





ARK OF LIGHT

Its delicate arboreal structure wrapped in an armature of stone, Ripon College's new chapel is a subtle synthesis of nature and the sacred

Ripon Chapel, designed by Níall McLaughlin Architects, sits in the garden of Ripon College, a theological centre on the edge of the village of Cuddesdon, Oxfordshire. The chapel sits off the brow of the hill, in deference to the parish church which can be seen on slightly rising ground. The site of the walled precinct of the college is not in the expected urban form of Oxford, but perhaps more like that of a model farm. It is reached by following country lanes that lead over a bridge, and is set among warm honey-coloured manor houses. As part of the client body, the Sisters of the Community of St John the Baptist have relocated their convent to the precincts of Ripon College. The new chapel is a locus for their orders of prayer, their life-long commitment, and also becomes the context for the college's theological reflection. Proposed courtyard accommodation of the convent has not been built.

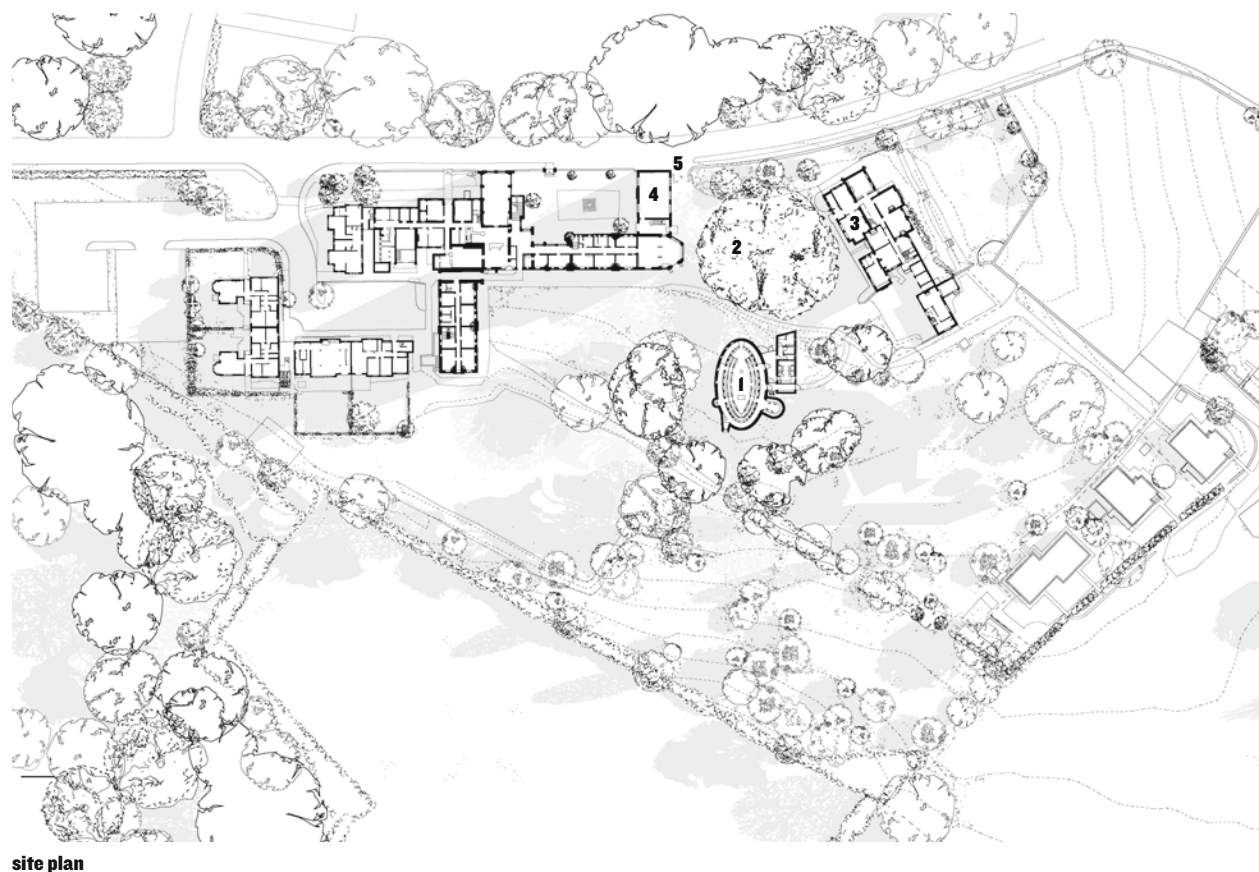
The architecture of George Edmund Street's college of 1854 sets the institutional tone for the complex. The open-sided courtyards and wings of buildings carry none of the tight quad form of the medieval Oxford college. The garden with its rather languid vegetation provides the over-sized site for the chapel, which is approached through a covered porch on the south side of the elliptical structure forming part of the sacristy.

