

Dhiban Excavation and Development Project (DEDP)

ARKY 3400 - Archaeology of Jordan

ARKY 3000 - Analysis of Jordanian Material Culture

ARKY 3300 - Archaeological Field Work: Jordan

Summer Session I/II

June 5 – July 30, 2023

Archaeological Field School

- ▶ Excavation Project Overview
- ▶ Excavation Schedule
- ▶ Application Procedure
- ▶ Course Requirements
- ▶ Costs
- ▶ Student Loans and Funding Possibilities
- ▶ Risks, Safety and Responsibility
- ▶ Website: <http://people.uleth.ca/~bubest>



Dr. Bruce Routledge



Dr. Kevin McGeough



Tell Dhiban, Jordan



Dr. Shawn Bubel



Middle East



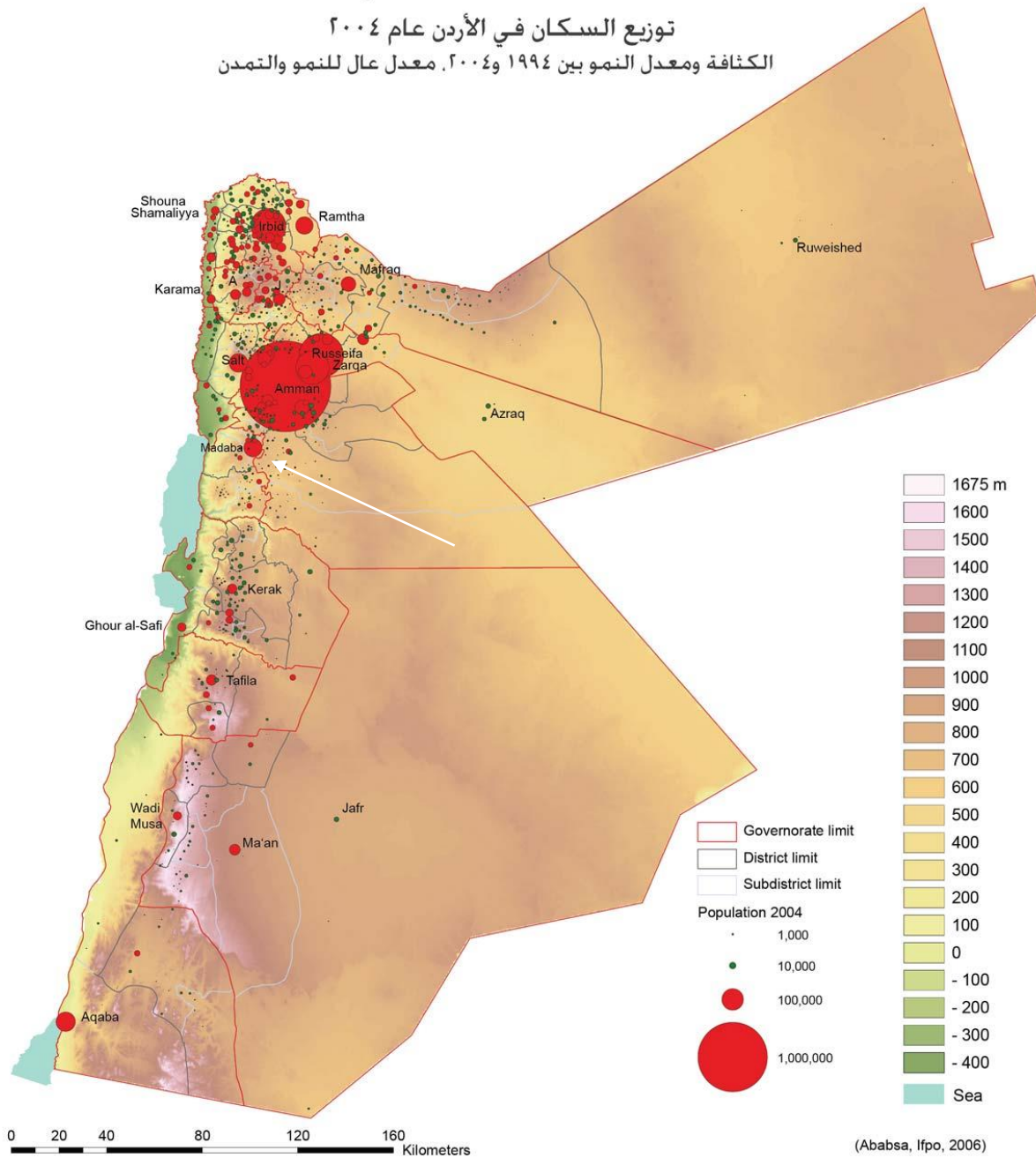
* Israeli-occupied with current status subject to the Israeli-Palestinian Interim Agreement -- permanent status to be determined through further negotiations.
 Israel proclaimed Jerusalem as its capital in 1950, but the US, like nearly all other countries, maintains its Embassy in Tel Aviv.

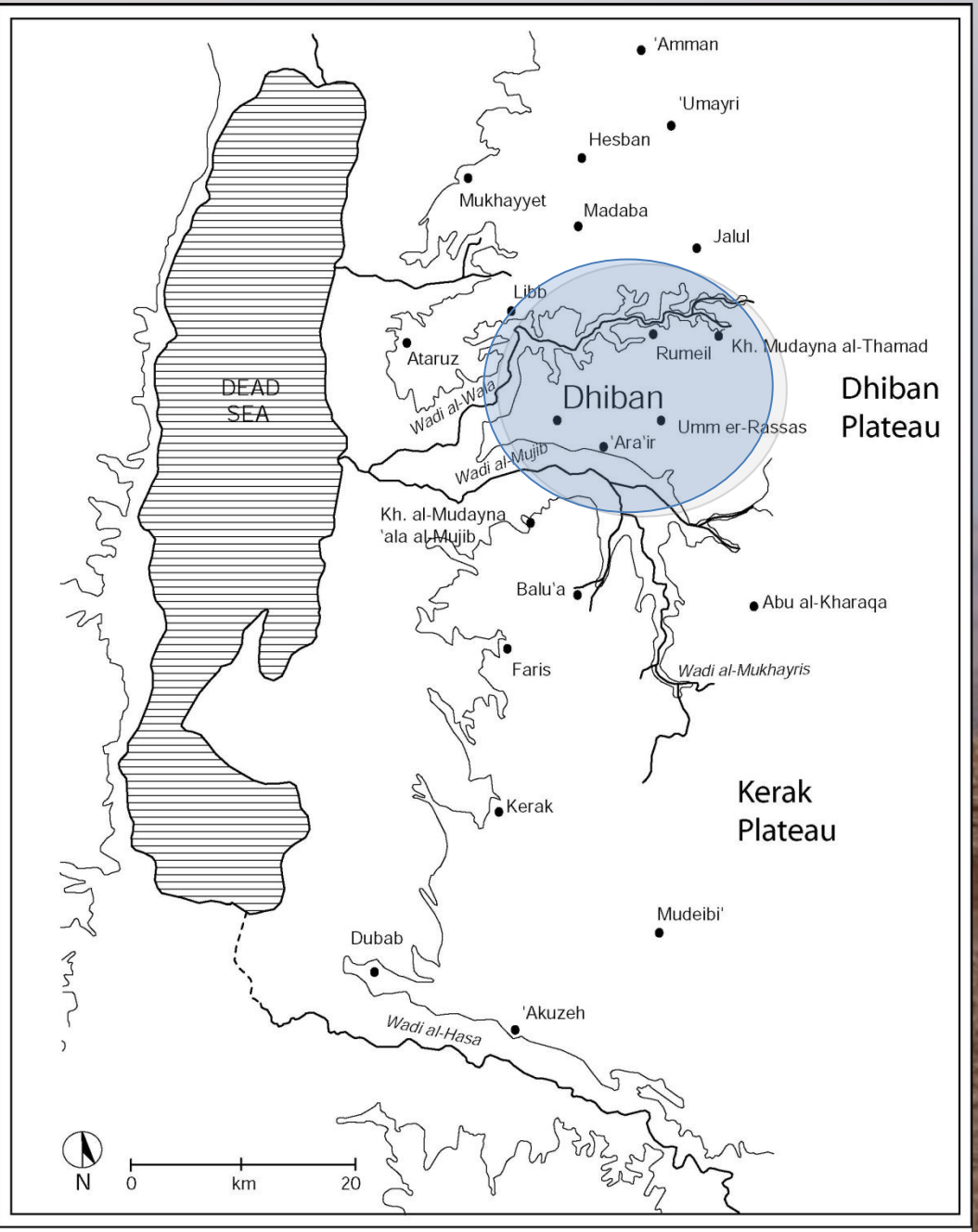
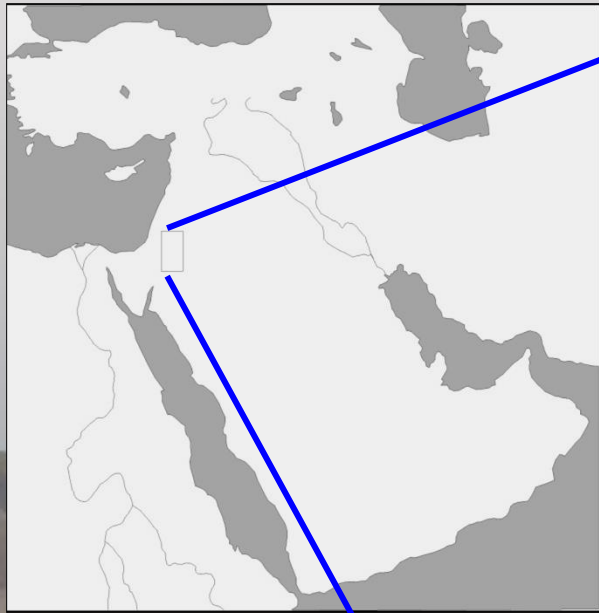
Jordan Population Distribution in 2004

Density and Growth Rate between 1994 - 2004

توزيع السكان في الأردن عام ٢٠٠٤

الكثافة ومعدل النمو بين ١٩٩٤ و٢٠٠٤. معدل عال للنمو والتمدد







Wadi Mujib Lookout - 2 km south of Dhiban

Wadi Mujib



Dhiban, Jordan

- c. 70 km south of Amman
- Town population c. 15,000
- Settled by Bani Hamida Tribe post-1940.
- Primary income sources are agriculture, military, government, and remittance payments.



Tall Dhiban

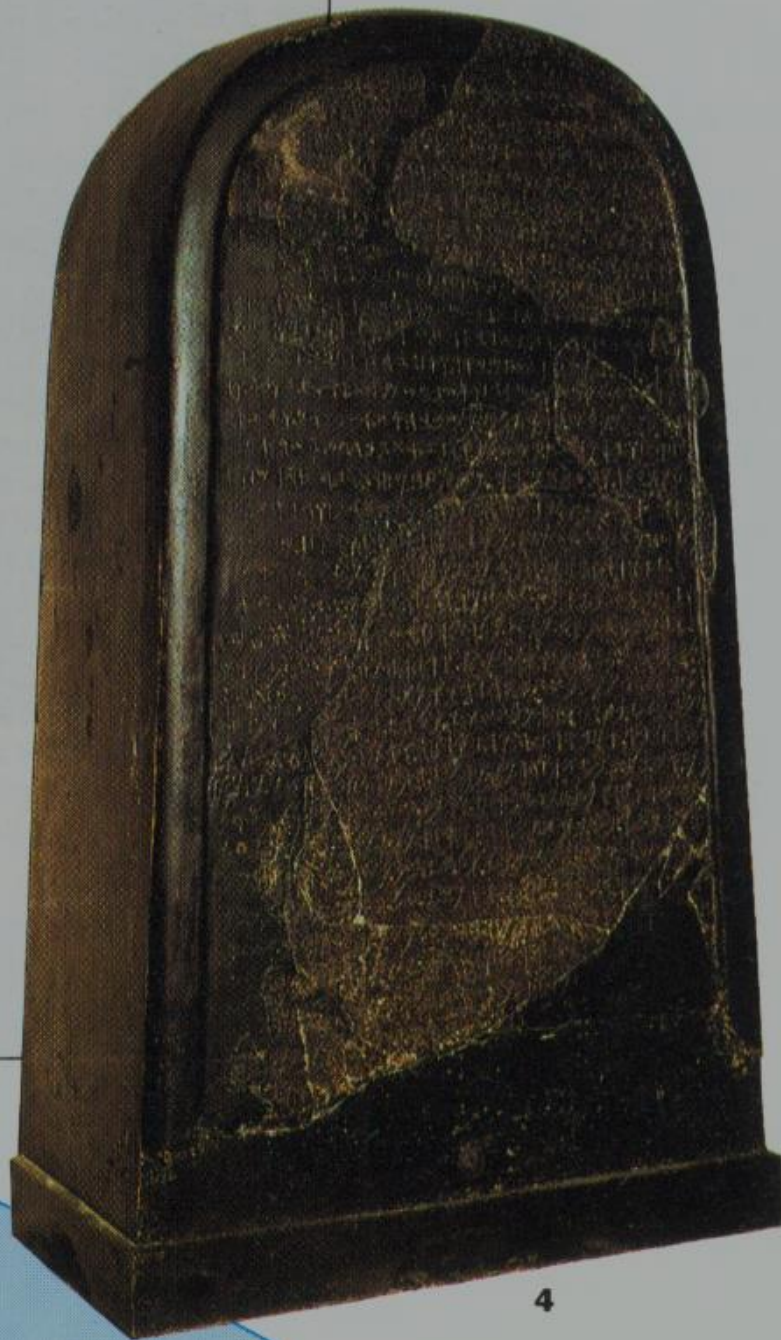
- Artificial mound adjacent to town
- Occupied intermittently from the Third Millennium BCE to the end of the 14th Century CE
- 12.5 hectares - 40 metres high



MESHA!!!!

