German-Iraqi Excavations in Fāra / Šuruppak 2022 and 2024

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ABSTRACT

An important result of the short excavation campaigns in (2022) and (2024) was that research in Fāra is both possible and promising, despite the dramatic destruction of the recent past. The combination of non-invasive methods—geophysics, survey, and aerial photography—with limited, targeted excavations led to the first systematic documentation of Early Dynastic II and IIIa period neighborhoods and houses, together with the mobile finds they contained. The large building in the center probably represents the temple, surrounded by planned streets. The discarded sealings of the ED II period in trench Ide—long regarded as the hallmarks of the Mesilim period—turned out to be waste from a neighboring building, which must have had administrative functions.

Introduction Conclusion:

New excavations began in Fāra again in spring (2022), exactly (120) years after the first excavations, carried out by a joint team from Ludwig-Maximilians-Universität München and the State Board of Antiquities and Heritage. Iraq[(1)], The legendary earliest excavations - groundbreaking pioneering achievements in the research on early Mesopotamia - were carried out from June (1902) to March (1903) by members of the Babylon Project of the Deutsche Orient-Gesellschaft (DOG) as an offshoot of that major excavation, Under the direction of Robert Koldewey and Walter Andrae, the mound of Fāra, extensive with an overall surface of (250) hectares but no more than (10) metres higher than the surrounding

plain, was systematically explored by means of search trenches, which was the best method at the time[2].

As early as (1902), an Ur (III) foundation peg revealed the identification with ancient Šuruppak[3], one of the most important cities of the third millennium, which flourished in the earlier Early Dynastic period, more precisely in the ED (I,II) and (IIIa) periods, appr, (2900-2475BCE) (MC). The approximately (900) cuneiform tablets excavated there gave their name to the 'Fāra period', roughly equivalent to ED (IIIa), ca, (2600-2475BC)[4].

Since the first half of the third millennium is one of the least well known periods of Southern Mesopotamia – neither the Early Dynastic history, nor buildings or settlement structures, pottery and most other artifact groups can be considered as well known before the ED (IIIb) period – the new excavations are of particular importance for a better understanding of the formative phase of urban societies in the 'Heartland of Cities' (Adams 1981).

Fāra / ancient Šuruppak was then located on the main branch of the Euphrates roughly halfway between Nippur and Uruk (Fig.1). It could be paradigmatic for the first urban phase of Mesopotamia, but is still largely unknown despite its brief exploration at the beginning of the (20th) century. Yet Fāra offers ideal conditions for comprehensively investigating all elements of an Early Dynastic city using combined archaeological, philological and scientific methods, because the urban structures of the (3rd) millennium are directly lying on the surface. Additionally, the history, social structure and diachronic development of the city are known to such an extent through the cuneiform texts recovered in the early excavations that open questions can be specifically addressed. The 'Fāra texts' provide information about the partly centralised administration of this Sumerian city with an Ensi ($ensi_2$(.GAR)), the temple household of the city goddess Sud (^{d}SU.KUR.RU), the palace (e_2-gal) and other institutions such as the womens' house (e_2-$geme_2$) or the town house ((e_2-)uru)[5], However, the archaeological results to date do not reflect this city structure, as only several so-called "houses"[6], but neither a temple, nor a palace or other administra-

tive buildings, not even a city wall (which must have been existed in this period of continuous struggle between city states) were discovered in the excavations of the early (20th) century.

In addition, devastating, widespread looting after the last Gulf War, between (2003) and (2006), resulted in the main mound being massively disturbed by thousands of looting pits, which made Fāra being considered as lost to scientific research (Fig.2). Our new excavation project is therefore also intended to demonstrate to the Iraqi and international community that such sites are not lost forever, but can still yield good results, if the right questions are asked and adequate methods employed.

Nevertheless, in order to investigate the archaeology of this supposedly atypical early Sumerian city, a joint team from the universities of Munich and SBAH initially carried out short surface surveys from (2016 to 2018)[7]. These already made it possible to recognize synchronous functional areas of the city, in particular the extensive lower town, which surrounds the higher parts of the pear-shaped upper town like a broad, flat belt, but was previously completely unknown (Fig.3).

The diachronic settlement distribution of the city had already been determined by Harriet Martin in the course of a three-day survey in (1973) (Martin 1988), and her results are still valid. In addition, a team led by Jörg Faßbinder carried out geophysical surveys in (2018) and (2022), which were difficult in the area of deep looting pits, but successful in less disturbed areas[8]. This led to the discovery of several canals running through the city and of at least one harbour (Hahn et al 2020) as well as of the long-sought city wall with city gates on the south-eastern flank of the city (Fig.4).

The Magnetometer prospections in Fara (Jörg Faßbinder):

The geophysical measurements in Fara in (2018 and 2022) primarily served to obtain an overview of the site by taking magnetometer measurements in different areas over as large an area as possible. In addition to this, and to confirm and improve the archaeological interpretation, we carried out magnetic susceptibility measurements on selected samples and soil layers.

The measurements were carried out with three different measuring devices. These were a Caesium Scintrex SM4G Special and a Caesium Geometrics (G858) total field magnetometer as well as a Foerster (4-probe) fluxgate gradiometer. The use of different device types (vector and scalar magnetometers) and the physical combination of the data is described in detail elsewhere (Hahn et al. 2022). Due to the soil conditions - a deep and soft soil - only hand-carried devices can be used.

The investigation of the central area of Main Mound F was aimed at locating and supplementing the old excavation results of (1902) (see below, Fig.14). At the same time, these measurements were intended to clarify whether and how usable data could still be obtained from the prospection despite the countless looting pits. The measurements on Mound B. which lies east of the main mound, were aimed at the settlement structures, which are less disturbed there. At the same time as new archaeological structures were discovered, exciting results particularly for methodological research and further development of the interpretation of the magnetometer measurements were also emerging (Figs.4,5):

-Road and path networks stand out particularly clearly as positive (dark) anomalies on the magnetogram.
-Waterways and channels are clearly mapped by the measurements; they stand out as a negative (light-colored) anomaly from the rest of the surrounding sediment and soil.
-The main mound is separated in the east from the settlement extension of Mound B by an approximately (5-20m) wide, partly multiphase canal. On both sides of the canal we find a dense housing area with mud-brick buildings and an intricate network of paths.

-At the eastern edge of settlement area B we find clear evidence of the city wall built as a casemate wall. It borders the settlement in an arc and is only about (5m) wide here, but then bends to the south in a straight line and is widened to about (15m) (Fig.4).
-In the south of the measured area, the city wall encounters an anomaly that is most likely to be interpreted as a dam (Fig.4). A strong black anomaly in the form of two parallel wall courses is interpreted as a kind of bridge or water sluice, similar to

those observed in Larsa or Girsu (Fassbinder et al, 2023).

The first two seasons of the German-Iraqi excavations in spring (2022 and 2024):

Based on the excavations in the early (20th) century, our surface survey, the magnetometer prospection and the building structures visible in aerial photos, three areas in the north, center and east of Fāra were chosen for excavation in spring (2022 and 2024) and will be presented here from south to north (Fig.6).

Area 'Southeast': an Early Dynastic residential quarter near the city wall:

Mound B lies in the east of the main mound beyond an ancient canal, is lower than the main mound and obviously represents a settlement extension that existed until the Fāra period (Figs.3,5). The rather flat Mound B is less disturbed than the main mound. For this reason, building structures could be seen on the surface for about two days after rainfall in February (2018), which we recorded using a drone flight, The results of the (2018) geophysical prospection are partially complementary to the aerial photos, revealing more houses and the long-sought city wall (Fig.4), Over (100) buildings, including roads and open spaces, can be identified in this area on the basis of non-invasive methods, The results by excavation show that Mound B contains a densely built-up quarter of houses from the FD IIIa period, and possibly earlier, the mudbrick walls of which have not been hardened by fire.

Two Early Dynastic buildings on Mound B: 'House' 2 and House 3 (Johannes Hechtl):

Two buildings were excavated that were already visible on aerial photographs and in the geophysics, in order to investigate their lay-out, size, furnishings and date. The walls of plano-convex mud bricks were lying directly below the surface and were cleaned by scraping, the floors were situated only (0,2-0,8m) deeper (Fig.7).

'House' 2 :

An excavation area of (25×20m) was set up near the city wall and 'House' (2) was excavated (Figs.7, 8, 9). As walls and floors were lying close to the surface, the building could be explored within (5) days, The walls were built on a layer of

red clay over (30cm) thick, which also served as the floor. In total, the building consists of (9rooms), covers an area of (227,5 Sqm) (17,5×13m), and was free-standing with no connection to a neighboring building. It had obviously been abandoned and no active inventory remained, which is why the room size, installations and accessibility are the main indicators of its use.

The house was entered via Room 5, which was actually just the widening of a corridor to (2 sqm). This corridor led to the inner courtyard 'Room 2', which was almost square at (4,7m×5,1m) (24 sqm). An oval hearth consisting of orange bricks, black ash and white inclusions, indicating great heat, was placed on a shallow clay platform in the northwest wall, A working stone, a flint blade, the clay stopper of a vessel and a complete conical bowl near the hearth platform indicate domestic activities.

Rooms (1,3,5,6 and 7) were only accessible from the courtyard. Rooms (1,6 and 7) are of considerable size and are therefore likely to have been used for living, reception or other active tasks. The small rooms (3 and 4), on the other hand, are more likely to have been used for storage, Room (1) in the south-west corner of the house was rectangular in shape and measured (7,75×3,1m) (24 sqm). Room (6) was the largest at (27 sqm) (3,1×8,7m) and occupied most of the north-east side of the building. Room (3) measured only (2m×3,5m) (7 sqm), Room (4) in the western corner of the house is only slightly larger than Room 3 at (3m×3m) (9 sqm); due to the state of preservation of the walls, no access could be determined, but it must have been via Room (1) or Room (6), Room (7) is located in the eastern part of the house and measures (3,1×7,3m) (22,6 sqm)[9], It is likely to have been used as a kitchen or for food preparation due to several burnt areas, food remains in the form of animal bones and a large hearth near the two doors. The area around the hearth was extensively covered with a powdery-soft layer of ash, which can be attributed to burnt reed. Here, as in all the other excavated buildings, we found that only reed was used for cooking and heating in the course of food preparation, but no wood at all, as there were always large quantities of powdery-white burnt or charred

reeds, but no charred wood remains. A flint blade and a clay lid were found in the west corner near the passage to the courtyard, a working stone in the east corner and a flint nucleus in the south corner.

