

CREATING AN INCLUSIVE LEARNING ENVIRONMENT : FOR AUTISTIC CHILDREN

THESIS

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Architecture degree

By

SASHWANTH SARAVANAN (40102006)



**DEPARTMENT OF ARCHITECTURE
SCHOOL OF BUILDING AND
ENVIRONMENT**

SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**

Accredited with Grade "A" by NAAC

**JEPPIAAR NAGAR, RAJIV GANDHI SALAI,
CHENNAI - 600 119**

MAY - 2024

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)

Accredited with "A++" grade by NAAC

Jeppiaar Nagar, Rajiv Gandhi Salai,

Chennai - 600 119

www.sathyabama.ac.in

DEPARTMENT OF ARCHITECTURE

BONAFIDE CERTIFICATE

This is to certify that this Thesis Report is the bonafide work of **Sashwanth S (40102006)** who carried out the thesis entitled "**Creating an inclusive learning environment for autistic children**" under our supervision from January 2024 to May 2024.

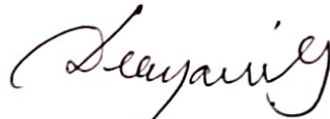

Internal Guide

Ar. DEEPALAKSHMI



External Guide

Ar. KARTHICK NACHIAPPAN



Dean and

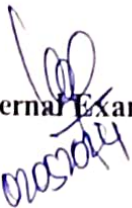
Head of the Department

Dr. DEVYANI GANGOPADHYAY

Submitted for Viva voce Examination held on 02.05.2024

Internal Examiner

External Examiner





DECLARATION

I, **Sashwanth S** hereby declare that the Thesis Report entitled “**School for autistic children**” done by me under the guidance of **Ar Sarath Chandra Kanth** (Internal Guide) and **Ar Karthick Nachiappan** (External Guide) at Sathyabama Institute of Science and Technology is submitted in partial fulfillment of the requirements for the award of Bachelor of Design Degree.

DATE:

PLACE: Chennai

SIGNATURE OF THE CANDIDATE

ACKNOWLEDGEMENT

I am pleased to acknowledge my sincere thanks to Board of Management of **Sathyabama** for their kind encouragement in doing this thesis and for completing it successfully. I am grateful to them.

I convey my thanks to **Dr. Devyani Gangopadhyay**, Dean and Head of the Department, **Ar. Sarath Chandra Kanth**, Design Chair of School of Building and Environment, Department of Architecture for providing me necessary support and details at the right time during the progressive reviews.

I would like to express my sincere and deep sense of gratitude to my Project Internal Guide **Ar. Sarath Chandra Kanth** and External Guide **Ar. Karthick Nachiappan** for their guidance, suggestions and constant encouragement which paved the way for the successful completion of my thesis work.

I wish to express my thanks to all Teaching and Non-teaching staffmembers of the **Department of Architecture** who were helpful in many ways for the completion of the thesis.

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ABSTRACT

This project aims to design and establish a specialized school catering to the unique needs of autistic children. Autistic individuals often face challenges in mainstream educational settings due to the lack of tailored support and understanding. Therefore, this initiative focuses on creating an inclusive environment where autistic children can thrive academically, socially, and emotionally.

The project moves along the guidelines created with the help of various case studies and research papers which first help identify the usual traits of autistic children, which moves forward to identifying special requirements to amalgamate with those traits and finally leads to the application of the requirements in one particular space that is used for various activities ranging from learning to play zones to teaching all with the scope of keeping autistic children at a steady state to have the ability to gain knowledge at ease .

Various aspects ranging from using light as a form of creating direction in the space to the use of transparent surfaces to create a space that seems timeless yet create a state of sensory isolation that helps the child better interact with the space before entering it.

Furthermore, the school will prioritize the training and professional development of teachers and staff to ensure they have the necessary knowledge and skills to support autistic students effectively. Collaboration with families, therapists, and community organizations will also be integral to providing comprehensive support and promoting a collaborative approach to education. This along with creating a space that is best suited with keeping in mind the behavioural traits of autistic children can help create the best experience for these children to learn and grow out of their insecurities and establish a clear mindspace for them to be more capable of intellectual yet motor based activities for their future endeavours.

By establishing a school dedicated to serving autistic children, this project seeks to empower individuals on the autism spectrum, promote acceptance, and create a model for inclusive education that can be replicated globally.

1. INTRODUCTION

1.1 AIM :

The aim of establishing a school for autistic children is to provide a supportive and inclusive learning environment where each student can thrive academically, socially, and emotionally.

1.2 OBJECTIVE :

- To Address individual needs of autistic children's characteristic traits
- To create a sensory friendly environment
- To Promote social skill development
- To empower independence and life skills

1.3 SCOPE :

- Development of a curriculum for autistic children based on physical environment
- Teacher and peer training to help support autistic children and adults and create an environment that makes it easier for autistic people to live in the society.
- To establish partnerships with organisations to become more aware and support the community of autistic pupils to make the society a better space for them
- Parent and family involvement at an earlier stage to allow them to handle autistic pupils at times of emotional distress by encouraging workshops and awareness programs amongst the society

1.4 LIMITATIONS :

- Choosing the right site and built space for making a more appropriate physical environment for autistic children.

1.5 METHODOLOGY :

- Observation of research papers to first understand the characteristic features of autistic children and how it is said to handle the interiors for them
- Identifying literature case studies to best understand how people have already designed for the niche group

- Inferences from Architects and Designers on how best to mould the thinking process while designing for autistic children.
- Define concept, mood and materials used in the space from the research done to start identifying the aspects to include in the final spaces
- Deliver an appropriate space with all aspects considered that is best suitable for autistic pupils

1.6 ABOUT RESEARCH PAPERS:

- **RESEARCH PAPER 1** - The use of various colors in the space helps engage the minds of the students and the solid shapes create a sense of uniformity in the minds of the children as children often tend to correlate their visuals to their thinking pattern.
Link - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1350917/>
- **RESEACH PAPER 2** – Design across the spectrum
Link -https://www.utas.edu.au/__data/assets/pdf_file/0006/930246/UTANPlayspaces
- **RESEARCH PAPER 3** - Journal of Autism and development disorders
Link - <https://link.springer.com/article/10.1007/s10803-022-05768-9>

1.7 ABOUT AUTISM SPECTRUM DISORDER:

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental condition characterized by persistent challenges in social interaction, communication, and behavior. It is referred to as a spectrum disorder because it encompasses a wide range of symptoms, abilities, and levels of impairment that can vary greatly from person to person

2. CREATING AN INCLUSIVE LEARNING ENVIRONMENT: A SCHOOL FOR AUTISTIC CHILDREN

the term "autism" with reference to the school may refer to the principles and considerations used to create environments that are supportive and accommodating for individuals on the autism spectrum. Designing spaces with autism in mind involves understanding the sensory sensitivities, communication styles, and behavioral needs of autistic individuals, and incorporating design elements that promote comfort, safety, and functionality.

