Boothville Primary School

Design + Access Statement

March 2013

Construction of a new single storey, four classroom teaching block with covered play area, staff room and enlarged car park at Boothville Primary School, to enable the school intake to increase from 420 to 630 places.
Contents

Design + Access Statement

1.0 Introduction 03
2.0 Requirement for Primary Places 04
3.0 Context 07
3.1 The School Site 08
3.2 Site Photographs 09
4.0 Developing the Brief 11
4.1 Existing School Analysis 12
4.2 Expansion Options 13
4.3 Brief Requirements 14
5.0 Design 15
5.1 Layout 16
5.2 Form & Scale 18
5.3 Materiality 20
5.4 Detail Design 21
5.5 Daylight & Ventilation 22
5.6 Play Space 23
6.0 Access 24
1.0 Introduction

Architecture Initiative, on behalf of Northampton Schools Limited Partnership, has been commissioned to develop a proposal for the expansion of Boothville Primary School in Northampton.

Full planning approval is sought for the construction of a new single storey, four classroom teaching block with staff room and enlarged car park at Boothville Primary School, to enable the school intake to increase from 420 to 630 places (2 to 3 form entry). The increase in pupil numbers is forecast to occur steadily over a seven year period to match demand.

It should be noted that the current school intake capacity is 420 pupils. This is based on 60 pupils per year, over 7 year groups. The current number of pupils on roll at the school differs from this school capacity figure.

Summary of Proposal

The application site area is 1667sqm. The proposal involves a single storey stand alone block located to the south of the existing school building, with a gross internal floor area of 434sqm. The existing school building has a gross internal floor area of 1515sqm.

This Design & Access Statement details the proposal as well as how the final design solution was reached.

The document has been arranged into six sections; starting with an explanation of the requirement for additional primary places at Boothville Primary, details of how the brief was developed and an final design solution was reached. The specifics of the proposal are described in the Design section. The final part of this document addresses access.
2.0 Requirement for Primary Places

Decision to Expand: Overview

It should be noted that this application specifically concerns the built accommodation and associated works required to house the additional intake of pupils at the school.

The decision to enlarge the school is covered via a formal process undertaken by Northamptonshire County Council, which included a period of consultation with a final Cabinet Member decision in early 2013.

The proposed expansion is related to the general rise in the population of primary aged pupils living in the area, which is the result of the higher birth rate and inward migration being experienced by the County as a whole and Northampton in particular.

Recent census data demonstrates a 19% increase in the County’s under-fives population. Northamptonshire County Council has a statutory obligation to provide sufficient school places for all pupils living in the area. Current projections forecast that additional capacity is required in the local area and therefore extra places are proposed at Boothville Primary School.

Alternative solutions to the need for additional places considered by Northamptonshire County Council included:

(i) Providing ‘Portakabin’ style accommodation to house the additional intake. - It was concluded that this would not provide a long-term conducive learning environment for children and would separate them from their peers.

(ii) Transporting children to alternative schools outside the town. - It was concluded that there would be a negative impact on the welfare and education of children for them to be spending considerable parts of their day on buses and this does not support the healthy schools agenda.

(iii) Reconfigure the starting ages for children to attend school. - It was concluded that this would not adequate to meet the levels of school place demand and does not ensure that every child in the county has the same opportunities as their peers.

(iv) Increase class sizes. - Legislation precludes this option.

Therefore NCC made the decision that the best solution is to construct additional long-term teaching accommodation on the school site to accommodate the enlarged pupil intake.
Decision to Expand: Analysis by Northamptonshire County Council

Demand for school places

Analysis of the January 2013 surplus capacity for primary school places in Northampton is that there are 445 spare places across all age-groups (mainly at the higher end). This is a surplus of 2.7%, which is well below the recommended working capacity of 5 – 10%, and certainly undermines the Government agenda of providing choice and diversity for parents in the admissions process. The Northampton position is not a surprise given the rising birth rate, new housing and high levels of migration into the county; Northamptonshire County Council continues to make plans for an additional 4,400 pupils in Northampton primary schools by September 2014.

There is a national picture of rising pupil numbers, with Department for Education calculations that the primary school population is set to rise by 18% in the next 8 years, requiring an additional 450,000 new primary school places. As well as the rising birth rate as evidenced by the recent census data, a further indication of the continuing increase in school applications is the number of “In-Year” applications from families moving either within the county or into the county for the first time, but outside of the standard times for school place allocations. The figure for September 2012 was 459 children (primary and secondary) moving into the county for the first time. Indications for the September 2013 intake to reception classes are that numbers will continue to grow; by the end of January 2013, just under 9,000 primary applications had been received, which is approximately 500 more than the same time last year. Last year this figure was supplemented by 960 late applications.