2 Kings 3:4ff





Mesha Inscription (ca. 840 BC)

*“I am Mesha, King of Moab
the Dibonite...*

*Omri, King of Israel oppressed
Moab many days for Kemosh was
angry with his land”*

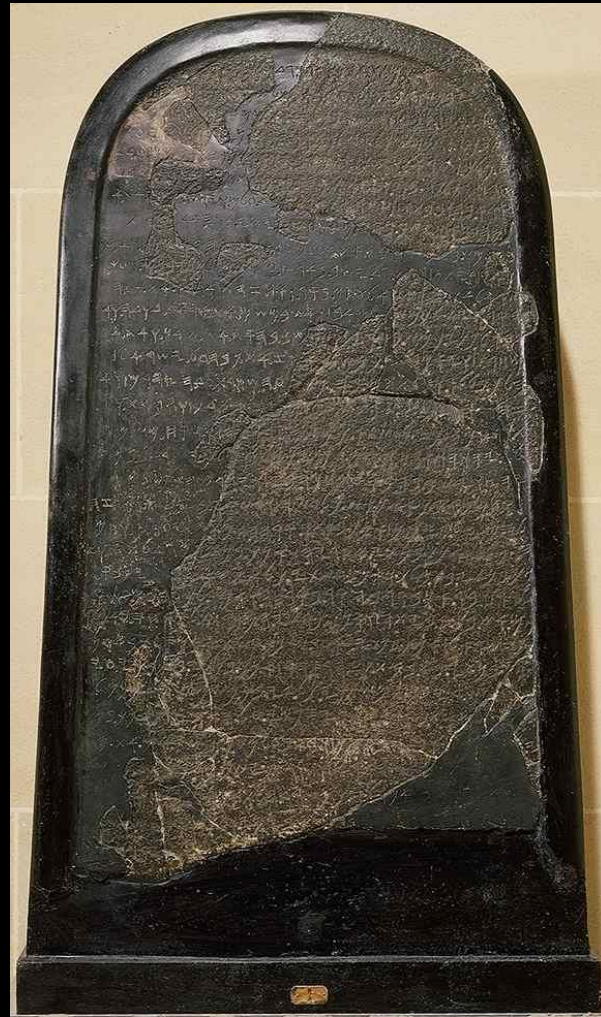
*“Now Mesha of Moab was a sheep
Breeder who used to deliver to the
King of Israel...But when Ahab died
The king of Moab rebelled...”*

2 Kings 3:4-5



Clermont-Ganneau

Mesha Inscription



Warren





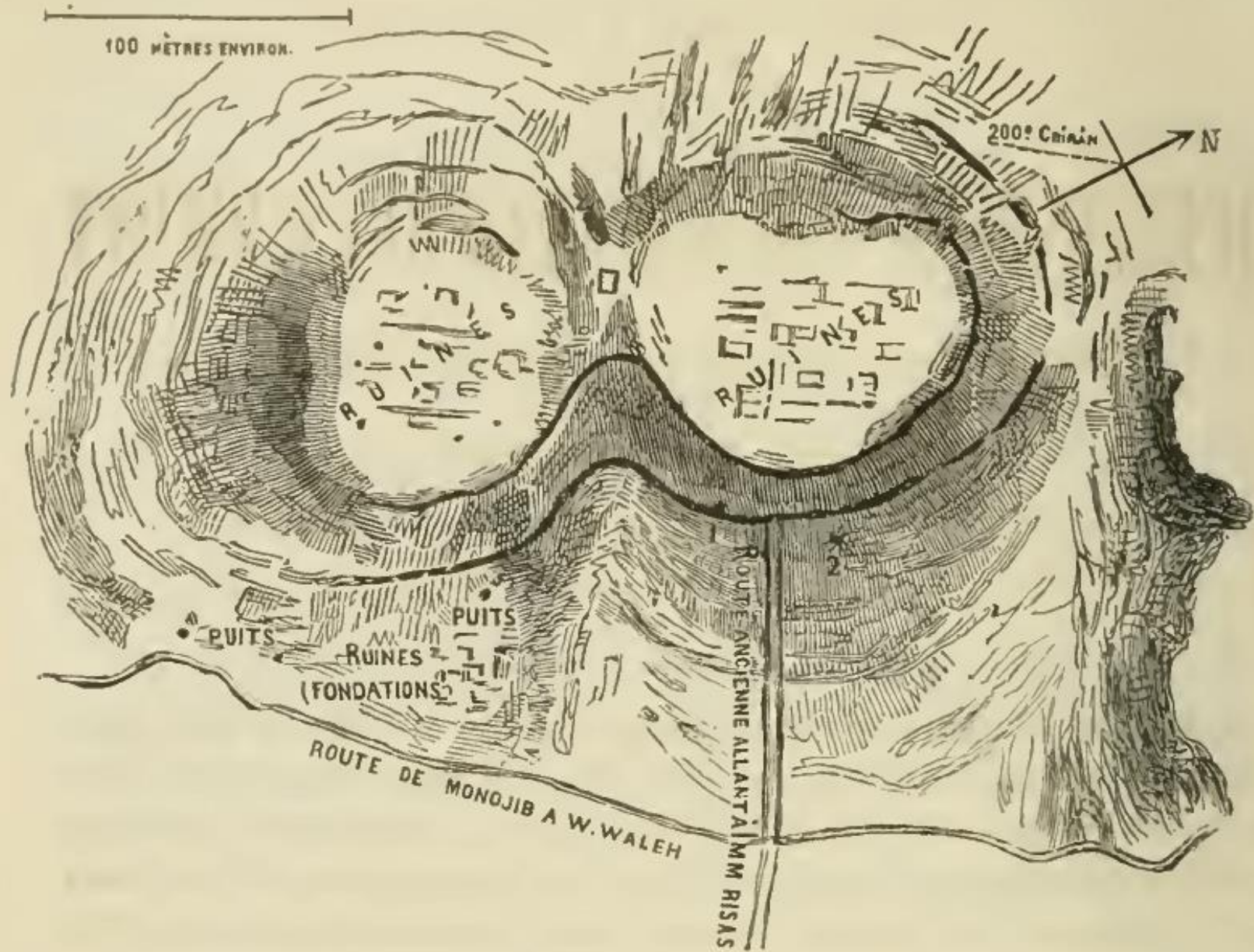
THE JORDAN TIMES

[Home](#) » [Local](#) » Centre planning protest to demand return of Mesha Stele from Louvre

Centre planning protest to demand return of Mesha Stele from Louvre

By Muath Freij - Apr 12,2016 - Last updated at Apr 12,2016

AMMAN — The Mesha Centre for Studies and Human Rights will submit a request this week to the governor of Amman asking for permission to picket the French embassy in Amman to demand the return of the Mesha Stele from France, the centre's president, Daifallah Hdeithat, said Tuesday.