Room (8), a (7,8m) long and (0,75m) narrow corridor (5,85 sqm) that ran along the north-eastern outer wall of the house, was only accessible from Room (7). The passageway between rooms (8 and 7) reveals a small niche to the north, in which there was an oven, which we interpret as a winter tannour[10]. The clay floor is red in color with numerous white and black inclusions due to the intense heat. A lot of pottery was found in the south-eastern part of the room, including two complete vessels, some bases of conical bowls and flint blades. The elongated room could have served as a storage and preparation room for the neighboring kitchen and as a staircase room leading up to the roof.

Three soundings were carried out to determine the building phases and the depth of the red alluvial layer mentioned above. The latter is an approx, (30 to 50cm) thick layer of pure clay with no finds, the only inclusions being shells and snails, which may have been caused by flooding. In the (0,8m) deep sounding in Room (6), horizons of yellowish clay were found under the alluvial layer. However, no finds were made in the alluvial layer or on the lower horizons that would allow dating. Whether this corresponds to the alluvial layer allegedly found in both the (1902/03) and the (1931) excavations and associated with 'the great flood' due to the well-known myth is to be scientifically investigated in future by drilling at various locations[11].

Outside the house to the southwest was a large circular kiln whose dome had collapsed inwards, Immediately next to it were two spoil heaps with ashy and reddish-burnt material containing overfired pottery, ceramic slag and charcoal, so that an interpretation as a ceramic kiln is obvious.

In sum, 'House' (2) is a fairly large building in the immediate vicinity of the city wall, and its layout corresponds to that of a courtyard house with two large reception rooms, The artifacts date to the ED (II) or (IIIa) period, although no more precise dating can be given due to

the scarcity of diagnostic material.

Aerial photographs and geomagnetic survey show several larger buildings all around, which stand in a rather open formation, Whether this was due to the status or number of inhabitants or to the activities carried out in 'House (2)', which may have been more than purely domestic, cannot be determined at present. However, the difference in size to the much smaller House (3) not far to the north is striking.

House 3:

The area was chosen for excavation due to well visible building structures on aerial photographs which were made during the (2018) survey. The structures were only visible for two days after rain, then they disappeared and have since then never been visible again (Fig.10). Excavation was conducted for (5 days) in (2022). The major part of 'House (3)', open spaces and alleyways bordering the house, and the corners of two more houses (Housee 4 and 5) were excavated (Fig.11).

House (3) measures only approx, (9x7m) and was excavated over an area of (66 sqm). It has two construction phases: In the oldest phase 1 it consisted of three rooms, in the following phase (2), in which the floors were raised about (30cm) higher, it consisted of only two rooms. Based on the finds, both phases can be dated to the ED (IIIa) period.

Room (2) is the largest room at (15,7 sqm) (5,8×2,7m). The floor of phase (1) is well preserved. It was once covered with reed stalks that were laid regularly across the room; they have survived as whitish, calcined remains, and the remains of ceramic vessels were lying above them. Above this were found the remains of the collapsed roof in the form of carefully woven, charred reed mats, The room was equipped with a hearth, only half of which was excavated.

Room (1) is the second largest room in the house at (5,5×1,9m) (10,45 sqm). In phase 1 there was a dividing wall between rooms (1 and 6), which was dismantled in phase (2), In phase (1), the remains of three hearths were found in the room. One is located relatively centrally in the room, the second on the dividing wall to room (6). The third fireplace is located directly next to it, but is significantly larger. Finds in this room of phase (1) included

a spindle whorl, a bitumen lid, a conical bowl and a net sinker, The hearths indicate that the room was used to prepare food and for warmth and shelter in the colder seasons, Room (6), measuring (1,8m×1,3m) (2,34 sqm), is the smallest room in the house. It only existed in phase (1), after which the dividing wall to room (1) was removed, The masonry technique consisted of sun-dried plano-convex mud-bricks in a herringbone pattern.

House (3) is separated from the neighboring houses (4) and (5) by narrow alleys in the northwest and southeast. In the northeast, a waste pit adjoins the outer wall of the house, the backfill of which varied in color from green to gray and brown to black, red and orange. Obviously, various materials such as charred remains, excrement, meat waste, broken bricks, fire debris and other waste were disposed of here. Apart from abundant pottery, many artifacts were found in the relatively small excavated part of the pit: various flint blades and flint flakes, a terracotta sickle, a bronze needle, several net sinkers, a whetstone, a stone vessel, a terracotta wagon wheel, a token, an animal figurine, slag and many other fragmentary objects. Furthermore, a clay lid with a seal impression, a jar lid without a seal impression, and three door sealings were found, The seal impressions in Fāra-style ED (IIIa) provide an important clue to the dating of the garbage pit and the house quarter. The seal impressed on a door sealing shows an animal contest scene in two registers in the typical 'crossed style'[12], in which the protagonists cross each other (Fig.12 a-c). It is interesting that doors were sealed in a residential area with rather modest houses, which points to administrative processes even here.

House (3) was integrated into a densely built-up residential area: House (5) was located to the north of a narrow alley (408), and House (4) adjoined it on the other side of a small square to the west of House (3).

The central area with a large building, Area 'Temple' (Abbas al-Hussainy, Karlotta Herbst and Johannes Hechtl):

In the central depression of the main mound, an unusual building was excavated in Trench (III a-c) in (1902). Its dimensions, room sizes, construction method (several walls

consisted of baked bricks) and a niched wall were so different from other buildings that Walter Andrae already speculated whether this could be a temple (Heinrich & Andrae 1931: 12-13, Pl. 5). Geophysics carried out in (2018) revealed that the architecture excavated in (1902) was only a small part of a large, multi-roomed building complex measuring at least (160x120m) (Hahn et al. 2022). As the dimensions and structure of the building are similar to the temple of Umm al-Aqarib (Almamori 2014), the temple of the city goddess Sud, which is documented in texts, is assumed to be located in the city center (Otto & Einwag 2022).

The magnetogram from (2018) showed a broad dark discoloration in the west and north of the building, the nature of which needed to be clarified. Therefore, Jörg Fassbinder and Marco Wolf enlarged the area of magnetometer prospecting in this area in (2022), and a west-east section with a length of (20,5m) and a width of (6m) (123 sqm) was added on the western edge of the strongly magnetic anomaly (Fig.13). This black anomaly turned out to be an unusually wide about (4m) road running NNW-SSE, It consists of hard, brownish soil with reddish inclusions and was deliberately "paved" with a lot of broken pottery, which caused the strong positive magnetic anomaly (Figs.14,15). To the west, the street is bordered by a narrow wall, which delimits a modest building, The grave (502) of an adult and a child was installed in one room. The mud-brick wall (507) bordering the road to the east is of a completely different nature. Although disturbed by many recent pits, it must have been at least (2,6) m wide. This unusually wide wall is abutted at right angles by a (1,5m) wide mudbrick wall (510) made of beige bricks.

In the room framed on two sides by the two walls, a small sounding was undertaken until the floor of the room. It contained mainly solid footed goblets in terms of ceramic material, suggesting a date in the ED (I) period.

The aforementioned wall (510) in turn abuts a (1,30m) wide wall (511) made of strikingly colored clay bricks (grey-green, brown, red; dimensions (23x17cm)), which bends at right angles to the east. It surrounds a cylindrical in-

stallation (512), which has an outer diameter of (2,00-2,50m) and a wall thickness of (50cm) and is made of fired dark red bricks laid in a herringbone patternm, The upper part of the (1-1,50m) wide shaft is filled with loose brownish rubble, but was not excavated to the bottom. It could be a well or a very small silo.

To summarize, an unusually well laid out, wide paved road runs along the site, bordering a building with an exceptionally wide outer wall. This building contains several rooms and installations from different phases, probably dating from various periods. The few pieces of pottery recovered so far from undisturbed layers date to the ED (I) period, If, as can be assumed on the basis of the geophysics, the building represents a temple or other large building, it appears to have several phases on the one hand; on the other hand, it appears to have been stripped of its upper phases, presumably in the course of massive clandestine excavations, which must have taken place here on a large scale before the excavations began in (1902), at least since the (1850ies), Harriet Martin (1988:15) reports W. K. Loftus' assessment of Fara as a place where an infinite number of antiquities could be acquired, and H. V. Hilprecht states to have bought the most 'precious' objects in Fara in (1900) "in a depression near the center of the mound", including cuneiform tablets and two almost life-size copper heads of caprids, which are most likely to have decorated a temple[13].

Excavations in Area 'North':

Fāra occupies an important position in the art history of the early 3rd millennium because the largest quantity of glyptic art from the 'Mesilim period', roughly contemporary with the ED (II) period, was found there, specifically in trench Ide on the northern edge of the main mound, In (1902), hundreds of clay sealings, dozens of simple clay figurines and most of the only (26) cuneiform tablets from Fāra dating earlier than ED (IIIa), according to Krebernik (1998), were found in 'thick layers of ash and rubble' in trench Ide, without any evidence of 'remains of dwellings' (Heinrich & Andrae 1931: 61). Many of the more than (90) different seal images became key pieces of the 'Mesilim style' of the ED (II) period

(Karg 1984), others were labeled ED (I) and Jemdet Nasr due to their seal styles (Martin 1988), which at the same time implied their date, Since then, it has been assumed that there were large waste areas on the outskirts of the city where sealings and other debris were dumped for centuries, i.e. from around (3000 to 2700 BCE).

