

D. Excavating Gird-i Bazar: the 2016 season

F. Janoscha Kreppner, Silvia Amicone, Francesca Chelazzi, Vera Egbers, Zahra Hashemi, Alessio Palmisano & Andrea Squitieri

The 2016 work programme continued directly from the results of the first excavation season at Gird-i Bazar in 2015.

In the eastern part of Gird-i Bazar (Squares 272927, 272928, 271927 and 271928; **Fig. D1**), where the excavation was started in 2015 under the supervision of John MacGinnis, work continued in 2016 (**Fig. D2**) under the supervision of Alessio Palmisano (Squares 272927, 272928 and 271927) and of F. Janoscha Kreppner and Andrea Squitieri (Square 271928). In this area, dubbed the “Eastern Trench” in the 2015 excavation report⁴⁹, Building A was identified in 2015 and then thought to be a single-room building. In 2016, the excavation goal was to further investigate this building which turned out to be a large multi-room building: Courtyard 2 and Rooms 1, 3, 23, 24 and 29 have so far been excavated, at least partially. In 2015, also a second building, called Building B, had been identified. The results of the 2016 excavations suggest that Building B is in fact a part of Building A. Additionally, the 2016 excavations unearthed Outdoor Area 26, Alley 25 and a wall belonging to another building towards the east, called Building J (**Fig. D2**). This building lies on the easternmost limit of the excavation, where the mound was heavily damaged by the construction of a road leading to the modern chicken farm.

In 2015, the central part of the mound was targeted by the 43 m long and 1.5 m wide “Connecting Trench”, excavated under the supervision of Adam Stone⁵⁰ (**Fig. D1**). Here, several graves were found, but most importantly a pottery kiln and, towards the west, partial walls of two more buildings, called Buildings D and E. In 2016, Francesca Chelazzi continued the investigation of the Connecting Trench in the area west of the pottery kiln, between the latter and the Western Trench (**Fig. D15**). The aim was to understand the spatial connection between the kiln and the western part of the mound, as well as to further uncover Buildings D and E. The excavation of the kiln itself was supervised by Silvia Amicone. A rectangular trench

was opened all around the kiln in order to fully investigate and sample the kiln structure and its fill (**Fig. D15**).

In the western part of the mound (**Fig. D1**), next to the metal fence surrounding the chicken farm, the 2015 excavations were supervised by Peter Bartl⁵¹. Here, in Square 267931, several buildings were partially uncovered: Buildings E, H, I, F, and G (**Fig. D17**). The 2016 excavations aimed to further investigate Buildings D, E, F and G, under the supervision of Vera Egbers and Zahra Hashemi. Because it is cut by the fence, it proved to be impossible to unearth Building G, extending towards the west, in full.

We will first present the methodology and review the dating of the site before discussing the various buildings, outdoor areas and alleys unearthed during the 2016 excavations.

D1. The excavation methodology

(F. Janoscha Kreppner and Andrea Squitieri)

D1.1 The digital documentation system

As already for the 2015 campaign, an important aspect of the 2016 season at Gird-i Bazar was the implementation of a digital documentation and registration system. This was achieved by enabling the trench supervisors to access the online database directly in the field in order to record as much data as possible in “real time”. The database, based on MySQL, stores information regarding deposit and installation descriptions, find collections, photos, drawings, diaries as well as spatial data in the form of total station points and GIS-elaborated plans. It was designed by Christoph Forster (Fa. datalino, Berlin)⁵² and is managed by Andrea Squitieri and F. Janoscha Kreppner.

The documentation system includes the creation of daily orthophotos, digital elevation models (DEMs) and

⁴⁹ MacGinnis/Kreppner 2016.

⁵⁰ Stone 2016.

⁵¹ Bartl 2016.

⁵² We gratefully acknowledge the Gerda Henkel Foundation's financial support towards the development of the database (Grant AZ 42/V/16, awarded to Karen Radner).

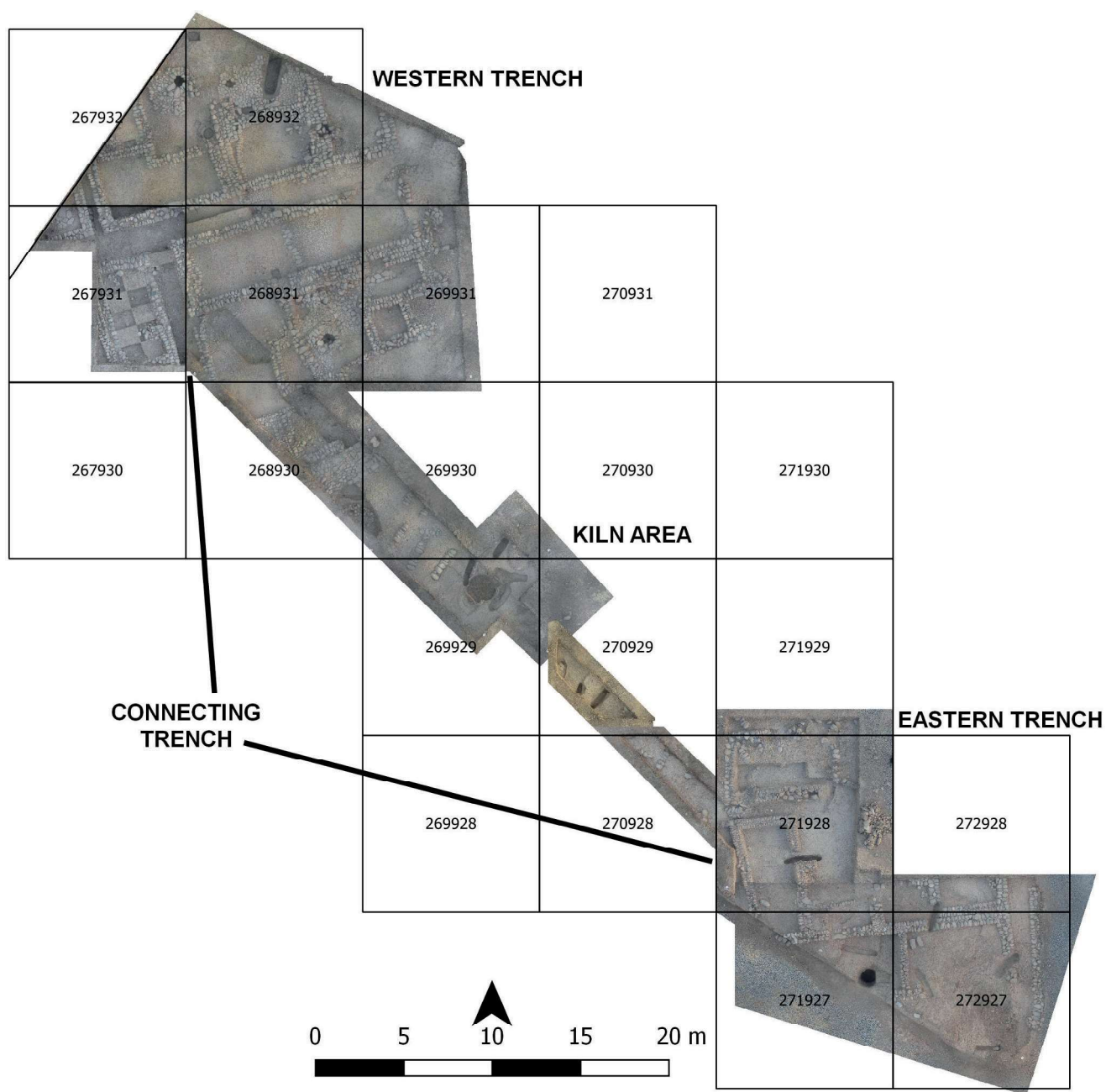


Fig. D1: Excavation grid of 10x10 m squares superimposed over the orthophoto of the 2015 and 2016 excavation areas at Gird-i Bazar. Prepared by Andrea Squitieri.

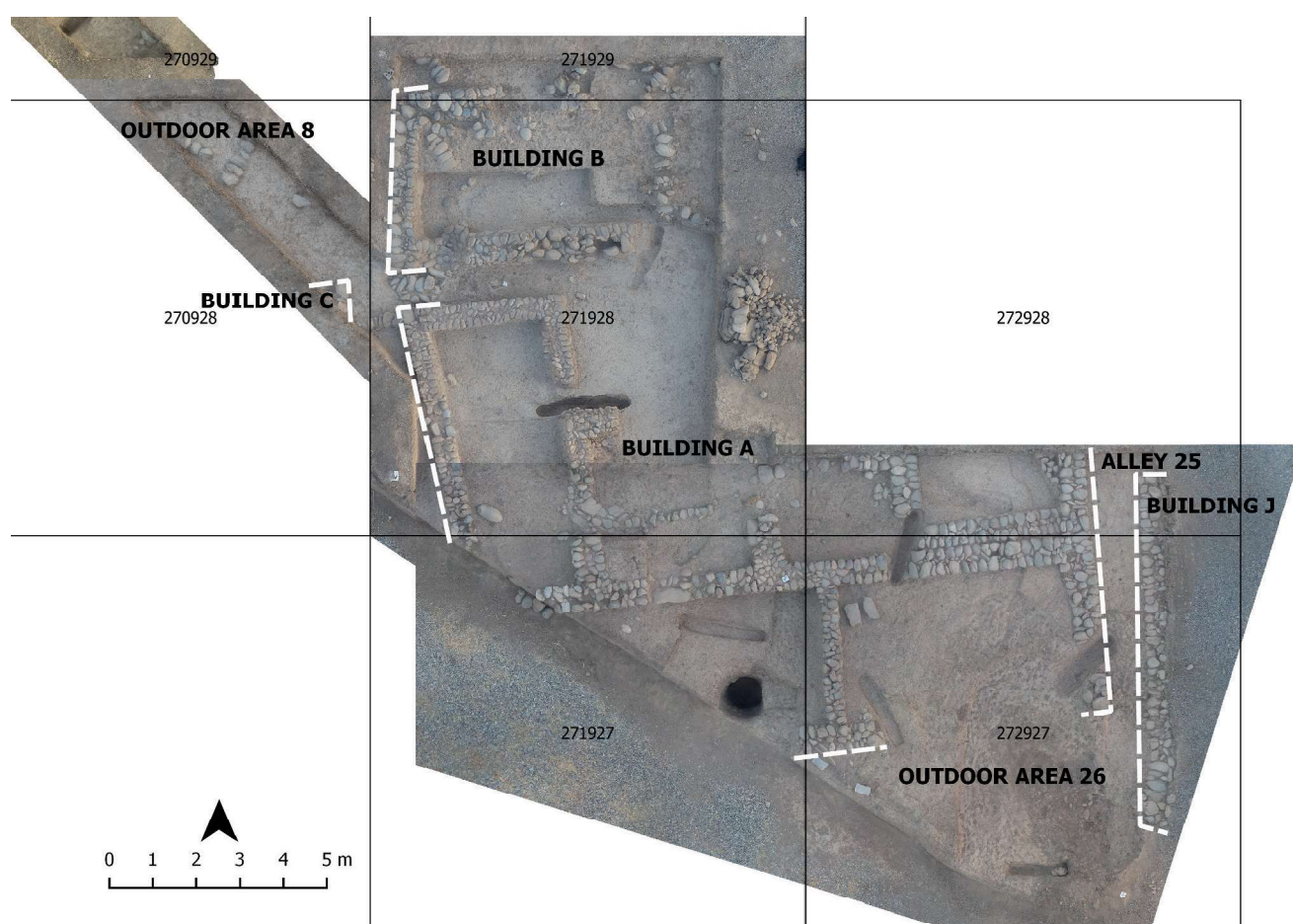


Fig. D2: Orthophoto of Buildings A, B, C and J; Outdoor Areas 8 and 26; and Alley 25. Prepared by Andrea Squitieri.

3D models by means of the software package Agisoft Photoscan. The daily orthophotos, DEMs, and 3D models help keeping data loss at minimum during the destructive process of the archaeological excavation; they also represent a valuable help for interpretation in post-excavation analysis, along with field photos and diaries. The orthophotos were used by the trench supervisors for their daily sketches in the field and later provided the basis for the 2D plans drawn in QGIS 2.18.

An advantage of using a digital documentation system is that it allows to better keep track of samples which are collected during the excavation (such as charcoal, phytoliths, soil samples for flotation) and to implement a more precise sampling strategy (see **Chapter G**), in particular when excavating deposits immediately overlying floors.

The creation of a 3D stratigraphy of the entire site is ongoing, using Photoscan generated 3D models, DEMs and 3D drawings. This is meant to contribute to the interpretation of the results as well as help with the presentation of the excavation data.

D1.2 The excavation grid and the locus / collection registration system

As in the 2015 campaign, the registration system was based on the locus / collection system, tied to an excavation grid based on UTM-WGS84 coordinates. In order to link up the 2015 spatial data with the 2016 data we recreated the 2015 excavation grid at the beginning of the 2016 season, using a dGPS (Leica Viva GS10). This is a grid of 25 10×10 m squares in northern orientation (**Fig. D1**), with each square name corresponding to the Easting and Northing coordinates of its SW vertex. So, for example, Square 271928 has a SW vertex with UTM-WGS84 coordinates East 512710, North 3999280. The square names form the first part of the locus, collection, find and sample names (see below).

In our system, loci (pl. for locus) are defined as discrete and detectable stratigraphic units representing a single event or action leaving traces in the archaeologi-

cal record⁵³. Soil deposits and installations such as walls and floors constitute loci and are therefore given a locus number. This number is composed of the 6-digit number of the square where the locus lies, followed by a progressive number (e.g., Locus:271928:001 is Locus 1 in Square 271928).

During excavation, particular attention is paid to understanding deposit formation, firstly by excavating each complete deposit according to its specific shape and secondly by recording detailed data concerning the soil characteristics (e.g., colour, consistency and particle size). Such loci often contain materials such as pottery or bones. These are then given a collection number, formed by the locus number followed by a progressive number, with the label being preceded by PPP (for “Peshdar Plain Project”) instead of Locus (e.g., PPP 271928:001:001 for Pottery Collection 1 from Locus 1 of Square 271928). Samples, such as phytoliths, charcoal and soil for flotation, and single finds are labelled in the same way (e.g., PPP 271928:001:002 for a charcoal sample from Locus 1 of Square 271928).

The database is structured in such a way that it is possible to access all loci within a square and all collections/samples/single finds within a locus. Finally, each pottery sherd coming from a pottery collection is given an additional progressive number (e.g., PPP 271928:001:001:001 for Sherd 1 in the Pottery Collection 1 of Locus 1 in Square 271928). In the database, all sherds within a pottery collection can be accessed.

Sometimes, especially during post-excavation analysis, two or more loci are identified as belonging to the same stratigraphic unit. In such cases, the relevant loci are grouped together to form a so-called Locus Group (abbreviated LGR), identified by progressive numbers (e.g., LGR:0001). Unlike locus numbers, these designations are not based on a square number. This is due to the fact that locus groups may link loci that describe the same stratigraphic unit extending across several squares. So, for example, if a wall runs across two continuous squares, e.g. Squares 271927 and 272927, then it will be initially assigned two locus numbers, one for each square: in our example, Locus:271927:008 and Locus:272927:007. These two loci will then be combined into a locus group, in this example LGR:0138. Locus group numbers appear in the orthophotos and the section drawings throughout this book. A concordance between locus numbers and locus groups is given in **Table D1**.

Lastly, as in 2015, graves are labelled with the letter G (for “grave”) followed by a unique progressive number (e.g.,

G51). Graves are units composed of (at least) four loci: the grave cut, the skeleton, the fill and the grave architecture.

D2. Dating the occupation of Gird-i Bazar

(F. Janoscha Kreppner and Andrea Squitieri)

The absolute chronology of the occupation at Gird-i Bazar was established by means of the ¹⁴C analysis of a charcoal sample from a floor of Building A. This produced a *post quem* date of 937–829 calBC (92.2 % probability)⁵⁴ and confirmed the attribution of Gird-i Bazar’s main occupation phase to the Neo-Assyrian chronological horizon, as assumed on the basis of the pottery finds. More precise dates may be available once ¹⁴C analysis has been completed for the carbonised seeds isolated through flotation⁵⁵.

In order to elucidate the relative stratigraphy of the 2016 excavations at Gird-i Bazar, we present a new stratigraphic table (**Table D2**) that updates the stratigraphic table of the 2015 excavation⁵⁶. Here, we summarise the information required to read the table:

- The rows of the table follow the timeline, from the oldest (bottom) to the youngest (top) occupation periods.
- The columns of the table contain the spaces, such as rooms of buildings, courtyards and open areas, arranged from east to west. Consequently, roughly contemporary depositional processes and occupation periods that span various areas of the site can be identified in the table by reading it horizontally.
- The cells of the table contain either a locus number (e.g., Locus:271927:027) or a locus group number (e.g., LGR:0010), followed by a brief description of the locus / locus group, be it a deposit, a wall or an installation; or else a grave number (e.g., G6). The background colours of the cells indicate the temporal extent of the occupation as well as non-occupational or post-occupational periods. Hence, different pink shades are used for topsoil, modern occupation, graves and virgin soil; brown is used for post-occupation periods; yellow for occupation periods. The same colour coding is used in the section drawings so that the stratigraphic table and the section drawings can be read in parallel.

⁵⁴ Radner 2016b, 52.

⁵⁵ In July 2017, Melissa Rosenzweig (Miami University, Oxford, Ohio) made a selection of suitable seed samples from good floor contexts that are currently being processed at Curt-Engelhorn-Centre Archaeometry gGmbH (Mannheim, Germany).

⁵⁶ Kreppner/Squitieri 2016, 52–53.

⁵³ Kreppner/Forster/Squitieri 2016, 45.

Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	
	2	271928	24	45	268931	7	78	268932	25	122	268932	66
	2	271928	44	45	268931	8	79	272927	39	122	269932	18
	3	271928	40	46	269930	4	79	272927	40	123	267931	28
	3	271928	41	46	269930	5	79	272927	41	123	267932	34
	3	271928	42	46	269930	6	79	272927	42	124	267931	15
	3	271928	48	47	269930	7	80	268930	12	124	267932	33
	4	271928	33	47	269930	8	80	268931	3	125	267931	29
	4	271928	43	47	269930	9	80	268931	18	125	267932	36
	5	271928	62	48	269930	10	80	268931	36	126	269930	2
	5	271928	68	48	269930	11	80	268931	44	126	268930	2
	5	271928	69	48	269930	12	80	268930	25	126	268931	2
	5	271928	70	49	269929	8	80	268930	37	126	268931	13
	7	271928	16	49	269929	9	80	268930	46	126	269929	24
	7	271928	19	49	269929	19	81	269932	11	126	269930	15
	7	271928	20	50	269929	7	81	269932	14	126	268931	35
	8	271928	21	50	269929	17	81	269932	20	126	268930	21
	8	271928	25	50	269929	18	82	268932	9	126	269929	45
	8	271928	26	50	269929	41	82	268932	32	126	269930	26
	8	271928	52	51	269929	11	82	268932	35	126	268930	42
	9	269929	5	51	269929	12	82	268932	43	127	269929	3
	9	269929	26	51	269929	13	83	268932	49	127	269930	3
	9	269929	39	51	269929	21	83	268932	51	127	269929	4
	10	271927	15	51	269929	22	84	269931	5	127	269929	14
	10	271928	53	52	270929	23	84	269931	7	127	269929	25
	10	271928	54	52	270929	24	84	268932	41	127	269929	46
	10	271928	108	52	270929	25	84	268931	38	127	269930	28
	11	271928	3	53	270929	16	84	269932	3	128	269930	29
	11	271928	6	53	270929	17	84	269932	15	128	269930	30
	11	271927	3	53	270929	18	85	268931	43	128	268930	23
	11	271928	18	53	270929	19	85	268931	45	128	268930	24
	11	271928	38	53	270929	20	86	272928	9	128	269930	31
	11	271928	45	54	270929	3	86	271928	112	128	268930	45
	11	272927	2	54	270929	4	86	272927	43	129	267931	7
	11	271928	92	54	270929	13	86	272928	30	129	267932	7
	11	272928	2	54	270929	14	87	268932	65	130	268931	22
	12	271927	4	54	270929	15	87	268931	55	130	268931	41
	12	271927	12	55	270929	21	88	268931	53	130	268930	38
	13	271927	20	55	270929	22	88	268932	62	130	268930	47
	13	271927	23	55	270929	26	88	268932	63	131	268930	43
	14	271927	30	56	270929	8	88	268931	56	131	268930	48
	14	271927	37	56	270929	10	89	268931	16	132	267931	45
	14	271927	38	56	270929	11	89	268932	34	132	268931	61
	14	271927	40	56	270929	12	90	268932	40	133	269929	29
	15	271928	14	56	270929	27	90	269932	16	133	269929	48
	15	271928	23	57	270928	6	91	272928	10	134	269929	34
	15	271928	27	57	270928	9	91	272927	44	134	269930	20
	15	271928	94	58	270928	20	91	271928	117	135	269929	30
	16	271928	32	58	270928	21	92	272928	11	135	269930	21
	16	271928	65	58	270928	22	92	272927	45	136	269929	28
	16	271928	90	59	270928	12	92	271928	118	136	269930	16
	17	271928	49	59	270928	13	93	268931	20	137	271927	32
	17	271928	50	59	270928	14	93	269931	13	137	272927	10
	18	271928	39	60	270928	5	94	269929	50	138	271927	8
	18	271927	25	60	270928	15	94	269929	51	138	272927	7

Table D1: Gird-i Bazar 2016: concordance between locus numbers and locus groups. Prepared by Andrea Squitieri.

Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	
	18	271928	60	60	270928	17	94	269930	36	139	272927	28
	18	271928	64	61	270928	16	94	269930	37	139	271927	42
	18	271928	66	61	270928	18	95	269930	32	140	271927	22
	18	271928	111	61	270928	19	95	269929	52	140	272927	29
	19	271928	59	62	271929	3	96	269930	27	141	271927	28
	19	271928	63	63	271929	4	98	267931	41	141	271927	36
	20	271928	57	64	272928	14	98	268932	67	143	271927	16
	21	271928	58	64	272928	21	98	268931	58	143	272927	22
	21	271928	102	64	272928	24	99	267931	3	144	272928	6
	21	271928	103	64	272928	25	99	267931	9	144	272927	27
	21	271928	104	65	272928	19	99	268932	14	145	272928	16
	22	271928	67	65	272928	26	99	268931	65	145	272927	30
	23	271928	74	65	272928	27	100	267931	46	146	272928	15
	24	271928	75	65	272928	28	100	268931	63	146	272927	33
	24	271928	114	66	267931	2	100	268932	74	147	272927	25
	24	271928	115	66	267931	11	102	268932	38	147	272928	7
	24	271928	116	66	267931	34	102	269932	4	148	272927	11
	25	271928	76	66	267932	2	103	267932	25	148	272927	12
	25	271928	99	67	267931	10	103	268932	33	149	271928	7
	25	271928	100	67	268931	15	104	267932	11	149	271927	26
	25	271928	101	68	267932	10	104	268932	15	150	271927	14
	26	271928	61	68	267932	14	105	268930	35	150	271928	96
	27	271928	72	68	267932	31	106	272927	46	151	271927	13
	28	267931	38	69	272927	3	106	272927	47	151	271928	93
	28	268931	60	69	272927	4	108	268931	49	152	269929	20
	29	271928	30	69	272927	5	108	269931	24	152	269929	42
	29	271928	78	69	272927	17	109	267932	17	153	268930	6
	30	271928	9	70	272927	13	109	268932	30	153	268930	28
	30	271928	13	70	272927	14	110	267932	9	154	268930	7
	31	271928	83	70	272927	15	110	268932	16	154	268930	49
	32	268932	61	70	272927	18	111	267932	6	155	268930	5
	32	269932	17	70	272927	21	111	268932	23	155	268930	22
	33	271928	34	71	269929	47	112	267932	26	155	268930	27
	34	271928	35	71	269930	33	112	268932	75	156	268930	14
	35	271928	84	72	268931	10	113	267932	20	156	268930	31
	36	271928	85	72	268931	14	113	268932	20	157	268930	10
	37	271928	86	72	269931	3	114	268932	3	157	268930	34
	38	271928	4	73	269929	31	114	268932	26	158	268930	9
	38	271928	5	73	269929	32	115	268932	68	158	268931	9
	39	271927	18	73	269929	33	115	269932	19	159	268931	11
	39	271928	98	73	269929	35	116	268932	29	159	268931	62
	39	271928	105	74	269930	17	116	268932	46	160	268931	5
	39	271928	106	74	269930	18	116	268932	54	160	268931	42
	39	271928	107	74	269930	19	116	268932	59	161	267931	24
	40	271927	19	74	269930	23	116	269932	6	161	268931	57
	41	271927	7	75	272927	23	118	268932	42	162	267931	13
	41	271927	17	75	272927	31	118	268931	50	162	267932	32
	42	271927	5	75	272927	32	118	269932	12	163	267931	4
	43	271927	6	75	272927	36	119	267931	5	163	267932	3
	44	269929	10	76	272927	16	119	267931	36	164	268932	6
	44	268930	15	76	272927	34	119	267931	37	164	268932	8
	44	268930	16	76	272927	35	119	268931	25	164	268932	10
	44	269930	13	76	272927	37	119	268932	39	165	268931	6
	44	268930	18	77	272928	12	119	269932	7	165	269931	6
	44	269929	49	77	272928	13	120	269932	9	165	268932	73

Table D1 – continued: Gird-i Bazar 2016: concordance between locus numbers and locus groups. Prepared by Andrea Squitieri.

Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus	Locus Group (LGR)	Square	Locus
44	269930	35	77	272928	22	120	269931	27	166	268931	26
45	268931	6	77	272928	23	121	267932	8	166	268931	29
			78	268932	4	121	268932	5			
			78	268932	21	121	268932	18			
						122	268932	58			

Table D1 – continued: Gird-i Bazar 2016: concordance between locus numbers and locus groups. Prepared by Andrea Squitieri.

Each occupation period is defined by a floor. When a new floor is detected that overlies an earlier one, a new occupation period is defined. Note that the term “floor” refers to the actual purpose-built floor or a hardened surface created by human use, which is assigned a specific locus number. The deposit found immediately above the floor is given its own locus number. This allows us to isolate material found on a floor and, at the same time, gain a better understanding of the formation processes of the deposits above the floor.

Reading the table from bottom to top, we have identified the following phases:

- Virgin soil.
- The first Construction Phase when the foundations of the buildings were laid down and the walls were created.
- The Main Occupation Period when these buildings were used. During this period, some alterations were implemented and there is evidence for new floors in Building A Room 1, Building F Room 15 and Building H Room 17 as well as Alley 13, indicating two distinct phases of use. We therefore subdivide the main occupation period into two phases called “Main Occupation Period 1” and “Main Occupation Period 2”. Each of these two phases is divided into three sub-phases, from oldest to youngest:
 - Construction phase of the floor, comprising the construction of the floor and the installations created before the floor was used;
 - Occupation of the floor, resulting in deposits and installations from the time when the floor was in use;
 - End of occupation, resulting in deposits that indicate the destruction or abandonment of the floor, covering the finds collected directly on the floor.
- A Post-Occupation Period follows each occupation period, representing a period of non-occupation during which erosion phenomena sometimes caused the formation of archaeological deposits. These processes may be repeated cyclically, which is why yellow and brown rows alternate in the table.

The Main Occupation Period at Gird-i Bazar belongs to the Neo-Assyrian period, c. 9th to 6th centuries BC, as

already established in 2015 on the basis of ¹⁴C analysis and pottery observations. An important result of the 2016 excavation is that the Main Occupation Period is divided into two phases of use in some building contexts, both belonging to the Neo-Assyrian chronological horizon. Consequently, **Table D2** features Main Occupation Period 1 (identified in 2015 and further explored in 2016) and Main Occupation Period 2 (identified in 2016).

Main Occupation Period 1 represents the period when the buildings were founded on the virgin soil and when the oldest floors were laid down. The construction of new floors overlaying the earlier ones indicates the beginning of Main Occupation Period 2. The characteristic pottery of Gird-i Bazar’s Neo-Assyrian occupation was also found on these younger floors. In some cases, new walls were erected during Main Occupation Period 2, thus modifying the function of the architectural units concerned. In contexts such as Building A Room 1 and Alley 13, no Post-Occupation Period layer was identified between the construction of the floors of the two main occupation periods. Thus, the two phases do not represent two strictly separate periods; the Main Occupation Period saw a continuous development of use that in some contexts resulted in changes. In many other rooms, the first and only floor remained in use from the beginning of Main Occupation Period 1 to the end of Main Occupation Period 2.

In Alley 13, a package of floors was uncovered. In the west, the oldest and the youngest floor lie on distinctly different levels and join to the east. The oldest floor can certainly be attributed to Main Occupation Period 1 since it is connected to the oldest floors in Building F Room 15 and Building H Room 17. The youngest floor in Alley 13, on the other hand, is connected to the younger floors of these two rooms. Overall, however, the continuous sedimentation in Alley 13 and the many superimposed floors show its uninterrupted use. Because of the new results, we now assign the second occupation of Building H and Building I, excavated in 2015⁵⁷, to Main Occupation Period 2.

⁵⁷ Bartl 2016, 75.

EASTERN TRENCH						
GIRD-I BAZAR STRATIGRAPHY	BUILDING A					
	Building J	Alley 25	Outdoor Area 26	Room 23	Room 24	Room 29
PRESENT SQUARE SURFACE						
TOPSOIL			Locus:272927:001			
MODERN OCCUPATION			Locus:272927:011 pit cut, Locus:272927:012 fill of the pit			
POST SPORADIC OCCUPATION PERIOD						
END SPORADIC OCCUPATION PERIOD						
SPORADIC OCCUPATION PERIOD						
CONSTR. FOR SPORADIC OCCUPATION PERIOD						
POST RE-USE OCCUPATION PERIOD						
END RE-USE OCCUPATION PERIOD						
RE-USE OCCUPATION PERIOD						
CONSTRUCTION FOR RE-USE OCCUPATION PERIOD						
POST MAIN OCCUPATION PERIOD 2						
END MAIN OCCUPATION PERIOD 2						
MAIN OCCUPATION PERIOD 2						
CONSTRUCTION FOR MAIN OCCUPATION PERIOD 2						
POST MAIN OCCUPATION PERIOD 1						
END MAIN OCCUPATION PERIOD 1						
MAIN OCCUPATION PERIOD 1						
CONSTRUCTION FOR MAIN OCCUPATION PERIOD 1						
FIRST CONSTRUCTION PHASE FOR MAIN OCCUPATION PERIOD						
VIRGIN						

Table D2: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

EASTERN TRENCH (cont.)				CONNECTING TRENCH			
BUILDING A (cont.)		BUILDING B		BUILDING C			
Room 3	Alley 4	Alley 5	Room 6	Outdoor Area 7	Alley 4 / Outdoor Area 8	Outdoor Area 8	
Locus:271928:001	Locus:271928:001	Locus:271928:001	Locus:271928:001	Locus:271929:002 Locus:271929:001	Locus:270928:001 Locus:270928:003	Locus:270929:001 Locus:270929:002	baulk
			Locus:271928:015 drain, Locus:271928:012 surface				
Grave 1		Grave 7	Grave 16, Grave 3, Grave 18, Grave 19, Grave 20, Grave 21, Grave 22	Grave 43, Grave 44, Grave 45	Grave 38, Grave 39, Grave 40, Grave 41	Grave 33, Grave 34, Grave 35, Grave 36, Grave 37	
LGR:0038 tough grey fill, LGR:0007 eroded mudbricks, LGR:008 red clayey earth Locus:271928:36 hard light brown yellow clay (South only)		LGR:0038 tough grey fill	LGR:0030 grey material Locus:271928:077 hard light brown yellow clay				
			LGR:0029 floor				
			Locus:271928:073 wall Locus:271928:082 wall				
LGR:0151 tough red clayey material	LGR:0015 red clayey material	Locus:271928:046 red clayey material LGR:0019 tough red clay with white inclusions	LGR:0016 red clayey material Locus:271928:071 conglomeration of stones		Locus:270928:004 grey brown silty clay	Locus:270929:005 (east) = Locus:270929:006 (west) grey brown silty clay	
LGR:0150 reddish-brown clayey soil with white inclusions, very crumbly, quite a lot of soft burnt red clay (C14 sample)					LGR:0057 dark moderately compact orangey brown silty clay	Locus:270929:009 dark brown sandy silt	
Locus:271928:087 stone feature							
LGR:0010 floor, Locus:271927:033 stone feature, floor	Locus:271928:028 floor	Locus:271928:047 floor	LGR:0018 floor	Locus:270928:010 floor (= 271928:047)		Locus:270929:028 floor	
LGR:0149, Locus:271927:010, Locus:271927:011, Locus:271928:008, Locus:271928:031 walls, Locus:271928:080 threshold	LGR:0149 wall	Locus:271928:031 wall, Locus:271928:010 wall	Locus:271928:017 wall, Locus:271928:081 wall, Locus:271928:010 wall	Locus:270928:023 wall			Locus:270929:029

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

CONNECTING TRENCH (cont.)						
			BUILDING D			
Outdoor Area 8	Outdoor Area 8	Outdoor Area 8	Room 9	Room 34	Room 10	Courtyard 11
Locus:269929:001	Locus:269930:008	LGR:0126	Locus:268930:001			Locus:268931:001
LGR:0128 modern pit						
Locus:268930:003 hard and compact layer of grey brown sandy silt, Locus:268930:004 medium brown compact silty clay, Locus:268930:026 stone						
Grave 30, Grave 31, Grave 32, Grave 49, Grave 48	Grave 27, Grave 28, Grave 29, Grave 54, Grave 55, Grave 56, Grave 57		upper rows of walls (GR:0153, LGR:0154 reused, LGR:0155 surface			
LGR:0127, LGR:0136 compact grey silty clay		LGR:0080 hard yellowish brown sandy silt Locus:268930:039 dry hard brown silty clay installation fill			Locus:268931:047 hard yellowish brown sandy silt, Locus:268930:011 and Locus:268930:013 wall collapse	LGR:0080 hard yellowish brown sandy silt, Locus:268931:018 crumbly and very hard soil
LGR:0071 dry, hard and silty soil; yellowish brown colour with some pottery, Locus:269929:027 grey brown, compact silty clay with sherds lying flat, LGR:0009 mixed deposit with dark grey brown silty clay, rich in pottery: upper kiln fill, LGR:0138 fill of a second kiln? LGR:0152 dark grey black ashy deposit rich in charcoal flecks and pottery: lower kiln fill	Locus:268930:036 dry, hard and silty soil	Locus:268930 dry hard and silty yellowish soil			LGR:0130 hard compact silty soil, light brown in colour with few white particles	LGR:0158, Locus:268931:021 walls
LGR:0133 floor, LGR:0135 possible floor, kiln features: Locus:269929:006, Locus:269929:015, Locus:269929:016, Locus:269929:036, Locus:269929:037, Locus:269929:038, Locus:269929:040, Locus:269929:043	LGR:0157 paved floor	LGR:0156 floor	Locus:268930:044 stone installation			LGR:0160 pebble floor, LGR:0131 floor, Locus:268931:023 Locus:268930:033, LGR:0154, LGR:0072 wall, Locus:268931:040 wall, LGR:0159 threshold
	Locus:268930:008 wall	LGR:0153, LGR:0154, Locus:268930:029 walls	Locus:268930:032, Locus:268930:033 walls			LGR:0045

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

WESTERN TRENCH (cont.)				GIRD-I BAZAR STRATIGRAPHY	
BUILDING F (cont.)				Outdoor Area 32	
Courtyard 21	Room 22	Room 28			
Locus:267932:001 Locus:268932:002	Locus:267932:001 Locus:268932:002	Locus:268932:002			PRESENT SQUARE SURFACE TOPSOIL
Locus:268932:022 modern pit	Locus:268932:047 modern disturbance?				MODERN OCCUPATION
					POST SPORADIC OCCUPATION PERIOD
					END SPORADIC OCCUPATION PERIOD
					SPORADIC OCCUPATION PERIOD
					CONSTR. FOR SPORADIC OCCUPATION PERIOD
					POST RE-USE OCCUPATION PERIOD
					END RE-USE OCCUPATION PERIOD
					RE-USE OCCUPATION PERIOD
					CONSTRUCTION FOR RE-USE OCCUPATION PERIOD
LGR:0121 left clayey soil of light brown colour, Locus:267932:015 brown clayey soil, Locus:268932:011 brown soil, soft and silty clay with charcoal, 268932:013 fill of drain, 267932:018 fill of well	LGR:0082 light brown silty clayey soil	LGR:0116 silty reddish brown clayey soil with charcoal and burnt clay	LGR:0120 accumulation of big cobble stones Locus:269932:013 silty clayey soil of white-pink colour		POST MAIN OCCUPATION PERIOD 2
LGR:0078 brownish clayey soil with much pottery, LGR:0113 brown-grey silty clayey soil, Locus:267932:012 silty soil with pottery, charcoal and ash	LGR:0083 silty dark brown clayey soil with charcoal and pottery	LGR:0122 clayey soil with charcoal and burnt clay			END MAIN OCCUPATION PERIOD 2
					MAIN OCCUPATION PERIOD 2
					CONSTRUCTION FOR MAIN OCCUPATION PERIOD 2
					POST MAIN OCCUPATION PERIOD 1
					END MAIN OCCUPATION PERIOD 1
					MAIN OCCUPATION PERIOD 1
267932:019 row of stones	LGR:0111 well, LGR:0112 floor, LGR:0114 stone pavement, Locus:267932:016 pebble floor, 267932:021 door socket, 267932:077 socket for pole, 268932:050 small oven, 268932:052 big oven, Locus:268932:027 step to room 22	Locus:268932:057 floor, Locus:268932:027 drain, Locus:268932:044 stone boxes, Locus:268932:045 stone podium, Locus:268932:078 threshold	LGR:0115 floor, 268932:056 oven, 268932:069 stone podium?, 268932:071 clay podium?, Locus:269932:021 stone box		CONSTRUCTION FOR MAIN OCCUPATION PERIOD 1
LGR:0068, LGR:0104, Locus:268932:019, Locus:268932:024, Locus:268932:037 walls, 268932:028 plaster, 268932:048 substructure of stone pavement	LGR:0164, Locus:268932:019, Locus:268932:036 walls, Locus:268932:028 plaster	LGR:0102, Locus:268932:037, Locus:269932:005 walls			FIRST CONSTRUCTION PHASE FOR MAIN OCCUPATION PERIOD
					VRGIN

Table D2 – continued: Synchronoptic stratigraphy table of the 2015 and 2016 Gird-i Bazar excavations. The rows follow the timeline, from the oldest periods at the bottom to the youngest periods at the top. The columns indicate the spaces (e.g., rooms, open areas, etc.). The cells contain a short description of the locus or locus group. The background colours indicate the temporal extent of the occupational, non-occupational or post-occupational periods. Prepared by F. Janoscha Kreppner and Andrea Squitieri.

Continuing to read **Table D2** from bottom to top, the Post-Main Occupation Period 2 is followed by a “Re-Use Occupation Period”, a very ephemeral occupation identified already in 2015 but only in Building A and Building B⁵⁸. As the use of the buildings changed totally and was then in no way comparable to their former, we define this period as a period of re-use.

It is followed by the “Sporadic Occupation Period”, identified only above Building D’s Room 9. Already in 2015⁵⁹, this sporadic occupation was dated to the Sasanian era because of pottery sherds found on a pebble floor (§D7.1). The 2016 investigations confirm this attribution: because of the ¹⁴C results that date a tooth from Grave 47 to the late Sasanian period (calAD 390–533 (95.4 % probability); §G4), we assume that the remains of the pebble floor and the graves belong to the same occupation period. Unfortunately, the pebble floor was not preserved towards the east, due to the proximity to the recent site surface.

Finally, the Modern Occupation Period refers to the recent activities at Gird-i Bazar during the 20th to 21st centuries AD, including the damages caused by the construction of the chicken farm (e.g., modern rubbish pits). It includes a small surface that can be dated to the Saddam era (§D5.7).

The following sections describe the structures and installations uncovered in 2016 from east to west, thus following the same order as in **Table D2**.

D3. Building J and Alley 25

(Alessio Palmisano)

Wall LGR:0144 of Building J adjoins Alley 25 in the east. Due to the presence of the road built during the construction of the modern chicken farm, it was not possible to investigate Building J any further (**Figs. D2–D3**).

Alley 25 is 8 m long and 1.10 m wide. It is limited to the west by walls Locus:272927:009 and Locus:272928:003, belonging to Room 23 and Room 24 of Building A, respectively. Alley 25 was very likely unroofed and had an earthen floor (LGR:0145), featuring a light brown dirt surface with patches of charcoal and flecks of grayish clay. It slightly sloped down from north to south. The deposit above the floor (LGR:0146) is a light brown, clayey soil with a moist friable consistency, covered by a deposit of light brown, clayey soil (LGR:0147) containing stone collapse (Locus:272927:027).

D4. Outdoor Area 26

(Alessio Palmisano)

Alley 25 leads to Open Area 26, which is located to the south of Building A (**Figs. D2–D3**). However, it is difficult to understand the spatial arrangement of this area because of the damages of the large modern pit (Locus:272927:011) and the recent bulldozing of the south-eastern edge of the site. Open Area 26 yielded the fill of the large pit (Locus:272927:012) and Grave 51.

D5. Building A

(Alessio Palmisano, Janoscha Kreppner & Andrea Squitieri)

This building is a multi-unit architectural complex of the Main Occupation Period.

D5.1 Room 23

(Alessio Palmisano)

Room 23 (**Fig. D3**) is located in the southeastern corner of Building A. It measures 4.30 m in north-southern direction and 6.40 m in east-western direction and is surrounded by four walls that were built on virgin soil and could have supported a roof. The walls (LGR:0138 = Locus:272927:007, Locus:272927:008 and Locus:272927:009; and LGR:0137 = Locus:272927:010) are about 55–60 cm wide and built with stones with a diameter of c. 20–25 cm, arranged in two rows with a core of pebbles and mud.