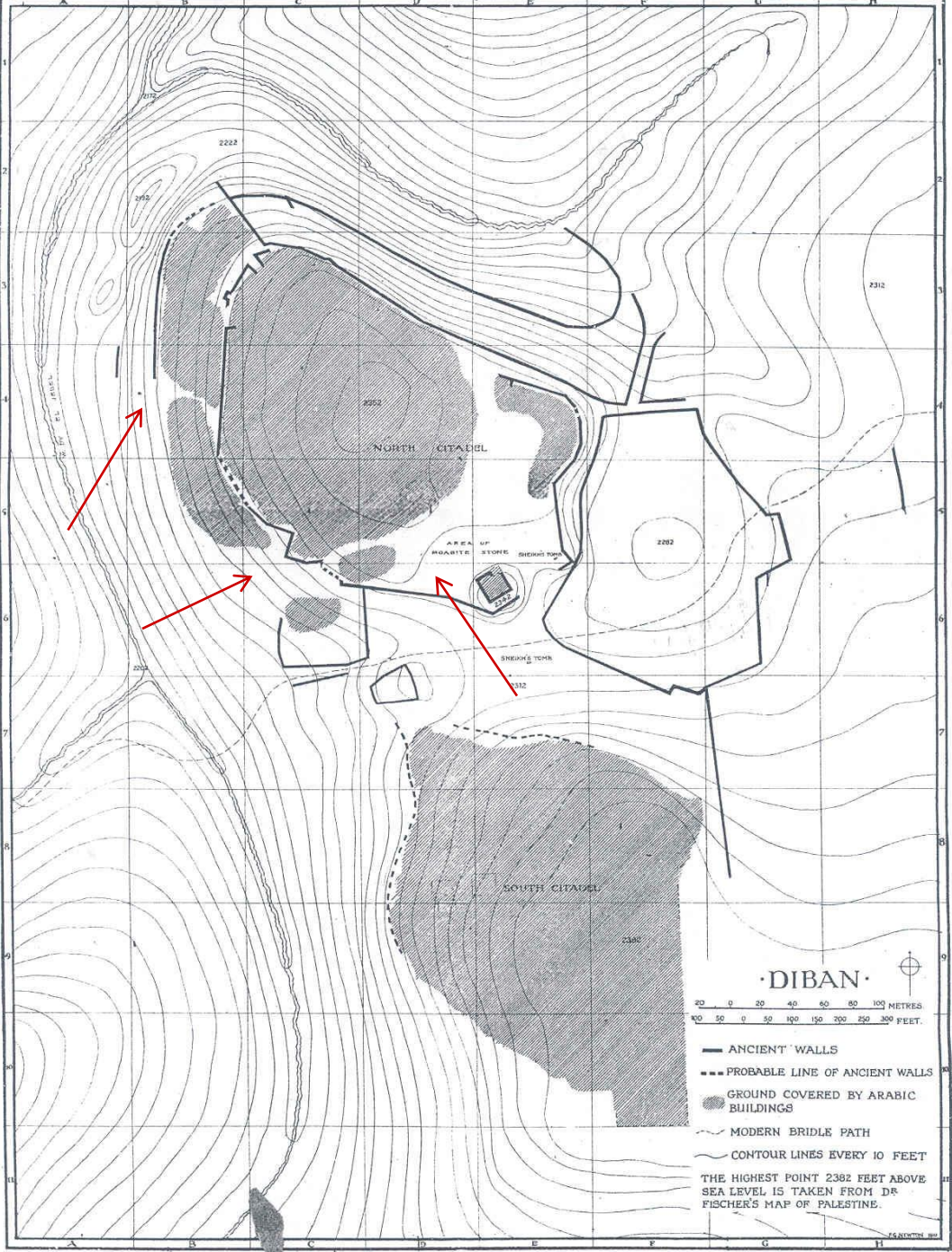


Sketch Map of Dhiban – Clermont-Ganneau 1871



Duncan
Mackenzie

Plan of Dhiban – Palestine Exploration Fund 1910

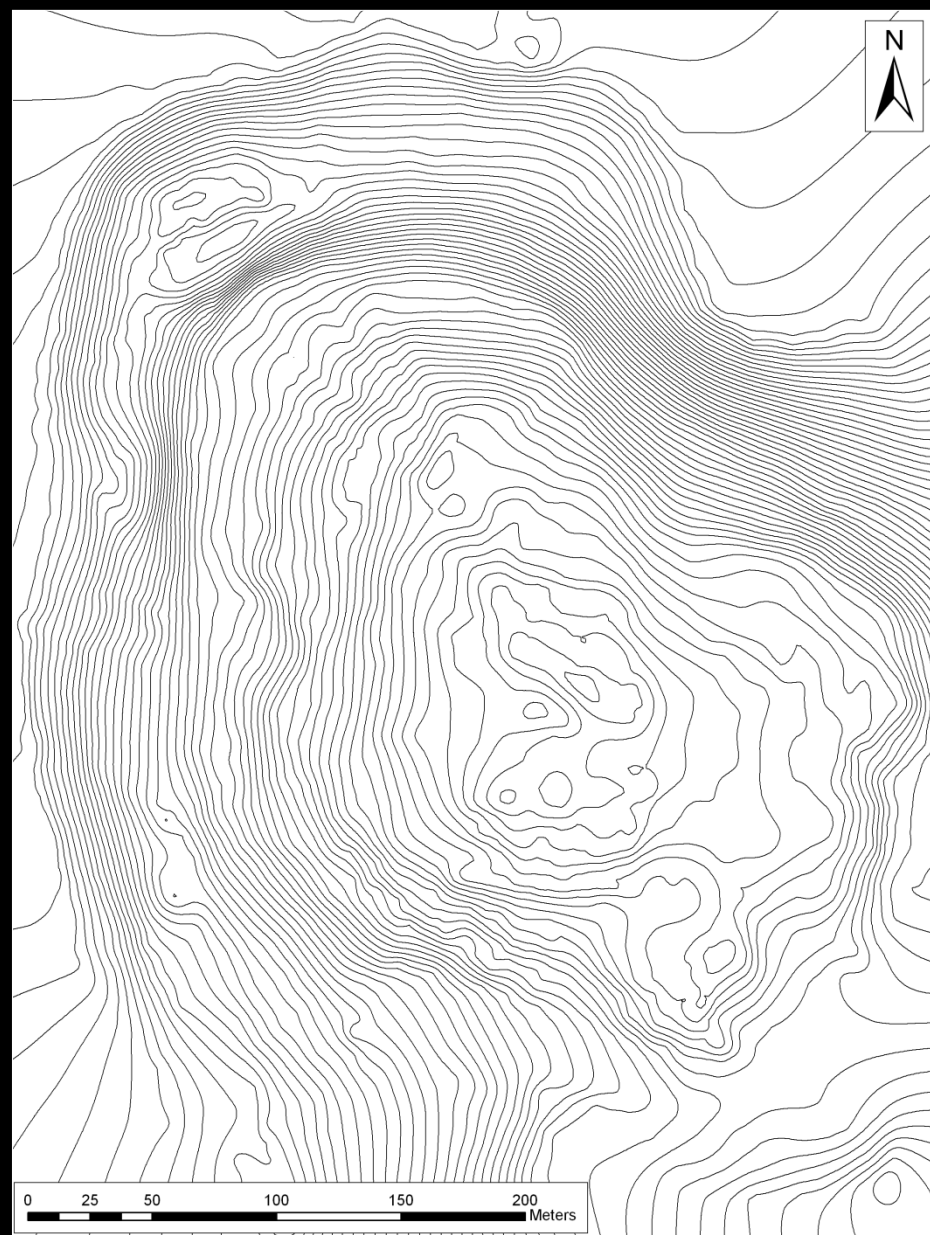


William Morton

ASOR 1951-1953



Tall Dhiban: Topography and Site



Tall Dhiban

'Nabataean Temple'
(2020)

Field S

Field L
(2020)

Field W
Note Karstic
Depression
&
Slope Collapse





Jordan in the Holocene

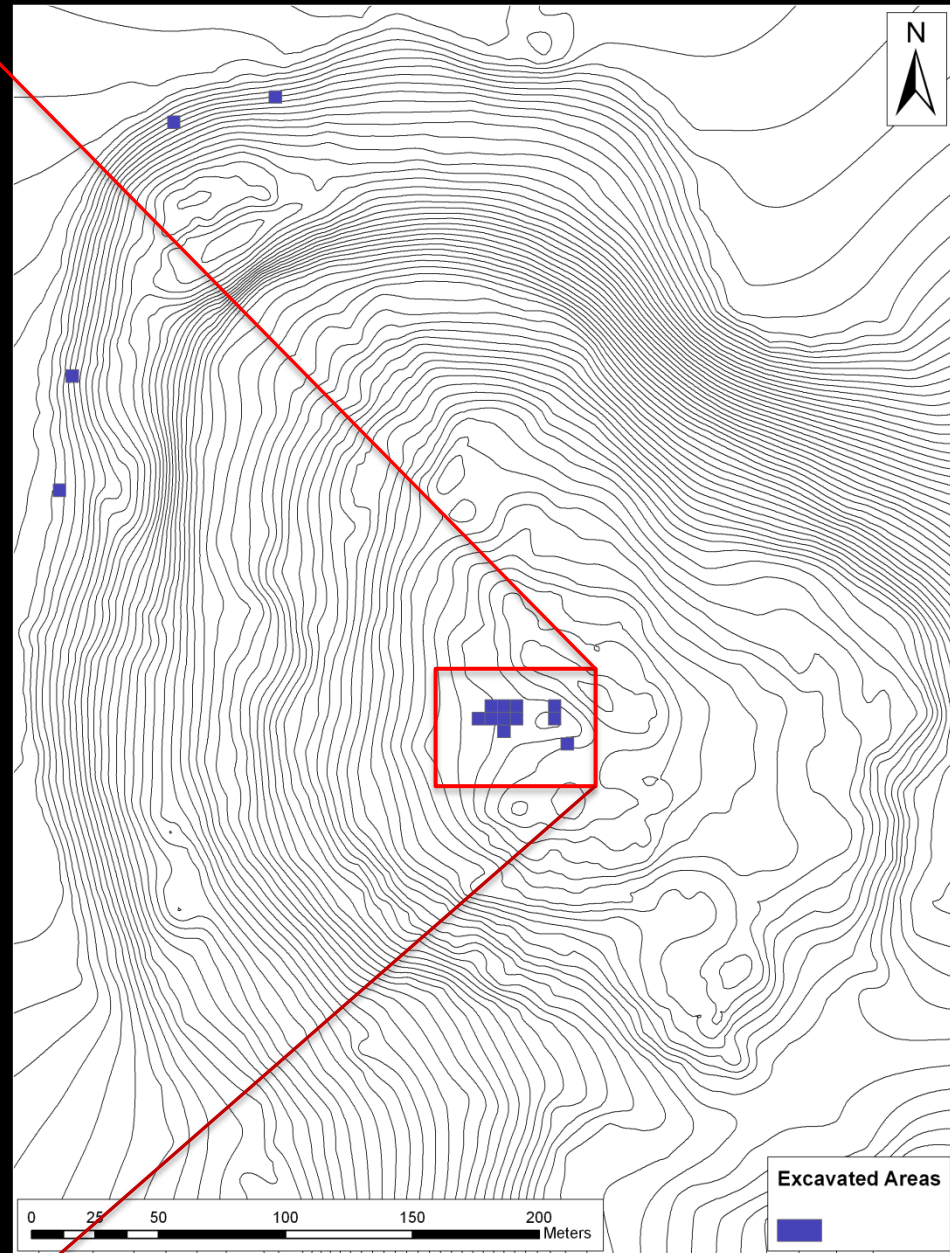
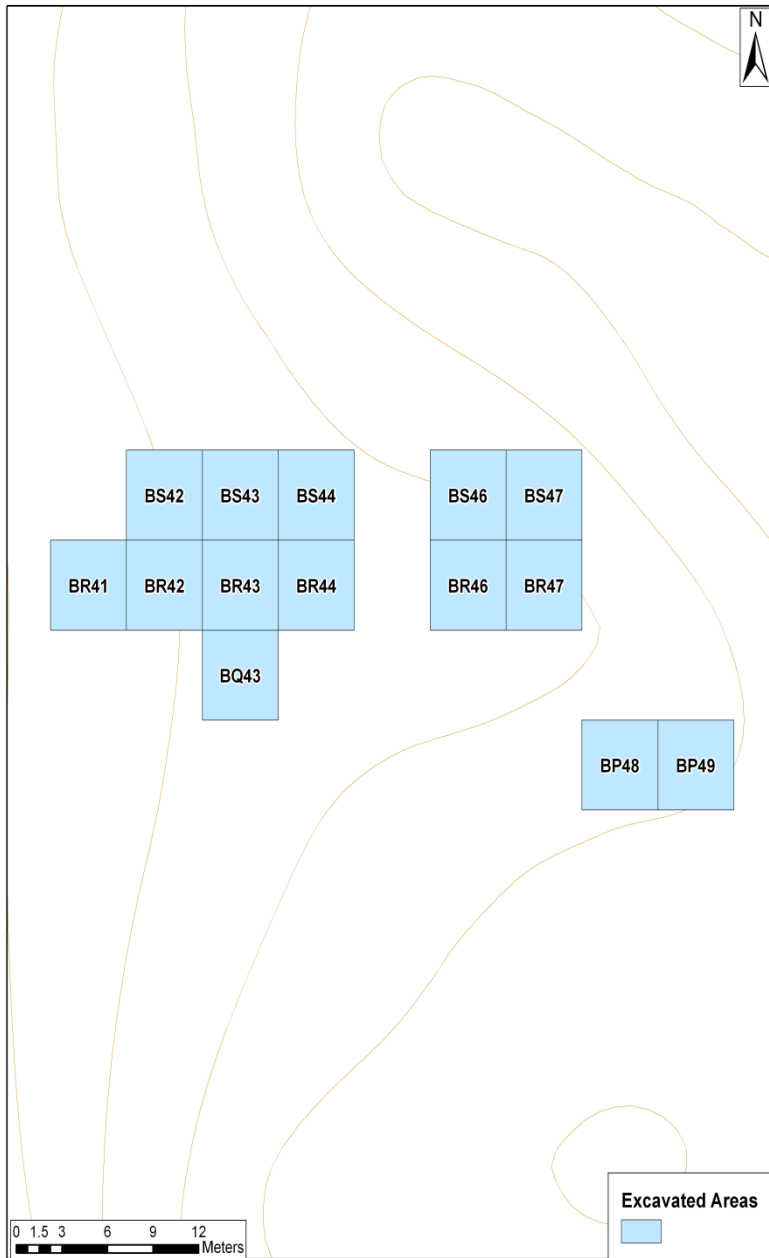
Natufian	(10,500 – 8,500 BCE)
PPNA	(8,500 – 7,600 BCE)
PPNB	(7,600 – 5,500)
Pottery Neolithic	(5,500 – 4,500 BCE)
Chalcolithic	(4500 – 3500 BCE)
Early Bronze Age	(3500 – 2000 BCE)
Middle Bronze	(2000 – 1550 BCE)
Late Bronze	(1500 – 1200 BCE)
Iron	(1200 – 539 BCE)
Persian	(539 – 322 BCE)
Hellenistic	(322 – 63 BCE)
Nabataean	(63 BCE – 106 CE)
Roman	(106 – 400 CE)
Byzantine	(400 – 630 CE)
Early Islamic	(700 – 1000 CE)
Middle Islamic	(1000 – 1450 CE)
Ottoman	(1450 – 1918 CE)
Hashemite	(1923 – present CE)