Looking at the site plan of the chapel without its complex, it does appear alone, like a moored boat, tied to a giant beech within the haven of the walled garden. Its elliptical form presents an uncompromising and 'proper' architecture at ease with the majestic presence of surrounding mature trees. It is as though the trees have connived in the setting out of the chapel, the boughs of the sweet chestnut, beech and cedar giving shelter to its presence. Street's adjacent college buildings are attenuated and elaborate, forming courtyards as complete ensembles, with a 'nod' to the vernacular, and institutional

in setting. The presence of the chapel with its self-conscious vocabulary of stone and fenestration is certainly a match for Street's neo-Gothic bays and oriel windows. The stone detailing of the Street building is matched by the stripped clean detailing of Clipsham stone of McLaughlin's mannered building. Above the smooth and dressed storey-height plinth is a blind band of rusticated stone coursing that wraps the building like a vestment. Its fabric, textured by alternate courses of dressed and split stone laid at 45 degrees to the wall geometry, catches the sunlight on its traverse of the elliptical drum. The scale of stone blocks matches the courses of the Street building, but unlike that building the chapel comes alive because of the geometry that accentuates the rustication like a magnificent tooled shawl.

What McLaughlin and Street have in common is a sense of permanence, of building for perpetuity. The nuns, although dwindling in number, observe their office five times a day with high church ceremony; they chose building detail that is conscious of that perpetuity rather than the usual building warranties.

The arrival of the order of nuns at Ripon reminds you of those illustrations of early settlers to America – are they dismantling or constructing the boat structure? The carcass is an armature for an idea and a belief. The interior of the chapel carries resonances of a boat structure and of the vegetal forms associated with stone vaulting systems. The chapel's elliptical shape offers the same sense of completeness as a boat, in which you carry everything that is needed for a journey. Its fullness reminds me of the little Celtic gold boat with its oars preserved in the Museum of Ireland, its form produced by the workings of hand and eye drawing out the shape. In a similar way, McLaughlin arrives at his concept, showing a finger forming a depression in clay, a uniformly distributed



1. (Previous page) the arboreal structure of the chapel is crowned by a narrow band of clerestory glazing
 2. The columns meet to form a filigree vault, allowing light from the clerestory to wash through the chapel. Its central feature is a lectern, emphasising the educational function of the space
 3. Ancient trees surround the compact, elliptical structure, like a boat poised in the landscape

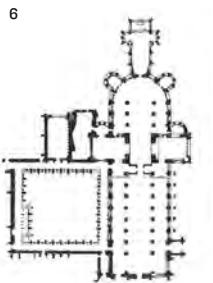


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4. The boat is a recurring image in Christian theology: here Christ and the apostles navigate the Sea of Galilee
5. The swelling fullness of the cymbiform chapel recalls an ancient Celtic golden boat in the Museum of Ireland



6 & 7. Gloucester Cathedral and its cloister, famous for its intricate fan vaults. Stone becomes lace in the hands of Gothic masons
8. The timber frame of the chapel seems to stop short of the soffit, creating an impression of weightlessness. A sequence of sections (below) shows the structural principles

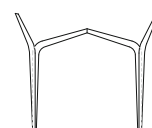
loaded structure displacing ground. The chapel space steps down into the ceremonial dish, marked by two brass plates locating the centering of the elliptical geometry which in turn locks the altar table and the lectern into the geometry of the chapel.

