bird species.

Due to the fact that the nominated area is located in a wooded area, it offers a natural environment without greater degree of contamination, where outdoor activities can be carried out, such as walks, and contemplation of nature, bird and wildlife observation. It also provides an environment characterized mainly by natural sounds such as bird singing.

Inside the Park and its surroundings, 176 species of birds (Annex 2) have been reported according to the park's own field data and updated bird watching records (eBird 2022). This species richness corresponds to 23% of the 758 bird species recorded in Guatemala (Eisermann & Avendano 2018).

In Guatemala are identified 21 important areas for bird conservation (Eisermann & Avendano 2008). The region where the Park is located, belong to one of these priority areas, since its location allows the presence of these bird species conservation. The nominated area is located on the coast, it is between the highlands and the low lands on the Pacific coast of Guatemala. This region is very important for the biodiversity conservation, specially due to the endemic species of the denominated region "Pacific Slope of North Central America" (it covers from the south of Mexico to the Northwest of Nicaragua) as well as in danger of extinction species worldwide.

Two endemic species have been registered in the Park, the White-bellied Chachalaca (*Ortalis leucogastra*) and the Blue-tailed Hummingbird (*Sucerottia cyanura*). Species have been also recorded that in Guatemala have distribution restricted to the Pacific slope, like the Long-tailed Manakin (*Chiroxiphia linearis*) that can only be found in the coastal region. This species is attractive for the bird watching tourism (Fig. 4).

Another species typical of the Pacific slope is the Yellow-naped Parrot (*Amazona auropalliata*) which has also been recorded in the Park (Fig. 5). Recently in 2021, this parrot was included in the category of Critically Endangered species worldwide, according to the IUCN Red List of Threatened Species. This due to the fact that lately its population is decreasing due to illegal traffic and the loss of its habitat (IUCN 2021).



Figure 4. Long-tailed Manakin (*Chiroxiphia linearis*), a specie with a distribution restricted to the Guatemalan piedmont region. Photography: © Vice Ministry of Cultural and Natural Heritage.



Figure 5. Yellow-naped Parrot (*Amazona auropalliata*), a critically endangered species worldwide. Photography: © National Archaeological Park Tak'alik Ab'aj.

In Guatemala it is estimated that the wild population is only 500 individuals (Muccio 2019). Six priority sited for conservation, research and permanent monitoring have been identified for this emblematic species. The nominated area and its surroundings is one of these sites. That is why

various activities have been carried out, such as counting individuals and nests, workshops with key actors and environmental education programs.

Regarding the environmental education activities carried out in the facilities of the National Archaeological Park Tak'alik Ab'aj, young children and teachers from public schools in the local place El Asintal. The objective has been to make them aware of the importance, valorization and conservation of the natural environment. In 2019 the Yellow-Napped Parrot Festival was held with recreational educational activities and contact with nature (Fig. 6). Said activity was developed jointly with the COLORS project. In this way, the Park in addition to safeguarding the archaeological component, also contributed to the conservation of threatened species.



Figure 6. “Yellow-napped Parrot Festival” was held in the facilities of The Park. Photography: National Archaeological Park Tak'alik Ab'aj.

The National Archaeological Park Tak'alik Ab'aj is certified with the Green Q seal quality and tourism sustainability distinction, which is a recognition granted by the Guatemalan Tourism Institute (INGUAT, by its acronym in Spanish) to archaeological parks and protected areas that implement quality and sustainability standards in its services, establishing controls in the processes and services that guarantee the satisfaction of tourists, the safety and comfort of the facilities.

Outside the nominated area but within the archaeological site, biological conservation efforts are also underway. For example, private hotels near the Park promote ecotourism and appreciation of the natural environment. They offer guided bird watching tours visits to the natural

forest in regeneration, as well as agro-tourism or tours of coffee, macadamia, rubber and cocoa plantations, in addition to horseback riding and visits to waterfalls.

On the other hand, one of the private estates within the archaeological site (Buenos Aires Estate) is legally registered with the National Council of Protected Areas (CONAP), as a Private Nature Reserve. Also outside the archaeological site, but within the Municipality of El Asintal, there is another reserve (Dolores Hidalgo). In the neighbouring Municipality Nuevo San Carlos, another reserve is also located (Los Laureles). Both are officially registered as Private Nature Reserves.

The State of Guatemala, through the Protected Areas Law, recognizes private nature reserves as a management category. These areas that still contains little altered wild ecosystems whose owners voluntary allocate them to biological conservation.

For its part, the nominated area and the entire archaeological site are recognized by this law as a special protection area intended for the conservation (Article 90, paragraph 35). In this sense, the nominated property, the rest of the archaeological site and the surrounding protected areas, form a regional network of protected areas in the piedmont region of the department of Retalhuleu. These areas, together with the gallery forests, contribute positively to the biological community through corridors that favour the dispersion of wildlife fauna.

Protection Islands

The protection islands are very small areas where specific elements considered of special interest have been found. This concept is a proposal that still requires further study, consensus and legal approval. Currently working on it.

These points or archaeological interest have been discovered during survey investigations carried out outside the nominated property, that is in the 634.62 hectares that make up the rest of the archaeological site. The elements are scattered and can be related to the OUV of the nominated property, according to the justification criteria under which they have been classified. It is worth mentioning that these studies must be deepened to achieve a better approach, as well as other requirements such as protection and management.

These points have been partially investigated and documented, some restored and enabled *in situ*, in their respective discovery sites and are in the custody of the landowners. The National Archaeological Park Tak'alik Ab'aj in consensus with the owners, administers a monitoring program with which the current protection islands can be maintained and exhibited to the visitor.

As an example, on the protection islands, they can be those located in the archaeological sites of the North, West and South Group. Where Monuments 31, 1 and 64, are found. These elements considered to have potential, have been investigated and documented in a limited way.

As mentioned, the proposal for protection islands and the initial protection zone for a future buffer zone, has its main purpose, to maintain and guarantee the use of the current land, which is characterized by a natural environment composed mainly of agroforestry crops, rivers, streams, as well as some remnants of original o regenerating vegetation. Once consensus has been reached with the corresponding landowners for the definition of the proper management and land use categories, the Potential Protection Islands could be considered Current Protection Islands.

- ***What will their legal status be and how will it be different from the nominated area and the rest of the archaeological site in terms of protection measures?***

The Cultural Heritage Law (Law for the Protection of the Cultural Heritage of the Nation, Decree number 26-97 and its reforms) establishes the protection of the state over any cultural and natural heritage of the country. This in a more exact manner through the Declaration of Cultural Heritage of the nation (Ministerial Agreement 520-2002). Which implies land management that does not threaten the authenticity and integrity of the cultural or natural heritage. However, currently there are no regulations that facilitate compliance with this law. This is also an aim to be reached as part of the The Strategic Plan that includes the “Initial Protection Zone” for the nominated property and the outline roadmap “Categories of Protection of the Archaeological Site”.

The compendium of laws and agreements for the investigation, conservation and protection of cultural and natural heritage, apply equally both inside and outside the nominated property. The difference is the management of the heritage, since inside the Park (nominated property) which belongs to the State of Guatemala, a more active management is carried out, in addition to having an assigned annual budget, while management outside the Park, when it is private property, is based mainly on the proper custody of cultural property.

- ***What is the (potential) impact of the pig-farm on the nominated property?***

It is necessary to clarify that the activities carried out in the facilities of the pig-farm, corresponds only to the raising and feeding of animals. That is to say, no industrial processes related to the sacrifice of animals are carried out, since it is not a slaughterhouse. Therefore, there are no impacts produced by the management of organic waste (remains of dead animals, blood, bones, viscera, etc.). In the facilities there is also no processing of pork meat, so machinery and equipment are not required which implies other impacts.

In this sense, it can be said that the potential environmental effects of this farm are the same as those generated in most pig-farms. These potential negative impacts could be (IUCN 2009, FAO 2012):

- Waste in general.
- Solid waste consisting of manure and food scraps.
- Liquid wastes, including wastewater with solid and liquid excrement from pigs (pig slurry or effluent) remnants of drinking water and cleaning.
- Veterinarian waste.
- Possibility of pests associated with poor disposal of waste.
- Possibility of bad odors depending on the disposal of pig waste.
- Emission of gases such as ammonia and methane.
- Noise generation, such as vehicular traffic and mainly the grunting sounds emitted by the pigs.

However, it is necessary to clarify that due to the location of this farm, not all the potential impacts affect the nominated area. For example, the result of treated wastewater does not affect it, since the farm is located at a lower topographic level.

Through the observations carried out at the beginning of January 2021, the real and direct impact of the pig-farm on the nominated area were determined. The main environmental impact, but which affects only a region of the nominated area, is the noise produced by the grunting of the pigs. Which is more noticeable mainly at night, possible associated with the mobilization of transport of animals. During the daytime these sounds are perceived mainly during the early morning and noon hour, as a possible normal result of feeding activities. The directly affected region corresponds to the south-west zone of the nominated area, while the areas open to the public do not receive this impact. Likewise, complaints have not been received from visitors. On the other hand, bad odors have occasionally been perceived.

Lastly, it is necessary to mention that historically around the nominated area, only agroforestry activities have been carried out. The pig farm has recently been associated with changes in the administration of Santa Margarita Estate. In any case, it is considered that the facilities of said farm could be temporary, especially because they are built with removable materials that is it is not a definitive construction. In this sense, the negotiations made by the Ministry of Culture and Sports of Guatemala with the new administration of the estate, will include the request to change the location of the pig-farm away from the nominated area.

- ***Is there a timeframe for the finalization of the discussion on the buffer zone with the owners?***

The relationship between the administrators of the nominated area, that is, of the National Archaeological Park Tak'alik Ab'aj and the five owners of the private estates of the rest of the archaeological site, has always been collaborative and on good terms, especially with Mr. Jose Luis Ralda González of the Santa Margarita Estate, who donated to the State of Guatemala, the lands of the nominated area for being the center of the ancient city of Tak'alik Ab'aj.

In the month of December 2021, high-level communications were carried out by the Ministry of Culture and Sports of Guatemala with the new administration of the Santa Margarita Estate. The objective was to talk about the nomination process of the Park, as well as inform about the progress to resume the construction of the museum, which will bear the name of the donor. The general result was positive and news of the construction of the museum, after long period without concrete actions, was very motivating.

These approaches are strategic to carry out negotiations, among them the definition of the buffer zone proposal, in the Santa Margarita Estate, as it is the area surrounding the nominated area. It is considered that by registering the nominated area as World Heritage Site, the collaboration will be more fluid and will be possible to reach more mutually beneficial consensus for which it is estimated that the negotiations may last at least two more years.

Research activities



Research activities

From the detailed description in the nomination dossier and the very complete bibliography, it appears that a lot of research, specifically archaeological surveys and excavations, have been conducted. Much of it is described or mentioned in the nomination dossier. ICOMOS would be pleased if the State Party could provide maps that indicate the locations of these interventions, as well as of the conservation / restoration activities.

Archaeological investigations have been carried out over more than three decades both in the designated area, as well as in the rest of the archaeological site. However, the type of research has been different, since within the nominated area, it has been intensive and constant, while outside it has been sporadic and only through systematic surveys.

In thirty-five years of research 1,638 archaeological excavations have been carried out with an average of 47 excavations per year. Of which 75 % (1,226 excavations) have been carried out within the nominated area and only 25 % (412 excavations) have been outside. (Fig. 7, 7A, 7B, 7C). In addition, 62 walls have been scraped which reveal strategic profiles on the roads outside the nominated property.

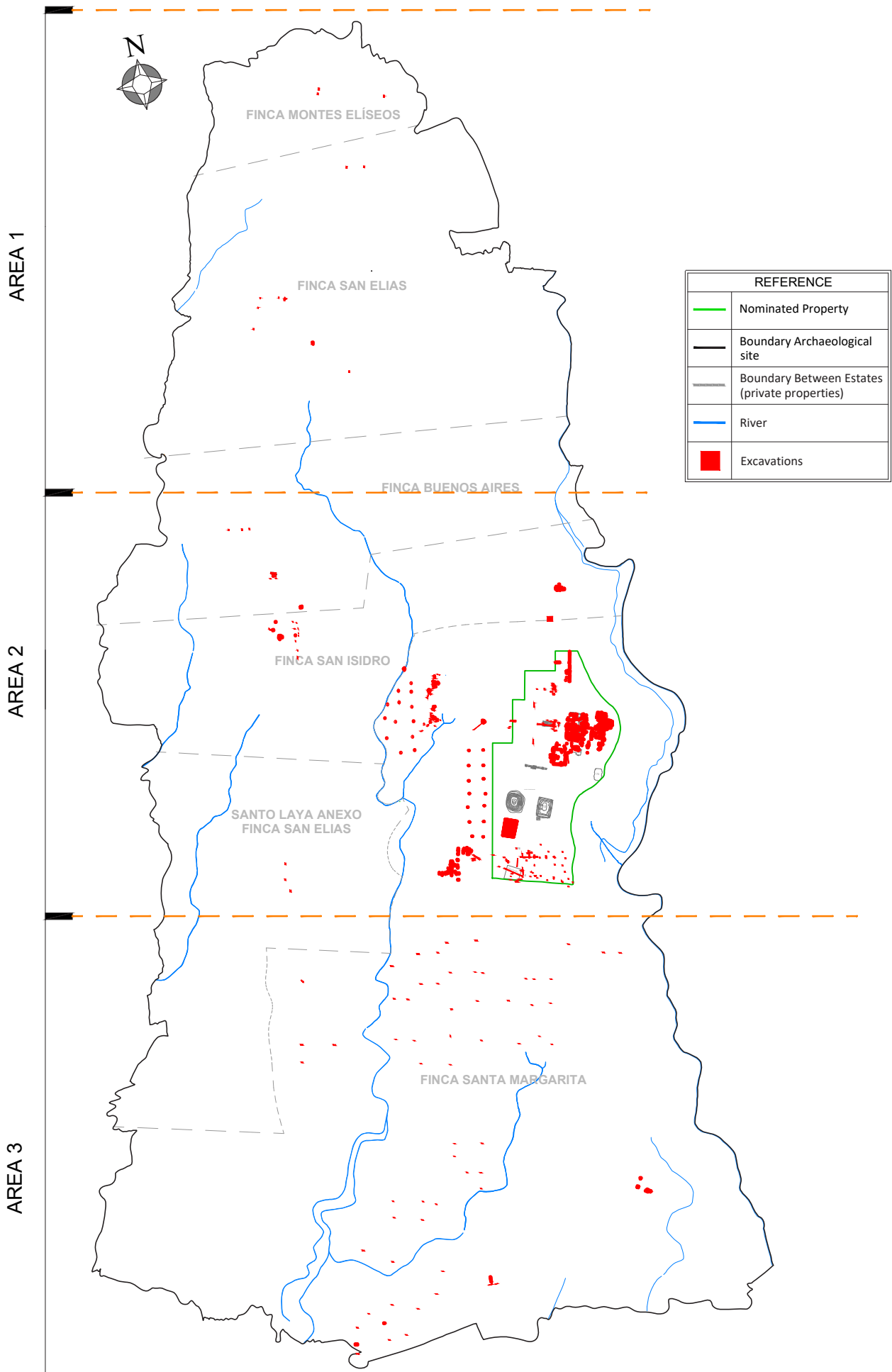


Figure 7. Location of archaeological interventions inside and outside the designated area. The archaeological site is divided into three areas.

