Walls, fences and gates in Oxton

Walls, fences and gates form an important part of the street scene and contribute to the character of the area. In Oxton, our fine sandstone walls are especially important and help define the unique character of the conservation area. They provide a visual cohesion that makes Oxton feel like a special place even with the wide variety of buildings that are found behind the walls.

The importance of sandstone walls

The Oxton Management Plan, adopted by the Council in July 2012, recognises the importance of sandstone walls and gateposts and singles them out for special mention.

"The loss of or alteration to boundary walls, traditional gates and gateposts could affect a significant feature of the character of the conservation area may and detract from its integrity.

All existing historic boundary walls and gateposts should be retained. Alteration as part of any planning permission should only be permitted in exceptional circumstances and when fully justified and mitigated. There should be a strong presumption in favour of resisting the loss of traditional boundary walls and vegetation in order to create accesses or forecourt parking."

Existing formal protection for our sandstone walls

As things stand, walls in Oxton have extensive formal protection. The law says that you will need planning permission to:

demolish a gate, fence, wall or railing over 1 metre high next to a highway (including a public footpath or bridleway) or public open space; or over 2 metres high elsewhere.

The definition of demolition includes even the partial demolition of a wall.

In some cases, Planning Permission is needed before you can erect or alter a gate, fence or wall. This mainly applies to increasing their height. The same rules apply whether or not you live in a Conservation Area. The diagram at the end of this note is our informal guide that tries to set out the logic of when planning permission is required. Any queries on whether you need planning permission should be directed to Wirral Council's Conservation Team – 0151 691 8183.

Voluntary protection

Rules and regulations can only go so far to protect our heritage. You can easily get away with poor designs while keeping within the rules. The key is to consider the impact on the character of the area when choosing a new gate, fence or wall.

Insensitive changes can damage the overall feel of the area. People's tastes differ but the main issue is to "keep the change in keeping". A high security gate with an entry phone system out of all proportion to your neighbours' gates would not be appropriate in a quiet residential street. Similarly an extravagant high-tech design would be out of place in a Victorian terrace, as would curved-top gates where walls and existing gates on the street have flat tops.

Good design does not necessarily have to ape the existing features of an area but being a "good design neighbour" adds to the amenity of the area and can be enjoyed by everyone.

Front garden parking

Removing front garden walls to create off street parking is not recommended. The loss of the wall and garden area damages the appearance (and value) of your house, and the street as a whole.

Where there really is no alternative think carefully about the design to save costs and reduce the environmental damage. Two parallel rows of stone flags or stone setts can accommodate the car wheels, retaining ground cover plants or grass elsewhere. Alternatively gravel gives a softer and more attractive effect than concrete or tarmac. Both these methods are cheaper than wide expanses of flags, concrete or tarmac, and you can often do them yourself.

The Royal Horticultural Society produces an excellent free 13 page booklet in their urban series "Garden Matters: front gardens – are we parking on our gardens?" available free on their web site at:

https://www.rhs.org.uk/science/pdf/Gardening-matters-Front-Gardens-urban-greening.pdf

Improving the protection for sandstone walls

We believe that walls would benefit from further protection. We have asked the Council to consider introducing a new rule for walls in Oxton. This is called an Article 4 Direction, which would mean that all proposed work on walls would require permission in advance. (there would be no fee for such applications)

Technically, this involves the removal of householders' permitted development rights, i.e. development that can take place without permission.

The Council is concerned about the extra work that this might involve. However they have included the suggestion in the Oxton Management Plan which says:

"Consider the introduction of an Article 4 Direction, as and when resources permit, to selectively remove permitted development (pd) rights on works to sandstone walls."

We believe that the number of instances per year involving permission to alter or demolish walls would be small and the benefits from increased protection would easily outweigh the extra staff time that would be needed. We are in on-going discussions with the Council. And in order to prepare for the possibility we are compiling a register of all Oxton's walls that could be used to help decide on any applications. This project is written into the Oxton Management Plan, which says.

"Continue to work with the Oxton Society to create a register of the location and condition of all historic walls and gate posts to assist in their ongoing preservation and enhancement."

Maintaining sandstone walls

When walls need repairing it is important to respect the traditional building methods. The type of mortar, the form of pointing that you use and the pattern of stonework can help to preserve the area's character.

Lime mortar, available from most builders' merchants (see below) is the best material to use. It weathers to a pleasant shade of grey, is cheaper than sand and cement, and gives a softer finish that will not damage the stone. Ordinary Portland cement mortar is much harder than the sandstone and will damage the stone when freezing takes place. (see photo 1)

Pointing should be finished flush with the surface of the stone, or slightly recessed. (see photo 2). The new mortar should be rubbed down with a damp brush or hessian sacking a day later in order to bring out the aggregate and to soften its appearance. It should not be trowelled smooth. Strap pointing, which protrudes forward of the face of the stone, is uncharacteristic in Oxton, and will eventually damage the stonework. It should not be used. More advice on pointing is available from the Historic England website at

https://historicengland.org.uk/images-books/publications/repointing-brick-and-stone-walls/heag144-repointing-brick-and-stone-walls/



Photo 1: damage after freezing following pointing with Portland Cement Mortar



Photo 2: pointing slightly recessed with surface of stone.