The chapel, like the boat where every cargo is balanced against its plimsoll line and centre of gravity, distributes its precious spaces as niches and outliers, so that the sisters' prayer space is sited opposite and across the ellipse to the niche that is to contain the tabernacle of the Blessed Sacrament. The focus of prayer is glanced at from the settles opposite. In his competition document, McLaughlin alludes to the accretion of structures around the chancels of Gloucester and Canterbury Cathedrals. Such chapels, tombs and chantries tried to position their form as close to, and aligned with the altar and the Sacrament, as though such spaces had become part of the ceremony of worship. However, this is not a chapel for the village, which has its own parish church beyond. Consequently, the chapel has no font or other furniture of public worship.

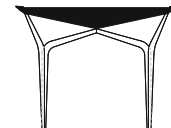
The chapel design has to reconcile the wishes of both client constituencies. The high church ceremony associated with the Sisters of the Community of St John the Baptist, which included at the chapel's first blessing a celebration with incense, and that of Ripon College which, one would like to imagine, would use the space much like a Scuola in Venice, with fixed seating around the periphery of a central space used for readings, debates, and presided over by an altar of the Blessed Sacrament. Unlike the usual arrangement of the church, this chapel locates its altar in the western end of the space – albeit, the altar table and the lectern have interchangeable positions on the east-west axis of the chapel. This has much to do with the orientation of entry to the space and its relationship to the siting of the unbuilt convent. The clients wanted the lectern to be the first component of worship to be seen on entry to the chapel. Turning left at the entrance, the visitor follows

the ambulatory down a ramp that reconciles disabled access with the quiet processional route to the lectern sited at the eastern end of the space. The slope emphasises McLaughlin's wish for the chapel to be grounded at a lower level to the outside space, like a medieval church in which the threshold steps down into the nave.

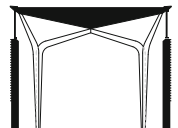
The main space of the chapel is formed from a layering of structure. As a geometric figure, the ellipse enables the external wall to be self-supporting. The setting-out used the dimensions of the major and minor axes to describe the ellipse full-size on the ground, just as medieval craftsmen set out at full size the curving stone components on a tracing floor. The projecting intersections of geometry became the nodal points for the positions of the columns. Much like the erection of a boat skeleton, or the timber centerings for an arch, the chapel portals were erected and became the datum for all the



basic glulam timber frame



roof is supported by the frame



walls encircle the erect frame

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later elements of structure. They stood exposed to the weather, waiting for the layers of walling to be built that would finally enclose and protect the space. Inside, the composite V-shaped columns describe the space, so that the ambulatory is a space in between the layers of structure. The V-shaped columns turn at the height of the clerestory to form a portal structure, like the elbow of a ship's rib or the cruck of a medieval frame. A spur of timber from that elbow completes the connection with the roof. The delicacy with which the soffit connects to the columns is due to the stability of the elliptical geometry and the interlacing of the portal structures. The soffit of the roof is 'belly' shaped, its keel running along the axis of the ellipse. Its curvature lifts to the clerestory, enabling light to be reflected at high level through the depth of space. The complexity of the serial forms and the light remind one of the overlaid clear glazed windows of a Norfolk church, the clerestory glazing with its fine stone mullions like a curtain wall in the perpendicular style.

This perceived lifting of the soffit almost separates the column structure from the carcass of the roof, so that the structure becomes part of another order of building. A space within a space much like choir stalls, a large piece of architectural furniture. As an inserted form, it carries the spirit of the Gothic, in which soaring structure and light equate to godliness and heaven. However, this structure needs no flying buttress; as an inserted

structure, it is more akin to the fan vault, resolving its load paths within its envelope. McLaughlin writes of the influence of Gloucester Cathedral. Did he visit the cloister? The stone fan vaults spring from their plinths in ribbed vegetal forms that bifurcate and interweave close to the apex of the arch. Like the fan vault and unlike the Gothic, McLaughlin's timber portal uses the same geometric section throughout the structural ensemble. Similarly, the decorated keystone of the fan vault finds its equivalent in the cross weaving timber structure that locks the portal frame into a self-supporting arch. McLaughlin consulted the sisters on the structural alternatives to this fixing detail; they chose the detail for its clarity and sense of perpetuity. At Gloucester, the bench seats are like a string course around the perambulation of the cloister; at Ripon the bench seats share a base with the columns. The honey-coloured stone of the Gloucester cloister finds its equivalent at Ripon in the lime-rendered walls that reflect a similar quality of light. In both the cloister and the Ripon chapel, the paring down of the materials used contributes to the quietness and power of the space.