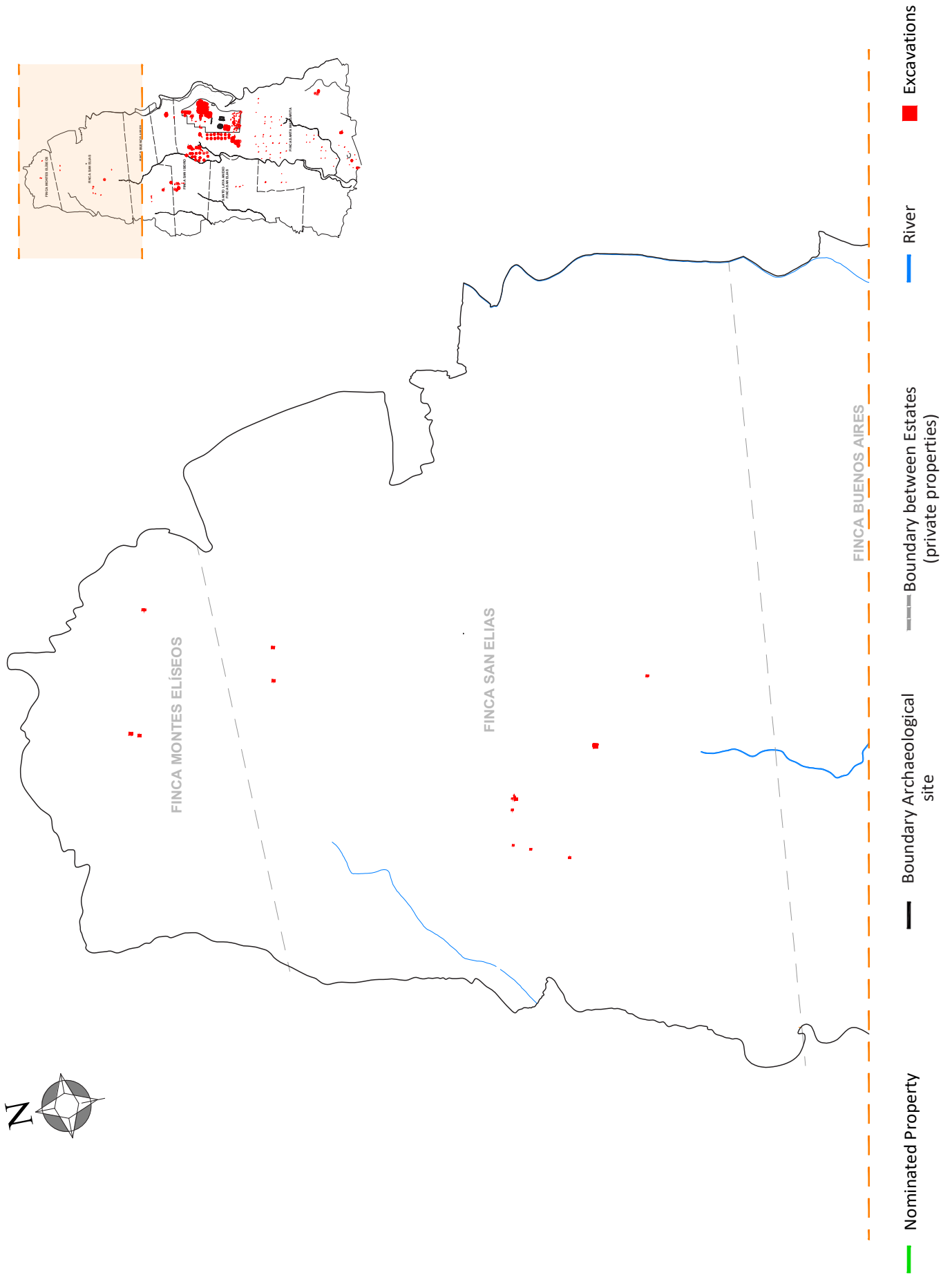


Figure 7A. Archaeological interventions in the archaeological site (Area 1).

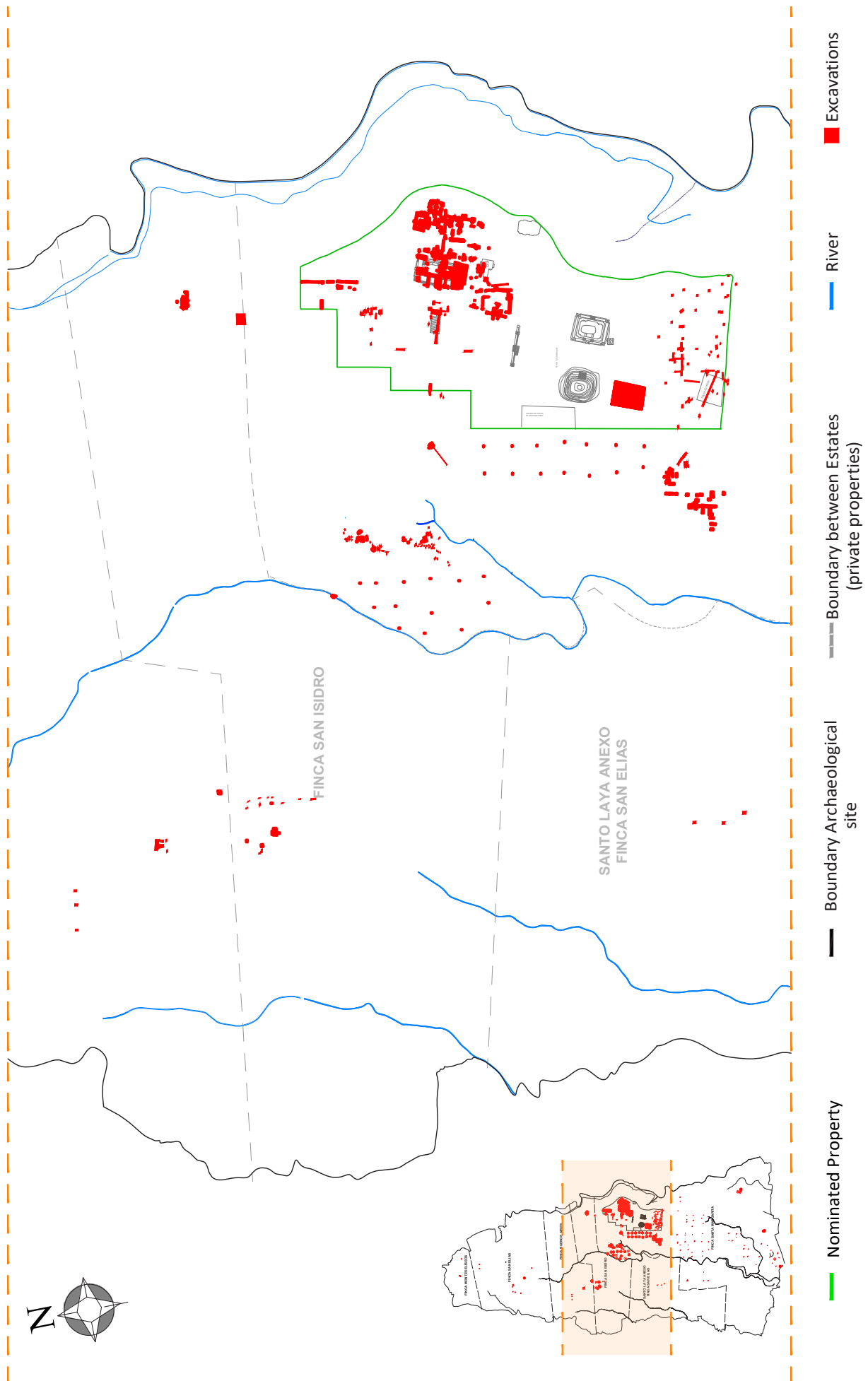


Figure 7B. Archaeological interventions in the archaeological site (Area 2).

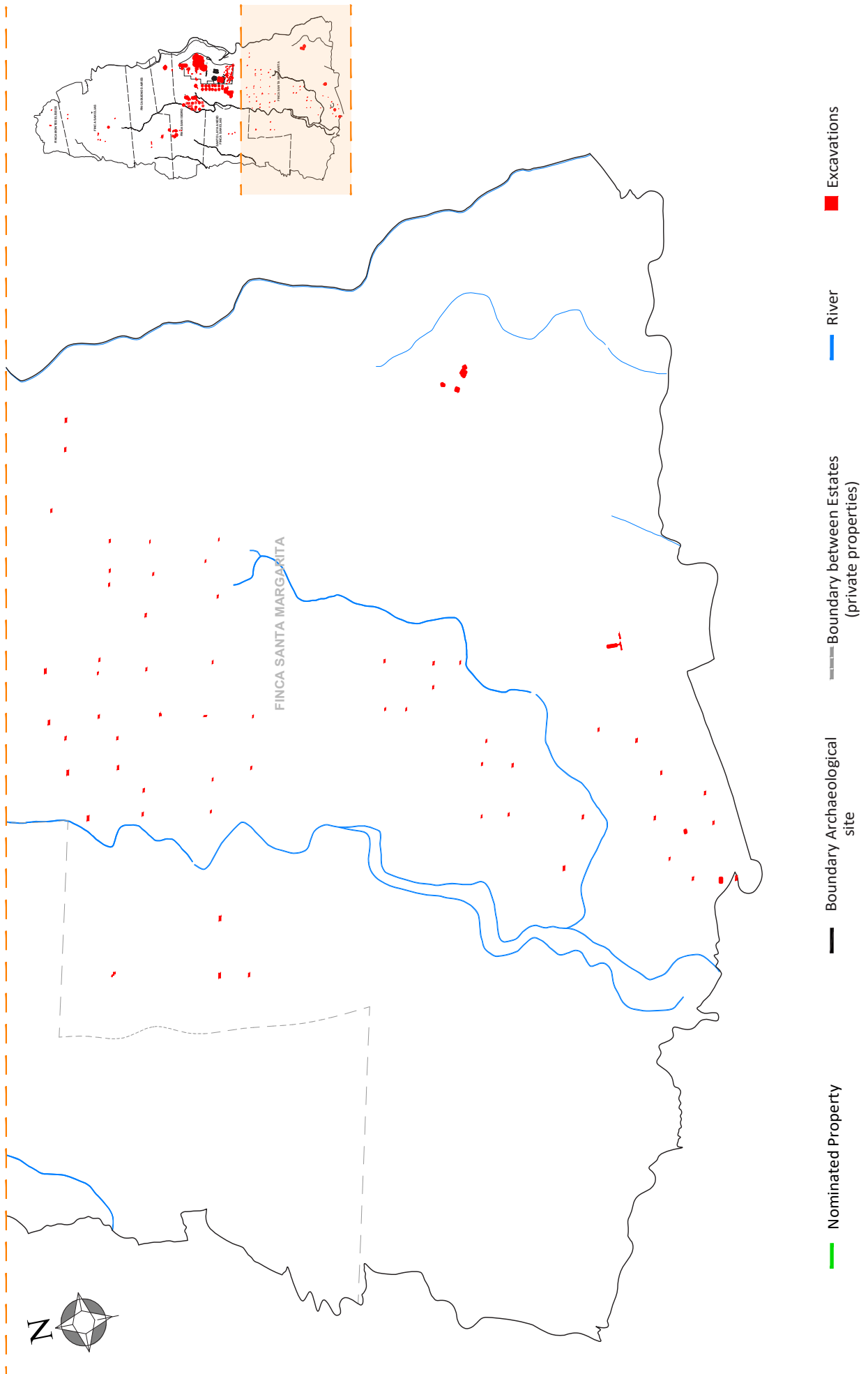
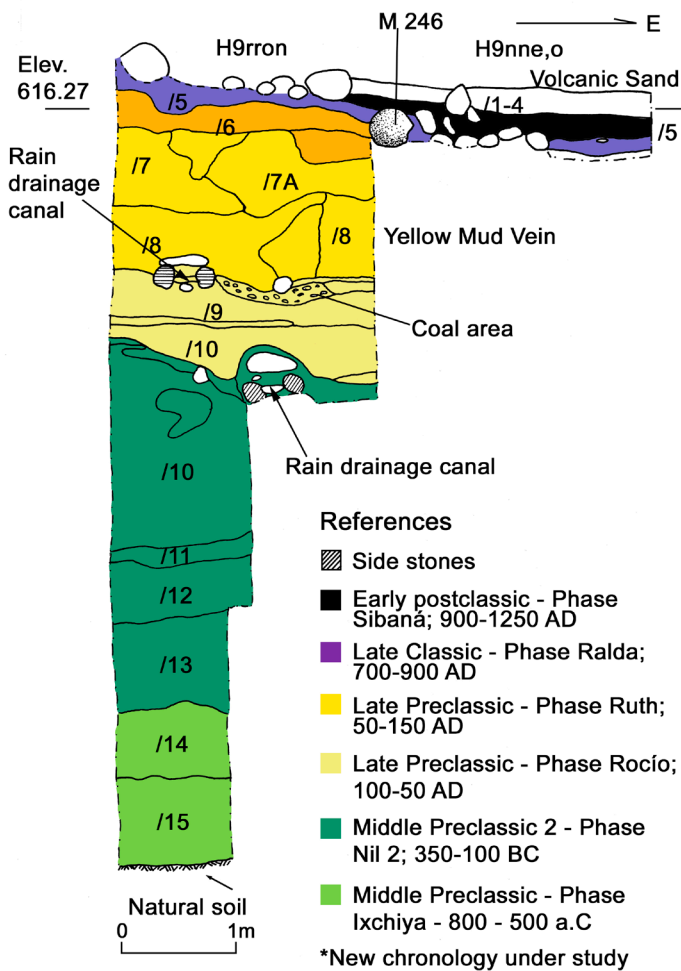


