



India - Vietnam Co-operation Project



Conservation and Restoration of E & F Group of Temples
My Son Sanctuary, Da Nang City, Vietnam
1st Working Session Feb 2025 to Jan 2026



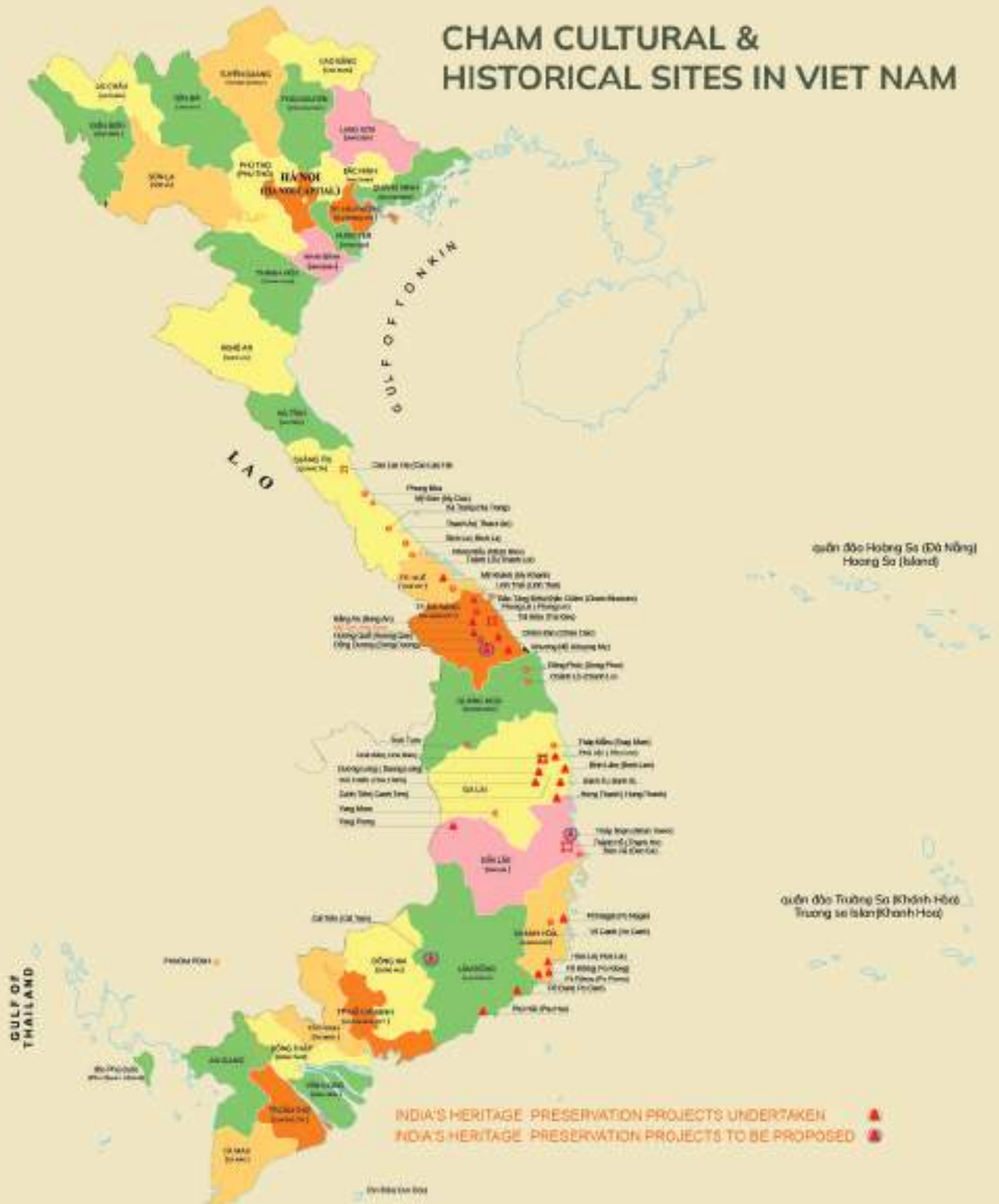
MUKHALINGA
GROUP E - TEMPLE E1
MY SON MUSEUM



MUKHALINGA
GROUP E: TEMPLE E1



ARCHAEOLOGICAL SURVEY OF INDIA - 2026





PHOTOBOOK ON
ANNUAL PROGRESS REPORT OF EXECUTED PROJECT WORKS OF
CONSERVATION & RESTORATION OF THE E & F GROUP OF TEMPLES, MY SON SANCTUARY (WHS), DA NANG CITY, VIETNAM
1st Working Session Feb 2025 to Jan 2026

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PREFACE

This Progress Report has been prepared as part of the ongoing Conservation and Restoration Project of the E & F Group of Temples at the My Son Sanctuary (World Heritage Site), Da Nang City, Vietnam, undertaken by the Archaeological Survey of India (ASI).

The project is being implemented in accordance with the Detailed Project Report (DPR) prepared and approved by the Ministry of External Affairs (MEA), Government of India, with a stipulated implementation period of five years. The first working season commenced on 27 January 2025 and is scheduled to continue until 31 January 2026.

During the reporting period, the following major activities were undertaken:

- Conservation and restoration of ancient temple structures
- Pre- and post-conservation documentation
- Scientific investigations in and around the temple complexes
- Systematic removal of topsoil to expose archaeological remains and structural elements
- Photographic documentation before, during, and after conservation interventions
- Field-based structural investigations and analytical studies

These activities were executed by the ASI Technical Team, comprising:

- Mr. D.S. Danve, Assistant Superintending Archaeological Engineer & Project Team Leader
- Mr. Prashindla Prashant, Surveyor, Grade-I
- Mr. Ravula Vikas, Senior Photographer
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This report comprehensively presents the conservation and restoration works executed during the current working season, the methodologies and strategies adopted, and the challenges encountered on site. All interventions have been carried out in strict adherence to the

principles enshrined in international charters on heritage conservation and restoration, with particular emphasis on the retention of original material fabric, minimum intervention, and structural stabilization through compatible traditional and new materials.

The ASI Technical Team expresses its sincere gratitude to Dr. Yadubir Singh Rawat, Director General, ASI, for entrusting the team with this prestigious responsibility during the 2024–26 working season.

The team is also deeply thankful to Shri Janhwij Sharma, Additional Director General (Conservation), and Shri Bhima Azmira, Director (Conservation), for their consistent technical guidance, supervision, and valuable inputs at all stages of the project.

The ASI technical team gratefully acknowledges the Ministry of External Affairs (MEA), Government of India, for funding this project, and conveys deep gratitude to H.E. Mr Sandeep Arya, former Ambassador of India to the Socialist Republic of Viet Nam, for his continued support, initiative, and active facilitation of the project implementation at the site.

The ASI Technical Team further expresses its sincere gratitude to H.E. Mr. Tshering W. Sherpa, Ambassador of India to the Socialist Republic of Viet Nam, for his exceptional efforts and guidance in ensuring the smooth progress of work during the 2024–26 working season.

The ASI Technical Team is also extremely grateful to the Embassy of India, Hanoi, and its staff for providing invaluable logistical and administrative support, without which the timely execution of the project would not have been possible.

Sincere thanks are extended to Mr. Khit Nguyen, Director, Management Board for My Son Cultural Heritage, and his team for their excellent cooperation and continuous logistical support during the team's stay and field operations at the My Son site.

Finally, the team conveys heartfelt appreciation to all local workers and supporting staff whose dedication and skilled efforts have been instrumental in achieving substantial progress during the current working season.

ASI Technical Team-2026

Summary of Project

India’s cultural relations with Southeast Asia constitute one of the most significant and enduring chapters in world history. This interaction, which predates the beginning of the Christian era, has left a profound and lasting imprint on the social, religious, artistic, and architectural traditions of several countries in the region. It would not be an overstatement to affirm that these exchanges played a decisive role in shaping the historical and cultural evolution of Southeast Asia. A distinctive and remarkable feature of this relationship is its entirely peaceful nature—there are few, if any, parallels in human history of such sustained cross-cultural fertilization over more than two millennia without the involvement of military conquest.

In response to a formal request from the Socialist Government of Vietnam, the Republic of India has taken the initiative to support the preservation and conservation of Vietnam’s Cham cultural heritage. This initiative forms a crucial component of India’s development partnership with Vietnam and reflects the deep civilizational linkages between the two countries. It also reinforces a long-standing legacy of cultural diplomacy rooted in ancient exchanges, while simultaneously strengthening contemporary cooperation through heritage conservation, cultural festivals, and tourism promotion.

Under this framework, the Archaeological Survey of India (ASI), on behalf of the Ministry of External Affairs (MEA), Government of India, in collaboration with the My Son Management Board, has completed a project titled the conservation and restoration of the A, H, and K Groups of temples during the period 2016–2022.

Furthermore, a new project, titled the Conservation and Restoration of the E and F Groups of Temples at the My Son World Heritage Site in central Vietnam, is being undertaken from February 2025. The project envisages a comprehensive and systematic five-year plan, encompassing detailed documentation, scientific and structural stabilization, capacity building, and long-term site management, aimed at safeguarding this exceptional cultural heritage in accordance with international conservation standards.

India’s contribution to My Son, World Heritage Site

Through this initiative, India continues its commitment to strengthening bilateral ties with Vietnam by extending technical cooperation, professional expertise, and skill exchange with all concerned stakeholders. The project aims to preserve and safeguard the Cham monuments at My Son, which bear a strong cultural and civilizational association with ancient India, for the benefit of future generations.

India’s contribution accounts for the conservation, safeguarding, and restoration of more than 60% of the ancient temple structures at My Son Sanctuary, many of which have suffered extensive damage due to human vandalism and the impacts of war. This collaborative effort stands as a testament to shared heritage, mutual respect, and enduring relations between India and Vietnam.

My Son Sanctuary Outstanding Universal Value (OUV):

Brief synthesis

The ancient kingdom of Champa gave rise to a unique culture on the coast of modern-day Vietnam, which had strong political and spiritual associations with India and the Hindu faith during the 4th to 13th centuries. A series of impressive tower temples present the tangible manifestation of this ancient culture at My Son, which served as the religious and political capital of the Champa Kingdom.