Sandstone walls in Oxton are usually capped either with stone coping, triangular in section, or by creating a castellated effect using the stones. Try to keep these features where they exist or introduce them on a new wall.

Most of the boundary walls in Oxton have a distinctive look that comes from "coursing" the stone so that strong horizontal lines of mortar appear at intervals throughout the wall. (see photo 3) Every effort should be taken to reproduce the coursing of walls, with coursing and sub-coursing of masonry often following the contours of the land.



Photo 3: horizontal courses give Oxton walls their distinctive look

Why use Lime mortar

Most modern mortar mixes are based on cement and sand. This produces a hard mortar that can be harmful to masonry. Cement mortar is impervious to water, so moisture in the stonework is unable to escape through the joint. Water therefore becomes trapped, causing damp in the wall and damage to the face of the stone.

Mortar should always be weaker than the stone around it. Lime based mortars have many advantages over cement mortar mixes. They are more flexible, longer lasting, less harmful to the stone and are more breathable.

Practical guide to Lime Mortar

Although lime mortar has been in use for thousands of years it appears to be a mystery to most builders who are wedded to the use of cement-based mortars. The variations of lime-based mortars described in the literature can be daunting. But there follows a simplified and practical guide.

All lime originates from limestone and there are 3 types in use.

- Non-hydraulic lime is limestone which has been burned to produce quicklime which is mixed with water to produce a "lime putty". This is mixed with sand to produce mortar and sets by absorbing CO2 from the atmosphere.
- 2. **Hydrated or "bagged lime"** is basically a powdered form of nonhydraulic lime and is added to cement –based mortar to improve workability
- 3. **Hydraulic lime** comes in powder form and starts to set on contact with water. It is mixed with sand to make lime mortar.

YOU CAN FORGET ABOUT EVERYTHING BUT HYDRAULIC LIME WHICH IS IS THE PRACTICAL SOLUTION FOR BUILDING AND RE-POINTING SANDSTONE WALLS.

Buy hydraulic lime fresh and keep in dry conditions as it has a short shelf life.

Hydraulic lime comes in different strengths, known confusingly as NHL – which stands for "natural hydraulic lime". The mid-range is NHL 2 to NHL5 and a good compromise is NHL 3.5. The higher the number the greater the strength and the less flexibility and breathability the mortar will have.

Choice of sand is critical for the colour and strength. Well graded sharp sand (not soft building sand) with angular edged and a range of particle sizes is essential. For walls in Oxton "fine Mersey grit" from local merchants will give grey/white result and sharp sand will give a pink effect.

You can use a cement mixer for mixing although small quantities can be mixed by hand. Mix at a ratio of 1:2 or 1:3 parts lime to sand depending on the strength required. An egg-cup of linseed oil per batch helps to improve plasticity in the mortar. The mix will be quite wet so leave it in the mixer for 15 minutes to "fatten up". For pointing it is better to cover with plastic and leave overnight to stiffen up.

When re-building you should be aware of the problems of extreme weather conditions. During very hot weather individual stones should be immersed in tanks of water in order to prevent the mortar drying out too quickly and losing

strength. Fresh mortar should also be sprayed down with clean water at the end of a day's work in order to improve setting. All areas of reconstructed masonry should be protected from frosts and extreme hot or cold weather with wet sacking for several days after work has been completed. Walls should not be reconstructed in weather below 5 degrees C.

Contractors and materials

Members of the Society have some experience with walling contractors and a list of those that we know can be found below. If any members have used other contractors who are confident in using lime mortar that they are happy with, then please let us know and we will add them to the list.

	Garry Whiting (S&M Landscaping) (07791 059313)
	,
	Tony Parsons (07801 535109)
	Marius (07840 754774)
	Streamline Construction (07752 226746)
	Steve Walling, Stone Masonry Wirral Ltd. (07811 152530), steve.walling58@virginmedia.com
	A B Building Services Ltd, (0151 678 7582, 07905 286759)
	Edward Anthony (Gun-Point) (0800 783 5140) http://www.gunpoint.co.uk/repointing/
	GMT Pointing Specialists (01244 550359, 07990 902562) http://www.gmtpointingspecialistltd.co.uk
	Chapelgate Construction, (639 1575, 07752 226746)
	Revive is a new business launched by Philip Stafford of Rose Mount. He specialises in "pointing, enriching and preserving sandstone walls with care". He aims to follow best practice and only uses lime mortar in his commissions. Contact Phil on 07548 289171 or phil.stafford1966@icloud.com
Sandstone blocks, that match the stone in Oxton, for repairing old or building new walls (together with a vast range of reclaimed material) can be found at:	
П	Stone Heaven Ltd. The Depot. Station Rd. Barnston, CH61 1DG (648)