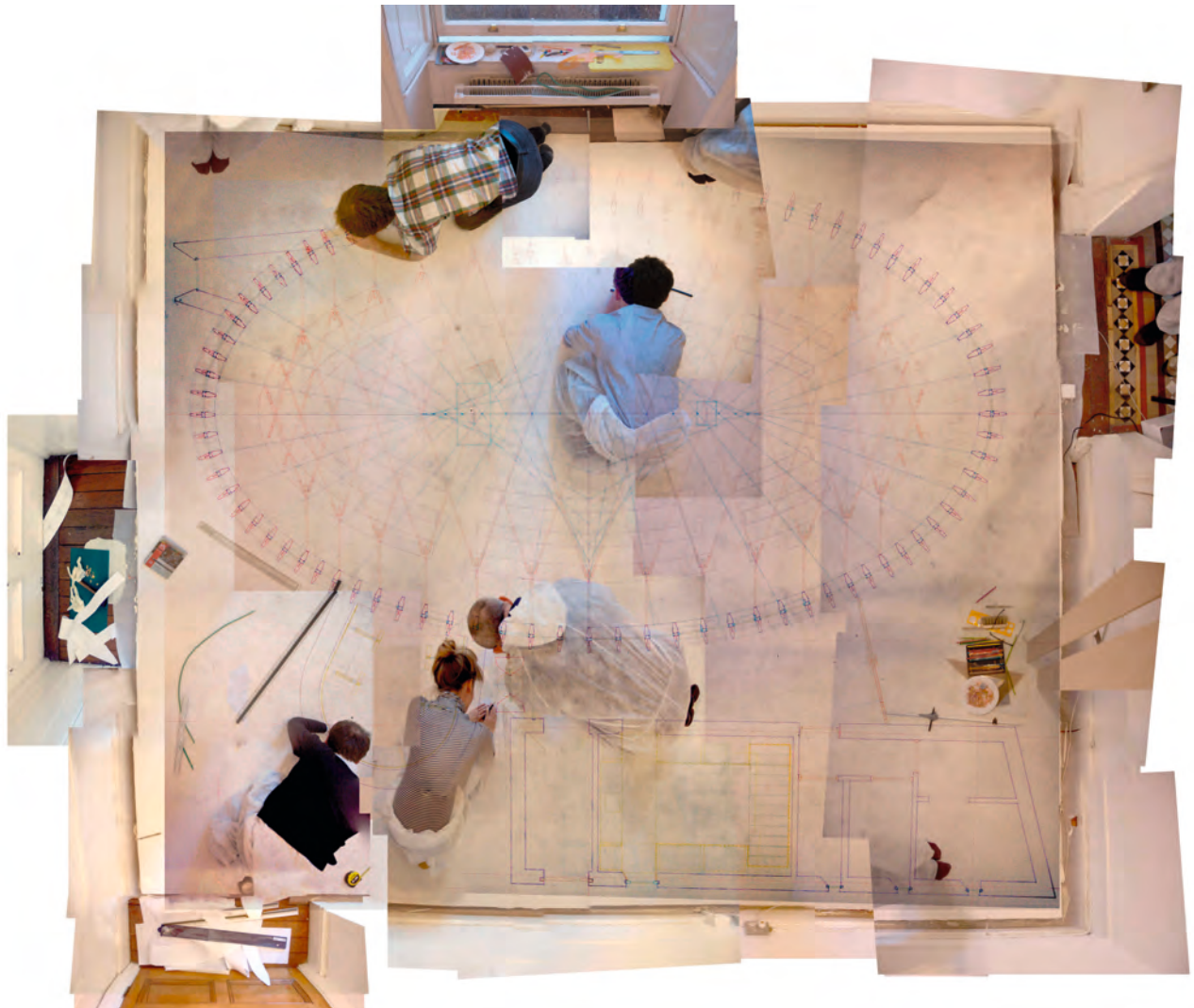
McLaughlin is also to design the Tabernacle for the Blessed Sacrament, to be made in oak and brass, as a further refinement of the scale of the chapel. As one of the rare reflective architects, McLaughlin has responded sensitively to the spiritual challenge of this commission.



