Carlton Parish Council
7 Main Street
Carlton
Nuneaton
CV13 0BZ

Our Reference: 25133-TDC-XX-XX-LT-Z-0001-P01

Date: 8th December 2025

RE: EXTERNAL BOUNDARY WALL INSPECTION - ST ANDREWS CHURCH, CARLTON, NUNEATON,

Further to your recent request on 14th November 2025 for us to attend the above property to inspect the existing front boundary wall due to movement observed, please find below our observations and recommendations.

The purpose of this inspection is to consider the condition of the wall and advise regards to next steps in order to undertake repairs due to concerns over the wall stability.

Introduction

On 27th November 2025, The Davey Corporation attended the St Andrews Church, Carlton to undertake an arm's length, non-intrusive inspection of the front brickwork boundary wall. The weather at the time of the inspection was noted at cool and overcast.

In advance of the site visit the Parish Council provided a set of hand drawings outlining the layout and construction of the wall along with monitoring results. The monitoring reports outline measurements taken on a three monthly basis form August 2018 to November 2025. The results indicate that movement of the wall increases during the winter and recedes in the summer but shows a consistent trend line with the overall vertical measurement of the wall increasing by just under 10mm since 2018. A copy of the information provided by the Parish Council is appended to this report.

Observations

The front wall of the church boundary abuts the footpath located on the adopted highway Main Street. The wall is divided into two lengths of approximately 13m in length with masonry piers to each end. The right hand wall when viewed from the highway is considered to be within acceptable limits and no major structural defects observed.

The left hand wall is observed to have rotated with then centre of the wall bulging and the wall leaning towards the highway. For context, the wall is observed to retaining 250-300mm of soil on the Church land. There was evidence that the levels within church ownership have been reduced historically, and it is understood as part of the investigations undertaken by the Parish council 300mm of soil was removed from behind the wall in an attempt to limit the wall movement.

Behind the wall is a 20m high tree which is located 2-3m behind the face of the wall. It is understood that during the investigation works minimal tree roots were encountered.

The wall itself is constructed from brickwork and was observed to be 14" thick with blue coping stones. The wall was observed to be suffering from significant mortar loss to both sides of the wall with areas of mortar completely missing.

The eastern pier was observed to be in good condition albeit there appears to be rotation of the footing, with the entire pier rotating as one and no additional cracks observed.

It would appear that historically mortar repair works have been undertaken with cement mortar observed, whilst the original wall is anticipated have been constructed from lime mortar.

Conclusions & Recommendations

Based upon the information provided and the observations on site we are of the opinion that lateral pressure through root growth, heave of the soils and water build up due to lack of drainage is causing seasonal movement in the wall, however it is believed the continued seasonal movement is causing a rotation of the existing brick foundation which is exasperated with each seasonal movement increasing the lever arm action.

It is acknowledged that the wall is unlikely to collapse in the short term however, repair works are required in the medium term before the rotation of the foundation causes collapse.

It is therefore recommended that the left hand wall be taken down and new concrete foundations provided with the new wall reconstructed onto this along with the eastern most pier being rebuilt. The detailed design of the new wall should be undertaken by ana appropriately qualified Engineer.

When considering the construction of the new wall, it is recommended that the Highway Authority are consulted and also services scans undertaken. It is anticipated that any works would require the partial closure of Main Street.

Finally, prior to any works being undertaken it is recommended that an Arboricultural surveyor be contacted to confirm the stability of the tree during any proposed works.

Regards

Jon Davey MEng. BEng.

Director, for and on behalf of The Davey Corporation Ltd.