Admission numbers at Boothville Primary

The published admission number at this school has been 60 pupils per year group (a total roll of 420 pupils) since the Northampton schools’ re-organisation was implemented in 2003 / 04. Prior to this it was a Lower School with a three form entry admitting 81 children into Reception each year. In September 2011, the school was required to establish a third Reception class as a result of the appeals process. In September 2012, the school again admitted three forms of entry at the request of the local authority. Postcode analysis of these 90 children’s addresses highlighted that they all resided within 1.432 miles of the school and were not being allocated a place at Boothville from outside the area. It is also noticeable that some new housing is under construction in the immediate area (e.g. Jubilee Mews off Lumbertubs Way) and may generate additional pressures.

The current pupil numbers at the school are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>90</td>
</tr>
<tr>
<td>Year 1</td>
<td>90</td>
</tr>
<tr>
<td>Year 2</td>
<td>60</td>
</tr>
<tr>
<td>Year 3</td>
<td>60</td>
</tr>
<tr>
<td>Year 4</td>
<td>58</td>
</tr>
<tr>
<td>Year 5</td>
<td>60</td>
</tr>
<tr>
<td>Year 6</td>
<td>60</td>
</tr>
</tbody>
</table>

Permanent plans for Boothville

Public Notices were published on 8 November 2012 regarding a permanent increase in capacity to three forms of entry and the final decision to proceed was taken by Cabinet on 15 January 2013. The required extension to the accommodation will be delivered via a contract variation to the Northampton Schools PFI contract. In the meantime, the school is operating within its existing buildings and has had planning granted for the newly installed mobile classrooms for use from February 2013 until building works are completed.
Consultation

This Design & Access Statement has been prepared by Architecture Initiative, who have been appointed by Northampton Schools Limited Partnership to develop a proposal for Boothville Primary School on behalf of Northamptonshire County Council.

Northamptonshire Schools Limited Partnership (NSLP) is a Special Purpose Vehicle (SPV) set up to run the Northampton Schools PFI Scheme. The scheme, which was set up in 2005 following the Review of Education in Northampton includes the operation and maintenance of five secondary schools and thirty-six primary schools in Northampton over a 32 year period.

Boothville Primary is one of the primary schools covered under the PFI scheme.

Consultation has occurred with Northamptonshire County Council, local authority, PFI SPV (NSLP), the School and governors as well as NCC planning department and other relevant consultees to the planning process.

Refer to the Consultation section of the Planning Statement for a summary of the consultation that has taken place.
3.0 Context

Boothville Primary School is currently a 2FE mixed primary school for children of 4-11yrs with a current intake of 420 pupils and 51 nursery and reception pupils. It is located in the north east of Northampton in the Boothville Ward, the site is located in a residential area.

The rears of neighbouring two storey semi-detached and terraced houses surround the school site to the north, south and west. The main entrance of the school is located to the east of the site, accessed from Booth Lane.

The site does not lie within any areas of particular note, as shown in the map identifying zones of land use surrounding the school site. For full details of zones of land use surrounding the school site and other relevant planning policies please refer to the accompanying Planning Statement.

The existing school is mainly visible from the rear of the neighbouring houses located on Churchill Avenue and Keswick Drive. Care has been taken to ensure that the new development is sympathetic to views from these nearby residences.

The main entrance is located at the east of the site, where pedestrian and vehicular access occurs. There is an on-site car park for staff and disabled visitors in front of the school building, within the fenced ‘air-lock’. The refuse and recycling bins are also located in this area.
3.1 The School Site

The school buildings are located at the centre of the 2.32ha site with hard play areas located to the north and south of the buildings and with soft play space occupying the south west of the school grounds.

From the main entrance at the front of the school access through the ‘air-lock’ is either into the building or via access gates to enter the site around the top or bottom of the building. The site is fenced and it contains a number of trees (none of which have TPOs).

As can be seen from the photographs on the following pages, the majority of the existing school buildings are all single storey and mainly of a similar architectural language; monolithic rectilinear forms of brown tile cladding with blue spandrel panels, or buff/brown brickwork. The modular nursery/reception building differs and is of brown render with a pitched roof.
3.2 Site Photographs

On Site

Key plan showing views
3.2 Site Photographs

Off Site
4.0 Developing the Brief

The overall brief for the project, set by Northamptonshire County Council, was to develop a proposal for housing the additional intake required at Boothville Primary School to suit the specific constraints of the site and educational requirements of the school. To maintain external play space and deliver an extemporary, cost-effective and sustainable construction solution, whilst minimising the impact on the running of the school during construction.