Figure 7C. Archaeological interventions in the archaeological site (Area 3).

As already mentioned, the archaeological site of the ancient city is made up of four architectural groups arranged on different terrace, located in the current division of the five private estates.

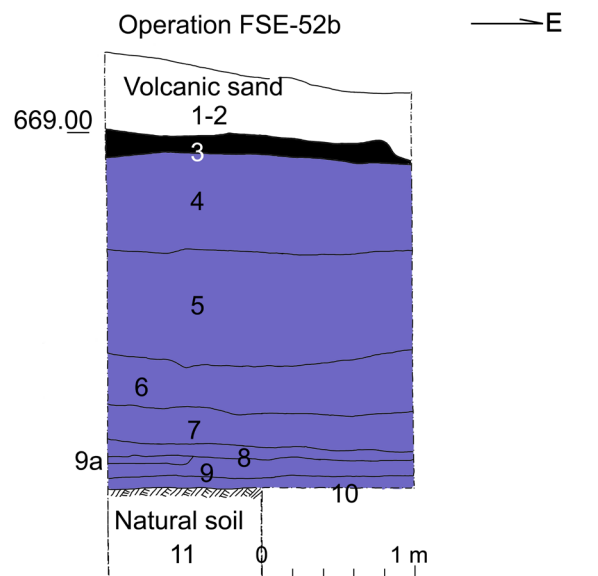
- North Group: Located in the Buenos Aires, San Elias and Montes Eliseos Estates (terraces 7, 8 and 9).
- West Group: Located in the San Isidro and Buenos Aires Estates (terrace 6).
- Group South: Located in the Santa Margarita Estate (terrace 0).
- Central Group: It covers the nominated area surrounded by the Santa Margarita Estate (partially the terraces 1,2,3 and 4) and which corresponds to 60 %, as well as another section outside the nominated area in the Santa Margarita Estate (terrace 0) and the San Isidro Estate (terrace 5) comprising 40 % of this group.

Horizontal coverage across excavations varies by location. Of the entire archaeological site, six strategic profiles of excavations are shown as an example. Three are found in the Central Group, here the average depths of excavations to the natural soil are 8 m in architecture and 3 m in plaza (Fig. 8). The other groups only have one profile and the depth data are as follows: North Group 4 m in architecture and 3 m in plaza (Fig. 9). West Group 5 m and 3 m (Fig. 10) and South Group 8 m and 3 m respectively (Fig. 11).



North Profile Operations H9rron and H9nne,o, East Facade Structure 7A, Terrace 3, Central Group, Archaeological Site Tak'alik Ab'aj

Figure 8. Central Group stratigraphic profile.



Updated drawing with New Chronology

North Profile, Operation FSE-52b, Structure 52, Terrace 7, Finca San Elías, North Group, Archaeological Site Tak'alik Ab'aj

Figure 9. North Group stratigraphic profile.

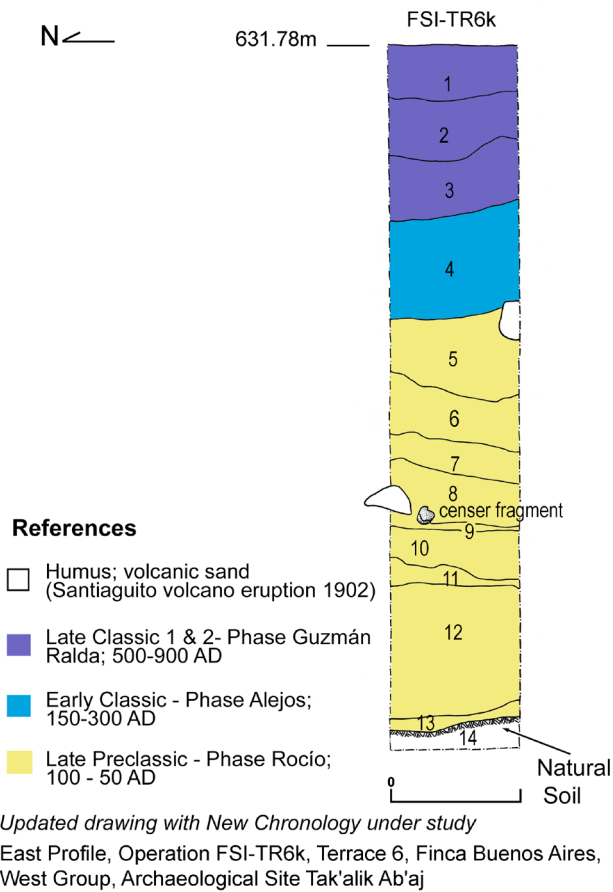


Figure 10. Western Group stratigraphic profile

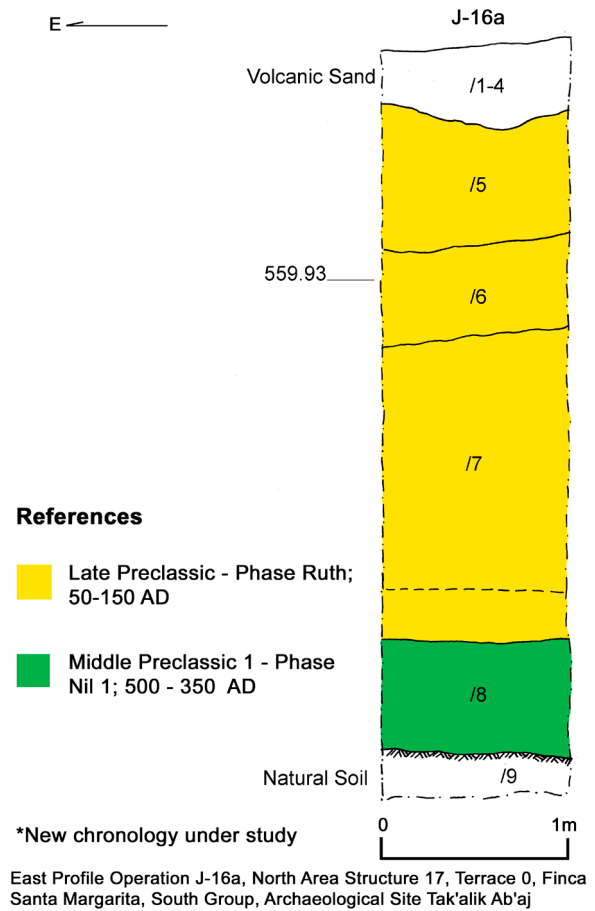


Figure 11. South Group stratigraphic profile.

The archaeological elements include: architectural buildings, sculptures and water supply and evacuation canals. A total of 528 elements have been identified in the entire ancient city to date. The number of elements in the nominated area (296) is higher than the rest of the archaeological site (232). Likewise, the average density expressed in number of archaeological elements per hectarea, is much higher (19 elements/ha) and is concentrated in the area nominated (15.38 ha), while the rest of the archaeological site, the density is less than one element per hectare (0.36 elements/ha) due to the greater extension (634.62 ha).

The investigation of these archaeological elements has been greater within the nominated area. For example, all the architectural structures or buildings present in the nominated area have been documented and it is considered that the percentage of research has reached 15% to date, while outside, despite the fact that 72 structures have been identified, only 27 have been documented and it is considered that the percentage of research achieved is only 3%. In other words, the research for these elements has been three times higher in the nominated area (Table 4).

Table 4: Archaeological elements investigated and restored inside and outside the nominated area.

ARCHAEOLOGICAL ELEMENTS	NOMINATED AREA	OUTSIDE
Architecture		
Number of structures	22	72
Number of investigated structures	22	27
Research percentage achieved (%)	15	3
Number of exposed and partially consolidated	22	3
Consolidation percentage (%)	50	0.01
Sculpture		
Number of sculptures	252	140
Number of sculptures investigated	245	134
Consolidation percentage (%)	7	1.5
Hydraulic engineer		
Number of canals	22	20
Number of water evacuation canals	20	7
Number of water supply canals	2	13
Research percentage achieved (%)	50	50
Number of exposed and partially consolidated	3	4
Consolidation percentage (%)	14	3
Total archaeological elements	296	232
Site area (ha)	15.38	634.62
Density (archaeological elements/ha)	19	0.36

Source: National Archaeological Park Tak'alik Ab'aj

Throughout the archaeological site, 392 sculptures have been found, which is considered a significant amount. The majority (252 sculptures) is within the nominated area. Of lapidary art there are a total of 247 elements of which 154 were found within the nominated area (Annex 1). Of this sculptural and lapidary tradition, within the nominated area 23 elements have been identified considered to the best exponents or ambassadors of the criterion (i). Outside only six are considered ambassadors. The best exponents of each criterion are listed below, as well as outside the nominated area. (Table 5).

Table 5. Best exponents or ambassadors of each criterion inside and outside the nominated area.

CRITERION (i): SCULPTURAL AND LAPIDARY TRADITION		
AMBASSADORS OF CRITERION (i)	NOMINATED AREA	OUTSIDE
Sculptural tradition cultural transition	2	0
Olmec sculptural style	6	2
Maya sculptural style	5	2
Potbelly sculptural style	2	1
Zoomorphic sculptural style	2	0
Petroglyph sculptural style	0	1
Lapidary art	2	0
Lapidary tradition Middle Preclassic	1	0
Lapidary tradition cultural transition	1	0
Lapidary tradition late Preclassic	2	0
TOTAL	23	6

CRITERION (ii): URBAN DESIGN AND PUBLIC WORKS		
AMBASSADORS OF CRITERION (ii)	NOMINATED AREA	OUTSIDE
Architecture	8	1
Hydraulic engineer	2	1
TOTAL	10	2

CRITERION (iii): ASTRONOMIC OBSERVATORY, WRITING AND LONG COUNT

AMBASSADORS OF CRITERION (iii)	NOMINATED AREA	OUTSIDE
Astronomical observatory (architecture)	3	0
West Row: Big Dipper Constellation 17° NE	5	0
Central Row: Draco Constellation 19° NE	9	0
East Row: Sun 15° NE	6	0
Ombiligo-Mux (Navel)	1	0
Writing 1st. and 2nd. generation, long count	8	2
TOTAL	32	2

CRITERION (iv): OPEN AIR MUSEUM AND VENERATION TO THE ANCESTOR

AMBASSADORS OF CRITERION (iv)	NOMINATED AREA	OUTSIDE
Open-air museum	18	0
Bearer of the Ancestor	1	0
TOTAL	19	0

CRITERION (vi): SPIRITUALITY AND MAYAN CEREMONIES

AMBASSADORS OF CRITERION (vi)	NOMINATED AREA	OUTSIDE
Representative monument of the cosmogram	1	0
Alternative altars	6	0
Annual average of Mayan ceremonies	250	0
Annual average number of attendees at ceremonies	1,760	0

Source: National Archaeological Park Tak'alik Ab'aj

Conservation and restoration activities

According to the intensive investigation within the nominated property, archaeological elements have been carefully selected to be partially or totally restored as well as for exhibition. These elements are considered emblematic and the best exponents. These include building, rows of monuments of sculptures, canals, ceremonial platforms, astronomical observatory, ceremonial plazas, sunken plazas and sunken patios with incoming grandstands (Fig. 12). These elements are listed below:

- **Structures and buildings.** Buildings were chosen, whose characteristics define them as the most representative of criterion (ii) and that illustrate the evolution of 1700 years of construction history. These are the Structures 6 and 12 from the end of Late Preclassic period, structure 89 of the Early Classic (whose restoration is planned for this year) and the structure 11 of the Late Classic. Some buildings from earlier periods cannot be displayed because they are below later versions. Failing that, careful documentation was sought to make them known graphically and descriptively (Shieber de Lavarreda and Orrego 2011). Example of these elements that are buried are the Ball Court (Structure Sub-1, 2 and 3) South of the Structure 11 and the Stepped Structure below Structure 7 corresponding to the Middle Preclassic period.

