

Welch E (1967) Plymouth Building Accounts of the Sixteenth and Seventeenth Centuries. Devon and Cornwall Record Society.

The early Guildhall was a stone building, of immediately local limestone and of 'moorstone' brought down from Dartmoor. Moorstone was the softer, more weathered and tractable granite that might be won from the surface, rather than deep-quarried; the roof was stone slated. Deliveries of sand and lime, but not of earth suggest lime-sand mortars, lest earth was being won on site. For the new, later Guildhall, however, lime, sand and earth is carried to site, suggesting earth-lime mortars improved before use by the addition of sand. The evidence of the Shambles and later Guildhall accounts is that the mortars were both earth-lime and lime – the former probably forming the bedding mortar; possibly the base-coat plasters, although when plasterers are being paid, lime, lime-ashes, sand and hair are also listed. It may be that the interior plastering was effected with haired earth-lime and then haired lime-sand finish mortars; with the exterior plastering haired lime and sand mortars throughout. The Orphanage accounts show lime and sand for the moorstone masonry, though earth may have been won in situ. Towards the end of the project, payments are made for 'white hair', as well as the first specific payments for 'quenching' and sifting lime. This would indicate that the finish plasters are being made from dry-slaked and sieved lime to facilitate the removal of lumps. The finish coat almost certainly comprised lime and (white) hair only. By implication, all other mortars, of both earth and lime, were being hot mixed. The lump lime for the Guildhall is being carried and stored in canvas sacks, not by the load or in barrels, at least to the site itself. There was a kiln close to the site, but carriage costs for burned lime to the site are high. Stone, although quarried only a mile away, was loaded onto boats which brought it within ¼ mile of the site; the same seems to have occurred with the lime, hence the need for limesacks. Sand was drawn from the rivers. Lime ashes are as commonly delivered as lime. Lime ashes are a mixture of fuel ash and quicklime, but would make a pozzolanic mortar slaked together on their own or as a gauge for clean lime mortars. Lime ashes likely preferred for the below-ground masonry, laying floors upon; perhaps in the roof works, perhaps as a general pozzolanic addition. Plymouth limestone, as Smeaton demonstrated in 1756, produces a fat lime for all that it is hard and dense and will take a polish.

At the Guildhall, lime is being burned in the 'town kiln' – associated payments are for burning and carrying the lime, not for the limestone or lime itself. There are entries for sand and for earth. Most payments to day-workers do not identify the work for which they are being paid. Generally, three trades are using lime – masons, plasterers and roofers.

The Building of the Guildhall 1564-65.

1564

Item: for 6 yardes of canvas for make lymesackes.

Item: payed to Rafe Clayton for 9 quarters and half of Colles...

Item: paied for beringe and hevenge of the sand...Payed for furse and woode

Item: payed to John Nychole for drawing stones for the kyll 2 days...

Item: payed for furse and woode...

Item: payed for Roberte the Kilburner for one weike 23d...

Item: payed to Roberte Kilburner for one wieke 3s 10d

Item: payed to John Grepe for Carrege of the lyme stones...
 Item: paied to Nicholas Hale for one daie to drawe lyme stones...
 Item: payed to Roberte Kilburner for one weycke 3s 10d
 Item: payed to Roberte Kilburner for one weke 3s 10d
 Item: payed to Roberte Kilburner for one weyike 3s 10d
 Item: paied to John Vesye for 8 quarters of Coles and 2 bushells...
 Item: paied to Roberte Kilburner for one weicke 3s 10d
 Item: paied to John Walter for 3 days to drawe stones [*lump lime from the kiln*] 2s 6d
 Item: paied for a whilbarrowe
 Item: paied to Roberte Kilburner 3s 10d
 Item: paied to John Walter for 1 day to drawe stones 10d
 Item: paied for beringe 6 quarters of Lyme [*quicklime*] 2s
 Item: paied for caryenge of 6 quarters of Lyme 18d
 Item: paied to John Walter for 2 days to draw stones
 Item: payed to Roberte Kilburner for one weicke 3s 10d
 Item: payed to Pomery for caryenge of 6 quarters of Lyme 12d
 Item: payed for caryenge 6 quarters of lyme aysshes
 Item: payed to Pomery for caryenge of lyme Ayshes
 Item: payed to Pomery for caryenge of 4 quarters of lyme and 4 quarters of lime ayshes
 Item: payed to Roberte Kilburner for one weycke 3s 10d
 Item: payed to Pomery for caryenge of 17 quarters of lyme...
 Item: payed to Pomery for caryenge of 13 quarters of lyme...
 Item: payed to John Roche for 16 quarters of Cole...
 Item: payed to Roberte Kilburner for one weicke 3s 10d
 Item: paied to John Walter for 2 days to drawe stones...
 Item: paied for 2 quarters of lyme...
 Item: to Roberte Kilburner for one weike...
 Item: to Roberte Kilburner for one weike...
 Item: paied for a bucket 12d
 Item: paied for the caryenge of 1 quarter of lyme...
 Item: paied to John Walter for one daie to drawe stones...
 Item: paied to Roberte Kilburner for one weicke...
 Item: paied for carieng of 6 quarters of lyme...
 Item: paied to Roberte Kilburner for one weicke...
 Item: paied for 2 seifes (sieves) 13d
 Item: paied to Roberte Kilburner for one weicke 3s 10d...

