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# The Enigma of the High-Level Aqueduct to Jerusalem and the Mamilla Water System

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In the Early Roman period the High-Level Aqueduct conveyed water to Jerusalem. The widely accepted view has been that before reaching the city, the aqueduct made a detour to the Mamilla Pool and then merged with the Mamilla Street Aqueduct on its way to the city. The article argues that this route is implausible. It presents data from excavations that set a consistent dating of the Mamilla water system to the Byzantine period. The Mamilla Pool and the Mamilla Street Aqueduct constituted a stand-alone water supply system that merely collected run-off water outside the urban area. The final stretch of the High-Level Aqueduct remains unknown.

Keywords Jerusalem, High-Level Aqueduct, Mamilla Pool, Mamilla Street Aqueduct, Water systems, Roman aqueducts

The High-Level Aqueduct, also referred to as the 'Upper Aqueduct', is one of the two waterworks that conveyed water from Solomon's Pools, on the outskirts of Bethlehem, to Jerusalem. While the precise dating of the aqueduct is disputed, the widely-accepted view is that it was part of Jerusalem's water supply system during the Early Roman period. It was built when a need arose to supply areas in Jerusalem that were located higher than the reach of the previously-constructed Low-Level Aqueduct. To preserve the altitude, the aqueduct followed a relatively higher course from Solomon's Pools to the city, adhering closely to the elevation of the Judean Hills watershed. However, the final stretch of this aqueduct in proximity to the city has not been discovered (Fig. 1). This has left open questions regarding the course of the aqueduct near the city and its destination inside the urban area. The biggest bone of contention is whether the High-Level Aqueduct reached the Mamilla Pool before entering the city.

The course of the High-Level Aqueduct, and its assumed integration with the Mamilla Pool was dealt with in the past (e.g., Wilson 1865; Schick 1878; Mazar 2002; Billig 2012). These issues have been revived as a result of recent excavations. In 2008–2009, Amit

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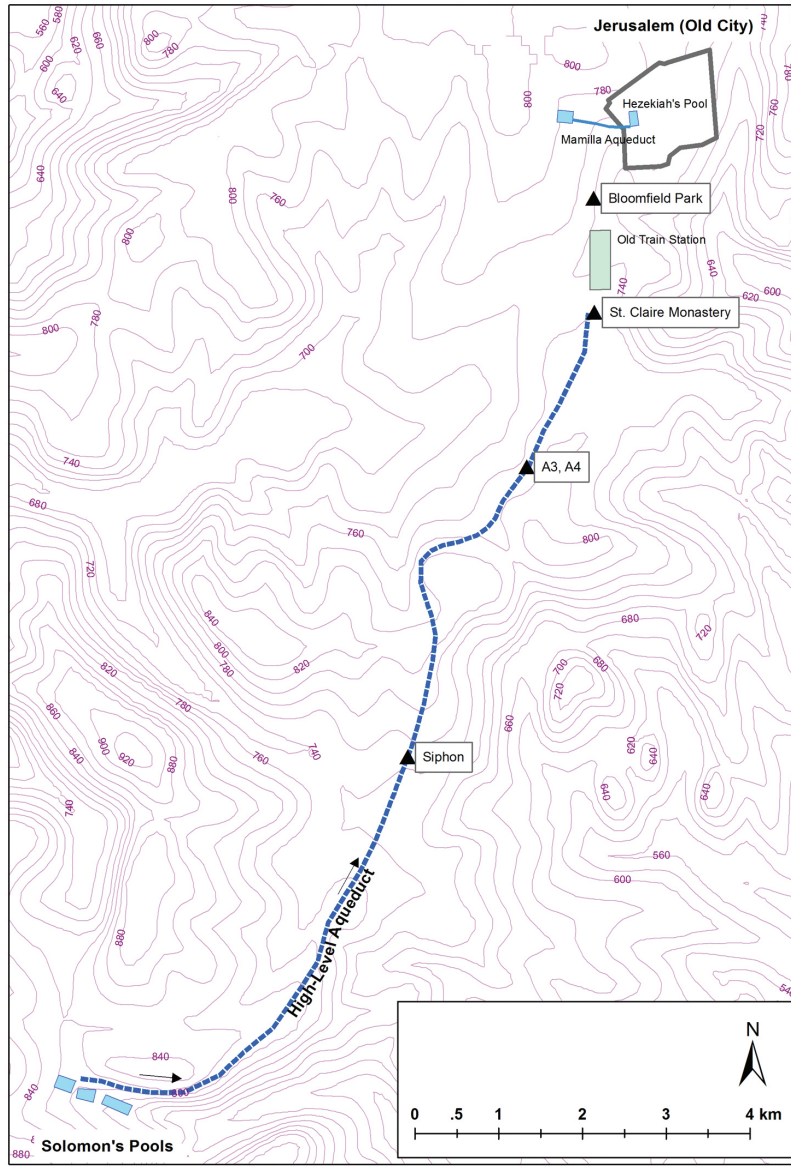


