

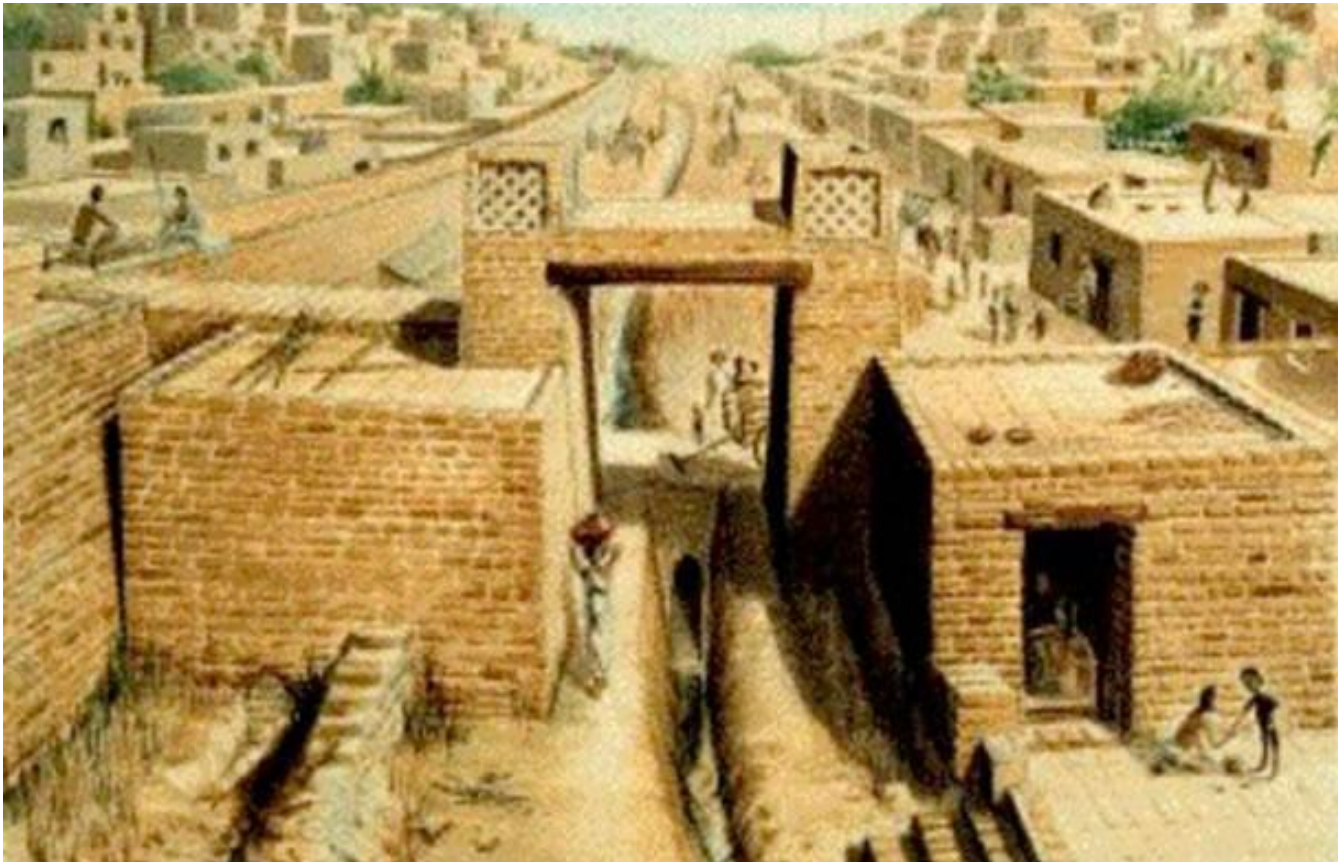
Cities of Indus Valley Civilization

Harappa and Mohenjodaro



City of Harappa

Indus Valley Civilization



General Features of Harappa

- Harappa was a city in the Indus civilization that flourished around 2600 to 1700 BC in the western part of South Asia
- It is located about 20 km (12 mi) west of Sahiwal.
- The site takes its name from a modern village located near the former course of the Ravi River, some 5 km (3 mi) southeast of the site.
- The mounds at Harappa remain largely unexcavated.
- Approximately half a percentage of the site's area is being unearthed each season by the ongoing Harappa Archaeological Research Project (HARP).