9. A thumb print in clay recalls God's moulding of Adam – an indexical trace of creation – and inspired the chapel's sunken floor

10. The architects work on a large-scale plan on plaster, a technique informed by Peter Salter's article on the traditional design process used to create fan vaults (AR January 2011)

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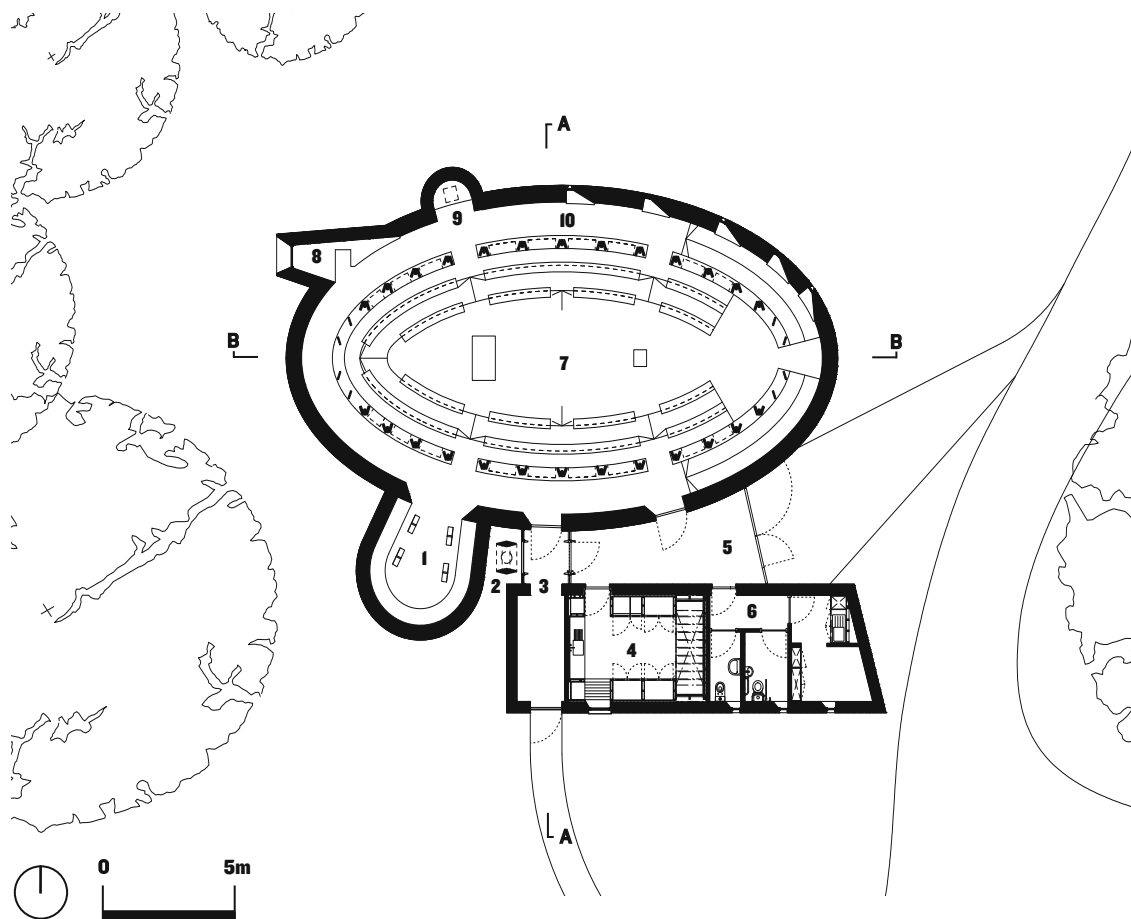


