

- It could be part of a garden allotment that was formed to the north of the barracks and stables that occupied the edge of the allotment, recorded as early as 1831.

The artefacts recovered from the remnant surface suggest that this surface and land remained in use up to the middle years of the nineteenth century.

The attribution and dates might be more precisely defined with further investigation.

3.2.3 Road Construction 1855

The excavation revealed that the remnant early nineteenth century surface was removed at both the northern and southern ends of the test excavation by what appears to be a slicing cut down the hill from the south to the north. The portion of the surface [062] only remained because it was at the base of the cut as it was excavated down the hill. A straight line at the northern end was the interface between the remnant surface [062] and the underlying sand [065]. It could be interpreted as a property boundary or a division into a garden plot with the planting holes found here [069, 064, 063, 068] forming the line of a hedge. Equally the line might represent a deeper excavation required to remove those plants when the site was cut down. It suggests that the remnant surface in the middle of the trench extended further north. The interpretation could only be resolved by revealing a greater area of the allotment. The oblique line at the southern end of the excavation between the remnant surface [062] and the underlying sand [066] shows more accurately how the existing surface was being cut and levelled for the new work. It also infers that the remnant surface extended to the south before it was cut away.

The southern end of the excavation also particularly revealed how the plants [072, 077, 074] and the post [061] that were in this area were removed pulling up the sand to peaks on either side of the old holes and then those planting holes and the post-holes were filled in to level the surface. At the northern end the planting holes here [069, 064, 063, 068, 071] were also filled with remnant soil and sand to level the surface. The large excavation in the north-western corner, possibly the site of an old tree was packed with clay at the base [070] to fill in the hole.

After the excavation down the hill and the site preparation a deep deposit of silty, dark brown clay loam was laid over the entire area, sloping down to the north [057]. In two places the underlying fill in planting holes sank and extra material was brought to level the depressions. In the north-western corner the large hole [060] was filled in the base with clay [070] and was topped with loose gravel and sandy loam and the top was covered with a lens of the same gravel [076]. In the south-western corner the other large excavation [074] was filled up with a dark dense loam [075]. At the southern end the hole left by the removal of the large timber post had a deposit of sand pushed over the top to level up the sand that was sinking down into the uncompacted fill that had been pushed into the post-hole.

The most likely interpretation for this work is the construction of an extension of Bridge Street that was made from George Street down to the existing curve of the road to the wharf in 1855. £35 was paid to a contractor in that year for “cutting, carting and macadamizing” a road to the Windsor Wharf.³ The absence of artefacts in the lower deposit after the mid-century supports this attribution or at least the date for when the work was carried out.

The “cutting” is the sloping cut that can be seen in the excavation that removed the old trees and plants and possibly a building that stood in the way of the new road. The carting probably was for the dark brown silty soil that was used to form the level base for the new road and that covers the entire area of the excavation [057]. What is missing is the macadamizing - the paved surface.

³ Sydney Morning Herald 29 December 1855; 3



Plate 25: View of Thompson Square that shows the c. 1855 road extension to Bridge Street and the point where it met the 1876 road to the wharf (source: NSW State Library).

The service trench that was found cutting through the material laid down for the road [058/059] must have been introduced either during the construction of the road in 1855 or as part of a later period of works before this road surface was replaced in the later years of the nineteenth century. The surface lying above it [056] had not been cut through to lay this pipe. This new surface is likely to have been laid down in the mid to later 1880s, meaning that the service would have been introduced in the c. 1860s or 1870s up to c. 1885.

3.2.3 Further Road Works c 1885

No evidence of a macadamized surface for the new road was found in the excavation but other works that were carried out in 1885 might explain this absence. In 1885 there were reports that at least some of the roads in Thompson Square and its environs were to be substantially cut down, up to 3.5 feet on the eastern side of the square to make the landform better for drainage, vehicular and pedestrian traffic.⁴ This work would account for the loss of the tar or bitumen that may have been used to seal the road in 1855 and any later surfaces that may have been laid over it between that year and 1885.

It is possible to see that a new clay and loam surface [056] was laid directly over the exposed soil of the 1855 road. This was a thin deposit over much of the road except on the western side; here the new material is thicker. There are several possibilities for the greater depth of material. First, the older material under this deeper layer sank because of the subsidence of the fill in the old planting holes under it and the new surface was made deeper here to accommodate that depression. Secondly, there may have been a camber on the old road; a camber is where a road is made with a dome-shaped profile, the higher part in the middle and the sides much lower. This encourages water run-off to the sides. Contemporary images suggest that there was a depression either side of the road to provide for drainage and encourage run-off from the surface. The increased depth of the new surface on the side of the trench could be accounted for by it filling in the camber from the 1855 road. If this was the case, then the road works of 1885 appear to have cut down both the tar surface of this road (evidenced by archival sources) and the majority of the camber of the 1855 road.