FIGURE 1 Schematic Map of the High-Level Aqueduct to Jerusalem with sites mentioned in the article.

discovered a short water conduit at a close distance to the Mamilla Pool. He postulated that this channel is part of the High-Level Aqueduct and that the pool functioned as an operational tank outside the city walls (Amit 2009a; Amit and Gibson 2014: 27–29). According to him, the existence of the short conduit constitutes "clear evidence that the Mamilla Pool, the destination of the aqueduct, was originally built during the reign of Herod, and if so the aqueduct that led from Mamilla Pool to Hezekiah's Pool is the continuation of the High-Level Aqueduct from the Second Temple period" (Amit

2009a: 99).[1] In 2010, Sion excavated another water conduit under the present-day Jaffa Gate plaza and attributed it to the High-Level Aqueduct (Sion 2010; Sion and Rapuano 2014). Although the Jaffa Gate water system yielded finds dating to the Byzantine period, Sion suggested that "the aqueduct discovered in the excavations was part of a water system originally constructed at the end of the Second Temple period" *(ibid*.: 454). Moreover, the title of Sion's (2010) article— "The Upper Aqueduct of Jerusalem in the Area of Jaffa Gate"—regards the finding as the previously missing segment of the High-Level Aqueduct.

In this article I re-evaluate the available data regarding the last segment of the High-Level Aqueduct and presents new information on the chronology of the Mamilla Pool and the water systems connected to this reservoir. Based on the articulation of the archaeological record, I maintain that the High-Level Aqueduct could not reach the Mamilla Pool area.

## The High-Level Aqueduct

### Segments of the aqueduct

The two aqueducts to Jerusalem—the Low-Level Aqueduct and the High-Level Aqueduct—were fed by Solomon's Pools. These three large reservoirs, located a few kilometers south of Bethlehem, were filled by nearby springs and by two conduits that conveyed water from more distant sources. The aqueducts were examined in the 19th century (Guérin 1869: 110–117, 303–309; Wilson 1865; Schick 1878), and more recently, in a comprehensive archaeological survey headed by A. Mazar (2002) in 1969.

The surveys discovered only sections of the High-Level Aqueduct. The estimated length of the aqueduct is ca. 13 km (*ibid*.: 227). It emerged at elevation ca. 800 m above sea level and ran approximately along the watershed of the Judean Hills. In some fragments, the High-Level Aqueduct was located about 40 m higher than the Low-Level Aqueduct. This difference in elevation indicates that the destination of the High-Level Aqueduct must have been higher than the Temple Mount (top 743 m), which had been served by the earlier Low-Level Aqueduct. It is possible that the aqueduct reached the residential quarter on the Western Hill of Jerusalem (ca. 760 m) or water works (Josephus, *War* 5.181) in Herod's palace (at a possible elevation of 762–771 m).[2]

The High-Level Aqueduct features a well-preserved stone siphon which enabled it to cross a topographical dip north of Bethlehem (Fig. 1). However, the more typical sections of the aqueduct consisted of a wide, built up foundation with a U-shaped *specus* (channel or water-way) on top of it. Near Solomon's Pools, the foundation was 1.6 m wide and 1.5 m high; the *specus* was 0.50 m wide and 0.75 m high (Mazar 2002: 227). Among the

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1 All quotes from publications in Hebrew presented here were translated by the author.

2 Herod's palace occupied a large area south or southeast of the Ottoman Jaffa Gate, but its exact location is still disputed. The highest elevation in this area is 771 m. Nevertheless, it was not necessary to convey water to the highest spot in the palace. For a topographical map of the area, see Sion and Puni 2010: 114 (note that the palace's location there is a theoretical suggestion). Re'em (2010: 99; 2018: 38–53) exposed a large Herodian podium in the Kishle police compound, which he regarded as a possible foundation for the palace. The limited scope of his excavation does not allow for the drawing of definite conclusions regarding the nature of the remains.

excavated segments was a section 300 m long on the western slopes of the Kibbutz Ramat Raḥel hill, where the foundation was constructed of rough stones 2 m wide and up to 2 m high (Area A1 in Billig 2012: 160–161). The northernmost segment of the aqueduct identified to date (250 m long) was unearthed parallel to Hebron Road in modern Jerusalem (Areas A3–A4, Billig and Dolinka 2012; 2013; Fig. 1).[3] The foundation of this segment was 1.6 m wide and had a narrower U-shaped *specus*. According to the excavators, the *specus* was originally ca. 0.40 m wide before it was narrowed due to re-plastering. The elevation of the aqueduct here is ca. 776 m.