Location of Harappa



General Features of Harappa

- There is an enormous amount still to be learned about the site, most of which remains unexcavated.
- Archaeologists think that ancient Harappa was the urban center dominating the upper Indus region, much like Mohenjo-daro dominated the lower Indus Valley.
- Although the archaeological site at Harappa was partially damaged in 1857 when engineers constructing the Lahore-Karachi railroad, used bricks from the Harappa ruins for track ballast, an abundance of artifacts has nevertheless been found.

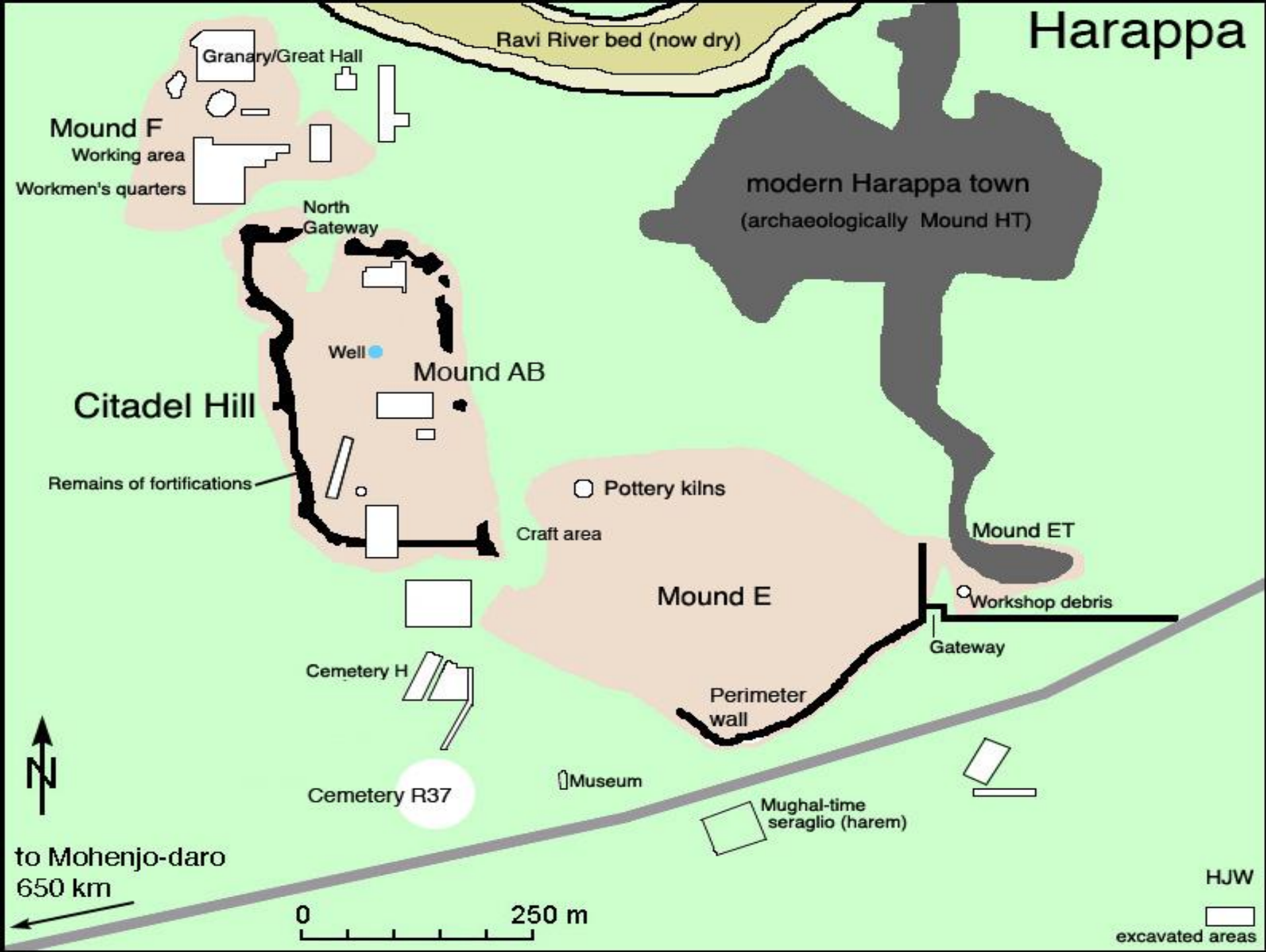
Excavation at Harappa

- The Harappa site was first briefly excavated by Sir Alexander Cunningham in 1872-73, two decades after brick robbers carried off the visible remains of the city. He found an Indus seal of unknown origin.
- The first extensive excavations at Harappa were started by Rai Bahadur Daya Ram Sahni in 1920.
- His work and contemporaneous excavations at Mohenjo-daro first brought to the world's attention the existence of the forgotten Indus Valley civilization as the earliest urban culture in the Indian subcontinent.