Encl. Record Photographs

Parish Council Monitoring Results & Sketches

Image 1 – Image of left hand wall with tree behind

Image 2 – Image of left hand wall condition and pier

Image 3 – Image of rear of wall showing reduction in levels

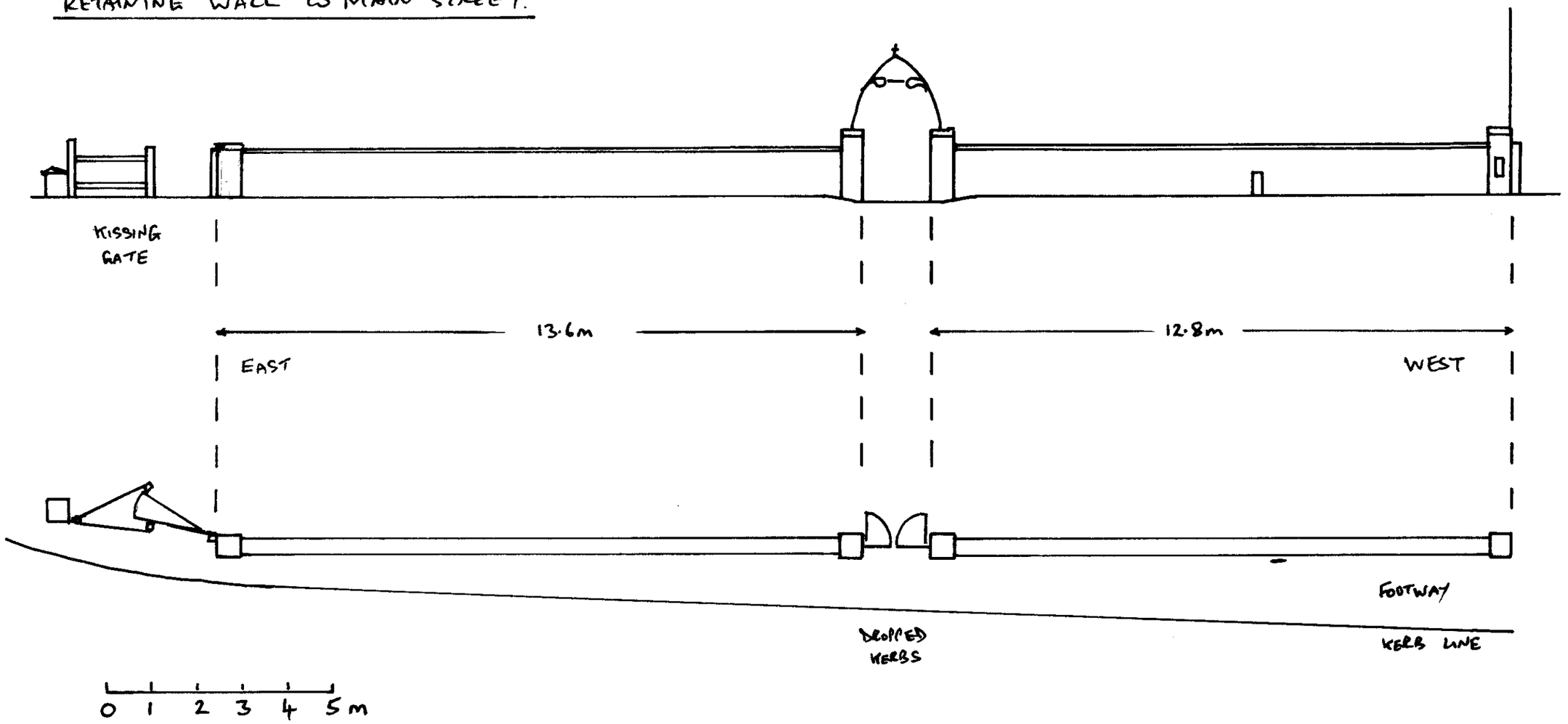
Image 4 – Image of masonry and mortar general condition

Image 5 – Image showing deviation in wall line

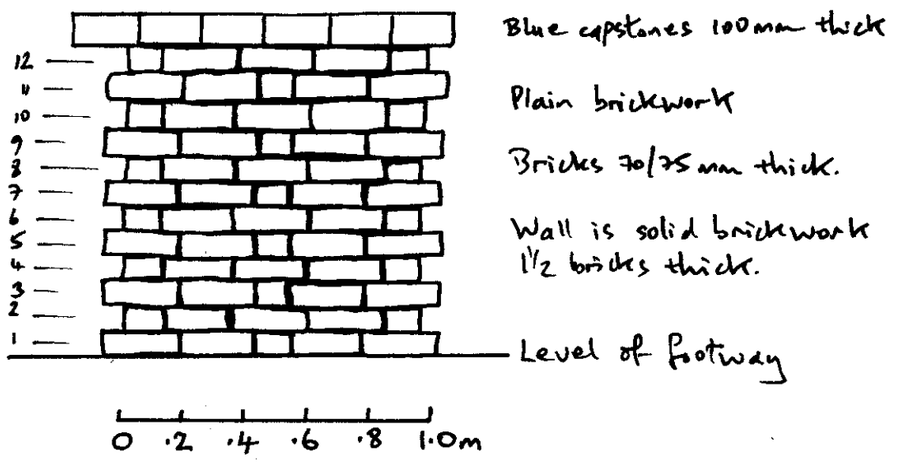
Image 6 – Image showing severe mortar loss

SAINT ANDREW'S CHURCHYARD, CARLTON

RETAINING WALL TO MAIN STREET.