⁴ Hawkesbury Chronicle 6 June 1885; 2

There were few artefacts in this new surface and none especially diagnostic but they certainly dated from the later years of the nineteenth century or early years of the twentieth century.

This could have been a road surface but seems more likely to be a fill deposit that would have been used to support a hard paved surface; no evidence of any paving such as bitumen was found but this deposit [056] from the later part of the nineteenth century also appears to have been truncated by later work.

Apart from the changes made to the roads in 1885 there are several references to road works in Thompson Square during the later years of the nineteenth century and early years of the twentieth century, but the impact of the last phase of works recorded in the excavation appears to have removed much of this evidence.

7.4.5 Last Road; Twentieth Century

The top third of the excavation encompassed crushed sandstone [051] that was laid as the level packing for the present road surface [050]. The work was carried out in the twentieth century but a precise date is not possible to determine from the physical evidence. The work appears to have entailed another excavation down the road to level it prior to the construction of the new surface; the road surface or packing [056] that predated this new road appears to have been cut to a consistently flat surface across the width of the road; there is no evidence of a camber on the western side except where it increases in depth at the base. The dome of the camber is not evident on the surface of the deposit. The new work entailed laying down a consistent and compacted deep deposit of the sandstone and then surfacing it with the present bitumen.

The only change to this road is evident on the western side where the gutter and kerb [052] for the Thompson Square parkland have been cut into it through the excavation of a narrow trench [053]; the trench cuts into the sandstone fill and the kerb and gutter sit above it. If the kerb and gutter were introduced as part of the restoration works of the 1970s or later, the date for the last and present road predates the 1970s.

3.2 Test Trench 2: Car Park, Thompson Square

3.2.1 Site Selection

The purpose of placing a test trench here was to test to the greater depth of excavation required for the road works, which is 1.5 metres, and to provide a profile that, with the results of the other works planned here, will enable conclusions to be drawn with respect to the depth, distribution and integrity of an archeological profile.

With regard to specific sites there were none anticipated however, in the earliest images of Thompson Square there are many small huts shown and the returns of public works from several years also indicates the presence of more buildings than can be accounted for in the several images of the place.

3.2.2 The Excavation Area

Test trench 2 ran east-west across the car park; it measured 7.5 metres x 6.0 metres Refer to **Error! Reference source not found.** for the location context of Test trench 2.



Plate 26: Detail of Figure 1 showing the location of test trench 2



Plate 27: The small car park that was partially excavated and formed Test Trench 2. The landform surrounding the car park suggests that it sits on the alignment of the former road to the bridge; View east to number 4 Bridge Street.

3.2.3 Description of the Excavation

The upper portion of Test Trench 2 was similar to that found in Test Trench 1. The entire excavation area was covered with bitumen up to 50 mm deep [001]; this is the present surface in use. It was laid over a thin deposit of blue metal [002] and below the blue metal was up to 300 mm of compacted sandstone rubble [005]. This was the same deposit found under the present road in Test Trench 1 [051]. A cement kerb and gutter ran along the southern side of the trench at the edge of the reserve [004, 005]. The presence of the blue metal [002] here across the surface of the trench, similar to that found under the kerb and gutter in Test Trench 1 [054] suggests that the car park is later than the last surfacing of Old Bridge Road and comparable in date to the kerbing and guttering found around the reserve, probably from the mid-1970s onwards.



Plate 28: Test Trench 2, removal of the present car park surface revealing the underlying blue metal; scale one metre.



Plate 29: Test Trench 2, view east showing the depth of sandstone rubble lying under the road in the section; scale one metre

Removing the sandstone rubble revealed a flat surface across the entire trench and along the southern side a wide cut up to 2.8 metres wide (Plate 30). This cut ran the full east-west length of the trench [006]. It narrowed slightly at the western end of the trench.



Plate 30: Test Trench 2, view west showing the cut [006] along the southern side of the trench; scale one metre.

The long, straight cut [006] had been made into an existing surface [008]. The cut appears to have been a paved path or road; remnants of bitumen surfacing survived along the northern side of the cut and at the western end in a shallow depression [013]. Some of this bitumen was mixed with the loam and compacted clay that had been used to fill the cut [007]. In the section at the eastern end of the trench there appears to have been a post-hole cut into the filling material [036].



Plate 31: Test Trench 2, view east showing the cut [006]; scale one metre.



Plate 32: Test Trench 2, remnant bitumen surface on the northern side of the cut for a path [006], view east; scale 500 millimetres.

