

Preservation of an Archaeological Heritage: 'Ayn Ghazāl

I. Introduction

The Neolithic site of 'Ayn Ghazāl is located at the eastern edge of 'Ammān, along a major wadi to the southeast of the downtown area. Excavations by a joint Jordanian-American team are on-going at the site since 1982. They uncovered occupation from c. 7250-5000 BC. The excavated remains include plaster floors, stone walls and fire pits in various areas of the site.

In 1989, a consultant team of four faculty members from the University of Jordan (two of whom are the authors of this paper) were commissioned by the American Center of Oriental Research (ACOR) to conduct a study for the preservation and presentation of the site.

The lack of monumental architectural remains and the rather empty condition of the site were from the start a major problem in making the site comprehensible to the general public, and hence "popular". The real challenge in developing such a site was, therefore, the presentation of an important chapter in our history with little visible material evidence to support it.

From the start we understood that an interpretive and imaginative approach was needed, the little that is evident at the site is the archaeological excavation trenches and sections. Such evidence ought to be accentuated. It was also clear from the beginning that an interpretive and educational site museum should be placed somewhere on the site.

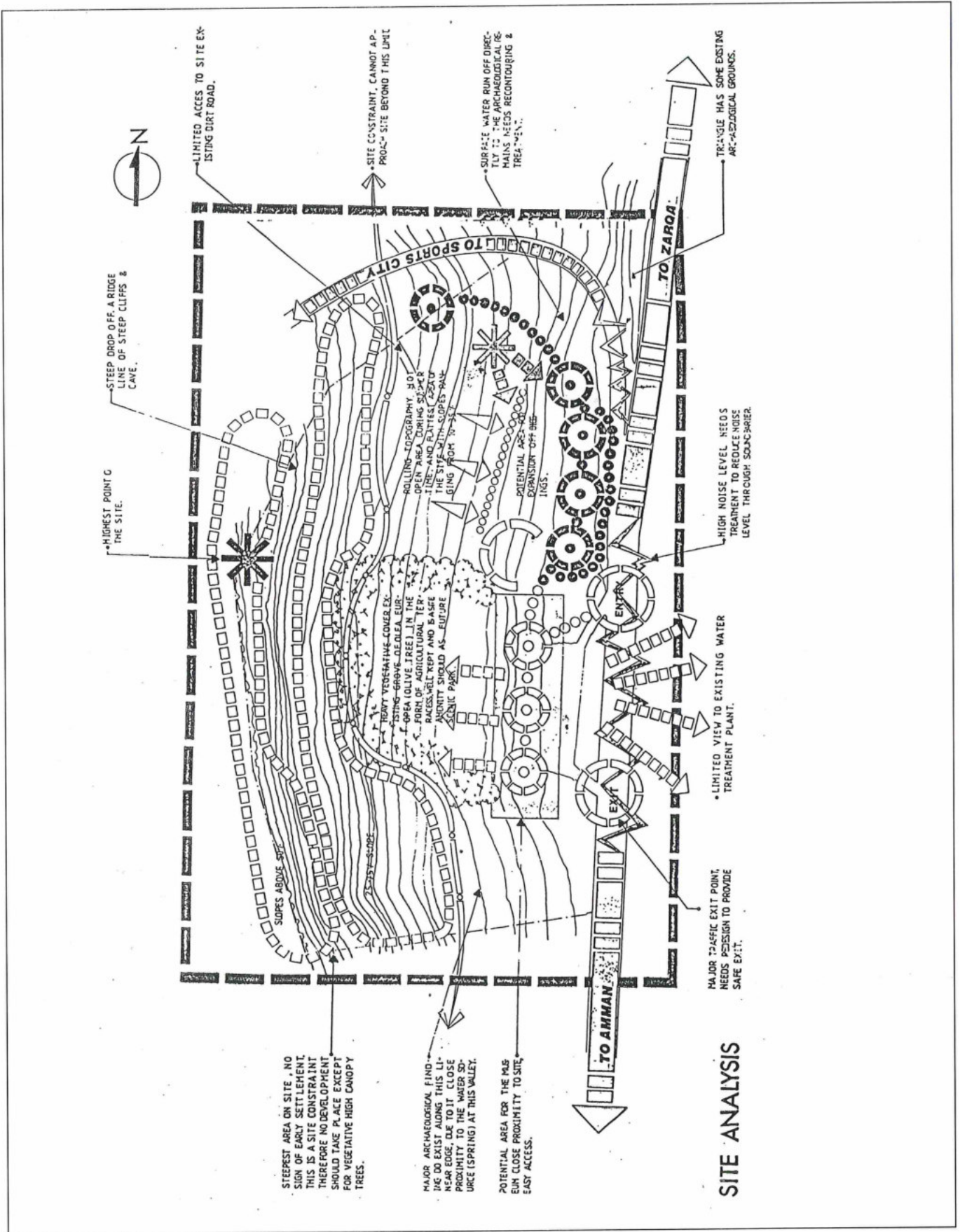
Two vital elements, therefore directed our work:

1. Creating a route capable of tying all the scattered archaeological trenches and providing some order to the movement of visitors.
2. Establishing a "centre" in the form of a site museum that serves as an entry statement to the site and a story teller, as well as housing some of the archaeological finds. The museum acts, therefore, as the major educational and information tool for comprehending the site, in addition to providing it with all the necessary services for visitors.

II. Site Inventory and Analysis

The site of 'Ayn Ghazāl is located in the Mārka District of 'Ammān. Its total area amounts to 100 dunums with steep topography. The site is divided into three major areas (FIG. 1):

1. *The Upper Ridge Line*: This is the steepest area of the site with outcropping bedrock. The ridge line is located along the west boundary where no signs of early settlement have yet reported. The ridge line with its surface bedrock is a site constraint.
2. *The Middle Plateau*: This area is divided into two sub areas:
 - a) The farmland south of the site which is heavily vegetated with a beautiful grove of *Olea europea* (olive) and the land is terraced in agricultural method. The olive grove is well kept and could act as a site amenity that should be used as the green park.
 - b) The rolling plateau north of the site is almost equal in land area to the olive grove but is covered with native grass groundcover. The land gradient ranges from 10-35%. The road and the Sports City bounds the plateau from the north and there is a dirt road that provided limited access to the site.
3. *The Eastern Plateau*: Adjacent to the major highway that links az-Zarqā' with 'Ammān. This is the most critical area in terms of the number of archaeological remains. The following remarks were made in this area:
 - a) Archaeological trenches are concentrated in this area due to soil strata that clearly and visibly depict archaeological remains.
 - b) There seems to be a linear pattern of archaeological remains that stretches from the parking lot to the major highway intersection in the north.
 - c) The major watershed area is located along the eastern edge of this plateau, therefore endangering the remains.
 - d) There are high noise levels coming from the major highway that need design solutions.



SITE ANALYSIS

III. The Concept

3.1 'Ayn Ghazāl is registered as an antiquities site, and therefore should be protected against all potentially damaging development.

The Site Concept was guided by the idea of an interpretive archaeological park rather than a historic site that just needs minor upgrading and preservation. The idea is to develop the area into a place of learning about 'Ayn Ghazāl and its history, where local and foreign visitors will find it an attractive historic site that provides a clear vision of 'Ammān's early settlements (FIG. 2).

The site analysis depicts a strong linear pattern of archaeological remains, thus the prime objective of this scheme is a provision of an interpretive site system accommodating a new pedestrian movement pattern. The movement pattern has to link several excavation areas with each other, and with the museum and parking areas as safely as possible. The movement pattern will help in comprehending the totality of the site and allowing visitors to reach the middle plateau with relative ease and safety. In addition to existing and proposed sidewalks in the proposed site plan, new tracks may be developed when new excavations are conducted (as indicated on the site plan).

3.2 Entry Points and Parking

An important decision was taken early in the design to limit all vehicular entry in order to prevent further damage to the fragile remains. The existing parking facing the 'Ammān - az-Zarqā' highway provides a golden opportunity to accommodate both the museum and the vehicle parking, thus reducing damage to site grounds (FIG. 3).