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11. The facade is detailed above the podium with a textured band laid in alternating courses of dressed and split stone
12. McLaughlin's addition sits in an easy dialogue with Street's original college buildings



- 1 sisters' prayer room
- 2 bell tower
- 3 prayer board
- 4 sacristy
- 5 entrance lobby
- 6 WCs
- 7 main chapel
- 8 private prayer space
- 9 blessed sacrament niche
- 10 ambulatory



0 5m

ground floor plan

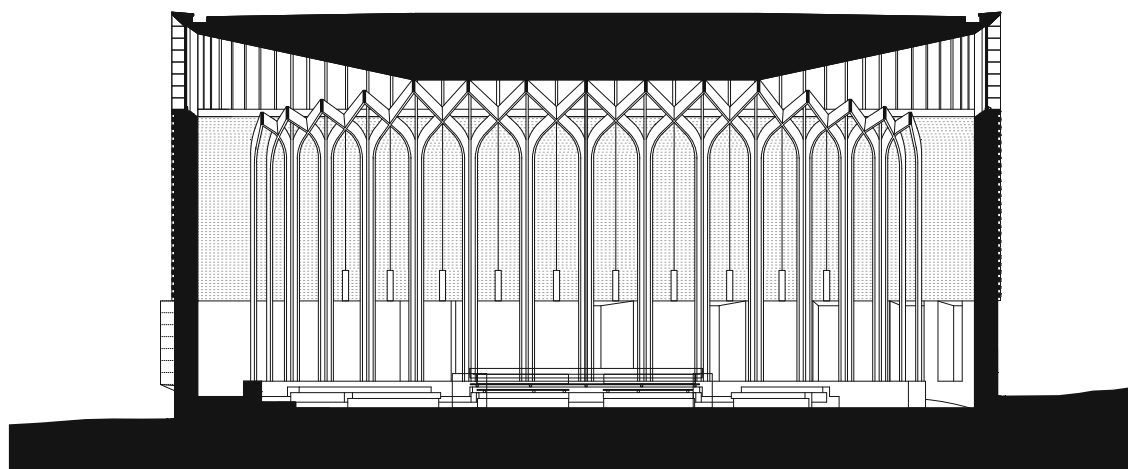