2.1 PROJECT OF LEO KANNER, SCHOOL FOR AUTISTIC CHILDREN

The name Leo Kanner came as a tribute to the first ever human being to diagnose autism and the challenges faced by him to come through the first ever psychological issue that was governed by a detailed study of children with unusual behavior. Kanner was perhaps best known for his description of "early infantile autism" in 1943 as a distinct clinical syndrome. On the basis of his observation of 11 children with similar behavior, Kanner described a common profile whereby the children did not relate "in the ordinary way" to people or situations. Instead, Kanner described a child whose "behavior is governed by an anxiously obsessive desire for the maintenance of sameness that nobody but the child himself may disrupt on rare occasions." Although he was to repudiate the term (and the theory behind it) by the 1970s, Kanner also coined the phrase "refrigerator mother" to describe the supposed emotional frigidity of parents who he thought caused, or at least contributed to, their children's autistic behavior.

2.2 UNDERSTANDING THE TRAITS OF AUTISTIC CHILDREN :

Autistic children exhibit a wide range of traits and behaviors that can vary greatly from one individual to another. These traits typically manifest across multiple domains, including social interaction, communication, behavior, and sensory processing

2.2.1 Basic characteristic traits seen in autistic children:

- **Social Challenges:** Difficulty with social interaction is a hallmark trait of autism. Autistic children may struggle with understanding social cues, interpreting facial expressions and body language, and initiating or maintaining conversations. They may prefer solitary activities and have difficulty forming and maintaining friendships.
- **Communication Difficulties:** Many autistic children experience challenges with communication. This can include delayed language development, limited use of speech or gestures, difficulty understanding figurative language or abstract concepts, and repetitive or echolalic speech (repeating words or phrases).
- **Repetitive Behaviors:** Repetitive behaviors and routines are common in autistic children. These may include repetitive movements (such as hand-flapping or rocking), insistence on sameness or rituals, and intense interests in specific topics or objects. These behaviors often serve as a way to self-regulate or cope with sensory input.
- **Sensory Sensitivities:** Autistic children may have heightened or diminished sensitivity to sensory stimuli. They may be hypersensitive to certain sounds, textures, lights, or smells, leading to sensory overload or discomfort. Conversely, they may seek out sensory stimulation or exhibit unusual sensory-seeking behaviors.
- **Difficulty with Transitions:** Changes in routine or transitions between activities can be challenging for autistic children. They may become upset or anxious in response to unexpected changes and may require support and preparation to navigate transitions successfully.
- **Narrow Interests:** Autistic children often develop intense, narrow interests in specific topics or subjects. These interests may be highly focused and may dominate their thoughts and conversations. While these interests can be a source of expertise and enjoyment, they may also interfere with social interactions and flexibility.
- **Nonverbal Communication Differences:** Some autistic children may have difficulty with nonverbal communication, such as maintaining eye contact, understanding social gestures, or using facial expressions appropriately. They may also struggle to interpret the nonverbal cues of others, leading to misunderstandings in social interactions.
- **Difficulty with Empathy and Theory of Mind:** Autistic children may have difficulty understanding the perspectives and emotions of others, which can impact their ability to empathize and engage in reciprocal social interactions. This challenges their ability to understand social nuances and may lead to difficulties in forming meaningful relationships.

- **Intellectual and Cognitive Variability:** Autistic children demonstrate a wide range of intellectual abilities, from intellectual disability to exceptional talent or giftedness. While some may excel in certain academic areas, others may struggle with learning difficulties or challenges in executive functioning skills such as organization, planning, and problem-solving.
- **Strengths and Talents:** Despite the challenges associated with autism, many autistic children possess unique strengths and talents. These may include exceptional memory, attention to detail, creativity, and expertise in specialized areas of interest.

2.3 USER ANALYSIS :

Analysis of the traits and behaviors of the users who will come in relationship with the space

- **Teacher/ counsellor/ guide/ admin staff:**

The teachers are one of the most important users of the space thus there are considerations to be made for their ease when in relation with the space such as gridded openings for easier vision for monitoring, cluster of the calm hubs and the guide rooms for easier interaction and communication between the teachers.

Age group: 26 - 40 Years

Activities in the space:

- teaching
- administration
- counselling
- monitoring
- transition guide

- **Autistic children:**

The school is being designed majorly for autistic children thus it is crucial to create a space that is best suitable for them and their activities. creating a sense of schedule in the space is a great way of allowing them to circulate in the space without confusion and thus being more comfortable in the space

Age group: 2 - 6 Years

Activities in the space:

- Learning
- game play
- manipulative activities
- reading activities
- creative activities
- transition

- **Kindergarten children:**

Although the school is meant for autistic children, study in 1008 in Cambridge university shows that allowing autistic children to mingle with normal children gives scope for mutual benefit since the autistic children understand the way of doing certain activities by observing the other kids and the normal children gather a sense of empathy towards the autism thus making them more helpful in their future

Age group: 2 - 6 Years

Activities in the space:

- Learning
- game play
- manipulative activities
- reading activities
- creative activities
- transition

- **Parents/ visitors:**

The parents or visitors comes into the space to have a discussion on queries or interaction between their wards during class or waiting during the transition period before class ends and thus is crucial to make sure the parents have easy access to their kid at any time of the day in case of emergencies

Age group: 20 – 60 Years

Activities in the space:

- enquiry
- waiting
- space tours
- ward interaction

- **Support staff:**

The cleaners of the space, first aid experts, maintenance and kid's attenders are also a large users of the space and thus it is important to have a space allocated for their materials and a space for their comfort within the building

Age group: 20 – 60 Years

Activities in the space:

- cleaning
- attending to kids needs
- food serving
- maintenance
- restroom guide

2.4 APPLICATION OF RESEARCH IN INTERIORS

- **ZONING THE SPACES** - zone the space in such a manner that the space is distinct and in order to the consecutive activities so as to avoid confusion and create a schedule for the children to follow
- **VISUAL SCREENING** - create visual barriers to distinguish the spaces but also to cover unnecessary objects to avoid distractions
- **VISUAL CLOCKS** - create an illustration that is a circle in the space which has a mark of what activity is to be done at that space, the circle acts as the time in a clock thus placing the pattern at the right space to depict the right time of the day
- **TRANSITION SPACES** - create seating spaces and interactive play games in transition spaces to encourage children to interact but also create a better mindset for change of environment in the next space by moving away from the traffic if movement
- **SPACES INSIDE SPACES** - create a refugee space that can be visually seen but not physically accessed thus creating a trailer into the space that the child is going to step into, can be done using couple of steps in transition spaces, connecting a space into different senses of a child can be used to help identify or create awareness about the next space, like keeping the visuals open but with no sound(glass doors) or music or noise open but no visual(jali walls) all these tend to create a sense of connectivity into the space before entering it but also not overloading all the senses
- **ACTIVE ENGAGEMENT**- most children with autism tend to lack motor skills or neglect physical activities, this can be achieved by deliberately creating physical and motor skill oriented movements in transition spaces thus making it casual for them to engage in physical activities, but this should be done with proper visual signage to avoid confusion of how to interact with the space
- **SENSORY DIVERSITY** - this is to use sensory aspects to create diversity in spaces such as using tactile panels or scented plants in various spaces or using different kinds of color palette in different spaces
- **INDUCE SOCIAL INTERACTION** - Induce social interaction - creating interactive props in spaces can help make sure children interact, parallel play systems makes sure children look at each other while doing activities and induce small games with patterns in transition spaces which induce thinking process and looking at informative props in the spaces can help nurture the thinking of children