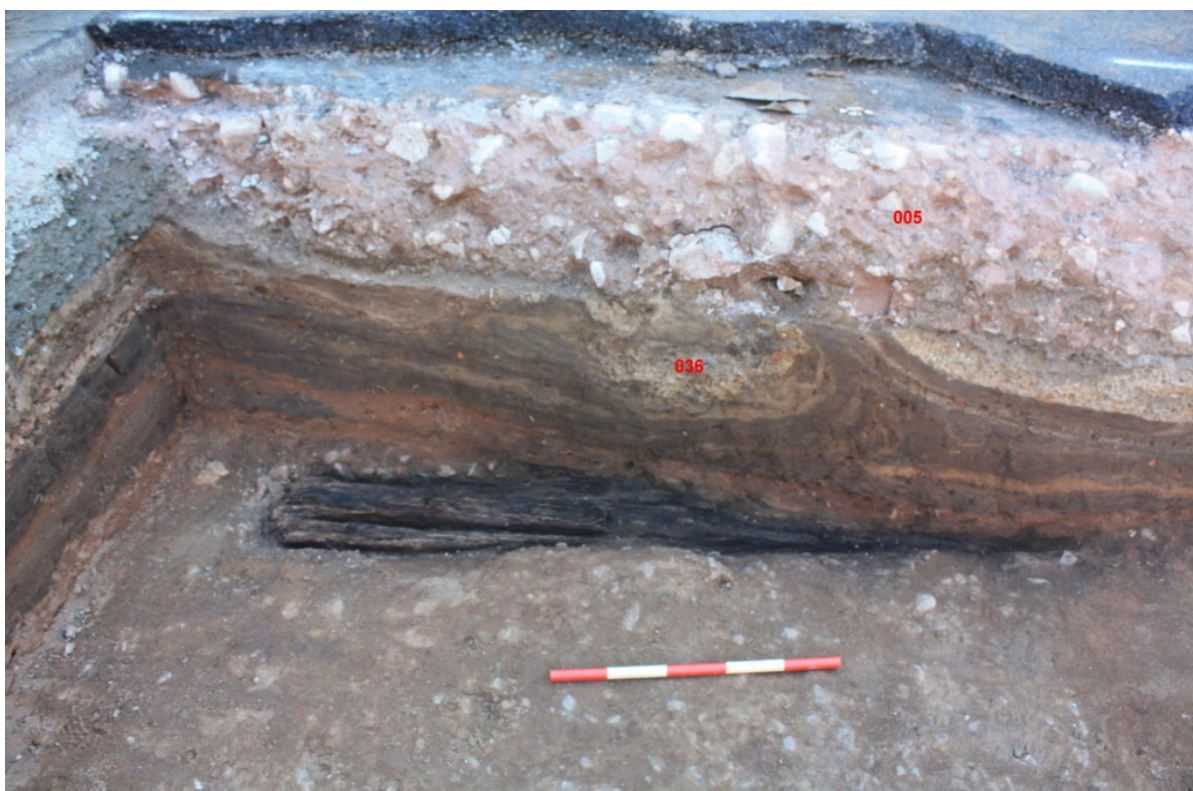


Plate 33: Test Trench 2, view west showing what appears to have been a post-hole [036] cut into the fill that surfaced the cut; scale 500 mm.

The existing surface [008] in which this cut had been made encompassed the remainder of the trench and extended beyond it to the north, east and west. The surface was made by heavily compacting clay using ironstone gravel to give strength and make it impervious. The surface was approximately 40 mm thick.



Plate 34: Test Trench 2, view east showing the road surface [008] with the cut made into the southern side [006]; scale one metre.

The hard surface [008] was founded on a deposit of fill or bedding material [010] that extended across the entire trench. The cut on the southern side of the trench [006] had been excavated into this material removing some and leaving portions of the compacted material intact. This flat compacted bedding was made with silt, red and orange sand, some gravel, small pieces of both early and later nineteenth century brick and some blue metal [010]. The inclusions appear to have been to create a textured surface that would grip the new hard surface.



Plate 35: Test Trench 2, view west showing remnants of the compacted silty soil [013] that was used to support the hard paved surface [008] here exposed in the cut [006/007] along the southern side of the trench; scale 500 mm.



Plate 36: Test Trench 2, view east showing the compacted silty soil [010] that formed the base for the hard paved surface [008]; scale one metre



Plate 37: Test Trench 2, view west showing the sandy silt [012] that lay under the bedding material [010] for the hard paved surface [008]; scale one metre

The layering of these two principal deposits with some lensing produced a clean flat surface that sloped gradually to the west best seen in the sections.



Plate 38: Test Trench 2, view north showing in section the layers of fill that produced a hard flat and slightly sloping surface; scale 500 millimetres.

The removal of this clean silty material [012] revealed a number of features across the entire trench. Under the majority of the trench, from the northern side were five poured concrete beams [014-019] that extended across the entire east-west length (Plate 38). A similar sixth beam [015] was found just on the boundary of the trench in the north-western corner [015].

The beams continued beyond the eastern end of the test trench but at the western end several of the beams ended with small semi-circular holes that supported timber posts, possibly form work for the pour [025,034, 035]. The northernmost beam [015] was not fully encompassed within the trench to observe whether it had a similar feature. The fourth beam within the trench [018] had a smaller hole for a stake or post [032] that was in conjunction with a piece of sheet metal [026]. The southernmost of these beams [019] also differed; there was a square post-hole on the southern side of the beam [031]. It was compacted with a circular stake hole within it. There was a similar small stake hole [033] close to the fourth beam [017].