Located in an elevated geological basin in Duy Xuyen District, Da Nang City Province, central Vietnam, the monument is encircled by a ring of mountains that form the watershed of the sacred Thu Bon River. Rising at My Son, the river flows through the historic heartland of the Champa Kingdom before reaching the South China Sea near the ancient port of Hoi An. This secluded and naturally fortified landscape provided both spiritual symbolism and strategic defensive advantages.

The tower temples were constructed over ten centuries of continuous development in what was the heart of the ancestral homeland of the ruling Dua Clan, which unified the Cham clans and established the kingdom of Champapura (Sanskrit for City of the Cham people) in 192

CE. During the 4th to 13th centuries CE, this unique culture, on the coast of modern-day Vietnam, owed its spiritual origins to the Hinduism of the Indian sub-continent. Many temples devoted to Vishnu and Shiva were built during this period. The temples at My Son are largely dedicated to Shiva. Although Mahayana Buddhism penetrated the Cham culture, probably from the 4th century CE, and firmly established itself in the north of the kingdom, Shaivite Hinduism remained the established state religion till the 13th century.

The temple towers of My Son are outstanding examples of the most significant tangible manifestation of Cham culture. The tower temples have a variety of architectural motifs symbolizing the greatness and purity of Mount Meru, the mythical sacred mountain home of Hindu gods at the centre of the universe, now symbolically reproduced on Earth in the mountainous homeland of the Cham people. The temples are constructed in fired bricks supported by the stone pillars and decorated with sandstone bas-reliefs depicting scenes from Hindu mythology. Their technological sophistication is representative evidence of Cham engineering skills, while the elaborate iconography and symbolism of the tower-temples give insight into the content and evolution of Cham religious and political thought.

As a coherent architectural ensemble developed over ten centuries, the My Son Sanctuary offers a vivid and unparalleled illustration of the spiritual and political life of an important civilization in the history of Southeast Asia.

Statement of significance:

The Statement of Significance, as part of the World Heritage Site Nomination dossier, follows.

Criterion (ii): The My Son Sanctuary is an exceptional example of cultural interchange, with an indigenous society adapting to external cultural influences, notably the Hindu art and architecture of the Indian sub-continent, into a highly distinctive local tradition.

Criterion (iii): The Champa Kingdom was an important phenomenon in the political and cultural history of South-East Asia, vividly illustrated by the ruins of My Son.

The My Son sanctuary was declared a UNESCO World Heritage site in December 1999 after infrastructure development works were carried out and resulting in it becoming the most favoured tourist destination to visit My Son Sanctuary from around the globe to understand & experience the Cham tangible and intangible heritage.



GROUP OF TEMPLES E & F COMPLEX

Location & Layout

The E and F group of temples one of the most important Hindu architectural complex of My Son World Heritage Site located on the North East of My Son valley, belonging to the My Son Commune, Tho Ban Village, Da Nang City and 45.00 meters above the sea level, measuring 100x45m adjacent with a common enclosure wall and temple structures built on a square or slightly rectangular bases with a tapering, stepped pyramid/corbel vaulted roof concept and symbolising Mount Meru.

PERIOD

The Group of temples E & F are earlier than the period (7th -11th CE) and represents important remnants of Champa civilization’s architecture and artistic achievements. The Cham ingenuity in design, cultural, religious art and symbolism offers a window into the evolution of Cham sacred architecture at Mỹ Sơn Sanctuary in central Vietnam.

Cultural Influence

My Son Sanctuary is a living testament to the cultural exchange between India and the Champa Kingdom, showcasing a unique blend of Hindu religious beliefs, artistic expressions, and architectural styles within the context of Cham culture. The function of both temple complexes was used for royal family religious ceremonies, rituals, worship of Lord Shiva as “*Bhadreshwar*”, Hindu deities and by Cham communities for nearly a millennium.

Ancient Construction Technique

The construction technique and materials used are Cham clay fire bricks, sand stones, Cham mortars with the brick masonry in a three-leaf system, which includes inner and outer face brick layers in thin joints and no visible mortar. The Cham builder might have adopted a unique adhesive technique, possibly using plant resin/fine brick powder clay mixed with water and an inner core filled with special prepared clay mud mortar with sand pebbles.

Dynasty Declined & Vandalism

The My Son Sanctuary was abandoned and left in ruined conditions until the 16th century CE due to vegetation growth and war. The E & F group of temples preservation & conservation efforts were started in the late 18th century CE by the world-renowned archaeologists, epigraphists, researchers & conservators until the Vietnam–American war, as per available records in the form of published books and reports. After the conclusion of the war, preservation works again started by the Government of Vietnam, and with the support of international cooperation, for research, documentation and preventive conservation works were taken up.

Scenario of Preservation

The E & F group of temples presents status; both complexes are in ruined, dilapidated conditions and verge of collapse. Due to the Vietnam & American war, structures were seriously damaged and destroyed, which is evidenced by bomb craters seen at the site.

Ongoing Conservation & Restoration Efforts

Presently, since February 2025, the conservation and restoration of the E & F group of temples has been undertaken by the Archaeological Survey of India (ASI), on behalf of the Ministry of External Affairs (MEA), Government of India, in collaboration with the My Son Management Board with a plan to complete it within the stipulated time frame of five years.

During the current season, scientific debris clearance revealed terracotta roof tiles, which, according to the stratigraphy of the trenches, may have been associated with wooden structures that once existed in the complex, but were likely destroyed over time. It is found that additions & alterations of some of the structures/Shiv Linga, etc., in the past were carried out, which were observed.

During the current phase of the first working season for the conservation & restoration of the E & F complex, temple structures were undertaken and completed, including the eastern and western enclosure walls, Temple E-2, E-3 & F-2.

Approach to Conservation & Restoration, Principles & Guidelines adopted.

The multidisciplinary approach to the restoration and conservation of the E & F Group of Temples will strictly adhere to the original construction techniques adopted by the ancient Cham builders, with minimal intervention.

Ancient Original Brick Masonry of Cham Builder

The original temples were constructed using specially sized bricks of unique dimensions, colour, and texture for restoration purposes; custom-made bricks matching these characteristics will be manufactured on special order.

- The outer and inner veneers of the masonry will be set using natural tree resin adhesive, following the traditional practice historically observed in the region.
- The core masonry, wherever required, will be laid in lime mortar, ensuring compatibility with the original material composition.
- Proper bonding between the core and veneers will be achieved by overlapping brick courses and introducing mortar cross bands at regular intervals.

The restoration will aim to reconstruct the temple structures above-ground level, based on existing remains and archaeological evidence. In areas where masonry already exists above ground level, consolidation of fragile and unstable portions will be undertaken while retaining the original skyline and profile.

The focus will be on achieving structural stability without compromising the authentic character of the monuments.

Conservation & Restoration Approach

The conservation and restoration activities are being undertaken strictly in accordance with:

- Established ASI conservation practices
- International Charters (e.g., Venice Charter, Nara Document)
- Global norms for heritage site preservation

Ensuring that interventions are minimal, reversible, and compatible with original materials and construction techniques.

SCIENTIFIC STUDIES, RESEARCH, DOCUMENTATION & INVESTIGATIONS

Conservation & Restoration Principles and Guidelines

The proposed conservation and restoration works will conform to internationally accepted charters and guidelines for heritage conservation, including those established by ICOMOS and UNESCO, and in line with the established practices of the Archaeological Survey of India (ASI).

The following principles are strictly observed:

Comprehensive Documentation:

The existing condition of all standing structures and ruins will be fully documented thorough measured drawings, high-resolution photography, and 3D recording before, during, and after conservation.

Preservation of Historical Evidence:

No historical evidence will be destroyed or altered. However, previous inappropriate or intrusive interventions may be removed if deemed necessary to restore authenticity, structural stability, and architectural integrity.

Use of Proven Techniques:

Only well-researched, scientifically tested, and time-proven conservation techniques will be adopted.

Reuse of Original Material:

Original materials will be reused to the maximum extent possible; where replacements are necessary, special-size bricks matching the original dimensions, colour, and texture will be fabricated and used.

Application of Anastylosis:

Where structural deformations are severe, such as wider cracks, major inclinations, or displaced architectural components, the method of anastylosis will be applied. This process involves dismantling, strengthening, and scientifically reassembling the original components in their original positions, guided by reliable archaeological evidence.

Ancient original materials used for the construction of the temple structures.

Introduction

The above-stated activities are fundamental to any conservation project, ensuring a scientifically grounded and technically sound approach towards achieving the objectives of preservation, conservation, and restoration. Comprehensive research is being conducted on archaeological, architectural, and artistic aspects, along with detailed documentation at every stage.

Research on old archive records of the E & F group of temples.

Extensive research on archival records about the E & F group of temples was undertaken before the commencement of conservation and restoration works. The archival study was based on published books, reports, and historical documents available to the My Son Management Board. The major reference sources consulted are as follows

- H. Parmentier, a French Scholar, the Ecole Francaise d’Extreme-Orient (EFEO).
- French Archaeological Missions in Vietnam: The Monuments of Champa Photographs and Itineraries 1902-1904. The photographs from the Charles Carpeaux collection were digitized by Pierre Hamouda, a photographer, and retouched by Jérôme Ghesquière. The maps were drawn by Yves Gretener, cartographer, and digitized by Michel Urtado, photographer.
- Report published by the Ministry of Culture and the Information Centre for Relics, design and restoration project of conservation, restoration and exploitation of My Son Cham tower relic site in Quang Nam province, Vietnam in the year 1998.
- Report published by the My Son Management Board in the year 2002-2003.

Studies and Investigations for resin as a binder

During the preparation of the Detailed Project Report (DPR), specific studies were conducted to examine the use of tree resin binders in the brick masonry of the E & F group of temples. The masonry pattern of these temple structures comprises three-leaf brick wall construction characterized by comparatively superior quality bricks with thin joints in the outer veneering, and core masonry composed of ordinary bricks set in mud mortar.

It has been a long-standing belief that the veneer brickwork was bonded using a locally available tree resin, botanically identified as *Dipterocarpus alatus*. To verify this, several brick samples collected from dislodged fragments at the site were examined by separating two adjoining layers. No visible traces of any resinous binder were observed. However, a fine layer of surkhi (brick dust powder) was noted between the brick surfaces.