Unfortunately, most of the southern wall (LGR:0137 = Locus:272927:010) is not preserved because it was cut by the modern large pit cut (Locus:272927:011). The access to Room 23 from Open Area 26 was in the southwestern corner as indicated by a door socket (Locus 272927:048). No threshold is preserved, probably because it was removed by the cut of the nearby Grave 47.

An installation (Locus:272927:038) in the northwestern corner of Room 23 consists of two parallel flat stones and a channel in between (**Fig. D5**). In front of it, we found potsherds of a big jar and a small bowl (PPP 272927:020:004). We interpret the installation as a toilet whose users could clean themselves by using a bowl to pour water taken from the nearby big jar.

Unfortunately, given the presence of three graves (45, 46 and 50) and of the large pit cut (Locus:272927:011), little survives of the floor (Locus:272927:019), which was found in the southwestern and northwestern corners of Room 23 and around and below the jar south of the toilet (Locus:272927:038). The soil above the floor is a tough grey clayey soil with charcoal and much pottery (Locus:272927:020).

58 MacGinnis/Kreppner 2016, 61.

59 Stone 2016, 69; Herr 2016, 91.



Fig. D3: Detailed orthophoto of Buildings A and J; Outdoor Area 26; and Alley 25. Prepared by Andrea Squitieri.

and marks the end of the occupation. Overlaying it, there was a tough light grey clayey soil (Locus:272927:006), resulting from post-occupational erosion processes.

D5.2 Room 24

(Alessio Palmisano)

Room 24 (Figs. D3-D4) is located north of Room 23. The excavated area measures 4.40 m from east to west and was excavated to a width of 2.10 m from north to south.

It is likely that the room was bounded to the south by the wall Locus:272928:029, to the east by the wall Locus:272928:003 and to the west by the wall Locus:272928:004. Further investigations to the north of the trench will clarify the plan. The wall Locus:272928:029 bonds with wall Locus:272928:003 and abuts the wall LGR:0138, belonging to Room 23, in the south. The southwestern corner of the wall Locus:272928:029 is cut by Grave 45, and therefore the connection to wall Locus:271928:004 is destroyed. All walls are 55 cm wide and preserved to the height of two

courses of medium-sized stones with an average diameter of 25 cm.

The floor (Locus:272928:018) is an earthen surface with patches of charcoal and flecks of greyish clay. In the northeastern corner of the room, an installation of unclear function (Locus:272928:032), made of small to medium stones, was found; it may have served as a bench. The floor is cut by Graves 44 and 52.

The deposit on the floor was a tough light grey clayey soil with pieces of soft red burnt clay and a lot of charcoals (Locus:272928:017), covered by a tough light grey soil with some charcoals (Locus:272928:008).

D5.3 Room 29

(Alessio Palmisano)

West of Room 24, Room 29 (Figs. D3-D4) is bordered by the wall Locus:271927:009 in the southwest, an opening on the west, the excavation limit to the north, wall Locus:272928:005 in the northeast, and wall Lo-

Fig. D4: Sections A and B of Building A. Prepared by Andrea Squitieri and Jakob Riedl, based on field drawings by Alessio Palmisano and F. Janoscha Kreppner.

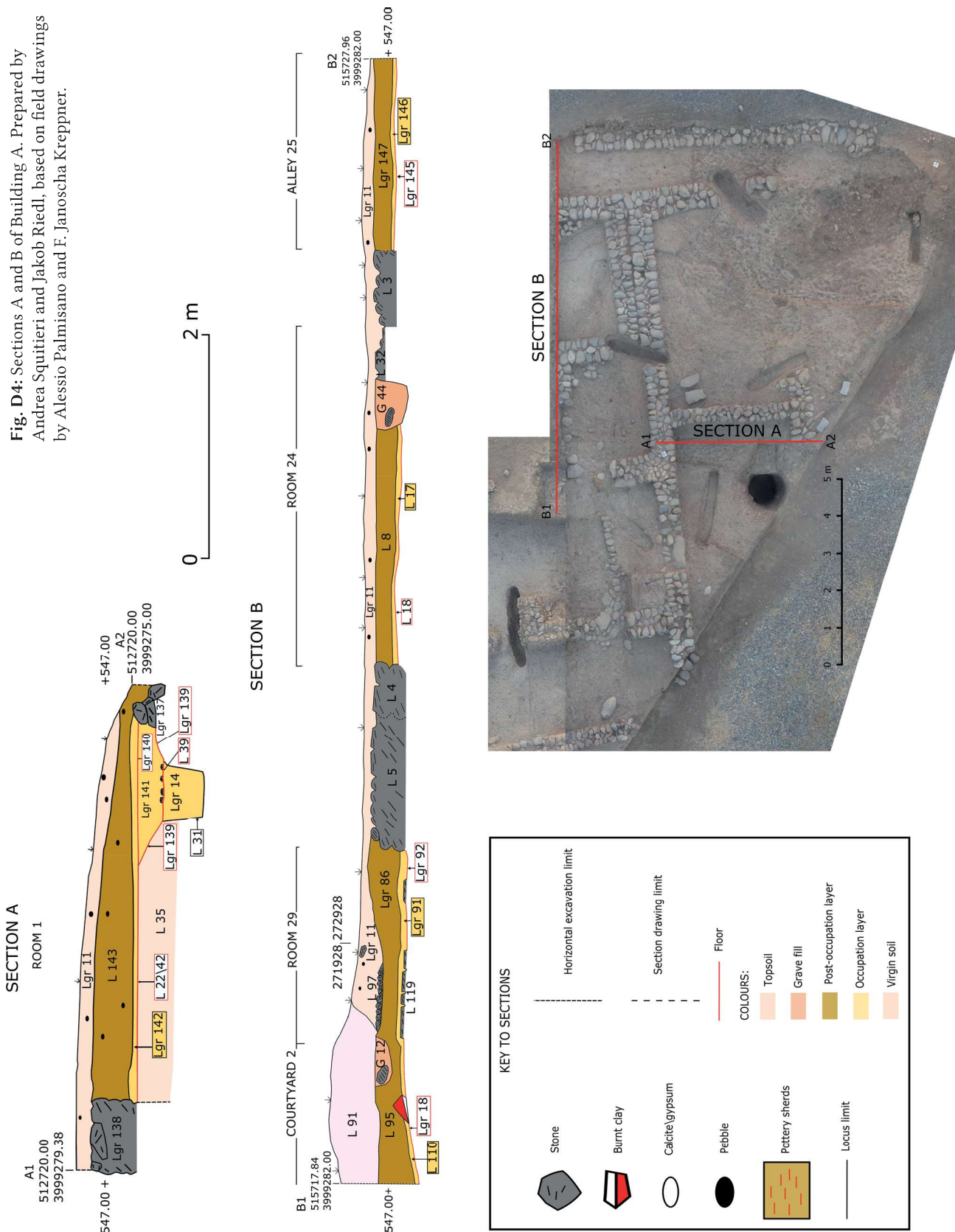




Fig. D5: The assumed toilet (Locus:272927:038) in Room 23, with the remains of a large jar with a bowl inside (collection PPP 272927:020:004) next to it. Photo by Alessio Palmisano.

cus:272928:004 on the east. This last wall was cut by Grave 45, but would have otherwise continued to meet the wall Locus:272928:029 in the south.

The floor of Room 29 (LGR:0092) features many white particles and a few burnt traces, with some flat pottery sherds embedded in it. This floor was assigned different locus numbers during excavation: Locus:271928:118 in the north-west, Locus:272927:045 in the south (where it is cut by Grave 53), and Locus 272928:011 on the east (where it abuts walls Locus:272928:005 and Locus:272928:004).

An installation (Locus:272928:031) is located in the corner formed by walls Locus:272928:004 and Locus:272928:005. It is made of medium-size stones set against the two walls, with a fill in the middle and may have been used as a bench or a storage area. Similar stone installations have been found in corners of other buildings across Gird-i Bazar, including Building A Room 24.

Another installation (Locus:271928:119), made of stones set in circle, was sunk into the floor in the northwestern part of Room 29. This feature has not yet been excavated, but although its structure is less clearly defined, it re-

sembles the wells in Building D (§D7.5) and Building F (§D12.3.2). Further work is needed in this area.

The floor of Room 29 was covered by a thin layer of very tough light grey soil (LGR:0091), with many particles of burnt material. This was sealed by a fill of very tough light grey clayey soil (LGR:0086), with a lot of pieces of soft red burnt clay and bits of charcoals. In turn, this deposit was covered by the topsoil (LGR:0011).

Three later burials (Graves, 12, 13 and 53) were excavated in this room. Grave 53 in particular was covered by large, only fragmentarily preserved stone slabs.

D5.4 Room 1

(Alessio Palmisano)

Room 1 lies in the southern portion of Building A (Figs. D3-D4). In this room, the eastern fill of the pit (LGR:0014; cut = Locus:271927:031; Figs. D6-D7) and the floor running in north-south direction along the wall (Locus:272927:008) were investigated.



Fig. D6: Room 1 with the pit (LGR:0014) in the foreground. Photo by Andrea Squitieri.



Fig. D7: Room 1 with the pit (LGR:0014) in the foreground and the floors Locus:271927:022 and LGR:0139 from which the pit was cut. The younger floors Locus:271927:039 and LGR:0140 are visible, abutting the wall. Photo by Alessio Palmisano.

The floor of Room 1 (Locus:271927:022 and LGR:0139) is a dirt surface abutting the walls LGR:0138 and Locus:272927:008, with patches of charcoal and reddened clay and fragments of pottery pressed into it. The section shows that the pit (Locus:271927:031) is cut into this floor (**Fig. D4**: Section A). This indicates that the pit belongs to Main Occupation Period 1, and not to an earlier phase, as we had assumed on the basis of the 2015 excavations⁶⁰. The pit is sealed by the other floors (Locus:271927:039 and LGR:0140) that are located to the south of floor Locus:271927:022 and LGR:0139. The bottom of the pit is c. 2.5 m below floor Locus:271927:022; it is composed of medium-sized stones (average diameter: 25 cm) that form part of the bedrock.

The upper fill of the pit (Locus:272927:037, part of LGR:0014) consists of brown clay with ashes, charcoal, reddish inclusions and many pebbles and small to medium-sized stones. The lower fill of the pit (Locus:272927:040, also part of LGR:0014) is a dark brown-reddish clayey soil with some charcoal and, compared to the upper fill, very few stones. This fill yielded many stone tools, namely six pebble mortars, a polisher and a perforated circular tool (presented in **§F2**), and a rich amount of pottery.

Since the pit does not cut through the bedrock, it is not deep enough to be a well. The presence of a possible toilet installation in Room 23 (**§D5.1**) may suggest that the pit functioned as this toilet's drainage pit at the beginning of Main Occupation Period 1. At a later time, it lost its functionality and was filled up with rubbish.

After the structural change connected to the construction of the new floor (LGR:0140), Room 1 was used again until the end of the Main Occupation Period. A deposit of tough light grey clayey soil with quite a lot of pieces of soft red burnt clay and charcoal (LGR:0142) covers the floor and marks the end of its use. This deposit is covered by a deposit of tough light grey clayey soil (LGR:0143), quite possibly formed by erosion processes.

D5.5 Courtyard 2

(Andrea Squitieri & F. Janoscha Kreppner)

Courtyard 2 (**Figs. D2-D4**) is located north of Room 1. It is a large area, defined already in 2015 as bordered in the west by the walls Locus:271928:008 and Locus:272927:011 and in the south by the walls Locus:271927:010 and Locus:271927:008 (part of LGR:00138). It is connected to Room 1 through the threshold Locus:271927:029. In 2016, we removed the baulk and therefore uncovered a further

portion of the floor, thus connecting floors LGR:0018 in the north and Locus:271927:025 in the south. Having established this connection, Locus 271927:025 was included in LGR:0018. The investigation in this area was particularly important to understand the difference in height of c. 10 cm between the floors LGR:0018 and Locus:271927:025.

The connecting floor under the baulk was named Locus:271928:111 (also part of LGR:0018). This floor features tiny white and black (possibly burnt) particles, with some red patches and a few flat pottery sherds sunk into it. It slightly slopes up from LGR:0018 and abuts the installation Locus:271928:109 (**Fig. D8**). This installation is made of a row of 21 unworked stones that run roughly in west-eastern direction. Starting between walls Locus:271928:008 and Locus:272927:011 in the west, the first seven stones are sunk into floor Locus:271928:111 (LGR:0018) so that their top is on the same level as the floor. Continuing towards the east, the stones sit between the two floor levels of LGR:0018 (see above).

The function of the installation is still unclear. One interpretation is to see it as a drainage system, which starts in Room 29 in the east (**§D5.3**), continues through Court-



Fig. D8: The installation (Locus:271928:109) in Courtyard 2. Photo by Andrea Squitieri.

60 MacGinnis/Kreppner 2016, 57.

yard 2 and ends in Room 3 in the west, where a large fieldstone was found lying on the floor. However, when excavating underneath a portion of the easternmost part of installation, there was no hollow space underneath the stones, unlike in the case of the drain excavated in Building F (§D12.4). So it is more likely to interpret the installation as a pavement / step construction that manages the difference in the floor levels around the podium (Locus:271927:027) in the southwestern corner of the room, which was excavated already in 2015⁶¹.

Above the floor LGR:0018, a deposit consisting of dark brown silty clay with white particles (Locus:271928:110) was covered by red clayey earth (Locus:271928:095; part of LGR:0019), perhaps the remains of a brick collapse. In the portion of Courtyard 2 excavated in 2016, the deposit LGR:0019 was sealed by the topsoil (Locus:271928:091; part of LGR:0011). Further north, a re-use occupation was detected in 2015⁶².

D5.6 Room 3 and Alley 4

(Andrea Squitieri & F. Janoscha Kreppner)

Room 3 (**Fig. D3**) is located west of Courtyard 2. It is defined by walls LGR:0149 in the west, Locus:271928:031 in the north, Locus:271928:008 and Locus:271927:011 in the east and Locus:271927:010 in the south; the southwestern corner was destroyed during the construction of the modern chicken farm. These walls belong to the first construction phase.

The removal of the baulk left in 2015 between Squares 271928 and 271927 revealed a further portion of the floor of Room 3 (Locus:271928:108; part of LGR:0010). It is a beaten-earth floor, with traces of burnt material and some flat pottery sherds sunk into it, as well as large unworked fieldstone (c. 70 cm long, c. 40 cm wide) in the western part of the room. The function of this stone, and whether it is connected to the installation Locus:271928:109 in Courtyard 2, is unclear.

In the western part of the room, the floor abuts the wall LGR:0149. In the eastern part, it ends at the opening between walls 271928:008 and 271927:011, which connects Room 3 with Courtyard 2. Here, some large flat stones paving the passage connect to the pavement / step installation (Locus:271928:109) in the courtyard (§D5.5). A stone (Locus:271927:033) that was partially uncovered in 2015 at the corner of wall Locus:271927:011, next to the baulk, was

then interpreted as a door socket⁶³. After removing the baulk this year, this stone was completely exposed. It is now clear that there is no depression in its centre and the identification as a door socket is therefore untenable. The passage leading from Room 3 into the adjoining courtyard may simply have been an opening without a door.

Immediately above the floor (Locus:271928:108), we identified a dry hard reddish-brown clayey soil yielding a lot of pottery sherds, phytoliths and charcoal but no bones. This deposit formed at the end of the floor occupation. It is consistent with the deposit excavated in 2015 above the floor in Room 3, and therefore along with the latter forms LGR:0150. This deposit was sealed by a compact hard layer (Locus:271928:093) of dark brown colour with many red particles, perhaps the remainders of a brick collapse. Together with the similar deposits excavated in 2015 in the other parts of Room 3, this deposit forms LGR:0151. It was in turn sealed by the topsoil (LGR:0011), which produced a modern Iraqi coin dated to the year 1970 (PPP 271928:092:004).

East of Room 3, Alley 4 is located in the westernmost part of Square 271928. It was already excavated in 2015 when we reached the floor (Locus:271928:028), a compact clay surface including a number of small pebbles (1-2 cm in diameter) and larger stones (up to 6 cm in diameter). Above this floor lies a deposit of hard red tough clayey soil with white inclusions (LGR:0015) that is sealed by the topsoil (LGR:0011).

During the 2016 excavations, the virgin soil underneath the floor was reached: a silty-clayey soil, rich in white particles and particularly hard (Locus:270928:011). The wall Locus:271928:007 (part of LGR:0149) borders the alley in the east and was built on the virgin soil.

D5.7 The graves and the modern occupation phase

(F. Janoscha Kreppner & Andrea Squitieri)

In the eastern part of Gird-i Bazar, graves lie above the Neo-Assyrian period structures. The chronological horizons of these graves has been clarified by the recent ¹⁴C analysis conducted on a tooth from Grave 47, which was dated to the 4th-5th centuries AD (§G4). In order to clear the area and better delineate walls and floors, the graves encountered in Squares 271928, 272927 and 272928 were excavated by Tina Greenfield who presents a first assessment of the Sasanian-period graveyard in **Chapter G**.

⁶¹ MacGinnis/Kreppner 2016, 54.

⁶² MacGinnis/Kreppner 2016, 58.

⁶³ MacGinnis/Kreppner 2016, 60.

A total of eight graves were excavated north of Building A's wall LGR:0138 (**Fig. D3**; "Grave" is abbreviated as G). From west to east, these are Grave 9, Grave 23, Grave 12 (currently only partially excavated as it continues under the excavation limit to the north), Grave 53 (cutting floor LGR:0092), Grave 45 (cutting walls LGR:00138 and Locus:272028:029), Grave 52 and Grave 44. Some of the burials contained small, spherical beads (with Grave 12 being particularly rich in them) and a very limited amount of pottery sherds. With the exception of Grave 53, all these graves had a stone capping made of a row of medium-size fieldstones, as already identified as a common feature of the Gird-i Bazar burials in the first excavation season⁶⁴. Grave 53, on the other hand, has a more elaborate architecture: it is a cist grave lined with large stones and possibly covered by a flat stone that was found in fragments. Although small and less well preserved, this grave recalls Grave 2, a cist grave excavated in 2015 in Square 271928.

In Squares 271927 and 271928, we also encountered evidence for a sporadic modern occupation. Above the wall Locus:271927:009, a small pebble surface was found (Locus:271927:041), with three modern Iraqi coins, a bullet and a bullet case. This surface must have been in use after the year 1975 as one of the coins bears this date. Linked to this surface is an irregular stone installation or, given its haphazard nature, accumulation in roughly north-southern orientation (Locus:271928:097). Neither its function nor its stratigraphic relation to the modern surface (Locus:271927:041) are clear, although it may have been created in conjunction with the use of the latter surface. Both the graveyard and the modern occupation layer are covered by topsoil (LGR:0011).

D5.8 Concluding remarks on Building A

(*F. Janoscha Kreppner & Andrea Squitieri*)

Building A is a multi-unit architectural complex of the Main Occupation Period, bordered by Alley 4 in the west, Alley 25 in the east and Outdoor Area 26 in the south. Its northern extent is unclear because of the excavation being still incomplete. Further work may well show that Room 6 (excavated in 2015 and labelled Building B⁶⁵) was in fact part of Building A.

The spatial arrangement of the walls and their construction technique suggest structural reasons for the existence of the double wall dividing Rooms 23 and 24. The wall LGR:0138 is 15 m long, with two walls oriented north-

wards (Locus:271927:011 and Locus:271927:009) and a third wall oriented southwards (Locus:272927:009) bonded to it. This indicates that from the beginning, Building A was designed to be organised on both sides of the wall. However, while Room 24 in the east of the building was constructed with a second wall (Locus:272928:029) set against wall LGR:0138, thus creating a double wall, Room 3 in the west of Courtyard 2 makes structural use of wall LGR:0138 itself. It seems reasonable, therefore, to assume that Room 24 was built as a separate unit during the first construction phase.

Overall, the following occupation periods can be distinguished:

- The main occupation period;
- The main usage period, which is divided into two phases in Room 1 whose drainage pit was filled and sealed by a new floor;
- A period of abandonment when the ruins of the main occupation period were covered by deposits;
- A period of a partial re-occupation, which was identified in Courtyard 2 and Building B Room 6 in 2015⁶⁶;
- Much later graves that were cut into the remains of these older levels;
- The modern occupation.

D6. Outdoor Area 8

(*Silvia Amicone & Francesca Chelazzi*)

Outdoor Area 8 (**Figs. D9, D15-D16**) was identified in 2015 as the large outdoor area west of Buildings A, B and C, stretching as far as the paved floor uncovered in 2015 in Square 268930 (LGR:0157). During the 2016 excavation, we further investigated this area, focusing on the excavation of the kiln identified in 2015 under the supervision of Silvia Amicone and on the area west of the kiln under the supervision of Francesca Chelazzi.