There are architectural and sculptural elements and canals that are combined, which transform practical spaces into ritual scenes loaded with meanings. Therefore, these spaces are considered as groups for decisions of exhibition and conservation work. These groups correspond to:

- **The Astronomical Observatory.** Criterion (iii) representative, consisting of small buildings with three rows of sculptures on a large ceremonial platform (Structure 7). These rows represent the astronomical orientations observed during the two iconic epochs, Middle and Late Preclassic periods, 800 BC – 150 AD (Popenoe de Hatch 2002).
- **The “David” Canal and the “Guacalitos” Canal.** They represent the criterion (ii) as drainage canals for rainwater. The first is located on the south façade of the Structure 7 and is characterized by containing reused and integrated sculptural elements. The second one is located at the access to terrace 3.
- **The Open Air Museum.** It is representative of criterion (iv) his composition of sculptures summarizes Preclassic history, whose function continues until the Late Classic.
- **Ceremonial Causeways.** There are two causeways. One between Structure 7 and Structure 4 on the terrace 3 that correspond to the Early Classic Period, the other one between Structure 7B and the row of central monuments on the platform of the Astronomical Observatory that correspond to the Late Classic period.
- **Sunken Plaza.** Correspond to Structure 87 with an adjoining steam bath (Structure 91). It is located on the south of the terrace 1.

Outside the nominated area, selective consolidation and restoration work have also been carried out, in some specific sites that correspond to the so-called “Current Protection Islands” (Fig. 13). On these three islands conservation, monitoring and maintenance work has made it possible to make a decision, with the approval of the owners of the farms, to be able to exhibit the archaeological elements. These elements are:

- **El Escondite (The Hidden Place in English).** It corresponds to the Structure 75, and is located in the Santa Margarita Estate. It represents a ceremonial place that consist of a system with seven canals (four are exposed and three are buried), they are water distribution canals for this housing sector. This island is proposed as another representative of the criterion (ii) on hydraulic engineering, urban design and public works.
- **El Patio Hundido (The Sunken Patio in English).** It corresponds to Structure 86. It is located on the West Group on the terrace 6, in the Buenos Aires Estate. It is another example of sunken plaza with incoming bleachers. It is proposed as a representative of criterion (ii) of urban design and public works.
- **Group Stela 2 and Altar 5.** Early Maya style Stela 2 (second generation with an elaborate frame) depicts two personages in profile with an elaborate headdress and a central glyph panel with Long Count date 8 B’aktun, under a Late Preclassic ancestral/celestial theme 50-150 AD. The group correspond to the criterion (i) sculptural tradition and to criterion (iii) writing and Long Count.

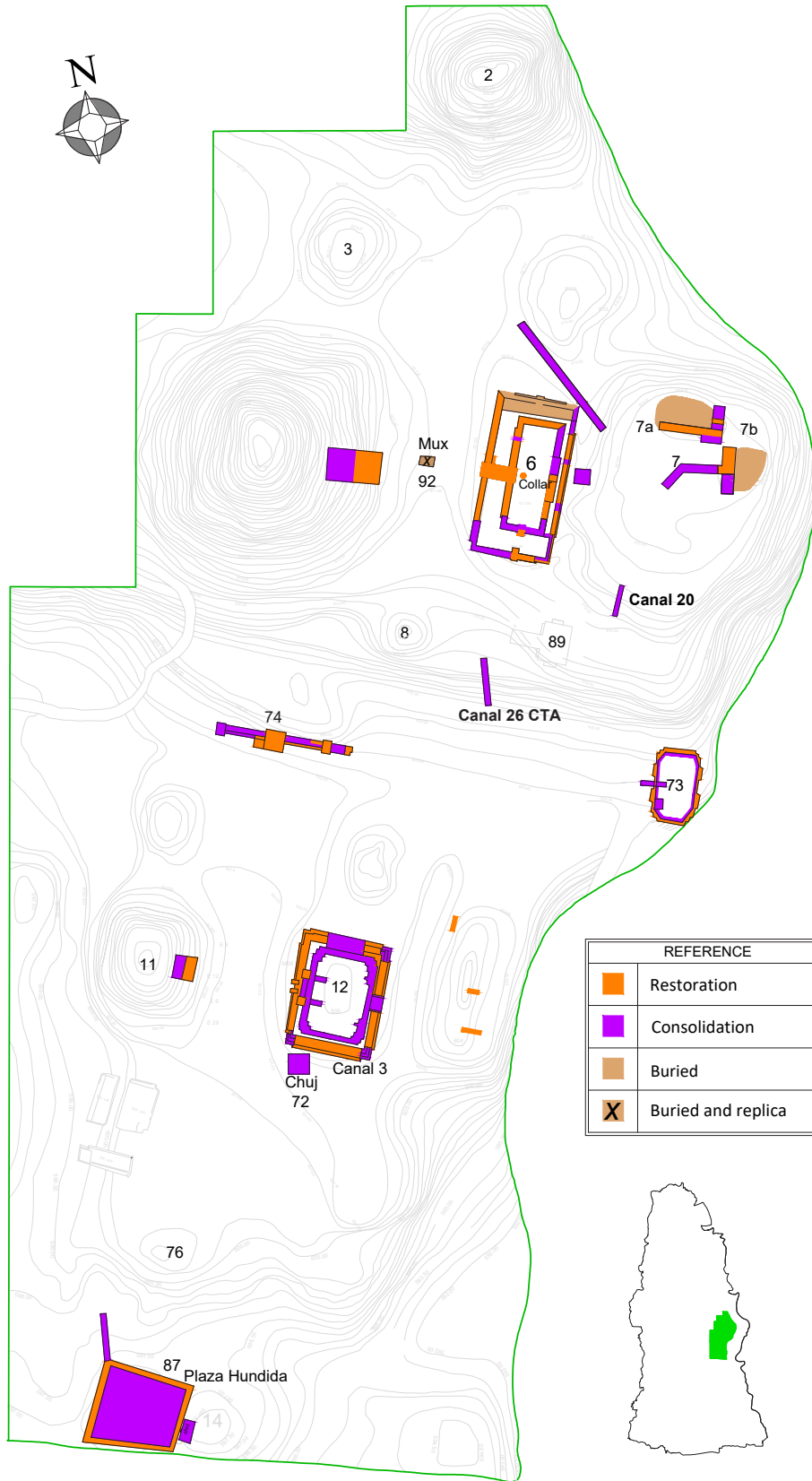


Figure 12. Restoration and conservation work within the nominated property.

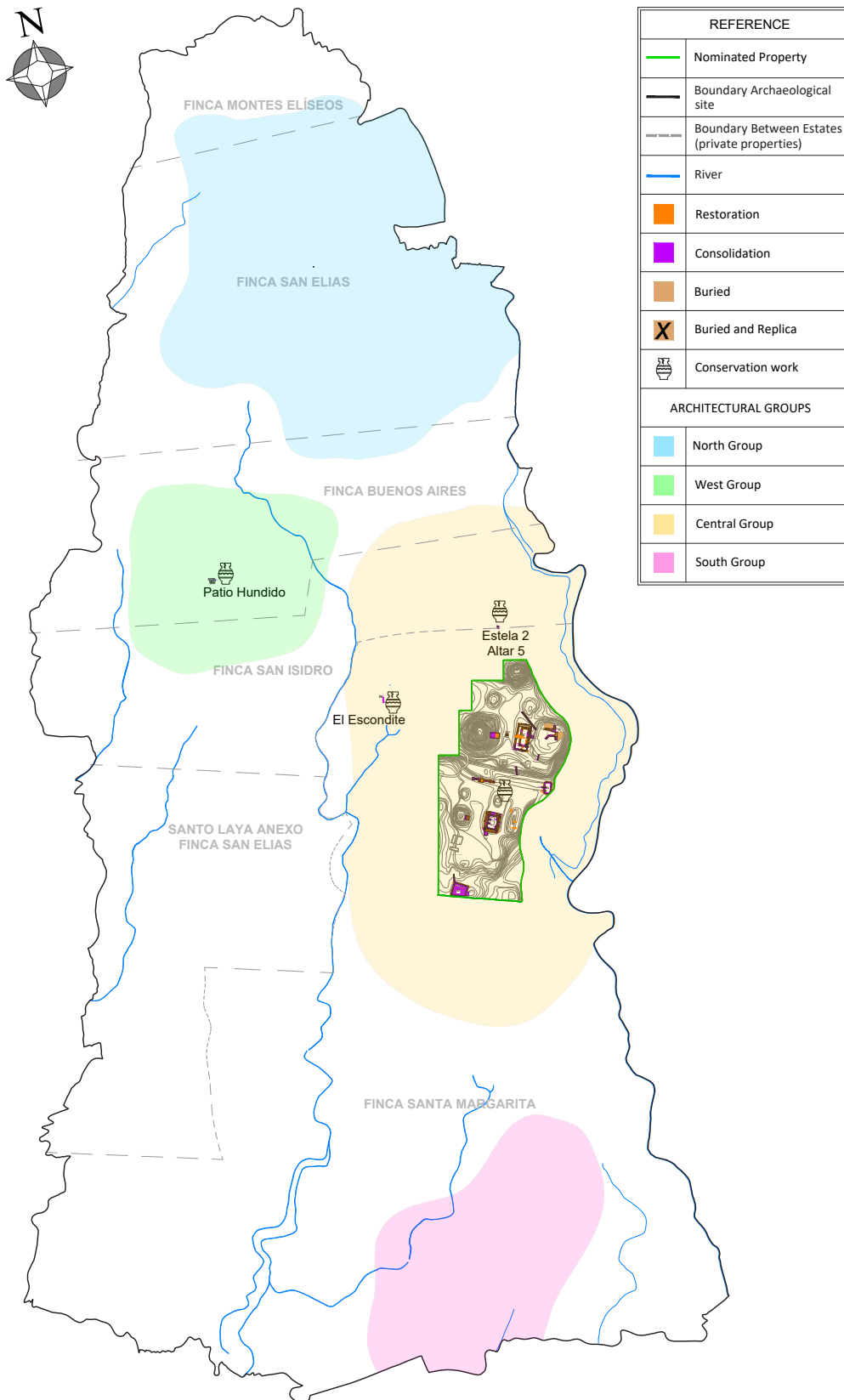


Figure 13. Restoration and conservation work outside the nominated property.

ICOMOS would also be interested in knowing if research is planned for the future and whether there is a clear Research Strategy/Framework related to sustaining the proposed Outstanding Universal Value.

There is a plan for the future research. Since its creation the National Archaeological Park Tak'alik Ab'aj has been governed by the principles of scientific research and conservation of cultural heritage. For example, the design of the archaeological park and the strategic selection of the elements for its exhibition to the public, are the result of research guidelines stipulated in terms of reference for research and conservation of the National Archaeological Park Tak'alik Ab'aj (Orrego Corzo 1990, Schieber de Lavarreda and Orrego 2002).

In the nominated area there is a system that allows permanent, systematic, intensive simultaneous and above all, multidisciplinary research. In the rest of the site the investigation has been at the level of prospecting or exploration. In both cases, a basic principle of prioritizing respect for the authenticity and integrity of cultural heritage has always prevailed in direct relation to its natural environment. This due to the need to take into account the surrounding landscape to understand the development of cultures.

The deep respect for the place, focused on understanding its very own characteristics, will continue to be an integral part of all research and conservation disciplines, both inside and outside the nominated area. This line of research marks the studies that will continue to be carried out in the future in the nominated area. Within these studies, the vertical and horizontal dimension or urban design can be mentioned, which includes water management, or other infrastructure and public works solutions. As well as studies of architecture, sculpture, ceramics, lithic, obsidian, and lapidary art, among others.

The combination of all this information has given rise to the concept "veneration of the ancestor". This concept is a transversal axis that is present in all cultural manifestation. Both in archaeological remains and today. The veneration of the ancestor was decisive for urban design, the construction of structures, astronomical observation, and currently for ancestral commemorations. All this research, as well as the principles and concepts, have generated the archaeological evidence that allows us to verify the direct relationship of resilience of the core elements of ancestral ritual life, which have survived to the present, including the concept and design of the cosmogram.

The research carried out over time, allowed the discovery of the Outstanding Universal Value (OUV), implicit in the various elements of cultural heritage. It also generated all the scientific information to recognize, define and support the exponents of the five cultural criteria, while contributing to its conservation. In this sense, the simultaneous research strategy will continue, venturing into new techniques and methodologies that allow continuing to support the criteria that determine the OUV.

Therefore, current and future research has as its main objective to expand, strengthen, deepen and support the documentation of all related aspects to reaffirm the values that make the nominated area, unique. An example of this type of specific research, planned or under development, with inter-institutional and international support, are the following:

Criterion (i). Sculptural and lapidary traditions that transcend eras and cultural geographic spaces:

- **Study on traces of lapidary production.** It is based on the traces left by local and foreign materials that have been used in the lapidary production process (jadeite, pyrite, specular hematite), which allows to establish its place of production and intercultural and interregional relations, this study strengthens the information of lapidary traditions developed parallel to sculptural traditions, such as government programs (Melgar and Solis 2019, Schieber de Lavarreda, Melgar and Solis 2022).
- **Study on the traditions of cephalic modification.** The process of transition from the Olmec cultural era in the Middle Preclassic period to the early Maya in the Late Preclassic has been documented by excellence in the sculptural traditions. The study of the changes of the cephalic modification in the figurines, through the different cultural epochs, offers a promising axis of investigation. This allows defining and contrasting traditions of cephalic modification embodied in the figurine, with sculpture and lapidary art (Schieber de Lavarreda *et al.* 2022).