Beyond this point northward, Solimany (2012) excavated a water conduit on the northwestern side of the St. Claire Monastery (Fig. 1). Due to the limited boundaries of the excavated area, only a short segment (10 m) of a rock-hewn and built water channel was exposed. The conduit runs from south to north along the watershed. The *specus* was 0.40 m wide, 0.60 m deep and its bottom elevation descended from 761.90 m to 760.95 m.[4] The excavation did not yield any datable material, but radiocarbon samples taken from the white plaster of the *specus* yielded dates in the 1st–2nd centuries CE. It is uncertain whether this conduit is a fragment of the High-Level Aqueduct, but it has been widely regarded as such.[5]

## Dating the aqueduct

Based on the Latin inscriptions on some of the siphon stone sections, it has been suggested that the aqueduct was established by the Roman Tenth Legion in the 2nd century CE (Stiebel 1999: 77; Mazar 2002: 238). The inscriptions are those of centurions whose units were responsible for laying the conduit (Di Segni 2002: 40–47). However, an earlier phase of the aqueduct was detected that employed a bridge crossing of the same valley; this earlier conduit was attributed to Herod the Great's reign (Amit 2002: 253–256) but the proposal was theoretical and not based on excavations. The more recent discovery of an Agrippa I coin (41–44 CE) in the core of the aqueduct's foundation in a different section demonstrates that the aqueduct was built not earlier than the 40s of the 1st century CE (Billig and Dolinka 2013). Multiple layers of plaster discovered in the *specus* indicate that the High-Level Aqueduct functioned for a long period and underwent several renovations.

It is reasonable to assume that the aqueduct was damaged during the First Jewish-Roman War (66–70 CE), and was therefore renovated by the Roman Tenth Legion when it was based in Jerusalem after the war, or, alternatively, during the 2nd century CE after the founding of Aelia Capitolina. A coin of Arcadius (395–408 CE), which was discovered in the flowing channel, shows that the aqueduct ceased functioning by ca. 400 CE and that rubble could then accumulate inside (Area A2 in Billig 2012: No. 2). Other numismatic findings testify that the aqueduct was covered in soil in the 8th century CE (Billig 2012: 79*).

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[3] The aqueduct was exposed north of the 'Pillbox junction', between Asher Viner Street and Revadim Street, ca. 150 m east of Hebron Road (Billing and Dolinka 2012: 247–248).

[4] Note that Billig and Dolinka (2012: 248) quoted the elevation of 762 m; Amit (2009a: 99) quoted 760 m.

[5] Solimany (2012), Gibson (Amit and Gibson 2014: 26, 28, n. 89); contra, see Billig and Dolinka (2012: 248); Amit (2009a: 99). Amit and Gibson (2014: 28, n. 89) suggested that St. Claire's conduit was only a side branch of the High-Level Aqueduct.

## The Mamilla Pool

The Mamilla Pool is a large reservoir (60 × 95 m) situated ca. 450 m west of the Old City of Jerusalem, in the upper part of the Hinnom Valley (Fig. 2). The pool is located east and below the watershed line. The elevated topography around the pool enables collection of run-off water from its immediate surroundings. The pool was dug in the ground and its built-up walls are an average of 6 m deep. Several masonry styles are visible on the walls of the pool, testifying that the reservoir underwent multiple renovations.

An outflowing conduit, known as the Mamilla Street Aqueduct, emerged from the Mamilla Pool's eastern wall and ran east through the area of the present-day Mamilla-Alrov Mall (previously Mamilla Street). Further east it passed under the Ottoman wall of the Old City and discharged into Hezekiah's Pool in the Christian Quarter (see below).

Because the last segments of the High-Level Aqueduct near the Old City have not yet been identified conclusively, it is necessary to re-examine the claim that this water system integrated the Mamilla Pool and the Mamilla Street Aqueduct, as was maintained in previous studies (e.g., Geva 1993: 766; Billig 1995: 45–46; Amit 2009a; map in Avni 2010: 38; Tsuk 2011: 283–284; Amit and Gibson 2014; Sion and Rapuano 2014: 459–460; map in Gafni, Reich and Schwartz 2020: op. 399).

### Date of the Mamilla Pool

The pool is not mentioned in any of the Early Roman period sources (Gurevich 2017: 103, 108). In 1999, trial excavations were conducted in the Mamilla Pool; the results have been only partially published (Abu Raya and Billig 2003). The information presented below includes unpublished archival material from the excavation.