These findings suggest that the durability and strength of the original brickwork are attributed primarily to the exceptional quality of bricks, precise workmanship, and the technique of rubbing and grinding the brick surfaces to achieve tight, thin joints, rather than the use of any resin-based adhesive or binder.

Scientific Debris Clearance and Investigation

The E & F Groups currently exhibit extensive structural damage, heavy debris accumulation, and dense vegetation growth, which obscure the original layout of the complexes. Consequently, visitors are unable to fully appreciate the spatial arrangement and interrelationship of the temples within each group.

Therefore, priority will be given to:

- Systematic Site Scientific Debris clearance of debris and vegetation under supervision.
- Stabilization of distressed and leaning structures.
- Exposure and presentation of the complete sub-complex layout, including boundary walls and associated architectural features

All interventions will be undertaken with utmost care to maintain the authenticity, integrity, and historical character of each shrine and its associated structures.

To address this, a systematic and scientific debris clearance process has been planned to expose the complete layout of the complexes and ensure accurate interpretation, documentation, and initiation of conservation interventions.

Objective of Scientific Debris Clearance

- To expose the full layout of the E & F Group temples, including subsidiary structures, enclosure walls, and approach passages.
- To differentiate and document individual structural units within the temple complexes.
- To remove accumulated debris, root systems, collapsed brick



- masses, and vegetation in a controlled archaeological manner.
- To develop a clearer understanding of the topography, structural relationships, and original plan of the complexes for conservation planning.

Trench Layout for Scientific Debris Clearance

Establishing the Survey Axes

To systematic the debris clearance process, a grid-based trench layout was established using the following steps:

1. Central Axes Identification

- The central east–west axis was established through temples E-3, E-2, and E-1.
- From the centre point of Temple E-1, a perpendicular north–south axis was marked.
- These two principal axes formed the reference lines for the entire grid layout.

2. Grid System (10 m × 10 m)

- The area covering both the E and F Groups (approximately 100 m × 100 m) was divided into 10 m × 10 m squares.
- Each 10 m × 10 m square was further subdivided into four quadrants measuring 4.25 m × 4.25 m for detailed archaeological investigation.

3. Trench Numbering System

- Due to the large extent of the site, a systematic trench numbering system was created.
- The axes were divided into alphabetic and numeric sequences:
- Rows (East–West): A1–A11, B1–B11, C1–C11 ... up to H1–H11
- This covers both E & F temple complexes and may be extended in the future as needed.

4. Selection of Initial Excavation Trenches

- Based on the established grid, segments F-10 and E-10 were selected for the initial scientific clearance.
- Reasons for Selection:
- F-10 is located at the northern-northwestern corner of the F Group, immediately outside the western enclosure wall of the temple complex.

- E-10 lies inside the combined E & F complex, parallel to F-10, and helps in correlating external and internal structural relationships.
- These placements provide the best starting point for understanding the stratigraphy, the extent of collapse, and the connection between structures.

Execution of Scientific Debris Clearance Layout and Orientation

- A total of 11 trenches were laid in a north–south direction.
- 8 trenches were laid in an east–west direction.
- The natural topographical slope of the area runs from east to west, descending toward the Thu Bồn (Thu Bang) River tributaries.
- This slope was considered in planning the debris clearance and in recording the stratigraphy.

Clearance Method

- Debris removal was conducted using standard archaeological procedures:
- Layer-by-layer removal
- Manual tools (trowels, brushes, spades)
- Documentation of each layer (photographs, drawings, soil descriptions)
- Tagging of architectural fragments
- Separate collection of artefacts, if encountered
- Vegetation and root systems were removed carefully to prevent further structural damage.

Expected Outcomes

- Full exposure of the temple layouts of the E & F Groups with visible architectural features.
- Clear understanding of the enclosure walls, gateways, mandapas, and ancillary structures.
- Availability of detailed stratigraphic data to support conservation and restoration planning.
- Identification of ancient pathways, drainage routes, and construction sequences.

General Description: Trenches F-01 to F-10

A series of trenches from F-01 to F-10 were excavated along the east–west natural slope of the E & F Group of temples. The average depth across the trenches reached 1.20 m, while in specific areas near the outer enclosure wall and sub-base of foundation, depths reached up to 1.80 m.

Stratigraphy of the Trenches (Average Depth 1.20 m)

The stratigraphic layers observed during excavation are as follows:

I. Humus Layer:

- Depth: 0.00–0.10 m
- Loose organic topsoil, vegetation, roots.

II. Layer 1:

- Depth: 0.11–0.60 m
- Black, fine-grained soil containing small fragments of brick and quartz.
- Occasional potshards observed.

III. Layer 2:

- Depth: 0.61–0.90 m
- Reddish, compact soil layer.
- Mostly devoid of brick or quartz fragments.
- Roof tile pieces observed in patches.

IV. Layer 3:

- Depth: 0.91–1.20 m
- Mixed soil layer containing brick fragments, red sandstone pieces (4–5 mm thick), and processed stone-metal-filled soil.
- Maximum depth in this zone extended to 1.80 m in some trenches.
- A steep natural slope, running from east to west, was consistently recorded across all trenches.

Observations and Findings

Site Topography & Natural Deposits

- The trenches lie along the natural gradient from the mountain ridge down to the stream on the western side.
- The lowest natural stratum consists of red sandstone mixed with soil, sand, and pebble deposits.

Cultural and Architectural Debris

During the scientific debris clearance, the following material groups were documented:

- Broken brick fragments
- Roof tiles
- Pottery objects and potshards
- Sculptural fragments
- Fallen architectural elements
- Structural blocks from collapsed sections
- Condition mapping of foundations and exposed wall bases

Dumping History

Earlier documentation (1991–1992) indicates that post-war clearance operations removed material from inside the temple complexes and dumped the debris around the temple periphery. The same displaced dump layers were encountered during the current clearance.

Outcomes of Scientific Debris Clearance

The ongoing debris clearance aims to:

- Expose the complete and authentic layout of the E & F Groups.
- Reveal the boundary walls, enclosure patterns, and approach passages.
- Establish the structural base levels for all major temples.
- Facilitate accurate conservation planning using archaeological evidence.

Base Levels Identified

After debris clearance and exposure of the layout:

- Outer East & West Enclosure Walls:
- Base and sub-base levels identified at 1.20 m to 1.80 m depth.

Structure-Wise Findings

F Group of Temples

Restoration of the Original Water Outlet on the western enclosure wall.

- The original water outlet system of the F Group was exposed.
- Its level has been correctly matched with surrounding structures F-1, F-2, and the corresponding enclosure walls.
- Using these reference levels, the internal ground level of the complex has been established accurately.

Documentation

- All exposed structures were documented trench-wise and compared with archival records to verify authenticity before conservation work.
- F-2 Temple Structure
- Foundation sub-base outside: ~ 0.60 m depth
- Inside sub-base level: ~ 0.40 m depth
- This differential confirms the original interior layout and external plinth conditions.
- E-2 Temple Structure
- Original interior level: ~ 0.40 m depth
- Exterior level along west enclosure wall: ~ 1.20 m depth
- Suggests substantial deposits and collapse layers accumulated on the western side.
- E-3 Temple Structure
- Foundation base level: ~ 1.00 m depth (average around all sides)
- Indicates significant accumulation over time and possibly earlier collapse events.

Archaeological Care and Documentation

Throughout the excavation:

- Extreme care was exercised to maintain the authenticity and integrity of the shrines and structural remains.
- All sculptures, artefacts, fragments, and architectural elements were catalogued, photographed, and mapped.
- Detailed condition mapping of standing structures and exposed foundations was completed.

Continuation of Work

Due to monsoon conditions, work will resume in the next season. Future debris clearance will follow the same scientific protocol:

- Layer-by-layer excavation
- Full documentation and mapping
- Verification with archival drawings
- Preservation of structural stability

Documentation:

The following documentation techniques have been adopted to ensure accurate recording and analysis of the conservation and restoration works of the E & F group of temples:

- PHOTOGRAMMETRIC documentation of topographic map and contour map (interior and exterior)
- 3D LASER SCANNING
- Preparation of CAD drawings (Plans, sections, elevations).
- Preparation of high-resolution orthophotography with a map up to 300 meters from the monument.

Manually Drawing documentation:

As part of the ongoing conservation and restoration works, comprehensive drawing documentation has been undertaken for all structures under execution. This includes the preparation of detailed condition mapping, plans, elevations, sections, and local architectural details, documenting the state of the fabric before, during, and after conservation interventions.

Photographic Documentation:

Parallel to the technical drawings, photographic documentation has been carried out to record the conservation and restoration processes. This includes systematic photographic recording of various temple components and architectural features such as walls, floors, ruined structures, cracks, fabric decay, dislocated elements, courtyards, and decorative details.

Comprehensive photographic documentation has been completed for all structures before, during, and after conservation activities. These records have been compiled and organized into a digital database for easy reference and long-term archival use.

Hydrological Issues & Solutions or Surface/Storm Water Management. Problem Identification

One of the major factors contributing to the deterioration of the temple foundations at the My Son complex is the stagnation of stormwater around the structures. Prolonged water accumulation accelerates foundation decay, promotes biological growth, and leads to soil instability beneath ancient masonry.



The primary causes of stormwater stagnation include:

- Deposition of soil and debris over time has buried the original drainage channels.
- Collapse of bricks and stones due to war-related damage and weathering.
- Dense vegetation growth, which obstructs natural runoff paths and alters site topography.

Existing Conditions

During recent investigations, debris clearance and vegetation removal exposed portions of the original site levels. However, the ancient drainage network could not be restored due to irreversible structural damage and altered terrain conditions. Consequently, an alternative drainage system is required to effectively manage surface and stormwater without disturbing the archaeological remains.

Hydrological Studies

Comprehensive hydrological and topographical studies were conducted across the temple complex after removing overburden soil and exposing the original ground surface.

These studies assessed:

- Natural slopes and water flow directions,
- Infiltration and permeability characteristics of the soil,
- Catchment areas contributing to surface runoff, and
- Suitable discharge points to regulate water accumulation near heritage structures.

Drainage Solution

As restoration of the original drainage system is not feasible, an alternate stormwater management system has been proposed using modern, non-intrusive techniques compatible with conservation principles.