3. LITERATURE CASE STUDIES

3.1 ELEMENTARY & MIDDLE SCHOOL - FENG XIAN QU, CHINA:

ARCHITECTS - Wuyang Architecture

AREA - 17960 m²

YEAR - 2023



Fig 3.1 Case study images

1. The use of various colors in the space helps engage the minds of the students and the solid shapes create a sense of uniformity in the minds of the children as children often tend to correlate their visuals to their thinking pattern
2. Informal seating spaces in the transition spaces of the school helps induce an interaction between children which often leads to them solving their anxiety and calm themselves by communicating about their emotions as it is proven in study that inter personal communication is one of the best solutions for symptoms of autism
3. The open plan and terrace helps create open seating spaces towards the courtyard thus making children be engaged by others at the courtyard and observe good qualities of others
4. The use of curved and rectilinear shapes helps create a deviation to the spaces and visually distinguish the spaces
5. The use of directional patterns creates a pathway for the children without the use of deliberate instructions
6. The use of grey interior spaces help create a balance between the splashes of colors in the space and doesn't clutter the visual aspect of the spaces
7. Use of daylight helps calm the students as artificial lighting strains the eyes of visual senses of autistic children and day light gives an illusion of a bigger space.
8. The use of vertical patterns with red color helps create an illusion of uniformity although the pattern is abstract which indirectly creates direction, awareness of the moment and kick starts the thinking of children.
9. The use of minor courtyard/open spaces all over the campus gives room for children to take breaks in the transitional spaces and gives way for the children to calm or reset themselves before the next class

3.2 GYMNASIUM, ELEMENTARY & MIDDLE SCHOOL- SINT-MICHIELSGESTEL, THE NETHERLANDS:

ARCHITECTS - Peters Bouw en Onderhou

AREA - 6052 m²

YEAR - 2023

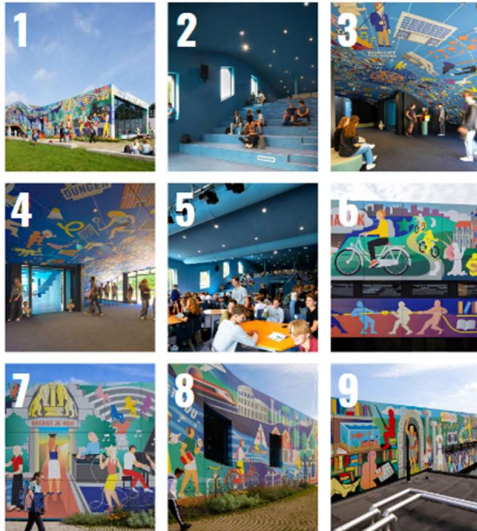


Fig 3.2 Case study images

1. Gathering space that is a step down seating space allows more people to sit in closer together which allows more interaction without any barrier, the color scheme of the space makes it moody and the lighting gives emphasis to the activity rather than the space itself which also leads to less distractions in the particular space
2. illustrations of the map and directions help students be more equipped with information and acts as a topic raiser for having better conversations with friends
3. use of such curved ceiling space allows there to be more of a 3d view of the illustrations and also acts as an acoustics panelling for the space to reduce the sound and reverberations
4. the classification of the space into different seating spaces creates a spatial division that helps children to use different spaces for their different emotions and could have a quiet corner for more of a relaxation
5. the use of illustrations to acknowledge what kinds of activities happen in the spaces such as the game shown in the illustration depicts the kind of physically straining activities that is going to happen in the gymnasium.
6. Again the use of illustrations depicts the activities that can interest children and inspire them to take more part in them, the door opening and these illustrations kept in transition spaces is great since it acts as an element that changes the minds of the children who come there
7. The use of illustrations can also act as a great way of providing students with directions of where to go for what spaces such as an illustration of children walking followed by an illustration of musical can show that there is a spot for a musical concert
8. But it is key to note that children with autism tend to get over whelmed with abstraction since there are too many things thrown at them visually at a time so it is crucial to keep a balance of illustrations and simplicity to make sure to depict the information but also not get them agitated
9. The out door space has seating areas and the facade of the building which is extremely illustrated to depict the activities done in the space and how to do them, this allows students to relate with the spaces

3.3 PONY SCHOOL / L&M DESIGN LAB - XINYANG, CHINA:

ARCHITECTS - L&M Design Lu

AREA - 15000 m²

YEAR - 2023

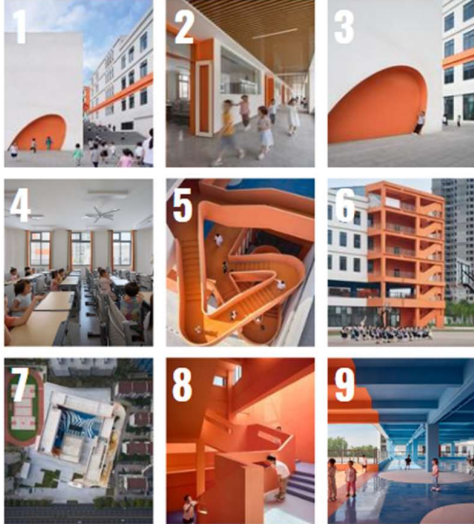


Fig 3.3 Case study images

1. Use of white wall and the orange doors that creates a visual barrier. This helps avoid the running tendency for autistic children which could lead them to get hurt or fall.
2. Use of The abstract elements can also correlate with a certain activity that can be done there such as this space could be a cool down space such as the child seen in the image calming down or relaxing.
3. The use of repetition of a certain element such as the windows or an orange strip of color in the space can help make the space familiar to the students and ease their anxiety
4. Use of color specific transition spaces can act as an element that provides knowledge of the upcoming space or the next space can have similar color qualities to inform the children of next activity and keep their schedule
5. Similarly the use colors can also help bifurcate the kinds of spaces in a building such as stairs having orange and the slope having blue or the first floor flooring to be red etc.
6. The use of patterned flooring in the play area depicts the bifurcation of the space in the large space and also helps students understand what activity is to be done there.
7. The use of novel shapes and ambiguity in a certain space can help a student correlate a particular visual element such as a shape to which activity can be done in that space thus making them more aware of their environment
8. The use of due colours in one particular space can help students know the activities in singular spaces and the circular flooring divides the space visually thus making sure the child doesn't get overwhelmed by the vastness of the space and start running or moving quickly
9. Use of Abstract shape inlayed in the wall and has a differentiation due to the use of a vibrant colour which creates immense emphasis on that space. This helps create an ambiguity in the space which induces interest into the minds of children

