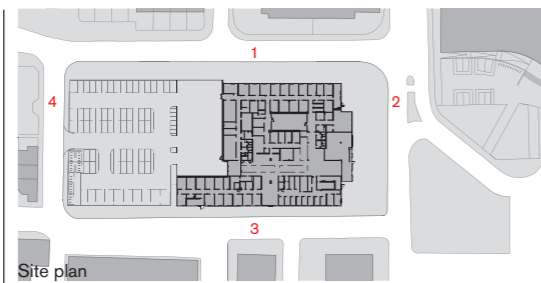


Fit for purpose

Sonnemann Toon injects colour and flexibility into a difficult health centre scheme in Coventry, writes *Felix Mara*. Photography by *David Butler*

Healthcare design, once shunned as dreary by many architects and a field which involves high levels of competence and accountability, is now as cool as in its 1930s idealistic heyday. Lubetkin and Aalto would applaud recent exemplars, including the best Maggie's Centres and Teenage Cancer Trust wards and AHMM's Kentish Town Health Centre. Healthcare is a tonic for architects weary of catering for a Trimalchio's feast of vacuous commissions for image-conscious clients, providing opportunities to use design skills to improve the way these buildings work and feel. But, as observed by Cressida Toon, a partner at Sonnemann Toon Architects, whose City of Coventry Health Centre (CoCHC) opened in December, they have increasingly complex briefs.

'CoCHC was commissioned at a pivotal time for healthcare design,' says Toon. 'There were significant regulatory and guidance updates, including the final version of *Health Building Note 11-01: Facilities for primary and community care services*, which highlighted standardisation and flexibility, and the publication of *Health Technical Memorandum 08-01: Acoustics*, the *Health and the Social Care Act 2008: Code of Practice for health and adult social care on the prevention*



and control of infections and related guidance, and BREEAM Healthcare.'

CoCHC was a tough commission as a large project with a tight budget, comprising GP practices, a walk-in clinic, podiatry and physiotherapy, plus child, family and sexual health services. An internal street with double-height, sky-lit atria channels visitors through the building and improves orientation by displaying first-floor GP accommodation. To provide flexibility, Sonnemann Toon specified post-tensioned slabs and developed modular consultation and treatment rooms. Each upper floor has a single waiting space for various services.

