



## DESIGN STATEMENT

AUTISTIC UNIT- FORMER CHURCH LAWTON SCHOOL

Prepared on behalf of  
CHESHIRE EAST BOROUGH COUNCIL  
CHILDREN AND FAMILIES

July 2012

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## I.01 The Project

The proposal is for a specialist school for children with Autism Spectrum Condition (ASC) between the ages 4 to 19.

Children and Families, Special Educational Needs and Disability (SEND) Review identified a gap in educational provision for children Autism Spectrum Condition, whose needs are not currently being met in mainstream schools and are currently being placed in autism-specific provision out of borough.

The development of this school will enable pupils to remain within Cheshire East where “no child or young person is left behind and is educated as close to their local community as is possible”

The school will accommodate 45 pupils in year 1 with the view to increase the intake to 60 pupils by year three.

This document produced by Pozzoni on behalf of Cheshire East Council, investigates various locations for building on the site, with regard to the existing site constraints and key relationships between the proposed building functions and the external space.

## I.02 Project Vision

The vision is to provide a responsive, locally based services which make sense to children , young people and their families that addresses their needs earlier and to be a place where all pupils achieve their full potential in a learning environment where they feel safe, happy, accepted and included.

## 2.01 Schedule of Accommodation

The following schedule lists the accommodation required for a school accommodating the numbers of pupils described above. The schedule has been compiled through reference to BB102.

### Learning Spaces

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Primary Classrooms	65	4	260	BB102 recommendation
02	Secondary Classrooms	65	5	325	BB102 recommendation
03	Sixth Form Classroom	65	1	65	BB102 recommendation
04	Unisex wc - primary	12	2	24	BB102 recommends 12-16
05	Classroom Store	5	10	50	Estimated size
06	Male wc - secondary	18	2	36	BB102 recommends 18-30
07	Female wc - secondary	18	2	36	BB102 recommends 18-30
08	Nappy changing	12	1	inc	Include within Disabled wc
09	Shower - primary	16	1	16	Estimated size
10	Shower - secondary	16	1	16	Estimated size
11	Cloakrooms (pegs)	2	10	20	BB102 recommendation
12	Science lab (within secondary class base)	65	1	0	BB102 recommendation
13	Art facilities	65	0	0	Within class bases.
14	Light room	12+4	1	16 }	BB102 recommends 12-24
15	Sensory room/ swinging equipment	35	1	35 } comb.	Estimated size
16	Small therapy/ group room / break out	5	10	inc	Within class base
17	Primary Entrance Lobby	10	1	10	Estimated size
18	Secondary Entrance Lobby	10	1	10	Estimated size
19	Linked reception	10	1	10	BB102 recommendation
20	Waiting area –visitors	4	1	4	Estimated size
21	Learning Resource Space (Library)	15	1	15	BB102 recommends 15-20
22	Post 16 Base/ Common Room	20	1	20	BB102 recommends 40-80
23	Storage	70	Table 29	70	Estimated size
24	Laundry Room	6	1	6	BB102 recommends 6-8m

### Catering facilities (2 staff)

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Kitchen	50	1	50	BB102 recommendation
02	Servery	10	1	10	BB102 recommendation
03	Cold storage inc freezer	6	2	12	BB102 recommendation
04	Changing area inc wc	4	2	8	BB102 recommendation
05	Office	6	1	6	BB102 recommendation

### Dining

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Dining area separate space to hall	60	1	60	BB102 recommends 80-135
02	Primary dining – family type area	20	1	20	Estimated size

### School Office spaces

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Head's office	15	1	15	BB102 recommends 15-18
02	Secretary's office	20	1	20	Estimated size
03	Larger meeting room	25	1	25	BB102 recommendation (inc screen)
04	Staff Room	40	1	40	BB102 recommends 40-60
05	Medical room	5	1	5	BB102 recommendation
06	Caretaker's room	10	1	}	Included within Plant space
07	Cleaner's store	2	1	2 } comb.	BB102 recommendation
08	Staff WC /Change Male	16	1	16 }	BB102 recommends 16-24
09	Staff WC /Change Female	16	1	16 } comb.	BB102 recommends 16-24
10	Staff WC / Change / Disabled / shower	6	1	6	Part M requirement

### Autism Team Base

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Office – hot desk for 6 people	15	1	15	BB102 recommends min. 15 for visiting professionals office.
02	Resource room – public access like a small library	20	1	20	Based on BB102 recommendations for a library.



Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Hall – PE/ drama/ dance (60 people)	140	1	140	BB102 recommends 140-180 (Badminton)

#### Outside space

Room No.	Room Name	Size m <sup>2</sup>	No. req.		Purpose / Notes
01	Secure outside space – each classroom has an exit	tbc			
02	Primary – external space	tbc			
03	Secondary – external space	tbc			
04	High perimeter fence	tbc			
05	Allotment	tbc			
06	Drop off and picking up	tbc			
07	Parking	tbc			
08	Delivery area	tbc			

#### New Build Option

	Total Net Area	1530	m <sup>2</sup>		
	Circulation	500			75:100 net to gross ratio (excluding Internal walls and plant)
	Plant	30			Estimated (Inc Caretaker)
	Internal walls	100			5% of net
	Total Gross Area	2160	m <sup>2</sup>		

#### Refurbishment Option

	Total Net Area	1530	m <sup>2</sup>		
	Circulation	650			70:100 net to gross ratio (excluding Internal walls and plant)
	Plant	30			Estimated
	Internal walls	100			5% of net
	Total Gross Area	2310	m <sup>2</sup>		
	Existing Building Gross	1024			
	Extension required	1286			

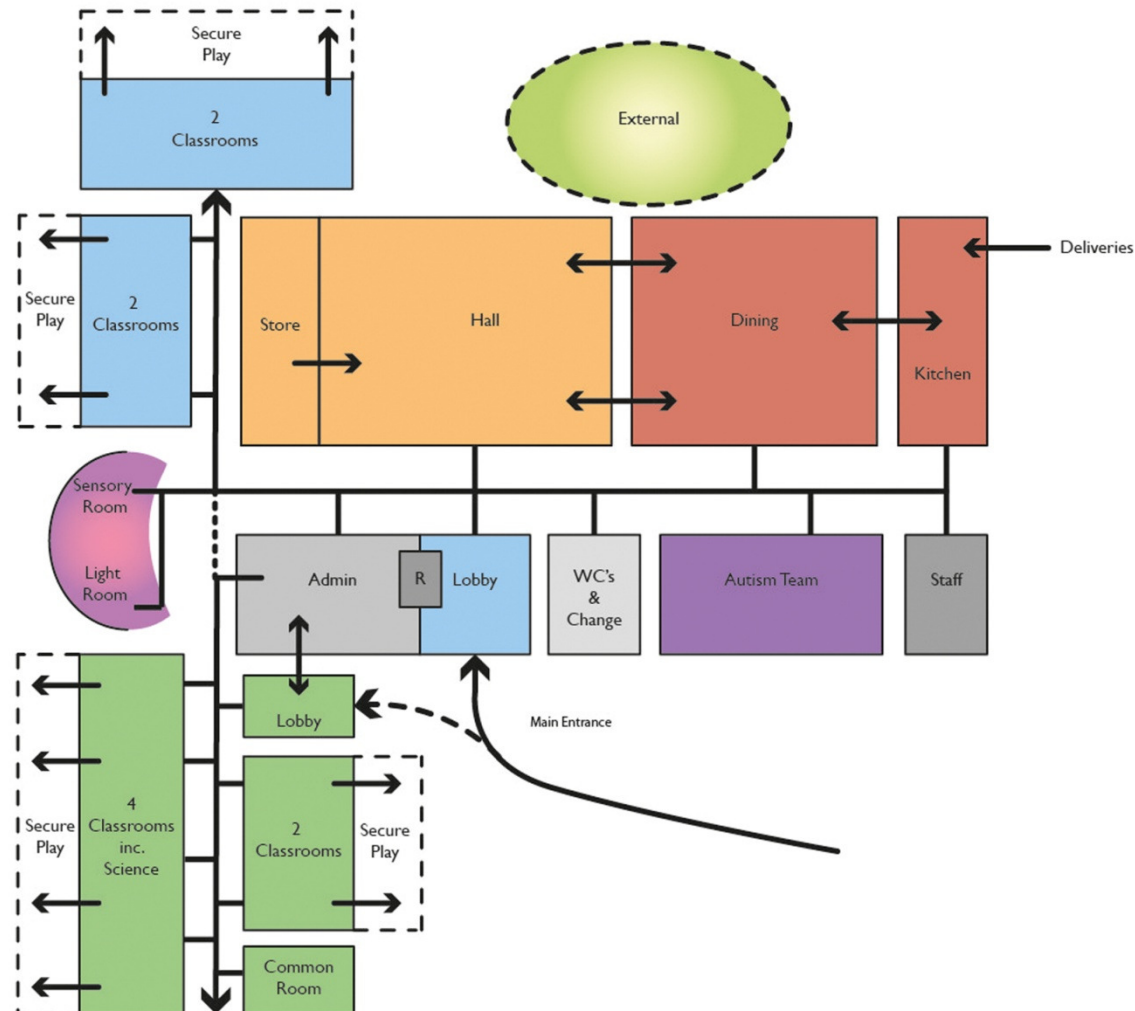
Rooms not included;