Trenchless drainage system: The system is installed with collection chambers strategically located around key structures to capture runoff, connected underground with PVC pipelines to convey collected water to designated discharge points to resolve the water stagnation within the temple complex.

Contour open drainage system: A contour open drain is constructed in the random rubble stone masonry on the mountainside to divert rainwater and stormwater flow to the nearby stream.

A River Bank slope protection:

North of the F group of temples, the riverbank was washed out in the past. Currently, the outer enclosure wall is on the riverbank, which needs slope protection to avoid future flooding damage to the temple.

Solution

The riverbank slope protection by the construction of a random rubble stone masonry protection wall has been provided with proper soil treatment by sowing grass to camouflage the random rubble stone masonry wall, to maintain the visual integrity of natural and cultural heritage.

Creation of Tourist Accessibility

Access to the Group E and F temples is currently constrained by the fragile state of conservation, complex site morphology, and the presence of fallen architectural members within circulation zones. Long-term, unmanaged visitor pressure has resulted in material loss and surface erosion of original stone elements, indicating the need for structured visitor management interventions in accordance with UNESCO principles.

To address these visitor accessibility and management challenges, a comprehensive Tourist Management and Accessibility Plan has been formulated and proposed in an approved Detailed Project Report (DPR).

In continuation, it is implementing a comprehensive visitor accessibility and management strategy aimed at regulating visitor flow, minimizing physical impact on original structures, and enhancing the overall visitor experience.

The plan includes the provision of new sandstone and brick-paved pathways, ramps, designated resting areas with seating benches, selfie points, and viewpoints. Cultural information panels are proposed for each ancient tower and temple complex, covering both internal and external precincts. Where required, steel or wooden staircases and elevated walking platforms will be introduced to facilitate safe movement without disturbing the original remains. Special consideration has been given to inclusive access, with ramps proposed for physically challenged visitors.

Main Entrance & Exit from West of the Temple E-3:

It is also proposed to enhance and reorganize the visitor entry & exit points to the Group E and F temples from the western side of Temple E-3, ensuring a more logical and controlled circulation pattern.

During the current season, measures to improve tourist accessibility within the Group E and F temples have progressed significantly. Given the

ruined condition, complex layout, and erosion caused by sustained visitor movement, a structured accessibility intervention has been undertaken. Sandstone pavement has been completed from the western entrance of Temple E-3 to Temple F-2, along with a sandstone ramp providing inclusive access to the F-2 structure for physically challenged visitors. In addition, cultural information boards have been installed near the E-7 temples, enhancing visitor interpretation and site awareness.

Capacity Building of local professionals and workers.

In accordance with the Memorandum of Understanding (MoU) between the Government of India and the Government of Vietnam, the project provides for the employment and training of 100 local workers per day.

Building upon the successful conservation and restoration of the A, H, and K groups of temples, over 100 local artisans, craftsmen, and masons have already been trained in traditional and scientific conservation techniques. Additional new workers are currently undergoing on-site training under the guidance of the Archaeological Survey of India (ASI) Technical Team.

Furthermore, four officials from the My Son Sanctuary Management Board are actively participating in the execution of conservation works. This collaboration provides them with hands-on experience and skill enhancement in the specialized field of heritage conservation and restoration, fostering long-term local capacity development.

Project Management for Implementation, Basic Mechanism.

For the effective implementation of the project, adequate manpower, logistical support, and infrastructure facilities are essential. In addition to conservation activities, the project also emphasizes training, skill transfer, and capacity building as key objectives.

Site Infrastructure and Facilities

Working Platform Space with Cover Sheds: A working platform with two reversible tin sheds has been erected on the northern side of the F Group temples, serving as both a materials stacking yard and a work yard, enabling uninterrupted work throughout all weather conditions.

Machinery and equipment.

Brick Cutting Machines: A new brick-cutting machine has been proposed for procurement to facilitate the preparation of restoration bricks. The brick-cutting machine from the previous project has been repaired and reinstalled at the site.