SKETCH TO SHOW BRICKWORK BOND

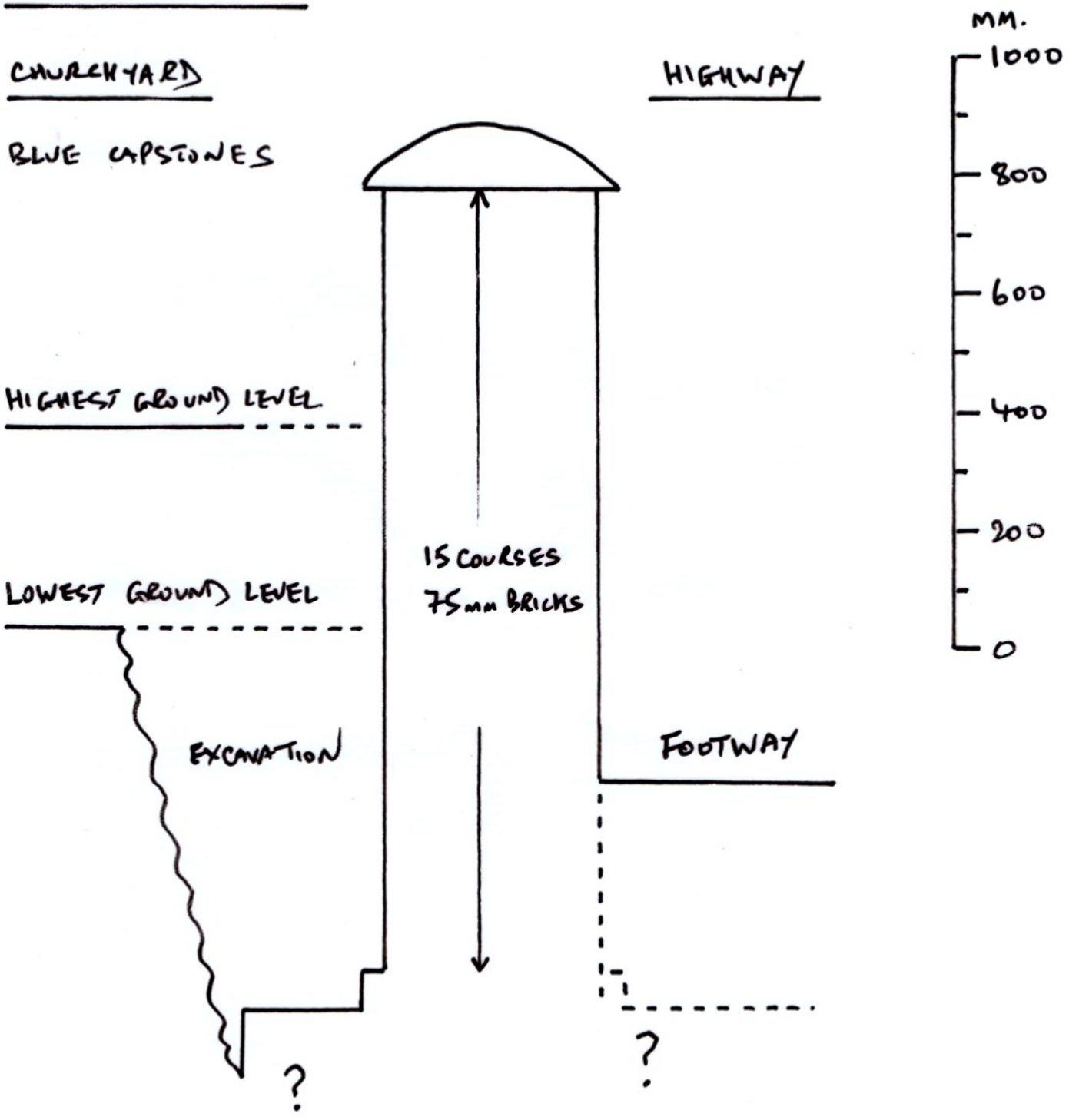


C.J. PEAT. 24TH APRIL 2018.