Excavation at Harappa

- After independence, Harappa was excavated by Mohammed Rafique Mughal of the Archaeological Survey of Pakistan in 1966.
- In 1986, the first systematic, multi-disciplinary excavations of an Indus Valley city were begun by the Harappa Archaeological Project (HARP).
- These excavations, now also co-directed by Richard H. Meadow, have continued almost every year since then.

Harappa



Citadel Area

- View of what the archaeologists have named Mound AB and was at the city's core defense, the Citadel.
- This area in Mound AB, excavated in the 1920's revealed large houses thought to have belonged to upper class members of ancient Indus society.



Citadel Area

- The central area of Mound AB was continuously rebuilt in ancient times.
- Behind the curved wall is a well and below it what may have been a public bathing area.
- The well in the citadel of Harappa is the round opening near the centre of the photograph.



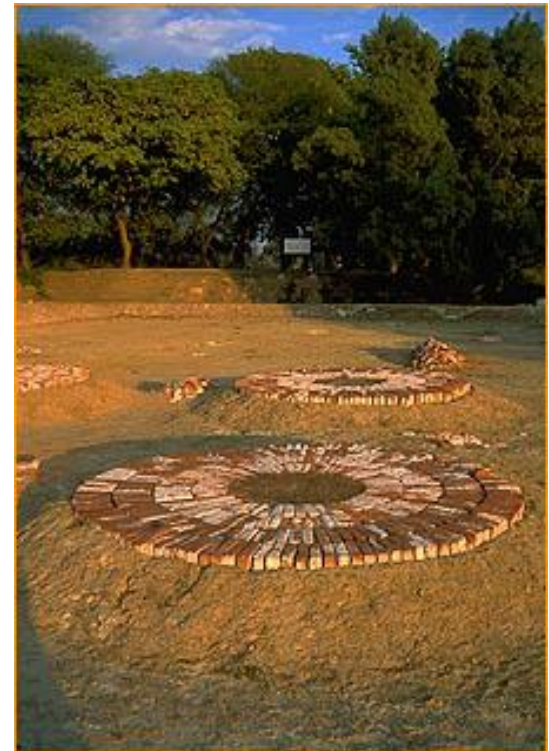
Culture and Economy

- Whatever the purpose of these "toys", they do show us (in the absence of any excavated full-scale carts) the sophisticated technology of this very early civilization. Goods were transported on such and similar carts.



Platforms

- Between Mound AB and Mound F are a number of mysterious circular platforms, originally inside houses and small courtyards.
- These platforms are often called workmen's platforms, and were first thought to have been used to thresh grain for what was also thought to have been the nearby "Great Granary."



Giant Ringstones

- These giant ringstones are similar to ones found in Mohenjo-daro and Dholavira.
- Local legend claims they were the rings of a giant 17th century saint (Baba Nur Shah) who is buried on Mound AB.
- Early excavators believed that were significant to the ancient Indus religion.
- Today, archaeologists think that they were used to secure wooden posts at gateways to the city.



Ruins of Harappa



Granary at Harappa



Harappa City

Ruins of Harappa



Ruins of Harappa



City ruins



Drain channel

City of Mohenjodaro

Indus Valley Civilization

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General Features of Mohenjodaro