BEFORE: Aerial view from east to west, E & F Group of Temples



AFTER: Aerial view from east to west, E & F Group of Temples



BEFORE: Aerial view from south to north, E & F Group of Temples



AFTER: Aerial view from south to north, E & F Group of Temples



BEFORE: Aerial view from east to west, E & F Group of Temples



AFTER: Aerial view from east to west, E & F Group of Temples





BEFORE: Group of Temple - F2 - West view



AFTER: Group of Temple - F2 - West view



BEFORE: Group of Temple - F2 - North view



AFTER: Group of temple - F2 - North view



BEFORE: Group of Temple - F2 - South view



AFTER: Group of Temple - F2 - South view



BEFORE: Group of Temple - F2 - North-west view



AFTER: Group of Temple - F2 - North-west view





BEFORE: Group of Temple - F2 - South-west view



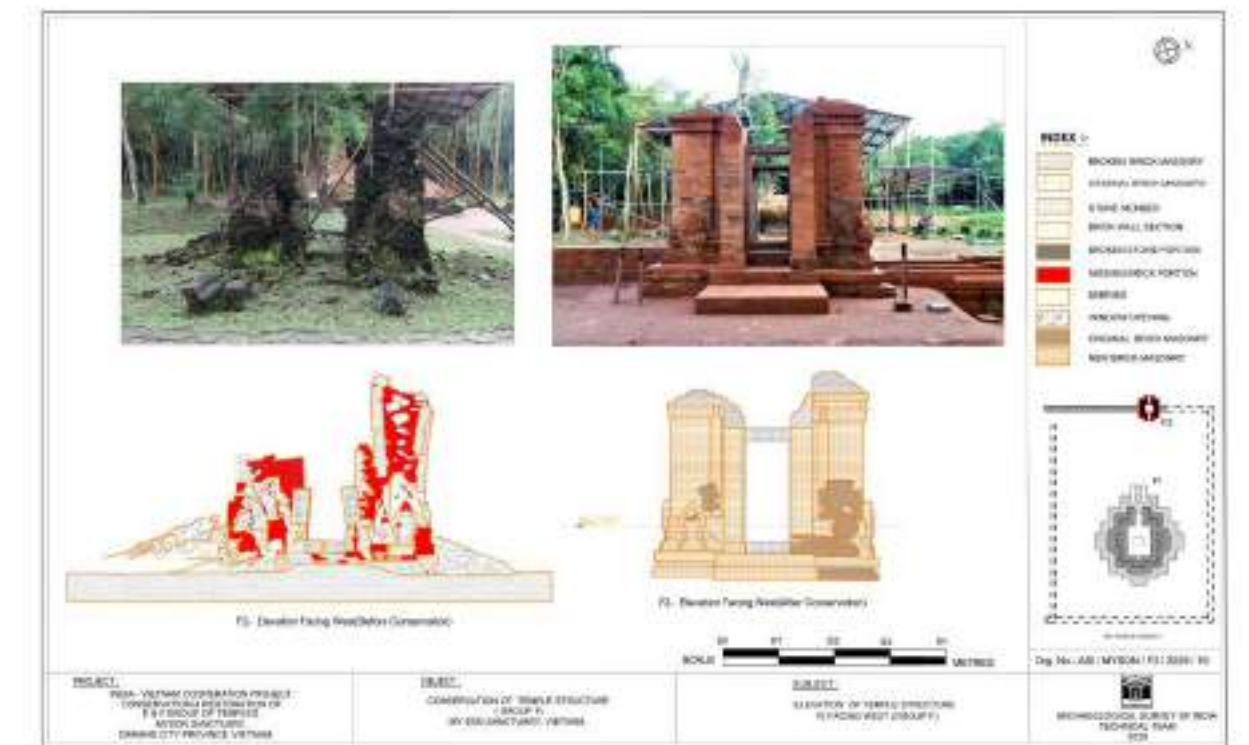
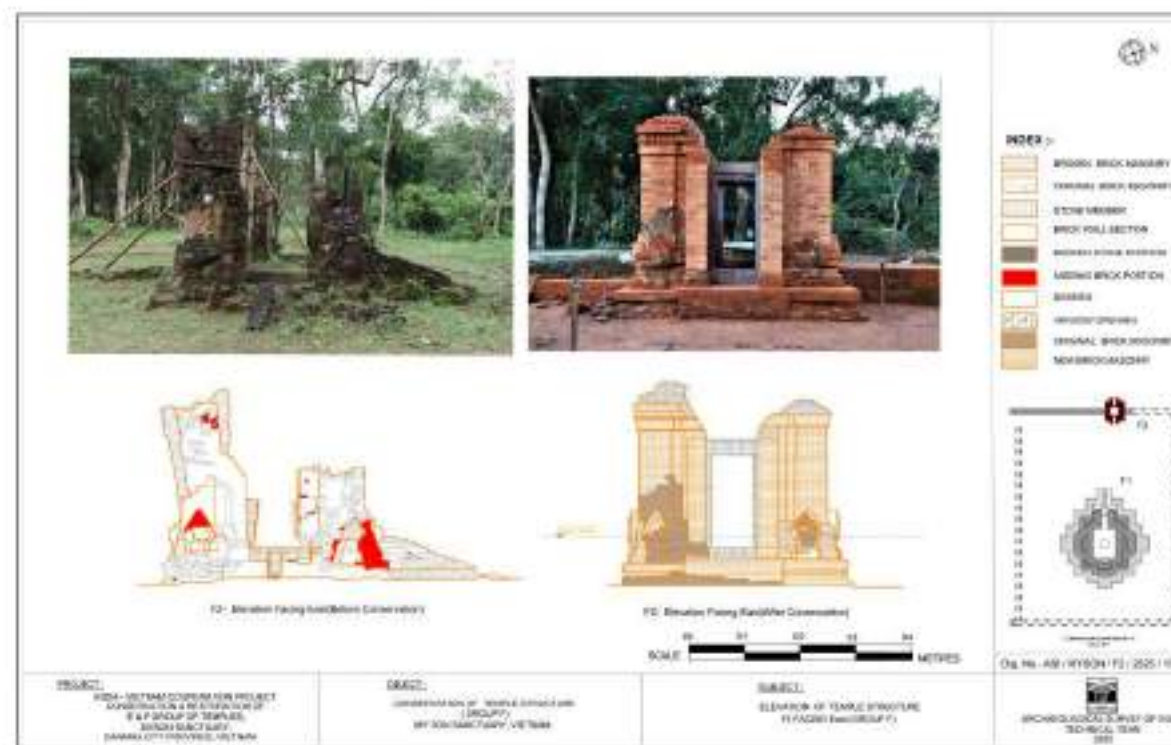
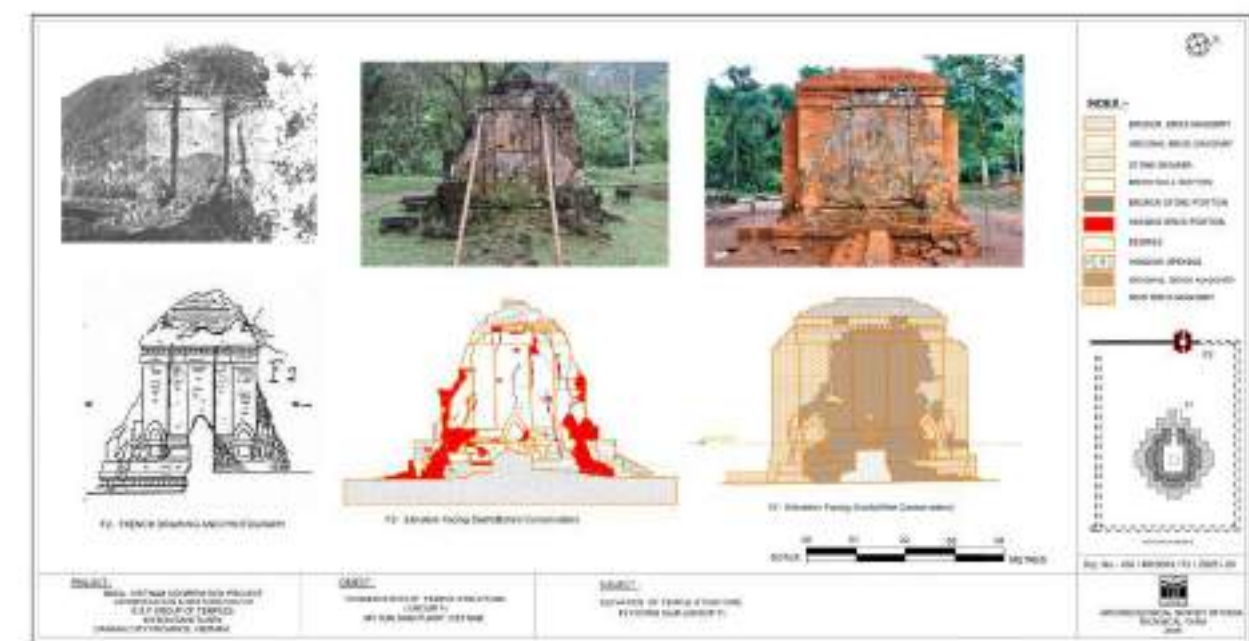
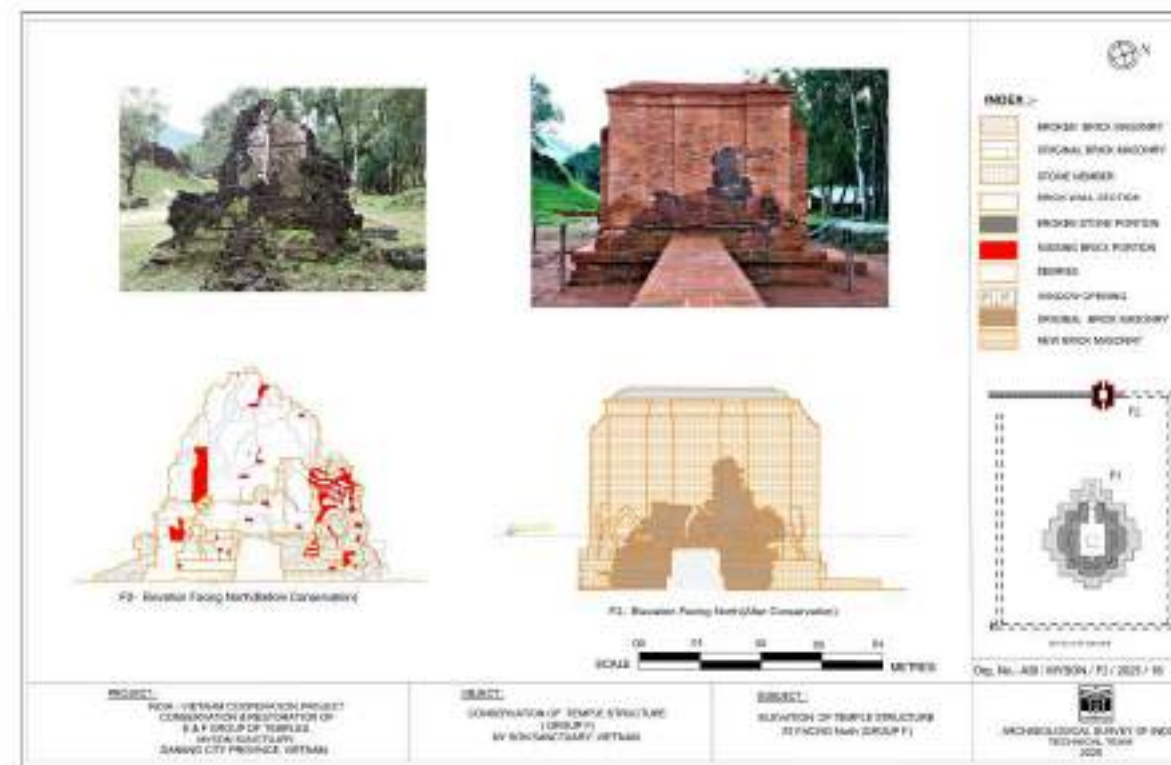
AFTER: Group of Temple - F2 - South-west view



BEFORE: Group of Temple - F2 - South-east view



AFTER: Group of Temple - F2 - South-east view





BEFORE: Group of Temple - E2 - East view



DURING: Group of Temple - E2 - East view



DURING: Group of Temple - E2 - East view



AFTER: Group of Temple - E2 - East view



BEFORE: Group of Temple - E2 - West view



AFTER: Group of Temple - E2 - West view



BEFORE: Group of Temple - E2 - North view



AFTER: Group of Temple - E2 - North view





BEFORE: Group of Temple - E2 - South view



AFTER: Group of Temple - E2 - South view



BEFORE: Group of Temple - E2 - South-east view



AFTER: Group of Temple - E2 - South-east view



BEFORE: Group of Temple - E2 - South-west view



AFTER: Group of Temple - E2 - South-west view



BEFORE: Group of Temple - E2 - North-east view



AFTER: Group of Temple - E2 - North-east view





BEFORE: Group of temple E3 - South-west view



DURING: Group of temple E3 - South-west view



DURING: Group of temple E3 - South-west view



AFTER: Group of temple E3 - South-west view



BEFORE: Group of temple E3 - West view



AFTER: Group of temple E3 - West view



BEFORE: Group of temple E3 - East view



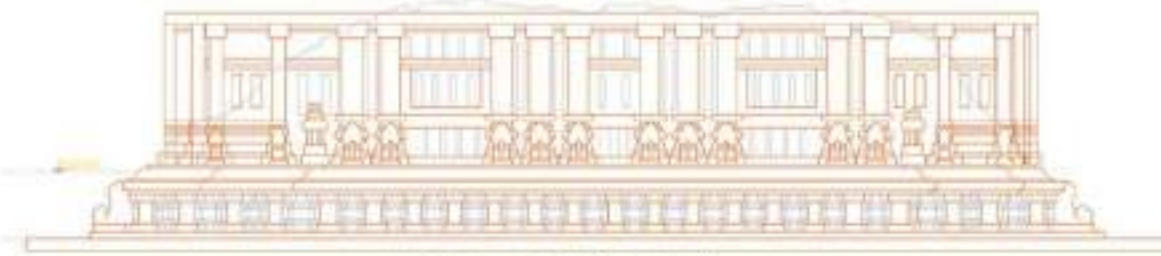
AFTER: Group of temple E3 - East view



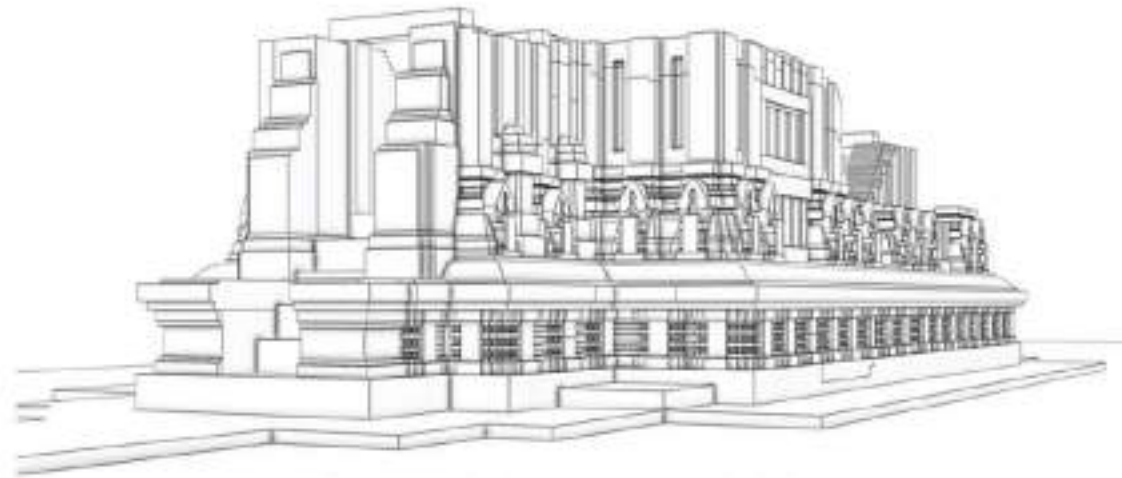
STEP WISE CONSERVATION & RESTORATION SEQUENCE ADOPTED FOR CHAM MANUMENTS AT MY SON SANCTUARY