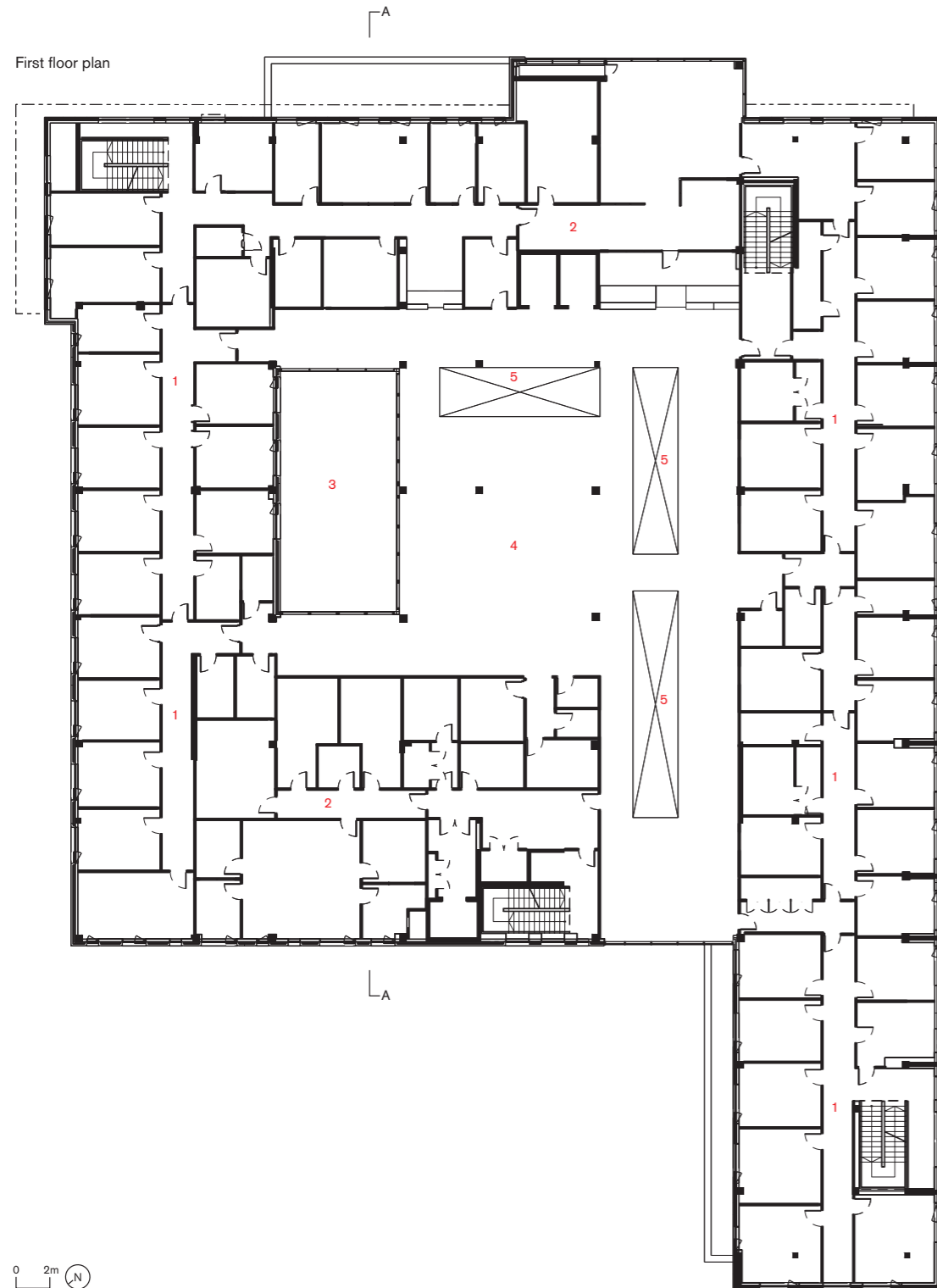
But the main feature was the oscillating floor plates strategy, with slab edges stepping in and out from one floor to another, providing further adaptability and enabling departments to expand and contract, and offering spacious waiting areas alongside >>

1. Howard Street
2. Stoney Stanton Road
3. Byron Street
4. Russel Street



Right MacKay Design Studio's Neil Musson designed a five-storey lighting installation to mark the main entrance





- 1. GP surgery
- 2. Administration
- 3. Courtyard
- 4. Waiting space
- 5. Void

Opposite, from left Waiting area with typically high naturally light level and ceiling; wards are included in the overall colour coordination strategy; a courtyard admits daylight and variously coloured solid ventilators and panels animate strip windows above; Ground floor street with ceramic tiles