The specific brief for the expansion which forms this proposal, was then developed through site analysis and consultation and dialogue with NCC, NSLP, Boothville Primary School and other consultants, listed in the Planning Statement.

Northamptonshire County Council gave specific request that the accommodation provided should adhere to the Department for Education’s Building Bulletins. The bulletins set out the types of spaces that school of a particular size should have and the areas of those spaces.

Northamptonshire County Council is also acutely aware of the potential traffic and car parking impacts that increasing school places can incur and in developing the brief Northamptonshire County Council has engaged with the highways authority and the school to insure where possible impacts are limited by additional facilities provided on the school site.

Setting the Brief

In order to keep the impact on the day-to-day running of the school during construction as small as possible it was decided from the outset that all additional accommodation required be provided in a new stand-alone building and any works to the existing school building are minimised. This is also the best way to ensure that the expansion of the school can occur in the most cost effective manner (the budget for expansion is finite).

With this starting point, analysis of the existing spaces within the school was undertaken in order to identify the additional accommodation required to enlarge the school from 2 to 3 forms of entry. This was completed in conjunction with the school in order to ensure that the best educational solution was reached.
4.1 Existing School Analysis

The main circulation route in the main school building extends out towards the north and east from the centrally located hall. The classrooms are currently orientated around the west and south perimeters of the hall and circulation route with views out onto the landscape.

A main consideration in a 3FE school is that the three classrooms in each year group are kept as a group, so with this in mind 14 groups of classrooms are required in the enlarged 3FE school (as well as other support and shared accommodation).

Northamptonshire County Council use area and space standards as set out in the 2003 document Building Bulletin 99: Briefing Framework for Primary School Projects as a guide for primary school provisions in the County. It was against these space standards that analysis of the existing building was undertaken in order to determine the additional spaces required.

The conclusion of this analysis was that four additional classrooms and associated accommodation (such as WC’s and stores) and a new staff room space, would be required for the school to enlarge to a 3FE intake of 630 pupils.
4.2 Expansion Options

The new building could potentially be located in a number of locations. However creating a successful circulation link back to the new building will provide the best possible solution of the proposed location as the link needs to run off the existing central circulation routes.

The next step was to analyse the most desired locations on the site for locating the new stand-alone block. This would ideally be as near to the existing school building as possible, whilst minimising the impact on sports and play space. Through discussion with NCC and the school three possible locations were indicated for the new classroom development.

The following principles and practises were employed in the analysis of location options for the additional accommodation:

(i) The location that would have the least impact on the private amenity of surrounding neighbours.
(ii) The location best suited due to site constraints e.g. protection of green spaces for sports, construction access, protection of the environment, etc.
(iii) The location best suited to support the circulation of pupils within their year groups and key stages.

The diagram below illustrates the potential locations that were identified for siting the building. Two of these options (shown in blue) were deemed less appropriate;

Option B is situated on an area of soft play area that is currently occupied by play equipment. It is also too far away from the existing school building and would require pupils to travel an unnecessary distance from the main school building. Option C takes up a large amount of hard play area and would require the relocation of sports provision.

Option A is the most favourable site for the new classroom block as it sits comfortably within the existing site and is most considerate to the current building arrangement. Option A is located on an existing area of soft landscaping; and would require the removal of trees, none of which have TPO’s. There was also a disused building in this location, which is to be demolished (note this is covered in a separate planning application).
4.3 **Brief Requirements**

In order for Boothville Primary School to become a 3FE school, four new classrooms and associated support spaces are required within the new teaching block. The diagrams below display the rooms necessary for this expansion, and how they have been arranged to generate the new building.

**Ingredients**

- Classrooms / Staff Room
- Support Spaces (W.C’s, Stores etc)
- Plant Room & Group Area

**Combination**

This diagram shows the arrangement of the spaces required by the school over one floor of the new build block.

**Proposed Plan**

This drawing represents how the diagram has been translated into a material form. The plan form relates directly to the existing buildings which it is located between; it is compact so as to minimise its footprint reducing its impact on the school site and allows for ease of access from the existing buildings to the proposed. The group space is open to circulation to enable maximum use of space in the building.
The basis of the concept revolves around the rationalisation of spaces, as previously discussed in section 4.3.