However, this hypothesis is unsatisfactory because clay sealings are relics of administrative processes and were always discarded close to their last use, In the case of door sealings, this means disposing of them close to where they were broken; and indeed, Roger Matthews already noted that many door sealings were found in trench Ide (Matthews 1991). As a result, we postulated that an administrative building causing the waste must have been located near trench Ide and planned to search for it in the (2022) campaign.

The first task was to find the old excavation site in Graben Ide, However, this proved to be easy since the maps drawn by the German architects in (1902/03) were so incredibly precise, that it was easy to match our new digital contour plan with the old hand-drawn DOG plan, In the midst of recent looting pits, the formerly excavated area was visible as a light and solid discolouration, as the excavated area had been left open and had been filled with light-coloured dust over the course of (120) years (Figs.16,17).

Starting from the edge of the old DOG excavation area in "Graben Ide", we made sections to the west and north (Fig.16), Indeed, immediately beyond the old backfilled cut, dark ash layers representing the remains of the same huge rubbish pit were encountered. At a distance of (20-25) further to the west and north were the remains of modest houses from the ED (IIIa) period, strongly disturbed by modern pits.

The silo and the large mudbrick building (Karlotta Herbst):

A silo, the broad wall of a building and a rubbish pit were encountered directly north of the West-East trench (Fig.16), The silo (212) is a smaller example of similar structures known primarily from Fāra, which were already documented in (1902/03) and labelled as 'round cellars' (Heinrich & Andrae 1931: 8-9). In (1931), Erich Schmidt excavated two such structures with a

depth of (8m), and interpreted them as silos (Martin 1988: 42). More than (30) silos can be traced near this silo in the northern third of the main mound of Fāra, which speaks in favour of the role which this city quarter played in the context of the stockpiling of communal grain supplies.

The silo (Fig.18) was built from baked plano-convex bricks in a herringbone pattern, arranged in two rows one behind the other. The outside is clad in places with vertically placed bricks, which were fixed with bitumen(14). The herringbone pattern was built in such a way that three rows of bricks slanting to the right or left were placed on top of three layers of flat bricks(15). The construction method is only recognisable in places where the plaster has flaked off, as the silo was plastered with a white lime layer on the inside. The average width of the walls is (55cm). In the east there is a deliberately placed massive bulge, the exact purpose of which is not known, but which was built at the same time as the silo and is not a later addition. The eastern wall of the silo also has an opening that was added later. It measures (18cm) horizontally and between (21 and 26cm) vertically. This could have been a casting hatch(16). If it is indeed a filling hole, the silo should have risen above the access horizon at least up to this opening.

The inner backfill of the silo was cut in half and excavated to a depth of (1,5m) without reaching the ground. The silo, the top row of which was already visible before the excavations, is cylindrical with an internal diameter of (2,63m) (north-south) and (2,83m) (west-east), Since, according to Heinrich & Andrae (1931: 8), the silos have a diameter of (2-6,5m), this here is a smaller example.

The dating of the Fāra silos is not entirely clear. According to Martin (1988: 46) they most likely date to the Fāra period ED (IIIa). However, this silo must date earlier and at least to the ED (II) period In the season (2024) it became clear that the silo was earlier or contemporary to the sealings in the ‘seal pit’, which date to the ED (II) period. Also the time when the silo was no longer in use can be confirmed, as Akkadian pottery was observed in the uppermost fill layers(17); a rim sherd with snake decoration is noteworthy.

The silo itself leans against the wall of a large mudbrick building. Only a small area (48 sqm) was excavated, but nevertheless, it is exceptionally significant. The wall has a width of (1,20m) and is made of plano-convex bricks measuring approx, (25×16×4cm). At the north-eastern end, a wall projection protrudes at a right angle, which is unfortunately disturbed by the (1902) trench, Based on the width of the walls - the walls of a nearby house are half as wide - it can be assumed that the building had a special function.

The room was equipped with several installations: In the northern part there is a fireplace surrounded by a multi-coloured red, brown and black layer with remains of fire and ash, In the southern part, two mud bricks lie vertically against the wall and probably formed a socle for an object (which has since disappeared) placed against the wall, Nearby, the broken upper part of a large bottle lay on the floor with its mouth in such a way that it may have served as a stand. A remarkable object from this building is a completely preserved bone tool (2187) (Fig.19ab). It is (15,4cm) long and consists of a polished and smoothed long bone of an animal, The long bone has been slit open lengthwise, its edges polished and the tip bevelled and rounded, as if something had been smoothed or scraped with it. At the blunt end, a dome-shaped rounded bitumen plug closes the opening, possibly to avoid cutting oneself on the edges or to equalise the weight when holding or operating the device.

The tool fits well in the hand and has very smoothly rubbed sides; it could have been used for polishing or smoothing. An almost identical tool (2278) was found discarded in the rubble of the ‘sealing pit’, but it was already broken in antiquity and the bitumen plug was no longer present; it may have become detached when the tool was discarded in the pit.

The most remarkable feature of the building, however, is the burned debris which begins directly at the outer wall of the building, and which continueds into the very large pit containing debris mixed with sealings (see below). Obviously, the waste was dumped from this building. Therefore, the hypothesis to be tested in the future seasons

is that this is a building of special, probably administrative, function from where the sealings and other objects were thrown into the pit.

Due to the assumed contemporaneity of the layers inside the room and outside in the ‘sealing pit’, at least some use phases of this building will date to the ED (II) period, This would be the first time that a building from this period has been recorded in Fāra – its excavation will be prioritised in the future.

The ‘Seal Pit’ of Fāra:

Exactly at the eastern outer wall of the building described above, ashy layers of rubbish begin to slope down towards the south (Figs.16,17), They obviously form the northern edge of the aforementioned rubbish pit, which was partially excavated in (1902/03), but is still present to a considerable extent, although the exact dimensions have not yet been determined, The area we call ‘Seal Pit’ was only investigated over a very small area in (2022) and enlarged in (2024: a) section (4m) long and (3m) wide was made to a depth of (2,20m) without reaching the pit floor. The photo (Fig.17) shows clearly the edge of the trench excavated in (1902), now backfilled with light-coloured drifting sand, and the undisturbed, sloping layers of dark debris. The layers consist of a continuous sequence of stratified layers of waste, which vary in colour between black, grey, chocolate brown and red due to varying concentrations of ash, burnt reeds, food remains and other waste. They contained a vast amount of animal bones and some botanical remains as well as enormous quantities of sherds. The dating of the pottery to the ED (II) period on the basis of the sealings makes these sherds an extremely valuable clue to the poorly known pottery of the period (see below), Mixed in with the waste were flint blades, bronze tools and (25) simple hand-moulded figurines of unfired clay, including theriomorphic figures of mainly quadrupeds, such as (Fig.20) and small, highly stylised anthropomorphic figurines (Fig.21).

In addition, more than (120) sealings with seal impressions and over (300) clay closures without seal impression – partly raw material, partly unsealed parts of large closures – were found in the debris in

(2022 and 2024). The backs of the sealings reveal which of them once sealed doors, sacks, vessels and other containers[18]. The seal types thus provide valuable information about administrative processes in the presumably nearby building that caused the debris, By the combined analysis of seal image and sealing type, it is possible to distinguish which people were responsible for securing (store-room) doors on site and which sealings had arrived here with incoming goods.

Of the more than (60) different seal images, about (40%) are duplicates to those excavated in (1902/03). Around (50%) are cut in the so-called Mesilim style of the ED (II) period, the others vary greatly in motifs and style, proportions, cutting technique and size of the seals. If the common stylistic classifications were taken as chronological indicators, they would span a period from the Jemdet Nasr to the ED (I) and ED (II) periods, For example, small seals of only 1cm height showing geometric patterns such as diamond and zigzag pattern are commonly classified as Jemdet Nasr or ED (I) in date; however they were found impressed on several sack sealings (Fig.22a-c), Simple seals consisting of rows of striding caprids mixed with plants, in this case (2151) only (1,8cm) high (Fig.23a-c) would have certainly been considered as much earlier than the large seal shown in (Fig.25). However, both were used contemporaneously in the building for sealing door pegs. Contest scenes of humans, animals and hybrid creatures such as the very common bull man are frequent, but occur in different arrangement, style, complexity and size, For example, a jar sealing bore the impression of a symmetrically arranged contest scene of five figures, where two heroes with split and upturned skirt are fighting two rampant lions which are attacking a central animal, below which an isolated human head is depicted (Fig.24a-c)[19].

More than (12) fragments of door sealings bear the impression of a particularly large, richly figured and exquisitely cut seal in the most typical ‘Elegant Style’ of the Mesilim glyptic (Fig.25)[20]. The fragments were found in the uppermost, middle and lowest pit layer reached so far. The combined evidence of

the new excavations shows beyond doubt that all the sealings, however different they may be stylistically, lie together in a homogeneous pit fill whose burnt waste must have accumulated over a short period of time – years rather than centuries.

This is proven additionally by another method which was employed for analyzing the sealings, Using pXRF (X-Ray Fluorescence) analysis of the sealed clay pieces, it was found out that the clays of those sealings on which stylistically early seals were impressed do not differ from those sealed with stylistically late seals[21]. In contrast, the clay sealings, which had been found in the "Waste Pit' near House (3) on Mound B and were impressed with seals in the 'Fāra style', ED (IIIa) (see above), show clear chemical differences to those in the 'Seal Pit', Taken together, all the arguments lead to the new hypothesis that the seal cutters of the ED (II) period partly adhered to traditional seal styles, but that at the same time modern seal styles were developed here in Šuruppak and thus different styles existed, but were possibly used by different groups of people - a thesis that needs to be further researched in the future.