Lime mortar and further advice on how to use it can be obtained from:

John Carr (Liverpool) Ltd 10/12 Grundy St Liverpool L59SG

6481)

0151 207 0067 http://www.johncarrliverpoolltd.co.uk/index.asp

Eden Lime Mortar (07717400233) Kirkby Stephen, http://www.eden-lime-mortar.co.uk/

Addendum on Structural Walls

This note concentrates on boundary walls but many of the issues raised apply equally as well to structural walls, ie the walls of your house. For instance, if your house is made from sandstone blocks then repair, pointing and re-building is exactly the same as for a sandstone boundary wall.

There are many examples of rendered walls in Oxton and great care needs to be taken when repairing or renewing your render. Essentially, cement based mortar is unsuitable for rendering. It creates an impermeable skin which prevents the house from breathing and increases the risk of condensation and damp.

Lime render should be used. It has many attractive attributes and qualities when compared to modern day equivalents such as cement render, polymer render and silicone acrylic render. Lime render contains Natural Hydraulic Lime, which gives it its unique properties.

Lime render is a more eco-friendly, than its alternatives. The manufacture of hydraulic lime produces less carbon dioxide than ordinary limes and cement, as it re-absorbs carbon dioxide when curing; this lowers its carbon footprint. Lime render is a long-established traditional building material which has an historical background. It is an entirely natural, traditional building mortar and render used in construction. Hydraulic lime render shares the practical benefits of modern cement based mortars but simply has none of the disadvantages. Hydraulic lime mortar is an excellent all around rendering materials and building mortar. Lime render has an excellent track record and proven performance.

Lime render is fast setting so it can be used on-site just as efficiently as modern cements and mortars. Shrinkage cracks are virtually eliminated due to the mortar's hydraulic setting characteristics. Lime render allows walls to breathe by absorbing and evaporating moisture from surrounding masonry. This also helps protect the masonry because less moisture means less risk of salt and frost damage. Hydraulic lime render has a low modulus of elasticity. This means it is extremely flexible, especially when compared to modern day renders and allows for movement and thermal expansion.

Render contractors

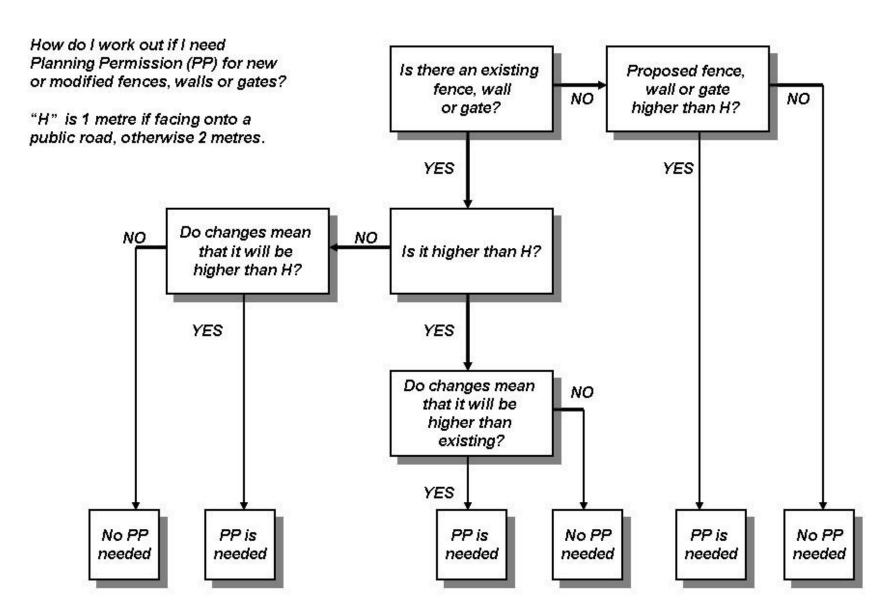
(We are building up our list of known rendering contractors and so far we have identified those shown below)

Marsden Builders, 0151 494 3014, 07976 654 773 http://www.liverbuild.co.uk

Trumpers, Lichfield, 01543 414 234

Updated March 2020/S Weber

See next page for flow chart to determine whether planning permission is needed



This is an informal guide, prepared by the Oxton Society. Any queries on whether you need planning permission should be directed to Wirral Council's Information and Advice Team -691 8183