E-Group Archival Studies



E-Group - Working Drawing



3D Modeling for visualized proposed restoration of structure



3D Modeling actual material rendering for visualization



E-Group Before: Condition of structure



E-Group During: Numbering, dismantling & restoration



E-Group After: Restoration



BEFORE: Group of temple E3 - North view



AFTER: Group of temple E3 - North view



BEFORE: Group of temple E3 - South view



AFTER: Group of temple E3 - South view





BEFORE: Group of temple E3 - South-east view



AFTER: Group of temple E3 - South-east view



BEFORE: Group of temple E3 - North-east view



AFTER: Group of temple E3 - North-east view



BEFORE: Group of temple E3 - North-west view



DURING: Group of temple E3 - North-west view



DURING: Group of temple E3 - North-west view



AFTER: Group of temple E3 - North-west view





BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall





BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of East Enclosure wall



AFTER: Conservation & Restoration of East Enclosure wall



BEFORE: Conservation & Restoration of East Enclosure wall



AFTER: Conservation & Restoration of East Enclosure wall





BEFORE: Conservation & Restoration of East Enclosure wall



AFTER: Conservation & Restoration of East Enclosure wall



BEFORE: Conservation & Restoration of East Enclosure wall



AFTER: Conservation & Restoration of East Enclosure wall



BEFORE: Conservation & Restoration of partition Enclosure wall



AFTER: Conservation & Restoration of partition Enclosure wall



BEFORE: Conservation & Restoration of partition Enclosure wall



AFTER: Conservation & Restoration of partition Enclosure wall





BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



BEFORE: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of West Enclosure wall



AFTER: Conservation & Restoration of Enclosure wall

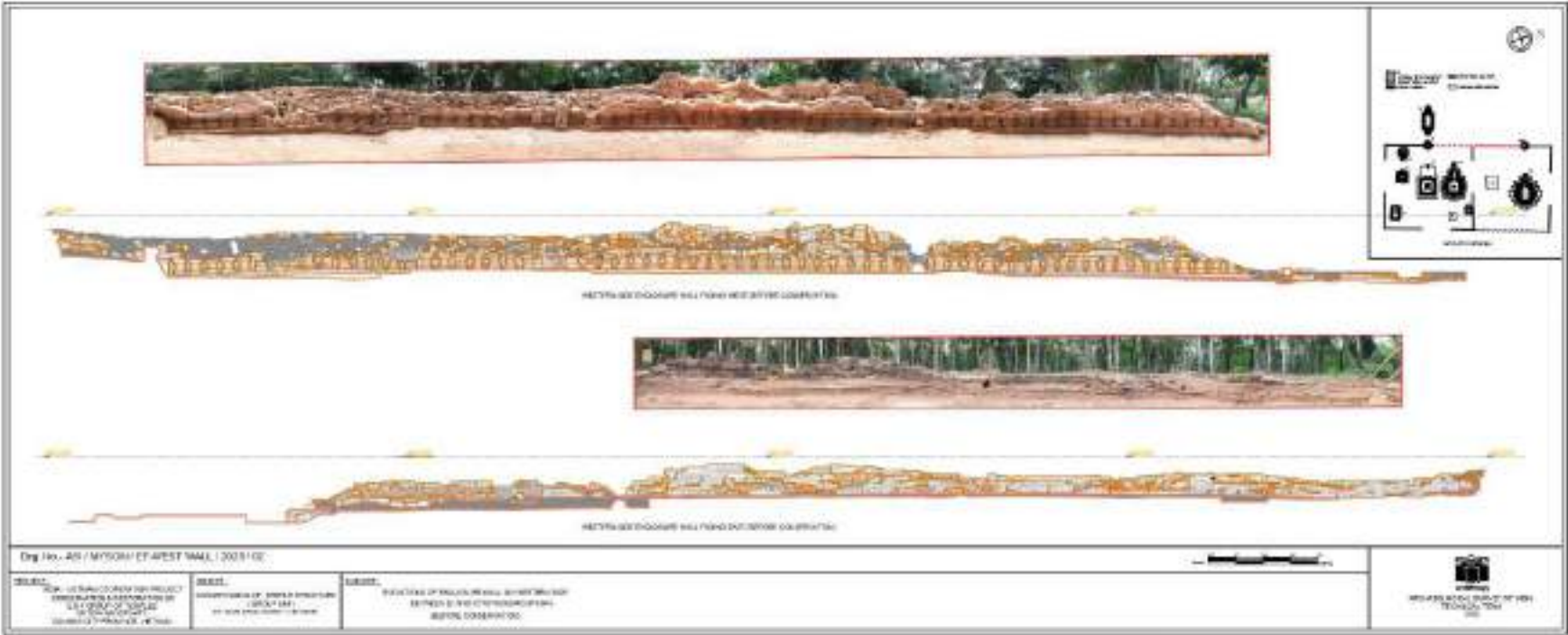
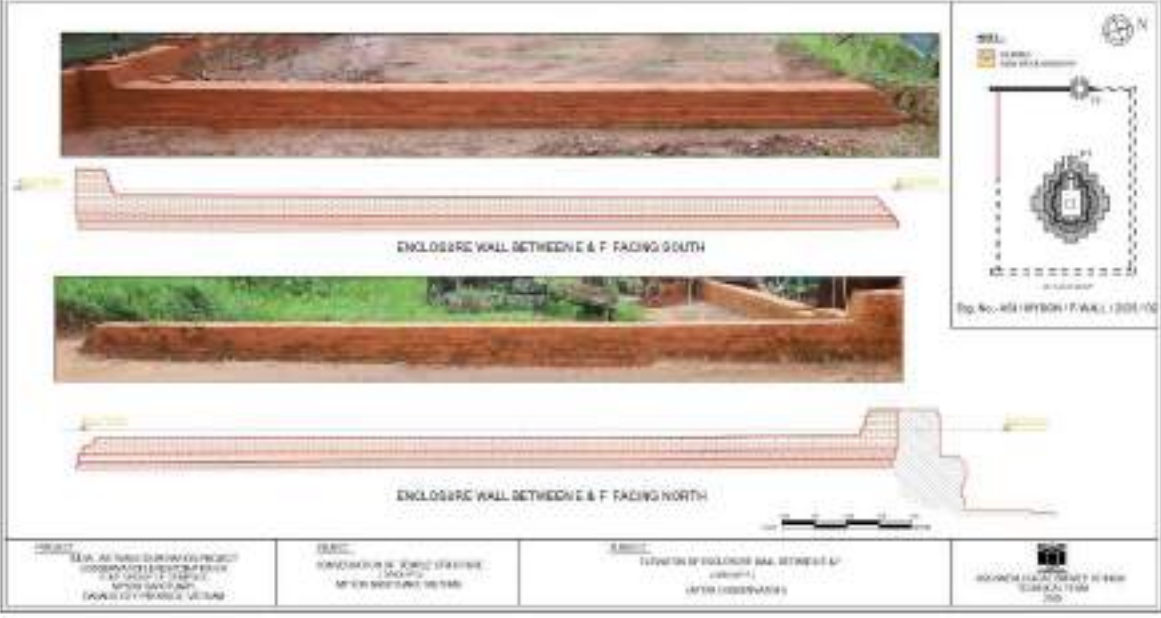
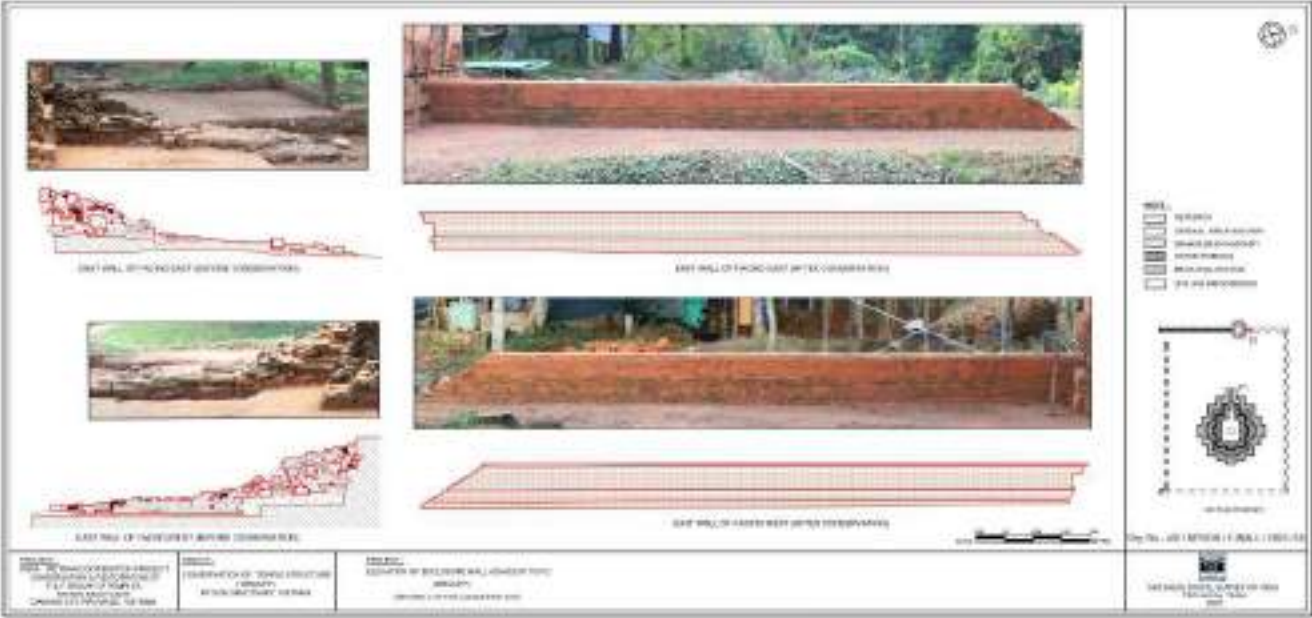


AFTER: Conservation & Restoration of Enclosure wall



AFTER: Conservation & Restoration of Enclosure wall







BEFORE: Scientific debris clearance



AFTER: Scientific debris clearance



BEFORE: Scientific debris clearance



AFTER: Scientific debris clearance





BEFORE: Scientific debris clearance



AFTER: Scientific debris clearance



BEFORE: Scientific debris clearance



AFTER: Scientific debris clearance



BEFORE: Scientific debris clearance



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BEFORE: Scientific debris clearance



