



Figure 43 Looking east to prison wall.



Figure 44 Overlay of 25" map and aerial image showing location of TT2

## Area 3

### TT3-1

Area 3 is situated to the south of the southern corner of the Court House. Flood defences are proposed along the existing quays in this area. The works involve a proposed piled foundation for a cantilevered boardwalk protected by glass flood defence panels, repairing, pointing and grouting the quay wall and raising the ground level. Given the space constraints in this area, between the corner of the railings of the courthouse and the quay wall, only one trench was excavated in this area. Area 3 measured 8m ENE/WSW by 1.8m wide and was dug to a depth of 3.6m

#### *Background*

Area 3 has high archaeological potential, being the location of the medieval docks and specifically, based on earlier cartography, near the north tower which stood at the end of the northern arm of the Quay wall. This tower features on a series of early maps but is best represented in Phillips' map of 1685 and his accompanying illustration. The pen and ink drawing provides a panorama of Limerick looking north east stretching from Thomond Bridge to Baals Bridge. The harbour entrance is dominated by two towers, the southern one, a tall slender structure, the northern one a circular, squat tower with crenelated parapet. This tower survived until the 1760's when the harbour was remodelled into the New Quay as shown on both the 1764 Plan and Colles's map of 1769. Based on overlays, the site of TT3-1 would generally correspond to the western end of the northern arm of the new long dock. Given the extensive work that took place during the late 18<sup>th</sup> Century when the new entrance to the quay was constructed, and the building of Court House, it was though unlikely that there were any remnants of the northern pier or tower extant.

#### *Results*

Two test trenches were originally proposed in Area 3. However due to the proximity of both trenches, the depth of excavation and the constraints of manoeuvring the excavator beside the court house railings, a bench seat and the quay it was decided for safety considerations to dig the bigger of the two, TT3-1. The purpose of the test trench TT3-1 was to ascertain whether there are any remains of the north pier and associated tower still extant. Excavation was undertaken over two days and exposed a low wall 400mm below the surface orientated NW/SE faced with concrete to the east (C3-1-08). This wall, only two courses deep (480mm in depth), features on the 25" OS map and marked the line of a terrace stepping down to a grassy apron on the projecting quay. This was later built up to its existing level. Due to this obstacle crossing the trench and mindful of the tides and the stability of the existing Quay wall, the deep excavation was undertaken either side of the cross wall, in two separate trenches. The material exposed was of successive layers of compact clay infill with 18<sup>th</sup> early 19<sup>th</sup> century material. Various layers below concrete were of an orange fine sandy clay (C3-1-04) 750mm thick over a compact grey sandy clay (C3-1-05) with few inclusions 580mm. Below this was a grey black patchy layer (C3-1-06) overlying redeposited grey clay with brick and glass and one sherd of shell edged pearlware (C3-1-07). At a depth of 2.6-2.8m below the surface was dark organic rich, sandy layer containing fragments of wine bottle, white table wear, red brick and oyster shell (C3-1-10). The basal layer was a dark alluvial sand with red brick inclusions (C3-1-11).

#### *Conclusion*

There was no evidence of the earlier pier wall or the associated northern tower in this area. Excavations exposed a low wall, below the surface, overlying successive layers of redeposited clay with late 18<sup>th</sup> and early 19<sup>th</sup> century material to a depth of 3.8m. Undisturbed natural ground was not reached in this trench.