The re-examination produced accurate measurements of the pool's rims and floor elevation (Fig. 3). Three squares were excavated inside the pool (Fig. 4): Square A (2 × 2 m) in its northwestern corner, Square B (4 × 4 m) in the centre and Square C (2 × 2 m) in the southeastern corner. The three squares yielded similar findings. Based on the results, one can establish the following stratigraphic sequence (from top to bottom; numbers of strata are assigned by the present author):

- *Stratum I*— The present pool's floor which is made of modern concrete. It represents attempts in the 1950s and 1960s to use the pool for municipal needs (Abbels and Arbit 1995: 43–44).
- *Stratum II*—Gray fill soil (3–10 cm) which was discovered below the concrete. It yielded modern finds, which accumulated in the pool before the laying of the modern concrete.
- *Stratum III*—A thin floor of grayish-white plaster containing ceramic inclusions (ca. 3 cm).[6]
- *Stratum IV*—A roughly-hewn or gravel stone bedding, bonded with gray mortar (23–50 cm). This layer yielded sherds from the Early Roman to the Late Byzantine or beginning of the Early Islamic periods. The latest finds date to the 6th–8th centuries CE.

[6] The width of the floor was measured in Area B. The floor was not found in Area A.

Figure 2 Mamilla Pool, looking northeast.

The bedding of Stratum IV is deposited directly on the bedrock, and thus it represents the earliest phase of the pool. Consequently, the Mamilla Pool was constructed not earlier than the 6th century CE, which makes any linkage of it to the High-Level Aqueduct of the 1st century CE impossible.

## Topographic considerations

The topography of the area forms an obstacle in the path of connecting the High-Level Aqueduct with the Mamilla Pool. By the location of the northernmost remains of the aqueduct (Fig. 1), it is clear that such hypothetical continuation of the aqueduct would have had to descend into a valley near the old train station and then ascend to the Mamilla Pool. The valley's altitude is no higher than 755 m, but the rim of the Mamilla Pool is situated at elevation ca. 774 m at the lowest (Fig. 3). In other words, the Mamilla Pool is 19 m higher than the surface of the valley where the aqueduct would have had to pass. Moreover, even the floor of the pool (Fig. 3) is situated higher than the aqueduct segment near St. Claire's Monastery (761 m).

In Roman hydraulic engineering, aqueducts often overcame valleys by using a bridge (for instance, the famous Pont du Gard in the south of France) or using the mechanism of pressure pipes (inverted siphon). A siphon which enabled water to flow across a valley and rise back almost to the same height was also used.[7] For significant stretches, such

[7] In fact, the destination of an inverted siphon or stone pressure pipe was usually lower than its header due to practical physical reasons, such as friction in the pipes that results in loss of energy (Hodge 1992: 153).

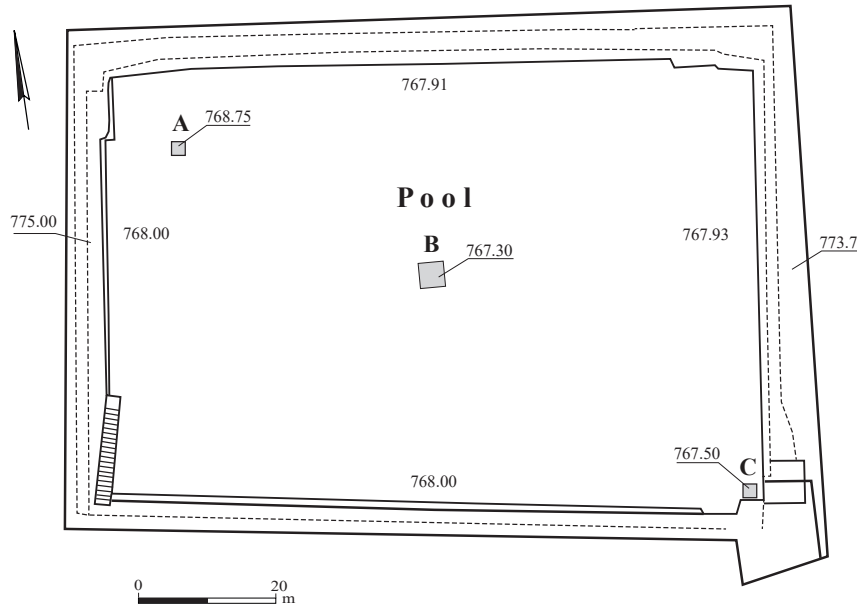


Figure 3 Mamilla Pool, location of the excavated areas (drawing by N. Zack).