- Life skills
- Splash pool
- Splash change female
- Splash change male
- Splash change staff
- Parent room
- Music room
- Staff change male / wc
- Staff change female / wc
- Male changing/ wc for Hall use
- Female changing/ wc for Hall use

In order to meet the needs of the number of children required, (maximum 60 after three years) the floor plan will require an increase in area from that of the existing building currently on the site.

## 2.02 Relationship Diagram

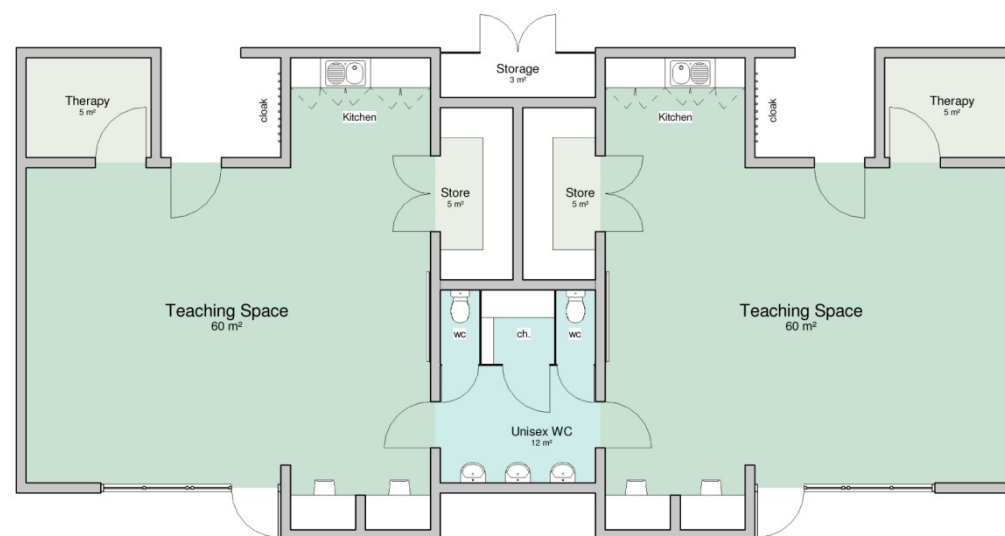
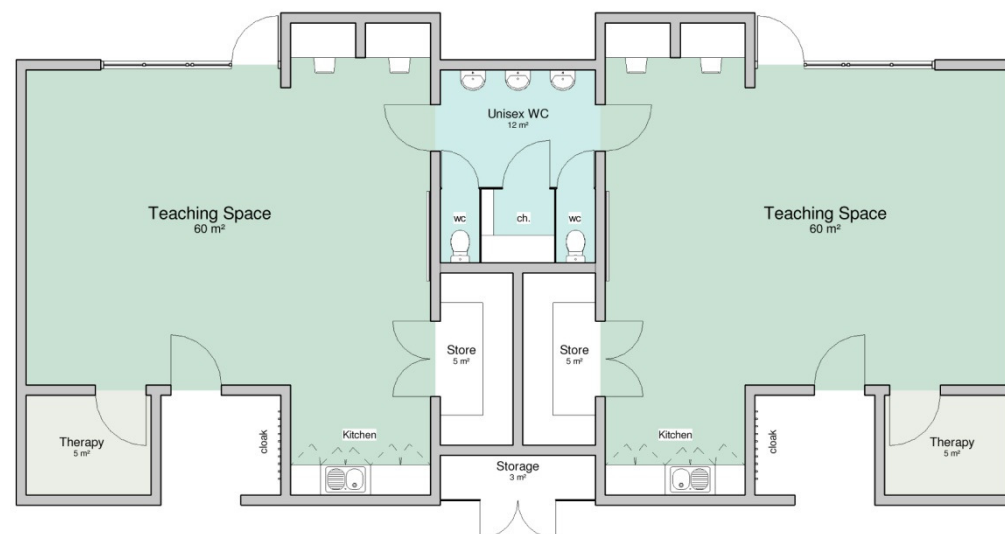
The relationships between the spaces within the school is key to the success of the building. The simple diagram below demonstrates in a simplified format the ideal arrangement for the accommodation to encourage relationships between areas and provide separation between the different spaces. These are illustrated below;