Criterion (ii). Studies that determine the design of the urban settlement on natural terraces adopted:

- Studies will continue on the design and distribution of the urban settlement of four main architectural groups, which are adapted and settled in the characteristic landscape of the natural terraces of the volcanic chain, in the piedmont of the Pacific coast of Guatemala, that demonstrates a full knowledge of the conditions of the landscape and climate, and the development of appropriate solutions that allowed their resilience.
- Continuity will be given to the recent program called “**Archaeology to the Rescue of Ancestral Knowledge**” which emerged in the symposium entitled “Archaeology to the rescue of the ancestral knowledge in the face of climate change” organized in 2021 (Schieber de Lavarreda 2021). This program is focused on the recovery of archaeological evidence on the adaptation capabilities of ancient cultures in the face of climatic phenomena and its current application in the conservation of their cultural remains.

Criterion (iii). Studies on the history of astronomical observations, the basis for the development of calendars, the calculation of time (Long Count), mathematics and writing.

- **Multidisciplinary study of Stela 87 on the beginnings of writing.** In this stela recently discovered in 2018 studies of the glyphic signs are being made, together with different specialists in epigraphy (Schieber de Lavarreda *et al.* 2022). This allows us to broaden our knowledge of the birth of writing along the cultural corridor of the old trade route, which covers the Pacific coast and the Isthmus of Tehuantepec, and interconnected the Olmec and Mayan cultural regions of Preclassic Mesoamerica.

Criterion (iv). Open Air Museum:

- The open air museum is a clear example of a recurrent central element that has been identified, which consist of endowing spaces and rituals with a deep sense of historicity. Since the past is constantly alluded to, so it is invoked and included in the design of the public spaces or settings, as well as the ritual protocol (Schieber de Lavarreda and Orrego Corzo 2012).
- The study programs will continue in the search for more information to document the primordial tradition of the veneration of the ancestor, this is its various archaeological manifestations through the 1700 years of occupation to the present.
- It will be strengthened by the recovery of archaeological evidence on the transversality in all social strata of the essential concepts of the ancestral cosmovision, which allowed the necessary social cohesion and survival to the present. To this end, the program called “Studies of Residential Areas and Potential for Cultivation” will be continued. (Espigares 2014, Espigares and Medina 2019, Gilewski *et al.* 2022).

Criterion (vi). Current ritual traditions based on sacred calendars and elements of ancestral cosmovision:

- The program of detailed documentation and study of current ritual practices will continue, which are carried out by groups of the different ethnic groups of the Mayan people, since the beginning of the National Archaeological Park Tak'alik Ab'aj in 1987.
- The periodic organization of the **Meeting of Mayan Spiritual Guides Ajq'ijab'** will continue. It has generated important information to contrast the archaeological evidence of the ritual practices recovered in the excavations, as well as to identify elemental characteristics and concepts found in the material remains of archaeological rituals and in current ritual practice, which allows us to understand survival and particularly the continuity and direct relationship between the past and the present (Schieber de Lavarreda *et al.* 2016).

In conclusion, the axes of research that led to the recognition of Outstanding Universal Value (OUV) manifest in the nominated area, will continue to develop and expand. This through a research framework strategy, which includes the incursion of new methodologies and technologies to deepen the generation of information. In this way it can be fulfilled with the objective of sustaining the criteria that determine the OUV, at the same time that its conservation is strengthened.

- ***Could the State Party please indicate whether there is a Conservation Plan (beyond the description of the threats presented in Annex III.2) for the nominated property and the entire archaeological site?***

There is a conservation plan that focuses specifically on the conservation of the archaeological elements that represent the criteria that determine the Outstanding Universal Value within the nominated area (Annex 3). Outside the area the conservation of cultural property within private estates are carried according to the Law of Cultural Heritage. Said law obliges the owner of the estates to guard the archaeological assets, while guaranteeing free access for the Park personnel to carry out research, monitoring and restoration. In addition, in agreement with the owners they can be exposed, as in the case of El Escondite (The Hidden Place in English) and El Patio Hundido (The Sunken Patio in English).

Regarding conservation within the Park, four potential threats have been identified: weathering, damaging agents (physical, chemical and biological), vandalism and archaeological looting. However, these last two are considered controlled, that is, their possibility of occurrence is low. This due to the fact that the tours of the visitors are guided by specialized park personnel. There is also a perimeter fence and permanent control.

Regarding the threats related to archaeological deterioration, weekly monitoring is carried out in the Park to assess the state of the archaeological elements that meet the criteria. That is to say, the conservation is guaranteed for sculptures of the criterion (i), for architecture, both of mud buildings and mud buildings with pebble stone cladding, as well as roads, canals and floors, which correspond to the criterion (ii), for the Astronomical Observatory according to the criterion (iii), for the Open Air Museum, criterion (iv) and for the alternative altars for the practice of Mayan spirituality, criterion (vi).

In the Park the application of conservation measures is prioritized with emphasis on monitoring and prophylactic maintenance, in this way it is possible to prevent and minimize the need for intervention and restoration measures. However, if it is necessary, at the time of applying these measures, the Park has the equipment and specialized personnel. Among the techniques and practical measures used are:

- **Consolidation.** Deep renewal of the binder with mixtures analogous to the original. Mix formula for outdoor and indoor elements, behind walls, cobblestone (rounded stone) cladding and anastylosis or straightening (Larios and Orrego 1997).
- **Restoration.** Replacement of mud fillers and rounded stone, when construction stability requires it.
- **Mend.** Repair. Surface renewal of the binder with mixtures analogous to the original.
- **Re-bury.** Burying an archaeological element again as a protection measure after its study and documentation.
- **Elaboration of replicas.** Substitution of original archaeological elements by replicas places in the same place.

- **Placement of roofs or covers.** On the exposed structures and sculptures that require it.
- **Transfer of parts.** Transfer to secure sites or warehouses.
- **Vegetation maintenance.** Especially in the case of trees whose removal could affect the stability of buildings or structures.
- **Grass planting.** Cover surfaces with grass to avoid erosion.
- **Prophylactic maintenance.** Preventing maintenance.
- **Use of original materials.** In the restoration works, materials whose composition and physical characteristics are as similar as possible to the originals must be used (Larios and Orrego 1997). Which is facilitated by using local and accessible materials, for example, mud and rock material of igneous origin is available in the vicinity. This is due to the fact that the Park is located in the slopes of the volcanic chain of the Sierra Madre, the most immediate volcanoes are the Santa Maria and Santiaguito, this last one is active. In fact, the origin of the rock material (andesite, dacite and riolite) comes from the rivers next to the Park.
- **Experimentation on archaeological deterioration.** There is a replica to scale (1:200 horizontally and 1:500 vertically) of Structure 6 to understand how a mud building with pebble stone cladding collapses. The replica was abandoned from 2016 to date (Fig. 14), through monitoring it was determined that, apparently, the vegetation has stopped the rate of deterioration recorded in the first two years.



Figure 14. Experimental station, replica of Structure 6.
Photographies: © National Archaeological Park Tak'alik Ab'aj.

The constructions of Tak'alik Ab'aj are made of mud with a pebble stone lining. Through the cultural eras, not only changes of style and forms can be observed, but also changes in the preferences of materials and boulder stone sizes. Next, the original materials used in sculpture, lapidary art and constructions are described, according to the period and criteria they represent.

- **Sculpture:** Andesite, dacite and freckled dacitic andesite, Preclassic sculptural tradition 800 BC – 150 AD, the presence of rocky type does not change, there are only two monuments of stone imported from the highlands in the Late Preclassic.
- **Lapidary Art:** jadeite from Motagua River in Eastern Guatemala, Middle Preclassic blue jadeite. Late Preclassic and Early Classic, jadeite with lighter green-grey tones (Schieber de Lavarreda 2015; Schieber de Lavarreda *et al.* 2019).

Architecture, construction of buildings, roads, canals and floors

- **Mud.** Homogeneous dark muds, different amounts of sand with ceramic and charcoal fragments (Schieber de Lavarreda 1991, 1994) Example: The Ball Court, Stepped Structure, Middle Preclassic Period.
- **Mud and pebble stone for cladding.** a) Mixture of a variety of light clays with taxcal and medium-sized rounded stone, examples of Structures 6 and 12, Late Preclassic period. b) Mixture of variety of light clays with volcanic sand taxcal, crushed pottery, charcoal and large boulder stone. Example Structure 89 Early and Late Classic periods.
- **Taxcal.** Volcanic tuff in a state of decomposition, example: Plaza floors 5-10 cm thick with crushed taxcal, Late Preclassic period.
- **Talc:** a) Flats and clods or “adobes” in special contexts. Example: Structure “Blanca” (White Structure in English), Offering “Collar de Ancestro” (“Necklace of the Ancestor” in English) and Burial No. 2, Middle Preclassic period. b) High concentrations of deep natural soil layers and fill mixtures. Late Preclassic period (Schieber de Lavarreda 2008; Mendoza et al. 2004)
- **Volcanic Sand.** Plaza floors. Example: Ball Court.

Site museum



Site museum

ICOMOS acknowledges that the legal problems holding up the termination of the site museum are resolved and that funds are allocated for the construction to be terminated in 2023. ICOMOS would be interested in understanding what are the steps still necessary to be completed before the construction can resume? Could the State Party please indicate what part of the museum is already constructed, and what part is still missing?

Steps necessary to be completed before the construction can resume

A number of technical and administrative steps must be followed in order to resume construction of the museum. The museum's construction is a service that the State of Guatemala must contract through the State Contracting and Procurement Information System -GUATECOMPRAS- (by its acronym in Spanish).

The GUATECOMPRAS system is an electronic marketplace that makes available to potential suppliers, all purchases and contracting of goods and services, which operate through bids based on specifications and terms of reference. The entire GUATECOMPRAS process began on Jan 7th, 2022 and will conclude on May 2nd, 2022, date on which the order to start the construction works will be given.

The current status of the process can be verified through in the following link, as well as the next actions to be taken until a contract is signed, thus starting the process of resuming the construction of the site museum. In addition, the following is a summary of the necessary steps that still need to be completed before construction can resume (Table 6).

<https://www.guatecompras.gt/concursos/consultaConcurso.aspx?nog=16187717&o=5>

Table 6. Required phases prior to resuming construction of the Site Museum "Caracol del Tiempo, José Luis Ralda González"

ADMINISTRATIVE PROCESS	AGREED DATES
● Construction request	January 7 th , 2022
● Publication of preliminary terms of reference	From January 12 th to January 18 th , 2022
● Approval of bidding documents	January 21 st , 2022
● Issuance of invitation for proposals	January 24 th , 2022
● Suppliers' preparation of proposals	From January 24 th to March 5 th , 2022
● Receipt of proposals	March 7 th , 2022
● Evaluation of proposals received	From March 9 th to March 15 th , 2022
● Publication of adjudication	From March 16 th to March 17 th , 2022
● Approval of project award	From March 25 th to March 31 st , 2022
● Preparation of the contract	From April 19 th to April 20 th , 2022
● Approval of the contract	From April 25 th to April 29 th , 2022
● Order issued by the Ministry of Culture and Sports to start	May 2 nd , 2022
● Completion of the Site Museum Project	2023

Source: SEGEPLAN 2022

Construction of the Site Museum

The Site museum project "Caracol del Tiempo, José Luis Ralda González" ("Time Snail, José Luis Ralda González" in English) was 50% built in previous years, which includes the areas of the main entrance, lobby, sales of publications, administration, educational room, restrooms, conference room, introductory exhibition room and bearing walls of the service areas and storage of cultural goods.

Following the structural study carried out in 2020, it was determined that 20% of the building must be demolished for safety reasons. Based on the foregoing, it can be affirmed that after these modifications, 30% of the existing construction will remain intact, which means that to conclude the project of the Site Museum “Caracol del Tiempo, José Luis Ralda González”, 70% of its construction is still pending. Note that most of the vertical structural and load-bearing elements are in an optimal state, as they only need cleaning and minor repairs in specific areas. Currently the process for the completion of the construction of the museum has begun, which will be executed as a multi-year project and is expected to be completed in 2023.

ICOMOS would also appreciate if the State Party could provide further information on what the building will include besides the museum installations: spaces for storage, laboratories, archives etc.

The Site Museum project consists of a one-story building and will be composed of the following installations divided into four areas (Table 7).

Table 7. Installations and areas of the Site Museum "Caracol del Tiempo, José Luis Ralda González".

AREA	MUSEUM INSTALLATIONS
MUSEUM	<ul style="list-style-type: none"> ● Souvenir shop ● Wardrobe ● 4 Exhibition Halls ● Sculpture room ● 2 Learning rooms ● Administrative office ● Goods storage and conservation workshop ● Bathrooms ● Cafeteria ● Cleaning room ● Conference room
SUPPORT AREAS	<ul style="list-style-type: none"> ● Security checkpoint ● Selling of tickets and guides ● Security office ● Employee dining room ● Storage room ● Bathroom facilities
COMMON AREAS	<ul style="list-style-type: none"> ● Rest areas ● Plazas ● Walkways and pathways ● Gardens
REPOSITORY OF CULTURAL PROPERTY	<ul style="list-style-type: none"> ● Storage area ● Conservation area ● Security box

Source: MCD Infrastructure Department

- ***Will older research and visitor infrastructure at the property be removed once the new museum is operational? Could the State Party provide information showing these changes at the site through maps and plans?***

The older visitor and research infrastructure on the property will not be removed, once the new museum is up and running. That is, no changes will be made. The Park will continue with all its research, conservation, and visitor functions in accordance with the established carrying capacity. The construction of the museum is a complement to the archeological park, which will have its own spaces for its function as a museum. A map with all existing infrastructure as presented in the nomination dossier is attached (Fig. 15).