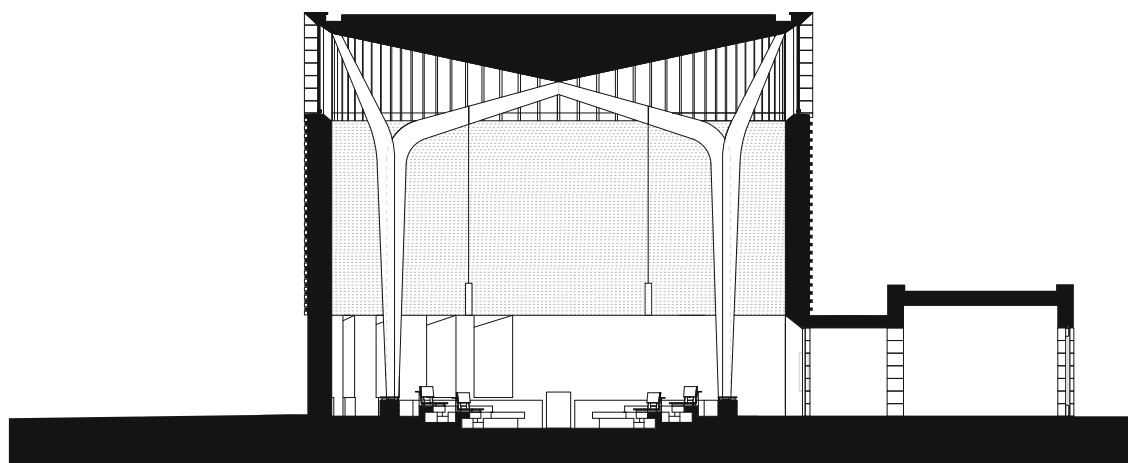


¹⁴ **Ripon Chapel,
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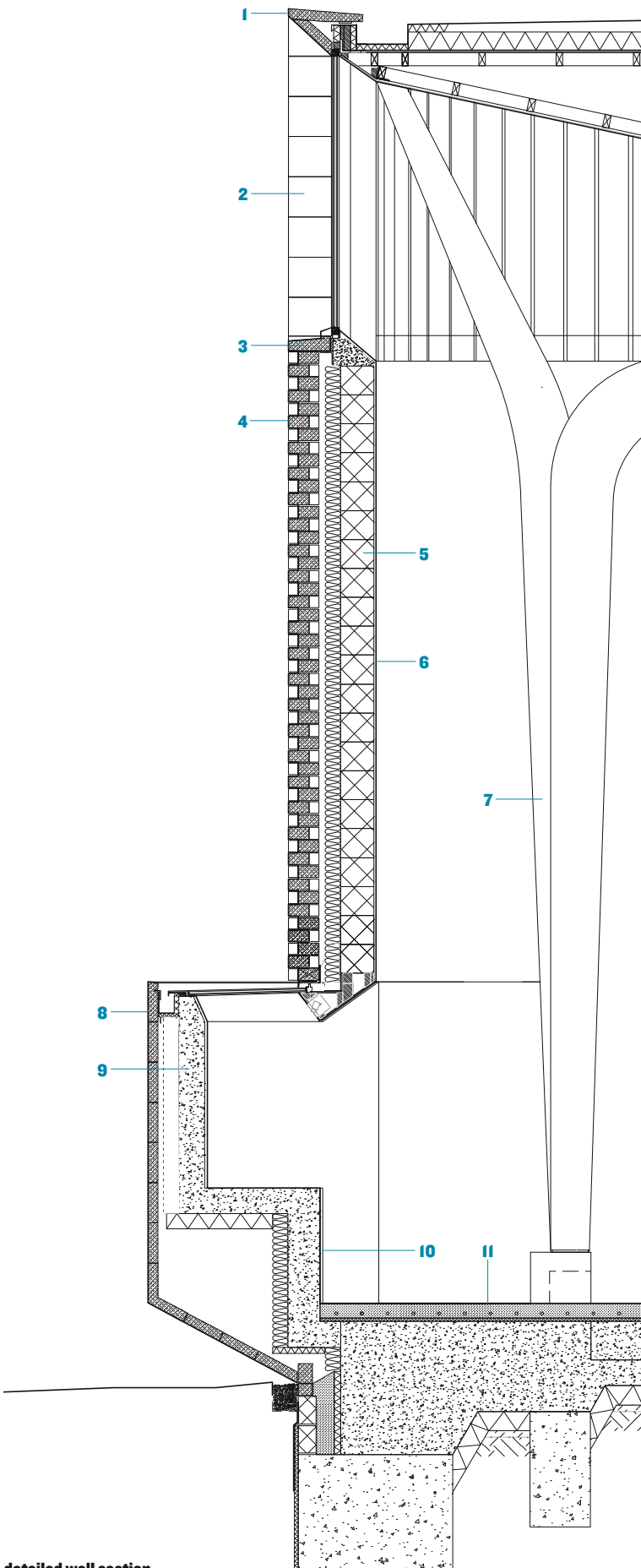
**13. (Previous page)
the frame meets like
interlinked fingers below
the meniscus of the roof
14. Materially, the wooden
columns and ribs recall
the traditional argument
that Gothic architecture
derives from the forest
canopy, echoing the forms
of the surrounding trees
15. A circle of clerestory
glazing creates an ethereal
halo of natural light**



