



Figure 122 Northern elevation of wall and west face of foundation



Figure 123 Looking north to wall and foundation



Figure 124 Deep excavation TT6-1, trench dug to a maximum depth of 4.2m



Figure 125 Evidence of render on north elevation of wall



Figure 126 Looking towards corner of Potato Market showing Stone foundation of possible bastion



Figure 127 Southern end of TT6-1CD showing top of foundation.

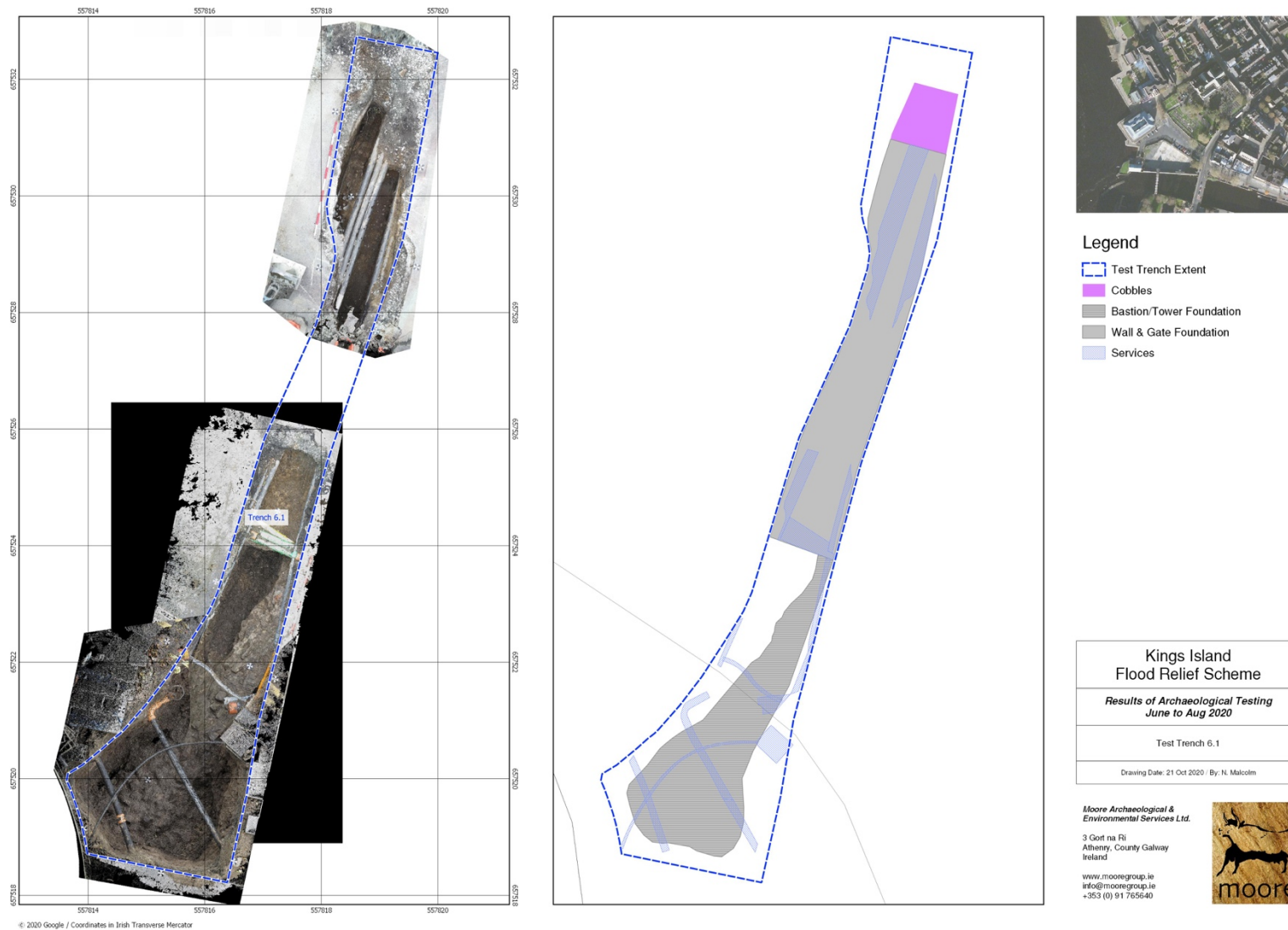


Figure 128 Plan drawing and photogrammetry of TT6-1.