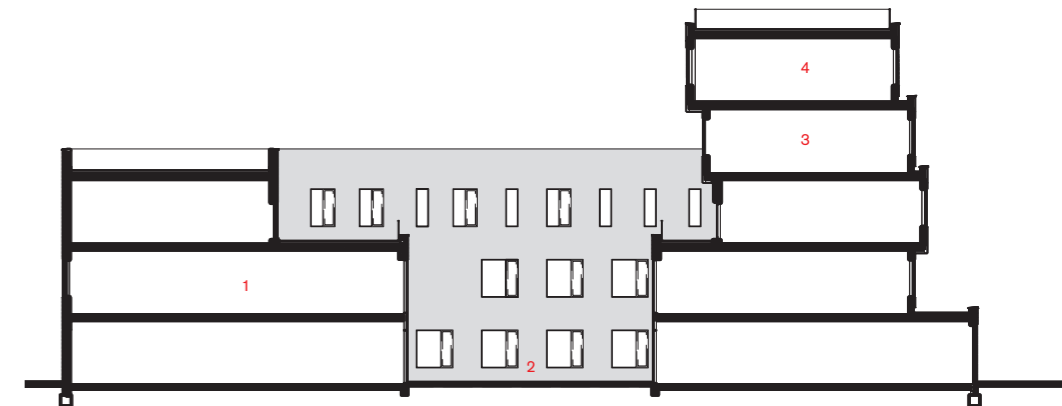
other, more intimate ones. This also addressed the perceived need to break up the facade and reconcile CoCHC's scale with smaller neighbours, using colour to reinforce surface modelling and cast shadows to avoid a monolithic, repetitive impression. Purists might consider this design strategy forced and meretricious, but it certainly won the planners' support. In its way, CoCHC is an image-conscious building and this extends to the use of colour, lighting and graphics. On a practical level, this assists wayfinding. Colours are used to identify floors and department entry points. Working with Frances Tobin Design, Sonnemann Toon, aware that this strategy can look garish, specified charcoal-coloured ceramic tiles, white walls and walnut doors

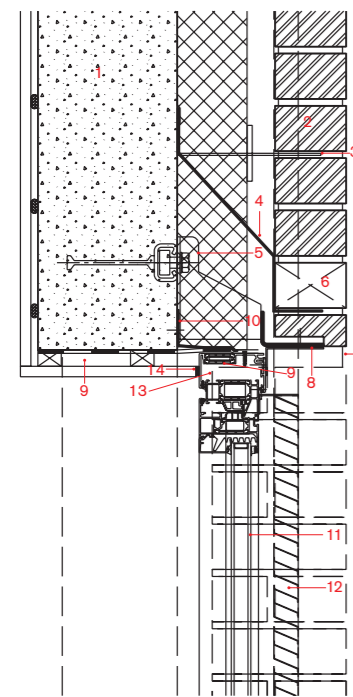
Section A-A

- 1. Administration
- 2. Courtyard
- 3. Sexual health services
- 4. Child and adolescent mental health services

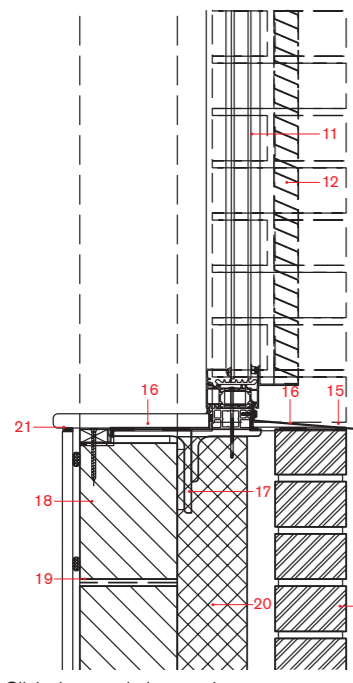


as a subtle backdrop to chromatic highlights. Like the facades, the interiors use colours which relate to Coventry's industrial past by referring to different types of metal. After consulting groups working on each floor, copper was chosen for level two, where sexual health services are located, because it was considered a warm, reassuring colour, suitable for its predominately young patients. Steel was picked for the level four, for its calming effect on patients with mental health problems. A timeline mural provides visual interest on the ground floor and waiting areas are identified by printed vinyl wallpaper, designed by Kelly MacPhee after Coventry University School of Art and Design students were invited to compete for this commission. >>





1. RC downstand
2. Clay facing brick
3. Wall tie
4. Cavity tray
5. Continuous masonry support
6. Weep hole
7. 30mm gap to allow for slab deflection
8. Aluminium profile to cover underside of window support
9. EPDM membrane to be extended to full depth of downstand
10. Window slip fixing
11. Schüco aluminium window
12. Fixed screw spline louvre with bird mesh
13. Expansion profile 10mm below structural opening
14. Fixing lug
15. 2mm aluminium outer sill
16. EPDM membrane applied continuously below windows and spandrel panels frames and sill to waterproof junction