From this point the building layout was developed through an iterative process of consultation, design and redesign. The opportunity for the school to gain brand new teaching spaces gave the opportunity for the proposal to be designed to meet the aspirations of a modern teaching environment: to maximise natural lighting and natural ventilation; to reduce solar gains and energy use; and to create inspirational teaching and learning environments.
Layout

The new teaching block is arranged as a line of three classrooms over one floor with shared support spaces in the core of the building. The design consolidates the relationship of the classrooms with the shared amenities core into a rational layout that is efficient both in terms of general use and construction. Most of the classrooms have windows on two external walls to maximise natural daylight. Internally each space meets the requirements of a modern teaching environment as set out in the DfE ‘Building Bulletin’ guidance.

The classrooms all have external doors to allow direct access outdoors. The service core consists of boys and girls WCs, a disabled WC (also for use of staff), a curriculum and cleaner’s store, a small plant room and IT hub room. A portion of the circulation space doubles up to provide a group area/break out space.

New Building Accommodation Schedule

<table>
<thead>
<tr>
<th>Rooms</th>
<th>Area per room (m²)</th>
<th>Number</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms</td>
<td>58</td>
<td>4</td>
<td>232</td>
</tr>
<tr>
<td>Staff Room</td>
<td>80</td>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td><strong>Support Spaces</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil WCs</td>
<td>9</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Disabled WCs</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Staff WCs</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Cleaner’s Store</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Store</td>
<td>8</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Class Store</td>
<td>1.5</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Group Area</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Hub/Server</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Plant Room</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Circulation</td>
<td>45</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total GIA</strong></td>
<td></td>
<td></td>
<td>438</td>
</tr>
</tbody>
</table>
5.1 Layout

External Works

The external works involve the existing car park being extended, requiring the removal of an existing tree. Two trees are to be removed adjacent to the new building. These will be replaced by two new trees. New cycle racks will be added.
5.2 Form & Scale

Form of the Proposal

The form of the proposed new teaching block is designed to respond to and was directly inspired by the existing school building.

The scale and rhythm of the existing elevations have been emulated in the proposed teaching block. However, contemporary details have been added so that the teaching block is read as a modern addition to the school site.

The overall result is one that sits lightly within the landscape while providing a valuable and sensitive addition to the existing built fabric.
5.2 Form & Scale

Scale within the Existing Context

The proposal is designed to sit comfortably in relation to its surroundings and the existing school.

The single storey building is of an appropriate bulk and mass and is situated ideally away from the school site boundary and within appropriate proximity to the existing school building to allow easy access to the new classrooms whilst not detrimenting daylighting or views from the classrooms in the main building.

The overall affect of the new build block on the existing context is minimal. The proposal sits lightly within its surroundings and compliments the landscape through carefully considered detailing and contemporary design.
5.3 **Materiality**

The materiality of the new teaching block has been carefully considered to respond to the existing school building, creating a link between the two buildings and helping to consolidate the existing materials and therefore defining the image of the school within its context.

The existing school buildings between which the proposal is situated consist of a buff/brown brickwork and brown render.

The proposed new building relates to and directly responds to this design and as such is to be constructed from a buff brick to match the existing brickwork of the adjacent school building.

Facing brickwork was chosen as it was felt these would best fit in with the context as well as being durable and secure. The brick colour will be chosen to compliment the existing building while becoming a feature elevation and complementary to the surrounding landscape.

The flat roof of the proposal will be finished in a single ply membrane or asphalt. With a thin profiled, powder coated aluminium coping.

The double glazed windows and external doors are aluminium framed, powdered coated grey to provide an attractive and durable finish.

Example of proposed facing brickwork (colour to match existing brickwork)
5.4 Detail Design

The suspended ceiling is set back from the internal wall to let more daylight penetrate deeper into the classrooms. The one brick return helps to control daylighting inside the classrooms whilst also reducing cleaning and maintenance.

Windows at eye level allow for surveillance of the external play areas.

Windows are raised from ground level and together with the one brick return help to reduce cleaning and maintenance.

Floor to ceiling windows allow for full height views out onto the surrounding landscape and natural light to reach deeper into the classroom. South facing windows utilise solar control glazing. Mid-level slide open windows provide easy access for natural ventilation. The windows open within the recessed opening.

The internal skirting visually aligns with the external window finish and also reduces maintenance.

Single storey height to match existing school building.

The suspended ceiling is set back from the internal wall to let more daylight penetrate deeper into the classrooms.
5.5 **Daylight & Ventilation**

**Natural Daylighting**

The principles of natural lighting and ventilation are realised throughout the design of the classroom spaces.

The classrooms have full height windows with the suspended ceilings set back to allow natural light to penetrate into the rear of the spaces during the winter.