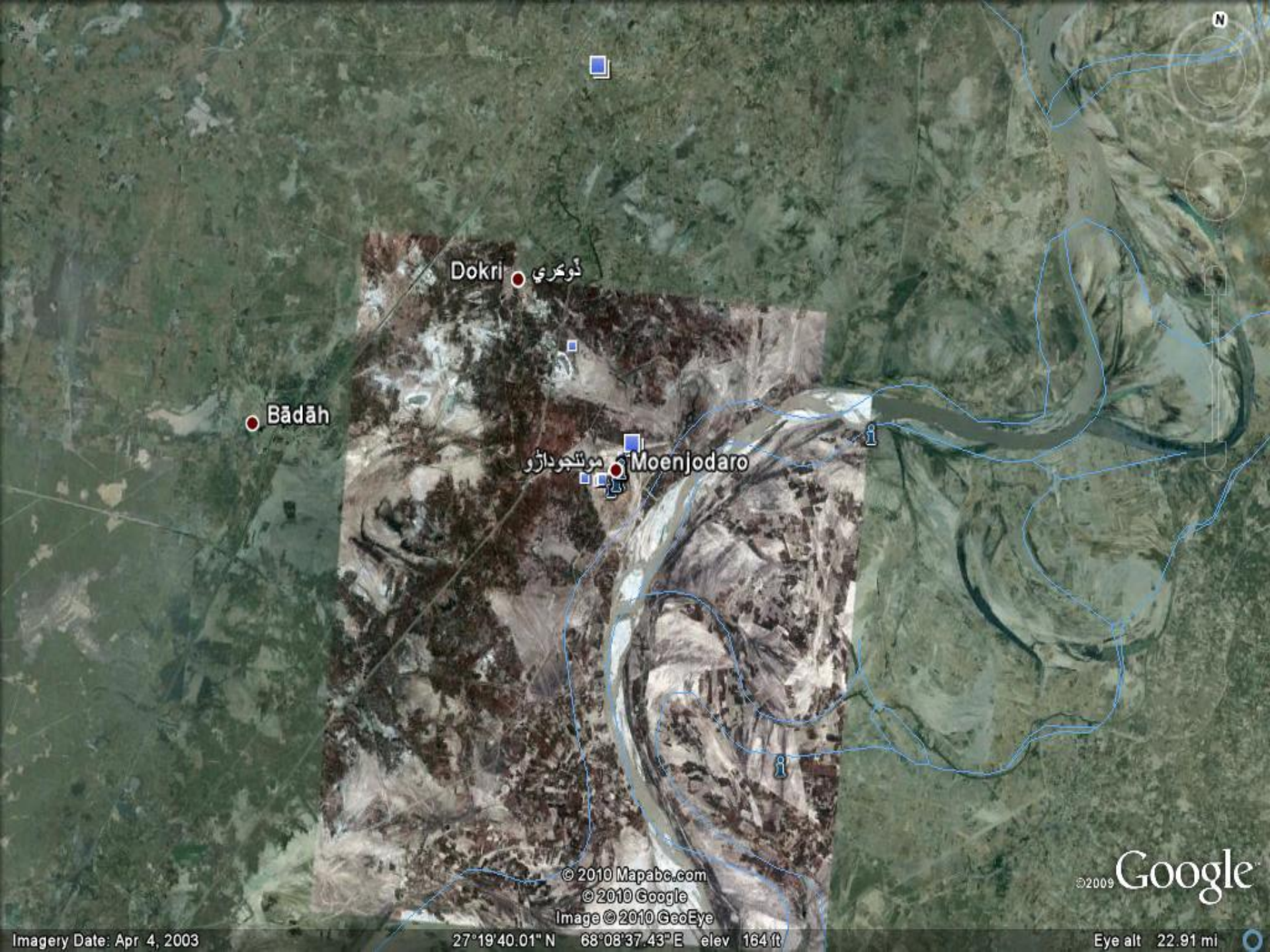
- Mohenjo-Daro is located along the Indus River and was intact around 2600 BC at the time of the Bronze age.
- Mohenjo-Daro flourished along with 100 other settlements along the Indus, however, it and the city of Harappa were the most populated.
- With roughly 35,000 citizens, the city demanded to have the latest in housing development.
- Mohenjo Daro was a very well planned city. Its original purpose was to serve as a major trading spot.
- If the Indus civilization did have a capital city it would most likely have been Mohenjo-daro.
- It was the most developed and advanced city in South Asia, and perhaps the world, during its peak.

General Features of Mohenjodaro

- The city was one of the early urban settlements in the world, existing at the same time as the civilizations of ancient Egypt and Mesopotamia.
- The archaeological ruins of the city are designated a UNESCO World Heritage Site.
- It is sometimes referred to as "An Ancient Indus Valley Metropolis".
- The ruins of Mohenjo-Daro can be found in present day Sind in southern Pakistan.
- Mohenjo-Daro is a great source of information to scholars being that the Indus valley civilization was one of the world's first great civilizations.

General Features of Mohenjodaro

- Mohenjodaro's brick floored bathhouses were even designed to have dirty water drain through clay pipes into an underground gutter system.
- Although advanced in architecture, citizens of Mohenjo-Daro lived on a simple form of agriculture.
- They lived by farming wheat, barley, rice, and some cotton for cloth. Scholars also believe that the people of Mohenjodaro had domesticated cattle, sheep, goats, cats, and dogs.
- Some evidence of Mohenjo-Daro's prosperity can be traced back to trade between the Harappan civilization and Mesopotamia.
- There are remains of seals that merchants used to mark goods that were to be traded among cities.