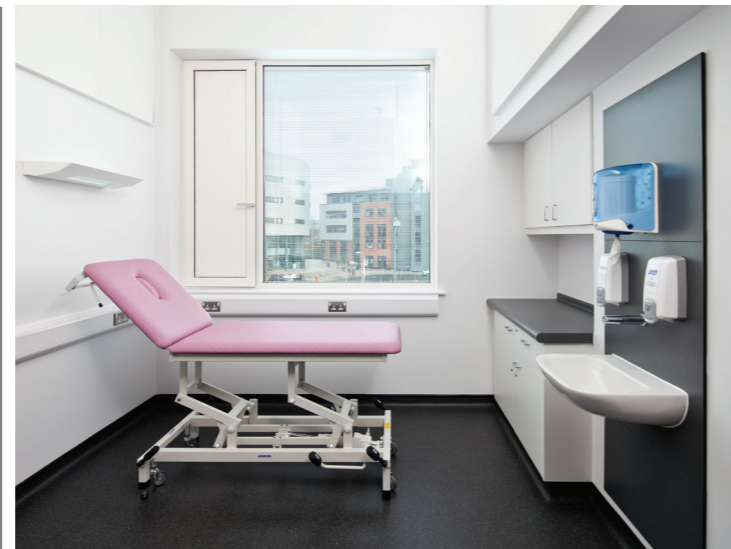


17. Steel support angles
18. Blockwork
19. Bed joint reinforcement
20. Partial fill cavity insulation
21. Underside sill 900mm above FFL

0 50mm

Clinical room window section

Above Clinical rooms have a standard size of 16m² with secure external louvre ventilators and 3m-high ceilings



CoCHC achieved the BREEAM Healthcare 'Excellent' rating required for the Strategic Health Authority's approval of its proposal and was one of the first healthcare projects to target an 'Outstanding' rating. Sonnemann Toon had previously worked with the self-assessment methodology of the NHS Environmental Assessment Tool and relished the challenge of third-party assessment. The success of the environmental strategy rested on good co-ordination and passive low-energy design, with summer passive purge ventilation. A number of conflicts involving infection risks needed resolution. For example, acoustic absorption required to control reverberation from concrete, which was exposed as a thermal regulator, and to avoid institutional suspended ceilings, was applied to walls rather than ceilings, and window blinds are external. The BREEAM process encourages consultation, which seems marginal to an environmental assessment method, and nearly undermined CoCHC's cohesion, for example, in the design of the murals. But, despite the tight budget, Sonnemann Toon retained artistic control and achieved high design and performance standards. ■

Project data	
START ON SITE	March 2010
DATE OF COMPLETION	January 2012
GROSS INTERNAL AREA	10,181m ²
PROCUREMENT	Local Improvement Finance Trust
TOTAL COST	£22.5 million
COST PER SQUARE METRE	£2,210
CLIENT	NHS Coventry
DEVELOPER	Coventry Care Partnership
STRUCTURAL ENGINEER	Mark Brock Consulting Engineers
M&E CONSULTANT	Couch Perry & Wilkes
QUANTITY SURVEYOR	Holbrow Brookes
FACILITIES MANAGEMENT	Integral
BREEAM ASSESSOR	3 Planets
DESIGN AND COLOUR CONSULTANT	Frances Tobin Design
PROJECT MANAGER	Coventry Care Partnership
CDM CO-ORDINATOR	Thomasons
APPROVED BUILDING INSPECTOR	HCD Building Control
MAIN CONTRACTOR	Galliford Try
CAD SOFTWARE USED	MicroStation
ESTIMATED ANNUAL CO ₂ EMISSIONS	17.8kg/m ²
AIRTIGHTNESS AT 50PA	5.73m ³ /h.m ²