17TH May 2018

ARCHITECT'S DESIGN STATEMENT

RE: New Block L Classroom (GLA) Facilities.
Magdalene Catholic High School
1 Smeaton Grange Road NARELLAN
Lot 51 DP 1077229

Introduction

This project resulted from the school's desire to provide new teaching and learning spaces that reflect current curriculum/ pedagogy and reflect the principles in the Design Quality Principles under Schedule 4 of the SEPP. The recent changes to the schools teaching and learning practices have resulted in less need for existing 'traditional' specialist spaces and a need offer more flexibility in timetabling; the additional learning facilities are not required due to an increase in student or staff numbers.

The original campus was designed by architects at Alleanza Architecture. The new facilities adjoin the existing and manifest themselves as a colourful building which utilises elements that tie back to the existing buildings and relate to the shape of the adjacent oval.

Design Considerations

1. **Context, built form and landscape**
   - The location for the expansion of the school is adjacent to the eastern edge of existing Blocks A1 to A3 in an under-utilised wedge shape portion of land to the west of the sports ground. The bulk of the proposed building form is nestled into the site which slopes to the east. The 21 learning spaces split over two levels still maintain the low-slung skillion roof form of the existing school buildings.
   - The roofs of the existing buildings have influenced the form of the new building to a large degree. The section profile of the proposed roof mimics the mono-pitch skillion roofs of the adjacent Block A buildings. This design approach maintains the visual continuity with Block A1-A3 adjacent and allows for placement of high level clerestory glazing for improved daylight penetration into the broad plan.
   - It was deemed necessary to remove a number of existing trees to enable a direct connection of the new building to the existing school facilities, replacement species have been re-introduced into the landscaping proposal to deliver the same level of amenity for those that were removed. A new landscaped courtyard within the central light shaft offers a more direct connection to the internal classroom environment offering variety in the available learning settings offered by the new building.
   - The approach to landscaping has been an important in grounding the building. Existing trees at the Northern side of the building have been augmented by new species and the introduction of sleeper-style seating along the terraced incline here make for a very inviting shaded external play

area. Large species shade trees along the eastern side of the building provide informal gathering and play spaces for students.

2. **Sustainable, efficient and durable**
   - High level clerestory windows orientated towards the north and east allow natural light to penetrate into the deep plan. The circulation corridors and classrooms to the west and southern sides of the building are lit via highlight windows. The generous lightwell offered via a large void in the centre of the building. The void allows for natural light and ventilation to penetrate to the centre of the floorplate and is of particular benefit to the circulation spaces on the Lower Ground Floor as no natural light source is available from the western side of the building. Students on the Lower Ground Floor can avail of the outdoor learning space created by the courtyard on this level where the landscape architect has cleverly employed perimeter planting to create a discrete learning setting.
   - Brick – a very durable and maintenance free material has been utilised for the external walls up to a 1200mm high datum on the Ground Floor and for the full height of the Lower Ground Floor external walls. This aesthetically pleasing and robust material choice will ensure that the areas that are exposed to the most wear-and-tear will last and not require any maintenance or up-keep long into the future. Painted express joint fibre cement has been used for the upper component of the external walls owing to its high-impact resistance and reputation for weathertightness.
   - Due to the greenfield nature of the subject site there is extensive opportunities for deep-soil planting available to the perimeter of the building which have been taken advantage of, similarly the undeveloped nature of the site means that water sensitive urban design (WSUD) measures can be implemented with ease.
   - The visual permeability of the lightwell also allow for easier orientation within and through the building and operable windows opening to the lightwell allows for naturally ventilated central spaces which would otherwise have limited access to the external environment.
   - The jagged-edge floorplate allows for additional outlook for the classrooms towards the north, full height glazing has been introduced to take advantage of the natural light and the views across the oval.

3. **Accessible and inclusive**
   - When built the new learning facilities will be the most remote from the school's public interface along Smeaton Grange Road where the boundary is fenced, as such security considerations have not had a large impact on the built form; adequate door security will be provided to ensure that unwanted after-hours access is not possible.
   - The close siting adjacent to the existing teaching facilities presented the opportunity to create a covered pedestrian street for student movement and shaded play spaces. The primary means of entry to the building is via the Ground Floor from the pedestrian street/circulation spine; the Ground Floor sits above the Lower Ground Floor the western edge of which is flanked by a retaining wall running the length of the floorplate, a passenger lift is provided to enable equal access for all students. External connections to play spaces are provided via double doors to the south west and eastern elevations.

4. **Health and safety**
   - The building has been designed such that the learning spaces are arranged around the perimeter to maximise natural light and fresh air intake via operable windows. Student circulation is primarily located in the centre of the floorplate and is lit via clerestory windows and a large open-air light shaft which is centrally located in the plan and penetrates both levels of the building. The saw-tooth stepped plan edge to the east also allows for floor to ceiling glazing and assist greatly in providing cross-ventilation to the individual classrooms.