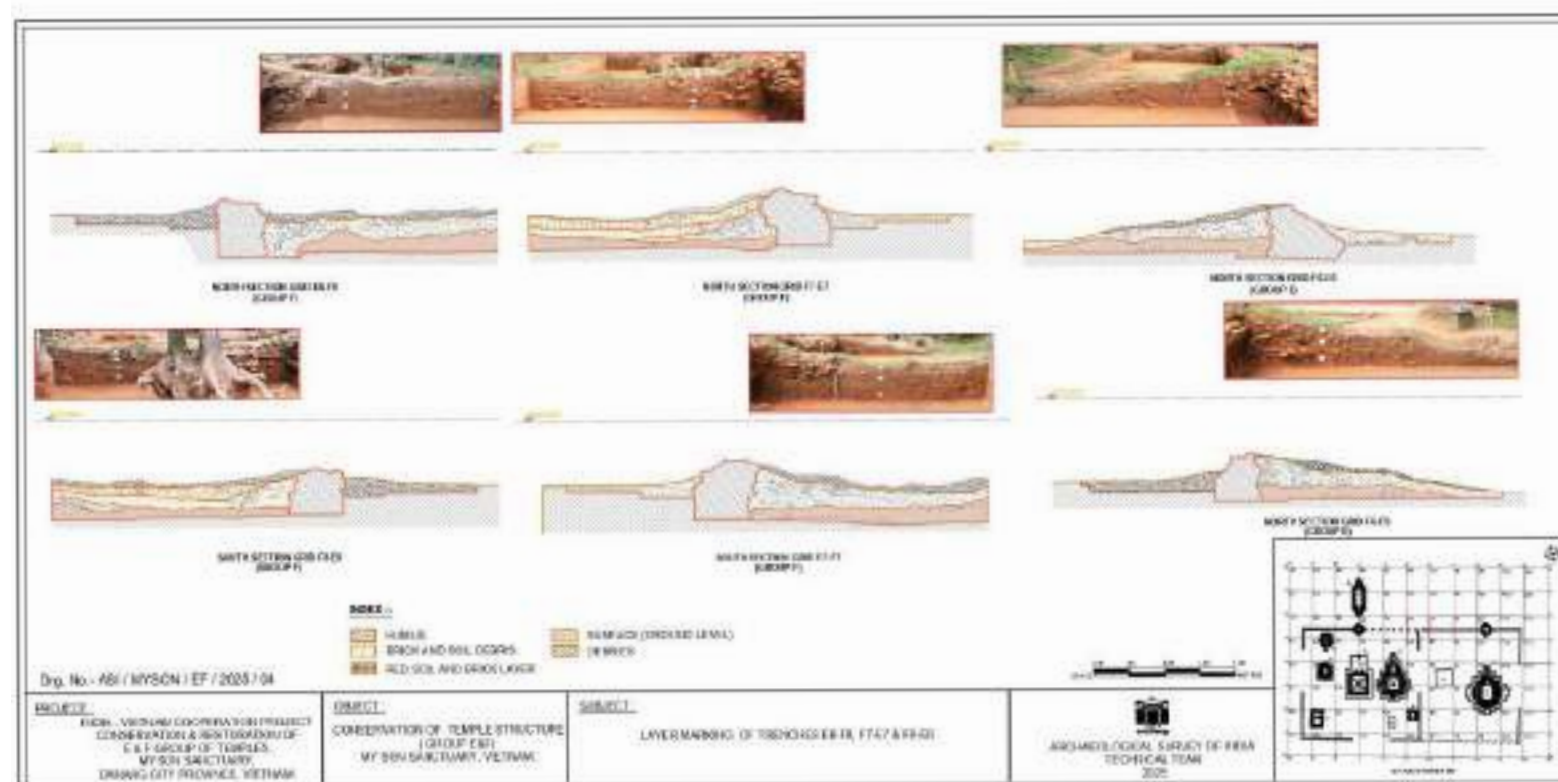
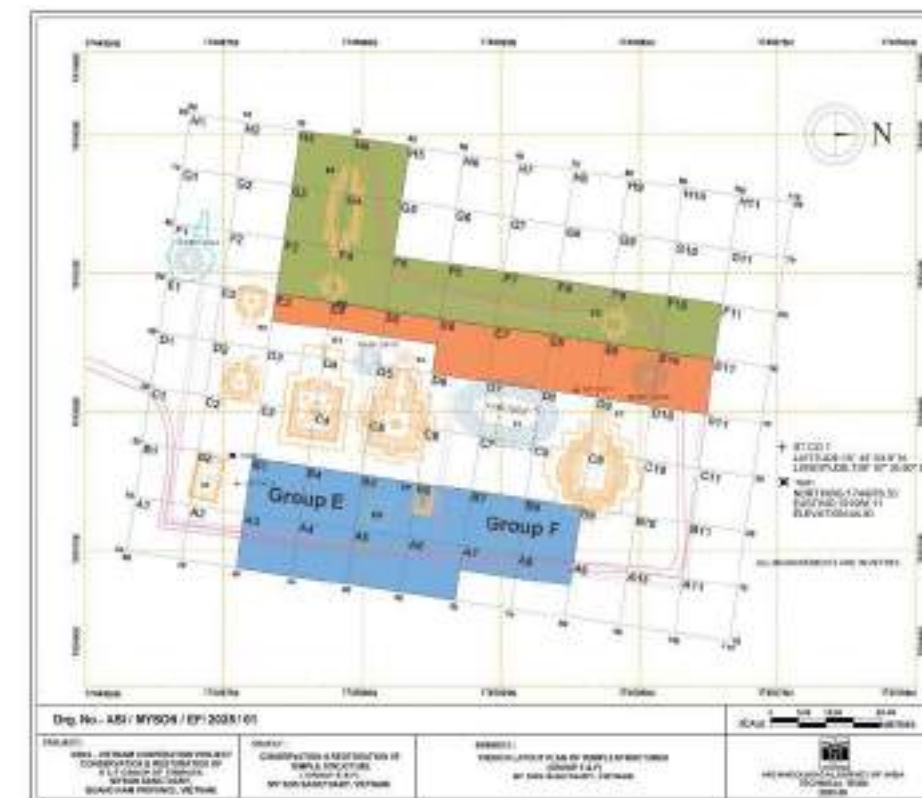
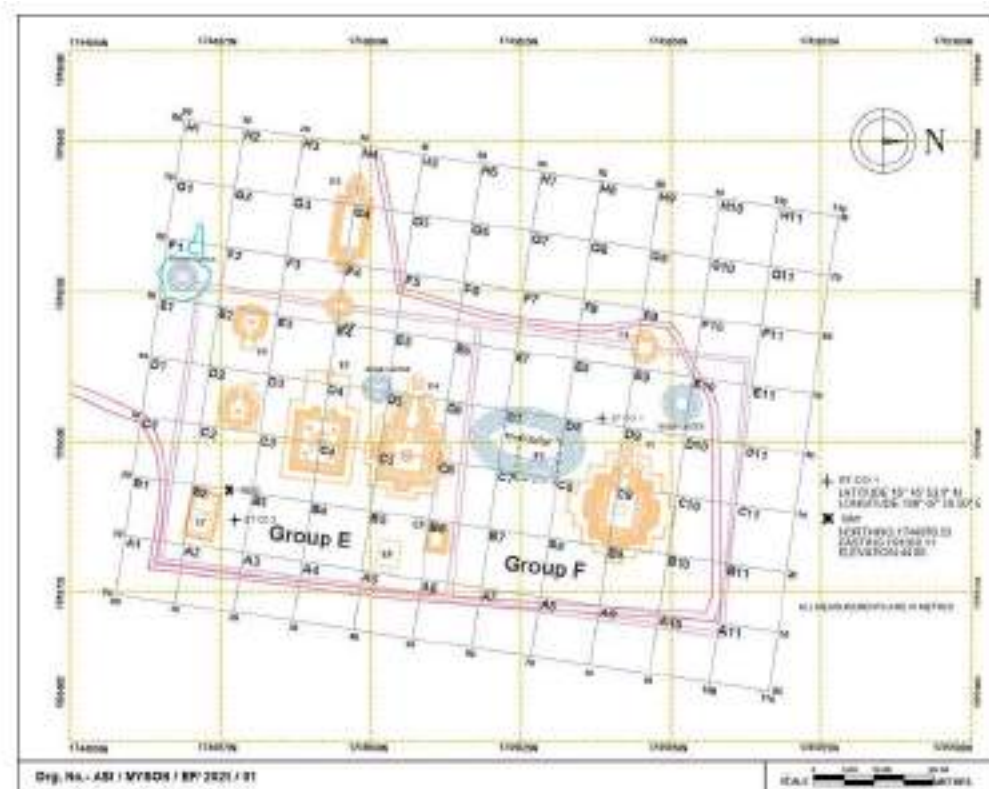
AFTER: Scientific debris clearance