Bādāh

Dokri دُوکری

مونیجودارو Moenjodaro

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Imagery Date: Apr 4, 2003

27°19'40.01" N 68°08'37.43" E elev 164 ft

Eye alt 22.91 mi

Mohenjo-daro



Citadel

(for more details
see map below)

excavated area

Lower Town

main streets of
lower town 10 m wide
with bricked drains

excavated
area

excavated
area

excavated
area

excavated
area

excavated area

to Harappa, 650 km

HJW



0

250 m



موئنجداد Moenjodaro

Image © 2010 DigitalGlobe

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27°19'19.33" N 68°08'19.38" E elev 177 ft

Google
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Eye alt 9915 ft

Imagery Date: Apr 4, 2003



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Imagery Date: Apr 4, 2003

27°19'30.19" N 68°07'59.09" E elev 184 ft

Eye alt 657 ft

Excavation at Mohenjodaro

- Mohenjo-daro was built around 2600 BC and abandoned around 1500 BC.
- It was rediscovered in 1922 by Rakhaladas, an officer of the Archaeological Survey of India.
- He was led to the mound by a Buddhist monk, who believed it to be a stupa.
- In the 1930s, massive excavations were conducted under the leadership of John Marshall.

City Layout Features

- Mohenjo-daro is located in Sindh Pakistan on a ridge in the middle of the flood plain of the Indus River.
- The ridge is now buried by the flooding of the plains, but was prominent during the time of the Indus Valley Civilization.
- The ridge allowed the city to stand above the surrounding plain.
- The ridge was expanded via giant mud brick platforms.
- Ultimately, the settlement grew to such proportions that some buildings reached 12 meters above the level of the modern plain, and therefore much higher than this above the ancient plain.

City Layout Features

- Mohenjo-daro is a remarkable construction, considering its antiquity.
- It has a planned layout based on a grid of streets, which were laid out in perfect patterns.
- The buildings of the city were particularly advanced, with structures constructed of same-sized bricks of mud and wood.
- The public buildings of these cities also suggest a high degree of social organization.

City Layout Features

- An orthogonal street layout was oriented toward the north-south & east-west directions: the widest streets run north-south, straight through town; secondary streets run east-west, sometimes in a staggered direction.
- Secondary streets are about half the width of the main streets; smaller alleys are a third to a quarter of the width of the main streets.

Artifacts



Standard Brick



Ring stone

City Layout Features

- Mohenjo-daro was a well fortified city. Lacking actual city walls, it did have towers to the west of the main settlement, and defensive fortifications to the south.
- Both Harappa and Mohenjo-daro share relatively the same architectural layout, and were generally not heavily fortified like other Indus Valley sites.
- It is obvious from the identical city layouts of all Indus sites, that there was some kind of political or administrative centrality, however the extent and functioning of an administrative centre remains unclear.

Streets of Mohenjodaro



City Layout Features

- Mohenjo-daro was successively destroyed and rebuilt at least seven times.
- Each time, the new cities were built directly on top of the old ones. Flooding by the Indus is thought to have been the cause of destruction.
- The city was divided into two parts, the Citadel and the Lower City.
- Most of the Lower City is yet to be uncovered, but the Citadel is known to have the public bath, a large residential structure designed to house 5,000 citizens and two large assembly halls.
- Mohenjo-daro, Harappa and their civilization, vanished without trace from history until discovered in the 1920s. It was extensively excavated in the 1920s, but no in-depth excavations have been carried out since the 1960s.

Drains



Citadel Area

- The large platform, called the 'Citadel' is presumed to be the administrative seat. Other public buildings might be temples and public baths. There are also granaries where the stores are elevated above brick platforms that have ventilation ducts. Separated from the domestic areas are the artisan workshops.

The street layout shows an understanding of the basic principles of traffic, with rounded corners to allow the turning of carts easily. The drains were having detachable covering.