CARLTON PARISH COUNCIL

ST. ANDREW'S CHURCHYARD WALL

CROSS SECTION

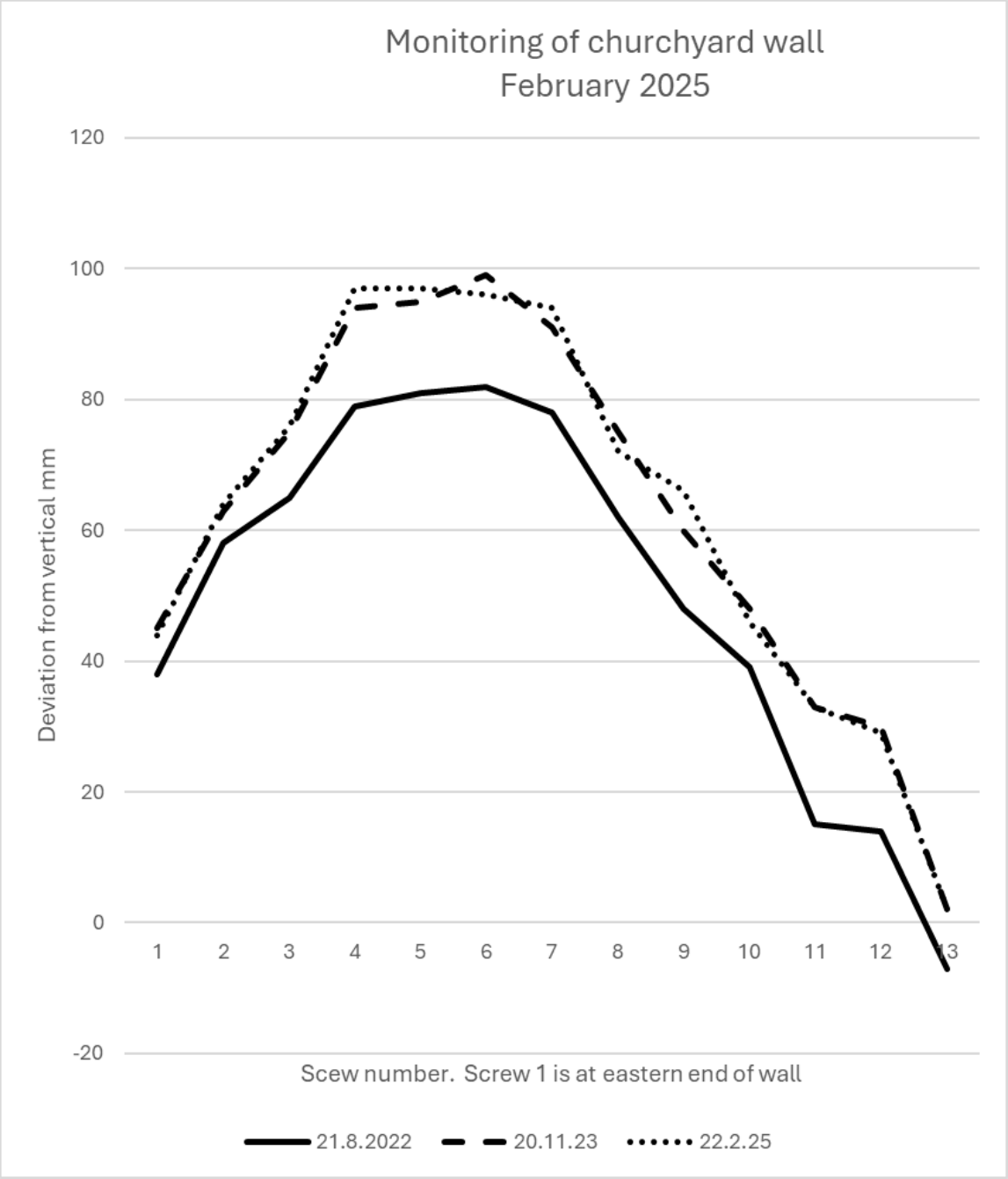


C.I. PEAT 6.11.2025

Monitoring of churchyard wall August 2018 to February 2025

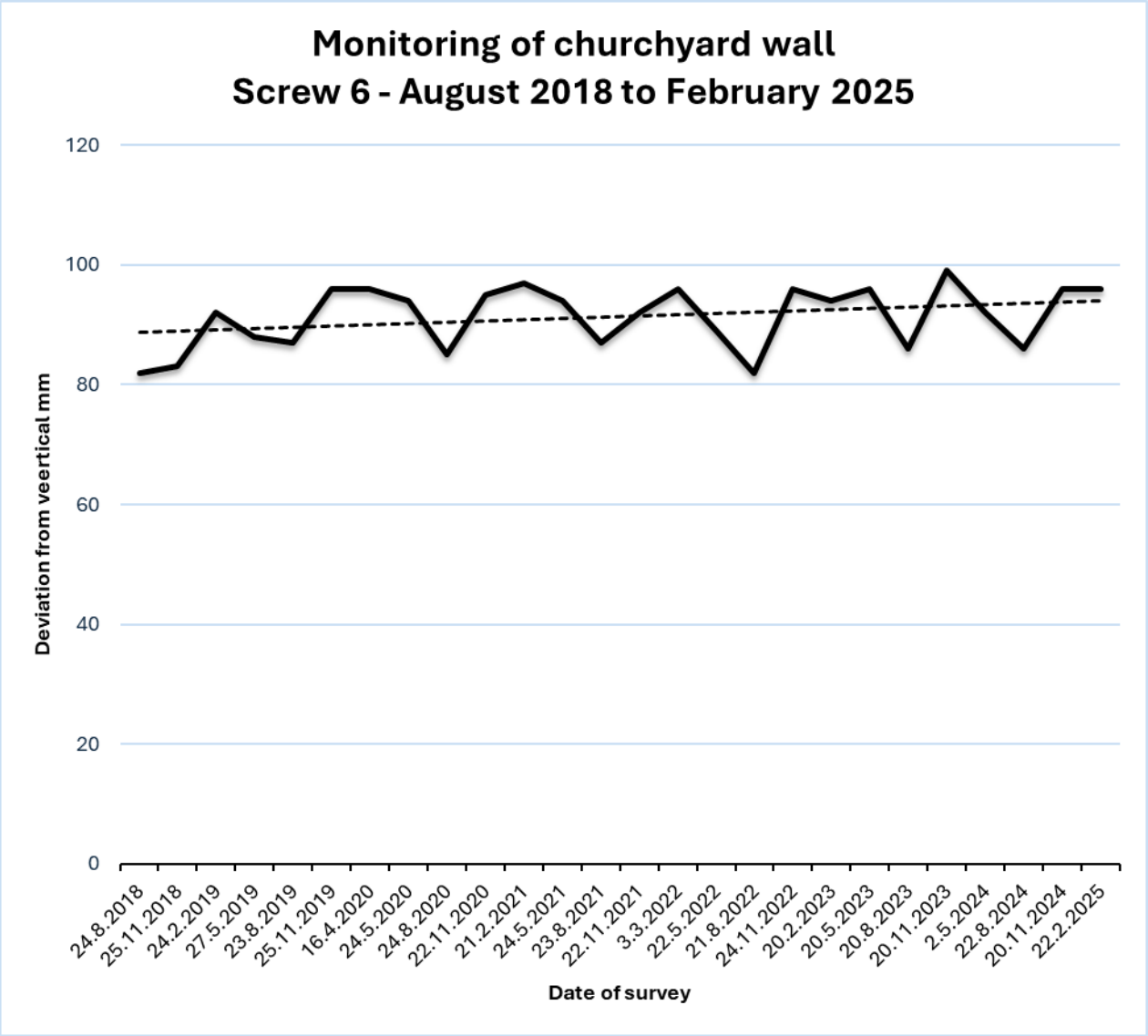
The eastern half of the churchyard wall has a noticeable bulge, and leans over towards the road. The amount of the overhang has been measured quarterly since August 2018. Thirteen screws have been inserted into bricks near the top of the wall at one metre intervals, and the amount of overhang measured using a plumb bob and ruler.