Strikingly comparable in composition is the fill of the '6G Ash-Tip' in Abu Salabikh, which is interpreted as cultic and administrative discard from an assumed nearby temple which, however, has not been found so far (Green 1993; Postgate 2024: 75-89). We hope to have the chance to investigate the 'Seal Pit' and the adjacent building more closely in future campaigns, in order to investigate if these structures – building, silo and waste – are the remains of an ED (II) temple administration.

In search for a local ceramic sequence: The pottery of the, Seal Pit' (Moritz Kellerer):

The pottery of the Early Dynastic II and IIIa period in southern Mesopotamia is comparatively unknown. The early excavations of third millennium sites focused on the Diyala region, the pottery published by Pinhas Delougaz in (1952). Other important publications of Early Dynastic pottery come for example from Abu Salabikh, Uruk or most recently Ningen and Lagaš[22].

When comparing the ceramics of the third millennium from different

sites, it is noticeable that, despite basic similarities, they differ from place to place. Especially the pottery from the Diyala Region is very different to what is usually found in the south. It is therefore most desirable to create a local pottery sequence for Fara.

Harriet Martin did this with a sequence of pottery based on the (1931) deep trench in Fara[23]. This sequence is an important first step, but it only contains (40) forms, which is not enough to represent the variety of shapes that were encountered during the (2022 and 2024) excavation, Establishing a comprehensive chronological pottery sequence for Fara specifically is therefore an important goal of the excavation, for better dating our contexts, and help dating contexts of other sites. In order to achieve this goal, it seemed most sensible to collect the pottery from well-dated contexts, such as the context of the ‚Seal Pit'.

This so-called ‚Seal Pit', which was discussed earlier in this article, contained more than (120) clay sealings, Most of the seals were cut in the Mesilim Style, an art historic category, which can be roughly linked to the ED (II) period. Together with these sealings, a very large amount of pottery was found in the sloping ashy layers. It is very likely that the material was deposited over a short period of time. This context therefore provides a snapshot of what the pottery looked like that was used in the ED (II) period. In the following, the most important forms of the context will be briefly described, to give an impression of the pottery of this period (Figs.26, 27).

Conical Bowls: Conical Bowls are a very common form of Early Dynastic pottery. The most important features of the conical bowls are the conically widening shape, the coarse, clearly visible turning grooves, the thick, irregular bottoms and the marks on the underside that are created when a vessel is cut with a string from a potter's wheel while this is still rotating[24].

The rough manufacture and the large number of examples found suggest that this is a disposable product with a wide range of uses: Conical bowls with animal bones inside were found in graves[25].

which therefore contained food, but their shape also makes them suitable as drinking vessels.

Fenestrated Stands: Fenestrated stands are vessel stands with triangular perforations. The pieces of fenestrated stands found in the seal pit are also characterized by horizontal notched and corded bands that divide the outside of the stands into registers. Overall, the objects have a tubular shape that is narrowed in the middle, making them concave when viewed from the side. On the inside, just before the upper edge, there is a bulge that probably served to make it easier to place the vessel on a stand. This feature, the decorative bands and the straight-cut, triangular windows were the most important criteria for identifying a sherd as part of a window stand.

It has been postulated several times in the past that fenestrated stands in the Early Dynastic period were cult-exclusive objects, meaning that they were used exclusively in the temple[26]. If this claim is tenable, the accumulation of fenestrated stands would be a valuable clue to the function of the building which produced the debris of the seal pit.

Bowls: All open shapes that are not conical bowls are summarized in this article under the category "bowl". As the very general definition suggests, the category is a catch-all for many, sometimes very different shapes. The plate shows one of the more common shapes: It has a round lip bent outwards and a groove running underneath.

Jars: A jar was any vessel that had a closed shape without a neck, i.e. any closed vessel shape that did not expand again. As with bowls, one would expect that, due to the very general definition, this would be a very common category with many sub-forms. In fact, all jars found in the seal pit had the same shape: the convex wall of the vessel curves under a horizontally outward-facing straight lip. This shape is documented six times.

Bottles: All closed vessels with a neck were collected in the bottle category. Bottles are the vessel shape that is most likely to have decoration. For example, there is often a striped slip on the shoulder of the vessel, and the transition from the shoulder to the belly of the vessel is often decorated with a cord band or a notched band, Bottles, just like bowls and pots, can have very different rim designs. Of

all bottle rims, the category depicted on the plate was found the most: The neck widens in front of the vessel opening and is closed off by a kind of protruding collar. Similar to the vessels with a pointed, outward-curving rim, the transition from the neck to the shoulder is quite steep.

Flat and Convex Bases: Flat and convex bases are characterized by a very flat transition from the vessel wall to the bottom: while the shape continues almost uninterrupted on the inside, a slight bend can be seen on the outside where the bottom begins. The difference between these two types of bases lies in the shape of the bottom of the vessel: while the entire base of the flat base is plane and sits evenly, the convex base is rounded towards the outside and wobbles on therefore flat surfaces. Since some of the fragments are quite small and irregular, the distinction between flat and convex bases is not always clear. For this reason, both types were combined to avoid incorrect classification.

Ring Bases: Ring bases are very similar to flat and convex bases, but a base ring was added to ensure that the vessel stood better. There were two ways to make this base ring: The first option was to first form a flat or convex base and then use the fingers to attach a base ring. With this option, the artisans' fingerprints can often still be seen.

The second method of making a base ring was to turn it separately and then attach it later. Often different clay was used for this separate base ring than for the actual vessel. The connection between the base ring and the base was not always permanent: in some sherds, the base ring can be seen starting to come loose, and others testify for the lost ring base by discolouration.

Globular Jars: Round jars have a short, rounded rim and widen considerably. Through comparisons (Moon 1987: 71-91) a spherical vessel shape and a round base can be reconstructed.

Spouts: Spouts from the pits have the shape of closed, usually quite small clay tubes. As far as can be seen, the attachment point was always the vessel shoulder. They probably belong to the bottle rims, that were discussed earlier in this article.

Perforated Vertical Sherds:

A special find are two perforated vertical pieces of clay, which appear to belong to a hand-formed object: neither turning grooves can be determined nor the diameter, which, however, must have been fairly large. The clay used is still relatively fine for objects of this size, and the holes are not arranged in any recognizable pattern, The most likely assumption is that they are parts of a drainage shaft wall.

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end notes:

1- We thank the LMU Munich (Ludwig-Maximilians-Universität München) and the Deutsche Orient-Gesellschaft (DOG) for making the 2022 pilot campaign possible, Our special thanks go to the SBAH Baghdad, especially Prof, Laith Hussein and Ali Shalgam, and all the staff from Diwaniyah, Afak and Munich for their outstanding work, Individual sections of this article were written independently by staff members, who are then named as authors.

2- Preliminary reports were published in MDOG 16 and 17 (1903), the final report was published much later (Heinrich & Andrae 1931), Six weeks of soundings by Erich Schmidt (Penn Museum Philadelphia) were the last excavations that had taken place there so far (Schmidt 1931); they were published by Harriet Martin in her seminal works on Fāra (Martin 1983, 1988), A brief outline of the early investigations and the 2022 campaign can be found in the volume at the occasion of 125 years of Deutsche Orient-Gesellschaft (Otto 2023).

3- This was reported by Koldewey and Andrae in MDOG 16 (Nov. 1902-April 1903): 13-14 with a supplement by F, Delitzsch.

4- Sallaberger & Schrakamp 2015.

5- Krebernik 1998; Visicato 2001.

6- The definition of houses from an architectural and functional point of view is not easy here, because the tablet archives were found in so-called houses, which speaks for a coexistence of centralised and decentralised organisational structures in Šuruppak, see Starzmann 2007.

7- Otto et al, 2018; Otto & Einwag 2020.

8- Jörg Faßbinder, Sandra Hahn, Marco Wolf, Marion Scheiblecker, all Ludwig-Maximilians-Universität München, For initial results see, Hahn et al, 2022; Scheiblecker & Fassbinder 2022: 372; Fassbinder et al, 2023.

9- The eastern outer wall was damaged by a later grave (354), It is poorly preserved because it was heavily disturbed in the recent past. The grave pit was lined with thick potsherds and a few remains of human bones were still preserved.

10- A winter tannour is used during the rainy season, when baking in the courtyard is impossible, It can be assumed that it was not located in the kitchen to prevent the room from becoming smoky and that there was a window on the outside through which the smoke could escape.

11- In the Sumerian King List, Šuruppak is regarded as the seat of the last dynasty ‘before the flood’, and its king Utnapištim / Ziusudra is regarded in the Gilgameš epic and Ziusudra myth respectively as the saviours of mankind, The search for the “Flood Layer” led to the excavation in 1931 on behalf of the University of Philadelphia (Martin 1988: 22-23; Krebernik 1998: 241).

12- Harried Martin’s labelling ‘crossed style’ is the ideal description of this arrangement of figures, not found on ED II seals, Martin 1988: 78.

13- They are now exhibited in the Penn Museum Philadelphia: Aruz 2003: 82, no. 41.

14- The brick size in the outer row varies between a maximum of (25×16×3cm) and a minimum of (18×12×3cm) with an average value of (21×15×3cm), In the inner row, it varies between a maximum of (23×15×4cm) and a minimum of (18×10× 3cm) with an average value of (21×13×4cm).

15- Heinrich & Andrae 1931, pl. 4 contains a detailed drawing of this construction method.

16- Heinrich & Andrae (1931,9) also mention such openings. However, these were "six layers high".

17- One of the earlier excavated silos or so-called "round cellars" was also filled in during the Akkadian period, the other in the Ur III period or later (Martin 1988: 46).

18- For a general differentiation of closure types, see Matthews 1991 and Otto 2010.

19- Sealing 2054, seal 1,7cm in height.

20- Dozens of impressions of the same seal were found in 1902, The seal image (Heinrich & Andrae 1931: Pl. 46f; Martin 1988: no. 256) is considered a key piece of the Mesilim style and was categorised by Martin (1988) as belonging to the "Elegant Style" due to the protagonists' elongated limbs.