 Item: paied to John Grepe for 15 score lode of lyme stones...

 Item: paied for a bushel to mete lyme (measure lime) 20d

The Shambles and the Guildhall 1606-1607

The Shambles

July 1606

The first weeke

To the Masons:

Thomas Creese 3 dayes 3s

John Werye 3 dayes 3s

To Lawrence Hunne for carieng 1 bote (boat) of Stones 2s

To Thomas Skorye for 2 doss of earthe 3s [*'doss' is an unknown measure, the author thinks a small amount, which seems most unlikely, as it costs 3 times the cost of a quarter of sand*]

Paid for 1 quarter of sand 1s

To Alse Jory for bearinge 1 quarter of sande, 1 quarter of Lyme ashes and 1 quarter Lyme 1s 6d

The seconde weeke

To Richard Shepheard for 4 doss of earthe...

To George Palmer for 6 botes of stones at 4s per bote...

To Thomas Nyle for 5 botes of stones...

To Phillip Tookerman...in parte of payment for paving

Item to Alice Joyce for carienge of 12 bushels of Lyme and 4 quarters of Lymes Ashes...

To Lawrence Hunne for carienge 4 botes of stones...

[£2 4s 6d paid to the Masons this week and £2 8s 8d the following week].

August

Item for carienge of 1 doss of earthe 1s 6d...

[15s paid to labourers for 18 man days]...

To Alice Jorye for carienge 3 quarters and 6 bushels of Lyme Ashes and 2 bushels of Lyme 2s.

[Significant payments to carpenters, masons, labourers, sawyers, helliers (roofers) and Pavers]...

To Walter Symons for carieng 20 doss of Ruble...

To Alice Jory for caryeng of 2 quarters of lyme more to her for 14 bushels of sand and the carriage...

The fifth weeke

For 4 bushels of heare (hair) at 8d per bushel

For 2 doss of earthe caryeng away...

For 6 bushels of heare at 9d per bushel...

Item to Alice Jory for carieng 22 bushels of lyme and 8 bushels of sand, and for the sand...

[Payments to the above trades *and* to Plasterers for the first time]:

2 labourers **beating mortar** eache 3 days at 8d per day....

Sixth week

Item to Alice Jory for bearing 1 quarter and ½ of Lyme, 2 bushels of sand and 1 quarter 2 bushels of Lyme Ashes and for the sand...

12 bushels of heare...

[Payments this week to Helliers, Sawyers, Plasterers, Pavers, but *not to masons*]

Seventh week

To Alice Jory for caryeng 1 quarter and ½ of Lyme

[payments to carpenters, sawyers, plasterers, roofers].

Eighth week.

[Payments to plasterers, roofers, carpenters]

To Alice Jory for carieng 1 quarter 7 bushels of Lyme

More for carieng 1 quarter of Lyme Ashes

The Guildhall, beginning 22nd August 1606

First week

Payments to masons and labourers pulling down the old Hall. Deliveries of timber and stone.

To Alice Jory for caring 8 quarters of lyme and 5 ½ quarters of sand at 6d per quarter.

To Alice Hume for caring ½ quarter of lyme and 1 ½ quarters of sand...

[strongly indicates lime-sand building mortars, for the footings, at least].

Second week

Paid Seller for bringin 1 bote of Slatt 10s

For 1 bote of earth to him 4s

More to him for 1 great Lighter of earthe of 10 tonns 9s

To Lawrence Hunne for caryeng 4 botes of stones 8s

To Alice Jory for caryeng 16 quarters and 1 bushel of lyme

More 9 quarters of sand for the Hall.

[Payments to masons, labourers, sawyers].

To George Palmer for 1 bote of sand and 1 bote of stones...

To 2 labourers carieng 1 bote of earth...

To John Hore for 3 days carieng of Ruble...

To John Hartope for carieng Ruble 2 days...

Paid for rope for the Stage...

Paid to William Swingsbury for a Corde for the Stage and 1 seve (sieve) hee bought in the market.

Thirde weeke

[Labourers, masons, sawyers, carpenters]

to Alice jory for carieng of 7 quarters of Lyme, 3 quarters of lyme Ashes and 6 quarters of sand...