In summer months, solar control is used to prevent over heating within the classrooms. The proposal utilises solar control glass, which is both cost effective and easier to maintain than alternate forms of solar shading such as canopies or bries soleil. All windows have internal blinds for user control of light levels.

**Natural Ventilation**

The classrooms are naturally cross ventilated where possible, via mid-level opening windows situated on each of the adjacent external walls but are designed to be shallow enough for single sided ventilation to occur.

The support spaces are also all naturally ventilated (with the obvious exception to the required extract to all WC’s).
The external spaces at Boothville Primary are a great asset to the school and neighbouring community. Large grass playing fields occupy the south west of the site and hard sports courts to the north.

It is paramount that the construction of the new teaching accommodation not impact negativity on the play and sports provisions of the school. This has been addressed in the design layout of the new block to minimise its footprint.

The new build teaching block is positioned on an area of soft landscaping, the proposal includes a new all weather hard surfaced court located to the north of the existing building. Thus providing and overall increase and improvement to the current play areas. The additional hard play space created also ensures that play space requirements are met.

Sport England have a statutory obligation to protect sports pitches, therefore building on a pitch will be opposed by Sport England unless the net overall sports pitch usable area on-site be maintained and improved.

The proposal does not affect the grass pitches to the south or the hard play areas located to the north of the site.
6.0 Access

Entering the Site
All access arrangements are as existing condition.

Pedestrian / bicycle access
The site can be accessed by pedestrians from the main access off Booth Lane, located to the east of the site.

Pick up/Drop off
As is the current arrangement, during the peak times when parents gather to drop off or pick up their children at the beginning or end of each academic day, the entrance gates will be open and monitored by members of staff. Pupils and parents will be able to congregate on the hard play area.

Teaching hours
During teaching hours, all access gates to the secure part of the site are secured. Visitors can still access the car park area. Any visitors must enter the site via the secure entrance/reception area, with access into the school through an electromagnetically locked door.

Non-teaching hours
Subject to out of hours uses or holiday use the main entrance gates will be locked closed. All visitors will have to wait off-site for the facilities manager to allow them access.

Parking
For this section the Northamptonshire County Council’s Supplementary Planning Guidance (March 2003) was consulted with regards to parking standards.

Cycling provision
NCC Planning guidance asks for 5 cycle parking spaces to be provided for every class at a primary school. Therefore in the case of Boothville Primary School this adds up to 105 cycle parking spaces, 5 for each of the 21 classes. NCC planners advised that additional spaces can be added incrementally, as and when they are required by the school. At its current 2 form entry size (420 pupils) very few pupils currently cycle to school. It is hoped that as they expand to 3 form entry, pupils will be encouraged to cycle to school. There is currently 1 cycle space already provided on site, therefore it is proposed that 10 additional spaces will be provided to meet current requirements, with the potential for more to be added in the future.

Car parking
Ten additional spaces are proposed in the staff car park increasing provision to 43 spaces, to allow for the increase in staff came from the client brief from NCC. It is hoped that staff will be encouraged to car share, use public transport, cycle or walk to work.

Disabled Spaces / Mobility Standard Spaces
There are 5 disabled/mobility standards parking spaces to the entrance of the school provided on site to meet the standards set out in NCC’s Parking: Supplementary Planning Guidance (March 2003).
Delivery access / parking
All delivery vehicles to the school or school kitchen enter the school site off Booth Lane.

Maintenance

Refuse collection
The bin store is located adjacent to the Main site entrance (including for recycling bins). Refuse collection will occur via the Booth Lane site entrance. There is no change in location of refuse collection: The refuse vehicles drive into the school site and leave in forward gear.

Service/maintenance access
The site is to be accessed via the Booth Lane entrance, managed by the facilities manager.

Emergency Access
To occur via the Booth Lane site entrance, with vehicular access gates into the secure part of the school site.

Inclusive Access
The new building has been designed to provide an inclusive environment, in accordance with current legislation that provides for the need of all users. Guidance referred to:

- The Building Regulations of England & Wales (most specifically Part M)
- Building Bulletin 91: Access for Disabled People to School Buildings (published by DCFS)
- Building Bulletin 94: Inclusive School Design (published by DCFS)

The building is designed to be fully accessible to all members of society, the design of the building is inclusive for children who may be dependent upon wheelchairs or have varying degrees of visual or aural impairment. All visitors access the building via the same entrance; no segregation occurs. The new building is fully accessible a disabled WC provided.

Please refer to the Transport Statement, School Travel Plan and access drawing for further details.