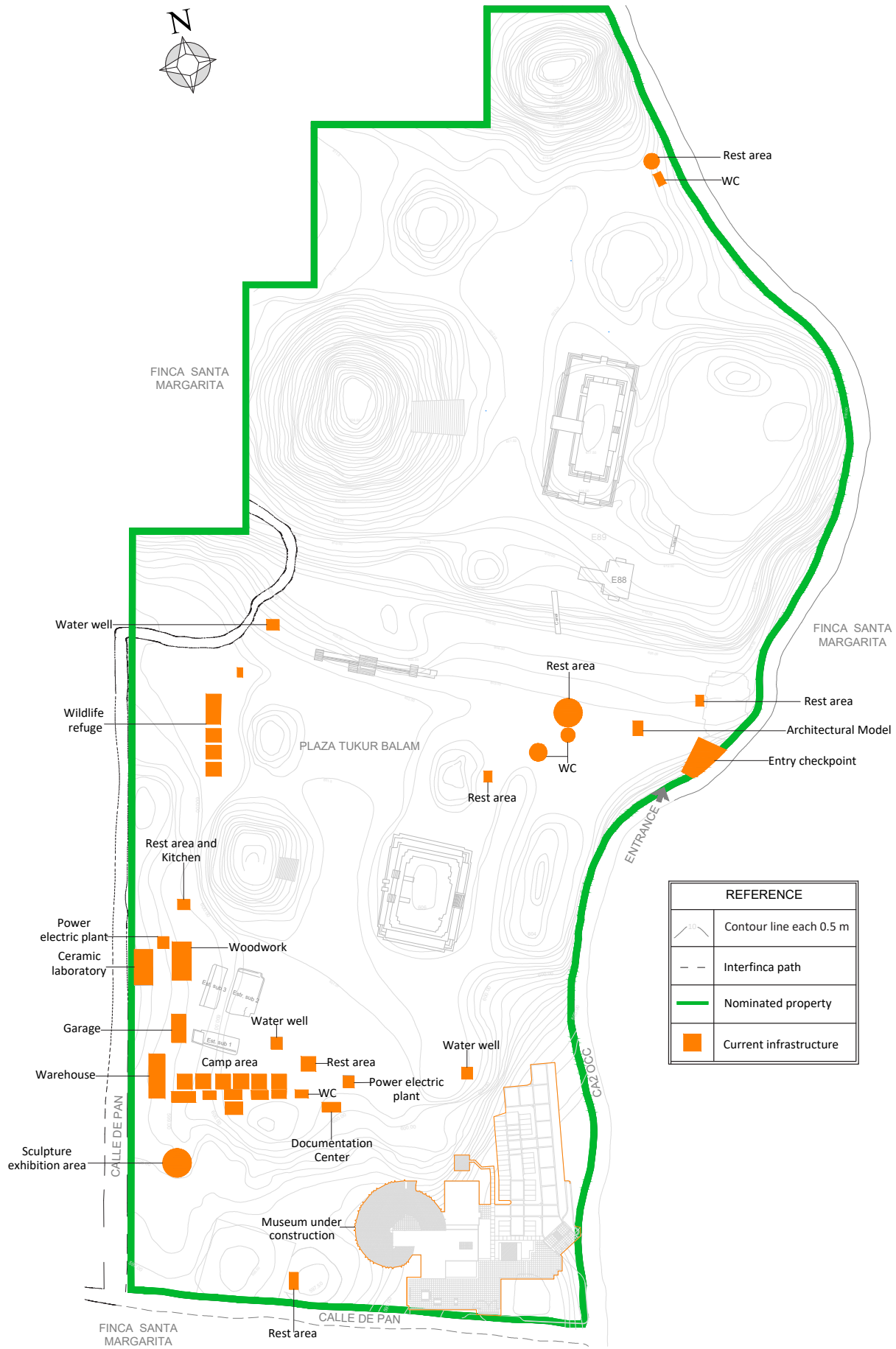


Figure 15. Map of existing infrastructure within the nominated area.

ICOMOS understands that archaeological surveys were undertaken in the southern area of the nominated property and determined that this area has little archaeological evidence. These confirmed that this location was appropriate for the construction of the museum. Could the State Party provide further information on the potential impact the museum complex may have in terms of visual integrity on the nominated property?

The Site Museum “Caracol del Tiempo, José Luis Ralda González”, has adequate dimensions and architectural components that are suitable and friendly to the natural environment. The location has been strategically selected based on the results of the archaeological studies carried out in 2005. As mentioned before, within this area of the nominated property, there is little archaeological evidence, which is mostly limited to ground leveling.

As can be seen in the overall plan (Fig. 16), the area surrounding the museum is formed by a visual buffer of tree species and vegetation typical of the region. This corresponds to an ecological restoration process that has been developing in recent years within the nominated property. The height of the proposed building does not exceed the tree canopy, in addition to this, the museum is located at a topographic level below the main archaeological complex known as “Plaza Tukur Balam”, where is located the “Open Air Museum”.



Figure 16. Location and surrounding areas of the Site Museum “Caracol del Tiempo, José Luis Ralda González” within the nominated area.

The design and construction of the site museum were approved by the Ministry of Environment and Natural Resources of Guatemala in 2019, as part of the new studies and corresponding approvals to reactivate its construction in 2022. According to the “Evaluation and assessment of environmental impacts during the construction and operation phase of the project”, the perceptual environment category component was taken into account; this category includes the landscape and aesthetics component.

Within this category the activities regarding hydraulic and electric installations, base casting and wall raising were also assessed, which was classified as having a “slight negative impact”. While the general maintenance and cultural activities were assessed as having a “moderate positive impact” and finally, solid waste management as having a “slight positive impact”. In conclusion, all these impacts, mostly positive, present a slight disturbance in the landscape aesthetics, with an advantageous design and environment adaptation.

According to different analyses that have been done, the importance of the project components has been proven. For example, the adaptation component of the project got an advantageous result, categorized as a “low vulnerability project”. Several factors were taken into account for the analysis, such as: the project environment and local cultural adaptation, environmental comfort and external factors to which the project is subjected.

The built environment was also considered, in which urban planning considerations, land use, common areas and the project dimensions were assessed. It is worthy to mention that this project is not a massive construction and it is limited to a single occupation level, with the aim of lowering the environmental impact and to integrate the museum into its surroundings.

All of the aforementioned studies are part of the “Risk Management Analysis for Public Investment Projects” (AGRIP, for its acronym in Spanish), which is supported by the Guatemalan Association of the Structural and Seismic Engineering (AGIES for its acronym in Spanish). Which was presented to the Secretariat of Planning and Programming of the Presidency (SEGEPLAN for its acronym in Spanish), as part of the requirements prior to resuming construction of the museum.

- **Could the State Party provide the architectural plans and design details of the museum complex?**

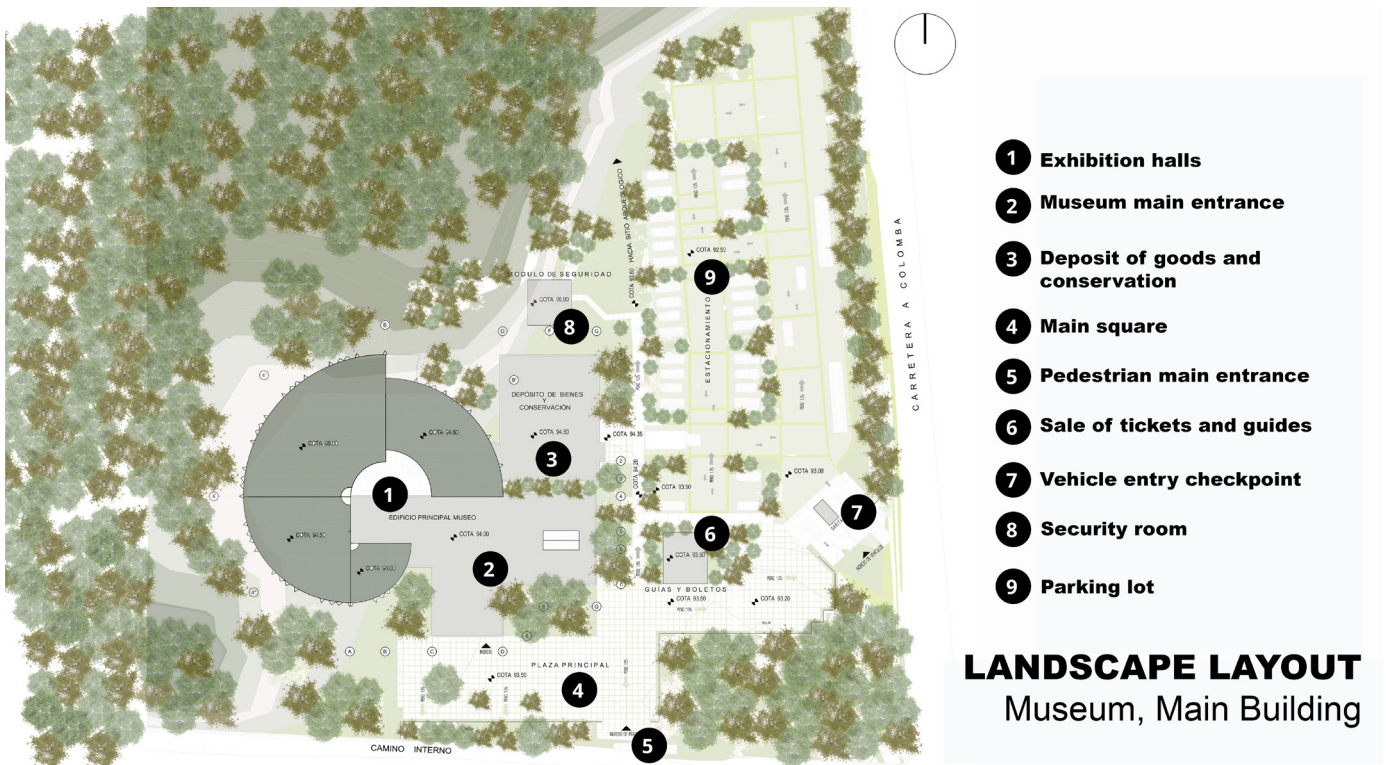


Figure 17. Landscape layout, Site Museum “Caracol del Tiempo, José Luis Ralda González”.