section BB



section AA



detailed wall section

16

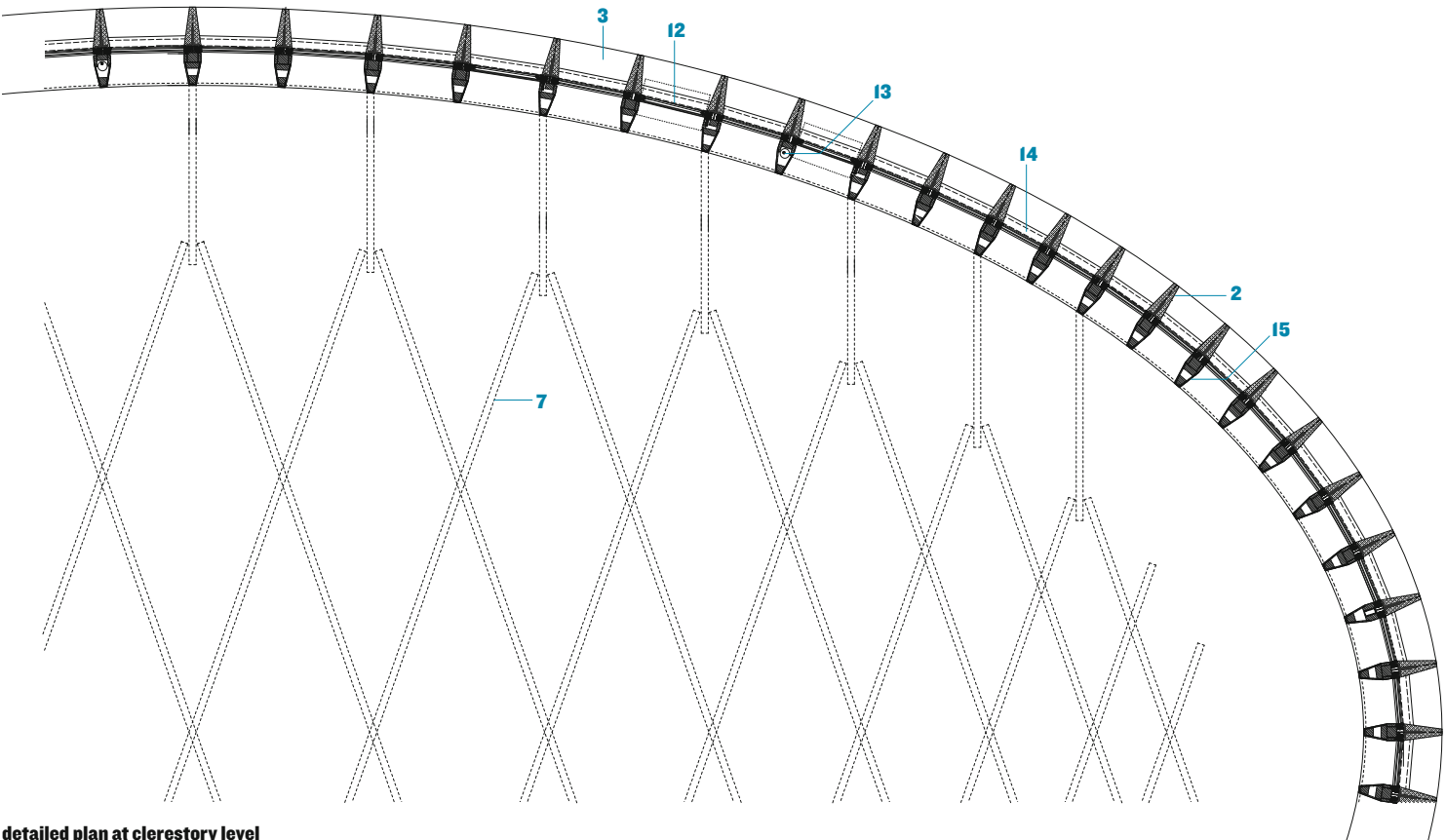


- 1 ashlar stone capping
- 2 ashlar stone fins
- 3 stone sill
- 4 dogtooth stone wall
- 5 reinforced concrete block
- 6 textured lime plaster render
- 7 glulam timber structure
- 8 ashlar cladding
- 9 reinforced concrete wall with lime plaster finish
- 10 fair faced concrete
- 11 power floated concrete floor
- 12 clear frameless glass louvres
- 13 rain water pipe
- 14 clear fixed glazing
- 15 timber fins

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16 & 17. A bay window extrudes through the curved walls, illuminating a human-scaled, contemplative space

Architect
Niall McLaughlin Architects
Structural engineer
Price and Myers
Services engineer
Synergy Consulting Engineers
Stone consultant
Harrison Goldman
Photographs
All photographs by Dennis Gilbert/VIEW except 1, which is courtesy of the architect



detailed plan at clerestory level