3.4 TOY BLOCKS KINDERGARTEN / BLOCHER PARTNERS INDIA - AHMEDABAD, INDIA:

ARCHITECTS - Blocher Partners India

AREA - 1730 m²

YEAR - 2023

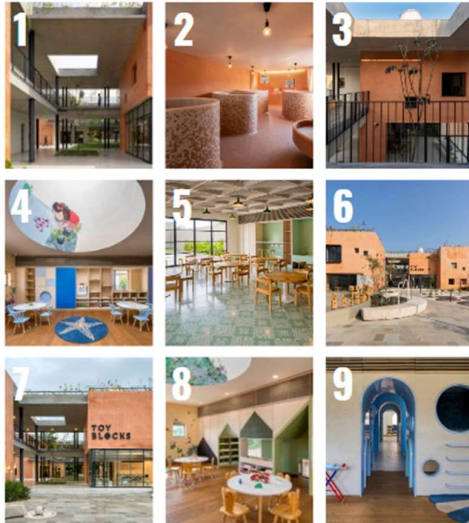


Fig 3.4 Case study images

1. Use of such dividing spaces which also acts as a private seating space gives complete access to children at anytime at any space to go and have a relaxation in a particular space or a quite zone to calm down and resume their activities.
2. The use of a metal rod or rods for creating partition in a space and a splash of color in the adjacent space creates direction to travel towards the next space.
3. The use of illustrations in the roof can either help provide some information about what is to be done in the space or can be used to create a spark related illustration of a cartoon or something they can relate to.
4. The use of complete subtle furniture's tend to help create this space which is a cafeteria more relaxing since it leads a public space to become a relaxing space due to its subtle touch of minimal furniture's and decluttering the space with very few elements
5. The use of box games seen in the seating space of this image is a great example of creating a fun activity in a transition space that induces interaction between children thus making sure no one is alienated which in relation with the space.
6. Although the use of sunlight can be harmful to the eyes of autistic children the use of translucent glass can be a great way to provide information about the upcoming space and help them learn about the space
7. Use of adequate storage in every space to make sure there is not object that is kept in a manner or a way it is not suppose to be kept since a dirty environment can close up the minds of children and that can increase their anxiety
8. The use of color coding to bifurcate the spaces in this case the blue tone is used with different hues to depict a differentiation in the space which say that space is for only one particular activity and creates a routine for the children
9. The use of open floor plan is used since that helps in complete transparency of the space. This allows the child to know what's happening around him/her or the space they are going to.

3.5 MSAP ARCHITECTURE & DESIGN SCHOOL - MANIPAL, INDIA:

ARCHITECTS - The Purple Ink Studio
AREA - 145000 ft²
YEAR - 2023

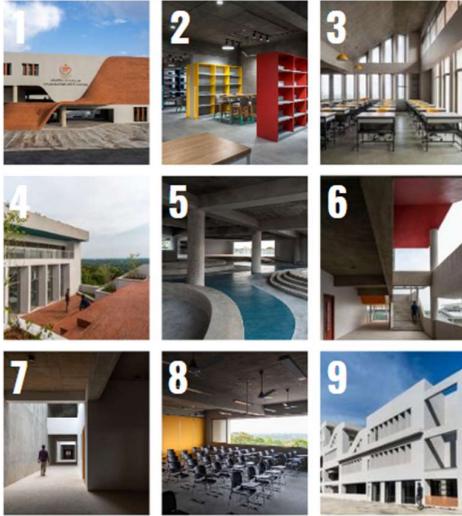


Fig 3.5 Case study images

1. The use of colors to depict the kinds of books in that particular space is a great ideation to provide information about routine in the space, The subtle colored interior is an added element that adds emphasis to the space
2. The use of windows is not ideal for autistic children but glazing them to make sure the effect of the light is more subtle for the eyes is a great way to induce interest about the outside world for the child
3. The use of seating spaces outside the windows or in a near access to a classroom can help create solitary zones in case the child has extreme anxiety or is overwhelmed
4. The use of such seating spaces and accent colors in pathways allow the child to understand the space and makes sure if the child is overwhelmed they can walk and stand or sit outside the high traffic transition space
5. The use of color coding as seen in the image where the roof of the adjacent floor has a different color code and is also shown in a minimal way by just color coding on plane in the space thus not overwhelming the child with vibrant colors around the space but also providing information's about it
6. The use of light is a great way to show direction. This can be done by dimming a transition space and brightening the space to go to as we all tend to move towards a brighter space
7. The use of table and chair combination is a great way of making sure the child is very organised and is thus calm with their surroundings, This setup allows only for one book or one item to be placed in their space and the easy movement of the table allows easy access to go to a solitary space in case of anxiety
8. The use pf such patterns in the facade allows the children to understand exactly what happens in what floor since that pattern can be associated with the activity done there or say if there is a principles office in that floor, this can be easily remembered by the child
9. The Stairs in the space can be seen to be a part of the building which is a great example of creating a flow in the space which also creates direction in the space of where to see and go

3.6 BRIJ CULTURAL CENTRE PROJECT - NEW DELHI, INDIA:

ARCHITECTS - CRAB Studio

AREA -

YEAR - 2023



Fig 3.6 Case study images

1. The ideology to bring in day light from outside but keeping the source covered is a great ideology since day light can be harsh for the sensitive senses of the children and by keeping this inverted cone structure the light is also dispersed well and acts as a thought inducing element
2. The use of such stairs that leaps downwards is a great idea to make sure the child can pause and see the space and activity before going into it thus making them ready for the activity
3. The large open spaces and pathways that are obstructed by the seating spaces allows the children not to run or get overwhelmed but even if they do they can sit and relax
4. Color coding the buildings is a great way of associating the activities done in them and this allows the children to have a sense of direction as they know what space has what activity and thus they wouldn't have confusion and would have ease in following their routine
5. The odd shapes of the buildings seen in this image is a great way of allowing children to associate which building is for what activity and make is easier to identify
6. The use of large open spaces and double ceiling spaces is a great way of opening the minds of the children and allowing them to keep a relaxed mindset throughout the space
7. The shapes seen in this image is a great way of identification for the student and also can provide a sense of direction as to where what space is just by seeing outside the building as they would know what shape associates with what activity
8. The grid patterned transition spaces is a great way of keeping things simple and avoiding the confusion of the children since it is lefts and rights which can be kept with the shapes and colors of the buildings to help them identify the space better
9. The use of such seating spaces in the transition space is a great idea to induce interaction and the placement of the seats to be parallel to each other is an added advantage to create interactive environment

4. LIVE CASE STUDIES

4.1 EURO KIDS INTERNATIONAL ASHOK NAGAR - ASHOK NAGAR, CHENNAI, INDIA:

ARCHITECTS -

AREA - 6000 sqft

YEAR - 2023



Fig 4.1 Case study images

1. The use of illustrations in the space is a great ideology since it creates a visual sense of information about the topics that is to be learned during class time. This also allows them to read and learn during their free time and get a better understanding of the topics
2. This illustration depicts the family tree of the animals which is a great example of how illustrations can be informative
3. This one is an art board that is done by the children and is put up as that allows the children to have more personalized information and have a great sense of ownership and appreciation
4. The drawings or illustrations of ABCs are also another great way of teaching the children about their syllabus and also makes it more interesting to learn concepts and by heart the while they are in their free time
5. The illustrations that come in unique shapes such as this one where the cloud is having water fall from it depicts rain which is a great idea and induces interest into the children
6. Again the use of illustrations done by children is a great way to allow them to think they are being appreciated and acknowledged
7. The colors use in the space in this particular campus is mostly green as that is a neutral color and doesn't allow any child to have anxiety or br overwhelmed by the colors and patterns around them
8. The flooring is a rough textured soft flooring which is great since children tend to fall often and this makes sure they don't get hurt, even the use of soft curved furniture with splashes of colors is a great way to keep their environment friendly and less harmful to them
9. The ideology of having the children sit on the floor and work is said to be a way of opening up the space and having more moving space and this opens the mind and posture of the children