Table 8 TT3-1 Summary of results

<b>Trench number</b>	TT3-1
<b>Dates excavated</b>	25-30/5/ 2020
<b>Location</b>	Paved area at SW corner of Court House along existing Quay wall
<b>Co-ordinates (NW corner)</b>	E 557712.0878, N 657550.0274
<b>Dimensions, orientation</b>	8m L ENE/WSW, 1.8m W
<b>Ground level (ASL)</b>	4.0095m
<b>Maximum depth</b>	3.6m
<b>Services exposed</b>	None
<b>Archaeological significance</b>	None, exposed low terrace wall featured on 25" OS map sitting on 19th century infilled ground to base of trench.
<b>Recorded contexts</b>	<p>C3-1-01: Brick paving 80m</p> <p>C3-1-02: Sandy bed 80mm</p> <p>C3-1-03: Lean mix concrete 560mm</p> <p>C3-1-04: Orange brown fine sandy clay infill with 20th century material glass and pottery fragments 750mm</p> <p>C3-1-05: Grey sandy clay infill with few inclusions 580mm</p> <p>C3-1-06: Black charcoal rich sandy organic layer with fragments of 19th century wine bottle, white table wear, red brick and oyster shell 280-400mm thick (2.6-2.8m below the surface)</p> <p>C3-1-07: Grey clay with some brick</p> <p>C3-1-08: Rubble-built wall foundation orientated NW/SE faced with concrete to the east. The wall was located 2.4m from western end of trench, it measured 600mm wide and 400mm deep, this wall features on the 25" OS map and based on mapping is mid-19th century and sits on 19th century infilled ground.</p> <p>C3-1-09: Brown silty clay infill 300mm</p> <p>C3-1-10: Dark grey alluvial sand with red brick inclusions, base layer</p> <p>C3-1-11: Patchy black clay found to east of wall (TT3-1-8) 180mm</p> <p>C3-1-11: Grey clay with brick and glass 480mm</p> <p>Note: Trench TT3-1 ran roughly parallel to the existing quay wall, the trench, for safety reasons, was dug in two sections either side of the cross wall TT3-1-8</p>



Figure 45 Extract from Limerick, 1685 by Thomas Phillips (National Library of Ireland) (Irish Historic Towns Atlas No. 21 Limerick, Map 12) showing entrance to the harbour.



Figure 46 TT3-1 Location of trench between Courthouse railings and Quay wall looking east



Figure 47 Looking west to flooded trench, note low wall to top left, features on OS 25" map.



Figure 48 TT3-1 showing redeposited clay deposits over C3-1-06 charcoal rich layer near base.

#### Area 4

Area 4 is within the Potato Market, designed by William Henshaw Owen in 1843. The Market in its present form is an irregular-shaped, five-sided, marketplace enclosed by squared limestone ashlar walls supporting wrought-iron railings. It currently has three access points, however originally there were three, the third now blocked up, led to the quays near Curragower Boat Club.

The site of the Potato Market was formerly the medieval harbour that operated from the 13th century with written descriptions by Ferrar and Lenihan, and extensive cartographic information detailing its layout. Based on an analysis of these maps the south pier wall would have run east west through the marketplace. This pier, nearly 400 feet (122m) long, started from a three-sided bastion, at the foot of Bridge Street, terminating at a tall slender tower guarding the approach to the harbour. This south wall of the quay was repaired in 1640-41, when Wm Comyn was Mayor. In the 1760s the harbour was remodelled into the New Quay, the centrepiece being a long dock oriented east west with a new north and south pier. A gun battery was placed at the southern pier head. In 2001 Celie O'Rahilly recorded in field notes taken during the Limerick Main Drainage Project that the Potato Market was filled with post-1840 harbour fill.

Proposed works for the KIFRS are to remove existing storm drains and sewers to be replaced by new infrastructure. Four trenches were excavated to assess areas of potential impact where archaeological features were suspected.