21- Michaela Schauer (then LMU Munich) carried out the pXRF investigations on site in 2023.

22- Moon 1987, Pongratz-Leisten 1988, Pizzimenti 2020, Renette 2021.

23- Martin 1988: 19.

24- Nissen 1970: 139.

25- e.g. Grave 401 from the 2022 campaign in Fara.

26- Delougaz 1952: 56 and Moon 1987: 57.

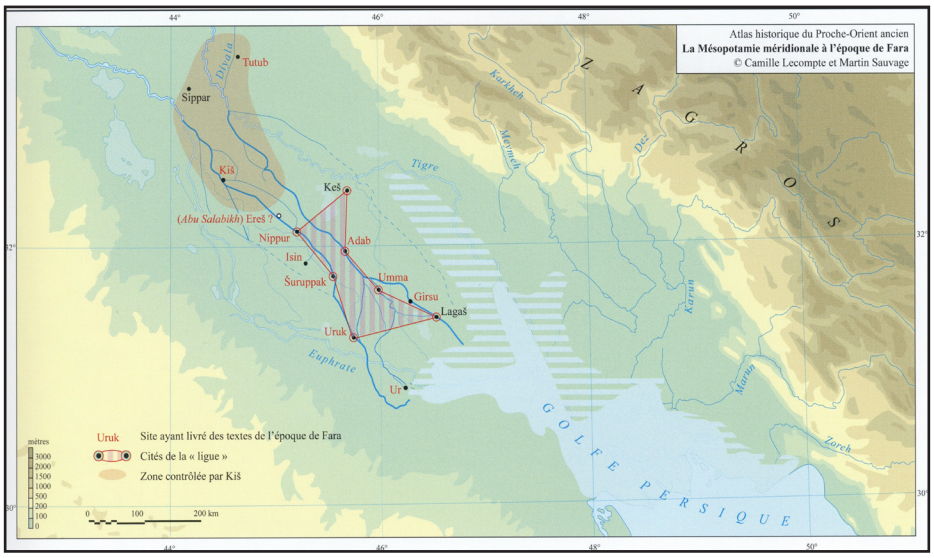


Fig.1
Map of southern Mesopotamia in the Fara period (C. Lecompte & M. Sauvage, Atlas historique du Proche-Orient ancien, Paris 2021: Pl. 65)

Fig.2
The heavily looted northern edge of the main mound of Fāra with excavation areas of 2022 and 2024 (below) and the ruins of the DOG dig house (above)
1902

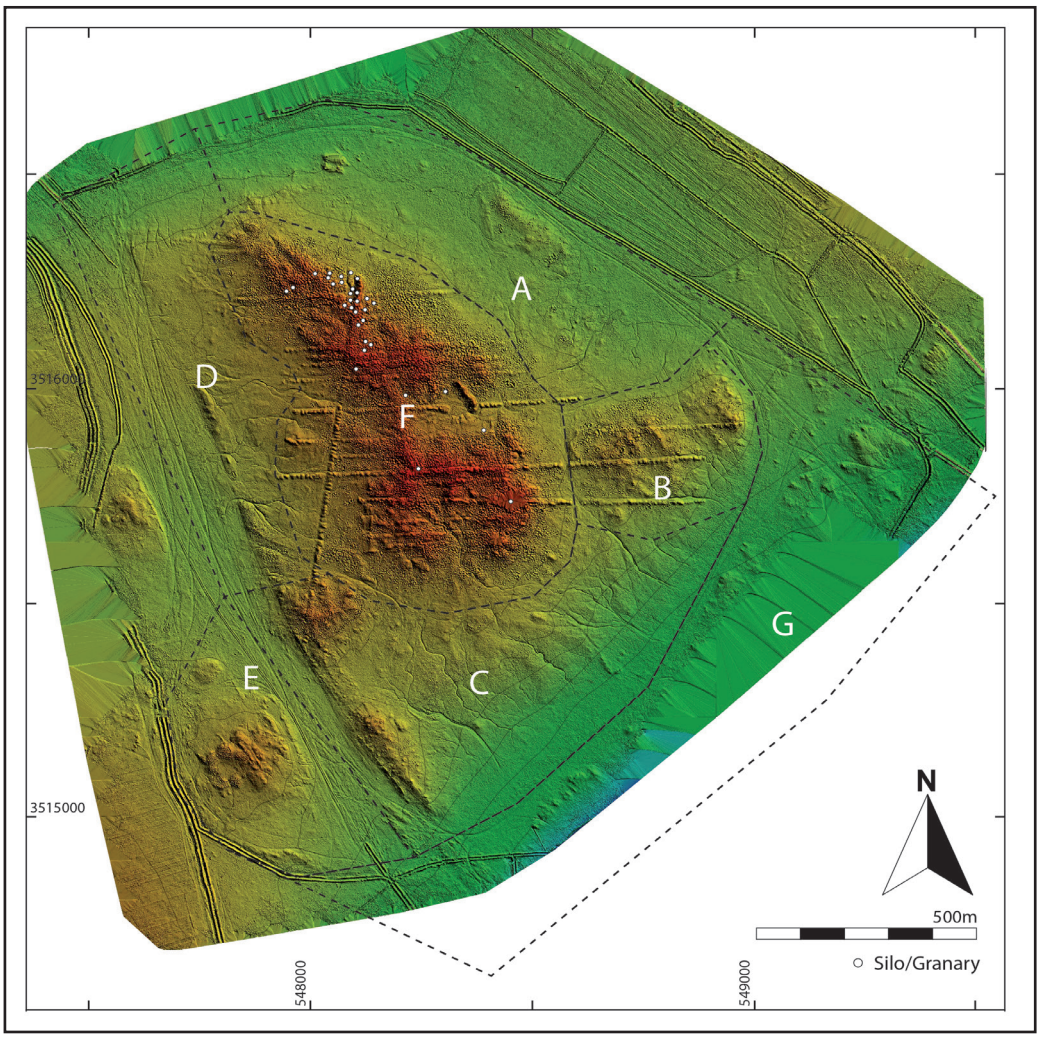


Fig.3
Digital elevation model of Fāra with the new designation of areas (A-G)

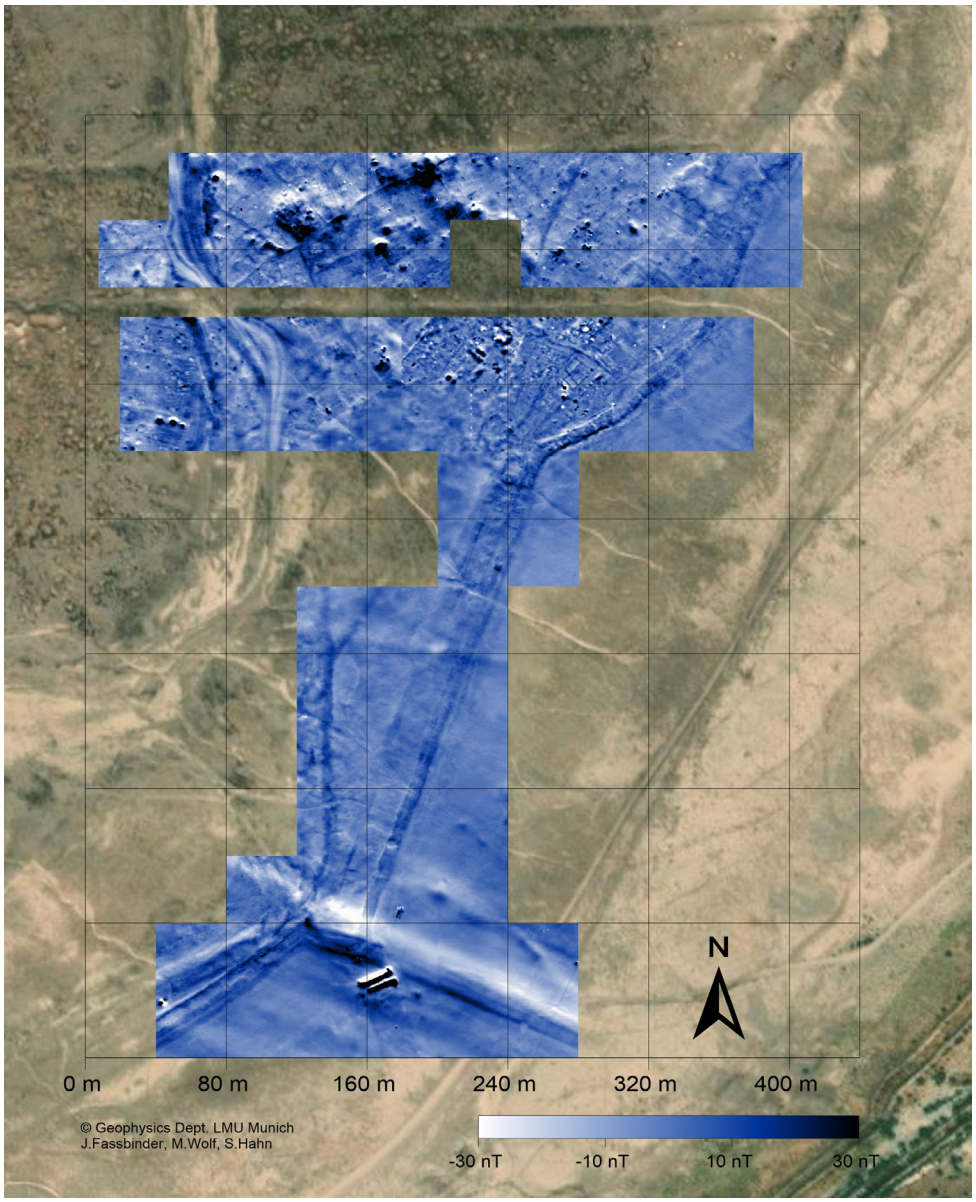


Fig.4
Results of the geophysical prospections 2018 and 2022 on Mound B with settlement areas, the city wall, canals and water installations (team J. Fassbinder)