Tall Dhiban



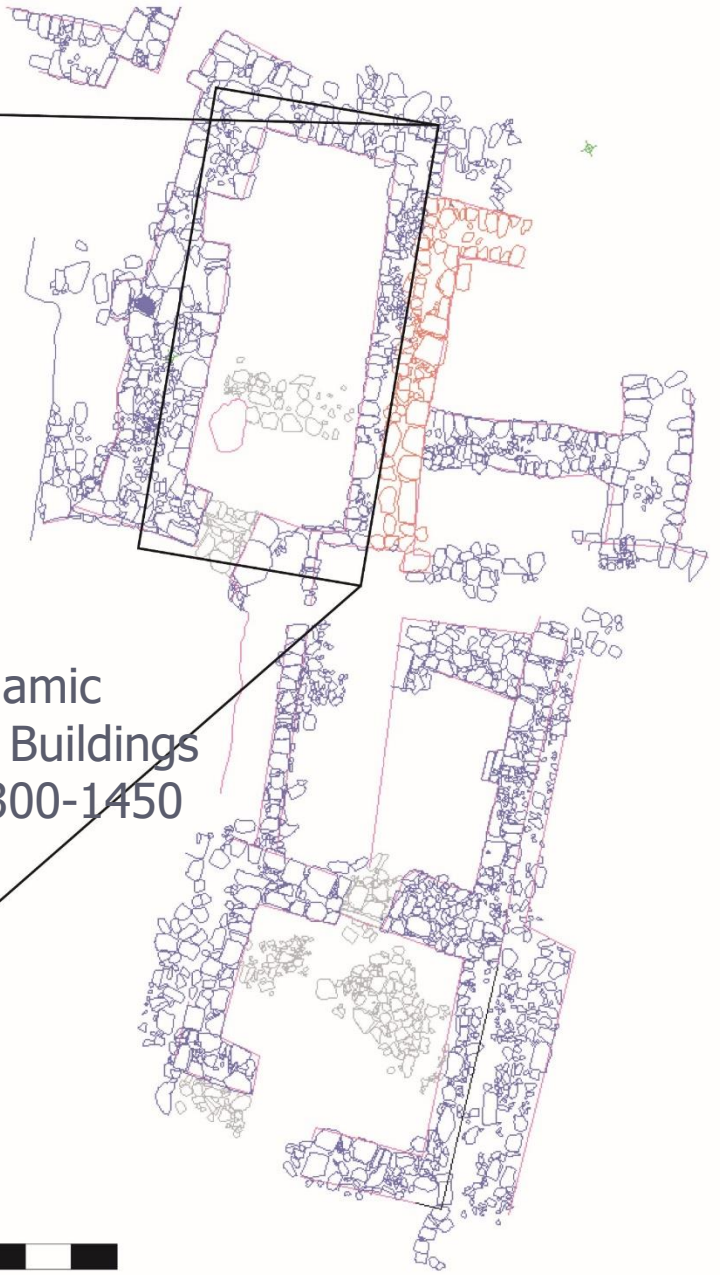
Field L
(2020)







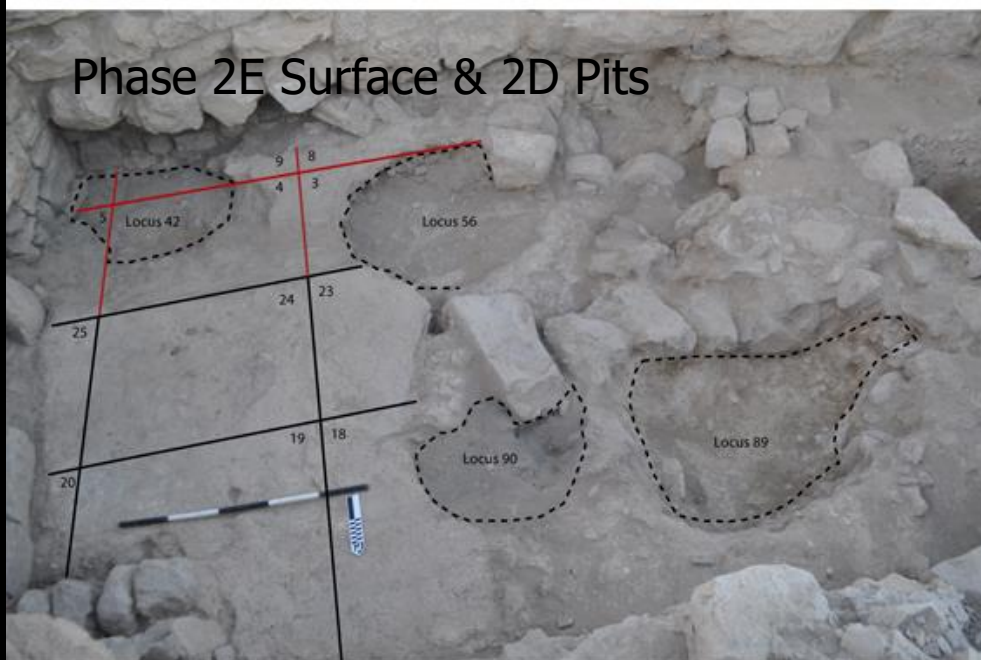
Middle Islamic
Domestic Buildings
c. A.D. 1300-1450





Barrel Vaulted Room

- 3 plastered surfaces with different room uses (2B, 2C & 2E)
- 2σ Radiocarbon range for primary use 14th century cal CE
- 1m+ accumulation <100 years.
- Secondary use of room (2A) 1409-1445 cal CE (2σ)
- Latest date beneath rock collapse 1522-1799 cal CE (2σ) ephemeral campfire.



Middle Islamic
Transverse-arch
House
Dhiban

Early phase no bin

Later phase bin

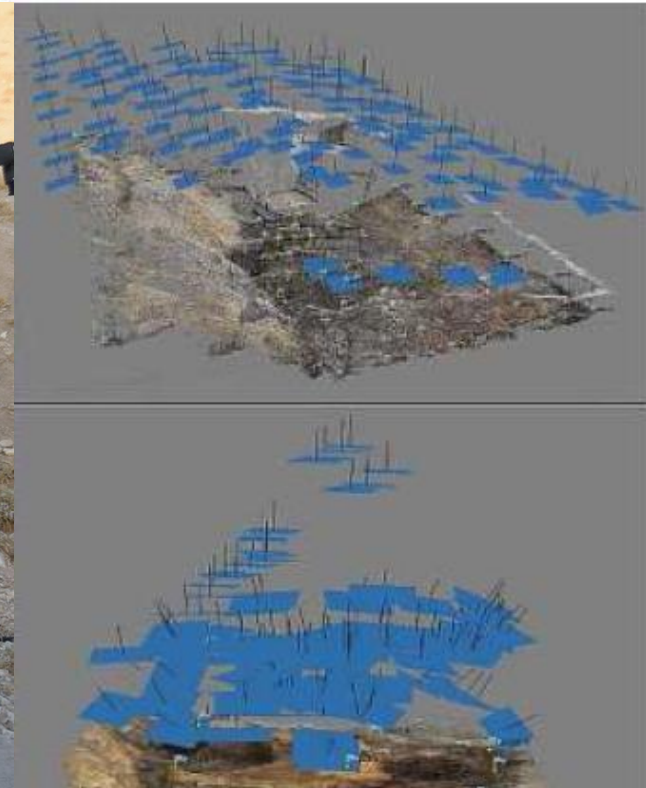
Eroded
edge of
1956 trench

Cistern

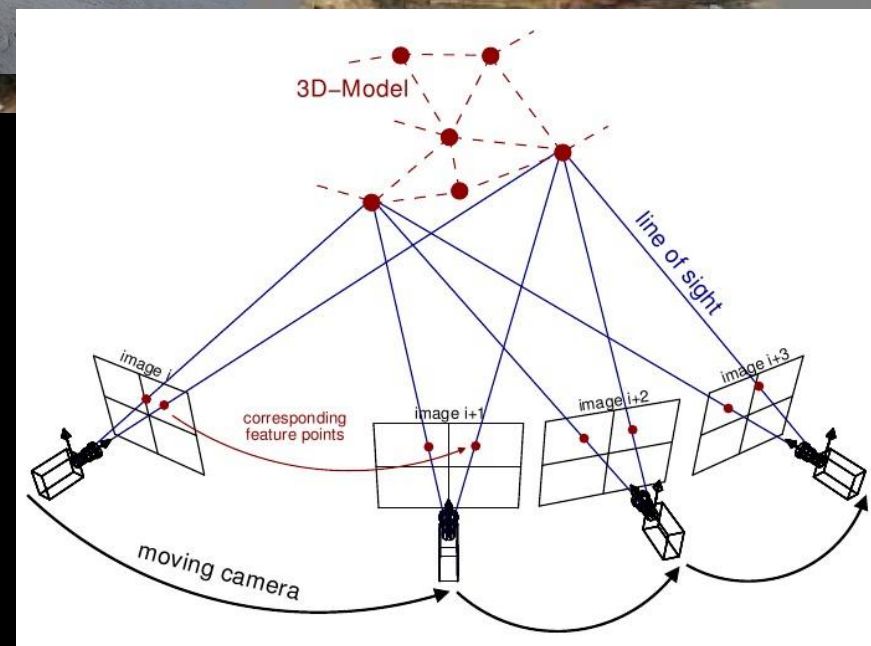
Animal
Burrows

Pit cut post-
abandonment
1440-1490 cal CE
(2 σ)





Structure from Motion Photogrammetry (Common software – Agisoft Metashape)



Perspective 19°



faces: 1,936,375 vertices: 973,685

Building from Tell Dhiban documented using digital photogrammetry, 2019.







Field L "Palace" Early Phase: Modified After Section Cleaning

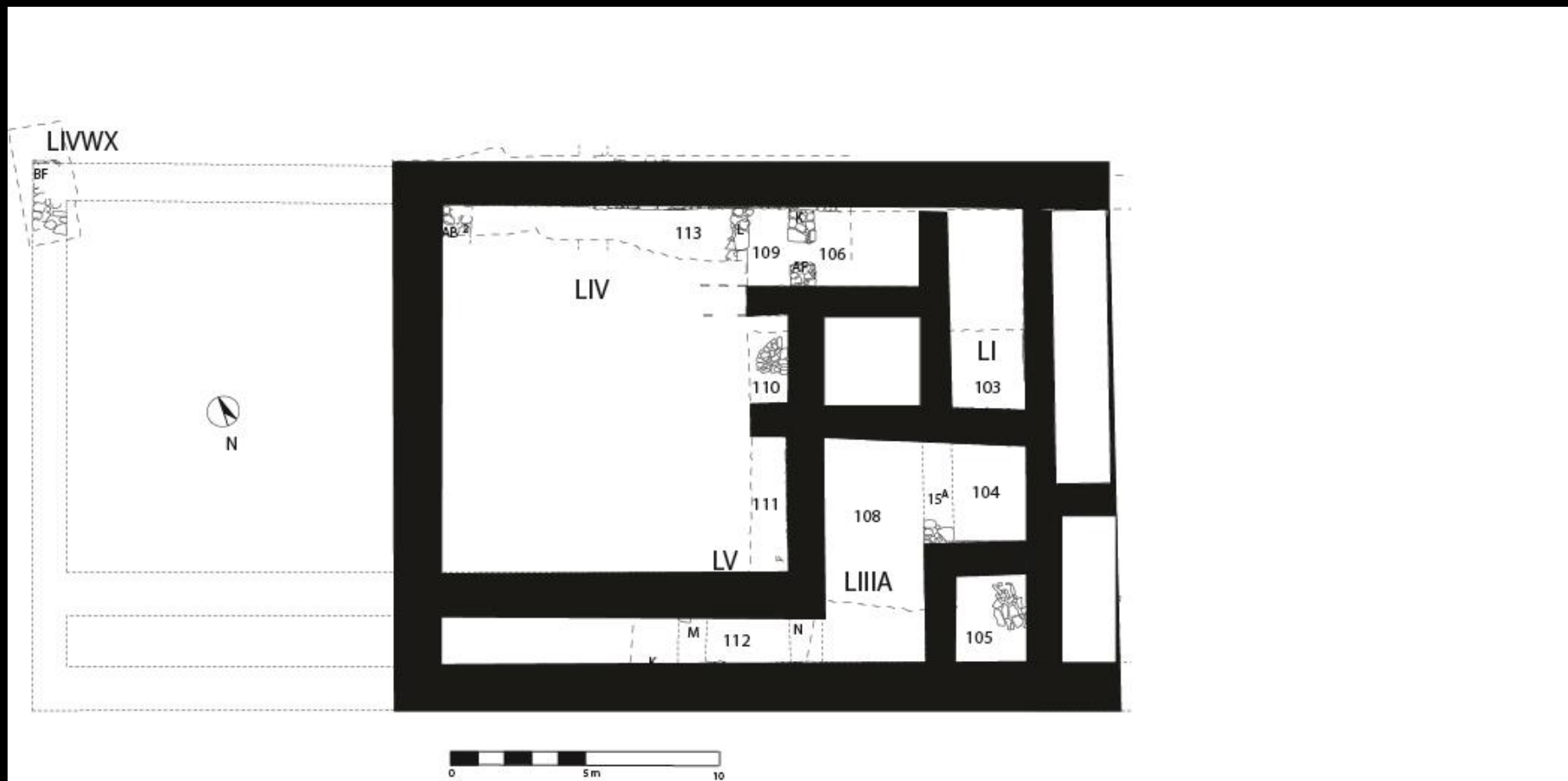
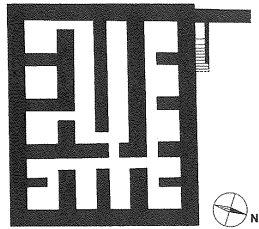
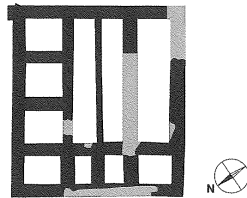


Figure 8.1. Dhiban, Area L "palace 1."