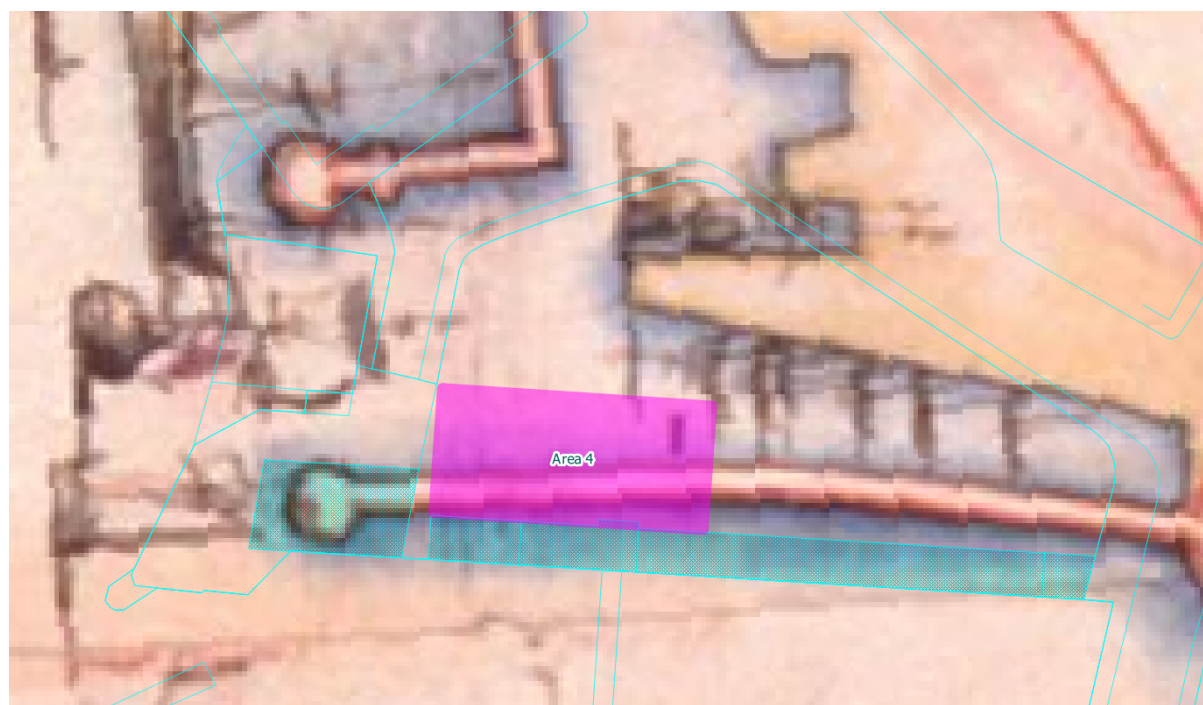


Figure 49 Extract from *Limerick, 1685* by Thomas Phillips (National Library of Ireland) (*Irish Historic Towns Atlas No. 21 Limerick, Map 12*) with Area 4 indicated.