4.2 APPLE VALLEY SPECIAL SCHOOL FOR SPECIAL CHILDREN - KOYAMBEDU, CHENNAI TAMIL NADU:

ARCHITECTS -
AREA - 5600 sqft
YEAR – 2023



Fig 4.2 Case study images

1. The use of illustrations in the transition space is a great way of distracting the children and making them think new from what they have learned. The use of door in a transition space is necessary to make the children understand their boundaries in the space.
2. The game in the background is a great way of inducing conversations into children as it is kept in a corner space which is a non core space in the classroom.
3. The classrooms tend to have completely soft touch materials and the use of colors to depict the mood or activity of the space, such as warm tones to depict the sense to study
4. There are outside games kept in large balcony spaces to allow the children to be more calm in the outdoor environment and with a teacher constantly there to calm them it is a great idea to keep them ready when they have to go to the outdoors
5. The play items kept below the stairs is a great way of creating a transition space but also could be a sneak peak as the top floor is kept to be a play ground space with a room filled with such balls
6. The use of curved false ceiling is a great way of soothing the space as children tend to associate the space with the shapes in it and the curved surface is a great way to acknowledge them of a calm space
7. The white tiles and a mirror in the silence space is to calm the minds of the children and allowing them to look at themselves is a great way of making them understand how they are behaving so they can control them
8. The games seen in the image is a great way of inducing interactivity and should be places in transition spaces thus making children play and make friends
9. The use of soft and grained furniture that has a texture to grip the children on it but also provide tactile knowledge on where they are, it also makes it safe since there are no sharp edges

4.3 KIDZEE KINDERKARTEN SCHOOL OF EDUCATION - PADUR, CHENNAI TAMIL NADU

ARCHITECTS -
AREA - 10000 sqft
YEAR – 2023



Fig 4.3 Case study images

1. The use of illustrations are a great way of making children understand their space and what they can do in it, The use of pencil like barriers is also a great way to show illustrations or make them relate the space into their classrooms
2. The use of such large cylinder shaped beds which can be used as a play thing inside the classrooms helps children understand that it is a safe place to play as well as a motivation to learn
3. The classroom furniture are simple lines with reed and whites with soft edges and the cupboards are orange shades thus making the space more simple yet colourful
4. The use of such ball pits in the school campus is a great way of physical activity as it allows one to use all their senses and also tactile feel to elevate their senses of touch. This also allows interaction as one would need another child's help to play in the pit
5. The use of vast play grounds with visual obstacles on the floor such as lines or play toys is a great way to motivate the children to play and improve their motor skills
6. The use of illustration in the space to depict curved lines like the notes of music in a space to learn music is a way to using children relate to the activities in the space
7. The stage with best participants board and green texture grass can be used to corelate the space and the green texture grass to be something of a pride as children who excel can come on the board and get recognition for themselves
8. The use of large multi colored space for soft play with cars or toys for a long time can induce interaction but also keep the space safe for the children to play in it.
9. The use of such play aspects in front of the school is a great way of luring the children inside the school for them to gain more interest towards the school

5. ARCHITECTS SPECIALIZED IN SENSORY DEVELOPMENT IN DESIGN

5.1 MAGDA MOSTAFA - born in Guelph, Canada

In the context of "autistic interiors," Magda Mostafa's contributions are significant. She emphasizes the importance of understanding the sensory experiences and needs of individuals on the autism spectrum when designing interior spaces. Mostafa's research explores how architectural design can positively impact the lives of autistic individuals by creating environments that are supportive, inclusive, and conducive to their well-being and development.

5.1.1 The following are the major Aspectss of Magda Mostafa:

- **Acoustics** This criterion proposes that the acoustical environment be controlled to minimize background noise, echo and reverberation.
- **Spatial Sequencing** This criterion is based on the concept of capitalizing on the affinity of individuals with autism to routine and predictability.
- **Escape Space** The objective of such spaces is to provide respite for the autistic user from the over-stimulation found in their environment.
- **Compartmentalization** The philosophy behind this criterion is to define and limit the sensory environment of each activity, organizing a classroom or even an entire building into compartments.
- **Transitions** Working to facilitate both Spatial Sequencing and Sensory Zoning, the presence of transition zones helps the user recalibrate their senses as they move from one level of stimulus to the next.
- **Sensory Zoning** This criterion proposes that when designing for autism, spaces should be organized in accordance with their sensory quality, rather than typical functional zoning.

5.2 JINSOP LEE - born in Seoul, South Korea\

Jinsop Lee is a renowned designer known for his emphasis on human-centered design and innovation. One of his notable concepts is the "6 Senses Chart," which he presented in his TED talk titled "Design for All 5 Senses."

5.2.1 Here's an overview of the sensory aspects of the chart

1. **Sight:** The sense of sight refers to the ability to perceive visual stimuli, such as colors, shapes, patterns, and motion. Design considerations related to sight include aesthetics, visual appeal, and the use of visual elements to convey information and evoke emotions.
2. **Hearing:** The sense of hearing involves the perception of sound and auditory stimuli. Designers can consider aspects such as sound quality, volume, pitch, rhythm, and the use of soundscapes to create immersive and engaging experiences.
3. **Taste:** The sense of taste relates to the perception of flavors and the chemical properties of food and beverages. While taste may not always be directly applicable in design, considerations such as the design of food packaging, presentation, and the sensory experience of consuming products can enhance user satisfaction.
4. **Touch:** The sense of touch encompasses tactile sensations and the perception of texture, temperature, pressure, and vibration. Designers can create tactile experiences through the selection of materials, surface finishes, and ergonomic design elements that appeal to the sense of touch and promote comfort and usability.
5. **Smell:** The sense of smell involves the perception of odors and scents in the environment. Design considerations related to smell include the use of fragrances, aromas, and ambient scents to create immersive and memorable experiences that evoke specific emotions or associations.
6. **Intuition:** The sixth sense, as conceptualized by Jinsop Lee, refers to intuition or instinctive understanding. This sense encompasses the subconscious processing of sensory information, emotional responses, and gut feelings that influence decision-making and behavior. Designers can leverage intuition by designing intuitive interfaces, user experiences, and environments that resonate with users on a subconscious level.

6. ABOUT SITE

6.1 SITE ANALYSIS - VIDYAKULA INTERNATIONAL SCHOOL

XR86+WJV, NH75, Beechanahalli, Karnataka 571432



Fig 6.1 Site image

This particular school for children was chosen due to various reasons including the scarcity of autistic schools in that locality. This is a simple dual story plan with a basket ball court and exterior seating spaces which can be best beneficial for the autistic children. furthermore the space also has great access points and ample space for pick up and drop off at the entrance and a play ground space for inducing interaction for the children and improve their motor skills by creating a multi level spaces for them to understand movement and allow more control to their senses Further reasons and analysis of the plan and the location is as follows.

6.1.1 perks of choosing this particular site

- lack of schools for special children lack of schools that provide education for special and autistic children in the locality with features specific for autistic children
- multiple entryway into the campus for relaxed traffic multiple entryways into the school for reduced traffic and thus calmer transition from the car or bus into the school campus, which also makes it safer
- less cluster of residence lack of urban spaces around keeps the surrounding noises to a minimum which is great for controlling the environment of autistic children
- pre existing open space the open space is a great way of teaching autistic children to control their senses in an outside environment and the games help improve motor skills and test all their senses of their body.

- dual storey access to all spaces the use of a single storey space makes it too long for a child to walk which creates long transition spaces and is not good for their running tendency, This also allows for color coded transition spaces.