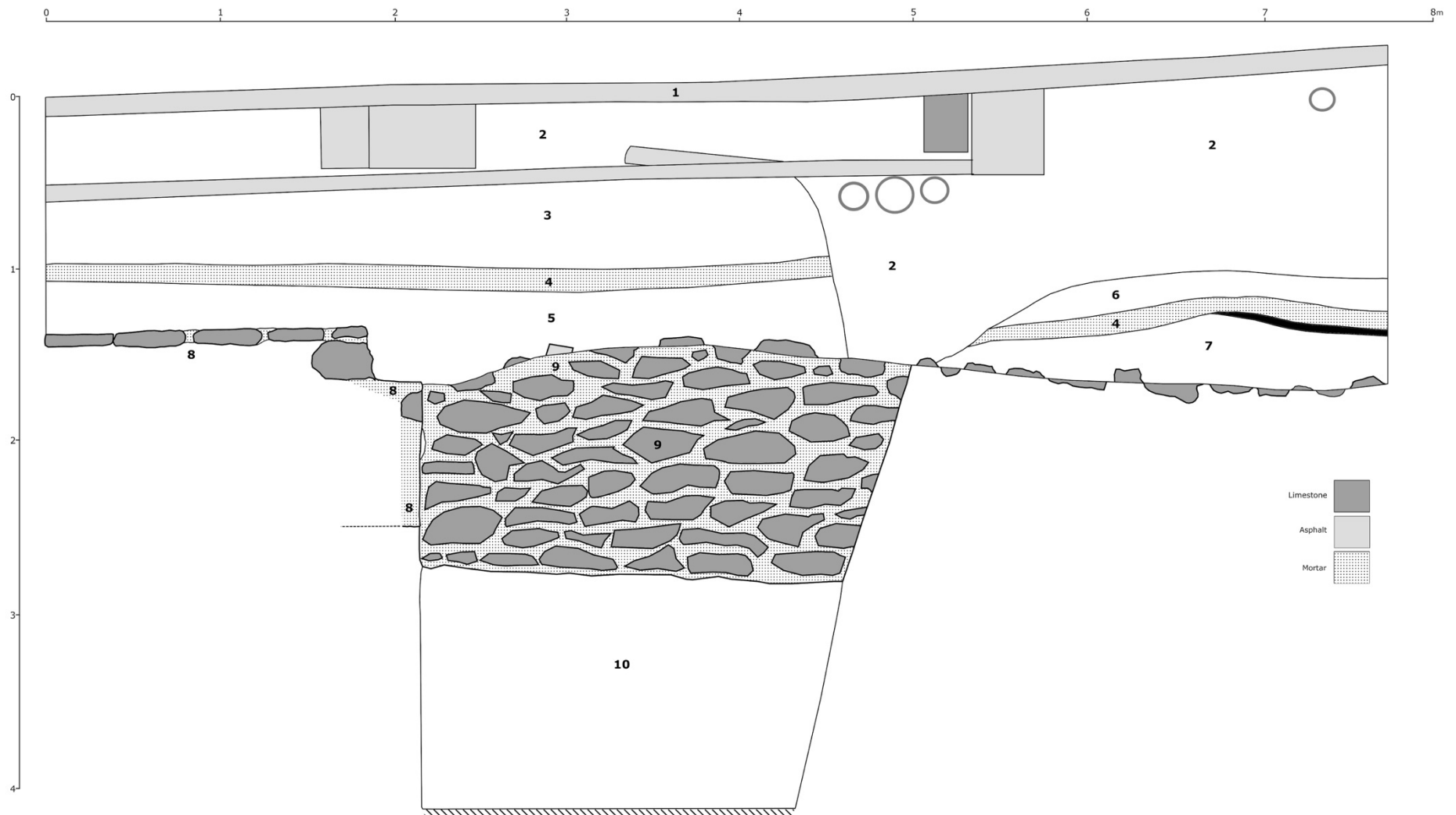


Figure 129 TT6-1CD profiled drawing of northwest-facing wall.