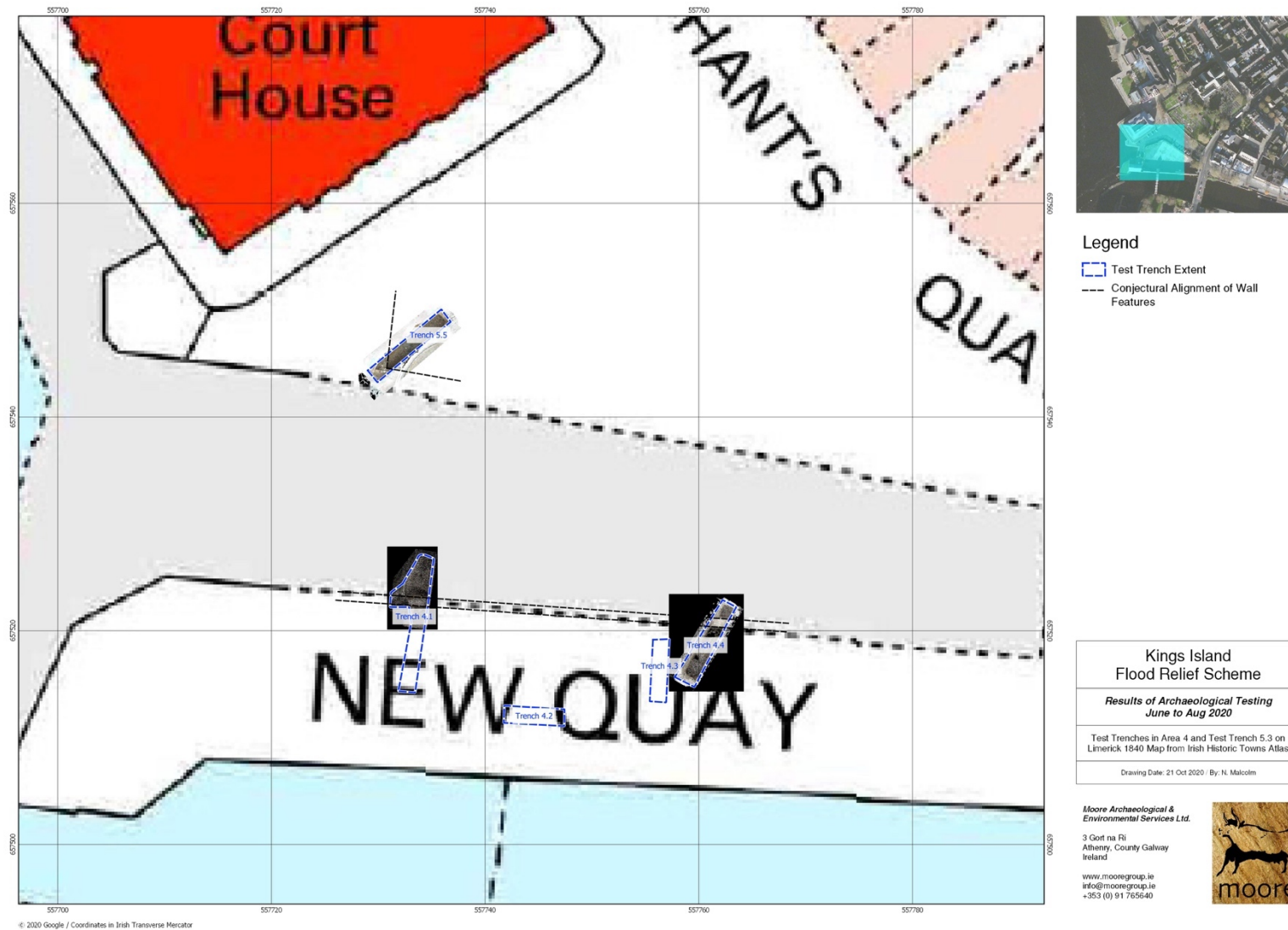


Figure 50 Map of archaeological testing in Area 4, overlaid on O’Flaherty 2010, Map 2, Limerick, 1840

## TT4-1

The trench was located in an overgrown rectangular strip of ground between the asphalt car park of the Potato Market to the east and the rear wall of the Curragower Boat Club to the west. The trench extended north to a point east of the now blocked up western gateway of the Potato Market leading to the Quays. This area had been used for the storage of finely cut stone/architectural fragments, which was removed to the northern side of the Potato Market.

Test trench TT4-1 was excavated in two sections due to flooding. The initial excavation (TT4-1A) was carried out on 20 of July and measured 3.6m long, TT4-1B was dug over the following two days and measured 7m by 3m wide, the enlarged width was due to the north western bank subsiding during the deep excavations.

### *Background*

The purpose of the test trench TT4-1 was to ascertain the nature and extent of any historic quay walls in the area of the proposed flood defence wall to the west of the Potato Market and to confirm whether or not there are any remnants of earlier quays in the area that may have been associated with the City Walls, specifically the South Quay Wall as illustrated in Phillips's view of 1685. Based on GIS overlays using these sources TT4-1, would be in the general area of the southern quay wall that terminated in a tall slender tower. This tower, probably located on the site of the Curragower Boat Club, was demolished following a gunpowder explosion in 1693 (O'Flaherty. 2010,26). In 1764 the harbour was extensively remodelled and recorded in plans drawn up by Christopher Colles in 1769. The New Quay comprised a regularly aligned 'long dock defined by projecting quay walls to the north and south (Guinness drawings). From map number 2 in the Limerick Historic Town Atlas the western terminals of the northern and southern arms of long dock align with the existing bay between the Curragower Boat Club and the projecting quay (Area 3) to the south west of the Court House

TT4-1 was in an overgrown rectangular strip of waste ground between the asphalt car park of the Potato Market to the east and the rear wall of the Curragower Boat Club to the west. The trench extended north to a point east of a now blocked up former gateway leading westward to the Quays. From the OS 25" map this range was occupied in 1870 by two rectangular buildings orientated NNE/SSW, that ran up to the gate (OS City of Limerick sheet V. 66, 1870).

### *Results*

TT4-1 was excavated between the 20<sup>th</sup> and 22<sup>nd</sup> July 2020 with overburden obscuring four concrete octagonal columns installed in the mid 1980's to support a super structure that was never completed. The column bases had 2m wide concrete footings 1m deep. Due to the proximity of the wall of the Curragower Boat Club and safety concerns over the depth of excavation, the overall length of the TT4-1 was reduced and excavated in two sections A and B.