The proposed parking area is located in a manner to serve the museum and the linear remains along the east edge, and to provide service and safe parking for visitors. This area consists of two sub-areas and accommodates a total of 20 cars and three buses. It is situated in a central area and in a location to keep land grading to a minimal.

The slopes between the parking area and the main highway are to be landscaped in a manner to help soften and enhance parking aesthetics and to prevent soil erosion.

Planting design is kept to minimal all over the site with a few exceptions. The entry plaza and slopes are covered with plant materials helpful in reducing noise levels and helpful with aesthetics of this entry statement. Cascading plants are recommended (for aroma and to prevent soil erosion) such as: *Bougainvillea spectabilis* (bougainvillea),

Lonicera japonica (honey suckle), *Junipers conferta* (Shore Juniper) and a few columnar *Cupressus* species are used to break the linearity of this slope and to provide vertical scale.

A typical tour starts with a visit to the museum, the visitor would then leave the museum (at a point indicated in plans on the northern edge of the museum building) and start his/her site tour.

This tour takes the visitor to several significant spots and areas where excavation trenches are preserved and made clearly visible. The visitor then will have the choice of going northwest where a lookout plaza is located and where a clear view of the entire site and museum building is possible. Otherwise he/she can return to the parking area where the tour ends.

The linearity of the existing archaeological remains along the eastern edge depicts the concept of a linear circulation system, which is clearly reflected in both the museum building and the site grounds. The visitors, aided by a proper directional and information signage system, should be able to decide on the intended destination.

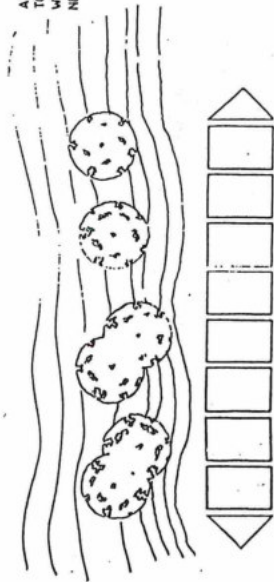
The entry plaza is designed to attract visitors to the museum, this is achieved by the use of native large rocks staggered in a detail hard landscape manner, in combination with a detail planting design. The use of drought resistant native plants of aromatic nature is highly recommended, such as: *Lavandula angustifolia*, *Rosmarinis officinalis*, *Santolina champ.* Various junipers and coniferous plants will be used for their outstanding texture and pleasant smell, as evergreen plants.

The Acres (*Acre negunda*) are used as deciduous high canopy shade trees by the entry plaza. Evergreen high canopy plants are also along the northern boundary to serve as a noise buffer and to reduce wind level: Trees such as: *Gravillia robusta* (Silk Oak), *Pinus pinea*, and *Olea europea* are highly recommended. Few medium sized trees are used to provide seasonal change and to help pedestrians identify the movement pattern, these are: *Lagersreomia indica* (Grape Myrtle) and *Jacaranda mimisifolia*.

3.3 The Site Museum/Visitors Centre (FIGS. 4-6)

A. Location: It was felt that the most suitable spot for the museum would be a point roughly halfway along the eastern edge of the existing paved parking area. This position would not only involve the least possible damage on the archaeological site, but also better utilize an already cleared and paved surface. The location will ensure that the building could successfully connect with the site

A LINEAR DESIGN SOLUTION TO REACT TO SITE LINEARITY AND TO ACCENTUATE SITE SECTIONS. A LINEAR DESIGN SOLUTION WOULD ALSO BE IN LINE WITH SITE CHARACTERISTICS AND CONNECT WELL WITH PROPOSED SITE TRACKS & WALKWAYS.