as the extrapolated distance of a water course to the Mamilla Pool, the Romans likely preferred building bridges because these were more economical and reliable (Hodge 1992: 147, 157). However, despite wide-scale excavations and surveys, no remains, neither of a bridge nor of a siphon, were discovered in the area of the old train station (cf. Kloner 2001).[8]

Stiebel (1999:76–77) suggested that the High-Level Aqueduct did not need to overcome the topographical depression near the old train station because its destination was not the Western Hill as many assumed, but a different lower location, of the post-70 CE Roman military bathhouse in the Tyropoeon Valley. In Stiebel's view, the bathhouse was part of the Roman Tenth Legion camp, which he positions below the Temple Mount, on the southwest (Stiebel 1999: 102, Fig. 13). However, the recently discovered coin of Agrippa I at the High-Level Aqueduct puts the construction of the aqueduct prior to the establishment of the Tenth Legion camp in Jerusalem. In addition, it makes more sense that the High-Level Aqueduct—as a newer water supply system that was constructed along a higher course than the already-existing Low-Level Aqueduct—would be planned to convey water to higher areas in the city. In fact, supplying water to the Tyropoeon could be done by installing a side channel from the Low-Level Aqueduct. We are, therefore, back to the original idea: that the aqueduct had to supply water to a higher altitude, such as the Western Hill.

8 According to Vitruvius, a siphon must be set on a built foundation (*De Arch*., 8.6.5). Indeed, such a foundation is preserved in the siphon section near Bethlehem, but nothing similar has been discovered on the suspected valley-crossing route to the Mamilla Pool.

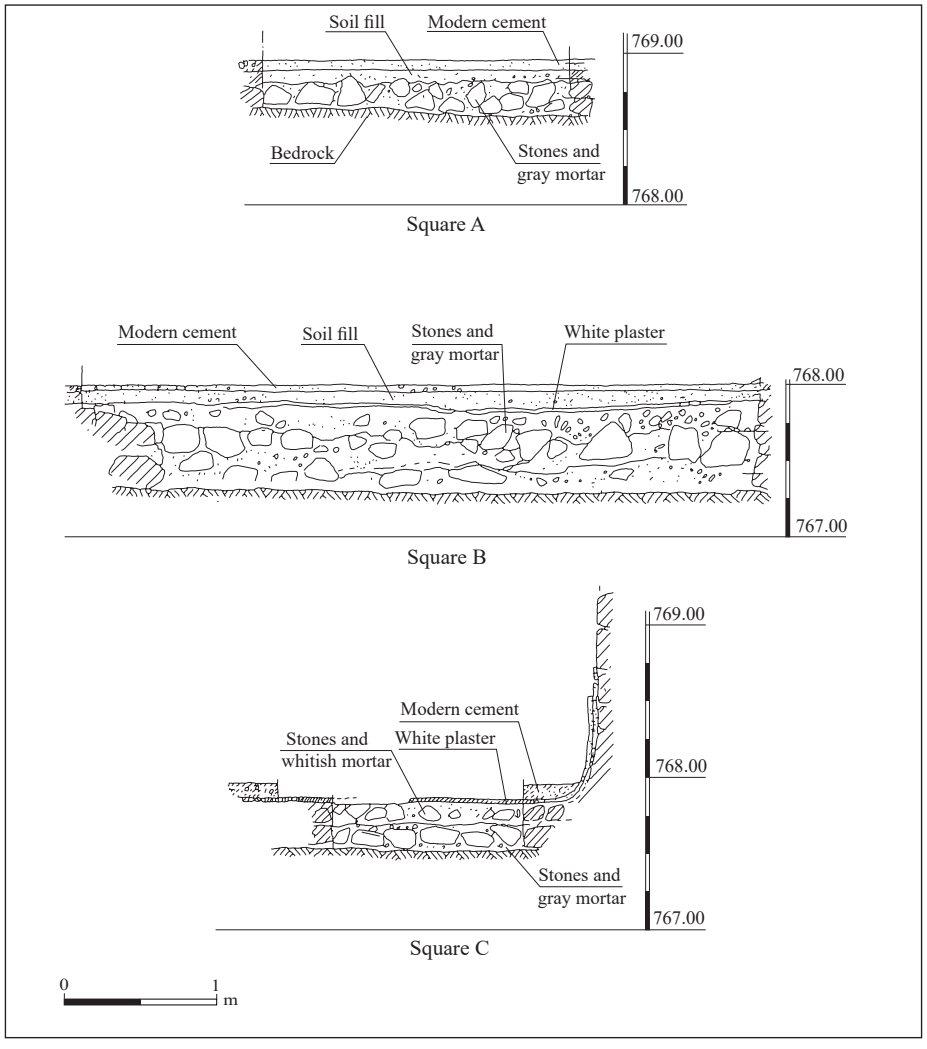


Figure 4 Mamilla Pool, cross-sections of the trial excavations. Drawing by N. Zack.