Section TT4-1-A, the southernmost trench, measured 3.6m N/S by 1.5m and was dug to the water table at 3m. Excavation in TT4-1-A exposed a layer of grey-brown, sandy, builders fill with 19<sup>th</sup> century material including rubble stone, slate, brick and red tile fragments and black terracotta ware (C4-1A-04, 1.4m deep) over grey sand to the base at 3m (C4-1A-04). Following tidal flooding a 2m gap was left before opening the northern section, Trench TT4-1-B measuring 7m in length and dug to a maximum depth of 4.1m. Excavation below the modern layers including concrete, gravel and builders fill with cobbles (C4-1B-05) exposed the top of a wall 700mm below ground (figures 51-54). This E/W orientated wall (C4-1B-17) was located 3.8m from the northern end of the trench and sat on a plinthed foundation approximately 1.3m wide. It was solidly built bonded by a light-yellow white mortar. The upper part of the wall was 800mm wide at the top with a regular, heavily mortared southern face. The northern face was very rough and eroded. The wall was exposed to a depth of 2.67m on its northern side and its base not determined. The more regular southern face was near vertical, dropping 1.3m to a plinth that jutted out by 300mm and continued to the base of the trench for a further 800mm. It was notable that the fills either side of the wall were different. To the north of the wall was a substantial and unstable layer of chalky lime mortar (C4-1B-10) over grey brown sandy fill and



rubble stone to the base (C4-1B-11). South of the wall were successive layers of 18<sup>th</sup> century deposits of builders fill and grey gravelly sand some charcoal enriched.

#### Conclusion

Excavation of TT4-1, specifically TT4-1-B, exposed a wall at a depth of 700mm. The wall had a fair southern elevation with plinth, its northern face was rougher and appeared robbed out. Either side of the wall abutting it were a succession of infilled layers mostly 19<sup>th</sup> century.

The wall corresponds to other walls found in both TT5-2 (C5-5-12) and later in TT5-4 (C4-4-07) as part of this programme.

This wall aligns with the northern face of the southern pier (approx. 12-13m wide) of the long dock as featured on Christopher Colles's map of 1769 for the New Quay. The northern elevation forming the exposed quayside was likely robbed out for its ashlar stone. The southern unexposed face was left *in situ*. It was infilled in the 1840's in advance of the development of the Potato Market.

The wall in TT4-1 is approximately 20m south of the wall found in TT5-2 (C5-5-12). The recorded distance between the earlier south and north pier in Phillips and Eyre's Maps were approximately 100ft (30m). This would generally align the earlier south pier wall with the existing quayside along the Abbey River.

The northern face of the wall, that would have been exposed along the dockside, was in contrast rough faced and eroded. Due to the depth of the excavation and the instability of the section faces a trench box was employed to dig to the 4.1m depth. The foundation was still continuing at this level. Based on historic mapping and the condition of the wall it is likely the facing stone of this wall was robbed out to foundation level to re-use elsewhere. It is notable that the foundation exposed in Test Trench 4-4, further to the east displayed similar characteristics, with a regular south face and a rough, broken out, northern face. No medieval artefacts were retrieved from deposits TT4-1 -A or TT4-1 -B.

No medieval artefacts were found in the infilled deposits either side of the wall.

Table 9: TT4-1 summary of results

<b>Trench number</b>	TT4-1
<b>Dates excavated</b>	22-23/07/2020
<b>Location</b>	To west of potato market, TT4-1 was located 2.6m from the rear wall of the Curragower Boat Club and
<b>Co-ordinates (NW corner)</b>	E 557733.9251, N 657527.5694
<b>Dimensions, orientation</b>	TT4-1 -A 3.6m N/S by 1.6m TT4-1 -B 7m N/S by 2m (wider due to subsidence)
<b>Ground level (ASL)</b>	3.3261m
<b>Maximum depth</b>	4.1m
<b>Services exposed</b>	None
<b>Archaeological significance</b>	Exposed infilled ground and wall foundation of the New Quay as detailed on Colle's Map of 1769 sitting on a plinth foundation. The wall was not bottomed out, the plinth foundation was 1.3m wide. Unconfirmed if this was an earlier wall or part of the 1760's development.
<b>Recorded contexts</b>	<b>TT4-1-A</b>