6.2 PLAN ANALYSIS – PLAN ANALYSIS AND STATISTICS



Fig 6.2 Floor plan

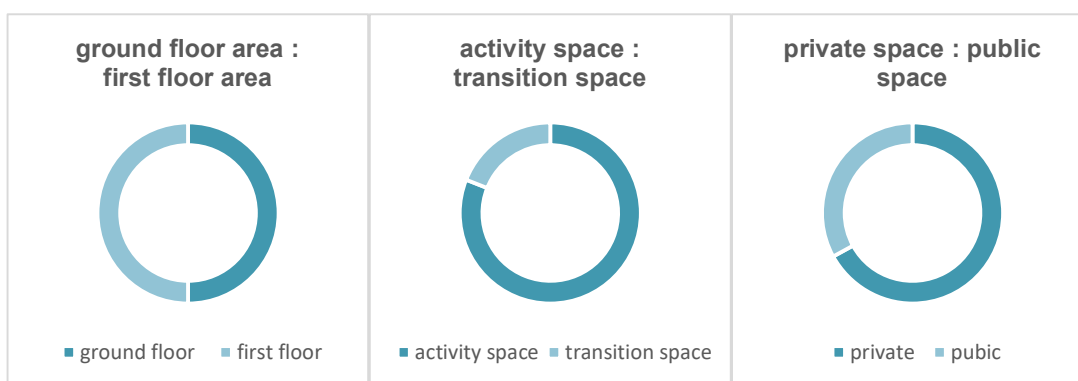
6.2.1 Fundamentals of the building

1. open glass façade great way of allowing the children to have a sneak peak into the space
2. multiple ways to a space allows the idea of color coding the sides to particular spaces
3. open glass view as a transition helps the child comprehend the space with single sense before entering
4. large soft play space creates interactive play zone to play and learn motor skills
5. soft yet regulated transition use of games and seating in transition spaces

6.2.2 Statistics of the building

- total area of the space - 925 sqm : each floor is approximately a 37 meter by 25 meter space which adds up to a total area of 925 square meter per floor
- floor space : the bulding comprises of 2 floors, which are equally divided where the ground floor will be comprising of the public space and the top by private
- entry and exit ways : the building comprises of 4 major transition stair space and 4 entry and exit ways of which 2 are exclusive service ways
- outer/inner space : the space has more open to sun areas than inner due to the early exposure of the open sensory stimulation being a good practice for young ones

6.2.3 Statistics of the spaces



6.2.4 Area statement

sno	space particulars	private/public	length	breadth	number of users	total area
1	classrooms (infotainment hub) 1,2,3,4,5,6	private	6	7.27	30	43.6
2	indoor play area 1&2	public	8.2	2.5	12	20.5
3	subject labs 1,2&3	private	4.9	4.8	20	23.5
4	(guide hubs) staff room 1&2	public	5.1	2.8	14	14.2
5	(calm hub) silence space 1&2	private	5.1	2.8	2	14.2
6	(entertainment & recreation hubs) activity space 1&2	public	18.2	7.2	60	131
7	cafeteria	public	3.3	6.6	9	21.7
8	(reading hub) library	private	3.3	6.6	9	21.7
9	administrative space	public	3.3	6.6	9	21.7

7. CONCEPT - PREDICTIVE CONTROLLED SENSORY

7.1 PREDICTIVE CONTROLLED AND SENSORY BASED DESIGN

7.1.1 *Concept derivation*

1. PROBLEM STATEMENT

Sensory Delicacy : ASD is a condition which depicts the major issue of the senses of the children being extremely delicate which makes it overwhelming and difficult to understand what they feel or senses that could also lead to social anxiety

2. SPACIAL PLANNING

Schedule and direction : Novelty is the worst enemy for ASD children since it leads to extreme anxiety when in relationship with a new space or anxiety thus is key to create a sense of direction and schedule in the space to make sure they experience less anxiety

3. MOVING TO THE SPACE

Induce interaction : Since ASD children face extreme social anxiety it is key to induce interaction amongst themselves by creating a space that directly induces interaction such as keeping parallel seaters or games in transition spaces to allow them to play yet interact

4. FINAL SPACE

Sensory isolation : Experiencing a lot of emotions or stimuli to many senses at once can lead to overwhelming feeling which leads to anxiety, thus having isolate the senses felt before entering a space can help calm themselves and familiarize themselves with the activity first

7.1.2 *Concept description*

- PREDICTIVE

This particular feature of the interiors is related to the role of schedule and direction in the space. ASD tends to have anxiety when they are experiencing something new, Thus keeping a sense of direction in the space, one makes it easier to understand the space and remember and second makes sure the child does not harm each other whilst circulating around the space. The schedule similarly helps

the children know what happens at what time of the day which along with the sense of direction helps the children direct themselves to the spaces without confusion.

- **CONTROLLED**

This is paired with the previous topic, The space can be made in such a manner that it indirectly gives room for a controlled space that makes it the best environment of children with ASD

- **SENSORY**

The whole space is made in such a manner that every aspect of senses may it be tactile or acoustical will all be taken into consideration and be made soft to sooth the sensitive senses of the children thus reducing thier anxiety and stress in the campus. Acoustic panels will be used, soft edges to reduce harm in the space, subtle toned colors to make the space calming etc

7.1.3 Concept application in the space

- Use of greenery in space
- Use of curved structures
- Use of incongruent furnitures
- Use of calm tones
- Use of color coded doors
- Use of large translucent window
- Use of color coded pathways
- seatings in transition spaces
- Private pods in classrooms
- Illustration in the space
- color coding traffic and waiting

8. SPACIAL PLANNING AND STATISTICS

8.1 BUBBLE DIAGRAM AND ZONING

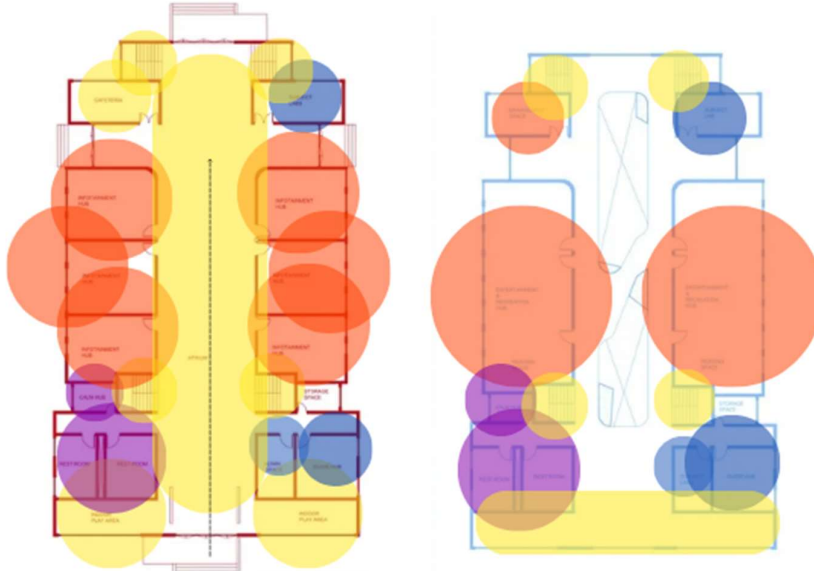


Fig 8.1 Bubble diagram

8.1.1 Description of bubble diagram and zoning

It is key to note that the spaces in the campus will be color coded to allow there to be a sense of identification yet allow the children to jump into the desired mood when they come in relationship with the space. The colors will be placed in a subtle manner as to not overwhelm the children. This process helps there to be a control of what the children feel from positive to negative emotions but is also done with room for freewill with the used of greenery and exterior spaces that allow the children to be ready for the outside world and accustom their minds to allow there to be incongruency and novelty and abstraction in real life thus making sure they dont get overwhelmed easily. The following are the color theory decription used in the bubble diagram.