Of these six beams most were between 300-400 mm apart from the adjoining beams; the exception was between the two southernmost [018, 019] and the next to the north [017]. The difference in spacing here was 700 mm; there was no obvious reason for the different spacing.



Plate 39: Test Trench 2, view west showing the six poured concrete beams [014-019]; scale 500 millimetres.

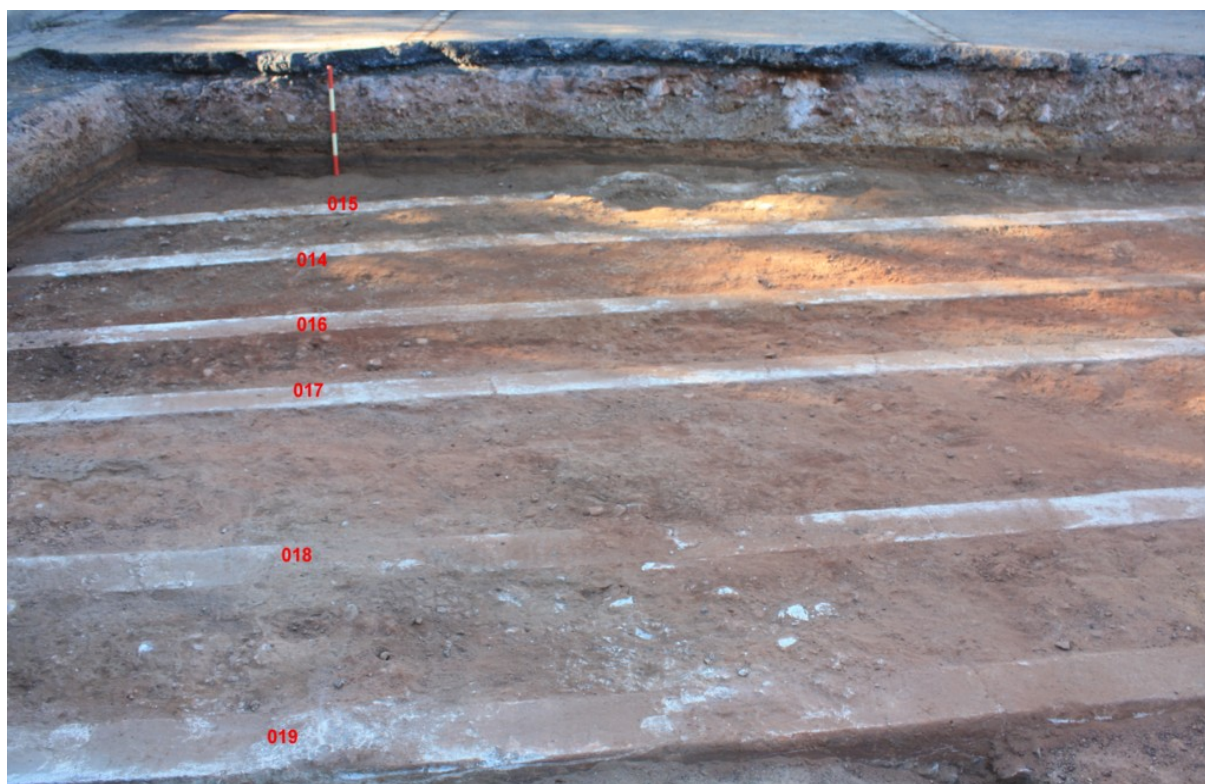


Plate 40: Test Trench 2, view north showing the same six beams; scale 500 millimetres.



Plate 41: Test Trench 2, view north showing the post and stake holes at the ends of each beam and the two smaller stake holes next to two of the beams; scale 500 millimetres

On the southern side of the trench was another concrete beam [020]; this was separated from the main group by 2.1 metres. The reason for the separation is unknown but two timber beams or plates were found spanning the gap in the space between this beam and the larger group, but not touching the concrete beams on either side; they were separated by approximately 200 mm. As well, the two timber plates [021, 022] were separated from each other by a space of approximately three metres.

The unusual feature of this arrangement is that the cut along the southern side of the trench [006] corresponded to this spacing almost exactly but this was a later feature excavated well after the beams had been constructed and the hard paved surface laid across. Apart from the coincidence of the space there appears to be no connection or relationship between the two features.

One particular feature of all the concrete beams and the timber plates is that they were placed on a slight angle from north-east to south-west.



Plate 42: Test Trench 2, view west showing all the concrete beams and one of the timber plates, the second [024] is in the shade at the end of the trench; scale one metre.