D6.1 The pottery kiln

(*Silvia Amicone*)

Moving westwards from Building A along the 2015 "Connecting Trench", a pottery kiln was found in Outdoor Area 8 (**Figs. D9-D11**) and partially excavated by Adam Stone in the first season⁶⁷. In 2016, Silvia Amicone continued the investigation of the kiln by opening a trench of 5.5×3.3 m

64 Greenfield 2016, 78-79.

65 MacGinnis/Kreppner 2016, 61.

66 MacGinnis/Kreppner 2016, 58, 61.

67 Stone 2016, 66-67.

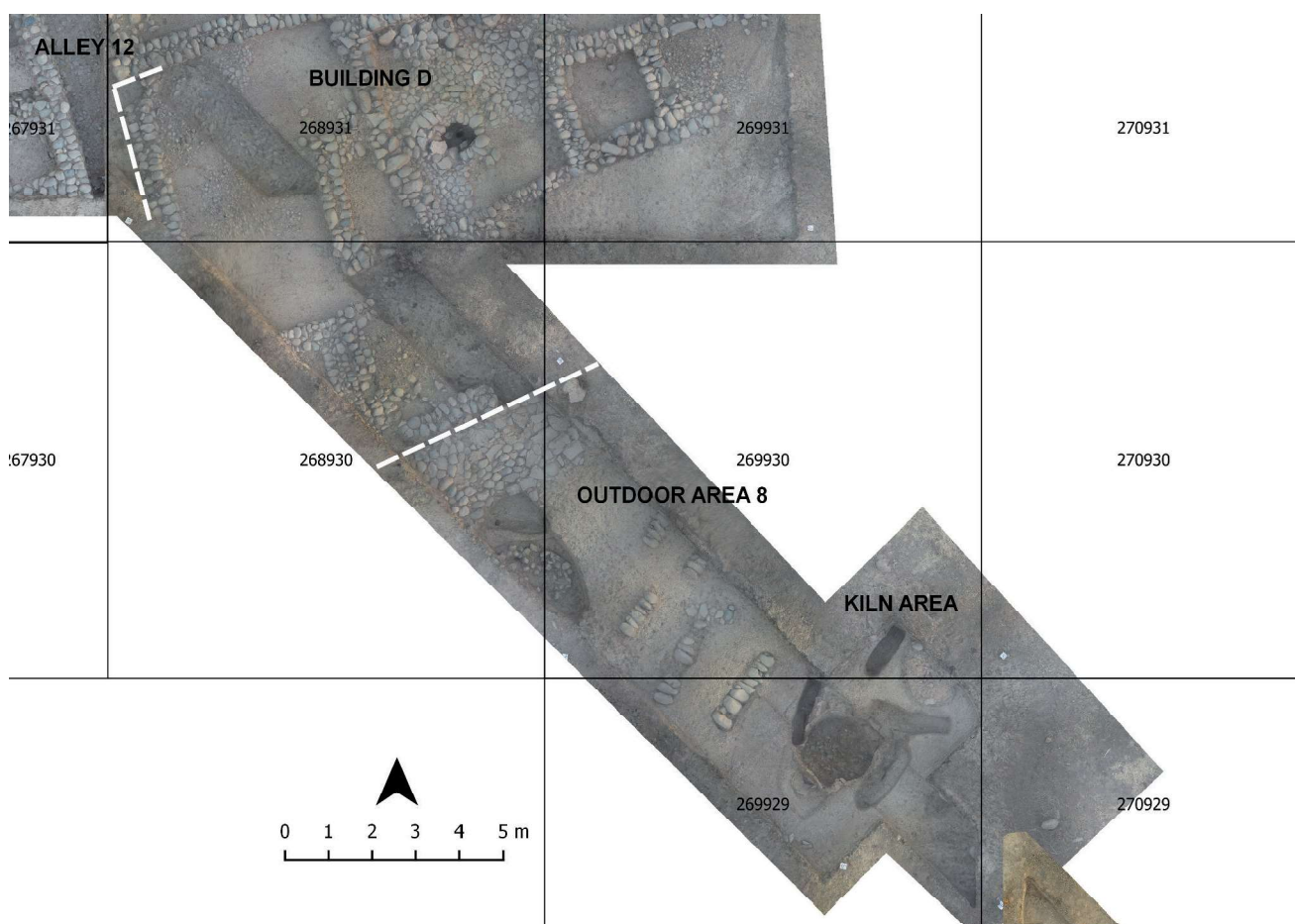


Fig. D9: Orthophoto of Outdoor Area 8 with the pottery kiln. Prepared by Andrea Squitieri.

extending to the southeast (Square 269929) and to the northeast (Square 269930) of the kiln.

During the investigation of the southeastern portion of the kiln structure it was possible to detect remains of the 5-10 cm thick kiln clay lining (Locus:269929:006), which had been already partially excavated in 2015. The kiln lining was well preserved for most of the height of the structure and burnt red on the outside and hard white on the inside (Fig. D12). Moreover, it was possible to identify different parts of the original kiln floor, featuring holes that originally allowed the heat from the lower combustion chamber to reach the upper chamber. A fragment of the kiln floor was still *in situ* (Locus:269929:036) while others were found in different levels of the kiln filling (Locus:269929:038 and Locus: 269929:040) (Figs. D13-D14). In the back wall of the kiln (Locus:269929:043) we identified a hole that allowed the smoke to get out while the kiln was in use. Behind the kiln wall and connected with this smoke opening, a small semi-circular plastered structure with a slightly concave upper surface was identified

(Locus:269929:037). During the investigation of the north-western portion of the kiln we found another portion of the kiln lining as well as the entrance to the kiln. In plan view, the kiln lining narrows and becomes smaller in correspondence with its entrance, which has a diameter of about 50 cm. About 1.5 m northwest of the kiln entrance, a filling containing much burnt clay was detected but not yet excavated (LGR:0134, with Locus:269929:034 and Locus:269930:020). It is likely that this filling belongs to a second kiln and this will be further investigated in 2017.

During the 2016 campaign it was possible to excavate the entire kiln fill. The lowest portion of this filling, below the fragments of the kiln floor (Locus:269929:040), was 25 cm thick (LGR:0152: Locus:269929:042) and consisted of a dark grey-black ashy deposit rich in charcoal; almost no pottery was found in this locus. As already observed by Adam Stone in 2015, this ashy deposit could be the residue of the original use of the kiln. This filling was very sharply separated from the above filling (LGR:0009: Locus:269929:039). The latter filling was very rich in

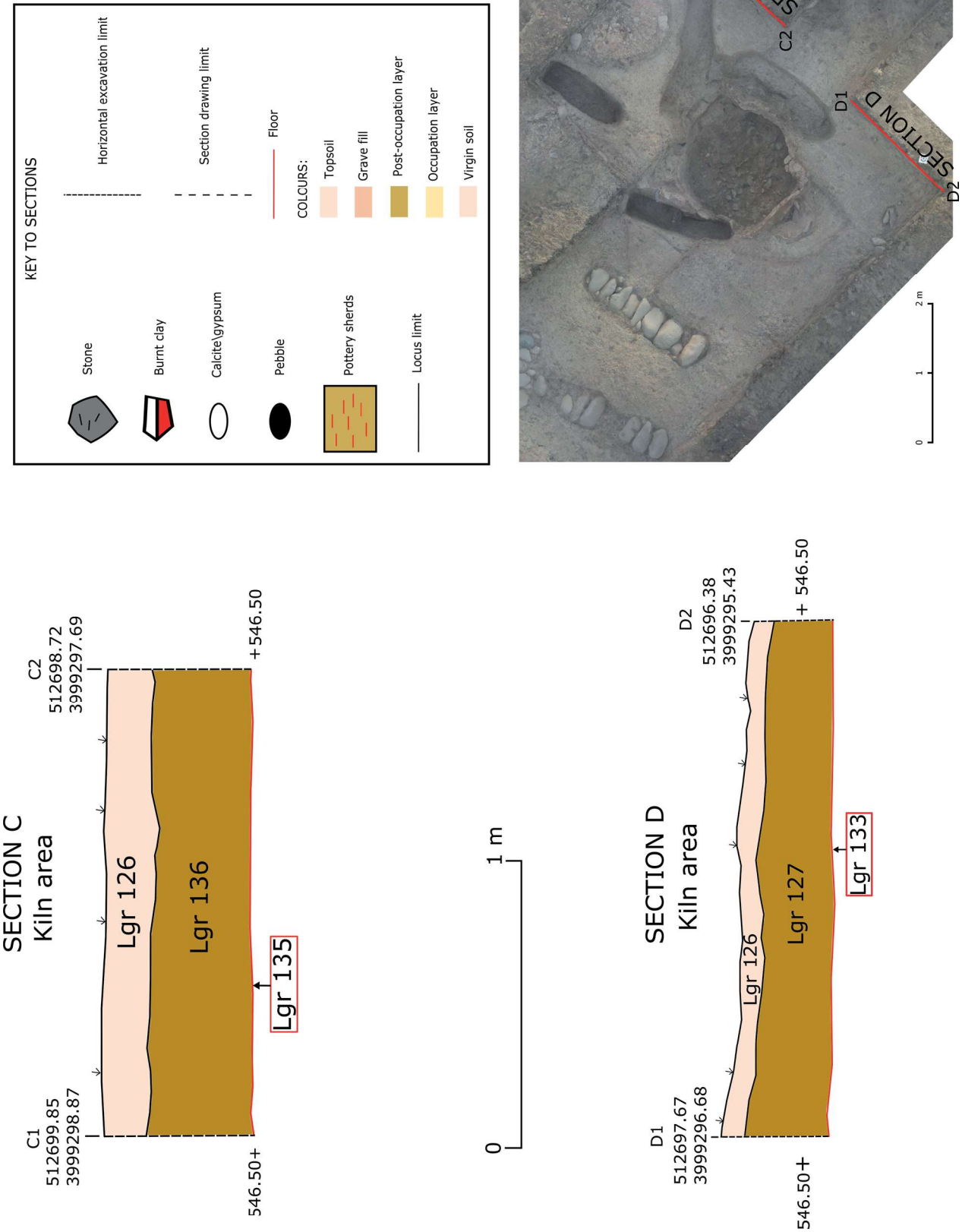
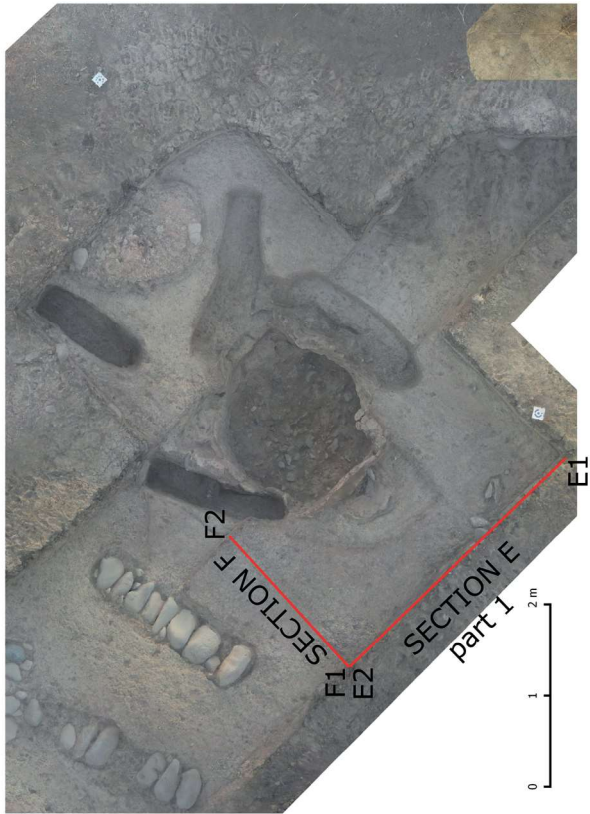
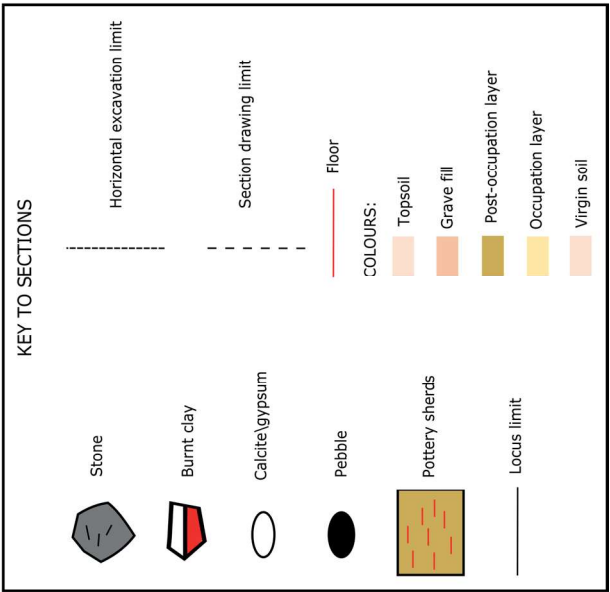
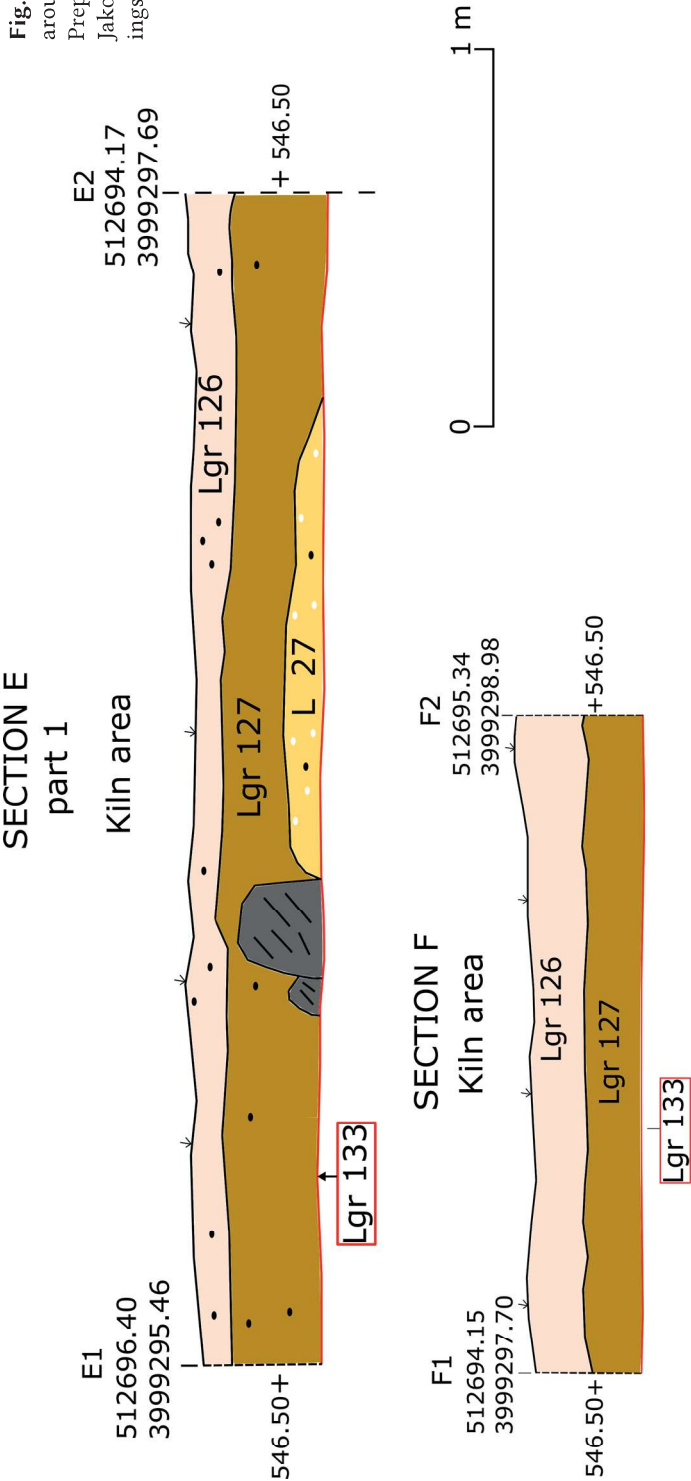


Fig. D10: Sections C and D around the kiln in Outdoor Area 8. Prepared by Andrea Squitieri and Jakob Riedl, based on field drawings by Silvia Amicone.

Fig. D11: Sections E (part 1) and F around the kiln in Outdoor Area 8. Prepared by Andrea Squitieri and Jakob Riedl, based on field drawings by Silvia Amicone.



pottery and included some complete and stacked vessels (e.g., PPP 269929:039:001, PPP 269929:039:003, PPP 269929:039:005 and PPP 269929:039:0018), together with several fragments of the kiln floor, which showed clear



Fig. D12: The kiln at the end of its excavation, showing the kiln lining and the stone-rich lowest layer. Photo by Silvia Amicone.



Fig. D13: The pottery kiln during the excavation of its fills, with pottery vessels from the last kiln load. Photo by Silvia Amicone.



Fig. D14: Close-up of the kiln fill showing some fragments of the original perforated floor of the kiln with signs of vitrification, among pottery sherds. Photo by Silvia Amicone.

signs of vitrification (**Fig. D14**). The upper portion of the kiln filling (LGR:0009; Locus:269929:026) also yielded pottery sherds, but these were much more fragmented than those found in the filling below (Locus:269929:039). Additional fragments of the kiln floor were recovered from this locus. Moreover, a total of 36 animal bones (**Table G1**) were collected from the two kiln fills, of which only one pig bone was burnt, however (**SG2.4; Fig. G3**).

In order to retrieve more information about the fuel used during kiln activity, several flotation, charcoal and phytolith samples were collected from the kiln fills (Locus:269929:026, Locus:269929:039 and Locus:269929:042).

In the southwestern portion of the kiln area, a floor (LGR:0133) was detected, which abuts the kiln structure and is contemporaneous with the period when the kiln was in function. In the northwestern portion of the trench a surface (LGR:0135) was found that could be the possible continuation of the floor LGR:0133. These floors continue towards the west and likely connected the kiln area to the western structures described below (**SD6.2**); however, it was extremely difficult to follow these floors because of the damages caused by later graves and a modern pit.

Four later graves (Graves 31, 32, 48 and 49) are located around the kiln, two of which had already been excavated in 2015. Grave 49 yielded a metal spatula (PPP 269930:019:002), positioned just next to the skeleton.

The kiln was covered by a hard greyish deposit (LGR:0136 with Locus:269929:028 and Locus:269930:016 in the northeastern part of the kiln trench, and LGR:0127 with Locus:269929:025 in the southeastern part of the kiln trench). This deposit was covered by the topsoil (LGR:0126 with Locus:269929:024 and Locus:269929:015).

In conclusion, we now have strong evidence that the installation under investigation was a pottery kiln. The nature of the kiln filling, especially in the upper portion (Locus:269929:026), seems to indicate a secondary use for this structure as a waste pit. The numerous staked complete vessels found at the back of the kiln, in the lower part of the upper filling (Locus:269929:039), could be what remains of the last load of the kiln, which collapsed during firing activity, thus sealing this portion of the filling. However, the presence of unburnt bones in this fill as well as of pottery vessels requiring different firing techniques (**SE1.1.1**) would point to a mixed formation process of this fill (Locus:269929:039). In part it seems that this fill sealed the last kiln load with some pottery as well as portions of the kiln floor *in situ*. However, bones and perhaps other pottery vessels appear to be in a secondary context, indicating that perhaps this fill was disturbed when discarding activities occurred after the kiln had lost its functionality. The collapse of the kiln does not appear to have been a single event, but may have occurred over

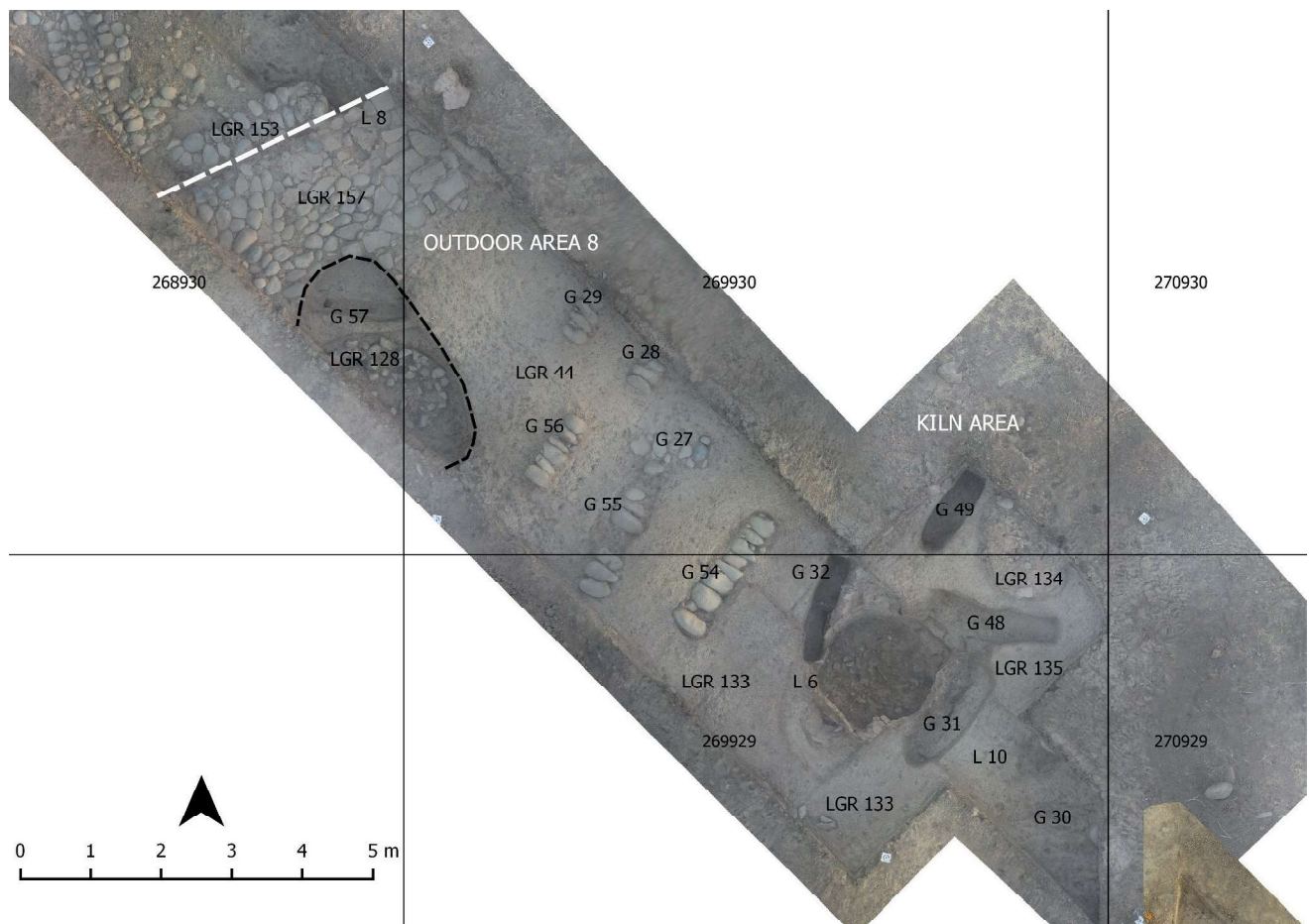


Fig. D15: Detailed orthophoto of Outdoor Area 8 and the kiln area. Prepared by Andrea Squitieri.

different stages. Importantly, however, the lowest kiln fill (Locus:269929:042, part of LGR:0152) appears to have formed in connection with the collapse of the kiln during its final firing, as it did not yield any material in apparent secondary context.

