



BRAMLEY-MOORE HYDRAULIC ACCUMULATION TOWER		
FACE	DEFECT #	DEFECT DESCRIPTION
SE	(GEN NB)	RH chimney appears to widen towards base, built with slight batter towards main tower. LH lower rise on this elev appears to be a retrospectively bonded addition to the core tower.
	1	Vertical butt-joint between lh lower rise and core tower slightly open; appears to be locally bonded with 3 courses every few metres, however these have sheared through the units and lost bond. Crack closes at top where it receives bonding preload from pier and superstructure construction above (1b).
	2	Mass coping stones at lh/rh corners of roof appear to be moving slightly outwards, perpends visibly open, although no referred cracking below observed, suggesting weathered mortar perpends propagating ratchet mechanism. Appear stable, minor movement.
	3	LH skew course along verge exhibits some missing units, weathering of perpends and persistent wall-head water penetration through defective roof. Moss and vegetation noted.
	4	Main archway geometry appears in good condition with no major distortion. Very slight downward movement in arch at crown (slight 'flattening'. Missing unit at crown appears to be mechanical damage. Weathering of mortar joints appears to exceed 25mm.
	5	Minor vertical cracking up from both springing points at each end of the main archway, consistent with the slight 'flattening' of the arch under high compressive load down through central pier.
	6	Deep weathering observed to this area of masonry, progressed since 2016 inspection
	7	Deep weathering observed to this area of masonry, mortar joints and scaling /spalling of brick units, progressed since 2016 inspection
	8	Fine vertical crack observed this face of the chimney tower when sighted with powerful binoculars. Crack width estimated to range from H/L to c.5mm, largely following the mortar joints up the centreline of the panel. Some split units observed. Appears to have a longstanding history (does not appear to be a "new" crack)
	9	Weathering of chimney tower at high level appears to have worsened/progressed since 2016 inspection
	10	Displacement of coping stones appears to have worsened since 2016 inspection.