Figure 130 Elevation drawing of Potato Market wall at west end of TT6-1.

## TT6-2

Test trench TT6-2 extended 8m NNE/SSW from the southern kerbside of Merchant's Quay to the centre of the roadway. The trench was located to the NE of the entrance to the Potato Market.

### Background

TT6-2 outside the Potato Market, would have formerly been located to the eastern end of the long dock built in 1769. Prior to this it was within or near the quays of the medieval harbour.

### Results

Excavation exposed a number of built features below the modern surface levels of thick asphalt over gravel and modern services. They included two levels of cobbles and a right-angled stone foundation. The upper level of cobbles were contemporary with the development of the Potato Market, built over the New Quay, in the 1840s (C6-2-06). The cobbles were patchy, best preserved in two stretches, one 1.2m from the south end of the trench, 800mm wide, cut to the north by a service trench infilled with lean mix. The second stretch, was 2m wide, found to the north of the trench. Below this layer was a deposit of builder's infill 450-600mm thick, with rubble, brick and slate.

In the SE corner of the trench, the builder's fill had a particular concentration of brick covered with a lens of mortar and may relate to the demolition of an underlying structure reduced to a foundation level (C6-2-12). This structure survived as an 'L' shaped wall that ran at an angle from the SW corner of the trench along the western section face for 1.7m before returning NE/SW across the width of the cutting. The top of the wall was obscured by three modern 4" ducts and an earlier 6" cast iron main that ran across it. The wall was 500mm wide but was stepped out and down along its northern face widening to 800mm at the base. From the top, the steps measured 200mm down, out 120mm, down 160mm, out 160mm and down for a further 250mm. The second step was edged with a line of brick, much of which, on excavation, fell away from the wall. The southern face of the wall was relatively uneven, made up of heavily mortared, medium sized, roughly shaped stone. This face was exposed for a maximum depth of 400mm. These foundations may relate to a free-standing rectangular structure featured on Christopher Colles's map, that stood at the north eastern end of the New Quay. This structure is annotated on the map as a 'Watch House'. The wall both enclosed and appeared to cut into a lower layer of cobbles exposed at a depth of 900mm (C6-2-11). These cobbles, not found to the north of the wall, measured 1.3m long by 2m wide from the southern baulk. The individual stones were better set, narrower and more angular than the upper cobble layer. Both the lower layer of cobbles (C6-2-11) and the wall (C6-2-12) were retained *in situ*. The deep excavation was concentrated to the north of the trench.

North of the wall, below the upper cobbled surface and a composite rubble infill, cut by a 4" cast main, at a depth of 950mm was a mottled orange, stony layer 120mm thick. This layer was most evident along the eastern side of the trench continuing southwards towards the base of the wall TT6-2-12. Underlying this was a thin mortar rich layer that covered a compact, grey silty sand with frequent small stones that ranged in thickness from 600-900mm. This silty sand layer contained 18<sup>th</sup> century material including clay pipe stem, wine bottle base and stem fragments, red roof tile and black glazed pottery and ran under the right-angled foundation. Below this at the northern terminal was a flecked mortar rich deposit 200mm thick, 1.2m in length extending across the width of the trench (1.8m below the surface). This overlay a substantial black-grey, sandy clay with frequent small stones and patches of peaty organic matter containing oyster shell, butchered animal bone, leather fragments, one pottery fragment (possibly Saintonge) and a corroded rectangular piece of lead. The sandy fill had a thickness of 1.4m. The sondage at the northern terminal was dug to depth of 3.5m bottoming out to a grey stony, natural alluvial clay, that was quickly inundated with water.

### Conclusion

Investigations in TT6-2 exposed two layers of cobbles, the upper surface related to the development of the Potato Market, the lower surface to the 1760s redesign of the harbour and

long dock. An 'L' shaped stone foundation at the southern end may relate to a 'Watch House' provided by the harbour commissioners for the use of Custom Officials monitoring the port. In the deep excavations to the north of the trench was a mix of layers (C6-2-13-14) overlying alluvial clay (C6-2-15). These layers had patches of peaty organic matter with inclusions of oyster shell, butchered animal bone, leather fragments, one pottery fragment and a corroded rectangular piece of lead.