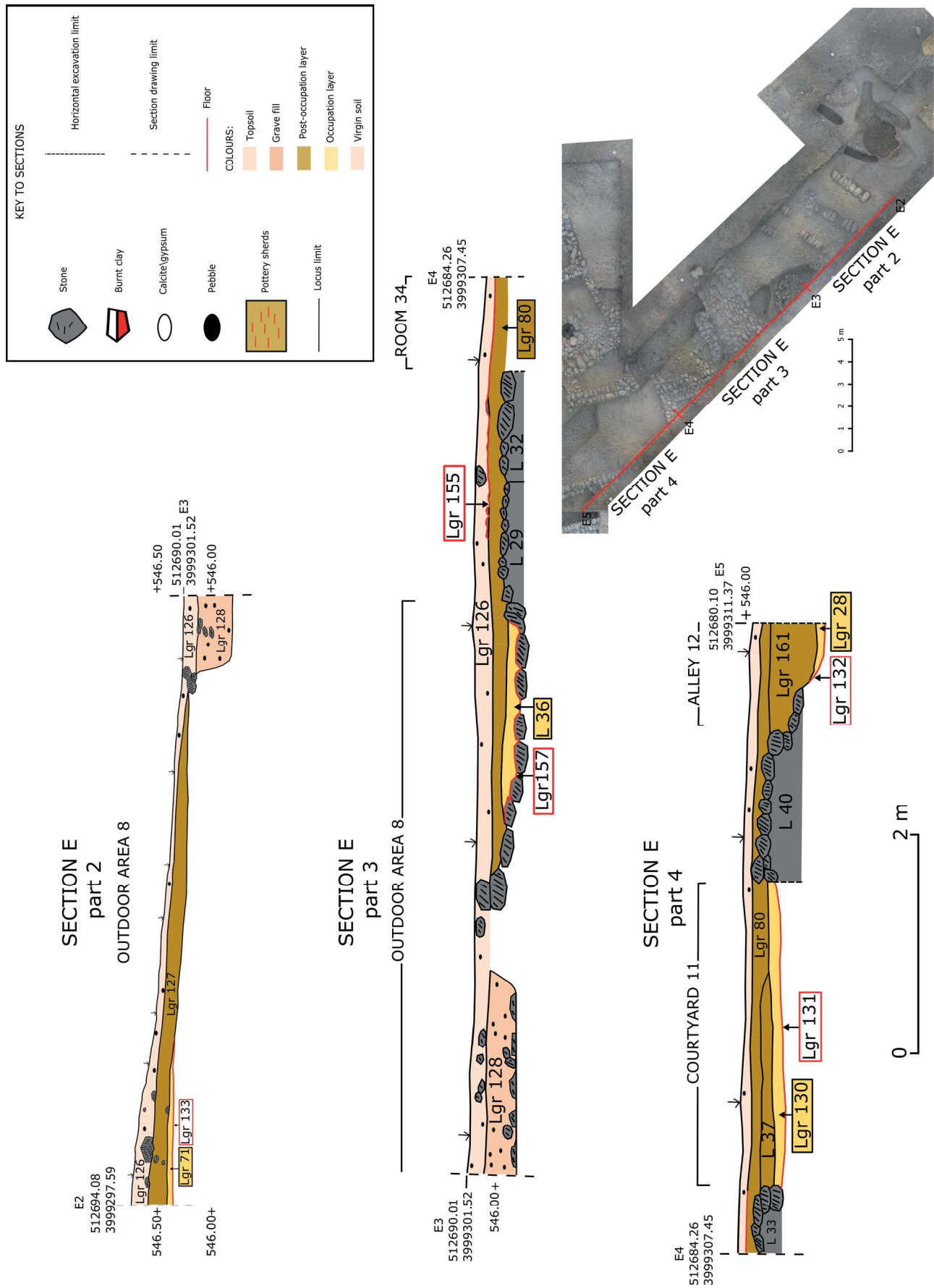
D6.2 West of the pottery kiln (*Francesca Chelazzi*)

The primary goal of the excavation in this area was to understand the spatial connection of the kiln with the structures identified in the western part of the site.

West of the kiln area, a beaten earth floor (LGR:0133) was identified in an area of c. 2 m², made of a light brown, very hard soil with a silty matrix. The floor was covered by a c. 3 cm thick layer (LGR:0071, with Locus:269930:033 and Locus:269929:047) consisting of yellowish brown dry hard silty soil. Unfortunately, it was very difficult to identify the western edge of this floor because the area was damaged by several later graves (§G4): from east to west,

Graves 54, 55, 27, 56, 28 and 29. West of these graves, a paved floor (LGR:0157) was found, partially uncovered in 2015. This is made of large flat and roughly regular stones with an average width of 20-40 cm. Despite being well laid, they do not seem to follow any regular pattern. This paved floor abuts on the east the virgin soil (LGR:0044), which was likely used as an occupation surface. The virgin soil is a very pale brown natural thin layer of silty clay. Covering the paved floor was a dry hard silty soil (Locus:268930:036) whereas the beaten floor as well as the virgin soil (LGR:044) were covered by a post-occupation deposit (LGR:0127, with Locus:269930:028 and Locus:269929:046) consisting of yellowish-brown dry hard, silty and moderately sorted soil.

Southeast of the paved floor, a modern pit (LGR:0128) was found that yielded a large quantity of fieldstones and modern material (plastics, glass, metal objects), likely dating to the time when the chicken farm was built in 2014. The pit disturbed Grave 57, which may explain why its stone capping was found in an unusual arrangement. The pit cut was not identified during the excavation of the



overlying topsoil, so it is possible that the pit was created before the latter formed. The topsoil in this area was a dark yellowish-brown and rain-induced deposition of fine sediments and pebbles characterised by a remarkable bioturbation.

In conclusion, the investigation of this area permitted us to identify a floor connecting the kiln to the structures in the west, which is a very important datum to understand the general planning of the site. As already noted in 2015, it appears that Outdoor Area 8 does not have architectural features such as walls between the kilns and Building D. The 2016 results confirmed the assumption that Outdoor Area 8 was a large area that was used mainly for pottery production.

D7. Building D

(*Francesca Chelazzi & Vera Egbers*)

Building D's original plan consisted only of Room 31 (with a possible oven) and of Courtyard 27 (with a well). Subsequently, the building received its final design in Main Occupation Period 2 with the erection of three walls that delimit Courtyard 27 and separate it from Courtyard 11 in the west. These changes also affected Room 10.

The plan of the southern portion of Building D, with Room 9 and Room 34, as well as of its eastern portion is not yet fully understood and will have to be further investigated. Still unclear is also the relation between Building D and Building E to the north (**Fig. D17**). We currently assume that the two units were originally parts of the same large building ("Building D / E"; cf. **§D8**) whose later alteration led to the structural division.

D7.1 Room 9

(*Francesca Chelazzi*)

When first encountered in 2015, this space was thought to be an open area and therefore named "Outdoor Area 9"⁶⁸; this is now obsolete.

Walls LGR:0153 and LGR:0154, situated at a distance of c. 2.4 m from each other, constitute the northern and southern limits of Room 9 (**Fig. D17-D18**). Wall LGR:0154, which is 80 cm long and 55 cm wide and survives in the shape of three courses of pebbles, separates the room from Courtyard 11 in the northwest. This wall forms a corner with wall Locus:268930:029, the western limit of Room 9. This wall is 3.1 m long and, again, 55 cm wide.

Wall LGR:0153, Room 9's southern perimeter, separates the room from Outdoor Area 8. The wall is 1.5 m long and 50 cm wide and survives as a single course with a height of 15 cm. The same construction technique is used for all these walls, with two parallel rows of large river cobbles filled in with smaller stones.

The floor LGR:0156 abuts these three walls and hence is contemporary to them. It is made of small pebbles, ranging from c. 1-5 cm in diameter. The deposit immediately above this pebble floor (Locus:268930:030) consists of a yellowish brown dry hard and silty soil, yielding pottery, a few animal bones and a spherical limestone pounder (PPP 268930:030:006; **§F3**). A semi-circular stone installation (Locus:268930:044), made of large river cobbles, lies above the floor in the southwestern corner (at the intersection between the walls LGR:0153 and Locus:268930:029). This installation was filled by a deposit (Locus:268930:039) that was very rich in small pebbles of a diameter of c. 2-3 cm and also contained pottery sherds.

This stone installation (Locus:268930:044) was located below a number of large stones (Locus:268930:026) that occupied the southern part of Room 9. The overall distribution of these stones did not seem to follow any specific pattern and they appeared to be mixed in size and orientation; nevertheless, their arrangement would suggest an anthropic deposition. Perhaps these stones originally constituted a poorly constructed wall that may have been heavily damaged over time due to its proximity to the site surface. This wall may have belonged to a later period of occupation. Evidence for the existence of such a late period of occupation (called Sporadic Occupation in **Table D2**) comes from a pebble floor (LGR:0155) which covered part of the wall Locus:268930:029. This floor yielded pottery sherds (PPP 268930:029:001) displaying an incised wavy decoration that suggests a Sasanian dating (**§E1.1.6**). Three similar sherds were recovered in the ceramic assemblage coming from the immediately overlying topsoil (LGR:0126), which included a remarkable quantity of small pebbles. Pottery indicating a sporadic occupation during the Sasanian period had already been observed in 2015⁶⁹, on a surface that forms part of LGR:0155. In 2016, we were able to collect charcoal samples from the Sasanian-period surface for radiocarbon dating.

No architecture associated with a Sasanian-period occupation of this part of Gird-i Bazar has been identified so far, with the possible exception of the poorly constructed wall discussed above.

68 Stone 2016, 68.

69 Stone 2016, 69.



Fig. D17: Orthophoto showing Buildings D, E, F, G, H and I; Outdoor Area 32; and Alleys 12 and 13. Prepared by Andrea Squitieri.

D7.2 Room 34

(Francesca Chelazzi)

When excavating the wall Locus:268930:029, the western limit of Room 9, the adjoining corner formed by the two walls Locus:268930:032 and Locus:268930:033 was unearthed. This is the northeastern corner of an area named Room 34 (**Figs. D16, D18**), which could not be fully investigated in 2016. Work will continue in 2017.

Wall Locus:268930:032 was partially covered by the Sasanian-period floor (LGR:0155), which was also identified in Room 9. It constitutes the eastern perimeter of Room 34 and runs in southeastern to northwestern direction, parallel to Room 9's adjacent stone wall (Locus:268930:029). It is 2.85 m long and 60 cm wide. Only one course was visible, but it is likely that it was formed of at least three courses of river cobbles, like wall Locus:268930:033.

D7.3 Room 10

(Francesca Chelazzi)

North of Room 9, another room belonging to Building D was identified and named Room 10 (**Fig. D18**). This is a small space of about 2.2×1.3 m, slightly narrowing towards north. It is surrounded by the walls LGR:0158 in the west, Locus:268930:017 in the south and Locus:268931:021 in the east. The room was likely connected with Room 9 through a passage although this has not yet been found, as Room 10 was not fully excavated during the 2015 campaign.

D7.4 Courtyard 11

(Francesca Chelazzi)

Courtyard 11 (**Figs. D16, D18**), of which 22 m² were excavated, was very likely an unroofed space, located in the

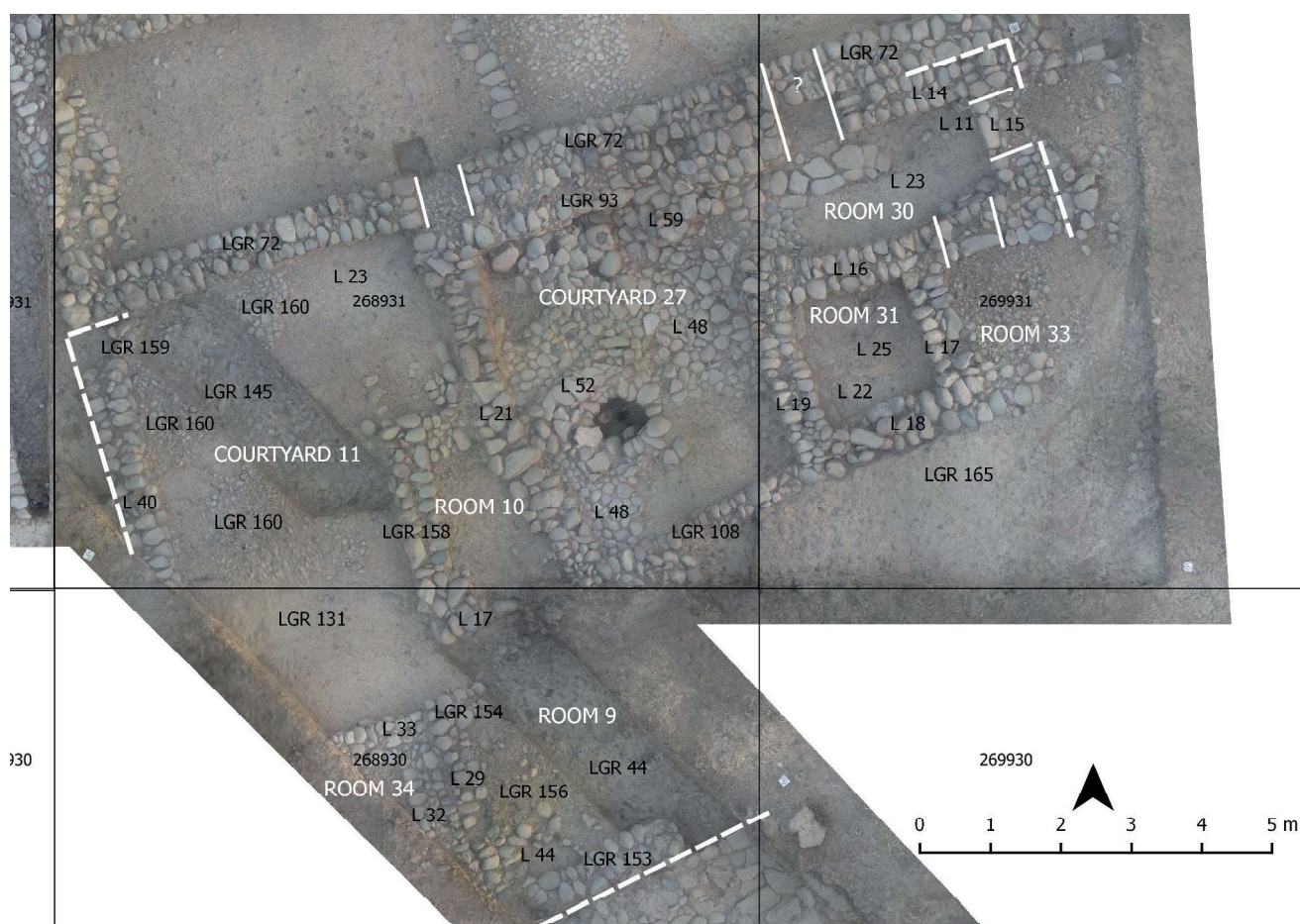


Fig. D18: Detailed orthophoto of Building D. Prepared by Andrea Squitieri.

western portion of Building D and connected to Alley 12 through a passage in the west. It is delimited in the south by the walls Locus:268930:033 and LGR:0154, in the east by the walls LGR:0158 and Locus:268931:021, in the north by the wall LGR:0072 and in the west by the wall Locus:268931:040. This last wall is abutted by a pebble floor (LGR:0160), identical with the floor excavated in 2015 as Locus:268931:005. A remarkable quantity of potsherds has been collected from this pebble floor, in particular a fragmentary jug (PPP 268931:036:002) and a group of fragmentary open vessels (PPP 268931:041:005). The pebble floor does not cover the entire surface of Courtyard 11. Towards the south and the east, trodden earth floors were found (named LGR:0131 and Locus:268931:023). The surface Locus:268931:023 abuts Courtyard 11's northern wall (LGR:0072). The reason why Courtyard 11 was paved with a patchy pebble floor is not clear, but it was possibly related to hydraulic purposes in order to improve the impermeabilisation of the surface in some areas of the courtyard. We assume that Courtyard 11 was during Main Occupation Period 1 connected in the east to Court-

yard 27 and that they were subsequently separated during Main Occupation Period 2 by the erection of the wall Locus:268931:021.

During the post-occupation period, Courtyard 11 was filled with a layer of crumbly and very hard soil (Locus:268931:018 in the north; LGR:0080 with Locus:268931:044 in the south), whose consistency and colour were the same as in the rest of the building (i.e., Locus:268931:017). On top of this layer, the topsoil accumulated (LGR:0126, with Locus:268931:013).

D7.5 Courtyard 27 and Rooms 30, 31 and 33 (Vera Egbers)

In the eastern part of Building D, Courtyard 27 and Rooms 30, 31 and 33 (Figs. D17-D19) form a group of units which is attached to the larger Building E in the south, so that they resemble an extension of the latter. While there is no wall separating Courtyard 27 and Room 30 from each other, the small Room 31 is surrounded by four walls (from north to

east: Locus:269931:016, Locus:269931:017, Locus:269931:018 and Locus:269931:019). These walls were constructed on the virgin soil and are bonded to each other. In particular, the eastern wall Locus:269931:017 abuts wall Locus:269931:018 to its south; it would seem that the construction began with this latter wall and continued clockwise. Locus:269931:016 is the wall between Room 31 and Room 30 and bonds with wall Locus:269931:015, the eastern limit of Room 30. Within this short wall, a long flat stone was installed that most likely served as the threshold to enter the building. The wall Locus:269931:015 connects with the northern wall of Room 30 (Locus:269931:014), which runs in parallel with the wall LGR:0072 of Room 19. Within the inner corner of the two walls (Locus:269931:014 and Locus:269931:015) lies a door socket (Locus:269931:011) still *in situ*. The door must have been installed in such a way that one would enter through the door in wall Locus:269931:015, stepping over the threshold stone and opening the door towards the inside of Room 30. The step down from the threshold to floor Locus:269931:023 (see below) was rather steep, about 45 cm. Similarly to the southern wall (LGR:0072) of Building E, the wall Locus:269931:014 of Room 30 is interrupted by a niche (90 cm long, 60 cm wide), possibly a passage to Room 19. Beyond this niche, the wall continues as LGR:0093.

The walls of Rooms 30 and 31 consist of two rows of cobbles, with pebbles and mud as filling in between, and seem to have been carefully planned before construction. In wall Locus:269931:019, a stone mortar was found, reused as building material (PPP 269931:019:001), as well as a stone pestle (PPP 269931:019:002; §F3), both reused as building material.

Because all walls are bonded with each other, they must have been erected at the same time. The chronological relation between these rooms and Room 19 is not clear, but judging from the layout and construction technique of the walls it seems likely that they were built either simultaneously or within a short time as two building units of a single house.