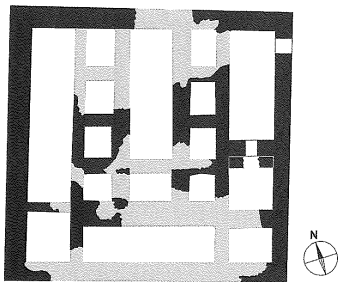
Central Hall Tetra-Partite Buildings



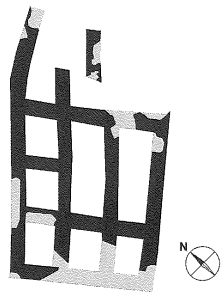
Hazor Str. VIII-V "Citadel"



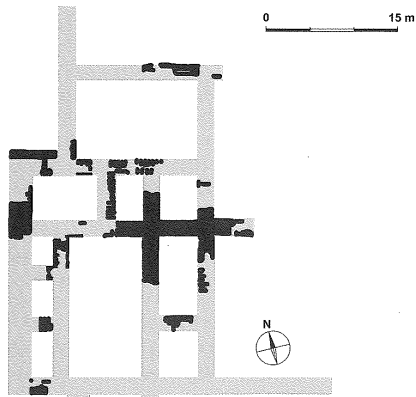
Megiddo Str. VA/IVB "Palace 6000"



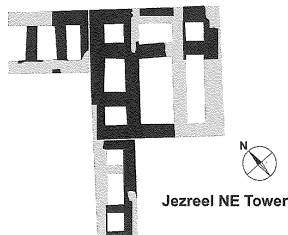
Lachish Str. IV "Palace A"



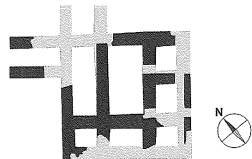
Jericho, Iron Age Building
on the hill overlooking the spring



Samaria Building Period I "Palace of Omri"



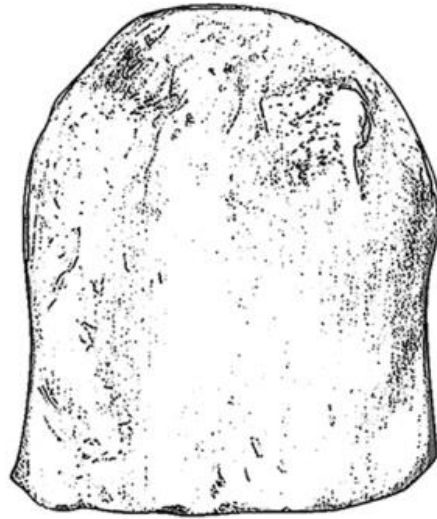
Jezreel NE Tower



Jezreel SE Tower



Tell al-Asawir/ Tel Esur



0 2cm



Figurines from William Morton's Excavation
in Area L, Dhiban 1956



Dhiban



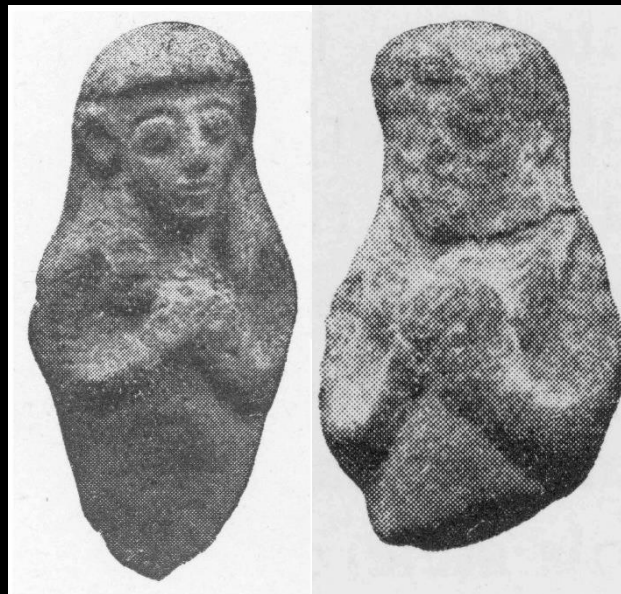
Mudayna
ath-Thamad



Balu'a



al-Mashad



Mudayna
ath-Thamad ?