Plate 43: Test Trench 2, view east (above) showing the timber plate in the body of the trench [021] and at the western end (below); scale 500 millimetres

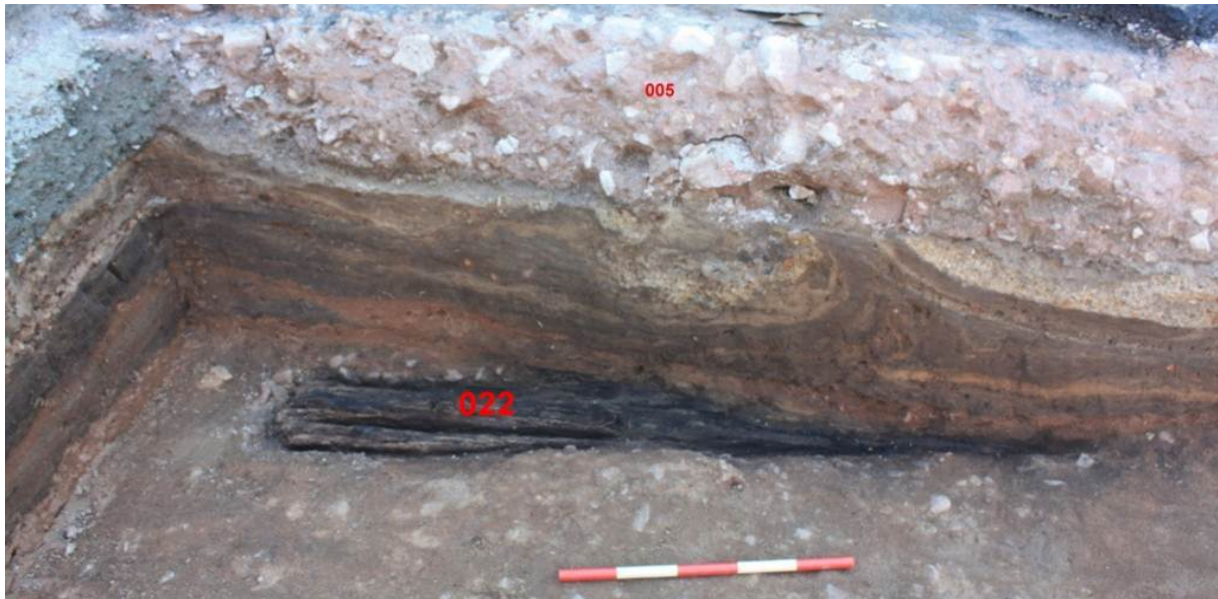


Plate 44: The timber plate in the section at the western end of the Test Trench 2.

The concrete beams and the timber plates had been placed in a deposit of fill [024] that comprised large pieces of blue metal, stone rubble, loam and clay. It was 300 mm deep had been compacted very hard to stabilise these elements. Between the six concrete beams on the northern side of the trench [014-019] the rubble had been topped with a thin slurry of cement [023]. This slurry was not found at the southern end of the trench between the widely spaced beams and the timber plates.



Plate 45: Test Trench 2, view east in the north-western corner of the trench showing the compacted fill into which the concrete beams had been placed; scale 500 millimetres.



Plate 46: Test Trench 2, view east showing the hard compacted fill [024] between the beams and timber plates on the southern side of the trench; scale 500 millimetres

In order to preserve these features the excavation was limited from this point to a test pit in the south-eastern corner between the two concrete beams [019, 020] and beyond the timber plate [021]. In this pit measuring approximately 2.0 x 2.5 metres the excavation was taken to the depth of 1.5 metres, the depth required for the proposed bridge construction.



Plate 47: Test Trench 2, view north showing the position of the test pit (indicated by arrow) used to take the excavation to the required depth while preserving the features uncovered in the body of the excavation; scale one metre.

Immediately below the hard packing [024] used to stabilise the concrete beams were several layers of fill used to raise and level the site prior to the introduction of the beams. The first of these layers, below the packing fill, was a deposit of mixed white and orange clay up to a



Plate 48: Test Trench 2, view west showing the section in the small test pit with the fill layers [027, 028] below the packing for the beams [024]; scale 500 millimetres

Below the two fill layers [027, 028] was a compacted deposit that comprised loam, some red clay, and a large quantity of rounded stones and small gravel [029]; it was up to 250 mm in depth but this was at its deepest point. It filled a sloping cut below and so the middle section was considerably deeper than the sides (south and north). It was impossible to determine from the small excavation area whether this was a fill deposit or an older road surface.



Plate 49: Test Trench 2, view west showing the compacted stone and soil layer [029]; scale one metre.



Plate 50: Test Trench 2, view west showing the stone and clay fill in section filling in the sloping cut below it; scale one metre.

Below this deposit was a distinctive fine, silty green/grey coloured loam. It was completely sterile of inclusions or artefacts. It may originally have been a level deposit but appears to have been cut in a step on the southern side of the trench leaving a thin deposit across the base of the trench that was missing in parts [030]. It also substantially sloped down to the east. There was insufficient evidence to determine what this material had been used for or when it was deposited here. Below it could be seen the top of a new deposit [037] apparently red clay. At this point the excavation had reached the 1.5 metre depth that is proposed for excavation of the new bridge and the investigation was terminated here.