	<p>C4-1A-01: Modern overburden with assorted debris mix of gravelly clay varying depth from 200-850mm</p> <p>C4-1A-02: Protruding through the overburdened were four concrete columns 700mm high set in concrete foundations approx. 80mm deep by 1m in diameter.</p> <p>C4-1A-03: Thin layer of concrete 50mm deep</p> <p>C4-1A-04: Grey brown sandy builders fill with 19th century material including rubble stone, slate, brick and red tile fragments and black terracotta ware.</p> <p>C4-1A-05: Grey sand to base with occasional 19th century finds</p> <p><b>TT4-1-B</b></p> <p>C4-1B-01: Concrete surface of car park 100mm, confined to southern section of trench and exposed for a length of 1.5m</p> <p>C4-1B-02: Modern grey gravel layer 300mm</p> <p>C4-1B-03: Compact dark modern gravel found under in upper level south of New Quay wall TT3-13- B-16 180mm thick</p> <p>C4-1B-04: Charcoal enriched layer with brick and stone found throughout trench to north of New Quay wall TT3-13- B-16, 350mm thick</p> <p>C4-1B-05: Mixed builders fill with cobble sized stones sealing the top of the New Quay wall 300mm thick by 2.9m in length</p> <p>C4-1B-06: Black charcoal sandy layer under TT3-1- B-5 found to south of New Quay wall 150mm thick</p> <p>C4-1B-07: Orange sand under TT3-1- B-6 found to south of New Quay wall 150-180mm thick</p> <p>C4-1B-08: Pocket of grey stony gravel under Charcoal enriched layer TT4-1- B-4 to north of trench 550mm thick</p> <p>C4-1B-09: Orange gravelly lime rich layer under TT3-8- B-8, max thickness 500mm</p> <p>C4-1B-10: Substantial deposit of gravelly white compact lime found mostly to the north of the New Quay Wall 1.8m thick</p> <p>C4-1B-11: Grey brown sandy infill with small stones abutting the north face of the New Quay Wall and cut by the lime deposit 1.8m thick.</p> <p>C4-1B-12: Grey sandy builders infill abutting south face of New Quay wall 300mm</p> <p>C4-1B-13: Grey sandy gravel with brick slate and occasional animal bone abutting south face of New Quay wall 20-600mm thick, deeper to south.</p>
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	<p>C4-1B-14: Compact grey sand abutting south face of New Quay thinning to the south 200-600m</p> <p>C4-1B-15: Grey sand with moderate amount of stone at base of south face of New Quay foundation to bottom of trench 430m</p> <p>C4-1B-16: Rubble stone infill in matrix of brown waterlogged sand at base of exposed northern face of New Quay foundation depth 500mm to bottom of trench.</p> <p>C4-1B-17: New Quay wall, found 700mm below ground. The wall ran E/W across the 1.5m wide and was 820mm wide at the top built of random rubble limestone bonded with a light-yellow white mortar. The southern face of the wall had a relatively fair face and was near vertical to a depth of 1.28m where it met a protruding, regularly built 300mm wide plinth, continuing to the base of the trench for a further 800mm. The base of the wall was not exposed. The southern face of the wall was heavily mortared, and the coursing could not be determined. At foundation level the wall was approximately 1.3m thick.</p>
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Figure 51 Location of TT4-1, facing north, with rear wall of Curragower Boat club to left.



Figure 52 Location of TT4-1B, looking north to rear of New Quay wall (C4-1B-17) showing plinth foundation.



Figure 53 *Location of TT4-1, facing south towards robbed out northern face of 1760s southern pier.*



Figure 54 South-facing view of TT4-1A & B, with quay wall in middle ground.



Figure 55 Northern elevation of quay wall in TT4-1.