Monitoring was carried out on 22nd February 2025, and the measurements are summarised on the chart below.



The smallest overhang was measured on 21st August 2022 after a very dry summer; the largest overhang was measured on 20th November 2023 after a very wet Autumn. The overhang measured on 22nd February after a very wet autumn and winter was very similar to the previous maximum.

Screw number six is at the centre of the bulge, and has shown the largest deflection (99mm on 20th November 2023). The chart below shows all measurements of the deflection at screw six.



This chart shows the deflection increasing each winter and decreasing each summer. The trendline on the chart above has a positive gradient, from 88.5mm in 2018 to 94mm in 2025, which suggests that the wall is being pushed over by about 1mm each year.

There is a tall Austrian pine tree growing in the churchyard near the bulge in the wall and is probably contributing to the pressure on the wall. This tree shows no signs of disease and appears to be windfirm and should be retained. Some soil was removed from behind the wall in November 2023, and no significant roots were found behind the wall at that time.

The movement in the wall is resulting in mortar spalling out from the joints in the brickwork: this is most apparent in the area of the bulge, and will be weakening the wall.

The wall does not appear to be at risk of collapse in the near future, but will need to be rebuilt at some point. It is recommended that monitoring be continued.

All measurements to date are tabulated below.

Screw number	24.8.2018	25.11.2018	24.2.2019	27.5.2019	23.8.2019
1	39	44	40	42	44
2	55	54	62	52	59
3	64	65	72	68	68
4	78	82	88	85	85
5	79	80	89	84	86
6	82	83	92	88	87
7	75	77	83	79	84
8	67	62	67	67	65
9	50	44	56	53	53
10	33	28	39	36	37
11	17	15	25	27	23
12	17	13	25	25	20
13	-3	-2	0	0	-1

Screw number	25.11.2019	16.4.2020	24.5.2020	24.8.2020	22.11.2020
1	48	47	45	40	44
2	65	64	63	54	61
3	72	71	73	65	71
4	92	90	88	80	91
5	94	91	88	83	92
6	96	96	94	85	95
7	91	90	89	80	84
8	77	72	78	66	70
9	61	61	60	57	54
10	47	45	43	36	41
11	30	30	30	21	27
12	26	27	26	19	24
13	3	3	-2	-4	0

Screw number	21.2.2021	24.5.2021	23.8.2021	22.11.2021	3.3.2022
1	42	44	38	43	43
2	65	61	57	61	63
3	77	74	69	71	73
4	90	91	85	90	91
5	95	92	85	93	92
6	97	94	87	92	96
7	93	88	83	87	92
8	74	78	70	69	76
9	60	62	53	56	62
10	44	46	37	41	41
11	30	31	23	24	29
12	30	26	20	22	28
13	4	2	-2	1	3

Screw number	22.5.2022	21.8.2022	24.11.2022	20.2.2023	20.5.2023
1	41	38	47	45	42
2	60	58	57	63	63
3	69	65	67	72	74
4	86	79	91	91	91
5	88	81	93	91	93
6	89	82	96	94	96
7	84	78	82	92	90
8	67	62	69	73	74
9	55	48	57	61	60
10	39	39	42	45	48
11	25	15	27	31	33
12	23	14	20	25	32
13	1	-7	0	2	3