Other scholars, who argued that the aqueduct reached the Mamilla Pool, have suggested various solutions to how it could have overcome the topographical low on its journey near the old train station (Billig 1995: 46–45; Amit 2009a:99; Amit and Gibson 2014: 26–28).

Billig (1995:46–45), as well as Amit and Gibson (2014: 26–28), believed that various fragments of hewn tunnels, noted in this area since the 19th century, could have created a water passage to the Mamilla Pool. Their presumed route overcame the topographical low using a hypothetical mechanism that, in their view, could function like an inverted siphon. Billig estimated that such a tunnel would have been ca. 1.86 km long. Amit and Gibson noted about 11 possible tunnels or conduits mentioned in regard to this area. Yet, taking into account that the engineers implemented a 'classical', stone-made siphon in another segment of the High-Level Aqueduct, it is unlikely that they would use a different technology here. Moreover, there is no indication that the various underground passages

were used to convey water, nor that they were hewn in the same time period. There is no indication that they could even constitute a continuous line ending in the Mamilla Pool.

In fact, a tunnel could not conserve the potential energy of water flowing across the valley because it might not have been filled up to the ceiling and thus not have functioned as a closed-pressure system. A tunnel would be more vulnerable to friction in comparison to a stone pressure pipe. In his comprehensive survey of the Roman aqueducts, Hodge (1992: 147–160) did not document even a single instance of tunnels that could function as a siphon. Finally, if the purpose of a pool was to serve as an operational tank of the High-Level Aqueduct, it is puzzling that the engineers did not chose to position it closer to the city, at a lower elevation than the Mamilla Pool, at a location which would not constitute a technical challenge.

## The Mamilla Street Aqueduct

### Outside the Old City

The Mamilla Street Aqueduct, which conveyed water from the Mamilla Pool to Hezekiah's Pool, has been excavated along most its ca. 850 m route (Reich and Shukron 1994; Assaf and Billig 1999; Maeir 2000; Reich and Shukron 2006: 146–147; and inside the Old City, Sion and Rapuano 2014). It was often regarded as the final segment of the High-Level Aqueduct (Amit 2009a; Sion 2010; Amit and Gibson 2014; map in Gafni, Reich and Schwartz 2020: op. 399).

The excavations established that the Mamilla Street Aqueduct operated during two periods that are represented by separate flowing channels. The earlier-phase conduit dates from the Byzantine to the Umayyad periods (Reich and Shukron 1994: 95; Channel 2 in Assaf and Billig 1999; Maeir 2000: 302–305). In one of the segments along Mamilla Street, the *specus* was discovered unroofed; it was partly rock-cut (Assaf and Billig 1999). Its built-up sides were made of fieldstones. In several fragments northwest of the Jaffa Gate, the aqueduct was supported by a 3–4 m high retaining wall and had side-channels that drained rainwater into the main conduit (Maeir 2000: 302–304, Area B2). The filling in the *specus* yielded roof tiles of the Roman Legion as well as pottery of the Byzantine-to-Umayad periods (Reich and Shukron 1994: 95; Assaf and Billig 1999: 63*). Another, later-phase channel, was discovered attached to the earlier Byzantine *specus* (Channel 1 in Assaf and Billig 1999). This channel was found built into the Ayubbid period city wall (Reich and Shukron 1994: 95), meaning that it must have been built earlier than or contemporaneous with this fortification. It was partially renovated in the 19th century.

The archaeological evidence, therefore, demonstrates that the earliest phase of the Mamilla Street Aqueduct is dated several centuries later than the building of the High-Level Aqueduct. Furthermore, the High-Level Aqueduct went out of use ca. 400 CE, which is about the earliest possible time that the Mamilla Street Aqueduct could have been constructed.

### Inside the Old City

The continuation of the Mamilla Street Aqueduct within the Old City was surveyed and partially excavated in the 19th century by Schick (1897: 218–220), who traced the aqueduct's route below the surface; he discovered that it was largely blocked with soil, and contained only a narrow passageway through which water flowed to Hezekiah's Pool.

In 2010, salvage excavations (Sion 2010; Sion and Puni 2010; Sion and Rapuano 2014) determined that the aqueduct was composed of two elements: (1) the foundation, erected on bedrock; (2) the *specus,* constructed above it, and covered with limestone slabs. The *specus* had a stepped form (width 0.55 m in the upper part; 0.18 m in its narrow lower part, total height 0.6–1.0 m; see Area C in Sion and Rapuano 2014: 481, Figs. 19, 20). The sides of the *specus* were made of dressed stones, including a few ashlars with drafted-margins in secondary use.