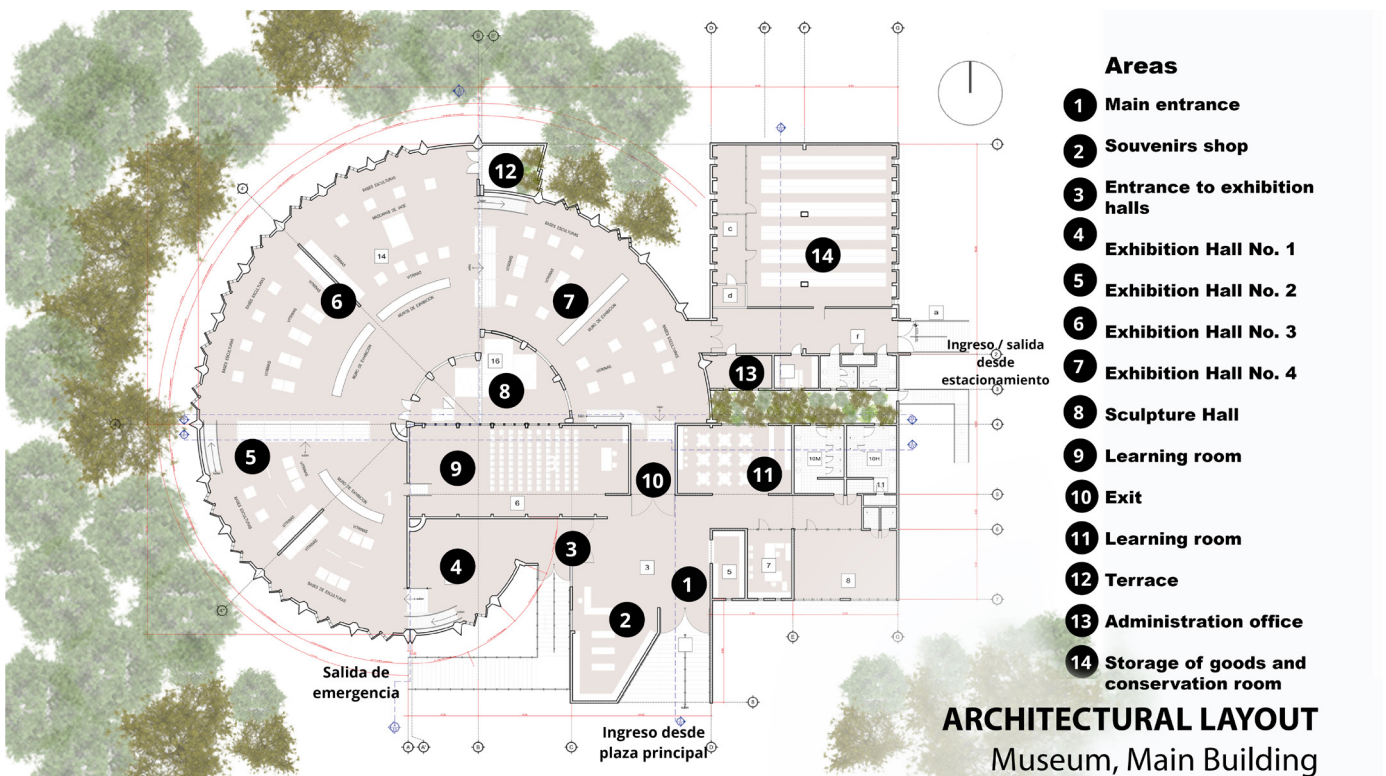
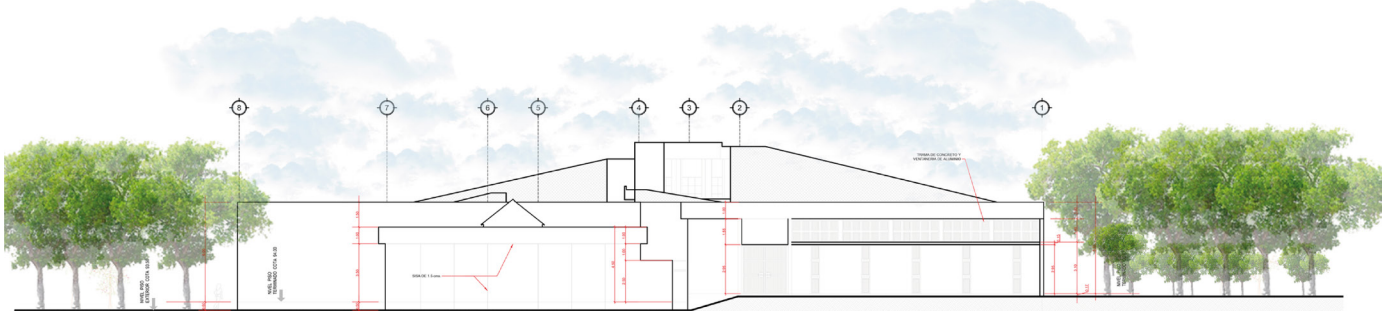
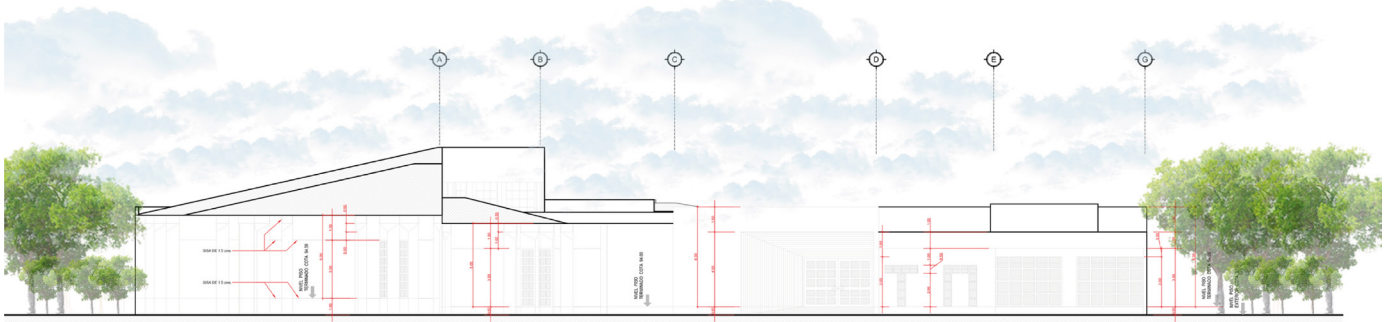
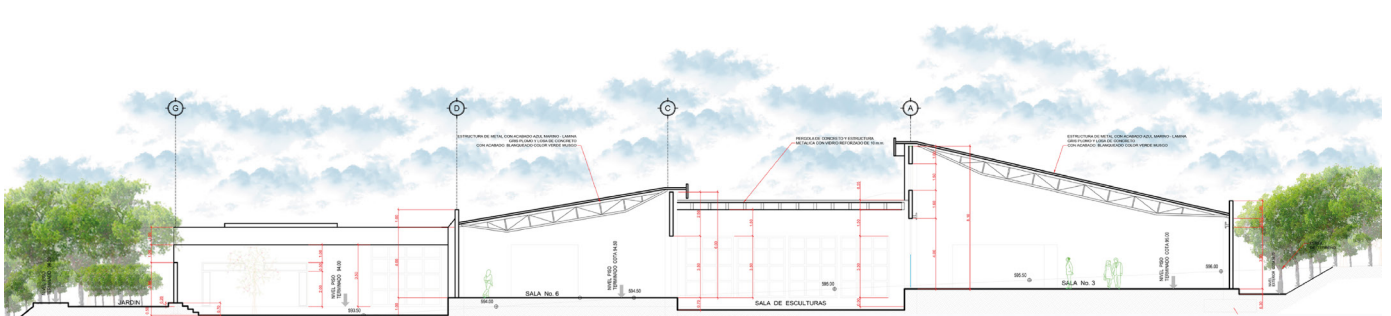
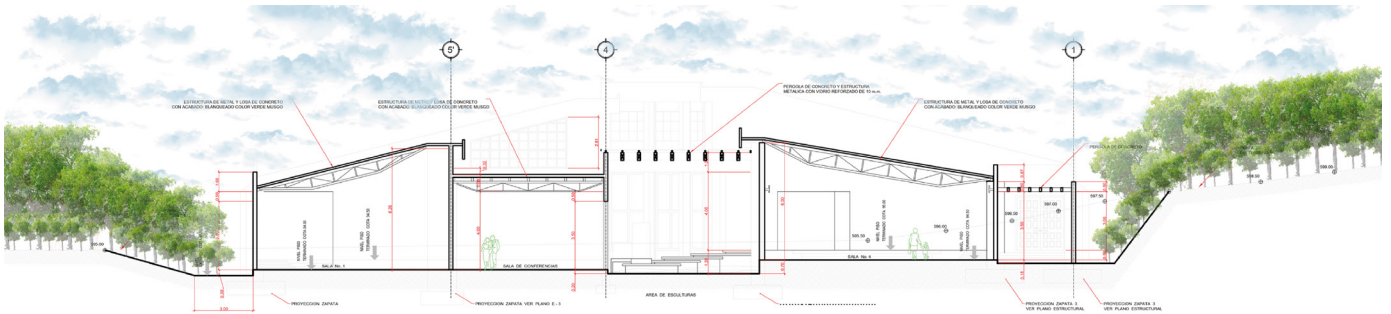


Figure 18. Architectural layout, Site Museum “Caracol del Tiempo, José Luis Ralda González”.



ARCHITECTURAL ELEVATIONS
Museum, Main Building



ARCHITECTURAL SECTIONS
Museum, Main Building

Figure 19. Elevations and sections, Site Museum “Caracol del Tiempo, José Luis Ralda González”.



Figure 20. Overall view, Site Museum "Caracol del Tiempo, José Luis Ralda González".



Figure 21. Exterior and interior visualization of the exhibition hall, Site Museum "Caracol del Tiempo, José Luis Ralda González".



Figure 22. Interior visualizations of the exhibition hall, Site Museum “Caracol del Tiempo, José Luis Ralda González”.



Figura 23. Detail main entrance, Site Museum “Caracol del Tiempo, José Luis Ralda González”

Risk management



Risk management

Finally, in the additional information the State Party supplied, a Risk Management Plan is mentioned. ICOMOS would appreciate if the State Party could explain what issues will be addressed in the Plan and whether this Plan will refer to the entire site or only to the nominated property. Could the State Party please submit the finished Plan or indicate the timeframe for its finalization?

Guatemala is a country highly vulnerable to natural disasters, which could increase as a direct consequence of climate change. This fact, together with anthropogenic actions can generate negative effects that put cultural heritage at risk.

The nominated area is susceptible to natural disasters because it is located on the western slopes of Guatemala's volcanic chain region, where there is an active volcano (Santiaguito Volcano). This has been identified both as a potential risk and threat. In this respect, it was considered necessary to establish an Integral Risk Management Plan. The main objective of this plan is to protect the values of the National Archaeological Park Tak'alik Ab'aj, but also of the rest of the archeological site.

The plan focuses on the conservation and safeguarding of the cultural heritage; however, it also takes into account the social, economic and natural environment, the safety of park personnel and visitors. Through participatory workshops with local stakeholders in the municipality of "El Asintal" and the Department of Retalhuleu, current and potential risks were identified. For each risk, the implementation of measures aimed at the prevention and reduction of threats and vulnerability is proposed. Moreover, it is intended to increase the institutional readiness for the response and recovery.

The plan identifies seventeen threats and prioritizes them at three levels (Table 8). The first or red level, classifies the most relevant or urgent threats, thus they require prompt intervention actions. This includes threats related to the land use and types of production around the stipulated area, i.e. possible changes in the current agroforestry use. To this end, measures are proposed, such as continuing to promote high-level dialogue between officials of the Ministry of Culture and Sports, Park administrators, and the landowners to develop joint actions for conservation and better management. Other threats at this level include environmental pollution and natural disasters such as earthquakes and volcanic eruptions.

The second or yellow level represents an intermediate priority and includes relevant threats that require close observation to determine the final intervention. Among them there are highly probable threats, especially due to the site location, such as storms, rains and strong winds. Some measures include continuing with vegetation control over the architecture, especially trees and branches that could fall in case of heavy rains.

While the third or green level identifies the lowest priority or minor relevance threats. Vandalism or archeological robbery are included here, as it is unlikely for this threat to occur both inside and outside the Park. That is, this threat is somewhat controlled due to the effective monitoring and accompaniment of visitors in the Park. Likewise, the private estates provide permanent security and public access is not allowed. Thus, it is proposed to continue monitoring the condition of the archeological elements, as well as to develop training and manuals on practices about preventive conservation, maintenance and restoration, among others. Attached is the Risk Management Plan for the National Archaeological Park Tak'alik Ab'aj (Annex 4).

Table 8. Prioritization levels of the threats identified in the Integral Risk Management Plan of The National Archaeological Park Tak'alik Ab'aj.

PRIORITIZATION LEVELS	THREATS
<p style="text-align: center;">LEVEL 1 (Red)</p>	<ul style="list-style-type: none"> ● Land uses and types of production ● Political system (governance) ● Environmental pollution ● Asphalt road construction and inter-farm roads ● Unsafety ● Lack of transfer of ancestral knowledge ● Volcanic eruption ● Earthquakes ● Thunderstorms ● Deforestation
<p style="text-align: center;">LEVEL 2 (Yellow)</p>	<ul style="list-style-type: none"> ● Storms, rains and strong winds ● Pests and rodents
<p style="text-align: center;">LEVEL 3 (Green)</p>	<ul style="list-style-type: none"> ● Weathering ● Unorganized tourism ● Hunting ● Fires ● Vandalism and archeological robbery

Source: Risk Management Plan, National Archaeological Park Tak'alik Ab'aj

Glossary

Alternative altars: Circular construction of approximately 1.5 m diameter and 10 cm thick. It is made with material construction from the region. The alternative altars are those currently used in ceremonial practices and are located in the vicinity of the original altars in locations selected by the Mayan Spiritual Guides.

The alternative altars have been well received by the indigenous peoples, in view of the fact that it allows them to perform their rituals, without affecting the original altars. In this sense, this solution offers freedom for the practice of the ancestral ritual tradition and at the same time it is a measure of preservation and conservation of the unique and unrepeatable archaeological pieces.

Andesite: Volcanic igneous rock of intermediate composition.

Axis mundi: Better known as the “center of the world”, it is a ubiquitous symbol present in numerous cultures. The idea expresses a point of connection between the sky and the earth in which all the directions of a compass converge.

Bajareque: It is the denomination of a housing construction system from interwoven sticks or reeds and mud covering them. This technique has been used since ancient times for the construction of housing in indigenous peoples of America.

Dacite: Volcanic igneous rock with high iron content.

Grave goods: Are the items buried along with the body. They are usually personal possessions, supplies to smooth the deceased’s journey into the afterlife or offerings to the gods. Grave goods may be classed as a type of votive deposit.

Gneiss: Metamorphic rock composed of the same minerals as granite, but with a defined orientation in bands, with alternating layers of light and dark minerals.

Igneous: Which comes from the melting mass existing inside the earth.

K'iche: (or Quiché) Is the name of one of the native people of the Guatemalan highlands, also the name of the language they speak.

Sculptural corpus: Sculpture inventory.

Volcanic tuff: It is a type of igneous volcanic rock, light, with a porous consistency, formed by the accumulation of ash or other very small volcanic elements expelled by vents during a volcanic eruption.