Table 22: TT6-2 Summary of results

<b>Trench number</b>	TT6-2
<b>Dates excavated</b>	1/09/2020
<b>Location</b>	Car park bay outside entrance to Potato Market extending across southern carriageway of Merchants Quay
<b>Co-ordinates (NW corner)</b>	N 557802.4857, E 657540.2257
<b>Dimensions, orientation</b>	7m L NNE/SSW by 2m W
<b>Ground level (ASL)</b>	4.0224m
<b>Maximum depth</b>	Avg. D 1.6m, Max. D 3.5m at northern end (to water level)
<b>Services exposed</b>	Two cast iron mains and an orange flexi duct and two green 4" pipes.
<b>Archaeological significance</b>	Exposed two layers of cobbles, lowest level was 900mm below surface and represented ground level for re-development of Potato Market.  At southern end was the angle for two walls.
<b>Recorded contexts</b>	C6-2-01: Two layers of asphalt 80mm thick C6-2-02: Modern gravel road base 150mm thick C6-2-03: Compact stony infill with frequent red brick fragments, broken slate, plaster and lime mortar. C6-2-04 & 5: Service trenches, the southernmost service trench, 2m from the end contained three 4" ducts (an upper orange flexi pipe and two lower green pipes covered with lean mix. To the immediate north of the pipes was an earlier service trench for a 6" cast iron pipe that sat on a stone foundation. Further north approximately 2.2m from the northern end was a cut for a 4" cast iron pipe with an invert level of 850mm C6-2-06: Upper cobbled layer found 300mm below surface, this layer was found in the north and middle of the trench and was cut by the three service trenches running NW/SE. The cobbles were well sorted and set averaging 120mm long by 80mm wide. These cobbles, based on their level, were probably contemporary with the development of the Potato market in the 1840s. C6-2-07: Orange brown 19th century builder's fill with brick and stone 600mm thick. To the SE corner this builders fill overlay the lower cobbled surface TT6-2-11



	<p>and appeared as a thin layer of mortar over a concentrated dump of brick and slate.</p> <p>C6-2-08: Orange stony layer with mottled surface 120mm running to base of wall TT6-2-12</p> <p>C6-2-09: Mortar rich layer 100mm thick runs to base of wall C6-2-12</p> <p>C6-2-10: Grey Stoney, silty sand layer 600mm deep</p> <p>C6-2-11: Lower cobbled surface found to the south of the trench at a depth of 900mm. This layer was retained in situ. The cobbles were smaller and more angular than the upper layer, TT6-2-6. The cobbles were bounded to the west and north by an 'L' shaped limestone wall.</p> <p>C6-2-12: Right angled wall visible in east facing section and returning across the trench at a NE/SW orientation. This structure, running across the trench, was partially obscured by the modern ducts and 6" cast iron pipe. The wall measured 500mm, at the top, was built of limestone rubble and bonded by a grey white mortar. On its south facing section it was exposed to a depth of 430mm to the cobbled surface TT6-2-11, which it appears to post date. Along its northern face, the wall has two steps running under the cast iron main and in total measures 800mm thick, with evidence of red brick facing. Note the only structure that appears in this area is a rectangular building on White's map of 1860.</p> <p>C6-2-13: Black grey sandy clay layer with oyster shell, animal bone, leather fragments found north of the wall, 1.4m deep</p> <p>C6-2-14: Mortar rich layer over TT6-2-13, found to the north of the trench, 200mm thick</p> <p>C6-2-15: Grey stony, natural alluvial clay found at a depth of 3.2m, trench base 3.5m</p> <p>Note: Features covered in geotextile and backfilled</p>
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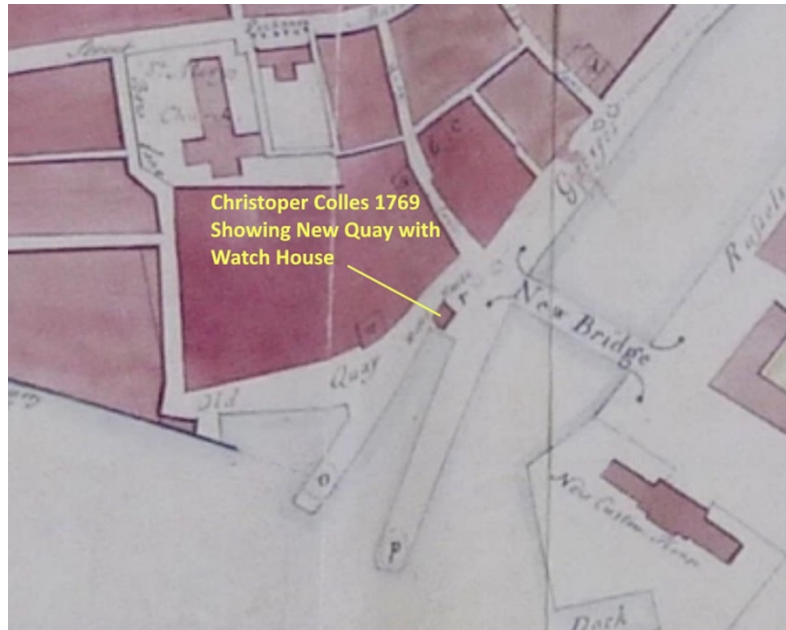