Figure 56 Plan drawing and photogrammetry of TT4-1



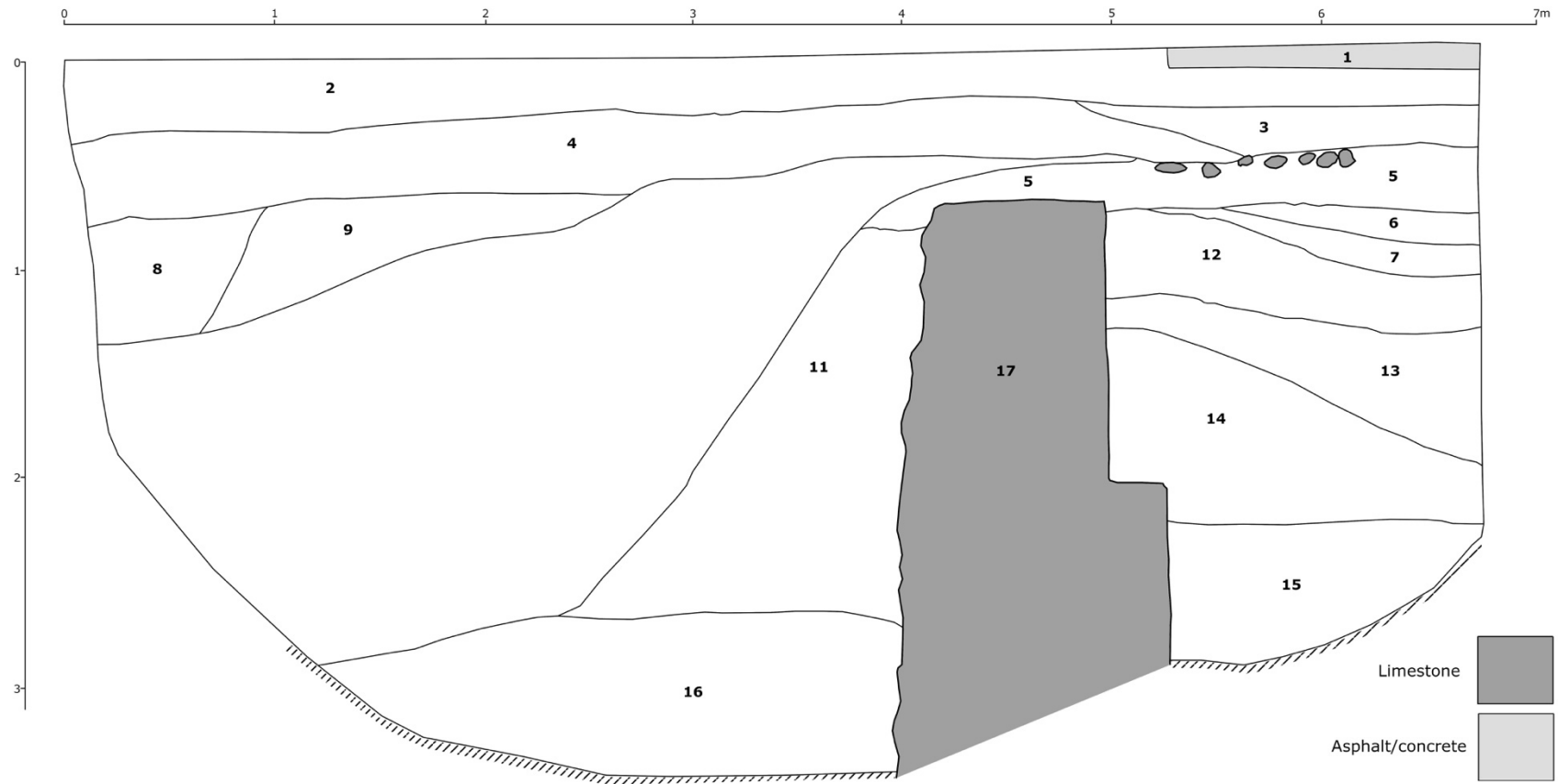


Figure 57 TT4-1a profile drawing of south-facing wall

## TT4-2

TT4-3 was located in front of stone faced storage building (built in the 1980s) to the west of the Potato Market. It measured 5 m E/W by 1.5m wide and was dug to a depth of 0.75m

*Background*

This trench was originally designed to be 20 m in length by 1.5 m wide and approx. 0.75 m deep running parallel to the western range of buildings that line the southern side of the Potato Market. Due to a design change in the original proposal the trench length was reduced to 5m running from outside the western corner of the Potato Market buildings towards the covered entrance to the Sylvester O'Halloran Footbridge.

*Results*

Under the paved surface excavations exposed modern infill related to the construction works undertaken in the 1980s that cut a section of well sorted cobble stones running along the northern edge of the trench. The well set cobbles, only two rows wide, averaged 150mm long and were sub rounded. They were found at an average depth of 770mm below the existing surface.

*Conclusion*

Paved surface over 1980s construction fill over cobbled surface at a depth of 770mm. These cobbles represent the original ground level for the Potato market yard developed in the mid 1840s.