Plate 51: Test Trench 2, view south showing the sloping silty soil [030] cut into a step at the base of the test pit; the slope to the east is evident here: scale one metre.

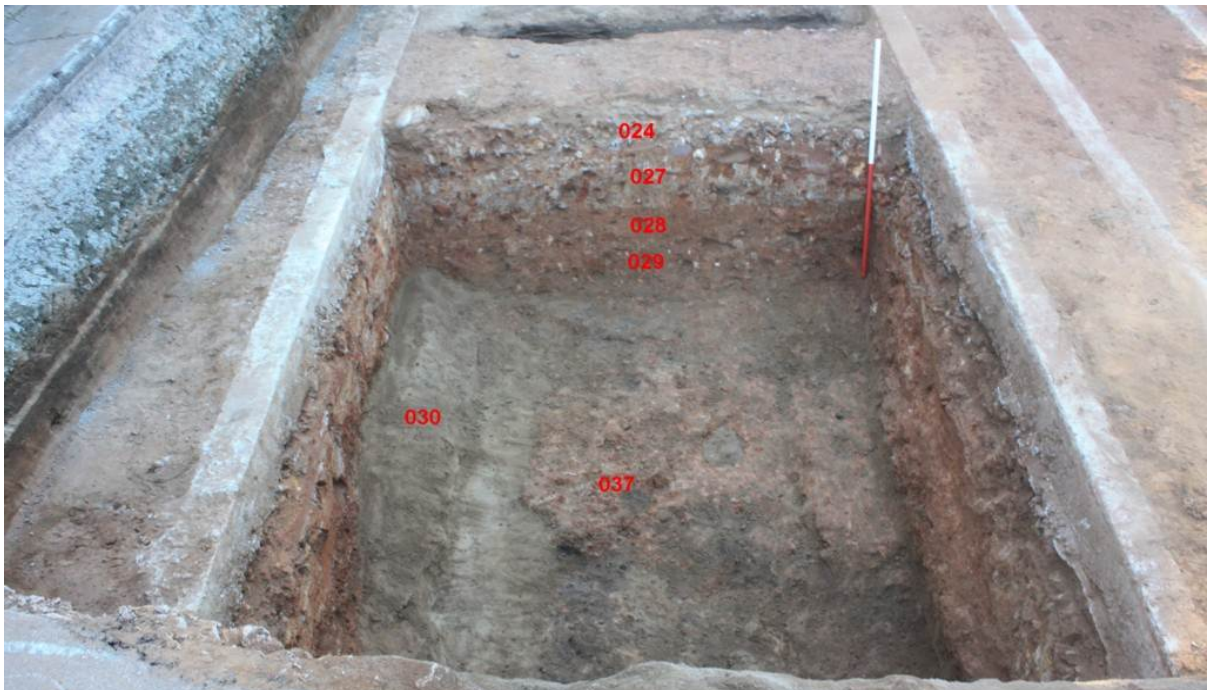


Plate 52: Test Trench 2, view east showing the sloping soil [030] at the base of the trench and the clay underlying it [037]; scale one metre

After this work was completed a small test pit was put into the side of the reserve adjoining the car park to determine if there was a distinct stratigraphic profile here and, if so, whether it could be related to the information recorded in Test Trench 2. A 1.5 metre trench was cut into the side of the reserve for this purpose.