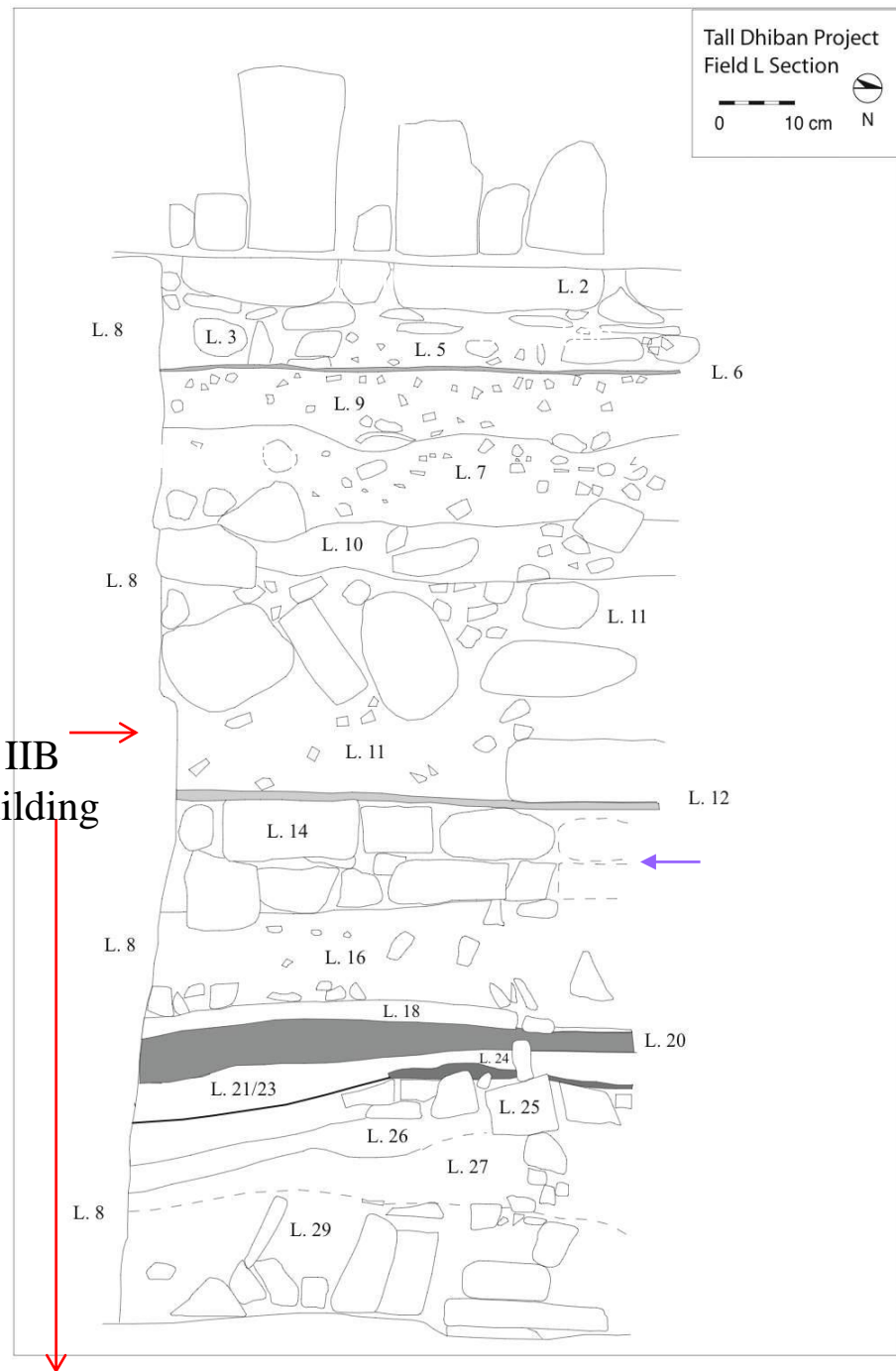


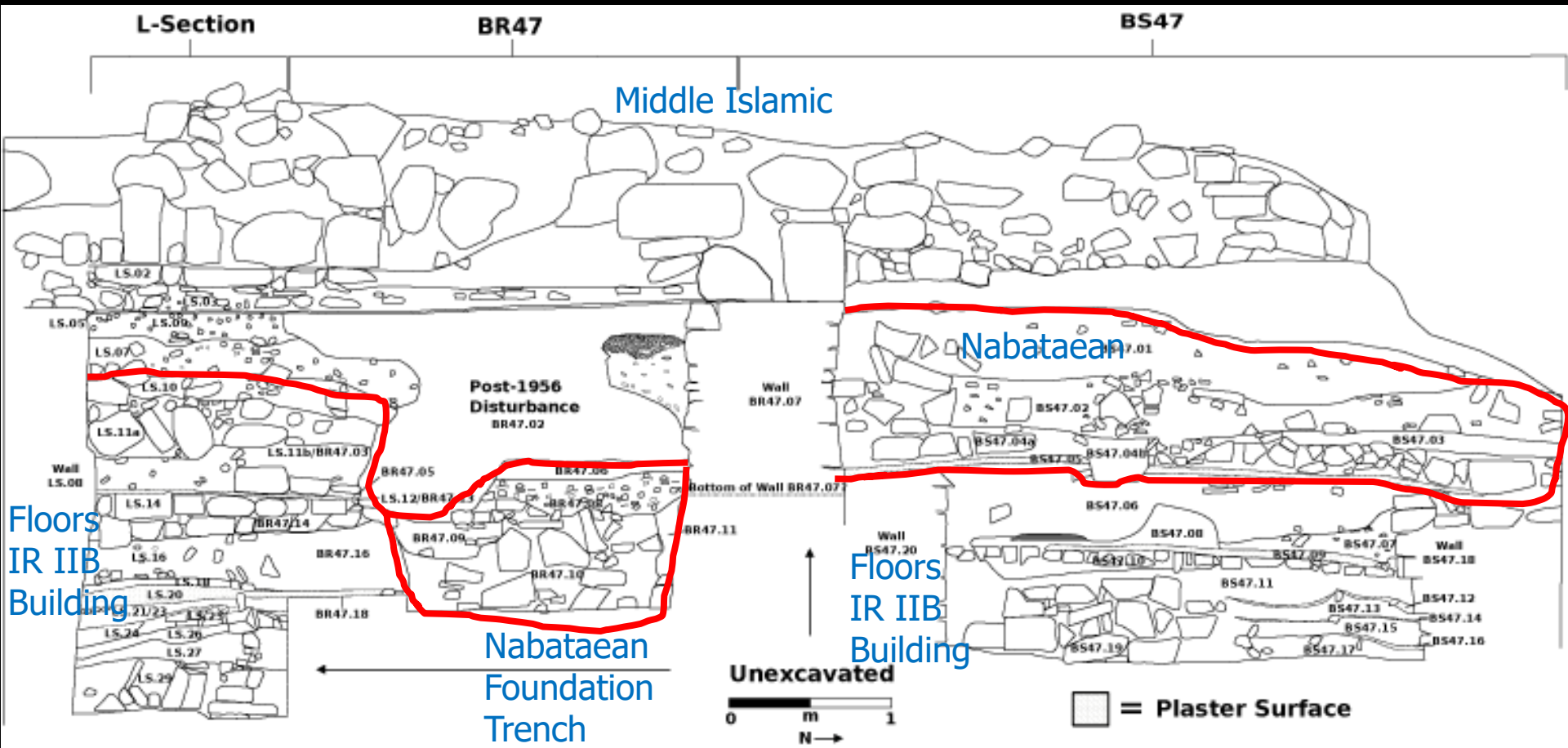
Karak





IR IIB
Building

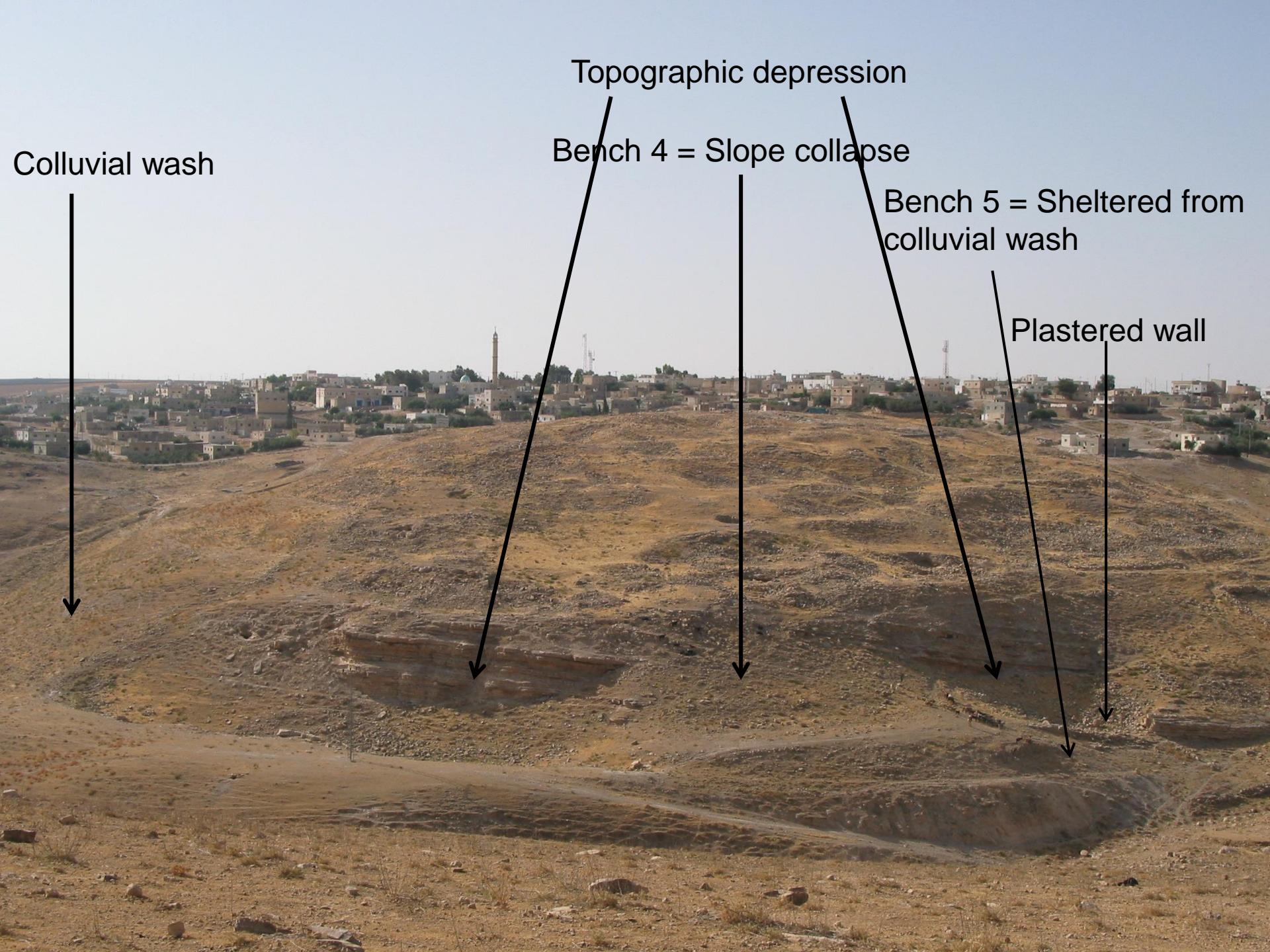




Tall Dhiban



Field W
Note Karstic
Depression
&
Slope Collapse



Topographic depression

Bench 4 = Slope collapse

Bench 5 = Sheltered from colluvial wash

Plastered wall

Colluvial wash



Slope
Collapse



Reservoir Wall



Karstic Depression



Iron Age
Dump



IRON AGE RESERVOIR

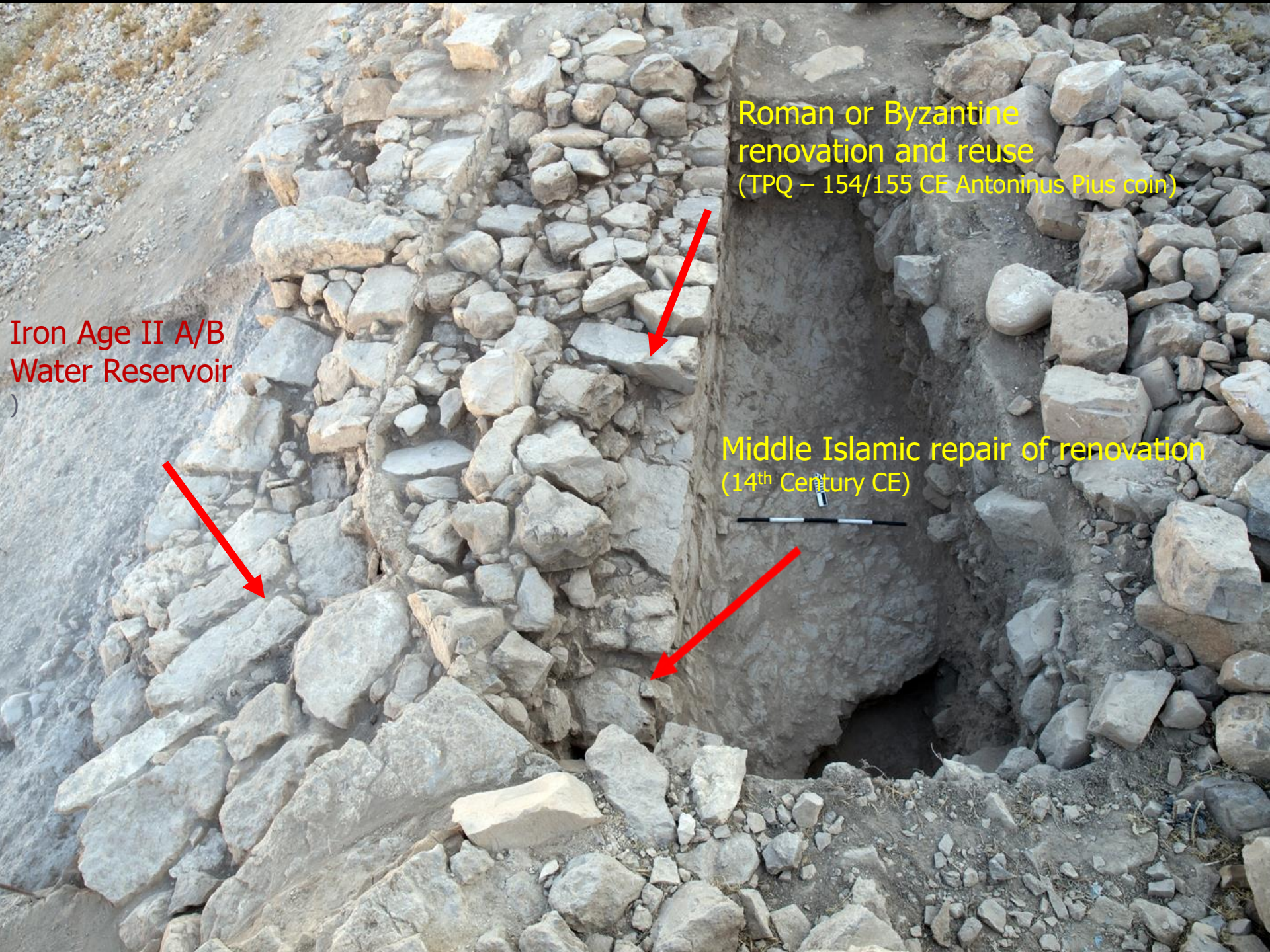




Iron Age II A/B
Water Reservoir

Roman or Byzantine
renovation and reuse
(TPQ – 154/155 CE Antoninus Plus coin)

Middle Islamic repair of renovation
(14th Century CE)





Plastered inner face
of IR reservoir wall





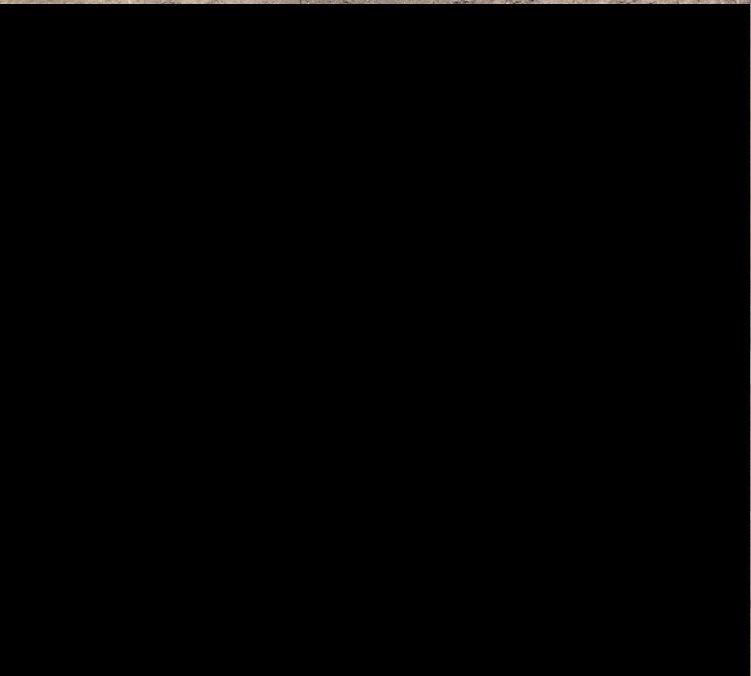
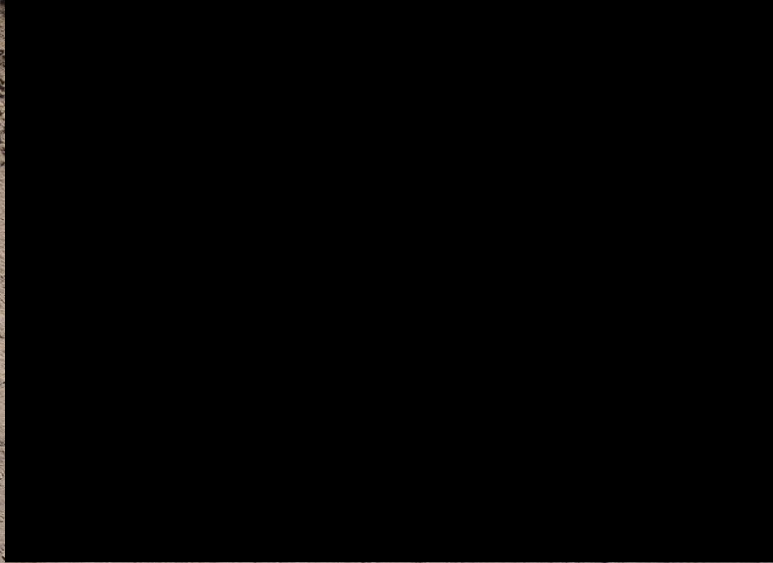
Antonius Pius – Year 18 (154/ 155 CE)/ Alexandria