- The new building does not adjoin any vehicle thoroughfares on the school campus, the only means of accessing the building is on foot. To this end a very generous pedestrian 'street' has been created along the eastern interface with the existing classroom blocks A1, A2 & A3, the street is sheltered by means of a large barrel-vaulted translucent roof which creates a bright and airy environment while offering complete protection from the sun and rain. Elsewhere large roof overhangs and a building under-croft on the Lower Ground Floor offer additional sheltered areas for student circulation and play spaces.
- The impact of crime prevention measures and after-hours access occur primarily in the vicinity of the existing buildings which themselves are setback from Smeaton Grange Road and while openness and casual surveillance principles apply to this new building they are not a major concern due to the building's location in the centre of the school campus.
- Student toilets have purposely been located along the covered pedestrian 'street' and adjacent to the main entry doors on the Lower Ground floor to increase visibility. The use of self-contained cubicles complete with wash hand basins ensures that there are no hidden corners and incidences of anti-social behaviour and bullying are mitigated through casual surveillance.

5. Amenity

- The proposed new trees along the eastern façade allows for shaded play spaces as well as shading the building during summer. At the northern edge of the building sleeper-style seating beneath the existing and new trees allow for informal external learning settings and shaded play spaces. The landscaped courtyard in the light-shaft provide a formal outdoor learning setting which is open to above, perimeter hedging provides for an element of screening from the circulation corridors that surround it.
- In addition to the generous perimeter glazing the introduction of a light shaft in the centre of the building floorplate allows for generous natural light and ventilation to the central circulation corridors.
- The building will be equipped with wireless and hard-wired connections back to the school's communications network allowing the use of handheld and wall mounted devices which are an integral part of the day-to-day learning experience in a 21st century learning environment.
- The use of operable walls dividing classrooms and student movement spaces allow the spaces to be quickly and easily adjusted to form multiple configurations suited to the required use.
- Owing to the generous size of the school campus and the proportion of the site that is given to open space the future provision of on-site play space is unlikely to be an issue.
- The new facility is centrally located on the school campus and is of a similar height to the existing education facilities, the proposed building does not adjoin the neighbouring buildings which are broadly commercial industrial units. Similarly, Hartley Street – a source of traffic noise - is approximately 140 metres to the east the new facilities, and Sedgwick street at its closest is 38 metres from the corner of the building.

6. Whole of life, flexible and adaptive

- The internal floor plate has been designed to allow for the re-configuration of spaces through the use of glazed operable walls which divide the individual learning spaces from each other and also all the spaces to open out onto student movement/circulation areas. Structurally the use of columns in-lieu of loadbearing walls offers the most flexibility in the long-term if and when the layout of the spaces need to be adapted.
- The school maintains a high level of community engagement and the opportunities presented by the adaptable room sizes of the new learning spaces through the use of operable walls will make the use of school facilities all the more appealing.

- The new learning spaces will be utilised to teach more specialised subjects such as STEM (science, technology, engineering & math), etc and allow more flexibility for teaching, for example to larger groups through the use of operable walls. The additional facilities will also allow more flexibility with timetabling, and the use of spaces which can now be set up for specific tasks that are available when required as not all spaces within the secondary school are all occupied at any particular time.

7. Aesthetics

- The building façade on the upper level moves away from brick masonry towards more vivid painted Fibre Cement cladding to "soften" and energise the learning environment. The light weight cladding to this upper level of the new GLA facilities not only allows for easier buildability but creates a contrast with the solidity and bulk of the brickwork below and adjacent.
- The external cladding is painted in two tones of blue; the colour blue was selected to tie back to the existing buildings which have blue accent colours to the facias, gutters and columns/metalwork, the two tones of blue on the façade also relate to the dual tones of the selected brickwork.
- The new building has been designed as a modern interpretation of the existing surrounding buildings. The solid brick base of the Lower Ground Floor comprising of two complimentary brick colours draws inspiration from the adjacent Block A buildings which displays two tones of brickwork to the underside of the its windows.
- The integration of the built form and the landscaping is a key design aim as it addresses the playing field and Hartley Road in the middle distance. Tree planting along the eastern façade while providing shading to the building in summer softens the built form and the Native and Exotic gardens on the south and north sides both bookend the new building assisting in integrating it into the inclined embankment along the western edge of the sports field.
- The air conditioning condensers will be located at the Ground Level nestled into the sloping site to the south side of the building, this plant area is screened from the building to the north and east by the brickwork lined retaining wall and addresses the new landscaped native garden with a batten-type screen.
- The form of the building has been largely informed by the location of the building in relation to the existing oval. The building responds to the curved edge of the playing field by stepping forwards in plan as required to maintain a consistent setback. A consequence of the stepped building form is the breaking down of the mass of the long double-storey elevation when viewed from the oval to the east.

Yours faithfully,

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