The Citadel

Details of the Mohenjo-daro citadel:

1 College

2 Bath

3 Rooms (guest rooms?)

4 Loading platform and granary

5 Drain

6 Residence for priests (?)

7 Assembly hall

8 Temple complex(?)

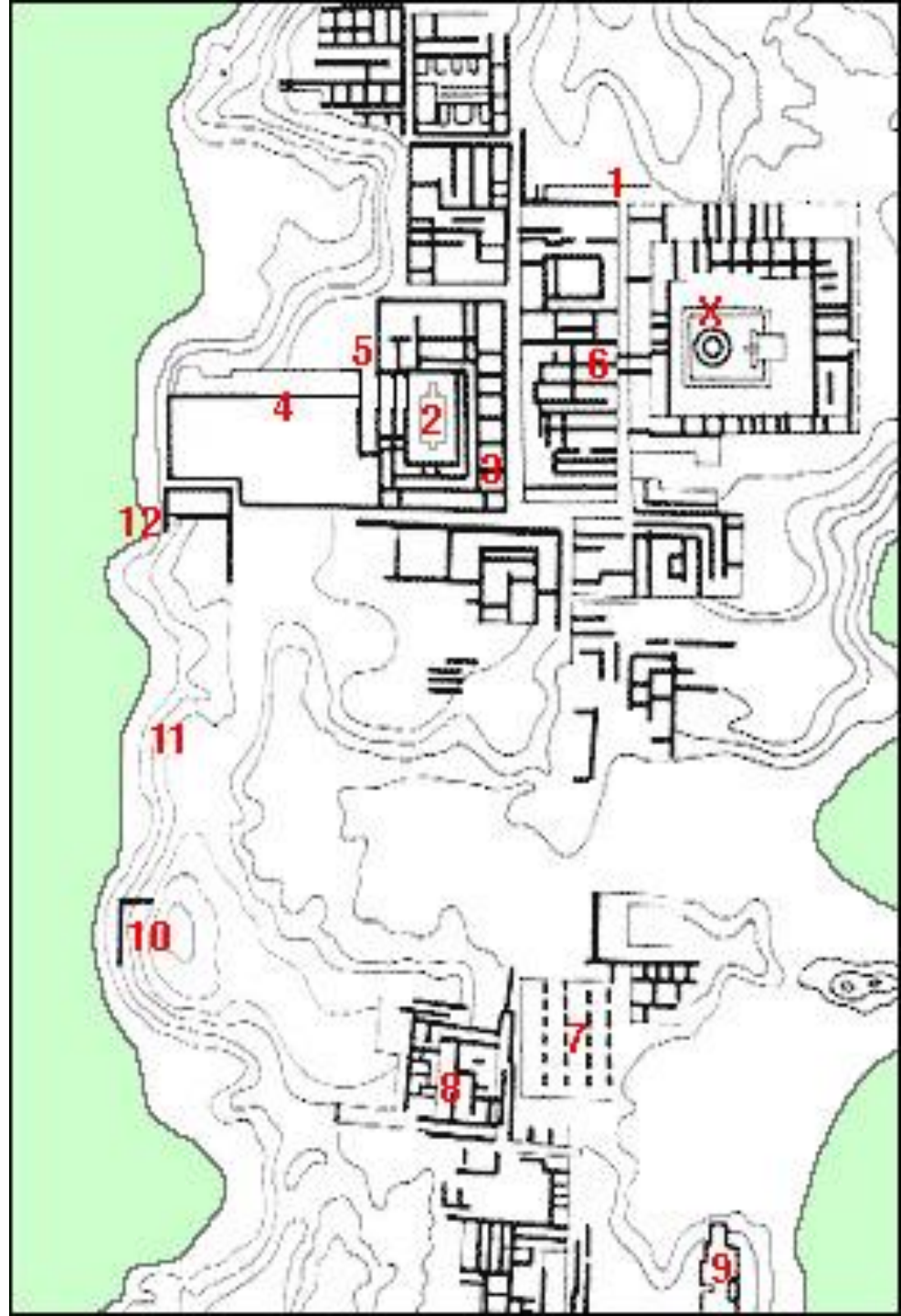
9 Bastions (of baked brick)

10 Tower (of baked brick)

11 Mud-brick embankment

12 Stairs

X Buddhist stupa (not contemporary with the ancient Mohenjo-daro structures)



Housing Characteristics

- The houses were planned as a series of rooms opening on to a central courtyard providing an open space inside for community activities.
- There were no openings toward the main street , only rather small openings to the side streets.
- Brick stairways provided access to the upper floors or rooftop gardens. The houses are believed to have flat, timber roofs.
- Houses built with a perimeter wall and adjacent houses were separated by a narrow space of land.
- There were just a few fairly standardized layouts, perhaps an indication of a fairly egalitarian society. But not all houses had two stories and only the larger houses have their own wells.