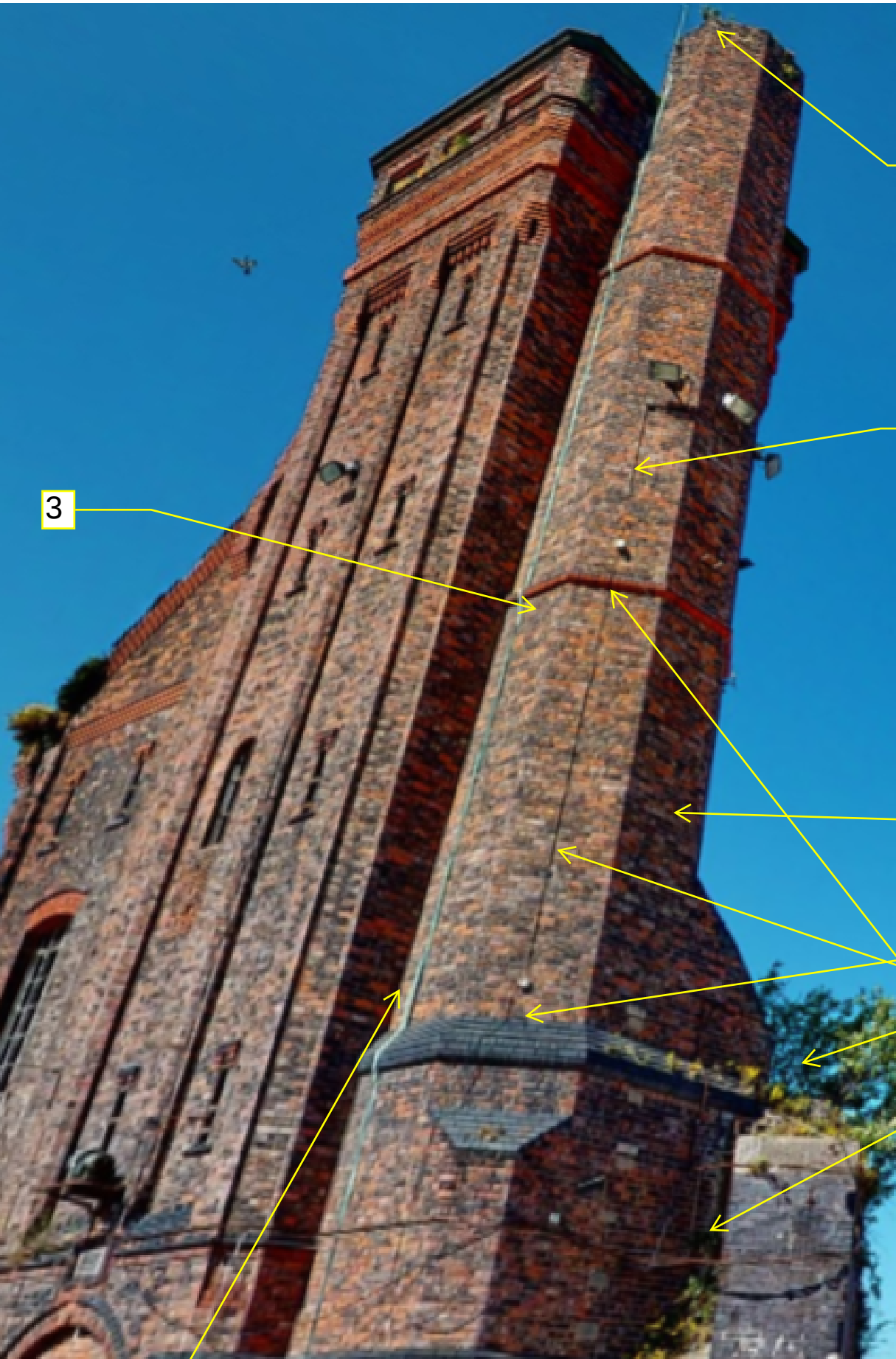


**Bramley Moore Dock
Hydraulic Accumulation Tower
Visual Condition Appraisal - Update**
Drawing: 75808-CUR-00-XX-DR-S-101
Date Prepared: 15/05/2020



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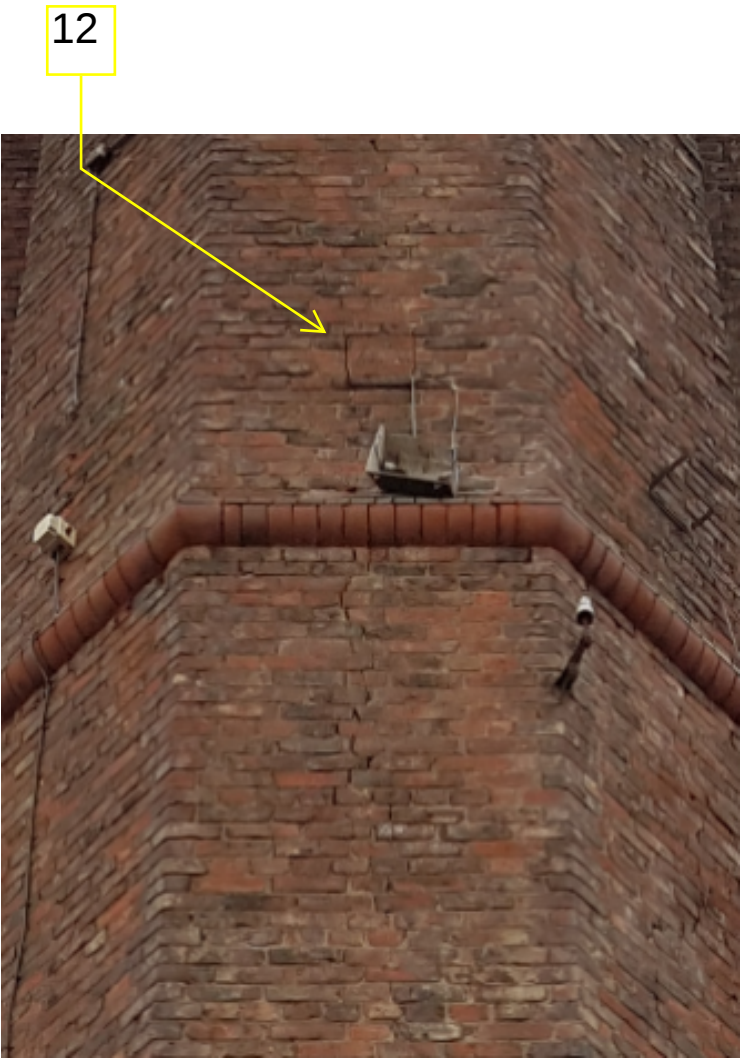
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NE	NB 1	Chimney construction appears to widen towards base
	2	Weathering generally exacerbates with height. Possibly no coping to chimney element.
	3	Minor vert crack down centreline of se face, just below middle string course, diminishing towards lower string course.
	4	Weathering of mortar joints (see photos)
	5	Significant vert crack down from middle string course to diminish at btm stiffening pier head on ne face. Both string courses appear level to the eye. Refer to report for narrative re mechanisms.
	6	Minor/moderate vert crack down centreline of n face diminishing at thickening pier below
	7	Very minor vert crack as N face, much less pronounced.
	8	Defective and corroding rainwater handling goods with associated accelerated weathering of masonry and possibly corrosion-related mechanical expansion.
	9	Vegetation associated with points of water ingress
	10	Chimney tower well bonded integral with hydraulic tower up full height both returns
	11	Thermal vertical crack up this panel similar as previous 2016 inspection
	12	Coarse crack tracks roughly up centreline this panel, wandering off C/L occasionally. Similar extent of propagation to condition observed 2016.



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