The aqueduct crossed through the Byzantine city wall (course north to south) also known as the *Schick-Johns Wall* (*ibid.*: Figs. 3, 19). The wall contained an opening made of a single course of dressed stones (height 0.35 m), through which the aqueduct entered into the Byzantine city. Further eastward, a few different styles were detected along the course of the aqueduct. The aqueduct discharged in the southwestern corner of Hezekiah's Pool.

The stratigraphic relationship between the Byzantine wall and the Mamilla Street Aqueduct enables clarification of their chronology. The conduit was found integrated with the wall (*ibid.*: 453). Multiple roof tiles of the Roman Tenth Legion, dated to the 2nd–3rd centuries CE, were discovered inside the walls of the aqueduct. Sherds from the 3rd and 4th centuries CE were found inside the *specus*. Coins from the 4th century CE were discovered in the locus that sealed the covering plates of the aqueduct, the latest coin dates to 355–361 CE (*ibid.*: 481, Area C, L302). The aqueduct was coated with reddish plaster that is characteristic of the Late Roman and Byzantine periods. The excavators concluded that the aqueduct found here was constructed in the second half of the 4th century CE (Sion and Puni 2010: 107–105; Sion 2010: 157–156; Sion and Rapuano 2014: 459–460). Due to the fact that the absolute dating is based on a single coin which was found in a locus contemporaneous with the aqueduct, a more accurate conclusion would be that the coin constitutes a *terminus post quem*, thus the aqueduct could have been constructed even later during the Byzantine period.

## A short conduit near the Mamilla Pool

A short conduit was unearthed in salvage excavations ca. 90 m north of the Mamilla Pool by Amit (2009a; 2009b: 68–69; Amit and Gibson 2014: 28–29). The area more proximate to the pool was not excavated and the conduit could not be traced on the surface there. This conduit, exposed at elevation 775 m, was ca. 85 m long, ran into the excavated area from the southwest, made a loop, and then turned south (Fig. 5).[9]

Amit identified three phases in the conduit's *specus*. The earliest was represented by two superimposed layers of plaster; based on numismatic evidence and pottery finds, it was dated to the reigns of Herod the Great and Agrippa I (Amit 2009a: 99). The

[9] Figure 5 here is based on Amit (Fig. 6 in 2009a: 99). Note that on the original Amit drawing, the conduit is connected with a much longer presumed channel leading to the Mamilla Pool. Another presumed end of the conduit enters into the mapped area from Solomon's Pools. However, the actual excavated conduit constitutes only a short fragment of the illustrated water channel (as shown in the figure).

second phase was attributed to the Late Roman period (after 70 CE) "as evidenced by the inscriptions found on the components of the stone pipe in Bethlehem" (*ibid.*:100). The excavator was uncertain regarding the latest phase of the conduit, which "can be dated as early as the Byzantine period and possibly from the Middle Ages" (*ibid.*). Amit postulated that the conduit constitutes a previously unknown fragment of the High-Level Aqueduct and required that it be linked with the Mamilla Pool and the Mamilla Street Aqueduct.

Yet, Amit's assertion is based on a short conduit that was exposed at a distance from the Mamilla Pool, and which was not necessarily connected to this reservoir. More important, his proposal contradicts the archaeological record obtained from the excavations at the Mamilla Pool and the Mamilla Street Aqueduct—elements that date conclusively to the Byzantine period. Furthermore, there is a significant difference in the building styles of the High-Level Aqueduct and the short conduit near the Mamilla Pool. The High-Level Aqueduct is characterized by a wide, built-up foundation and a *specus* on top of it, whereas in a few sections the short conduit was cut in the bedrock. In other sections its *specus* was constructed inside a foundation, but the foundation was padded with a 10 cm "light-colour limestone sand" layer (*ibid.*: 96) which was not found in the High-Level Aqueduct. All in all, the most probable explanation is that the short conduit found north of the Mamilla Pool was an agricultural irrigation channel.[10]

## Summary

Several arguments lead us to dismiss proposals that link the High-Level Aqueduct to the Mamilla Pool and the Mamilla Street Aqueduct:

1. No fragments of the High-Level Aqueduct, neither of a siphon nor of a bridge, have been discovered along the presumed line of ca. 2 km leading from the last confirmed spot of the aqueduct to the Mamilla Pool.
2. The topographical depression on the way to the Mamilla Pool makes the presumed route improbable. Various tunnels discovered in this area do not form a continuous line and could not function according to the principles of Roman hydraulic systems.
3. The Mamilla Pool area is located higher than the segment of the High-Level Aqueduct at St. Claire's Monastery, hence water could not flow from St. Claire's segments to the pool.
4. The short conduit discovered north of the Mamilla Pool differs significantly from the High-Level Aqueduct in its style of construction.
5. Excavations dated the High-Level Aqueduct to the 1st century CE; it was in use in the 2nd century CE, and went out of use ca. 400 CE. The Mamilla Pool and the Mamilla Street Aqueduct, however, both date to the Byzantine period.
6. There are no remains of any 1st century CE installations under the Byzantine Mamilla Pool or the Mamilla Street Aqueduct.