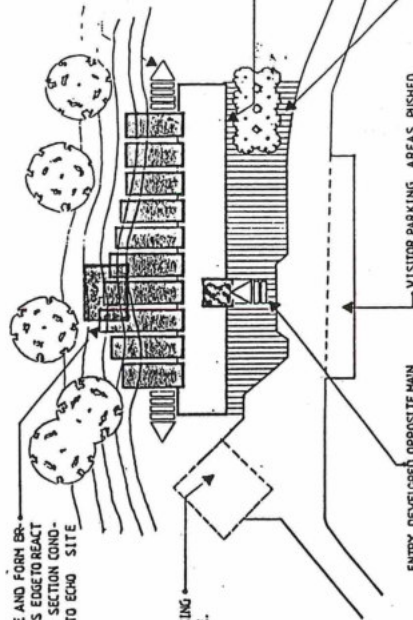


BUILDING LINE AND FORM BROKEN AT THIS EDGE TO REACT TO ACCURATE SECTION CONDITIONS AND TO ECHO SITE FORM.

SERVICE PARKING AND ENTRANCE.

ENTRY DEVELOPED OPPOSITE MAIN HISTORIC DIG AND DESIGNED TO HIGHLIGHT THE EXPERIENCE OF CONCEPT ENTRY.

VISITOR PARKING AREAS PUSHED TO EASTERN EDGE OF SITE TO RELIEF BUILDING AND TO USE INACTIVE SITE AREAS.



MUSEUM VISITOR'S DISCHARGE TO BEGIN SITE TOUR.

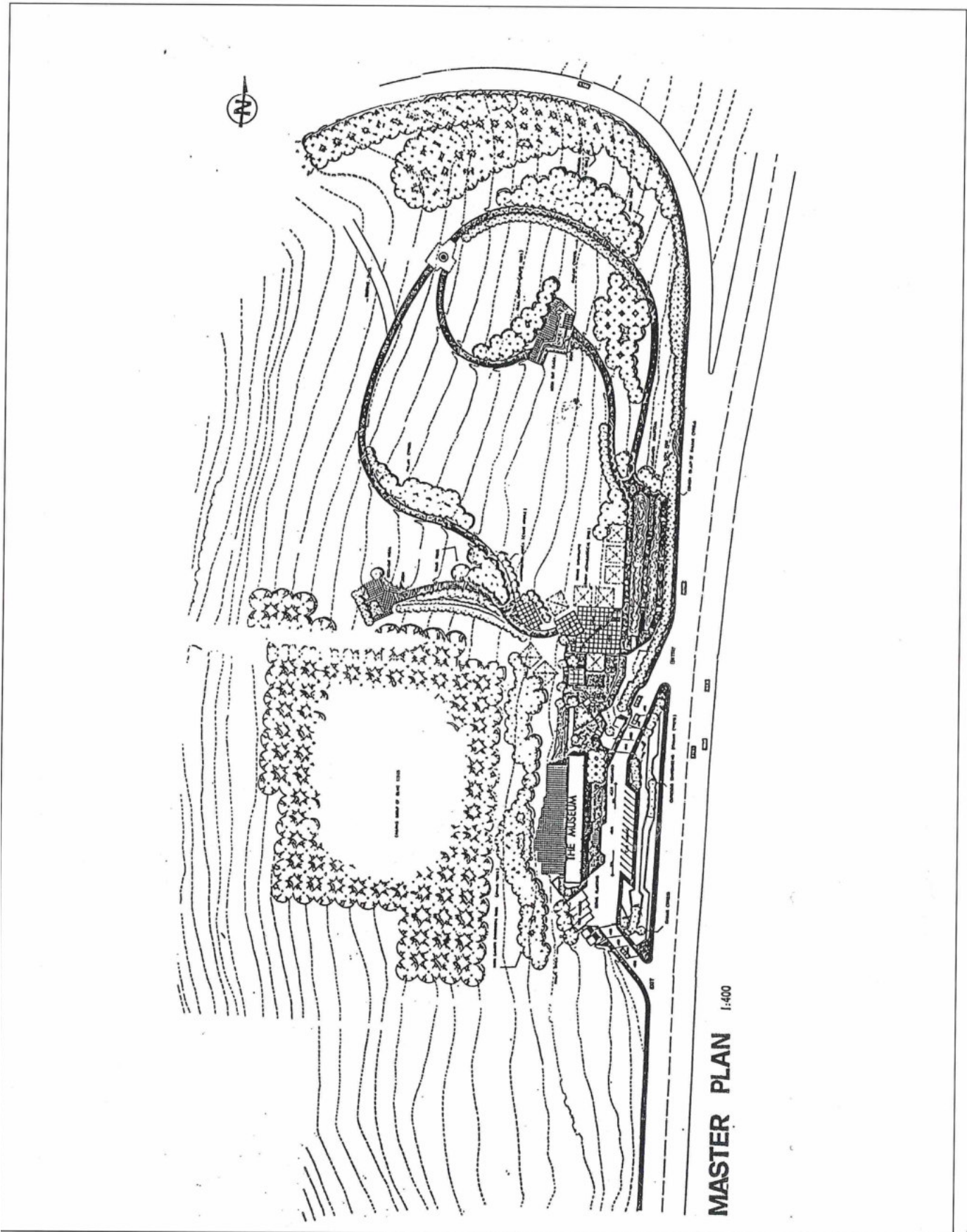
SIMPLE DIRECT FACADE SOLUTION SO AS NOT TO COMPETE WITH SITE FEATURES AND CONTEXT.