After the walls were built, the floor in Courtyard 27 (Locus:268931:048) was laid down and with it, a large round stone installation that is almost certainly a well (Locus:268931:052). Courtyard 27's floor is a very uneven surface of rather large, unworked stones that slope from the southwestern corner of the room down towards the northeast. The floor continues in the neighbouring Room 30 as Locus:269931:023. In the eastern portion of Room 30 no stones were used for the floor. Apparently the virgin soil was used as a surface on which also the walls were erected. Two stone mortars (PPP 268931:048:003 and PPP 268931:048:005), found with their cavities upside down, were reused during the construction of the floor (Locus:268931:048). Especially in the northeast of

the floor, many large pottery fragments were discovered that served as a pavement. Moreover, one polisher (PPP 268931:048:001) and a pounder (PPP 268931:048:002) were found lying on the floor (§F3), indicating that this area was probably a working area (Fig. D20).

The stone floor in Courtyard 27 is interrupted by the well (Locus:268931:052) and by a small area of c. 1 m² towards the southeast corner, where only the virgin soil was uncovered – likely used as surface, as in Room 30. We observed that the paved floor abuts the wall Locus:269931:019 in the east, but clearly runs under the southern, western and northern walls of Courtyard 27, which indicates that these were built after the construction of the floor. Therefore, the well and the paved floor were most likely built in one construction event and later enclosed by the three walls of Courtyard 27 (see also below).

The well (Locus:268931:052; Fig. D20) resembles the one excavated in Building F (Locus:267932:006; §D12.3.2). The inner diameter of the circle formed by big cobble stones is about 70 cm. The big cobble stones go down in concentric rows, forming the inner wall of the well. It is possible that the well was connected to the drain (Locus:268931:030) excavated in Room 19 of Building E (§D8), as the stones of the floor in Room 27 run clearly under the northern wall LGR:0093. The fill inside the well was grey-brownish soft moist soil with small white inclusions (Locus:268931:051). Several soil samples were taken from this fill at different depths. The bottom of the well was not reached as the excavation of the well fill was stopped at a depth of c. 1.50 m due to safety reasons.

Another stone installation was built on the floor in Courtyard 27, attached to the wall LGR:0093; it is made of five cobble stones, two courses high and lying in a circle (Locus:268931:059). Close to this installation, many pottery fragments were found as well as the above mentioned pounder (PPP 268931:048:002) and polisher (PPP 268931:048:001; §F3). The function of this installation remains unclear. It may have been used as a bench: given the high amount of pottery sherds found around it, perhaps to hold pottery vessels, or alternatively as a sort of work bench due to the presence of the stone tools next to it.

As mentioned above, a short time after the first construction phase, three walls (LGR:0093, Locus:268931:021 and LGR:0108) were built that enclosed Courtyard 27. The southern wall (LGR:0108), when compared to other walls such as those of Building E / Room 19 (§D8.2), looks less stable and well constructed, being made of only two rows of stones next to each other. While this wall is bonded to wall Locus:268931:021 in the west, it abuts the wall Locus:269931:019 of Room 31 in the east, meaning that it was built later.

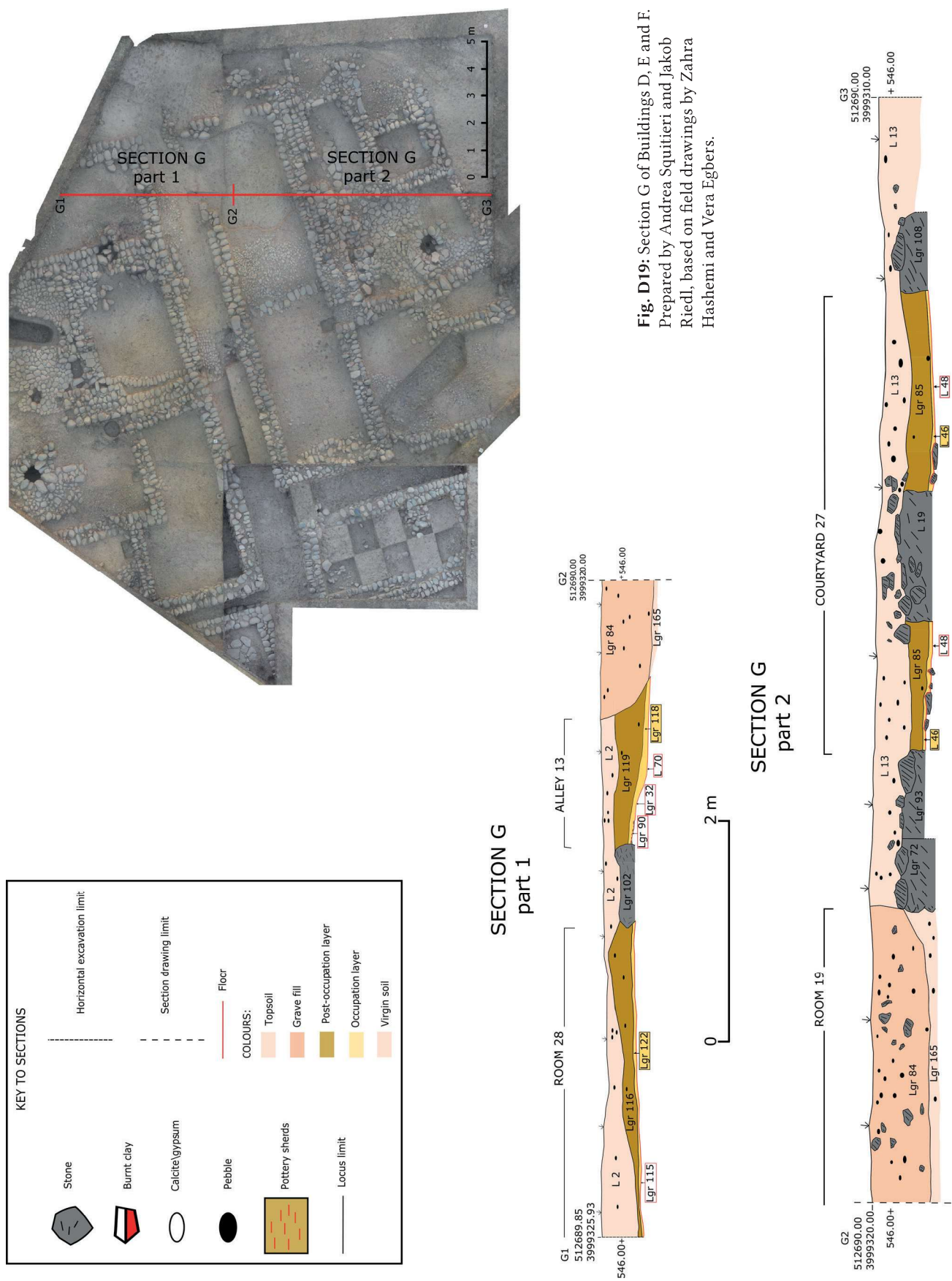




Fig. D20: The well (Locus:268931:052) in Courtyard 27 of Building D, view from the east. Photo by Andrea Squitieri.

The western wall of Courtyard 27 (Locus:268931:021) connects at a right angle to the wall LGR:0093, thus obstructing a niche (Locus:268931:024, possibly a former passage) in the southern wall of Building E (LGR:0072; §D8), in which a pebble floor is still visible.

The northern wall of Courtyard 27 (LGR:0093) runs parallel to the eastern part of Room 19's wall LGR:0072. These two walls are constructed side by side like a double wall. As the other walls, LGR:0093 consists of two rows of cobble stones, with smaller stones and pebbles used as a filling in between.



Fig. D21: The reddish circular structure (Locus:269931:025) interpreted as an oven or a kiln in Room 31 of Building D, partially filled with a red and ashy fill. Photo by Vera Egbers.

The construction of the three walls (LGR:0093, Locus:268931:021 and LGR:0108) took place at a later point in time than Room 19 and Room 31, which raises the question why and when the area around the well in Courtyard 27 was closed off. This remains unclear for the moment.

During the removal of the fill in Room 31, a reddish circular structure made of mud and filled with a red and ashy fill became visible, which we interpreted as an oven (Locus:269931:025; **Fig. D21**). Seen from above, it is pear-shaped, with the thinner part in the northwest and the wider part in the southeast. The installation has a maximum length of 1.55 m and a maximum width of 1.10 m. It could not be completely excavated due to lack of time. Interestingly, the structure occupies almost the

entire Room 31. The visible part of its wall is c. 3-5cm thick and seems to be heavily burnt. A thick piece of burnt clay was stuck in the middle of the fill, which may represent part of the collapsed structure's roofing. Some sherds were found in and around it. Surrounding the assumed oven, we encountered a mud floor (Locus:269931:022), with pottery sherds lying flat on it. It seems that the oven partially cut this floor, but this must be verified with further investigations.

Room 33 has not yet been completely excavated, and neither its complete plan nor its floor(s) are presently known. It is situated at the easternmost extremity of Building D, delimited in the west by the wall Locus:269931:017 and in the north by the wall Locus:269931:016. In the latter, a large flat stone slab was found that probably functioned as a threshold to connect Room 33 to Room 30.

D8. Building E / Room 19

(Vera Egbers)

We currently assume that Room 19 was originally part of Building D (§D7). The "Building D / E" unit was bounded to the north by Alley 13, to the west by Alley 12, to the south by Outdoor Area 8 and to the east by Outdoor Area 32. In Building D / E, the central Courtyard 27, equipped with a well and a drainage channel, was surrounded

(starting in the north and continuing in clockwise direction) by Rooms 19, 30, 31, 33, 9, 34 and 10 and Courtyard 11.

Courtyards 27 and 11 may well have originally constituted one large courtyard that was later divided when Room 10 was created by erecting the walls LGR:0093, Locus:268931:021, LGR:0108 and LGR:0158. These modifications also closed off access to Room 19 and changed its purpose, creating a separate Building E (Figs. D17, D22-D23). However, perhaps Room 19 remained connected to Building D, as a niche observed in the wall Locus:269931:014 of Room 30 possibly constitutes a passage to Room 19 (§D7.5).

D8.1 General layout

In 2015, parts of Room 19 were unearthed in the east of Square 267931, where a wall (LGR:0067) was partially uncovered near the excavation limit⁷⁰, and in the west of Square 268931 (part of the “Connecting Trench”), where a part of a wall (LGR:0072) was found⁷¹. The 2016 excava-

tions uncovered the full extent of Room 19, which seems to be a single-room architectural unit (“Building E”) composed by one large rectangular space of c. 36 m². It is delimited by the walls LGR:0067 in the west, LGR:0089 in the north, Locus 269932:008 and Locus:269931:026 in the east and LGR:0072 in the south.

D8.2 The walls

The walls were erected directly on the virgin soil, as already observed in 2015. They consist of large river cobbles (c. 30×18×15 cm), laid in two rows with small pebbles used as filling in between. The average width of the walls in Room 19 is c. 65 cm. No traces of the mudbrick superstructure have survived.

The southern wall LGR:0072 is preserved up to a height of three courses (c. 50 cm). The wall is connected in the southwest with wall LGR:0067. This c. 4.30 m long wall borders onto Alley 12, on whose other side Building H (excavated in 2015⁷²) is situated (Fig. D17). It connects to

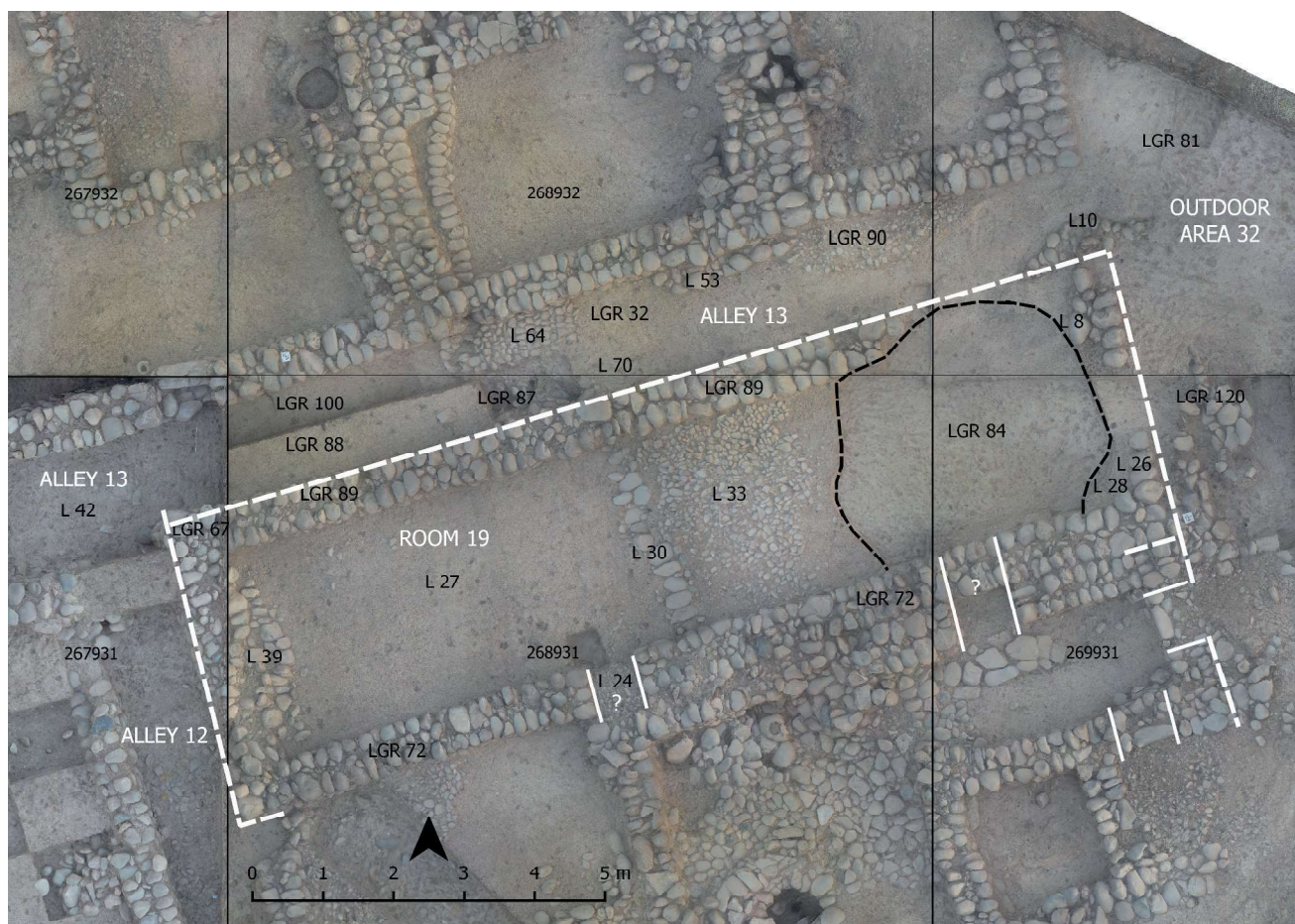
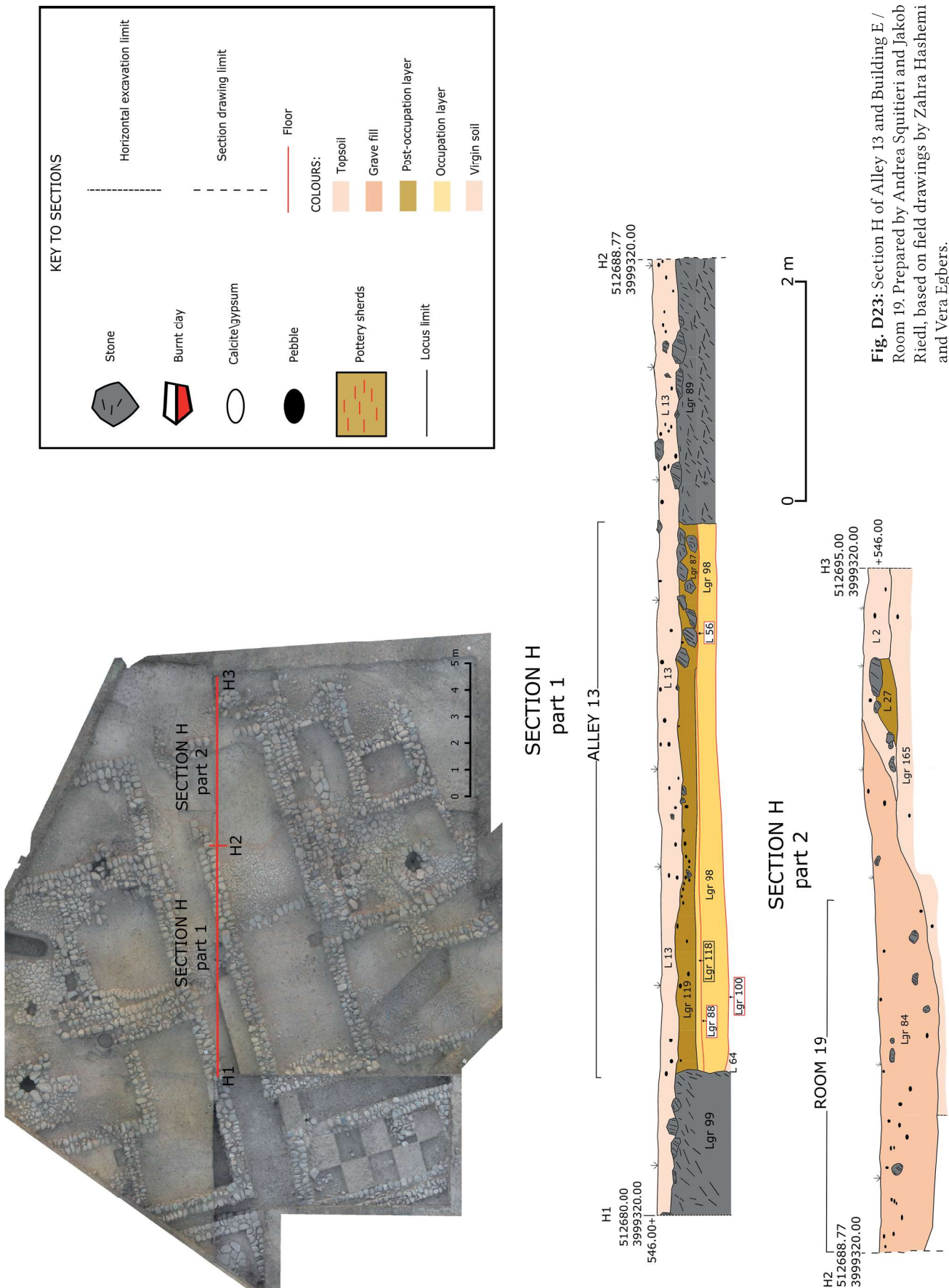


Fig. D22: Detailed orthophoto of Building E / Room 19. Prepared by Andrea Squitieri.

⁷⁰ Bartl 2016, 75-76.

⁷¹ Stone 2016, 69-70.

⁷² Bartl 2016, 75-76.



the northern wall LGR:0089. The corner formed in the northwest of Room 19 by these two walls is preserved up to a height of five courses (c. 75 cm). The northern wall (LGR:0089) could be traced for a length of c. 10.90 m while the southern wall (LGR:0072) is 14.45 m long; its eastern limit is somewhat obscured by the adjoining stone collapse (LGR:0120). The eastern part of Room 19 is heavily disturbed by a modern pit (LGR:0084).

It is unclear where the entrance to Room 19 was located. A niche (Locus:268931:024) with a width of c. 70 cm is located in the western part of the southern wall (LGR:0072). It has a rather uneven surface consisting of fist-sized and smaller pebbles that slopes down to the smooth stoneless clayey floor of Room 19 (Locus:268931:027, see below). When first exposed, we interpreted this niche as the entrance to Room 19. But on its southern side, this “entrance” is blocked by the corner of Building D, formed by the walls LGR:0093 and Locus:268931:021 (**Fig. D18**). This means, as discussed above (**§D7.5**), that these walls were constructed later than Room 19 whose use therefore must have changed. It is also possible that the niche was not a door but a space for storage, for example a shelf unit.

If the niche (Locus:268931:024) was indeed not the entrance to Room 19, it is possible that the original threshold may have been located in the now destroyed eastern part of the room. No door socket or threshold has been identified elsewhere in the surviving wall structures.

D8.3 The installations

The installation Locus:268931:030 (**Fig. D24**) in the centre of Room 19 consists of a row of 13 single large cobblestones, flanked by smaller pebbles, running over a length of c. 2.90 m from underneath the southern wall (LGR:0072) to underneath the northern wall (LGR:0089). Since the structure lies below the walls it was constructed before them. Like the very similar stone installation found in Building F (**§D12.3**), we interpret this structure as a drain that ran through Room 19 and connected the well in Courtyard 27 of Building D to the south with Alley 13 in the north. The stones are sunk in the floor (Locus:268931:027) of the western part of Room 19. On the eastern side of this installation is a pebble floor (Locus:268931:033). On top of this floor, close to the middle of the adjoining installation, we found a large piece of burnt clay (PPP 268931:033:001), perhaps a brick fragment, which may have been part of an architectural feature. Where the drain runs underneath the northern wall (LGR:0089), a large stone is visible in the wall.

