



## Case Study 21

### **Barker Foundation Science Centre, Barker College**

Hornsby, NSW

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# Barker Foundation Science Centre, Barker College, Hornsby NSW

Client: Barker College

Architect: Priestleys Architects

Builder: Gledhill Constructions

Bricklayer: J&K Bricklaying

Photographer: Jackie Dean



**“It’s a credit to the bricklaying team that they**

This page, from top:

*The south face displays a more contemporary appearance, dominated by an external staircase.*

*Face brickwork features throughout public areas. The mortar in every third course is deeply raked.*

*Extensive corbelling and expressed quoining are the building’s design signatures, creating an interesting and ever-changing surface texture.*

*Facing page, clockwise from top left:*

*A brick-paved path leads from the Pacific Highway entrance.*

*The corbelled reveals give a rhythmic modeling to the fenestration and shade the deep-set windows.*

*The Centre presents two storeys to a busy intersection. A third level is stepped into the roof, darker roof tiles assisting the regression.*

*The building entrance is located on the south-east corner at the pedestrian axis to the Barker campus.*

# Barker Foundation Science Centre, Barker College

Hornsby, NSW

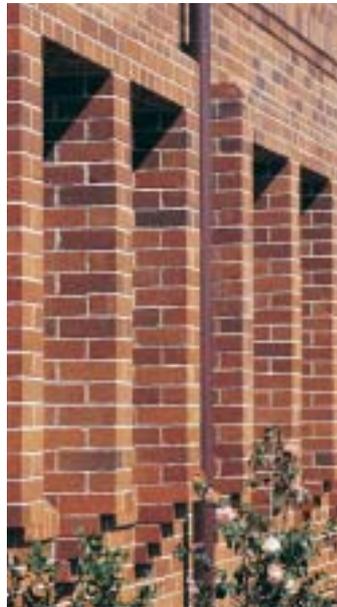
When Barker College moved to its present site in 1896, Hornsby would not have even qualified as an outer suburb of Sydney. Today it is still on the city's bushy northern fringe, albeit surrounded by well-established, prosperous communities.

The new Science Centre is on a busy corner of Pacific Highway. "That was an important aspect in the design of the building, to make it as sound-proof as possible," explains John Delohery of Priestleys Architects. "This led us to brick masonry construction and to try and get as much depth into the facade as we could."

Site constraints didn't allow stepping or breaking up the facade. "This led to one of the features of the design, the articulation of the external brickwork on the facades that face both the busy roads. We did this by corbelling the extensive brick surrounds to the window openings. This not only has acoustic value but it also shades the deeply-set windows."

The corbelling required custom-made lintels and tested the bricklayers' skills. "It's a credit to the bricklaying team that they were able to provide exactly what we were looking for in our design," Delohery compliments.

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In accordance with council requirements and a campus heritage study, the Centre presents to the street as a two storey building. A third level is stepped into the roof.

The medium to dark brown brickwork laid in off-white mortar picks up design aspects of heritage buildings on the campus including expressed quoins and recessed bands at floor level. "This emphasises the brickwork and provides an interesting texture and light/shadow effect," Delohery contends. "By the use of the quoins and corbelled window surrounds you get a rhythmic modeling of fenestration that gives the facade an overall texture and interest."

The Centre uses a reinforced concrete frame with post-tensioned floor slabs to maximise column-free spans. The outer leaf of brickwork is supported on shelf angles whereas the inner leaf – a mixture of bagged and painted clay blocks and face brickwork – is self supporting. Fire-rated clay bricks are used in stair wells.

The Centre "marks the beginning of a new phase in science education at Barker College," according to the headmaster, Dr Roderic Kefford who singled out the architect and builder for praise at the opening of this "outstanding building."