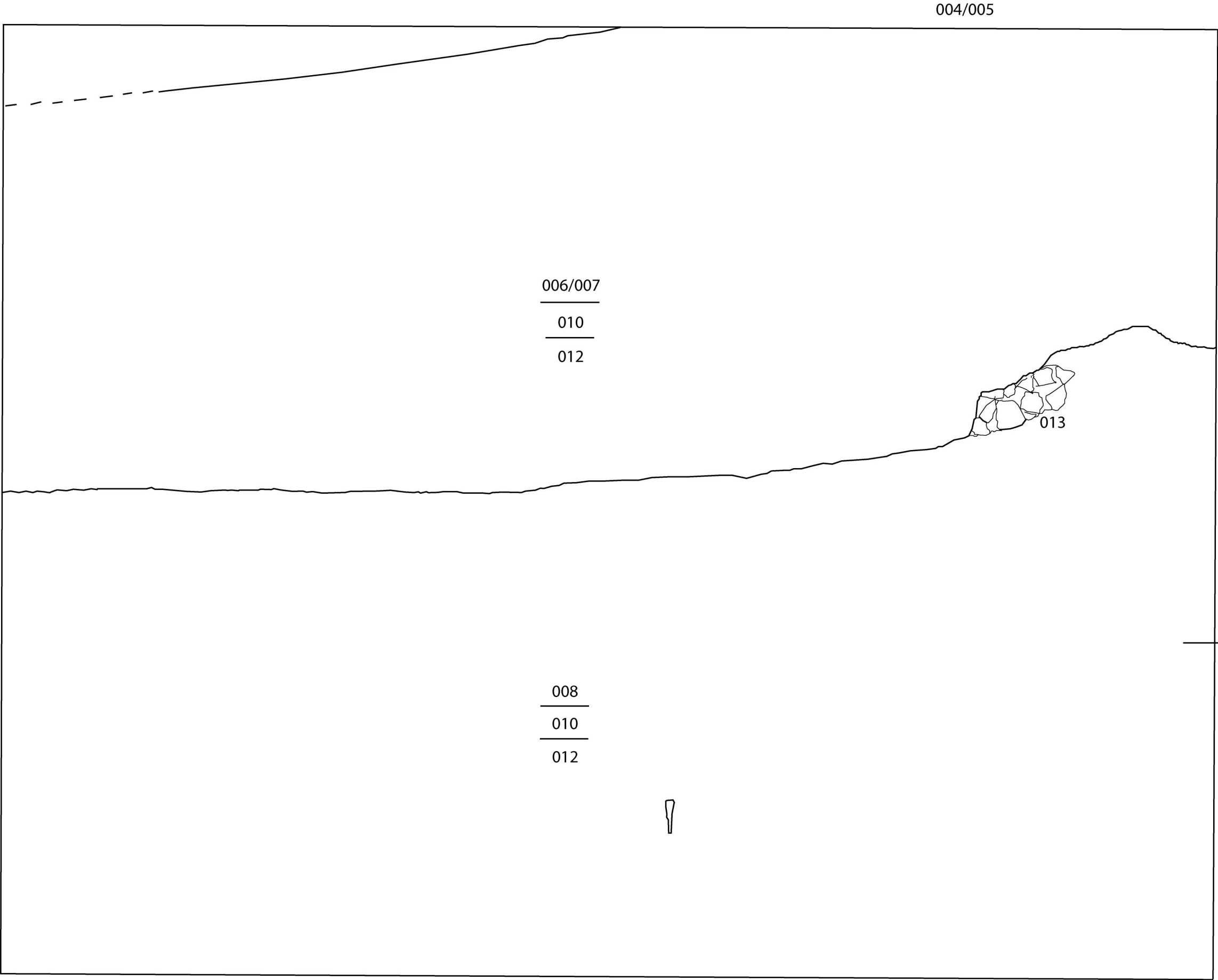


Plate 53: Test Trench 2, view north showing the main Test Trench 2 and the smaller test pit within it to its final depth; in the foreground is the base of the pit made in the reserve.

The excavation in the reserve revealed no connection to the test trench in the car park. All that was found in this smaller trench was introduced topsoil in lenses to a depth of 800 mm [038] lying above yellow clay [039] that extended at least to the 1.5 metre depth required for the bridge excavation. The deposits sloped down to the north.



Plate 54: Test Trench 2, view south showing the soil and clay in the excavation into the reserve; scale 500 millimetres.



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006/007

010

012

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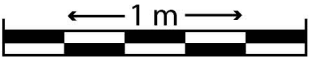
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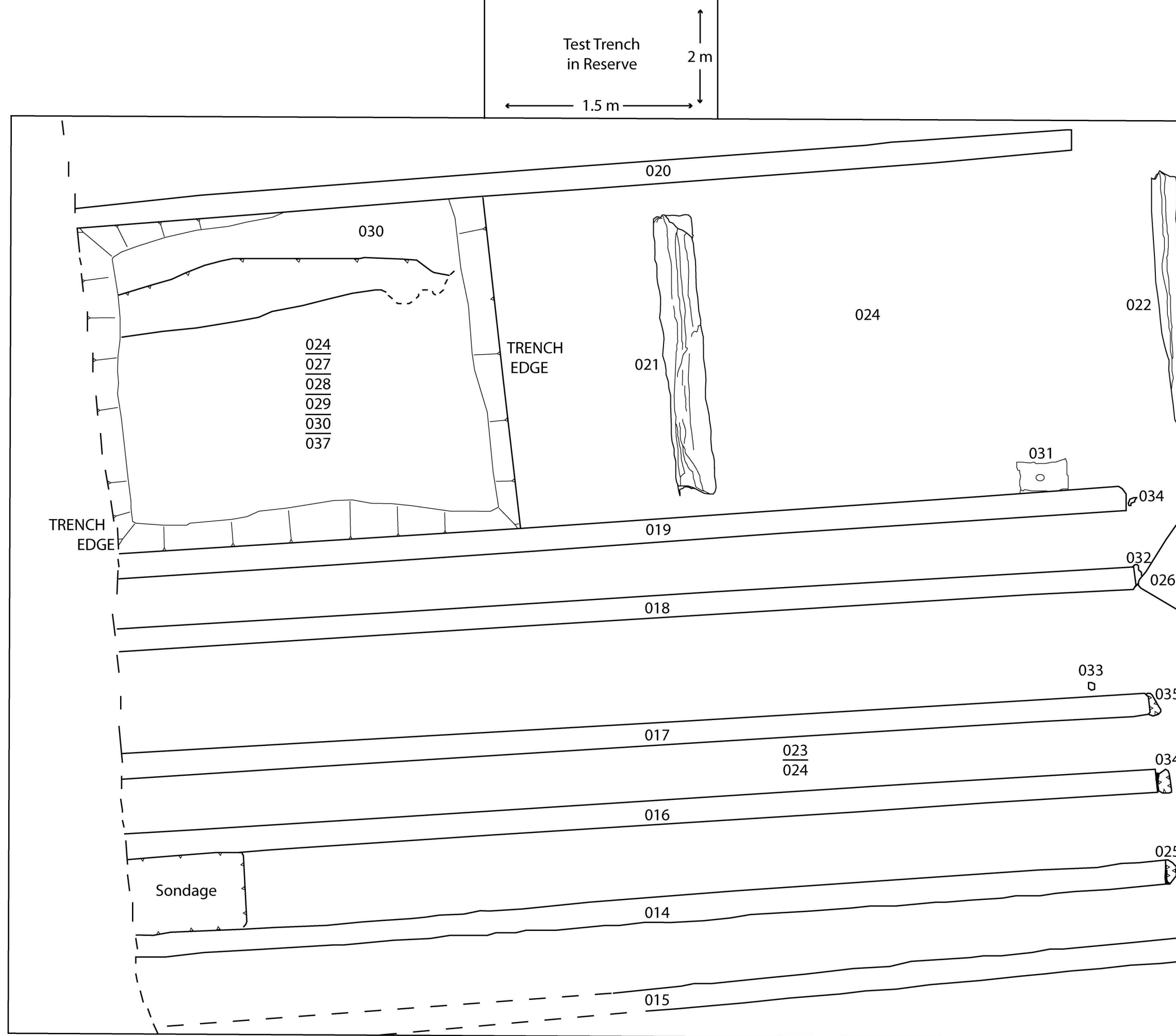
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Windsor Bridge Replacement Project 14020		
European Test Excavation	Test Trench 2	
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3.3 Interpretation of the Results