## 2.03 Typical Classroom Layout

Facilities linked with the main teaching space are required for children with special needs. The diagram shown one possible layout for a typical classroom which includes a main teaching space and smaller individual learning spaces with a kitchen area, toilets and storage. The classroom would be suitable for approximately 8 children and 2 teachers.

This classroom layout follows the recommendations of BB102 for dimensions and facilities linked to a learning area.



## 2.04 Precedent Images

The concept is for a new building which takes on the form of a collection of buildings domestic in size, sensitively set in the existing grounds.



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## 2.05 Conclusion of Brief

The proposed new school must meet the vision of Cheshire East – to be a place where all pupils achieve their full potential in a learning environment where they feel safe, happy, accepted and included. The school will utilise and promote ASC- specific approaches, with a focus on developing the pupils social interaction and communication skills.

For the school to meet the brief, the specific needs of children with ASC must be fully considered and their requirements must inform the design of the building. During the development of the brief, we have referred to BB 102 for recommended sizes of rooms and facilities for children with Autism.

A successful scheme therefore must follow as closely as possible, the Councils aspiration for the school, the recommendations of BB102 and the requirements of the Autism team.



### 3.01 Site Location

The site is located in a quiet residential area at the end of Cherry Tree Avenue, Church Lawton, Stoke on Trent. The site comprises of an existing school building, hard play areas, parking and grassed areas within a rural location.