Reference

- Chincilla Mazariegos, Oswaldo. 2009 Games, courts, and players at Cotzumalhuapa, Guatemala. In Blood and Beauty: Organized Violence in the Art and Archaeology of Mesoamerica and Central America. Location: Cotsen Institute of Archaeology Press. Editor(s): Orr, Heather; Koontz, Rex. Retrieved from <https://escholarship.org/uc/item/5xf2c5cn>
- eBird. eBird Field Checklist: Sitio arqueológico Takalik Abaj, Retalhuleu, GT. <https://ebird.org/hotspot/L726467>
- Eisermann, K. & C. Avendaño. 2008. Conservation priority-setting in Guatemala through the identification of important bird areas. Proceedings of the Fourth International Partners in Flight Conference: Tundra to Tropics, 315–327.
- Eisermann, K. & C. Avendaño. 2018. An update on the inventory, distribution & residency status of bird species in Guatemala. Bulletin of the British Ornithologists' Club, 138(3):148-229.
- Espigares Luarca, Carlos. 2014. Informe anual 2014, Investigaciones en sector habitacional Sur, Grupo Central (Terrazo 0), Finca Santa Margarita. El Asintal, Retalhuleu. Archivo Parque Arqueológico Nacional Tak'alik Ab'aj, Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural/IDAEH, El Asintal, Retalhuleu.
- Espigares Luarca, Carlos & Juan Miguel, Medina de León. 2019. Áreas habitacionales y de cultivo al sur y oeste del Grupo Central de Tak'alik Ab'aj. En XXII Simposio de Investigación Arqueológica en Guatemala ,2018. Editado por B. Arroyo, I. Méndez Salinas & G. Ajú Álvarez pp.175-186. Museo Nacional de Arqueología y Etnología, Guatemala.
- FAO, 2012. Buenas Prácticas Pecuarias (BPP) para la producción y comercialización porcina familiar. Organización de las Naciones Unidas para la Agricultura y la Alimentación. <https://www.fao.org/3/i2094s/i2094s.pdf>
- Ford, Anabel. 2021. Cultivated Landscape of the El Pilar & the Maya Forest. Paper presented at the 26th European Maya Conference EMC, Ancient Maya Agriculture. From Practice to Mythology Bratislava 7-11 December 2021.
- Gilewski, Michał, Christa Schieber de Lavarreda, Barbara Woronko, Kajetan Ogłaza, Miguel Medina, Carlos Espigares, Geremías Claudio, Víctor Flores & Aldo Aleman. 2022. Evidencia de diferencias y cambios en el uso del terreno del Grupo Central, Grupo Sur y áreas periféricas de Tak'alik Ab'aj, en base a estudios geoquímicos y de pérdida por combustión (LOI). En XXXIV Simposio de Investigaciones Arqueológicas en Guatemala 2021. Museo Nacional de Arqueología y Etnología. (en prensa).
- IUCN, 2009. Guía porcícola, instrumento de gestión ambiental. International Union for Conservation of Nature. <https://portals.iucn.org/library/sites/library/files/documents/2009-086.pdf>
- IUCN. 2021. The IUCN Red List of Threatened Species 2021: *Amazona auropalliata*. International Union for Conservation of Nature. <https://www.iucnredlist.org/species/22686342/180373727>

- Larios Villalta, Carlos Rudy & Miguel Orrego Corzo. 1997. Términos de referencia para la conservación de Tikal, Patrimonio Cultural de la Humanidad, Proyecto de Conservación Tikal Etapa I, Christa Schieber de Lavarreda, editor. CRISARQ – CONSULT. Guatemala.
- Lentz, David L., Trinity L. Hamilton, Nicholas P. Dunning, Eric J. Tepe, Vernon L. Scarborough, Stephanie A. Meyers, Liwy Grazioso & Alison A. Weiss. 2021. Environmental DNA reveals arboreal cityscapes at the Ancient Maya Center of Tikal. Springer Nature Scientific Reports 11:12725 <https://doi.org/10.1038/s41598-021-91620-6>.
- Melgar, Emiliano & Reyna Solís. 2019. Informe 2019, Análisis Tecnológico de la Lapidaria de Tak'alik Ab'aj, Guatemala. Estudio de Identificación Mineralógica y Huellas de Producción Lapidaria Tak'alik Ab'aj cooperación entre Museo del Templo Mayor-INAH/México y Proyecto Mosaicos Tak'alik Ab'aj, agosto 2019. Archivo Parque Arqueológico Nacional Tak'alik Ab'aj, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia, Dirección General del Patrimonio Cultural y Natural/IDAEH, El Asintal, Retalhuleu.
- Muccio, C. 2019. Estudio de caso sobre el tráfico ilegal del Loro Nuca Amarilla en Guatemala. Wildlife Conservation Society (WCS). Guatemala. https://arcasguatemala.org/wp-content/uploads/Estudio_de_caso_trafico_loro_NA_FINAL.pdf
- Nondédeó, Philippe, Cyril Castanet, Eva Lemonnier, Louise Purdue, Lydie Dussol, Marc Texté, Julien Hiquet, Antoine Dorison. 2021. Landscape, Settlement Patterns & Agrarian Strategies: The Case of Naachtun and its Hinterland During the Preclassic and Classic Periods. Paper presented at the 26th European Maya Conference EMC, Ancient Maya Agriculture. From Practice to Mythology Bratislava 7-11 December 2021.
- Orrego Corzo, Miguel. 1990. Reporte 1. Investigaciones Arqueológicas en Abaj Takalik, El Asintal, Retalhuleu 1988. Edited by Miguel Orrego, Proyecto Nacional Abaj Takalik, Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural/IDAEH, Guatemala.
- Popenoe de Hatch, Marion. 2010. Preclassic Olmec and Maya Monuments and Architecture at Takalik Abaj. In: The Place of Stone Monuments. Context, Use, and Meaning in Mesoamerica's Preclassic Transition. *Dumbarton Oaks Pre-Columbian Symposia & Colloquia*. Dumbarton Oaks Research Library & Collection, Washington, D.C., Edited by Julia Guernsey, John E. Clark & Barbara Arroyo, pp. 177-205. Dumbarton Oaks Trustees for Harvard University, Washington, D.C. ISBN 978-0-88402-364-7.
- Popenoe de Hatch, Marion. 2022. Evidencia de un Observatorio Astronómico en Abaj Takalik. In XV Simposio de Investigaciones Arqueológicas en Guatemala, 2001, Edited by J. P. Laporte, H. L. Escobedo, & B. Arroyo, pp. 437-458. Museo Nacional de Arqueología y Etnología, Guatemala.
- Schieber de Lavarreda, Christa Schieber. 1991. Abaj Takalik. Un Caso de Arquitectura del Preclásico Medio. Tesis de Licenciatura presentada en la Escuela de Historia, Área de Arqueología, Universidad de San Carlos de Guatemala.
- Schieber de Lavarreda, Christa Schieber. 1994. Remontando hacia el Pasado el Desarrollo Cultural Temprano en Abaj Takalik. En *Apuntes Arqueológicos*, Vol.

4, 1:43-60. Área de Arqueología, Escuela de Historia, Universidad de San Carlos de Guatemala, Guatemala.

Schieber de Lavarreda, Christa Schieber. 2008. Los Alcances del Mundo Olmeca en Tak'alik Ab'aj. En *Olmeca: Balance y Perspectivas*. Memoria de la Primera Mesa Redonda. Editado por María Teresa Uriarte y Rebecca González Lauck, 519-532, vol. 2. Consejo Nacional para la Cultura y las Artes, Instituto Nacional de Antropología e Historia, Instituto de Investigaciones Estéticas a través de la Dirección General de Publicaciones y Fomento Editorial, Universidad Nacional Autónoma de México y Fundación Arqueológica del Nuevo Mundo-Universidad Brigham Young, México. ISBN 978-607-2-00192-3 (obra completa).

Schieber de Lavarreda, Christa Schieber. 2015. Cabezas ceremoniales de mosaicos de jadeíta de Tak'alik Ab'aj. *Revista Arqueología Mexicana*, 23 (133): 62-67. Editorial Raíces S.A. de C.V./INAH.

Schieber de Lavarreda, Christa Schieber. (Organizador). 2021. Simposio "La Arqueología al rescate de los saberes ancestrales ante el cambio climático". En *RCA Red Centroamericana de Antropología/XIII Congreso Centroamericano de Antropología en línea*, Universidad de El Salvador y la Universidad Tecnológica de El Salvador, 18-22 octubre 2021, con Juan Miguel Medina.

Schieber de Lavarreda & Miguel Orrego Corzo. 2002. ABAJ TAKALIK 1987-2001. Proyecto Nacional y Parque Arqueológico. En *Anuario de la Dirección General del Patrimonio Cultural y Natural III Época No. 3 Año 2002*, pp. 27-51. Editado por Francis Polo Sifontes. Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural, Guatemala.

Schieber de Lavarreda & Miguel Orrego Corzo. 2012. El Retorno al ancestro en Tak'alik Ab'aj: Hallazgo del collar del ancestro del "Señor de la Greca". En *XXV Simposio de Investigaciones Arqueológicas en Guatemala 2011*. Editores Barbara Arroyo, Lorena Paíz y Héctor Mejía, pp.1045-1055. Ministerio de Cultura y Deportes, Instituto de Antropología e Historia, Asociación Tikal, Museo Nacional de Arqueología y Etnología, Guatemala.

Schieber de Lavarreda, Christa & Miguel Orrego Corzo. 2013. Celebraciones del solsticio de invierno en Tak'alik Ab'aj: El ritual en el Altar 46 "Piecitos". In *XXVI Simposio de Investigaciones Arqueológicas en Guatemala, 2012*, edited by B. Arroyo & L. Méndez, pp. 919-930. Ministerio de Cultura y Deportes, Instituto de Antropología e Historia, Asociación Tikal, Museo Nacional de Arqueología y Etnología, Guatemala.

Schieber de Lavarreda, Christa Schieber & Miguel Orrego Corzo. 2011. Avances de la última década 2002-2010: Investigación y conservación del patrimonio cultural y natural en Tak'alik Ab'aj. En *Antropología e Historia de Guatemala*. Anuario de la Dirección General del Patrimonio Cultural y Natural, III Época No.10, año 2011, p. 87-130, editado por Hugo Fidel Sacor Quiché y Patricia del Águila Flores, Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural, Guatemala.

Schieber de Lavarreda, Christa, Miguel Orrego Corzo & Heber Delfino Torres (editores). 2016. *The Dimensions of Rituality 2000 Years Ago and Today/Las*

- Dimensiones de la Ritualidad Hace 2000 años y en la Actualidad. Parque Arqueológico Nacional Tak'alik Ab'aj, Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural/IDAEH. ISBN 978-9929-40-808-1.
- Schieber de Lavarreda, Christa, Geremías Claudio & Miguel Orrego Corzo. 2018. Excavación del centro del mundo de Tak'alik Ab'aj: "Ombligo-Mux", testimonio de ingeniería civil con filosofía ancestral. *Mexicon XL (3):70-82*, June 2018, Verlag Anton Saurwein, Gatterburgstr. 15, 80689 München, Germany. ISSN 0720-5988.
- Schieber de Lavarreda, Christa, Oswaldo López & Omar Alvarado. 2019. Política y arte en piedra y jade. En *El Mundo de Tak'alik Ab'aj*, editado por Christa Schieber de Lavarreda, pp.50-65. Parque Arqueológico Nacional Tak'alik Ab'aj, Ministerio de Cultura y Deportes, Dirección General del Patrimonio Cultural y Natural/IDAEH, El Asintal, Retalhuleu.
- Schieber de Lavarreda, Christa Schieber & Miguel Orrego Corzo. 2022. Where is Tak'alik Ab'aj within the Network of Preclassic Interrelations? In *Routes, Interaction & Exchange in the Southern Maya Region*". Editores Eugenia Robinson & Gavin Davies. Editorial Routledge, Abingdon, Inglaterra. (en prensa).
- Schieber de Lavarreda, Christa, Emiliano Melgar & Reyna Solis. 2022. Análisis Tecnológico de los Mosaicos de Pirita de Tak'alik Ab'aj. In "Recent research on iron ore Mirrors in Mesoamerica & Central America". *Ancient Mesoamerica*, Cambridge University Press. (en prensa).
- Schieber de Lavarreda, Christa, José Pineda, Omar Alvarado & Miguel Orrego Corzo. 2022. La Estela 87 vista desde la ventana de Tak'alik Ab'aj. En XXXIV Simposio de Investigaciones Arqueológicas en Guatemala 2021. Museo Nacional de Arqueología y Etnología. (en prensa).
- Schieber de Lavarreda, Christa, Rocío Albarrán Reyes, Vera Tiesler & Miguel Orrego Corzo. 2022. Embodying the Heads of Tak'alik Ab'aj, presentación ponencia en Simposio "Portraits in the Ancient Americas", organizado por Virginia Miller y Annabeth Headrick, en 87 Reunión Anual de la Sociedad Americana de Arqueología del 30 de marzo al 3 de abril 2022 en Chicago.
- Schieber de Lavarreda, Christa, Nikolai Grube, Albert Davletshin, David Mora-Marín, Sven Gronemeyer, Christian Prager y Elisabeth Wagner, Alej&ro Garay, Oswaldo Chinchilla Mazariegos, Federico Fahsen Ortega José Pineda, Omar Alvarado & Miguel Orrego Corzo. 2022. La Estela 87 de Tak'alik Ab'aj: Resultado de un Estudio Colaborativo. En *Estudios de Cultura Maya*, Centro de Estudios Mayas, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México. (en prensa).

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Delegación de Patrimonio Mundial
GUATEMALA

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Signature on behalf of the State Party



MINISTERIO
DE CULTURA
Y DEPORTES



Delegación de Patrimonio Mundial
GUATEMALA

This **second additional information request** is hereby submitted to The International Council on Monuments and Sites -ICOMOS- and the UNESCO World Heritage Centre for application to be inscribed in the World Heritage List as:

National Archaeological Park Tak'alik Ab'aj

Felipe Amado Aguilar Marroquín
Minister of Culture and Sports

Republic of Guatemala
February 14th of 2022



TAK'ALIK
AB'AJ



PARQUE ARQUEOLÓGICO NACIONAL