The function of a second stone installation (Locus:268931:039) is less clear. 17 large cobblestones, set in a line,

are sunk into the floor (Locus:268931:027). The bottom part of the structure was not excavated. It was either built before or at the same time as the construction of the floor and adjoins the western wall (LGR:0067) but does not abut the southern wall (LGR:0072) and the northern wall (LGR:0089). Initially thought to be collapse from the western wall (LGR:0067), this interpretation was abandoned when it became clear that the stones were sunk into the floor. The structure may have been a bench, perhaps equipped with a superstructure that created an even surface on top of the stones, or the base for a shelf. No finds were discovered around or on top of it.

D8.4 The floors

Only one floor level of Main Occupation Period 1 was identified. The drain (Locus:268931:030) that divides Room 19 in two parts may mark the transition between a roofed area above the clay floor (Locus:268931:027) in the west and an unroofed area above the pebble floor (Locus:268931:033) in the east.

In the western part of Room 19, the floor (Locus:268931:027) is a greyish brown, firm clay floor with very few small stones pressed into the clay in some parts. Especially close to the niche (Locus:268931:024), the quantity of stones increased. The floor slopes up against the surrounding walls and flanks the western side of the drain (Locus:268931:030). A small sounding (**Fig. D24**) was opened directly in front of the niche, cutting this floor: this revealed that there was no other floor below, only a compact deposit of c. 15–20 cm of mud directly above the virgin soil, interpreted as the foundation for the floor⁷³.

Accordingly, the construction sequence here can be reconstructed as follows: the stones of the walls were built directly on the natural bedrock while the drain and the bench / shelf structure were put in place. Subsequently, a fill of firm clayey soil was brought into the new room to create an even surface. The top of this fill was then used as the floor, as far as we could observe, without any further preparation or alteration.

In the eastern part of Room 19, the pebble floor (Locus:268931:033) forms a relatively uneven surface. Close to the drain, it consists of many neatly laid pebbles of an average size of 7×10×5 cm with smaller pebbles of about fingernail size set in between as well as some pot sherds and loose, crumbly soil. Further to the east, the size of the pebbles diminishes until the appearance of the floor

73 It was therefore not assigned a separate locus number.

changes to a clayey surface with single small pebbles distributed irregularly over the area.

In this area, the floor was cut by a modern pit (LGR:0084; **Fig. D23**). The section created by this pit shows that there was only one floor. Similarly to the western floor (Locus:268931:027), a mud layer constitutes the foundation for the pebble floor⁷⁴. Perhaps the stones were pressed into this layer when it was still wet. The pebbles of the floor do not reach the northern wall (LGR:0089) and the southern wall (LGR:0072), but stop a few centimetres before, indicating that they were put in place after the construction of those walls.

Remarkably, very few objects and no charcoal were found in the deposits above the floor level of Room 19 (**Fig. F20**). The deposit above the western floor (Locus:268931:027) was a reddish-brown soil, dry and hard, silty to clayey, with many white inclusions of c. 3 mm (LGR:0166). The deposit above the eastern pebble floor (Locus:268931:033) was a light brown, hard clayey soil (Locus:268931:032) that could be separated easily from the pebbles below. These deposits were in turn covered by reddish-brown clayey-silty soil (Locus:268931:017), hard brown clayey-silty soil (Locus:268931:028), and reddish-brown clayey-silty soil (Locus:268931:031) that accumulated when Room 19 was exposed to decay.

The latest events in this building structure's history were the accumulation of topsoil (Locus:268931:013) and the cutting of the pit (LGR:0084). Both the topsoil and the pit were full of modern objects including shoes, glass bottle fragments and pieces of unidentified plastic objects. The topsoil consists of dark brown silty-clayey soil, very hard and dry, with inclusions of small pebbles. It formed a thick layer on top of the walls in the western part of Room 19 (Square 268931) but was less substantial in the eastern part (Square 269931) where the natural bedrock (Locus:269931:006) lies higher than in the west.



Fig. D24: Building E / Room 19 with the drain (Locus:268931:030) running across and the pebble floor (Locus:268931:033) beyond it. Photo by Andrea Squitieri.

D9. Alley 12

(*Francesca Chelazzi*)

The western wall of Building D (Locus:268931:040), running in southeastern to northwestern direction, borders onto Alley 12 (**Figs. D16-D18**). This stone wall is 20 cm high, 3.50 m long and 60 cm wide, and it consists of two courses of large river cobbles; in between these cobbles smaller stones were placed as a fill. As elsewhere in Gird-i Bazar, no mortar was used to build this wall. In the northern part, there is a threshold (LGR:0159), which marks the western entrance to Building D's Courtyard 11.

Alley 12 separates Buildings D and E from Building H in the west, which was excavated in 2015⁷⁵. The wall to the west of the alley is Locus:267931:019. In 2015, the apparent lack of any floor in Alley 12, as well as the very low elevation of the virgin soil (Locus:267931:042), led to hypothesise that the occupational surface was particularly subjected to erosion. Therefore the 2016 excavation focused on the investigation of any possible preserved occupational surfaces in Alley 12.

We noticed that the virgin soil was covered by a hard beaten earth floor (LGR:0132), which was only partially preserved in close proximity to the stone wall of Building

⁷⁴ It was therefore not assigned a separate locus number.

⁷⁵ Bartl 2016, 74-75.

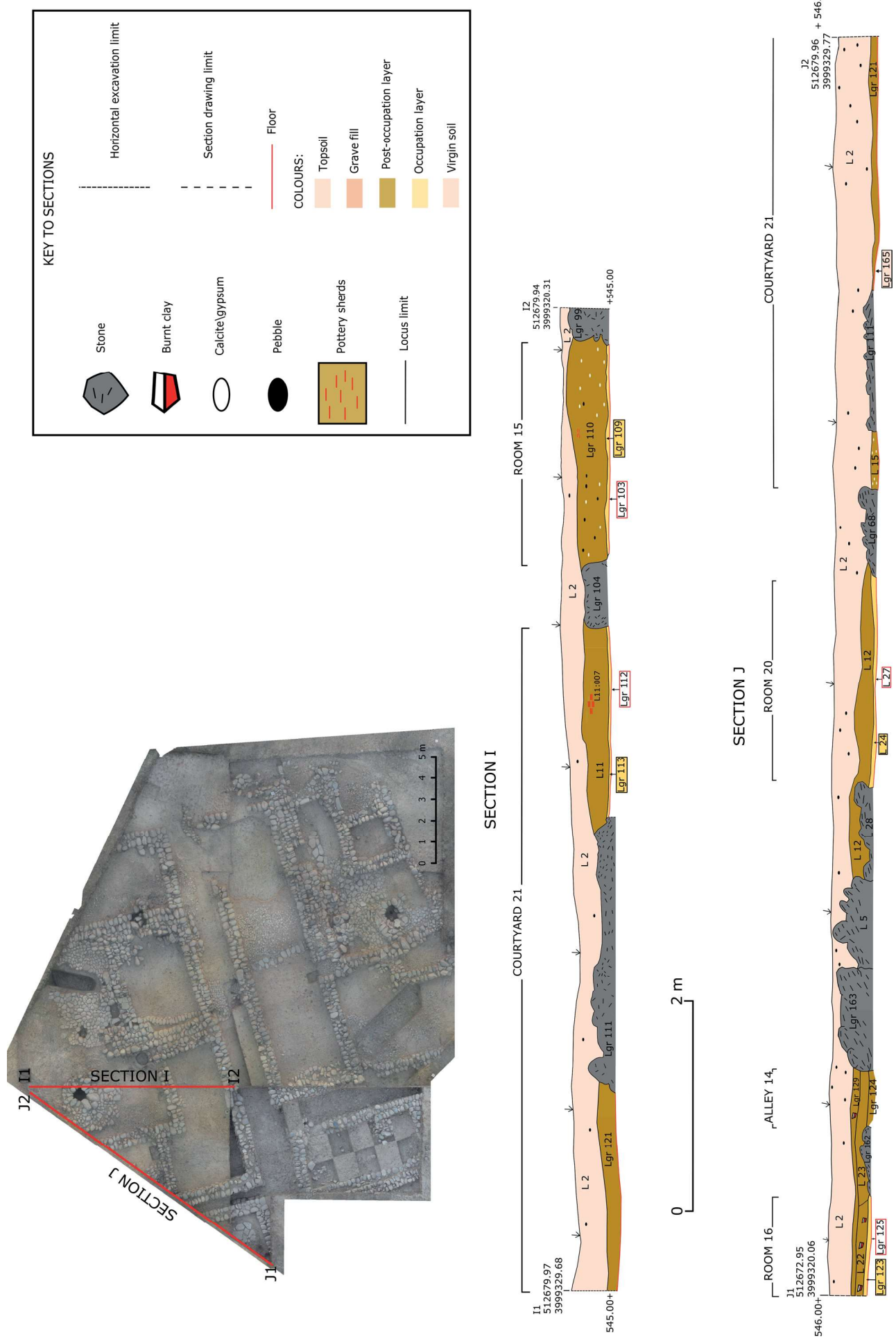


Fig. D25: Sections I and J of Buildings F and G. Prepared by Andrea Squitieri and Jakob Riedl, based on field drawings by Zahra Hashemi.

D (Locus:268931:040). Interestingly, the floor abuts this wall at an elevation c. 20 cm higher than the average elevation of the centre of Alley 12. The floor, therefore, sloped up towards the wall. The floor was covered by a 3–5 cm thick deposit (LGR:0028) of dry hard silty soil, not very rich in pottery.

D10. Building G

(Zahra Hashemi)

Building G (**Figs. D17, D25**) is located west of Building F and represents the westernmost limit of the excavation, where it is bordered by the modern metal fence. This building was already identified in 2015 when Room 16 was partially excavated⁷⁶. It remains the only room known of this building.

The western portion of this room continues under the metal fence and therefore is beyond the excavation limits. The 2015 excavation had revealed that this room has a paved floor (Locus:267931:016) in its centre, made of large flat slabs, where a stone pounder and much charcoal were found. The deposit on this floor yielded many signs of heavy burning⁷⁷. This led to the hypothesis that this room had been used for cooking purposes. In 2016, we decided to excavate a further portion of this room in the north, as far as the metal fence.

Continuing the 2015 excavation of Room 16 towards north, traces of another cooking installation with burnt clay and many charcoals were found (Locus:267932:035). This installation was surely connected to the one excavated in 2015. The floor (LGR: 0125) was covered by a deposit of light brown soil (LGR:0123), covered in turn by a reddish soft clayey soil (Locus:267932:022).

Room 16 is bordered in the south by the wall Locus:267931:012 and in the east by the wall LGR:0162. This wall separates the room from the narrow Alley 14, which adjoins Building F in the west. In the current state of excavation, two stone courses of this wall are visible. The fill of Alley 14 is a dark brown silty-clayey soil with white and reddish particles (Locus:267932:033, part of LGR:0124). The floor below was not yet reached in 2016.

A hard light brown silty-clayey soil (Locus:267932:023) covered the lower fill of Alley 14 (Locus:267932:033) and the wall east of Room 16 (Locus:267932:032, part of LGR:0162). On top of this layer, a silty clayey soil (Locus:267932:007) covers all the area to the west of Building F, and is in turn covered by the topsoil (Locus:267932:002).

D11. Alley 13

(Zahra Hashemi & Vera Egbers)

Between Buildings H and E to the south and Building F to the north, Alley 13 extends in east-western direction for a length of about 20 m (**Figs. D17, D19, D22–D23**). The westernmost part of this alley was already excavated in 2015. The alley is bordered in the north (from west to east) by walls LGR:0099, Locus:268932:017 and LGR:0102 and in the south (from west to east) by walls Locus:267931:026 (excavated in 2015⁷⁸) and LGR:0089.

Alley 13 sloped down from east to west and consisted of a thick package of successive floors, one of top of the other. In the easternmost part of Alley 13, the virgin soil was reached (Locus:267931:046). Moving towards west, the oldest clayey floor was identified in 2016, extending for about 4 m and sloping up towards east (LGR:0100). In cross section, this clayey floor has a U shape and raises up on the sides abutting the walls.

To the east of this clayey floor, at the southwestern corner of Room 22, some large pebbles form a floor (Locus:268932:064), abutting the wall north of Alley 13 (Locus:268932:017), but not extending towards the south. This floor extends for about 2 m. It continues westwards as a floor made of smaller pebbles (LGR:0032), which was very eroded. This floor continues until reaching the end of Room 22. At the corner of Room 28, this pebble floor is replaced by another floor made of medium-sized pebbles (LGR:0090), which, like the floor Locus:268932:064, only extends on the northern part of Alley 13, for about 2 m. To the west of this floor, at the southern wall of Room 22 (Locus:268932:017), several stones were laid in a row against this wall, forming an installation (Locus:268932:053). In the southern part of Alley 13, we found a clayey floor rich in white particles (Locus:268932:070) abutting the southern wall (LGR:0089). This floor extends from the middle of the alley towards the east.

As visible in **Fig. D23**, the oldest floor (LGR:0100) was reached only in the northern portion of the alley, during the excavation of a sounding along the northern wall, thus leaving the southern portion of the alley at a higher level, where the youngest floor was identified as LGR:0088. The fill between the two floors (LGR:0098) was made of a densely packed accumulation of clayey floors and deposits, perhaps due to a gradual accumulation through time of sediments brought by the drains terminating in this alley. This sounding allowed us to observe that the oldest floor (LGR:0100) has a U shape in cross section and slopes

⁷⁶ Bartl 2016, 74.

⁷⁷ Bartl 2016, 74.

⁷⁸ Bartl 2016, 71 Fig. C5.1.

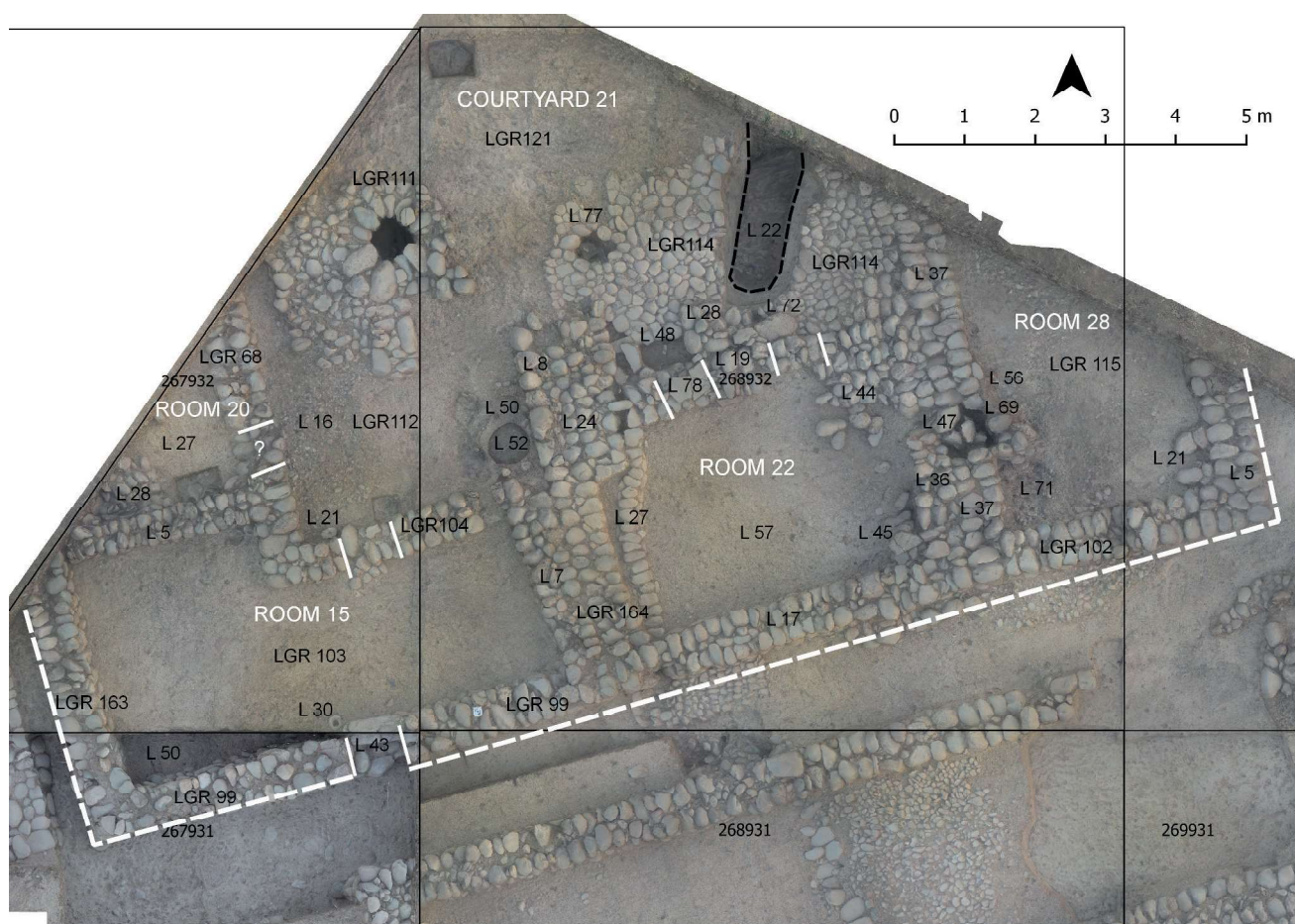


Fig. D26: Detailed orthophoto of Building F. Prepared by Andrea Squitieri.

up towards the wall (Fig. D27); moreover, below this floor we reached the white silty virgin soil (Locus:268931:064), on which the walls were erected.

Continuing along the southern side of the alley, in correspondence to the pebble floor Locus:268932:064, some stones were found (LGR:0087), probably collapsed material of the wall LGR:0089. Under these stones, we found a clayey floor with small white particles (Locus:268931:056, part of LGR:0088) that is considered to be the continuation of the youngest floor (LGR:0088), under which the continuation of the oldest floor (LGR:0100) was intercepted.

As mentioned in the discussion of Building E (§D8.3), the drains coming from Buildings E and F end in the Alley 13. In the earliest occupation phase, the water coming to the Alley 13 likely flowed towards west because the alley's floors sloped down in this direction. This may explain why the western part of the alley was paved with pebble floors, and why the oldest floor (LGR:0100) has a U shape with a deeper lying central part; moreover, the flowing of the water in western direction also explains the thick

packed accumulations of sediments (LGR:0098) observed in the western part of the alley.

At its easternmost extremity, Alley 13 was disturbed by the excavation of a large modern pit (LGR:0084), which also damaged the easternmost portion of Building E by



Fig. D27: Sounding in Alley 13 that allowed identification of the oldest floor (LGR:0100) and its U shape, sloping up towards the walls. Photo by F. Janoscha Kreppner.

obliterating the eastern part of wall LGR:0089. Continuing towards west, some stones were found aligned in the direction of the alley (Locus:269932:010), whose function remains unclear. It may be an installation or wall collapse.

D12. Building F

(Zahra Hashemi)

A small portion of Building F (Figs. D17, D26) was excavated in 2015 when two walls belonging to this building were detected in Square 267931⁷⁹. Moreover, the result of the magnetometer survey in 2015 had revealed regular structures in this area⁸⁰. All this prompted further investigations. In 2016, the excavation of this building was expanded towards north and northeast, as far as the metal fence that encloses the modern chicken farm and that constitutes our excavation limits.

Building F is separated from Building E in the south by Alley 13. Three of its rooms have been excavated: Rooms 15, 20 and 22 as well as the Courtyard 21. A fourth room on the east (Room 28) was only partly excavated; it may well belong to this building although its entrance has not yet been identified.

D12.1 Room 15

Room 15 (Figs. D25-D26) is located in the southwestern part of Building F and connected to the south to Alley 13 through a passage with a threshold (Locus:267931:043) and a door socket (Locus:267932:030), already unearthed in 2015. This room has a L shape and is surrounded by walls made of two rows of stones: wall LGR:0099 in the south, wall LGR:0163 in the west, walls Locus:267932:005 and LGR:0104 in the north and wall Locus:268932:007 in the east. Another passage, with its door socket (Locus:267931:021), is located in the northeastern corner of the room and connects it with Courtyard 21.

Two phases of occupation were identified in this room. The oldest floor was excavated in the south-western corner of the room in 2015. It is a beaten earth floor (Locus:267931:050) on a lower level than the threshold (Locus:267931:043). In 2016, a higher lying floor (LGR:0103) was found, at the same level as the threshold. This is a brown clayey floor, rich in small white particles. This floor slopes up from the west to the east and abuts the stones of the northern wall (LGR:0104) and the eastern wall (Lo-

cus:268932:007). However, in the west (LGR:0163) and south (LGR:0099) the walls go deeper than the floor. The deposit above the floor is a silty-clayey soil of light brown colour (LGR:0109) that yielded some pottery sherds and stone tools. In the Post-Occupation Period, the room was filled with a silty clayey light brown soil (LGR:0110).