Table 10: TT4-2 summary of results

<b>Trench number</b>	TT4-2
<b>Dates excavated</b>	22/07/2020
<b>Location</b>	Outside westernmost shed along southern range of the Potato Market
<b>Co-ordinates (NW corner)</b>	N 557741.7884, E 657512.9975
<b>Dimensions, orientation</b>	5m L E/W by 1.5m W
<b>Ground level (ASL)</b>	3.9448m
<b>Maximum depth</b>	770mm
<b>Services exposed</b>	None
<b>Archaeological significance</b>	No archaeology found; testing exposed the original cobbled surface of the Potato Market
<b>Recorded contexts</b>	C4-2-01: Square paving slabs 60mm thick running outside the southern range of buildings in the Potato market C4-2-02: Sandy bedding 150m C4-2-03: Modern sandy infill from 1980's construction work, concrete block, tarmac, gravel and plastic. 600mm thick C4-2-04: <i>In situ</i> layer of cobbles found along northern edge of the trench at a depth of 770mm



Figure 58 Looking west along TT4-2, note cobbles.

#### TT4-3

Trench TT4-3 was located in the Potato Market Car Park. The southern end of trench extended northwards from near the entrance to the Sylvester O'Halloran footbridge. The trench measured 6m N/S by 1.5m E/W and was dug to a depth of 770m.

#### *Background*

This trench was designed to investigate the path of a proposed outfall and determine if there was any archaeology at the depth of its invert level.

#### *Results*

This trench was 6m long by 1.5m wide and was dug to a maximum depth of 760mm. To the immediate SW of the trench was a deep manhole. Excavation exposed modern asphalt and gravel over a layer of geotextile. Below this, running across the centre of the trench, was a layer of well sorted cobbles measuring 2m long by 1.50m wide (TT4-3-5). The cobbles were generally water rolled limestones measuring on average 150mm long by 100mm wide set in light brown silty sand matrix. This layer is contemporary with development of the Potato Market

(1840s) and represents the surface of the period. Below this, was an earlier cobbled layer, confined to the southern end of trench. This surface, at a depth of 760mm, measured 1.1m in length by 900mm wide. The moderately sorted stones averaged 130mm long by 80mm wide. This layer was cut by a service trench running to the manhole to the south west corner. Based on historical maps, these cobbles, may date to the development of the southern pier of the long dock built by 1769.

#### Conclusion

Modern layers sealing two levels of cobbles the upper layer contemporary with the development of the Potato Market, the lower level possibly associated with the long dock built by 1769, as featured on Colles's map.

Table 11: TT4-3 summary of results

<b>Trench number</b>	TT4-3
<b>Dates excavated</b>	23/07/2020
<b>Location</b>	Potato Market Car Park, north of the entrance to Sylvester O'Halloran Bridge.
<b>Co-ordinates (NW corner)</b>	N 557755.7098, E 657519.1743
<b>Dimensions, orientation</b>	6m L N/S by 1.5m W, Avg. D 750mm
<b>Ground level (ASL)</b>	3.8727m
<b>Maximum depth</b>	750mm
<b>Services exposed</b>	Manhole to the south, service trench for pipe (not exposed running NE/SW through SE end of trench.
<b>Archaeological significance</b>	Infilled ground over two layers of cobbles relating to both the development of the Potato Market and the earlier New dock
<b>Recorded contexts</b>	<p>C4-3-01: Concrete surface of car park 170mm thick</p> <p>C4-3-02: Modern gravel layer 100mm</p> <p>C4-3-03: Cut and infill for service at SE corner of trench, pipe (not exposed) runs to manhole found to the south, cuts through, cobbles, 2m long by 1.50m wide.</p> <p>C4-3-04: Layer of terram geotextile.</p> <p>C4-3-05: Grey brown sand fill 120mm</p> <p>C4-3-06: Well sorted cobbled surface, found 420mm below the surface, extended across centre of trench, 2m in length by 1.5m wide in light grey brown sand matrix. The cobbles were generally water rolled stones measuring on average 150mm long by 100mm wide. This layer is contemporary with development of Potato Market (1840's),</p> <p>C4-3-07: Earlier, moderately sorted, cobbled surface, found in SW corner of trench, measured 1.9m in length by 1.3m wide, found at a depth of 730-770mm. Stones averaged 130mm by 80mm. This lower layer was possibly related to the development of the New Dock as featured on Colles's 1769 map. Cut by TT4-3-3 in the SE corner. This layer was retained in situ.</p>