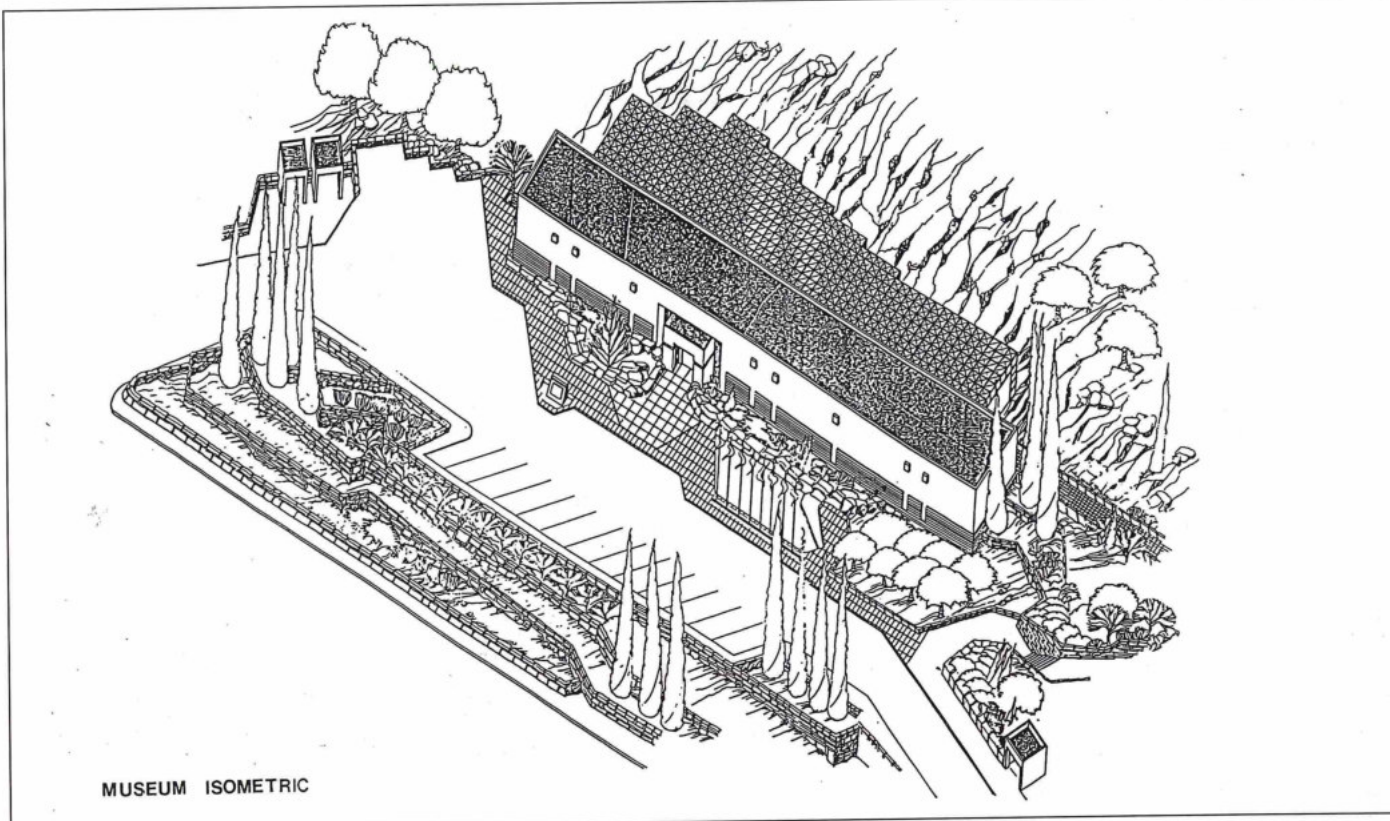
AREA EXTENSIVELY DEVELOPED TO PROVIDE RELIEF AND THEN EN TRY PLAZA TO NEW BUILDING.