3.3.1 1970s+ road works and improvements

The bitumen surface and blue metal and kerb and gutter [001, 002, 003, 004] around the reserve appear to be all part of one program of work, from the c.mid-1970s or later. The deep deposit of crushed sandstone [005] below the surface is part of the same work and is the same as that found in Test Trench 1.

3.3.2 1896 Bridge Works and Later alterations

Immediately below this deposit is what is likely to be the road made to the bridge when it was raised in 1896 although the large cut along the southern side of the trench [006] appears to be a later and narrower path that has been cut into this surface and paved with bitumen [013]. This was subsequently dug up but there was no evidence of this narrower path being repaved afterwards. Its relationship to the bridge road suggests this later path was made in the first half of the twentieth century and probably before the 1940s.

There was considerable evidence for the extensive scope of work that went into creating the new approach to the bridge. Large quantities of fill were brought to the site to raise its level [027, 028]; this is confirmed by archival sources. The concrete beams found throughout the trench [014-020] appear to have been used to stabilise the slope and create a firm base for the new road. Evidence remained of their construction, post holes from what appears to be some kind of form work at the western ends of each beam [025, 035, 034, 026, 032, 031, 033] and small stakes. There is not enough evidence to determine why they were widely spaced on the southern side and for what purpose the timber plates [021, 022] that stretched between them served; certainly both plates and concrete beams were part of the one program of work. They were all bedded in the same compacted deposit of rubble [024].

When this structure was completed the surface was leveled by means of a smooth deposit of silty soil [012] and then a coarser layer of fill [010] was laid to create a surface to which the new clay and ironstone road [008] would bond.

3.3.3 Pre-1896 evidence

What is more difficult to interpret are the layers found at the base of the smaller test pit excavated in the south-eastern corner of the large trench. The deposit with numerous rounded pebbles and gravel [029] could be the surface of the older road to the bridge or a deposit common to Thompson Square. The survey plan of the early 1870s for the proposed bridge records that the surface of the square close to the river was composed of earth with rounded pebbles. Whether this surface is a contained feature or common to the square is impossible to determine from the area available. Similarly, the deposit below [030] is also impossible to interpret other than it appears to be introduced soil and that it has been cut and shaped, possibly for the surface above it or for a purpose no longer evident because of the excavation made into it. It is also impossible to determine if it is a unique feature or a widely spread surface.

What can be concluded is that these two deposits pre-date 1896 and they indicate that there is likely to be an intact archaeological profile to a greater depth; the depths of excavation required for the project would impact an intact archaeological profile in this location.

The deposits revealed in the reserve [038, 039] had no connection to those revealed in the main trench and were separated by the kerb and gutter made for the car park [003]. Very little was revealed in this small excavation but it does suggest that the area of the reserve has been deliberately formed and sculpted at this lower level. This was subsequently confirmed by test pits excavated for Aboriginal archaeology (*refer following section*).