Figure 131 Extract from Christopher Colles' map (1769) showing Watch House at end of Long Dock.



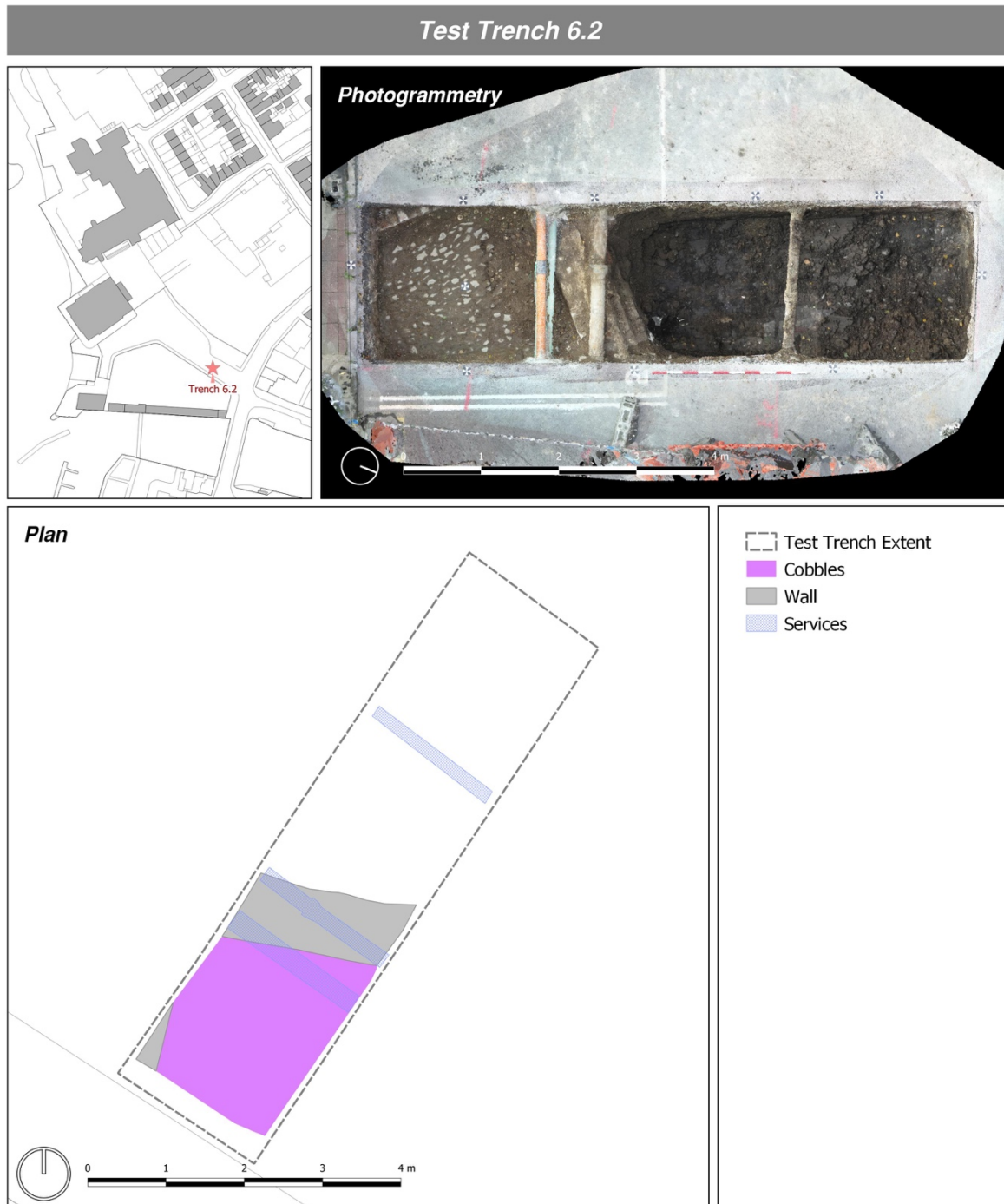
Figure 132 South-facing view of excavations in TT6-2.