Late Byzantine terrace wall, fills
& and remodelling

Iron II
Reservoir wall

2 intercutting pits
which are cut into
an earlier
midden.
8th C. BCE +







Tall Dhiban

'Nabataean
Temple'
(2020)

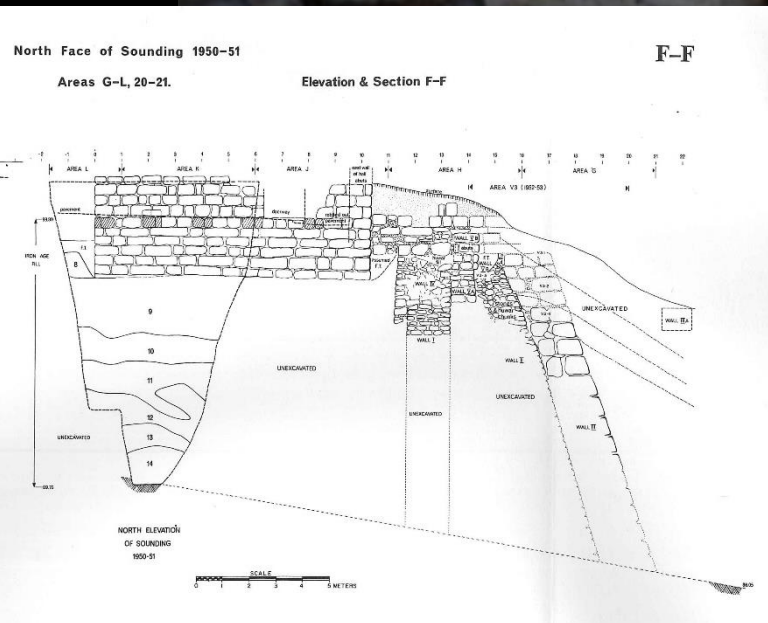




Area B

**Podium
(Nab. Temple)**

Battered Wall



Iron II Battered Wall. East side, Dhiban

Site Preservation and Presentation



Conservation and Cleaning of
Architecture

– Training and Implementation



Site Preservation and Presentation



Backfilling Old Excavation Areas

Site Preservation and Presentation



Sustainable Pathways and Signs









في فناء من الفناء
 في مَسْرَعَةٍ مَرَّكَ
 ذِي ذَنِّ لَافٍ سَمَّ مَلَبَّ حَمَّ مَسْرَعَةٍ
 دَرَسْتُ لَافٍ مَسْرَعَةٍ مَلَبَّ مَسْرَعَةٍ
 لَمَّا مَرَّكَ مَلَبَّ مَسْرَعَةٍ مَلَبَّ مَسْرَعَةٍ
 مَلَبَّ مَسْرَعَةٍ مَلَبَّ مَسْرَعَةٍ
 مَلَبَّ مَسْرَعَةٍ مَلَبَّ مَسْرَعَةٍ
 لَمَّا مَرَّكَ مَلَبَّ مَسْرَعَةٍ

عمان
 تل حسان
ذيبان
 وادي فنان
 الشويك
 البتراء



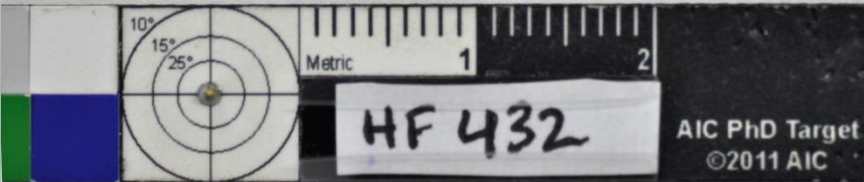
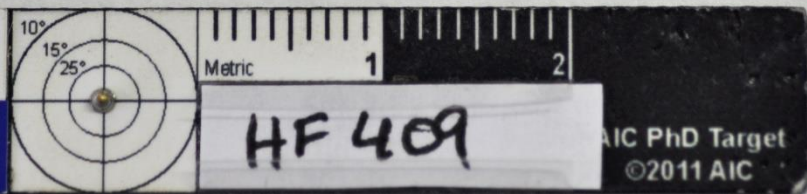
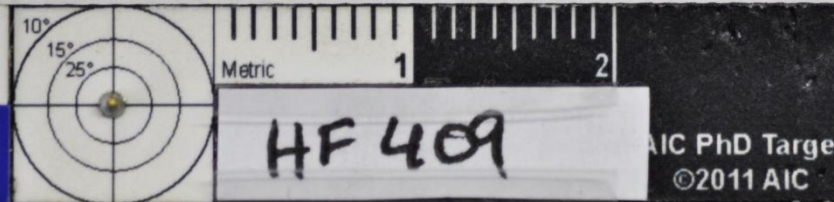
Fig. 1. — **DIBÂN.** Tombe du cheikh Sâlem eben Mişlah.

19th-century sheikh's tomb removed without documentation
by **the CANADIAN** archaeologist Fred Winnett in 1950





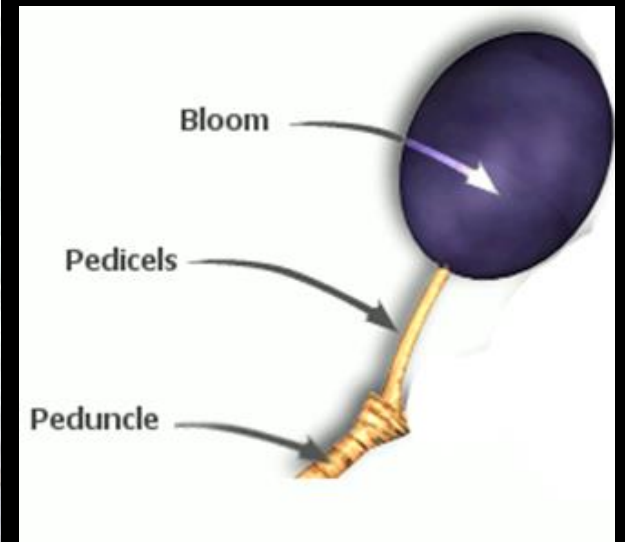




Evidence of Agricultural Production and Practice: Grape Pedicels



(Image taken by Rudi Vanzin 2013)





www.alamy.com - EEM4BA



"As **Guest** you stay,
as **Friend** you leave."

Madaba – Regional urban centre
With touristic infrastructure
32 km north of Dhiban.





Madaba Mosaic



Mount Nebo







متحف
MUSEUM

10-46236



ARKY 3400: Archaeology of Jordan

Online, beginning June 5 until departure for Jordan

- ▶ History and Archaeology of Jordan
 - ▶ Neolithic - Bronze Age
 - ▶ Iron Age Kingdoms
 - ▶ Greco-Roman Era
 - ▶ Nabataean
 - ▶ Byzantine
 - ▶ Islamic Eras
- ▶ Biblical, Assyriological, and Classical Studies Related to Jordan
- ▶ History of the Modern Middle East
- ▶ Islam and Society
- ▶ Very Very Rudimentary Arabic

An Average Day at the Site

June 25 – July 21 / Sunday - Thursday

- ▶ 4:00 Rise and shine
- ▶ 4:45 Leave for the site on our bus
- ▶ 5:20 Arrive at the site, begin the day
- ▶ 9:00 Second breakfast
- ▶ 9:30 Back to work
- ▶ 13:00 Bus back to the Madaba
- ▶ 13:30 Lunch
- ▶ 14:00 Break
- ▶ 16:00 Pottery washing and lab work
- ▶ 18:00 Evening Lecture
- ▶ 19:00 Dinner

Excavating in the Near East at a Tel/Tall Site



Base Camp

Excavating in the Near East at a Tel/Tall Site



Excavating using a 5 x 5 Wheeler Box method.

Excavating in the Near East at a Tel/Tall Site



Excavating using the larger tools.

Excavating in the Near East at a Tel/Tall Site



Excavating using smaller tools for 'detailed' work.

Excavating in the Near East at a Tel/Tall Site



Excavating – sometimes we need a jackhammer.

Excavating in the Near East at a Tel/Tall Site



Excavating – sometimes we move rocks whole.

Excavating in the Near East at a Tel/Tall Site



Excavating – screening the excavated sediment.

Excavating in the Near East at a Tel/Tall Site



Excavating – moving a lot of sediment.

Excavating in the Near East at a Tel/Tall Site



Excavating – preparing for photographs.

Excavating in the Near East at a Tel/Tall Site



Excavating – drawing stratigraphic profiles.

Excavating in the Near East at a Tel/Tall Site



Excavating – drawing stratigraphic profiles.

Excavating in the Near East at a Tel/Tall Site



Excavating – drawing stratigraphic profiles.

Excavating in the Near East at a Tel/Tall Site

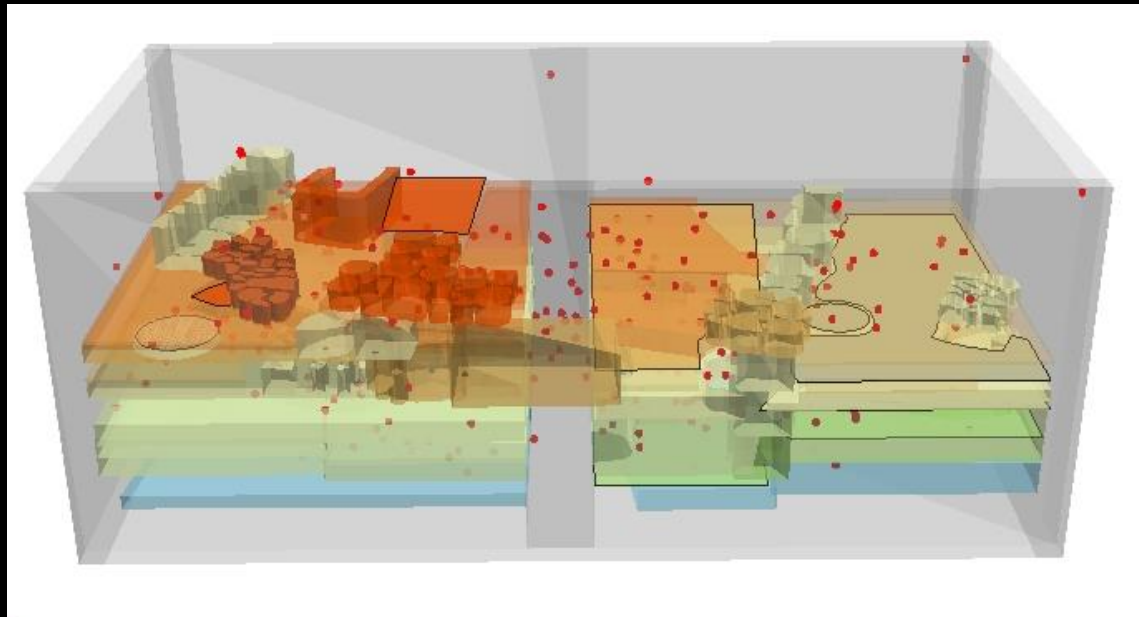


Excavating – Recording the excavations.

Excavating in the Near East at a Tel/Tall Site



Measuring the exact location of the archaeological remains with a Total Station.



Excavating in the Near East at a Tel Site



Excavating – Teamwork!

Excavating in the Near East at a Tel/Tall Site



Excavating – Teamwork.

Excavating in the Near East at a Tel/Tall Site



Excavating – Teamwork.

Excavating in the Near East at a Tel/Tall Site



Excavating – Teamwork.

Excavating in the Near East at a Tel/Tall Site



Excavating – Teamwork.

Excavating in the Near East at a Tel/Tall Site



Excavating – Getting Dirty!

Excavating in the Near East at a Tel/Tall Site



Second Breakfast – Finally!

Afternoon Laboratory Work



Pottery Washing

Afternoon Laboratory Work



Pottery Reading

Afternoon Laboratory Work



Pottery Marking

Afternoon Laboratory Work



Artifact Cataloguing, Faunal Analysis, and More.

Afternoon Laboratory Work



Artifact Cataloguing, Faunal Analysis, and More.