To Cornishe and his Company being 6 persons for carienf planks and mastes for Skaffoldes...

To Robert Drake for coloring the Shambles and Myles howse...£1 3s

Fourth weeke

Paid Paskowe Pepperell in parte for his Lyme...

To John Geynes for 1 bote of Rowecaste Sand...

For carieng 1 bote of Rowecaste Sand...

To Alice Jory for Caring 9 quarters of Lyme and 4 quarters of sand...more for caring 1 bote of Rowecasting Sand....

[rowecasting sand = roughcasting sand]

Fifth weeke.

[Masons, moorstone hewers, labourers, carpenters, sawyers and *plasterers* for first time].

Sixth week

[Masons, sawyers, carpenters, labourers; no plasterers]

To Alice Jory for bearing 7 quarters of lyme, 2 quarters of sand....

{Small volumes every week hereafter. Roofers and masons on site. Plasterers reappear in 10th week, and are working intensively thereafter until the 28th week, regularly supplied with lime and sand, after which most payments are to joiners}

Weeks sixteen & seventeen

Plasterers: Hercules Roe 5 days; 1 labourer 6 days; another, 6 days...for caringe 2 quarters of lyme...for 3 ½ bushels heare...more paid for 1 ½ bushels of heare...to the Plasterer 5 m (1000) of lathe nayles...

[Plasterers typically using 1 quarter of lime a week; hair, but no sand].

22nd and 23rd week

Plasterers: William Gydley 12 dayes; Robert Lynn 12 dayes; Nicholas Crocker 12 dayes...

To John Vinton for 1 ½ doss of yearthe...

To Alice Jory for bearing 2 quarters of Lyme... for 7 bushels of heare

24th week.

4 Plasterers 4 or 5 days

to Alice Jory for carrying a quarter of lyme...

to John Vinton for 1 doss of yearthe...

for caring up a bote of morestones...

25th week

To John Hore and John Vynton for 2 doss of yearthe
To Thomas Betts in parte of £4 which he is to have for ending the playstereing worke
except the walle...To Alice Jort for a quarter of lyme bearing...to Cornish for carrying a
bote of Moorestones...

[Masons reappear in week 39, with stone, lime and sand paid for as well as, in week
41, rowcasting sand. Roofers and carpenters reappear week 41].

Week 43

To Pascoe Pepperell's wiefe for Lyme
For carrying 3 ½ quarters of lyme this week and the last
For carrying 14 bushels of Rowcasting sand and 2 bushels of lyme which Bettes had
long since.

Hereafter, finishing and furnishing works.

Orphans' Aid Accounts 1614-1620

March and April 1615

[Along with stone...]

To Joan Pepperell widow for 1 quarter of lime...

To James Jorrye, his wife for bearing of 4 quarters of Lyme ashes and 1 quarter of
Lyme...

[Throughout May, a lot of stone and 6 quarters of lime (but no sand) delivered. Similar
in June, plus timbers and roofing but only 3 quarters of lime ashes. Regular deliveries of
lime and lime ashes to the masons thereafter, with masons still active in October, when
5 bushels of lime and a quarter of lime ashes delivered. November to March, deliveries
of stone and lumber but next delivery of lime (ashes) on 30th March 1616; lime and
lime ashes regularly thereafter, typically 3 quarters of lime and 2 of lime ashes each
week. Roofing has commenced).

October 26th – December 4th 1616

[Roofing complete, with gutters being installed. Plasterers at work within].

January

For 4 bushels want a little haire for playstereing

February

To Jorryes wyffe and her sister for carrying 20 quarters of lime
For a seeve for sifting of lyme
To John Light 6 days to quench Lyme

For 3 bushels and 3 pecks of hayre
For 15 ½ bushels of hayre for plastering...
For 19 bushels of hayre to Roe of Beare...

Marche

For 20 quarters of Lyme to Joan Pepperell...
To Constantin Sam for lathing 6 days
To Constantin Sam for lathing 3 days
To Constantin Sam for 5 ½ days...
To Jorye his wyffe for carrying 7 quarters of Lyme

April 1617

Payments to plasterers and carpenters

For 7 quarters of lyme for plastering
For 4 bushels of lyme...for 5 bushels of lyme ashes and 4 bushels sand...

June 18th

To John Rogers for 2 moulds for the plasterer.

March 1618

For a small boat of sand for the garden and pointing the walls

1619

To Constantyn Sam for Lyme, haire and stones for repaying that house and for his man to work on it 2 days

September 1620

To Richard Greep, Carpenter for his worke on the portal in the courtlage and for timbering for plastering of Mr Isted's study...

To Constantyn Sam, hellier, for his worke on the portal to cover itt and for nayles, mortar and stone.