Figure 133 Two levels of cobbles and pipes over wall in TT6-2, facing northeast.



Figure 134 *Deep excavation at northern end of TT6-2, west facing section.*



### TT6-3

Test trench TT6-3 was located in the middle of Merchant's Quay opposite the exit from the Potato Market. The trench extended 6.5m NE/SW by 1.5m and was excavated on the first of September in wet windy conditions.

#### *Background*

TT6-3 aligned with a row of 14 buildings that fronted onto Merchants Quay, that are featured the OS first edition maps. Most of these buildings, except for the three easternmost ones, were demolished in the 1870s to allow for an extension of St. Mary's Cathedral graveyard to its existing southern boundary. These buildings were used variously as houses, offices, a chandler and the site of the old custom house. Buildings along the quay are featured from the earliest maps and would have been knocked down and re-built over time. New building stock would have been required following the destruction wrought on the town by the effects of the artillery bombardments of the 1691 siege and the 1693 gunpowder explosion of the South Quay Tower. The latter explosion, as referenced by O'Flaherty (2010), broke most of the windows of the city and took roofs of many of the houses. O'Flaherty adds that in the 17th century there 'was the tendency to replace stone with brick in the rebuilding of houses in the Principal streets'. Brocas's illustration dated 1820 entitled 'View of Limerick George's Quay, Charlotte's Quay and New Bridge' shows a Georgian style terrace of four storey buildings running towards the courthouse. J. Jones' 1835 picture showing a 'View of Limerick taken from the North Strand, looking north-east' shows a view across Sarsfield Bridge (previously Wellesley Bridge) towards the rear of the court house beside which are two gable fronted Dutch Billy style houses adjoining a terrace of three to four storey brick buildings. The Dutch Billy style, named after the William of Orange, were distinctive in that the roof ridge ran at right angles, to the street, with the gables topped with flat curved or triangular pediments. Dutch Billys were recorded along Nicholas Street, Mary Street and Meat Market Lane (opposite Creagh Lane). The condition of the building stock on Merchant's Quay can be generally ascertained by their value in the mid-19th century based on Griffiths' Valuation. This information is documented on Map 24 of the IHTA, of the 14 buildings along the Quay six had a valuation of between £10.0.0 -£14.19.0. These buildings include the four nearest Bridge Street, three of which survived into the mid-20th century and the old brick built Custom House, featured on Sauthier's map of 1786. The remaining buildings all had valuations of between £5.0.0 -£9.19.0 contrasting with a typical Georgian style building in the Newtown that averaged in excess of £40.

#### *Results*

Excavations in TT6-3 exposed two upper foundations (C6-3-08 and C6-3-09) running WNW/ESE across the trench over a silted up, stone lined, box drain that ran the length of the trench terminating at a still functioning manhole to the south. A lower foundation (C6-3-14) ran under the southernmost wall and survived to a height of 1.2m onto bedrock. The upper foundations align.