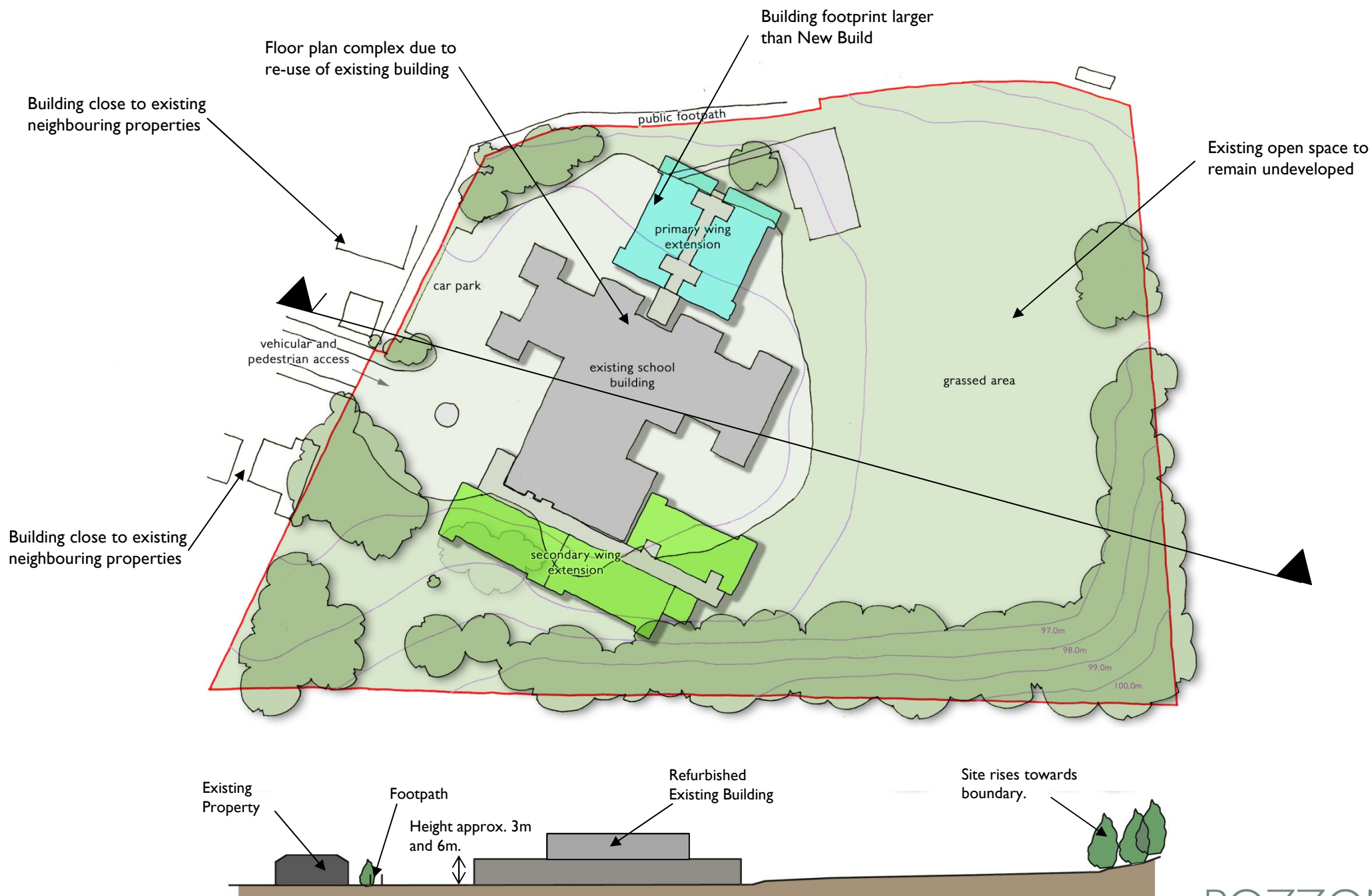


### 3.02 Site Constraints





## 4.01 Option I Existing Building with New Build Extension, Single Storey





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## Option I: Advantages and Disadvantages