- red - used to induce adrenaline into the students to make them ready for a steady state of mind to learn and educate themselves
- blue - used in spaces such as the guide hubs and admin office to portray the sense of stability and wisdom that are the roles of faculties in the campus

- yellow - yellows are used in transition space since they are bright and can be seen easily from a distance to make sure the children doesn't harm themselves while moving around
- purple - purple is the color that portrays trust and privacy amongst children which is reliability. this trait is key to calm the children and build trust in the calm hubs and restrooms

8.2 PROXIMITY CHART

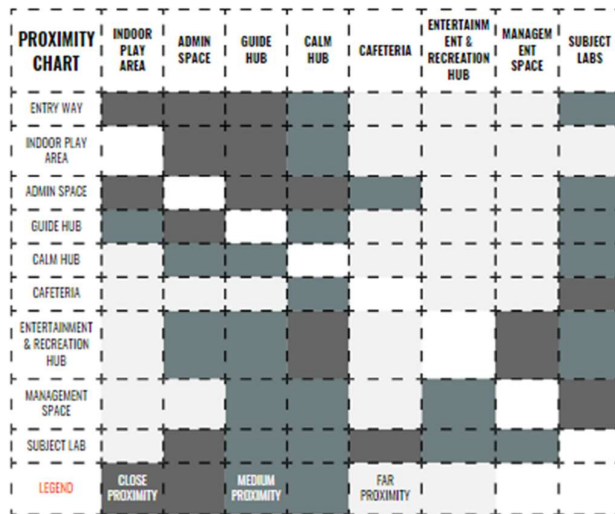


Fig 8.2 Proximity chart

8.2.1 Description of proximity chart

This particular chart holds the analyzed information about the close proximity between various spaces differed by the dark to light colors in which the dark colors denote the space to be close and the lighter to be vice versa. This is done to help with the scope of interior elements in transition spaces between each space

8.3 MATERIAL DESCRIPTION

The major materials used in the space will be the ply woods along with laminate to give the proper surface finish. This allows there to be a smoother finish in the furnitures and any structure and color can be acquired due to the vast variety of laminates available in the market. This also allows for lower maintenance and easier to build. The other major materials used in the space will be the metals for the trims or second for the base wood furnitures.

8.3.1 Description of the major materials used in the space

- AB PURE RUBBER TILES - Used for the flooring of the public spaces such as waiting spaces to help create contrast in the space yet is safe for children and maintenance free
- ACOUSTIC PANELS - Used to reduce the reverberation of sound in a space that helps create a calmer environment in a activity space since kids tend to make noise.
- ANTI SLIP PORCELINE TILES - Used in bathrooms to create an anti slip environment thus making sure the space is safer for ASD children since they have sensory issues including lack of motor skills
- CARPET - Used majorly in the infotainment hubs and classroom spaces to help create an environment that doesn't harm the kids since they lack basic motor skills and tend to fall often
- PLYWOODS - The base material of all furnitures to help create the complex shapes yet also make it easier to manufacture due to the extensive use of cnc cut parts in the space
- LAMINATES - Used to create a smoother surface for the furnitures and also gives scope for the colors that will be used in the space
- GLASS PARTITION - The most important aspect to create the isolation of senses and only allow the role of visual sense to allow the child to have more room to think of how to act in the coming space
- FABRIC - The most important material used in the furnitures such as seats to help create a softer space and safe for the autistic children