[10] Remains of an Iron Age irrigation channel, which collected run-off water, was unearthed in the same area (Amit 2009a: 107), hence such terrain-dependent functionality could continue accross many periods.

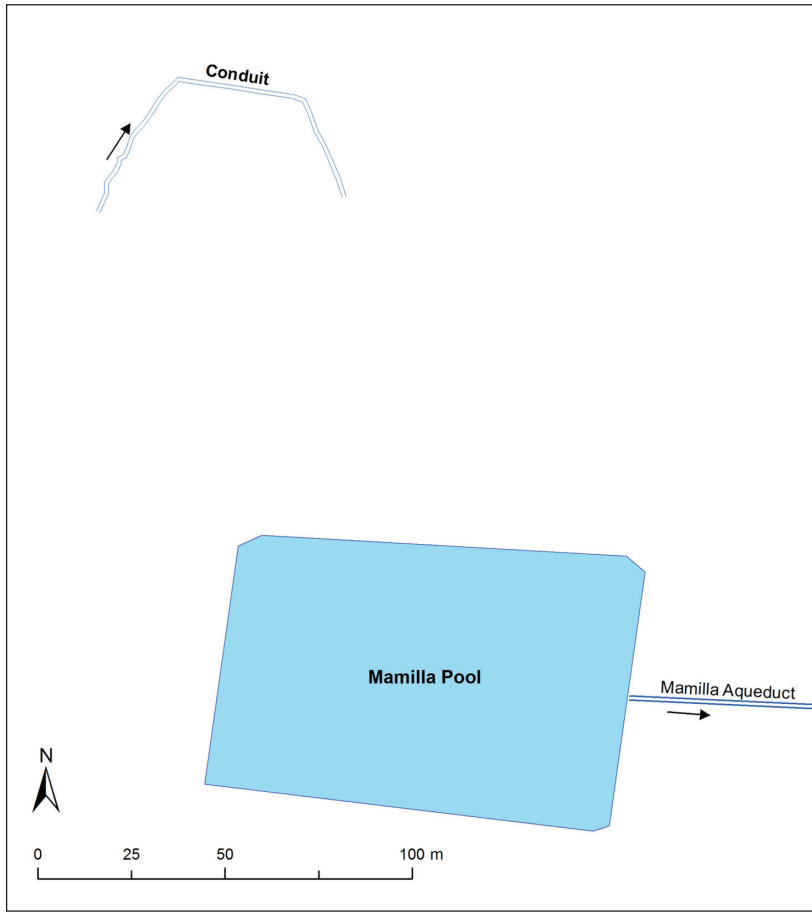


FIGURE 5 Map of the conduit excavated in the vicinity of the Mamilla Pool. Drawing after D. Amit (2009a: 99).

The Mamilla Pool was built in the Byzantine period and was filled with run-off water. After the rainy season, water from the pool was conveyed down into Hezekiah's Pool using the Mamilla Street Aqueduct.[11] This system functioned as a separate water supply mechanism,[12] and was not linked to any of the aqueducts from the Early Roman period.

It is therefore determined that the High-Level Aqueduct near the urban area of Early Roman Jerusalem has not been found and that the aqueduct could not include the Mamilla Pool. It is possible that the aqueduct reached the city by a still undiscovered route in a

[11] The lowest elevation of the bottom of the Mamilla Pool is ca. 767.5 m; the elevation of the bottom of Hezekia's Pool is 760 m. The Mamilla Pool–Hezekia's Pool water system functioned until the early 20th century. In 1864–1865, the Ordnance Survey of Jerusalem photographed Hezekiah's Pool filled with water up to its rim (Wilson 1865:30).

[12] Abbels and Arbit (1995:41–44) suggested that the Mamilla Pool and the Mamilla Street Aqueduct were a separate water system, though they dated it incorrectly to the Hasmonean period (2nd–1st centuries BCE).

lower topographical area. In resolving the question of its course, we should prioritise the archaeological record over theoretical proposals.

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