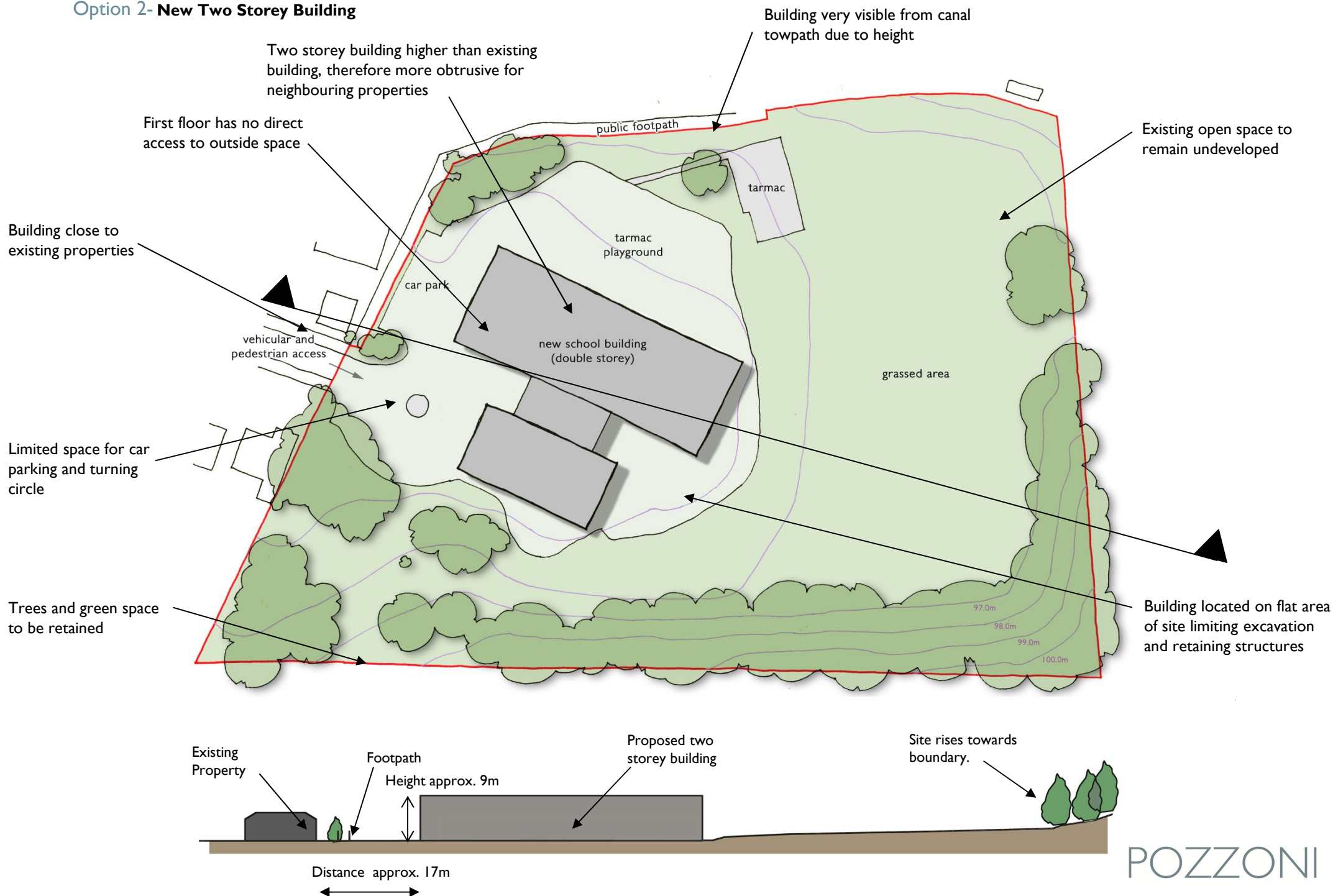
### Advantages;

- Minimal Impact on open space.

### Disadvantages;

- Extensive upgrading to existing building.
- Constraints imposed by existing layout prevents ideal relationships between spaces being achieved.
- Operational Difficulties- Kitchens currently to front of building.
- The lack of parking and limited access for delivery vehicles will not be resolved and will continue to be an issue within the local community.
- A design which is unlikely to have any architectural merit and will struggle to be fit for purpose.
- The refurbishment and extension of the existing building would be more costly than a New Build school.

## Option 2- New Two Storey Building



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## Option 2: Advantages and Disadvantages

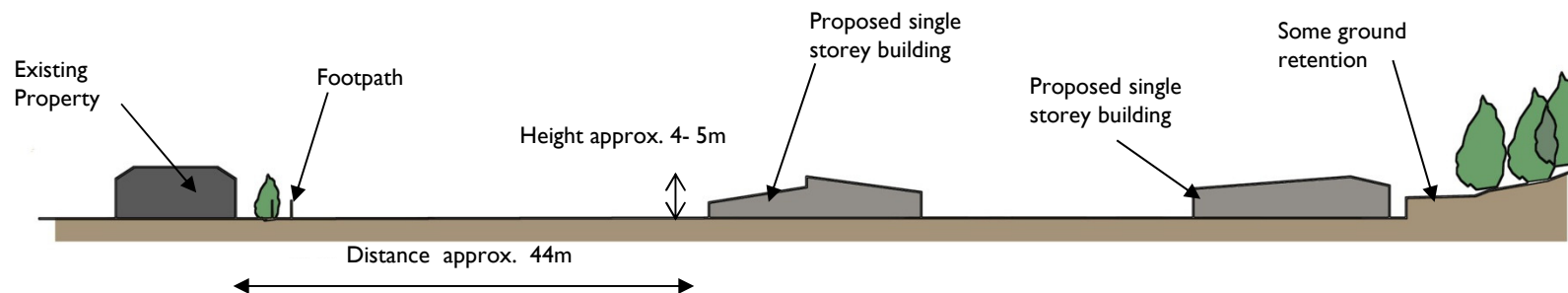
### Advantages;

- Minimal Impact on open space.
- Original Footprint is maintained.
- Avoids impact on Green Belt.