Specifically testing in this trench, through the surface layer of asphalt and concrete, exposed a layer of compact builders fill with frequent red brick to a depth of between 500 and 600mm overlying two parallel walls set 1.5m apart. The northernmost wall was right angled in plan crossing the width of the trench aligned ENE, WSW and returning along the west facing section to the north-eastern corner, for an exposed length of 1.1m. This limestone rubble-built foundation measured 600mm wide (2 foot) at the top and was bonded with a white grey mortar. The wall survived to a height of 600mm over the box drain.

South of this was C6-3-09, a matching foundation of similar build and dimensions, 600mm wide at the top, running the width of the trench and surviving to a height of 450mm on top of the lined drain (C6-3-15). Between the two walls were a succession of layers, visible on the eastern section face including contexts C6-3-10 to C6-3-13 made up of bands of silt, charcoal and clay. To the south of the trench the upper deposits over the drain included a mid-brown

silty sand, 500mm thick, and a dark brown silty sand with red brick, mortar fleck and a moderate amount of slate.

The stone lined box drain (C6-3-15) ran the length of the trench extending from the SW corner, under walls C6-3-08 and C6-3-09, and branched at the northern end to drains at the NE and NE corner respectively. The drain exposed at a depth of 1.1m was covered with roughly shaped, slate, cap stones 800mm wide by 100mm thick covering a 600mm H x 600mm W (2 foot) channel. This silted up channel very gradually to the south, fed into a manhole exposed to the south.

The earliest wall found under both the upper wall C6-3-09 and the drain C6-3-15 was built of random courses of limestone and had an overall width of 800mm surviving to height of 1.2m to bedrock. This wall was best preserved along its south facing elevation, to the north it was rubble, with broken stonework. This wall, respecting the property line of the overlying later structures may have been an earlier medieval – post medieval building or a retaining wall. Buildings along the quays have been recorded on earlier maps from the 16th century onwards (see Hardiman Hunt Map of Limerick c. 1590, John Speed's map of 1610 and Phillips' view of West Water gate and Pier towers on Merchants Quay, 1685).

To the south of the trench, lying under the drain were two layers: C6-3-07 was a dark grey silty sand with frequent small stones, oyster shell and animal bone 700-800mm thick. This overlay a base layer (C6-3-16) onto bedrock. This black-brown, stony, sand layer, 530mm thick, had inclusions of animal bone and occasional oyster shell. Finds from this material included the corner of a floor tile with polychrome slip on the face and dark green-brown glazed sides and a fragment of North Devon sgraffito dish.

#### *Conclusion*

Testing in TT6-3 exposed the limestone-built foundations of late 18<sup>th</sup> to 19<sup>th</sup> century dwellings built over a stone lined box drain. The southernmost wall of these buildings overlay a deeper earlier structure cut by the drain (C6-3-14). This wall was 850mm thick and stood to height of 1.2m (not bottomed out). Artefacts retrieved from deposits abutting the foundations were of late medieval date.

*Table 23: TT6-3 Summary of results*

<b>Trench number</b>	TT6-3
<b>Dates excavated</b>	1/09/2020
<b>Location</b>	Car park bay outside entrance to Potato Market extending across southern carriageway of Merchants Quay
<b>Co-ordinates (NW corner)</b>	N 557784.2273, E 657563.4511
<b>Dimensions, orientation</b>	7m L NNE/SSW by 2m W
<b>Ground level (ASL)</b>	4.0964m
<b>Maximum depth</b>	Avg. D 1.6m, Max. D 3.5m at northern end (to water level)
<b>Services exposed</b>	Two cast iron mains and an orange flexi duct and two green 4" pipes.
<b>Archaeological significance</b>	Excavation exposed foundations relating to a line of buildings along Merchants Quay on the 1 <sup>st</sup> edition map built over a box drain. A lower earlier wall to the south had late medieval pottery abutting its base.