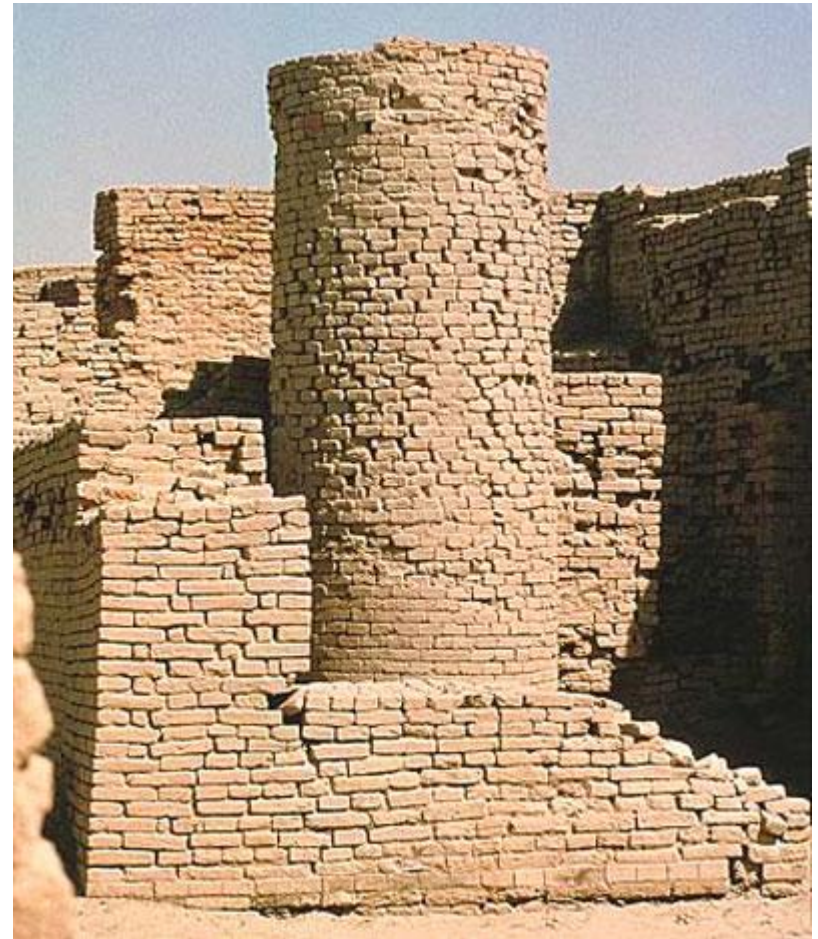
Houses with Courtyard



Housing Characteristics

- There are also rows of single-roomed barracks, perhaps for singles, soldiers or slaves.
- For water, the big houses had their own wells, other wells would serve groups of smaller houses.
- Almost every house had a bathroom, usually a fine sawn burnt brick pavement, often with a surrounding curb.
- Citizens were conveniently able to dispose of their garbage through a slit cut into their house which would then fall into containers lined up on the street below.
- Waste water was directed to covered drains, which lined the major streets. First floor bathrooms were also built. There is also evidence of vertical drains.

Wells



The Great Granaries

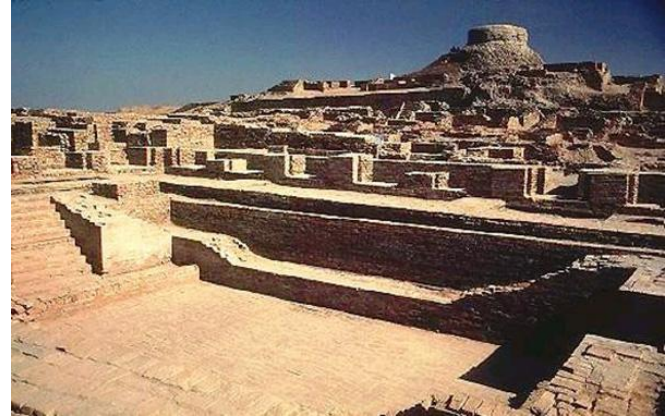
- To the west of bath there revealed a great granary
- It consists of twenty seven blocks of brick work criss-cross by narrow ventilation channels.