### Disadvantages;

- Extensive upgrading to existing building.
- Constraints imposed by existing layout prevents ideal relationships between spaces being achieved.
- The classrooms to the first floor would have no access to outside space.
- Due to the sensory difficulties of the children, acoustics and vibration would have to be addressed if classrooms above other learning spaces.
- Two storey building is more difficult for Autistic children to understand. The brief calls for a simple building due to the learning difficulties of the students.
- The building would be out of scale with the neighbouring residential development.
- A real compromise on the ideal layout. This option offers no advantages to the pupils.

Option 3- New Single Storey Building



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### Option 3: Advantages and Disadvantages

#### Advantages;

- Functionally and Operationally strong.
- The spaces relate well to each other and the outside space reflecting the relationship diagram. This optimises the learning environment for the students and facilitates efficient management strategies.
- Deliveries in ideal location
- Sufficient space for parking and manoeuvring to the front of the building. Drop off and pick up is a busy time in Autistic Schools as many students arrive in taxis.
- Buildings set away from the existing properties.
- Single storey buildings limits impact and is of appropriate scale with the surrounding residential area.

#### Disadvantages;

- Some impact on existing open space.



4.04 Option 4- New Single Storey Building



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## Option 4: Advantages and Disadvantages

### Advantages;

- No Impact on Open Space.
- Functionally and Operationally strong. This scheme retains the original design concepts and brief.
- The spaces relate well to each other.
- Sufficient space for parking and manoeuvring to the front of the building.
- Single storey buildings limits impact and is of appropriate scale with the surrounding residential area.

### Disadvantages;

- Limited aspect and access to open space from Primary Classrooms.
- Service area close to existing property.
- Removal of trees and green space to the front of the building.
- Some retaining walls will be required due to the levels.
- More separation between Primary and Secondary spaces would be ideal.

4.05 Option 5- New Single Storey Building





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## Option 5: Advantages and Disadvantages

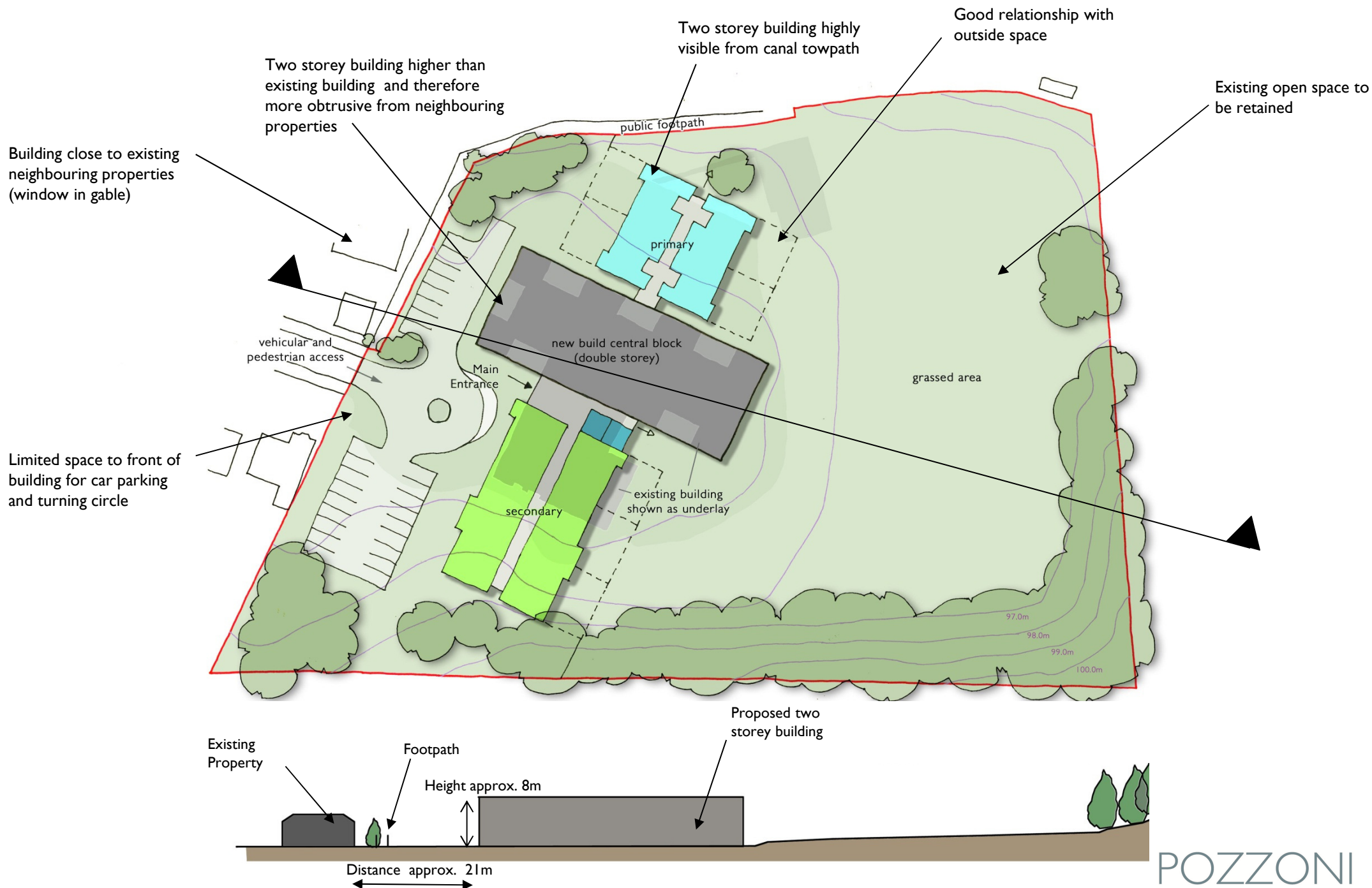
### Advantages;