Camp Life



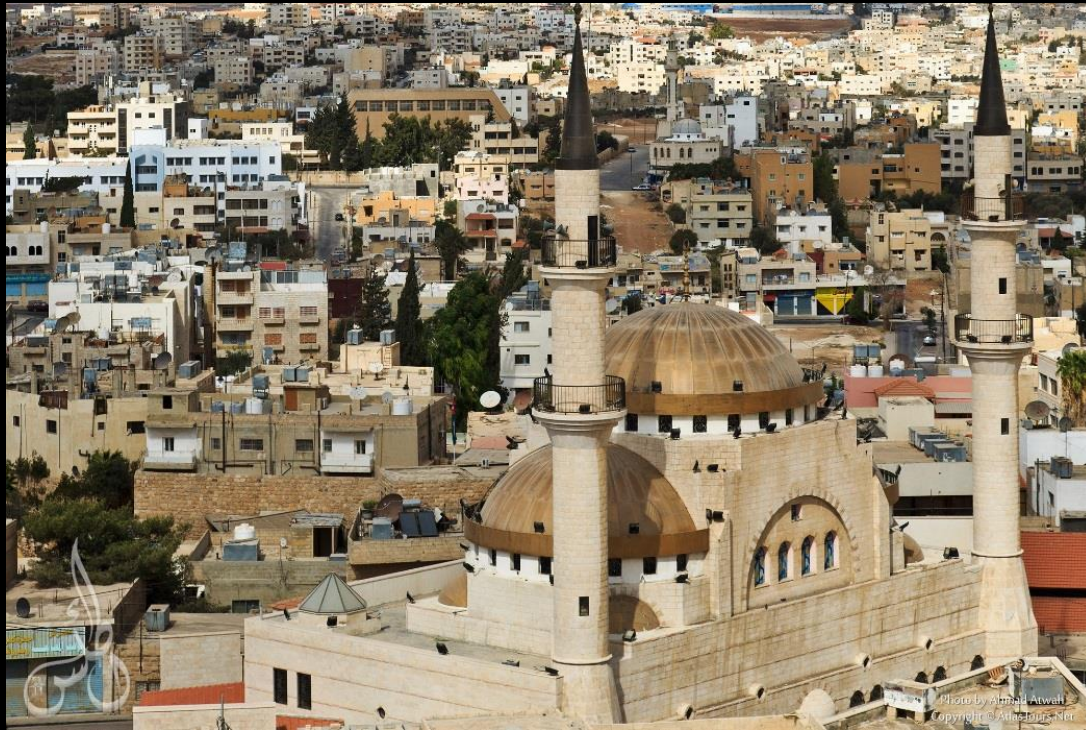
Camp Life



Camp Life



Weekend Field Trips



Madaba, Jordan



Madaba Map

Weekend Field Trips



Mosaic at Mt Nebo

Weekend Field Trips



06.14.2008

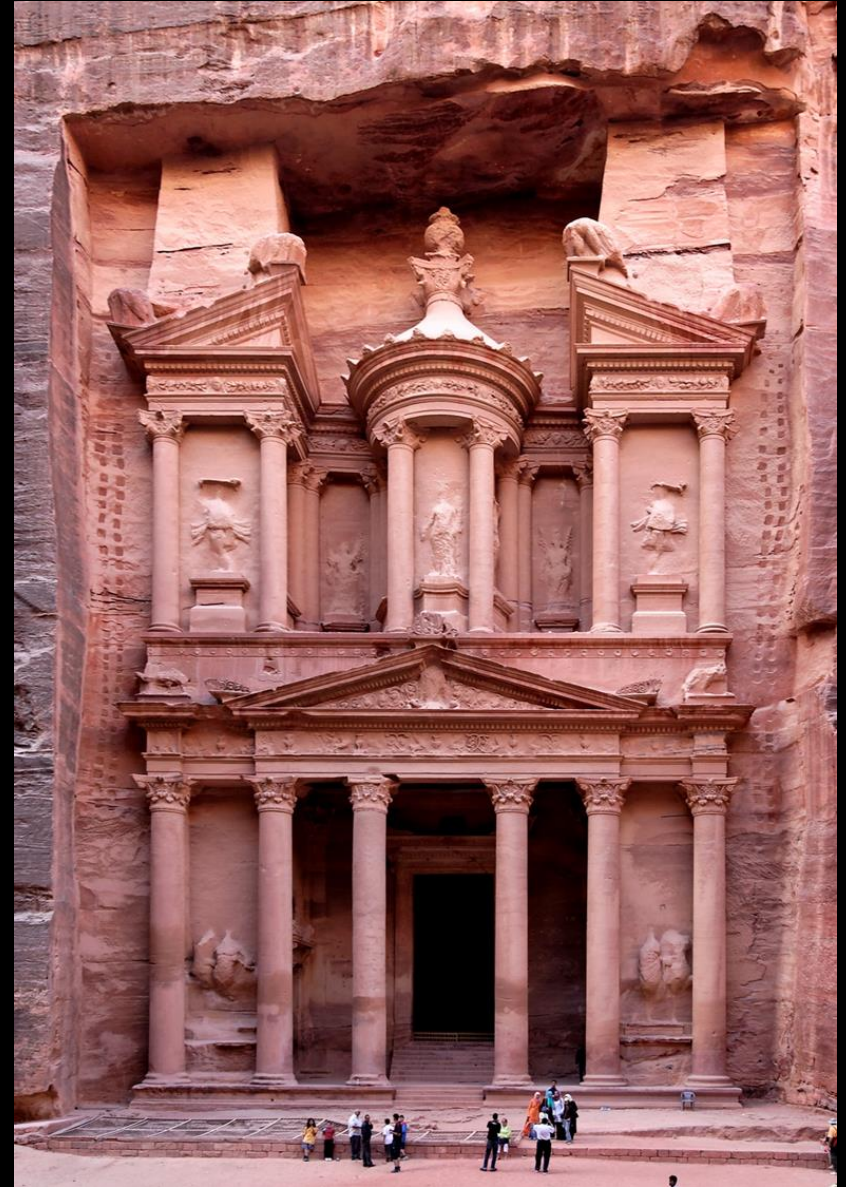
The Dead Sea

Weekend Field Trips



Jerash

Weekend Field Trips



Petra

Weekend Field Trips



Wadi Dana

Weekend Field Trips



Weekend Field Trips



“Desert Castles” – Umayyad 7th-8th Centuries CE (Qasr Kharana)

Israel Field Trip



Jerusalem

Israel Field Trip



Jerusalem

Application Procedure

- ▶ Those interested in the field school must fill out an application and provide the following by Feb. 28:
 - General application form (to be downloaded from Dr. Bubel's web site at: <http://people.uleth.ca/~bubest/>)
 - Medical form (included with the application form)
 - Essay on why you wish to participate in the project
 - Transcripts
 - Letter of reference (form is included with the app. form)
 - \$200 Application Fee (to be deducted from the course fee)
- ▶ The team will be selected by March 10, 2023.

Course Requirements

- ▶ ARKY 1000 (and preferably a 3000-level ARKY course)
- ▶ Registration
 - Only those accepted to the field school will be able to register for ARKY 3400, 3000, and 3300
 - Students will fill out course forms to register for the field school
- ▶ Grade assessments for the courses are based on the quality of your field work, notebooks, assignments and examinations
- ▶ Hard work and teamwork

Costs (Estimated)

▶ Tuition

- Three courses (Arky 3000, 3300, & 3400) = \$2213 CAN

▶ Airfare

- Calgary/Tel Aviv/Calgary = +/- \$1850 CAN

▶ Room and Board

- Apartment and Meals in Madaba = +/- \$2650 CAN

▶ Weekend Field trips

- Within Jordan = +/- \$600 CAN

▶ After trip to Israel

- Jerusalem and area = +/- \$750 CAN

▶ Spending Money

- +/- \$300

▶ Total Estimated Costs = +/- \$5850 (plus \$2213 tuition and spending money)

Student Loans and Funding

▶ Student Loans

- Alberta student loans: Students can apply for student loans for the tuition for the field school courses (3 courses over 8 weeks).
- A portion of your airfare, field trip fees, living costs and supplies can also be covered by Alberta student loans.
- Please visit the Student Finance office for help with your application forms.
 - ▶ Ask for Janet Macdonald

▶ Global Skills Opportunity (GSO) Travel Award - \$1500-2000

▶ Other Scholarships (individuals to apply for)

▶ Other Sources of Funding

- Fundraising – start asap

Risks, Safety, and Responsibility

▶ Excavation risks

- Hot and dry
- Scorpions, spiders, snakes
- Large stones and baulks
- Sharp equipment
- Steep slopes
- General risks

▶ International travel risks

- General travel
- Unrest in Jordan

▶ Students are responsible for their own personal safety

▶ Students must conduct themselves accordingly and respect the local laws and customs of Jordan

▶ Students must complete the Risk and Safety online course.

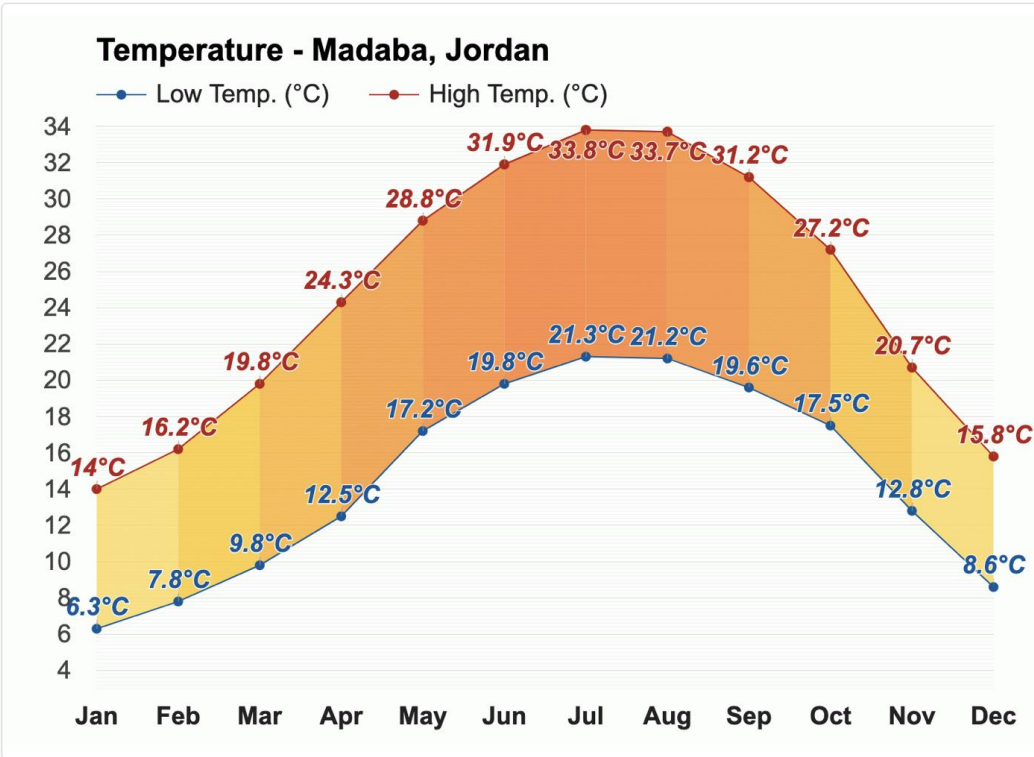
Hazards Living and Excavating in the Near East



'Friends' you meet while excavating.

Temperature and Modesty

Average temperature Madaba, Jordan



Average high temperature in January: 14°C

Average high temperature in February: 16.2°C

Average high temperature in July: 33.8°C

Average high temperature in August: 33.7°C



Start Arranging Now

- ▶ Application Package (Due Feb. 28, 2023)
- ▶ Deposit (\$200)
- ▶ Passport
 - Pick up at the post office
 - New requirements
- ▶ Health Insurance (Blue Cross)
- ▶ Student Loan Application
- ▶ After dig travel

Fun and Adventure

- ▶ Working at an archaeological site is a lot of work but it is also a lot of fun.
- ▶ You will:
 - Learn how to excavate, survey and process the archaeological remains
 - Discover the past
 - Work outside and be active
 - Work as part of a team
 - Explore another country
 - Experience another culture

It is an experience you will never forget!



Friends for Life!

2019 Field School Students



2023 Field School Team???