A IN GHAZAL SHOULD BE DECLARED AN "ANTIQUITIES SITE" AND SHOULD BE PROTECTED AGAINST ALL POTENTIALLY DAMAGING DEVELOPMENT. THE SITE ANALYSIS DEPICTS A STRONG LINEAR PATTERN OF ARCHAEOLOGICAL REMAINS, THUS THE PRIME OBJECTIVE OF THIS SCHEME WAS THE PROVISION OF AN "INTERPRETIVE SITE SYSTEM".

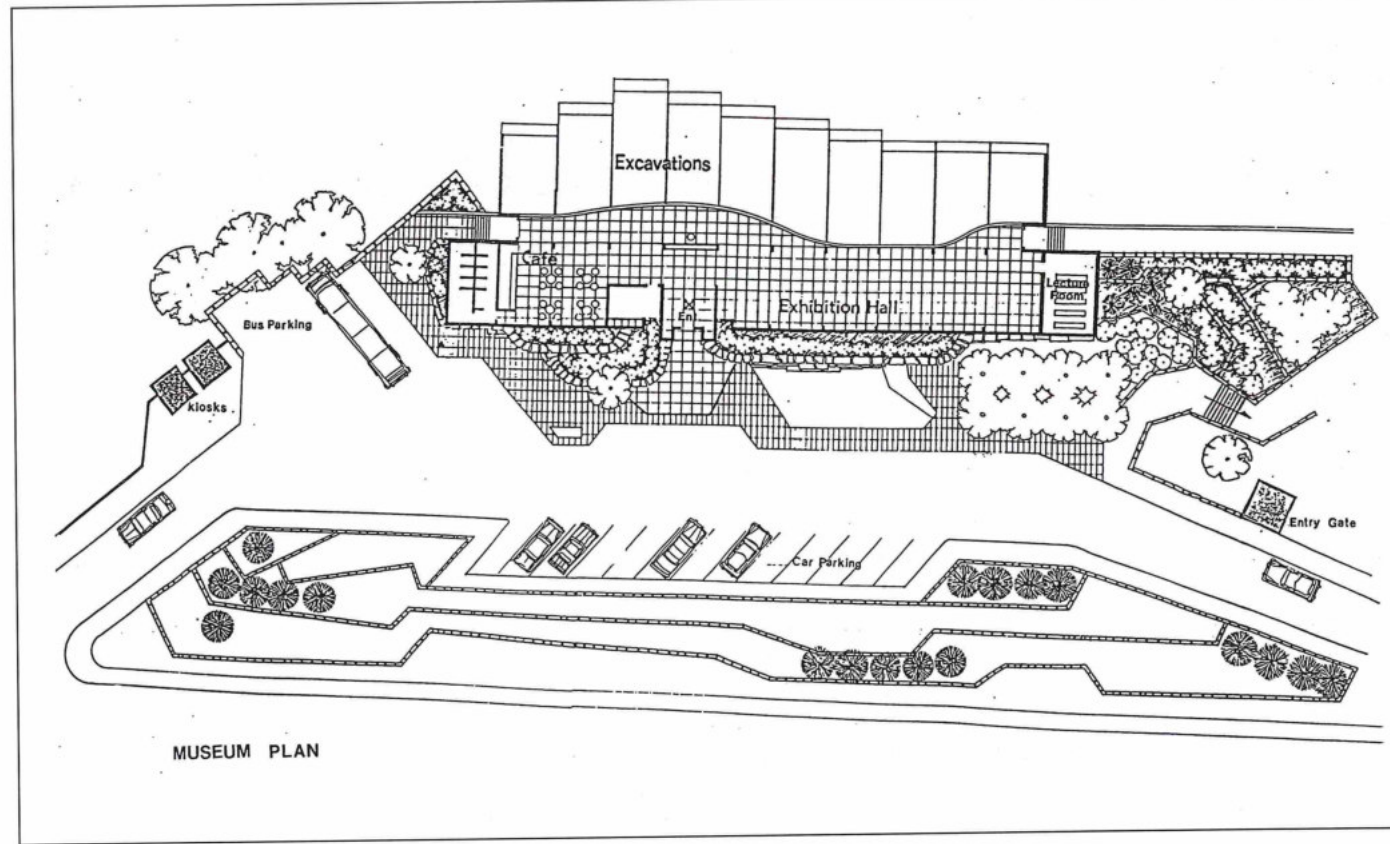
A TYPICAL TOUR STARTS WITH A VISIT TO THE MUSEUM. THE VISITOR WOULD THEN LEAVE THE MUSEUM (A POINT INDICATED IN PLANS ON NORTHERN TIP OF MUSEUM BUILDING) AND START HIS/HER SITE TOUR. THIS TOUR TAKES THE VISITOR TO SEVERAL SIGNIFICANT SPOTS AND AREAS WHERE HISTORIC DIGS ARE PRESERVED AND CLEARLY VISIBLE. THE VISITOR WILL THEN HAVE THE CHOICE TO GO NORTH WEST WHERE A LOOKOUT PLAZA IS LOCATED AND WHERE A CLEAR VIEW TO ENTIRE SITE AND MUSEUM BUILDING IS POSSIBLE, OTHERWISE HE/SHE CAN RETURN TO PARKING AREA WHERE TOUR ENDS.