D12.2 Room 20

Northwest of Room 15 lies Room 20 (Figs. D25-D26). It is limited in the south by the wall Locus:267932:005. The eastern limit of this room is a wall made of two rows of stones (LGR:0068), of which one course is visible. In the middle of this wall there is a depression that may be an entrance or simply a less preserved part of the wall (Locus:267932:031). No threshold or door socket was found near this wall. Due to the presence of the modern metal fence on the west, only a portion of this room could be uncovered, and it is therefore possible that the entrance was located towards the northern part of wall LGR:0068, connecting the room to Courtyard 21.

As in Room 15, two floors were observed in Room 20. The older floor is a beaten earth surface with flat lying sherds and some stones (Locus:267932:029) that was intercepted at the bottom of the small sounding opened next to the southern wall. The younger floor (Locus:267932:027) is a clayey brown soil, rich in small white particles. The sounding was opened to ascertain that Rooms 20 and 15 were not originally one single room and that the wall south of Room 20 (Locus:267932:005) was not a secondary wall built later and on top of the floors LGR:103 and Locus:267932:027. The sounding showed that the wall Locus:267932:005 went deeper than the floors LGR:103 and Locus:267932:027, having at least three courses of stones: the wall Locus:267932:005 is therefore not a secondary wall.

In the western part of Room 20, a concentration of stones, intermingled with much pottery, is interpreted as a stone installation of uncertain function (Locus:267932:028). The limits of this structure could not be defined as it continues under the metal fence.

The younger floor (Locus:267932:027) was covered by a deposit of hard dry silty soil (Locus:267932:024). In the Post-Occupation Period, Room 20 was filled by a silty-clayey soil of light brown colour (Locus:267932:012).

D12.3 Courtyard 21

As already mentioned, the northern entrance of Room 15 gives access to Courtyard 21, which occupies most of the northern part so far excavated of Building F and con-

79 Bartl 2016, 73-74.

80 Fassbinder/Aşandulesei 2016, 38-39.

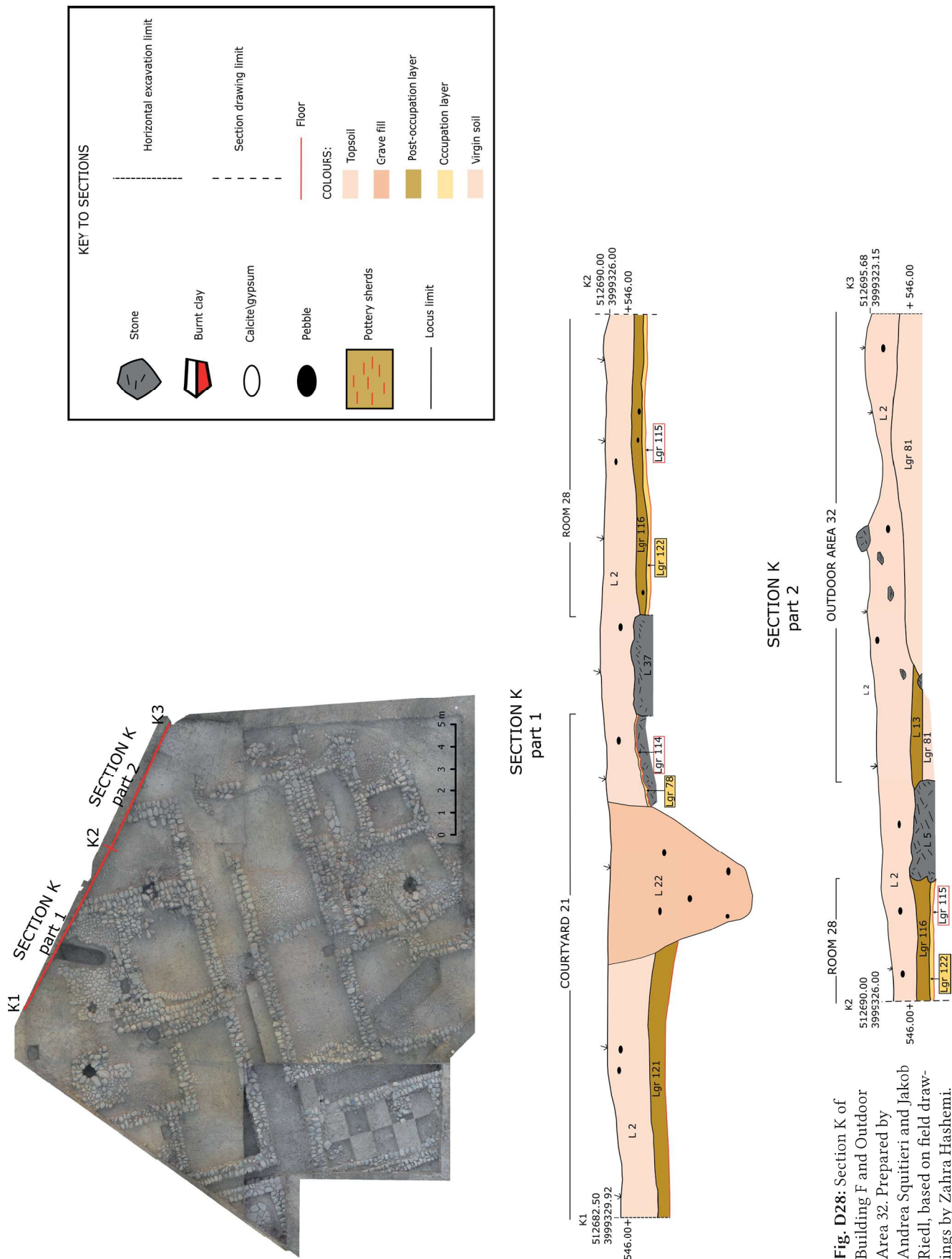


Fig. D28: Section K of Building F and Outdoor Area 32. Prepared by Andrea Squitieri and Jakob Riedl, based on field drawings by Zahra Hashemi.



Fig. D29: The well (in the background) and the hole for the water pulling structure (in the foreground) in Courtyard 21 of Building F. Photo by Andrea Squitieri.

tained installations that we will describe in the following (Figs. D25-D26, D28). The northernmost limits of this area were not found because the metal fence of the modern chicken farm delimits the excavation area.

D12.3.1 Stone paved floor

The eastern part of Courtyard 21 is covered by a stone paved floor (LGR:0114). This floor was cut by a modern pit (Locus:268932:022) that reached down to the bedrock. The stones of this floor about the wall Locus:268932:037 in the east and the wall Locus:268932:019 in the south. The stone floor is not regular and slopes up from east to west.

D12.3.2 A well with a water pulling installation (*shaduf*)

In Courtyard 21, we found a well (LGR:0111) with a circular shape and made of stones (Figs. D29-D30). This well very closely resembles the one excavated in Courtyard 27 of Building D (§7.5). Their presence indicates a sophisticated water management plan for this part of the settlement.

The fill inside the well (Locus:267932:018) was excavated up to a depth of about 80 cm, at which point the excavation was stopped for safety reasons. Pottery was extremely rare in the well fill. Soil samples were collected

at various depths for analysis. All around the well, and connected to it, are medium-sized stones that constitute a floor that must have been particularly suitable to protect the area from the water activity.

To the west of the well, we found a hole (Locus: 268932: 077), c. 70 cm in diameter and 50 cm deep. A well-worked rectangular stone (PPP 268932:012:009) was placed at its bottom, with a regular and very smooth circular depression in the middle. Small pebbles were placed all around the stone, perhaps to better fix it in the ground. On the concave part of the stone, a large body fragment of a ceramic vessel was found (PPP 268932:012:006), along with much charcoal. We interpret this installation as part of a water pulling device used to

draw water from the nearby well. The concave part may have contained the bottom part of a wooden beam used as a vertical axis, which in turn may have supported a horizontal beam that reached the well. At the extremity of this horizontal beam a bucket would have been suspended with a rope, to be lowered into the well. This type of water pulling installation, called *shaduf* in Arabic, is very common in the Middle East.

The space to the south of the well, in the direction of wall LGR:0104, is covered by a floor of medium-sized pebbles in the west (Locus:267932:016) and by a whitish floor (LGR:0112) in the east. These two floors were separated by



Fig. D30: Hole used to support a vertical wooden pole for the water pulling installation in Courtyard 21 of Building F. Photo by Zahra Hashemi.

four large stones aligned in north-southern direction (Locus:267932:019). To the west and the north of the well, a white, silty calcified floor (LGR:101) was identified as the virgin soil, which was used as a floor in this area.

D12.3.3 A cooking area with ovens

Northwest of Room 15, immediately north of the entrance leading through wall LGR:0104, there is an area of Courtyard 21 delimited on the east by a wall (LGR:0164) belonging to Room 22. Here, the fill of the Post-Occupation Period (Locus:268932:011) was very rich in charcoal. We assume the existence of a roofed area, perhaps a sort of portico, which opened towards Courtyard 21.

In this area, two round ovens were found (Locus:268932:052 and Locus:268932:050; **Fig. D32**). They are made of burnt clay and have a circular shape, with small stones placed around. The bigger oven (Locus:268932:052), with a diameter of 62 cm, is located at the southeastern corner of the area and the smaller oven (Locus:268932:050), with a diameter of 35 cm, is situated immediately to the north



Fig. D31: Above: Artist's impression of Courtyard 21 in House F, specifically the façade adjoining Rooms 22 (left) and 21 (right), as seen from northwest. Prepared by Jens Rohde after a sketch by Jean-Jacques Herr. Below: Courtyard 21 in House F, as encountered during the 2016 excavations. Photo by Andrea Squitieri, perspective modified by Jens Rohde.

of the first one. Both are set against the stones of wall LGR:0164. The bigger oven is the better preserved. In its western wall, a hole was found, which probably served for air circulation and / or was used to clean the oven after use. A charcoal layer was found at the bottom of this oven. The smaller oven is less well preserved and its southern part is not conserved. However, a cooking pot was found inside this oven (§E1.1.3).

To the west of these two ovens, much pottery was found, including a complete bowl lying on the floor (PPP 268932:020:001). The fill of this area (Locus:268932:011) was also rich in ceramics, including two jars (PPP 268932:011:004 and PPP 268932:011:005) and a complete vessel (PPP 268932:011:007), which were sampled by Elsa Perruchini for residue analysis (§E3).

D12.4 Room 22

Room 22 (**Fig. D26**) lies east of Room 15 and south of Courtyard 21. The western wall of this room (LGR:0164) backs against the eastern wall of Room 15 (Locus:268932:007) forming a sort of double wall, although LGR:0164 extends further towards north. Room 22 is limited in the south by the wall Locus:268932:017, in the east by the wall Locus:268932:036 and in the north by the wall Locus:268932:019. In the southern wall, two courses of stones are visible, whereas the eastern and northern walls have only one course of stone preserved. The middle of the eastern wall is disturbed, presumably by later (modern?) damage (Locus:268932:047).

Room 22 does not have access to Alley 13 in the south. However, two entrances lead from Room 22 through the wall Locus:268932:019 to Courtyard 21 in the north. The eastern entrance is marked by a flat stone (Locus:268932:072), presumably a step, while another flat stone (Locus:268932:078) indicates the second entrance in the west.

The most interesting aspect of the architecture of Room 22 is the façade along its northern wall, as seen from Courtyard 21. Large accumulations of stones were found adjoining the northern wall (Locus:268932:019) of this room; labelled Locus:268932:008 in the western part and Locus:268932:028 in the middle of the wall, they were initially thought to be some kind of stone installations. However, we then noticed that the stones form rectangular structures set against the wall that we now interpret as pilasters.

There are three pilasters structuring the façade (**Fig. D31**). The western pilaster continues from wall LGR:0164; the central pilaster (Locus:268932:028) protrudes from the middle of wall Locus:268932:019 and lies between the two entrances; and the eastern pilaster (only recog-



Fig. D32: The ovens (Locus:268932:052 and Locus:268932:050) in Courtyard 21 of Building F. Photo by Zahra Hashemi.



Fig. D33: On the right, the hollow of the drain (Locus:268932:027) running through Room 22 of Building F: note the two stones separated by a hole and supporting another stone, thus creating the drainage canal. Photo by Zahra Hashemi.

nised in post-excavation analysis) continues from wall Locus:268932:036. These three pilasters may have supported a protruding roof which would have offered shelter for the space in Courtyard 21 just in front of Room 22.

Turning now to the inside of Room 22, in its western part, we encountered a row of stones sunk into the floor that runs in roughly north-southern direction, ending in the north of the room in the corner between walls LGR:0164 and Locus:268932:019. Here, two stones are

visible that are separated by a hole and that support another stone, thus revealing the hollow of a drain Locus:268932:027 (**Fig. D33**). The drain crosses Room 22 along its western wall and terminates in Alley 13 to the south. Here, another hole was found (Locus:268932:031) where the drain runs underneath the wall Locus:268932:017. This drain served to bring waste water from Courtyard 21, where the well is situated, to Alley 13. This can be compared to the drain that brings waste water from Building D in the south to this alley (**§D11**).

The floor of Room 22 is a brown clayey soil, rich in white particles (Locus:268932:057). It was very rich in ash and charcoal and contained much pottery, as well as a baked brick (PPP 268932:049:005) and some stone tools (**§F6**). The southwestern part of the floor had some small pebbles, which perhaps helped permeabilise the floor in proximity of the drain. At the northeastern corner, some stones form an installation, perhaps a bench (Locus:268932:044), in which much pottery was found. At the southeastern corner of the room, another stone installation is visible (Locus:268932:045), perhaps another bench. The floor was covered by a deposit of silty clayey soil with ash, charcoal and pottery sherds (LGR:0083).

The fill of the Post-Occupation Period of this room was a silty-clayey soil of light brown colour (LGR:0082), which was very rich in charcoal and pottery.

D12.5 Room 28

Room 28 (**Figs. D19, D26, D28**) is located to the east of Room 22. The western wall (Locus:268932:037) of this room is preserved up to two courses and backs against the eastern wall of Room 22 (Locus:268932:036), thus



Fig. D34: The oven in Room 28 of Building F. Photo by Zahra Hashemi.

forming a sort of double wall. Both walls are damaged where a hole with fill (Locus:268932:047) was excavated. Wall Locus:268932:037 continues towards north along Courtyard 21 where it is abutted by the stones of the floor LGR:0114. The northern end of this wall exceeds the limits of our current excavation area.

A stone wall of two rows of stones (LGR:0102) in east-west orientation forms the southern limit of Room 28, and of Building F. Two courses of this wall are preserved. The eastern wall (Locus:269932:005) forms the eastern limit of the building, and only one course of stone is visible. The northern part of this wall is beyond the extent of the current excavation area.

No entrance to Room 28 has been found so far. We would expect an entrance in the west to lead from Courtyard 21 into the room, situated in the unexcavated portion of wall Locus:268932:037.

An oven (**Fig. D34**) was found on the western wall of the room (Locus:268932:056). This oven has a circular shape with a diameter of 40 cm and is made of burnt clay, closely resembling the ovens excavated in Courtyard 21. To the south of this oven, a stone installation (Locus:268932:069) was found, perhaps a bench. Much pottery, some burnt clay and a stone weight were found in connection to this installation. South of this installation we found a clay structure (Locus:268932:071), on which much pottery was found. This installation is limited in the south by the external wall of Room 28 (LGR:0102) and in the north by the stones of the first installation (Locus:268932:069).

The pebble floor of Room 28 (LGR:0115) slopes down towards the west. The deposit on top of it (LGR:0122) yielded much pottery. The fill in the northern part of the room (LGR:0116) was rich in charcoal and burnt clay while the fill in the southern part (Locus:268932:002) contained

less charcoal and burnt clay, but pottery was still abundant. The fill was covered by the hard and dry topsoil.

D13. Outdoor Area 32

(Zahra Hashemi)

East of Room 28 of Building F lies Outdoor Area 32 (**Fig. D22, D28**). After removing the topsoil in this area, we immediately reached the white calcified-silty virgin soil (Locus:269932:020, part of LGR:0081), which was probably used as surface, as in other parts of the site. Towards east, the excavations could not continue due to the presence of an irrigated garden and the metal fence.

Towards the south of this open area, east of Building E, some stones were found lying on the virgin soil (Locus:269932:014, part of LGR:0081; corresponding to Locus:269932:020 in the north) but not in any regular pattern (LGR:0120). These stones may represent collapsed material.

D14. General conclusions

(F. Janoscha Kreppner)

While in 2015 an area of 204 m² was excavated across a length of about 65 m in east-western direction, the 2016 campaign at Gird-i Bazar more than tripled the excavated area to about 625 m², extending the excavation to the south and southeast of the 2015 “Eastern Trench”, around the pottery kiln and to the west of the 2015 “Connecting Trench” and to the north and east of the 2015 “Western Trench”.

After the 2015 campaign, the excavated area was still quite small. All architectural units uncovered were separated from each other by alleys. Thus, we assumed that the Main Occupation Period of Gird-i Bazar consisted of single-room buildings. After the 2016 campaign, this assumption had to be revised. The buildings, contrary to our original assumption, contain numerous rooms, which are organised around courtyards.

As already recognised in 2015, the walls of these houses were founded on virgin soil. They are built of river cobbles and usually preserved to a height of about 40–50 cm. A mudbrick superstructure was likely present but is not preserved. The floors usually consist of beaten mud, but in particular areas, notably courtyards, alleyways and also in selected rooms, stone pavements were installed. A new feature first encountered in 2016 are the wells uncovered in the courtyards of Buildings F and D, which supplied the inhabitants with fresh water. In turn, wastewater was drained from the courtyards into Alley 13 through

drains. Various other installations, such as ovens of various sizes, were used for domestic and craft activities. In some areas, the Main Occupation Period can be divided into two sub-phases, as evidenced by some architectural modifications.

Building F extends over 17 m in east-western direction, north of Alley 13. Four rooms and the courtyard were unearthed across an area of 117 m². The building certainly extends further north but could not be further excavated there because of the modern fence of the chicken farm enclosure. In Rooms 15 and 20, soundings led to the identification of older floors, and consequently the Main Occupation Period was divided into two sub-phases of use in these rooms.

Alley 13 separates Building F from Buildings E and D. In Buildings E and D, two building phases can be distinguished during the Main Occupation Period, since a wall of Building D was set against the southern wall of Building E / Room 19, thus obstructing its seemingly original entrance from Building D's courtyard. Room 19 is the largest excavated space in Gird-i Bazar, covering an area of 65 m² with a length of 13.8 m and a width of 4.5 m. In the second phase, Room 19 was possibly accessed from Building D through Room 30. If Room 19 is considered a part of Building D, this would result in a substantial building with an area of about 160 m². However, Room 19 may have constituted a single room building ("Building E") with a separate access solution. Future excavations will hopefully further clarify the relationship between Building D and Room 19.

The pottery kiln in Outdoor Area 8 was first investigated in 2015 and completely excavated in 2016. Remains of the kiln structure, fragments of the kiln's floor and vessels of the last kiln load were found in the rear area of the combustion chamber in fallen position. About 1.5 m to the west of the kiln opening, another feature, probably a second pottery kiln, was discovered but not yet excavated. The kilns identify Outdoor Area 8 as an area of ceramic production.

In the east of Gird-i Bazar, Building A is structured in parallel to the buildings unearthed in the west. Rooms 3, 1, 23 and 24 are arranged around Courtyard 2. However, the organisation of Building A is not quite clear as modern construction work for the chicken farm damaged the

building in the south and its northern part it is not yet fully excavated: only a small part of Courtyard 2 is uncovered and the continuation of the building to the north is unknown. Up to now, only an area of 80 m² was excavated of Building A. Future excavations may reveal that Building B to the north of Building A, which was excavated in 2015, represents in fact a part of Building A. In this case, the excavated area of the combined building would increase to 140 m². In the east, Alley 25 separates Building A from Building J, of which only the western boundary wall has been excavated.

A characteristic feature of the architecture of Gird-i Bazar is the frequent use of double walls. Of these, only the construction of the wall LGR: 0093 represents a functional change in Buildings D / E after the first phase of use. On the other hand, the double walls in Building A (Rooms 23, 24), Building D (Rooms 9, 34) and Building F (Rooms 15, 22, 28) appear to have been built during the original construction phase and were likely designed as double walls for architectural reasons.

After the end of the Main Occupation Period, the buildings of Gird-i Bazar were abandoned. Only in one area, people returned, not long after the main occupation, and settled in Room 3 and Courtyard 2 of Building A as well as in Building B, where they installed the so-called Squatter Occupation floors excavated in 2015.

Another occupation phase, which we call the Sporadic Occupation Phase, was first observed in the western part of the 2015 "Connecting Trench". It consists of a small pebble floor surface, excavated in 2015 and 2016, which yielded Sasanian-period pottery. Due to its proximity to the modern site surface, this floor is not preserved further to the east. Thanks to the recent ¹⁴C dating to the 4th-5th centuries AD of a tooth from Grave 47 at Gird-i Bazar (**SG4**), we can infer that this floor was the surface from which the burials were dug during the Sasanian era. Therefore we now assume that this floor and the graveyard belong to the same occupation period.

In various spots of the excavation area, floor fragments and pits with modern finds have been detected. These were covered by the topsoil representing the plough zone of the modern agricultural use of the Bora Plain, just below the modern site surface.