- No Impact on Open Space.
- Functionally and Operationally strong. This scheme retains the original design concepts and brief.
- The spaces relate well to each other.
- Sufficient space for parking and manoeuvring to the front of the building.
- Single storey buildings limits impact and is of appropriate scale with the surrounding residential area.

### Disadvantages;

- Limited aspect and access to open space from Primary Classrooms.
- Some retaining walls will be required due to the levels.
- More separation between Primary and Secondary spaces would be ideal.

## 4.06 Option 6- New Two Storey Central Block with Single Storey Wings.



## Option 6: Advantages and Disadvantages

### Advantages;

- No Impact on Open Space.
- Good separation between Primary and Secondary Spaces.

### Disadvantages;

- The building would be out of scale with the neighbouring residential development.
- The two storey element would be highly visible from the canal tow path.
- Limited parking and turning to the front of the building which may cause operational difficulties.
- The classrooms to the first floor would have no access to outside space.
- Due to the sensory difficulties of the children, acoustics and vibration would have to be addressed if classrooms above other learning spaces.
- Access to offices required on minute by minute basis so these should not be on a different floor than the classrooms.
- Two storey building is more difficult to understand. The brief calls for a simple building due to the learning difficulties of the students.
- Building close to existing properties.

## 4.07 Option 7- New Single Storey Building



## Option 7: Advantages and Disadvantages

### Advantages;

- No impact on open space
- Functionally and operationally strong.
- The spaces relate well to each other and the outside space reflecting the relationship diagram. This optimises the learning environment for the students and facilitates efficient management strategies.
- Deliveries in ideal location
- Sufficient space for parking and manoeuvring to the front of the building.
- Single storey buildings limits impact and is of appropriate scale with the surrounding residential area.
- Good aspect from both Primary and Secondary classrooms.
- Good access to the outdoor space from the Primary Classrooms.
- Areas of public interest- Hall and Sensory Spaces to the front of the building creating architectural features.

### Disadvantages;

- Building close to the existing properties.
- Limited parking and turning.
- More separation between Primary and Secondary spaces would be ideal.

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## 5.01 Conclusion

In conclusion, the building must be of a scale suitable for the residential area in which it will be located, it must meet the operational and functional requirements of a school for children with Autism Spectrum Condition yet its layout and orientation must be sensitive to the site constraints.

It is the special needs of the children and the way in which the children learn most effectively that dictates the space required and the arrangement of the functions.

The plan which most effectively meets the needs of the children and is functionally and operationally efficient is Option 3.