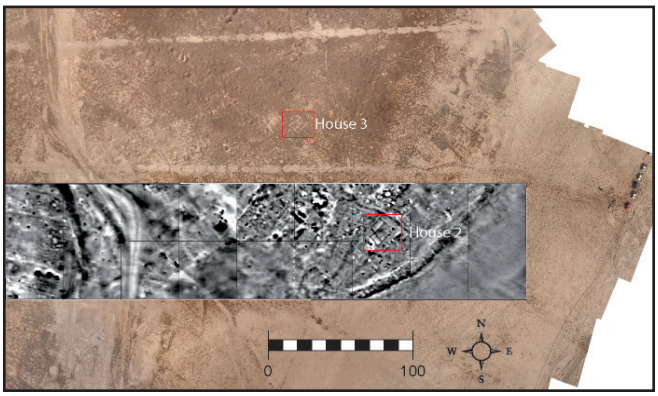


Fig.5
Non-invasive methods of aerial photography and geophysics showing dense occupation of houses on Mound B

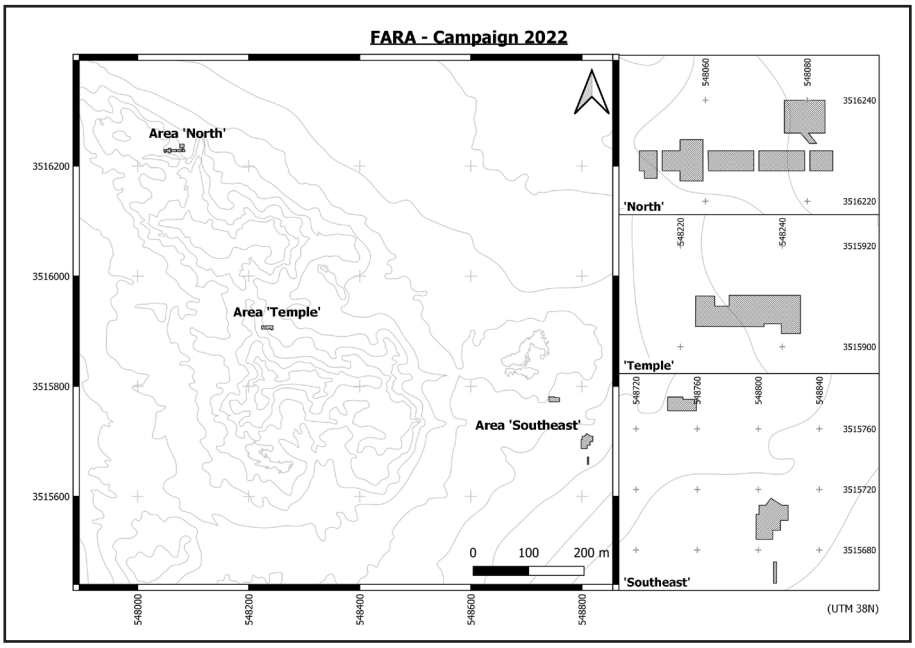


Fig.6
Schematic map of the excavation areas of the 2022 campaign

Fig.7
House 2 and House 3 on Mound B after excavation

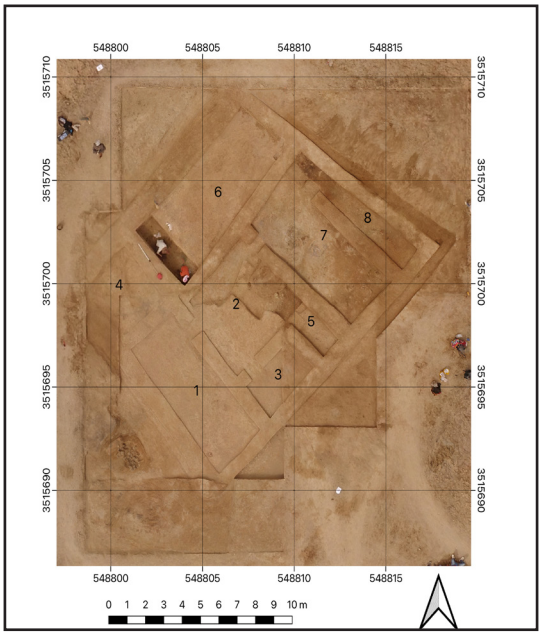


Fig.8
Detailed plan of House 2

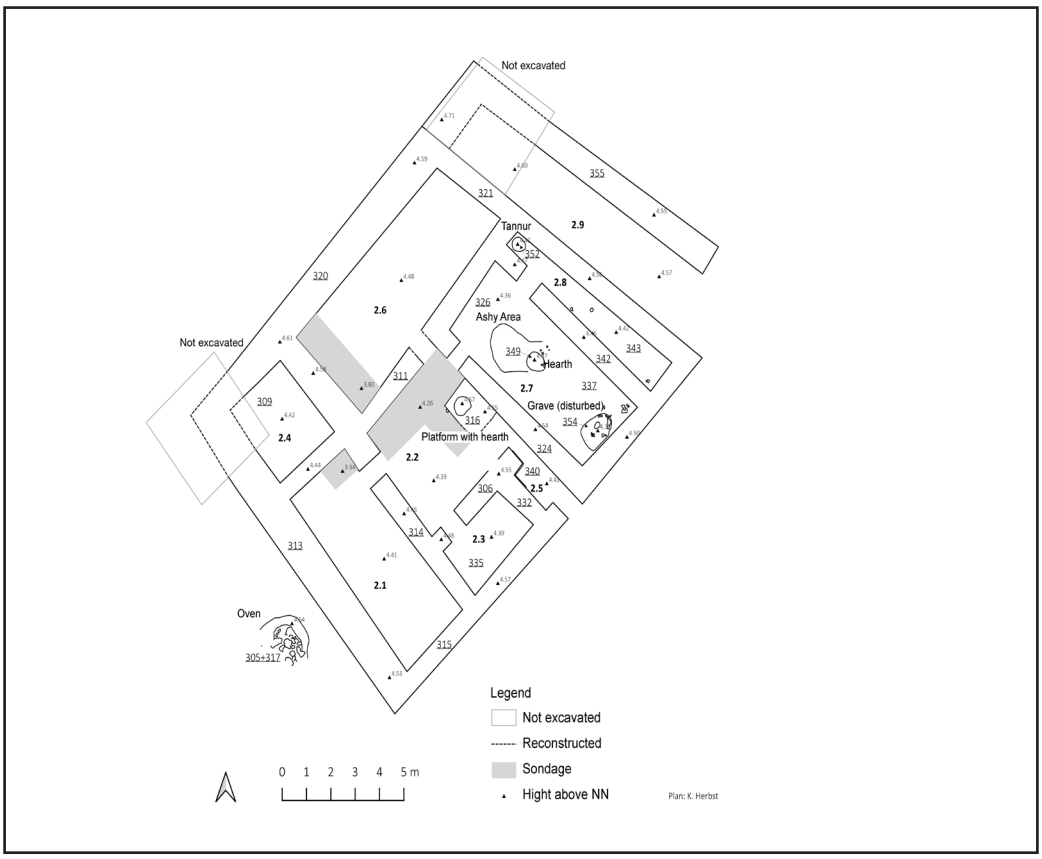


Fig.9
Sketch plan of House 2

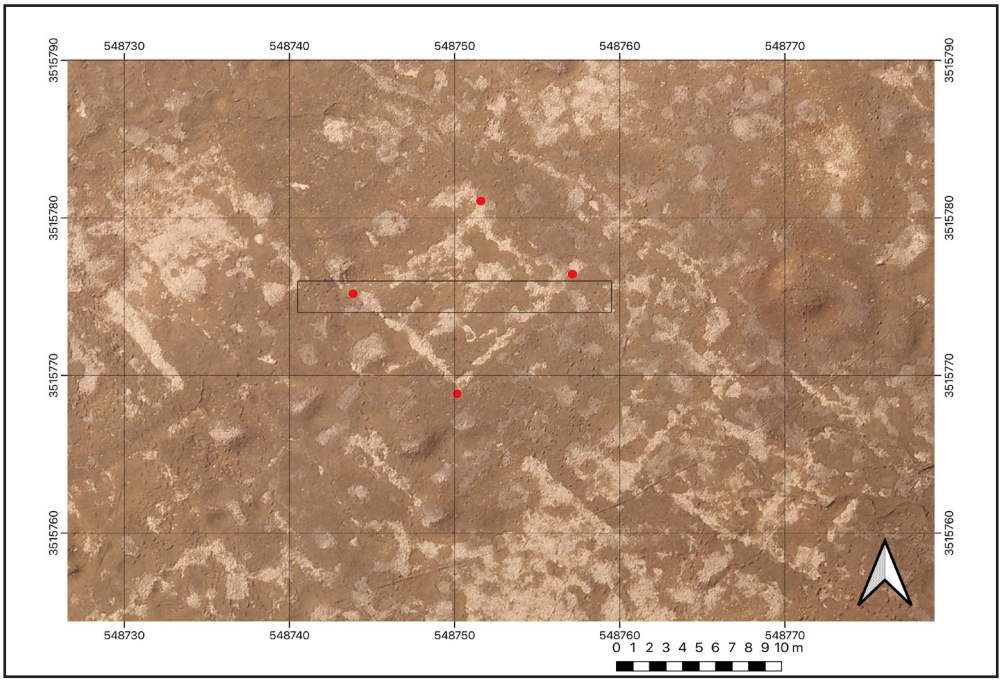


Fig.10
Visible structures of House 3 after rain (aerial photo 2018) and before excavation