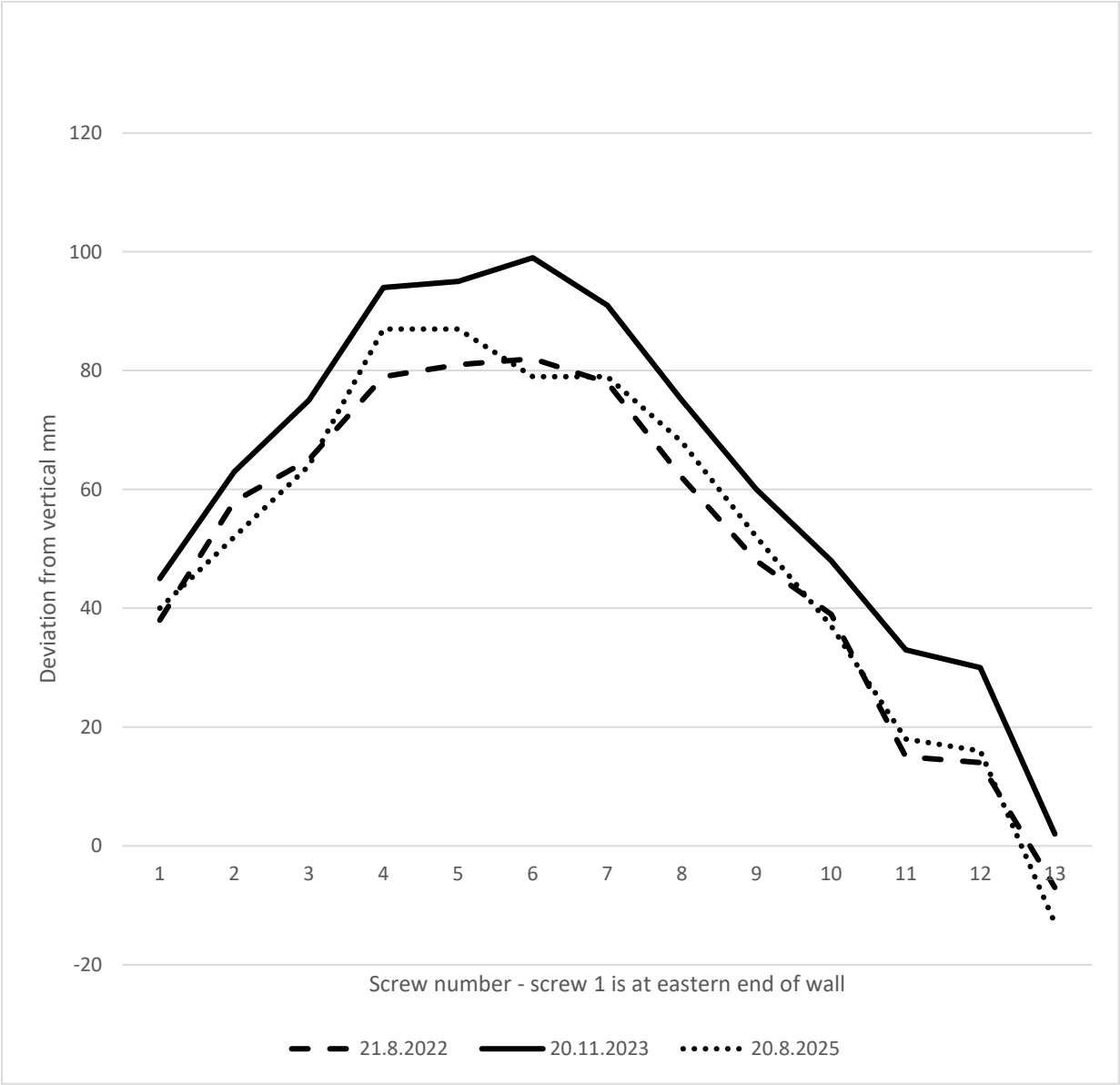
Screw number	20.8.2023	20.11.2023	2.5.2024	22.8.2024	20.11.2024
1	42	45	43	40	43
2	60	63	62	58	63
3	67	75	75	67	75
4	85	94	91	85	92
5	86	95	89	86	94
6	86	99	92	86	96
7	82	91	88	80	89
8	67	75	76	69	75
9	53	60	67	49	63
10	38	48	49	37	46
11	20	33	34	24	30
12	18	30	31	20	27
13	-4	2	5	-5	0

Screw number	22.2.2025
1	44
2	64
3	76
4	97
5	97
6	96
7	94
8	72
9	66
10	46
11	33
12	29
13	2

C J Peat Parish Clerk 23rd February 2025

Carlton Parish Council

Monitoring of churchyard wall, August 2025



The minimum deviation recorded was in August 2022; the maximum in November 2023.