BEFORE: Scientific debris clearance



AFTER: Scientific debris clearance





Tile pieces found while debris clearance



Tile pieces found while debris clearance





BEFORE: Bank protection wall



DURING: Construction of Bank protection wall



DURING: Construction of Bank protection wall



AFTER: West view of Bank protection wall



BEFORE: Bank protection wall



DURING: Construction bank protection wall



DURING: Construction bank protection wall



AFTER: East view of Bank protection wall





BEFORE: Excavation for Drain Chamber at North-west



DURING: Construction of Drain Chamber North-west



DURING: Construction & Pipe line of Drain Chamber North-west



AFTER: Construction of Drain Chamber North-west



BEFORE: Excavation for Drain Chamber at south east



DURING: Construction of Drain Chamber at south east

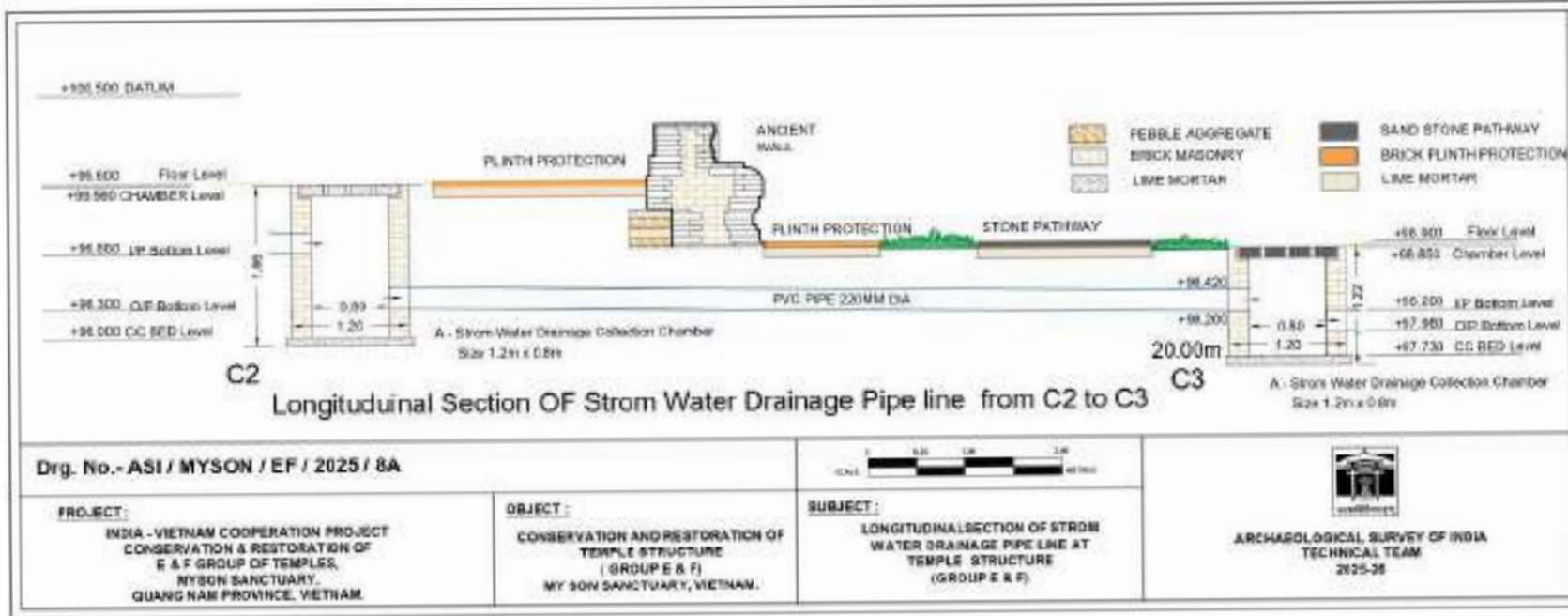
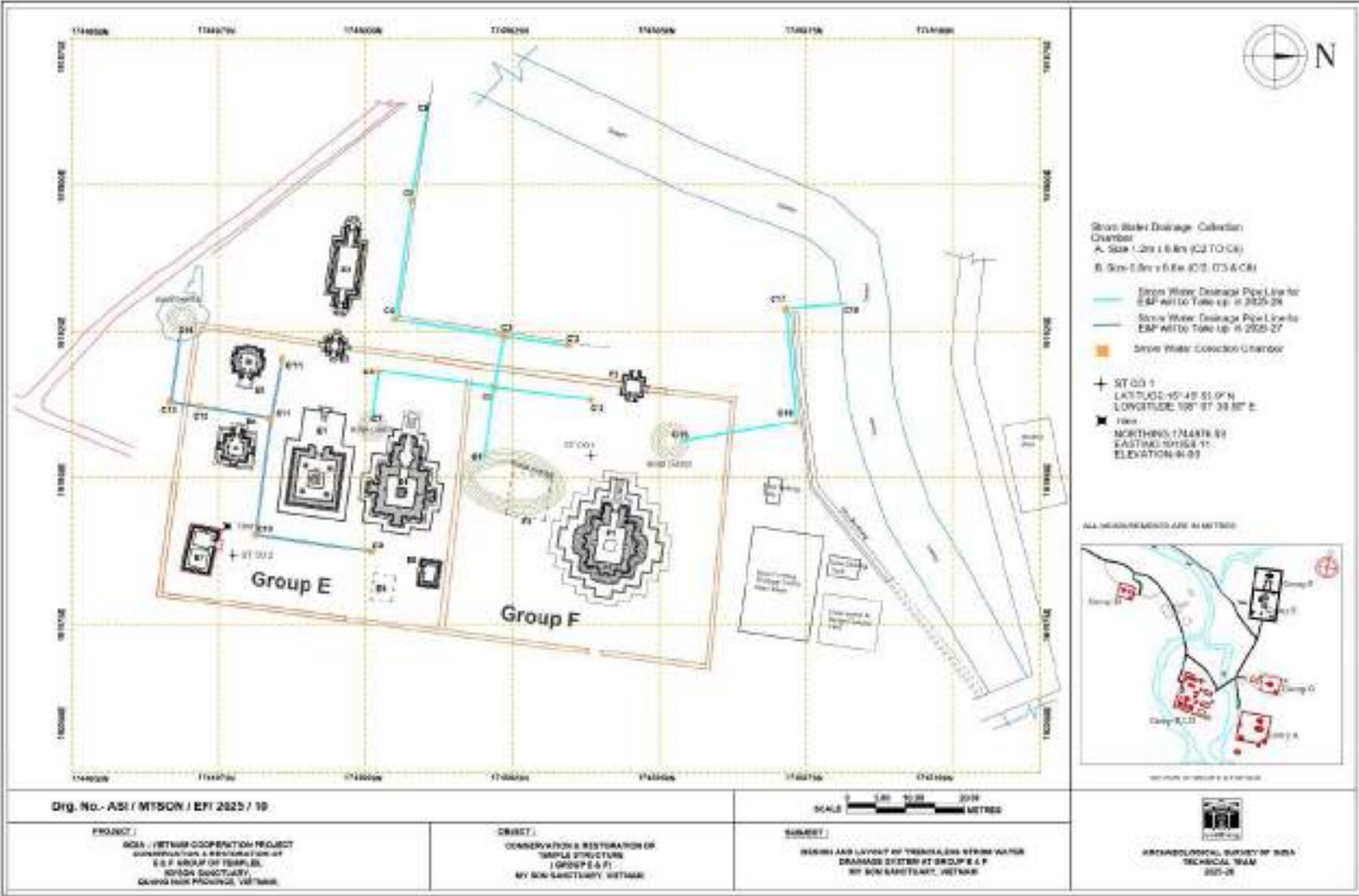


DURING: Construction & Pipe line of Drain Chamber at south east



AFTER: Construction of Drain Chamber at south east







BEFORE: Location proposed for Contour Drain system



DURING: Excavated area for Contour Drain



DURING: Laying of PCC for Contour Drain



AFTER: Construction of Contour Drain





BEFORE: Pathway from north to south



AFTER: Pathway from north to south



BEFORE: Pathway from south to north



AFTER: Pathway from south to north



BEFORE: Pathway from north to south



AFTER: Pathway from north to south



DURING: Conservation activity



DURING: Conservation activity



DURING: Conservation activity



DURING: Conservation activity





BEFORE: Construction of Causeway at Cham Hut



DURING: Floods



AFTER: Construction of Causeway at Cham Hut



BEFORE: Construction of Causeway at Group F temple



DURING: Floods



AFTER: Construction of Causeway at Group F temple



BEFORE: Construction of Causeway at Group K



DURING : Floods



DURING : Construction of Causeway at Group K



AFTER : Construction of Causeway at Group K





Proposed Area for Working Shed



Erected Working Shed



Proposed Area for Worker Shed



Erected Worker Shed



LIME KILN: Raw material



LIME KILN: Lime Processing Machine



LIME KILN: Lime Processing Machine



LIME KILN: Processed Lime





Construction of Lime Slacking tank



Lime Slacking Process



Lime Slacking Process



Processed Lime



Brick shaping Machine



Brick Soaking tank



Brick Surki



Prepared Mortar





Resin Tree



Raw Resin



Resin Preparation



Resin Application



Meeting with Mr. Sandeep Arya, H E Ambassador of India to Socialist Republic of Vietnam at Hanoi



Meeting with Mr. Tran Dinh Thanh, Dy. Director General, Department of Cultural Heritage, Ministry of Culture Sport & Tourism



Site visit with Official of My Son Management Board to start the Execution of project work at site



Site visit with Official of My Son Management Board to start the Execution of project work at site



Sri A.Z. Bhima Director (Conservation) ASI, New Delhi alongwith ASI Technical Team meeting with Mr. Kieth, Director My Son Management Board Before initiation of Project Work



Inspection of Brick Klin by Sri A.Z. Bhima, Director (Conservation) ASI, New Delhi alongwith ASI Technical Team



Inspection of model brick to verify the dimensions with ancient original brick by Sri A.Z. Bhima, Director (Conservation) ASI, New Delhi alongwith ASI Technical Team



H E Sri Hari Babu Kambampati, Governor of Odhisa, India on his visit to My Son Sanctuary





Sri Sandeep Arya, H E Ambassador of India to Socialist Republic of Vietnam inspection of Ongoing activity at the site



Sri Sandeep Arya, H E Ambassador of India to Socialist Republic of Vietnam inspection of Ongoing activity at the site



Sri Sandeep Arya, H E Ambassador of India to Socialist Republic of Vietnam inspection of Ongoing activity at the site



Sri Sandeep Arya, H E Ambassador of India to Socialist Republic of Vietnam inspection of Ongoing activity at the site



Deputy Ambassador of India to Socialist Republic of Vietnam on her visit to My Son Sanctuary



Visit of Mrs. Truong Thi Hong Hanh, Director, Culture, Sport & Tourism Department Da Nang City, to ASI Camp Office, My Son



Visit of Mrs. Nguyen Thi Anh Thi, Vice Chairman, City Administration, Da Nang.



Meeting with Mr. Nguyen Van Tien - Vice Director, and Officials Cat Tien Management Board with ASI Technical Team regarding Feasibility Assessment Report (FAR) for conservation & restoration of the Cat Tien Archaeological Site, Lam Dong Province.



Meeting Mrs. Nguyen Thi Anh Thi, Vice Chairman, City Administration, Da Nang with ASI Technical Team and Director, My Son Management Board.



Meeting with Mr. Khiết, Director, and Officials of My Son Management Board



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam Meeting with My Son Management Board



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam visit to ASI Project site office



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam for inspection of Ongoing activity at the site



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam for inspection of Ongoing activity at the site



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam for inspection of Ongoing activity at the site



Sri Tshering Wangchuk Sherpa, H E Ambassador of India to Socialist Republic of Vietnam for inspection of Ongoing activity at the site