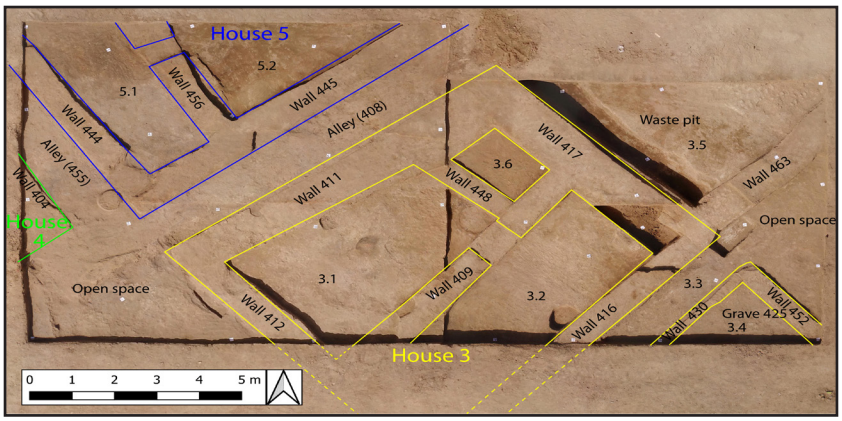


Fig.11
House 3 and adjacent structures after excavation

Fig.12 (a-b-c)
Door sealing found in the, Waste Pit ‘with impression of a seal in the so-called, Crossed Fāra Style’

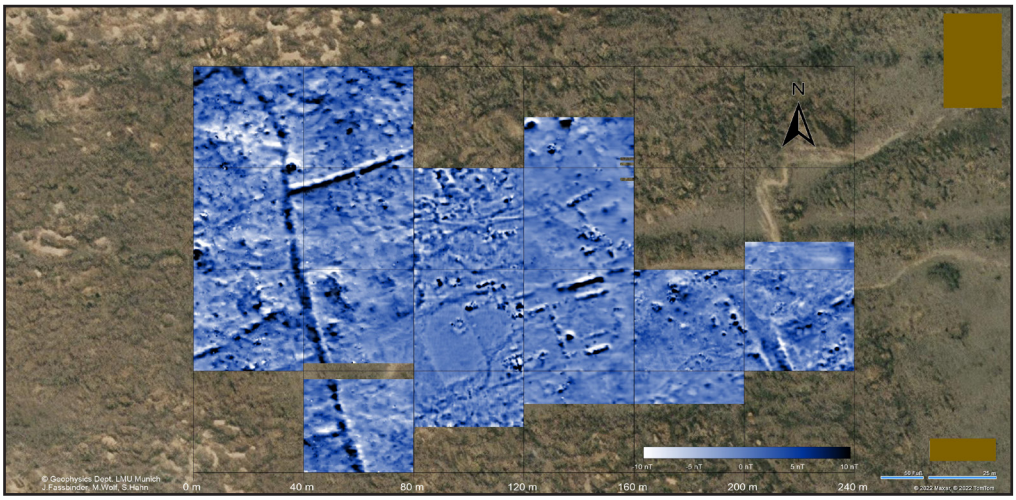


Fig.13
Results of the geophysical prospection 2018 and 2022 in the central area of Mound F

Fig.14
The outer walls of the large building (temple?) bordered by a street; view from north

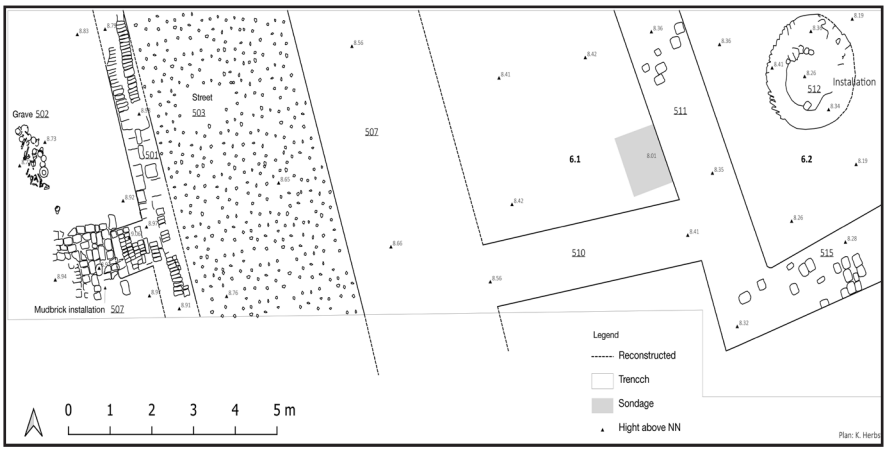


Fig.15
Schematic plan of the same area

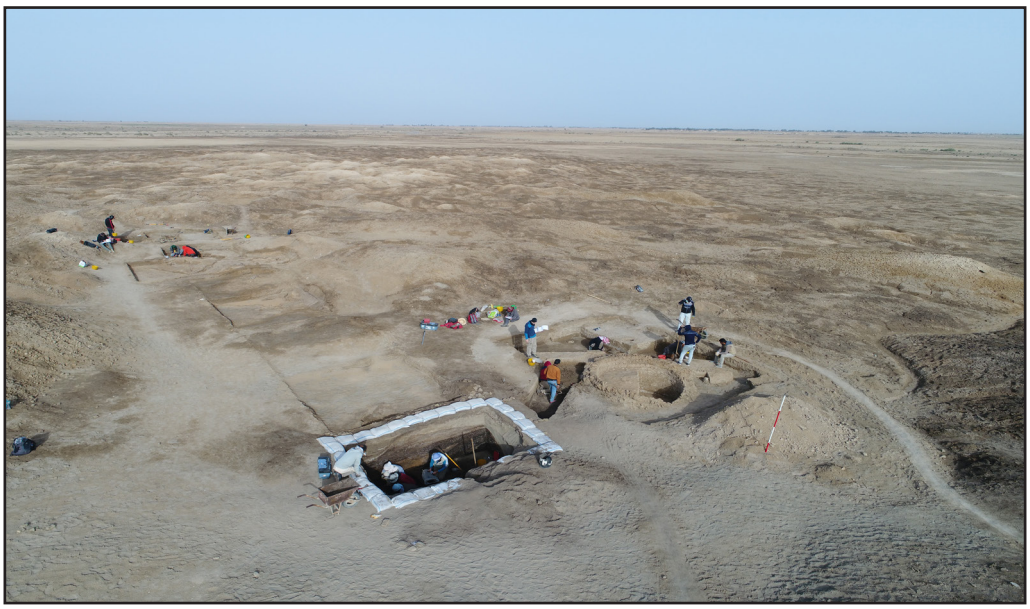


Fig.16
Overview of Area North, the ‚Seal Pit', the silo and the large building in foreground

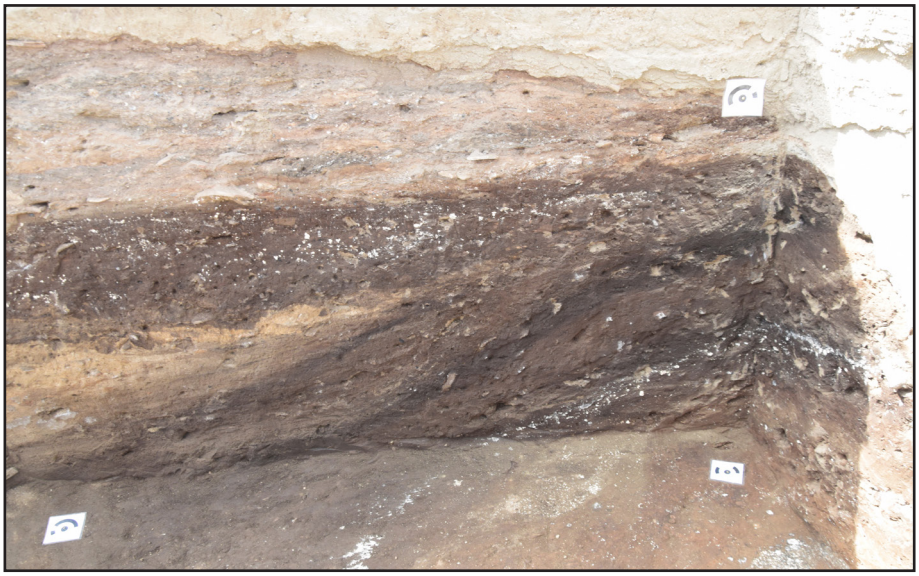


Fig.17
Sloping layers of the, Seal Pit', detail

Fig.18
The silo attached to the broad mudbrick wall

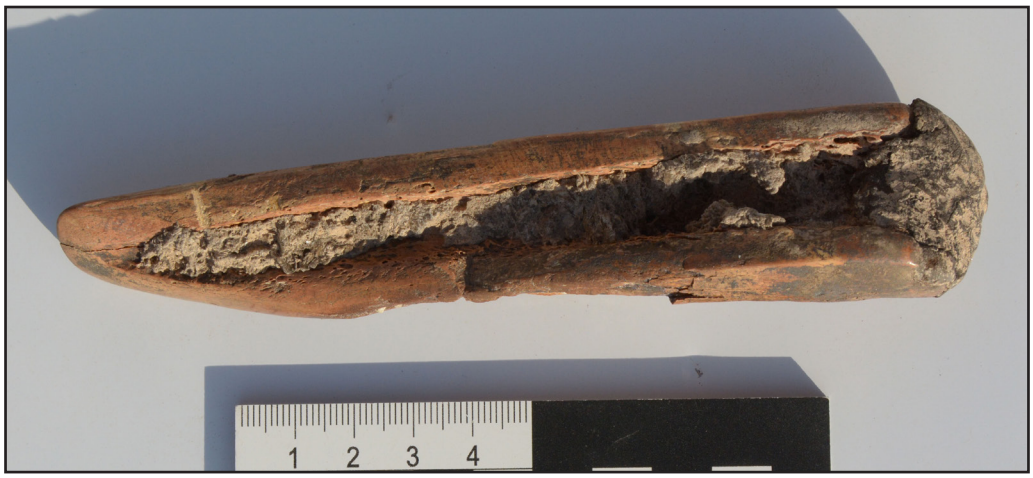
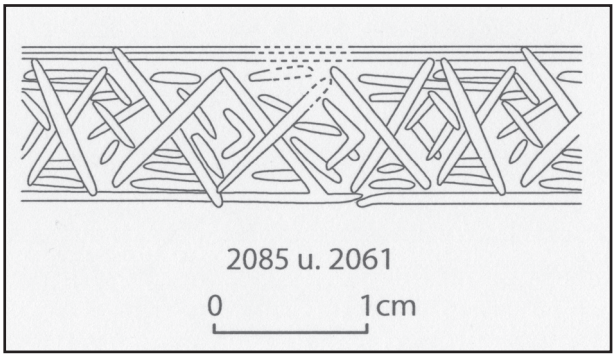