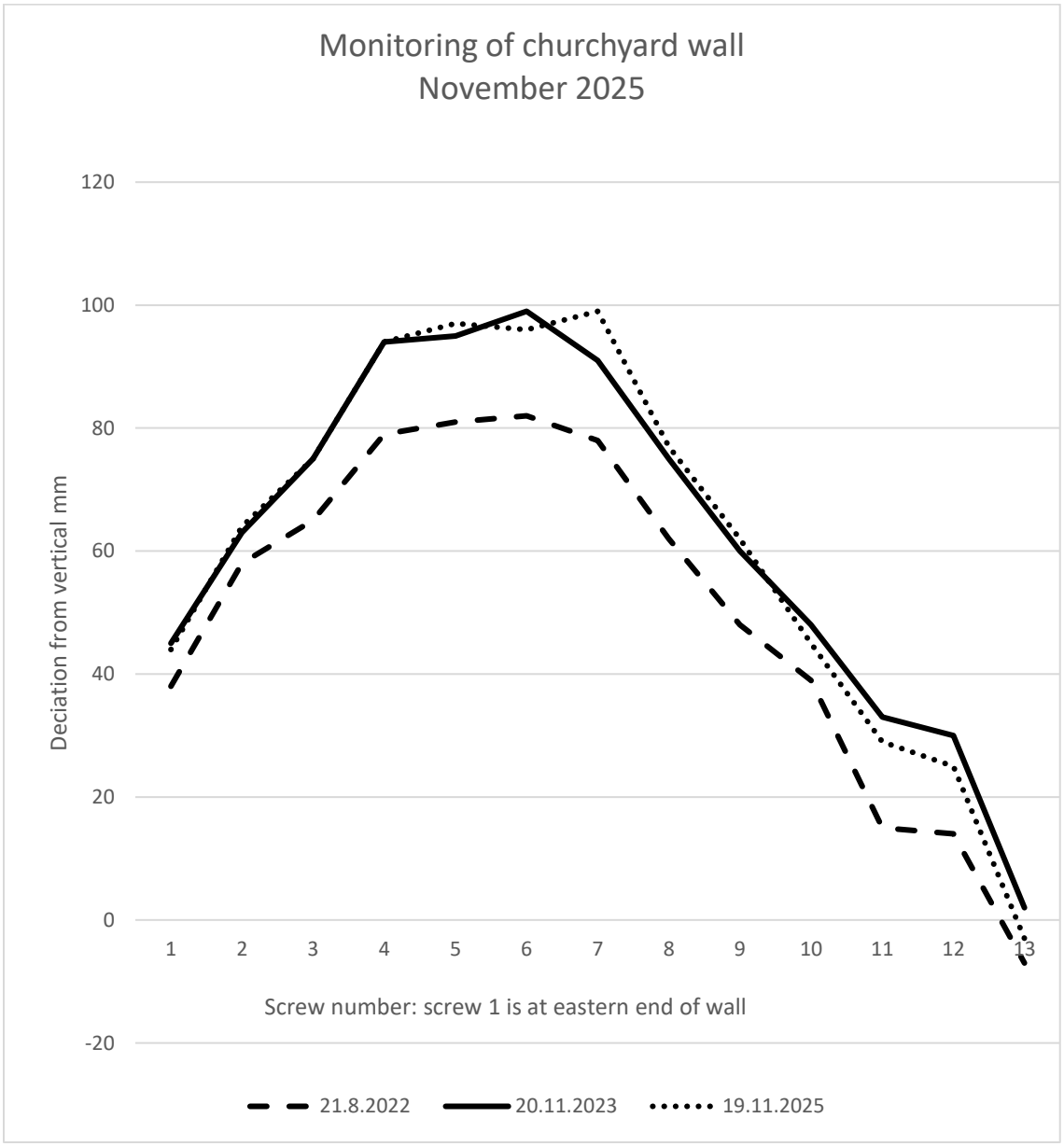
Measurements were made on 20 August 2025 after a long spell of dry weather.

The deviation from vertical is much the same as the minimum in August 2022, except for screws 4 and 5. The chart from August 2024 also showed an anomaly at screws 4 and 5, and it was suggested then that this part of the wall has lost some flexibility and might be at risk of failure.

C J Peat
20th August 2025

Carlton Parish Council

Monitoring of churchyard wall, November 2025



The minimum deviation recorded was in August 2022; the maximum in November 2023.

Measurements were made on Wednesday 19 November 2025 after a spell of wet weather following a very dry summer and autumn. There had been a day of heavy rain on Friday 14 November.

The deviation from vertical is much the same as the maximum observed in November 2023.

C J Peat
19 November 2025