THE LINEARITY OF THE EXISTING ARCHAEOLOGICAL REMAINS ALONG THE EASTERN EDGE DEPICTS THE CONCEPT OF A LINEAR CIRCULATION SYSTEM, WHICH CLEARLY SHOWS ON BOTH THE MUSEUM BUILDING AND THE SITE GROUNDS.





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layout (walkways, routes, rest areas, etc.), and ensure that a site tour would always start with a museum visit.

- B. The Architectural Solution: The architectural solution has to address, and successfully react to a number of vital issues:
1. The very distinct site characteristics/sections at location chosen.
 2. The wealth of archaeological remains fully or partially visible in site sections at location chosen.
 3. The lack of any visitor facilities on site (for example, information, toilets, café, etc.)
 4. The need for a building that would address all the above and yet be neutral, humble enough in character so as not to compete with the site or over-power its value.

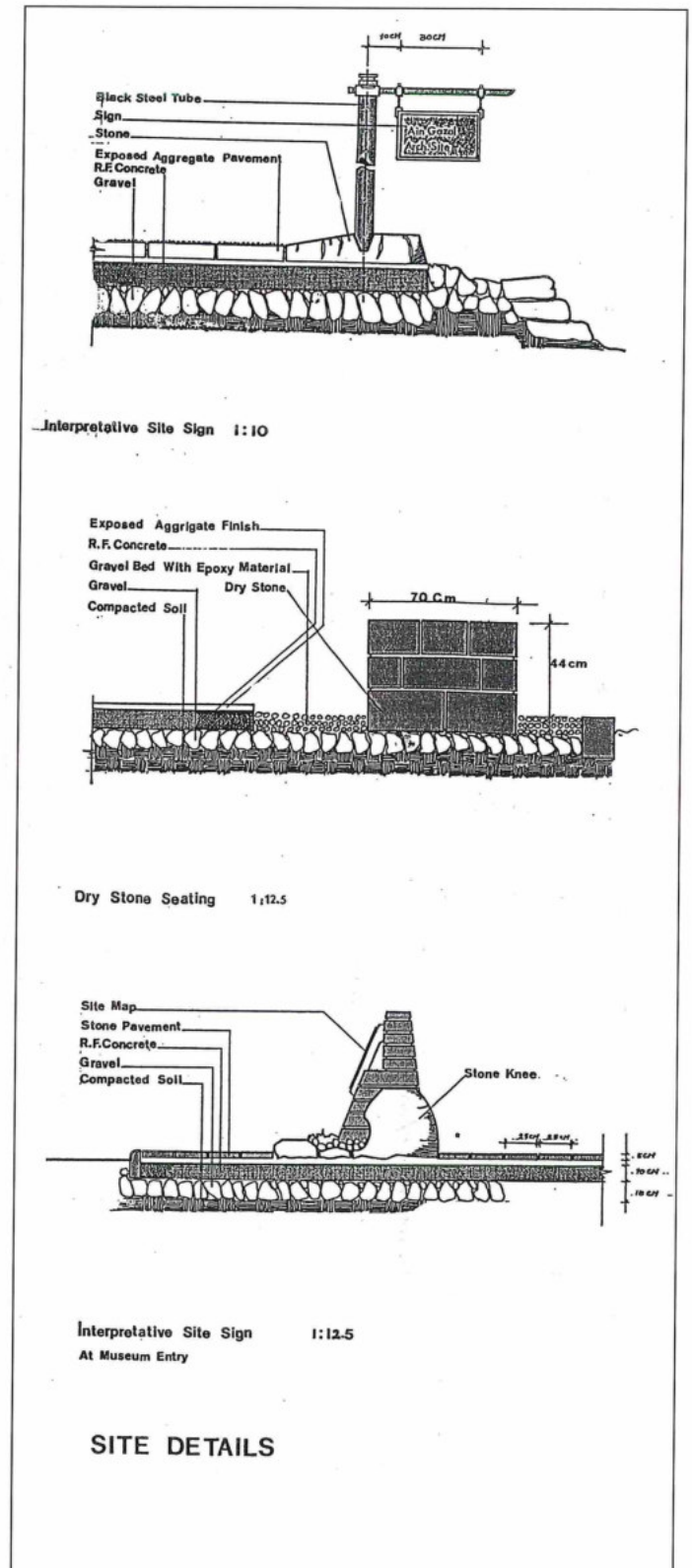
The above issues were addressed through a linear design that sits comfortably along the fairly steep sections along the eastern edge of the existing parking lot (FIGS. 4-6). The building was given two main parallel "bodies": the first houses all proposed exhibition and service facilities, runs parallel to site sections and is clearly modern in appearance to highlight its detachment from the original site history. The second body (also parallel to site sections) connects the first body with the actual site edge through light structures incurring as little damage on the site as possible, allowing natural light to penetrate and highlighting the very particular nature of the sections. Building elevations were designed to convey a neutral, modest effect with an entry clearly yet not loudly visible.

IV. Conclusions

This work is the second in the series of consulting work aimed at providing concepts for the design development of archaeological sites in 'Ammān. Soon after the University Consulting Team submitted its proposals for the development of the Citadel area in 'Ammān, the same group consisting of Prof. Khair Yassin, Dr. Mohammad Kadhim, Dr. Taleb Rifai and Dr. Kamel Mahadin, was commissioned by the ACOR to conduct a study aimed at providing concepts and plans for the development of 'Ayn Ghazāl.

This work stressed the importance of preserving archaeological and historic sites and the dire need to establish preservation policies for Jordan's archaeological sites and historic remains within rural and urban settings. The 1989 preservation master plan of the Citadel grounds and the work submitted in this paper clearly shows the efforts of the Department of Antiquities, the University of Jordan and the other agencies to preserve these sites.

Such work is clearly a comprehensive collaboration



6. between planners, architects, landscape architects, historians and archaeologists whereby issues related to these disciplines are addressed in the 'Ayn Ghazāl study.