Fig.19 (a-b)
Worked bone tool with bitumen head, obverse and reverse

Fig.20
Small figurine of a sheep from the, Seal Pit

Fig.21 (a-b)
Small human figurine in situ in the, Seal Pit' and lateral view

Fig.22 (a-b)
Sack sealing with impressions of a small geometric seal



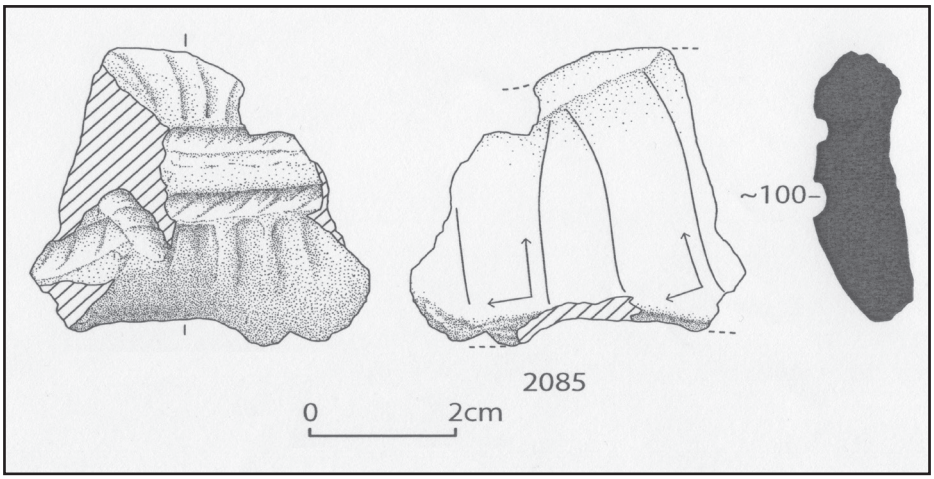


Fig.22 (c-d)
Sack sealing with impressions of a small geometric seal

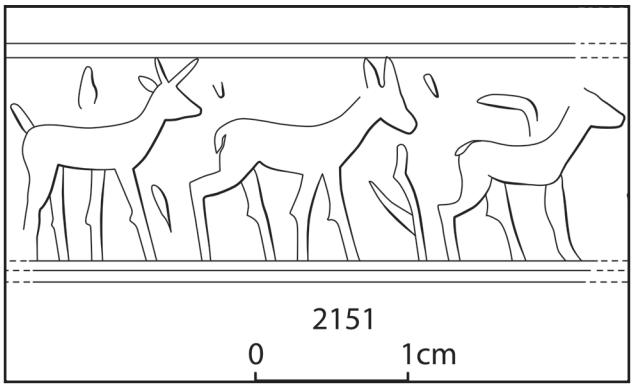


Fig.23 (a-b-c)
Door sealing with impressions of a seal depicting a row of animals

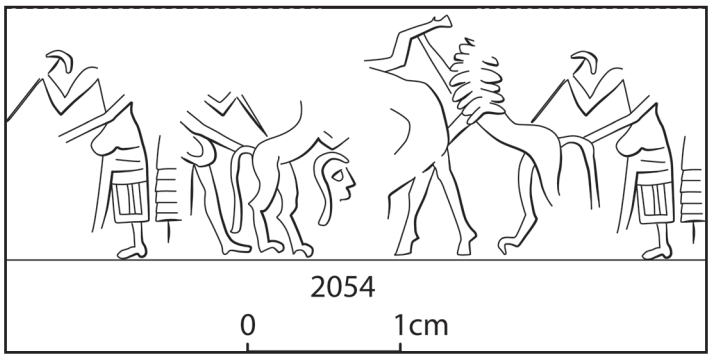


Fig.24 (a-b-c)
Jar sealing impressed with seal showing contest scene

Fig.25
Door sealing with impressions of the largest and most complex seal in the Mesilim, Elegant Style

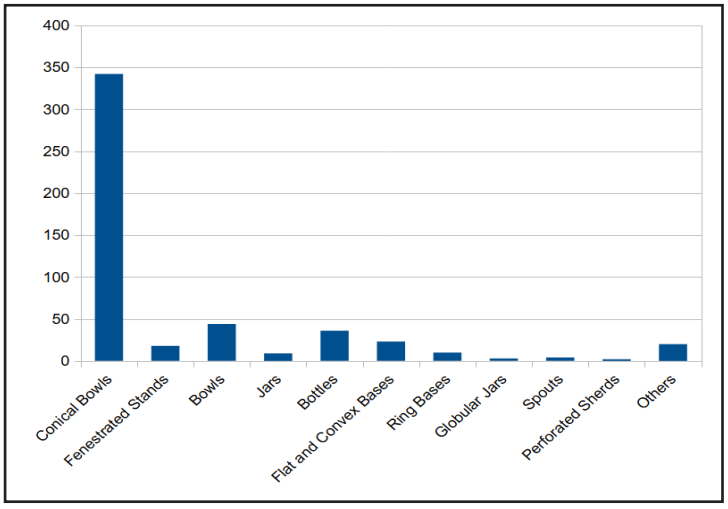


Fig.26
Proportions of the different types of ceramics in the 'Seal pit' (Drawing of fenestrated stand by M. Lerchl)

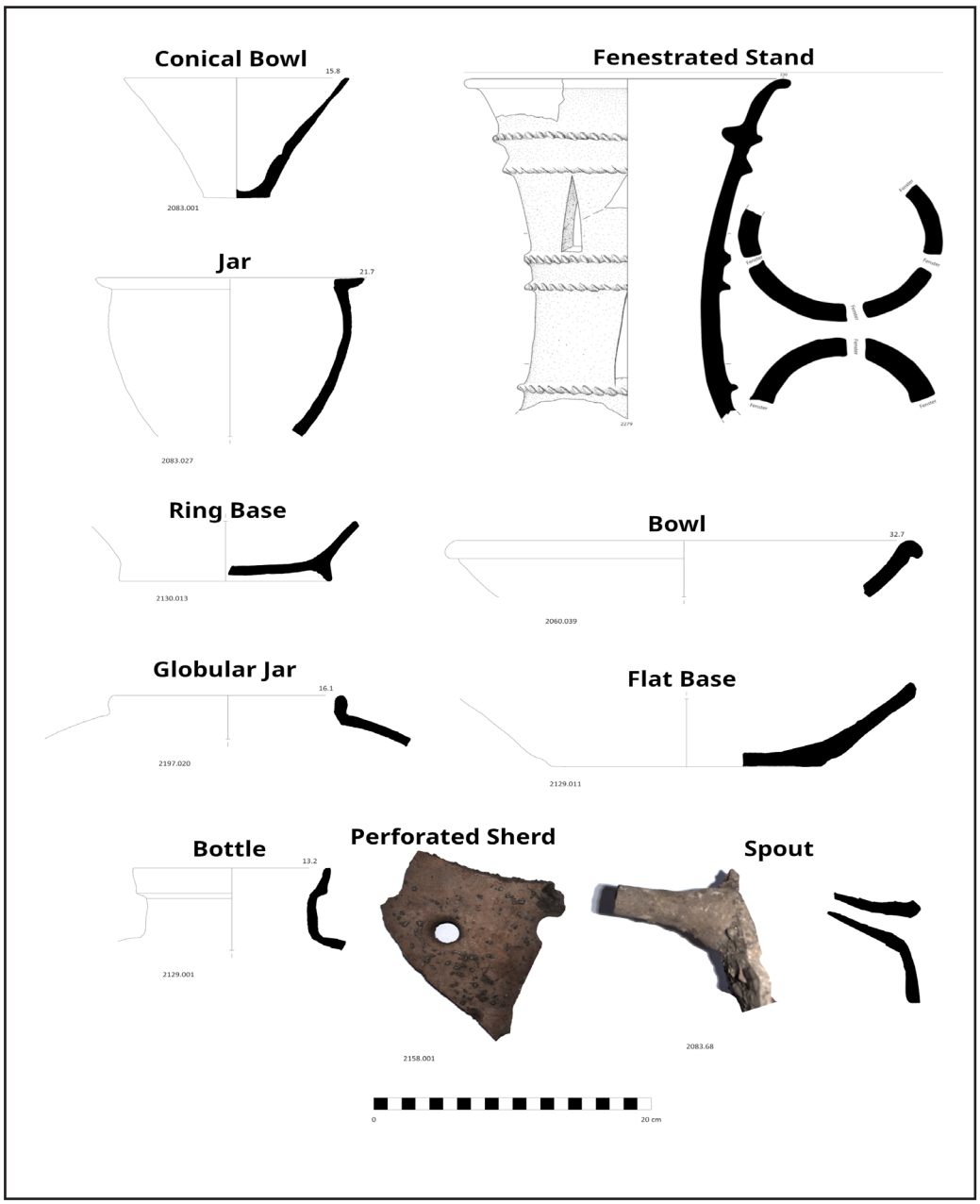


Fig.27
Plate with the most common pottery shapes from the ‘Seal Pit’