<b>Recorded contexts</b>	<p>C6-3-01: Asphalt surface 120-170mm thick</p> <p>C6-3-02: Concrete over gravel base 200mm</p> <p>C6-3-03: Red brick and compacted mortar fill 200-400mm thick, ran from 2m north of southern extent throughout rest of trench.</p> <p>C6-3-04: Grey sandy fill over 6” ceramic foul sewer found at southern end of trench at a depth of 1.5m.</p> <p>C6-3-05: Mid brown silty sand, mortar rich with frequent red brick 520mm deep and found south of structural remains</p> <p>C6-3-06: Dark brown silty sand with moderate amount of red brick and slate fragments, 800mm thick and found south of structural remains 1.7 x 1.5m w.</p> <p>C6-3-07: Dark grey silty sand with frequent small stones, oyster shell and animal bone. This layer was found to the south of the lower wall C6-3-14 and between the walls TT-3-8 and C6-3-8 beneath the stone drain 700-800mm thick</p> <p>C6-3-08: Foundation with right angle, over stone lined drain. The wall crossed the width of the trench aligned ENE, WSW and returned along the west facing section for an exposed length of 1.1m to the north-eastern corner. This limestone rubble-built foundation measured 600mm (2-foot-wide) at the top and was bonded with a white grey mortar. The wall was 600mm high over the stone lined drain and an additional 600mm deep along the drains eastern side wall (C6-3-15). The drain ran the length of the trench TT6-3 and branched off to both the north and north east at the northern terminal. From the top of the wall to the bottom of the drain was 1.25m. The wall sat on the dark brown silty sand layer (C6-3-07) in contrast to C6-3-09 that had a lower phase continuing to the base of the trench.</p> <p>C6-3-09: Southernmost wall, upper phase, over stone lined drain, 1.5m from C6-3-08. This wall, located 1.92m from the southern end, was parallel to C6-3-08 and had the same general build quality and dimensions. It was 600mm wide at the top, ran the width of the trench 1.5m and stood approximately 450mm high on top of the stone lined drain (C6-3-15).</p> <p>C6-3-10: Internal deposit between the two walls (C6-3-08 &amp; C6-3-09), dark brown sandy silt visible in west facing section, 300mm deep by 1.5m long.</p> <p>C6-3-11: Charcoal lens 80mm deep under C6-3-10, between both walls (C6-3-08 &amp; C6-3-09).</p> <p>C6-3-12: Dark brown clay 120mm thick, between both walls (C6-3-08 &amp; C6-3-09).</p>
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	<p>C6-3-13: Light to mid-brown clay with charcoal lens running through it, between both walls (TT6-3-8 &amp; TT6-3-9), 200mm thick.</p> <p>C6-3-14: Southern lower wall under stone lined drain. This wall was exposed for a height of 1.2m. The southern elevation was roughly faced built of random courses of limestone. The northern face was rubbly with smaller stones. The overall width of this wall was 850mm, 200mm wider than the upper phase. Possibly a retaining wall or medieval-post medieval foundation.</p> <p>C6-3-15: Stone lined box drain that runs the length of the trench extending from the SW corner, under walls C6-3-08 and C6-3-09 and branching at northern terminal to the NE corner and smaller drain to NW corner. The drain, of box construction, was covered with roughly shaped, slate, cap stones 800mm wide covering a 600mm H x 600mm W (2 foot) channel. This drain, very gradually falling to the south fed into a manhole exposed to the south. The stone drain was not in service, being completely silted up.</p> <p>C6-3-16: Black-brown stony sand layer 530mm thick, this base layer was exposed to the south of the lower wall, TT6-3-14 and continued to bedrock. This material had inclusions of animal bone, occasional oyster shell. Finds included a corner of a floor tile with polychrome slip on the face and dark green brown glazed sides and a fragment of North Devon sgraffito dish.</p> <p>C6-3-17: Bedrock, obscured by flooding</p> <p>Note: Features covered in geotextile and backfilled</p>
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Figure 135 TT6-3, north-facing view.



Figure 136 Southwest-facing view of TT6-3 to exposed upper foundations over a box drain.



Figure 137 TT6-3, facing southwest, showing southernmost wall over box drain and lower foundation



Figure 138 Depth of excavation at southern end of TT6-3 showing lower foundation



Figure 139 Northeast-facing view along TT6-3 showing depth of excavation



Figure 140 Postcard from 1950s showing surviving houses along Merchants Quay



Figure 141 Matthew Bridge and houses at Merchant's Quay, c.1900. The Lawrence Collection.