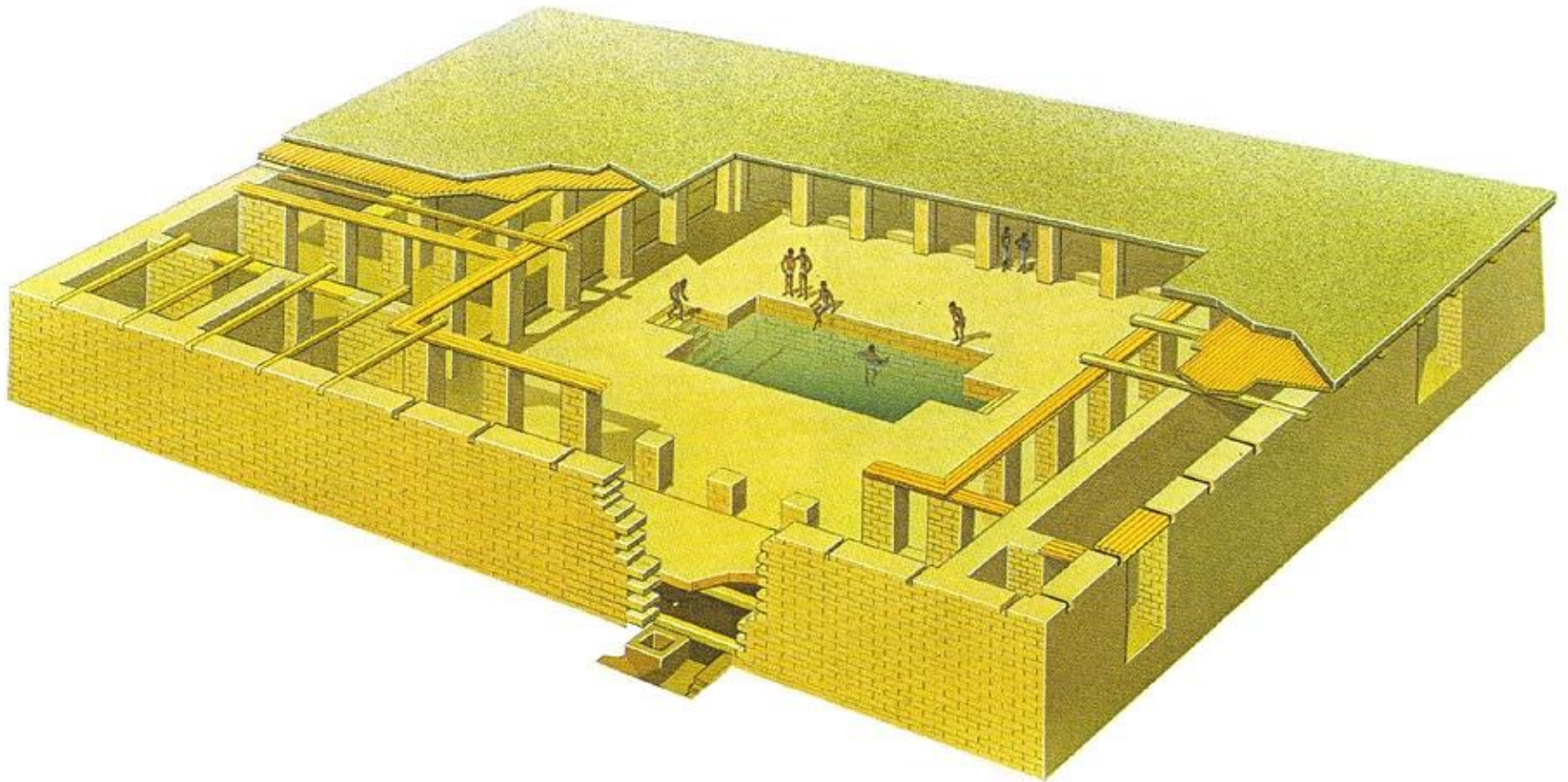
The Great Bath

- It is perhaps the most remarkable feature of the citadel mound.
- This finely built structure measures 12mx7m and 3m deep.
- It is approached at either end by flight of steps.
- Water was supplied by a large well in the adjacent room.
- It probably used for some ritual bathing.

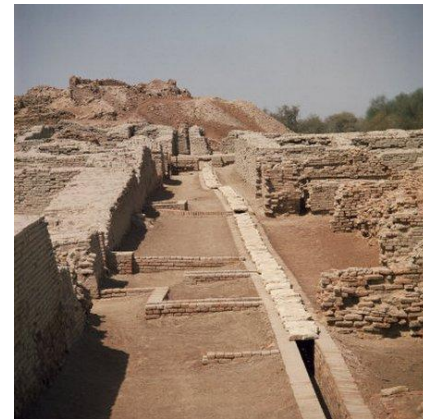
The Great Bath



The Great Bath



Excavated city



City Map