9. MASTER GROUND FLOOR AND FIRST FLOOR PLAN

9.1 Ground floor and first floor furniture layout

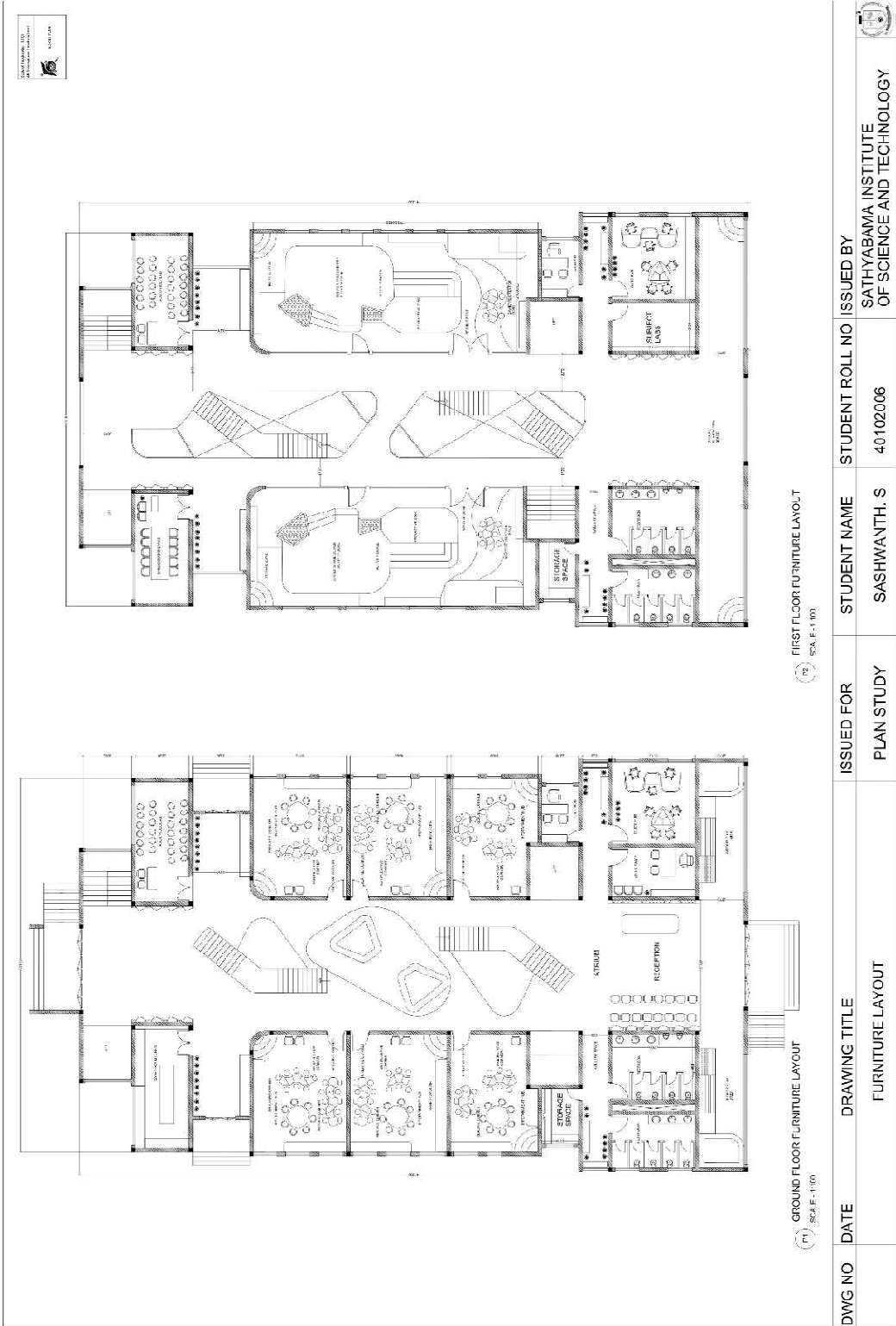


Plate 9.1 – Ground floor and first floor furniture layout

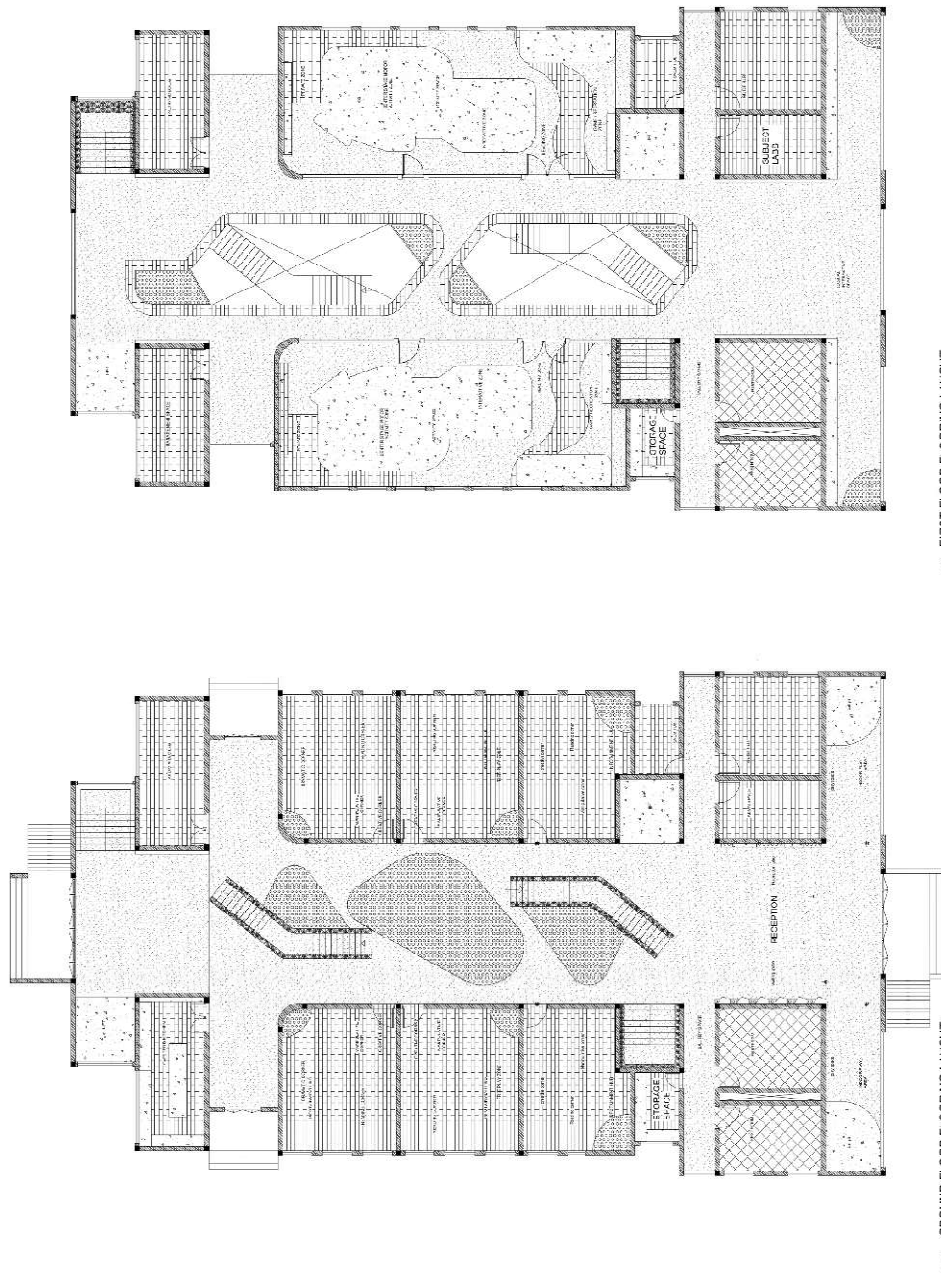
9.1.1 Description of ground floor furniture layout

The ground floor starts with the view of the reception space that has a concrete green wall with signage to create interest and recognition in the space with seating spaces for the visitors to wait for their wards or children, Directly on the right and left of the entrance space lies the indoor play area with interesting duel story space with ladders and slides which fall into a pit filled with soft balls which also acts as a soft landing space for the rock climbing wall adjacent to it. The space then moves into the atrium space with a flight of stairs on both sides along with see through seating spaces and storage spaces for keeping games in the transition space which allows the children to reset their minds before entering the next space which is the classrooms or infotainment hubs, Before this on the right lies the staff room and admin block along with a counsellors room which is clustered at one space to provide support to the children at all time, On the left is the restroom and the elevators wide enough to fit wheelchairs for easy access to the next floor. The classrooms itself are a unique set of spaces with the manipulative corner that has thought provoking games which moves on to the creative and reading corners with ample storage for their bags and the equipment used in the space, Every space is also equipped with a calm space which has a interesting parametric structure with seating spaces and a jasmine plant to provide the space with texture and a calming smell which along with the grass flooring helps increase the blood flow into the brain, There is also a mirror provided which allows the child to notice their behaviour and looks which allows them to adapt into the space easily and distract them from what the reason for their anxiety was. All of these ranging from the fragrance to the texture provided on their feet allow the child to trip out of their mood and come back with a better mood into the space. The space then follows outside the classrooms into a seating space with large planters and grass flooring that acts as a transitions space before entering the stairs. On the later side lies the waiting space which has unique seating spaces and storage space with unique shapes and comfort provided that acts as another transition before the cafeteria and the audio visual rooms that finally leads into the exterior space of the school.

9.2.1 Description of first floor furniture layout

The first floor has multiple entry points ranging from elevators to stairs in the atrium space and the stairs in the exit points of the space. The major entry points are through the atrium space staircase that acts as a transition space from the classrooms into the major activity spaces in the first floor and this kind of transition space along with the seating spaces kept in the ground floor acts as a reset button to their minds before they enter any other space, The stairs leads to a glazed activity space that isolates the senses of the children as they get enthused by seeing the children playing inside and the exciting games in the activity space yet allow them to calm down before entering a highly thought provoking space which could lead to a lot of anxiety due to the interactions required while playing games. This along with the transition and waiting space seaters kept near the conference room acts as a cool down space before entering the activity space, The activity space is given emphasis due to the relationship the children have with the space and the people when they interact with the space is crucial for them to have motivation to come back to the school everyday. The atrium space has a sky light with diffused glass treatment which helps let in ample light into the space that brightens the mood of the children with the colourful flooring patterns increase their drive to play and have fun in the activity space, The activity space starts with a stage for seated yoga and interactive activities that has storage spaces and boards, This moves onto the manipulative space that has seating spaces for interaction amongst children and teachers with table and seating spaces. After the learning and practice of motor skills, The space finally leads to the prize of the space which is the ball pit space with rock climbing and ladders which has monkey bars and games inbuilt in the structure of the space. The school finally ends with a transition zone space which is a fully glazed wall leading towards the entrance of the school which acts as a space that allows interactions and a space to make friends and play games before leaving school yet also gives a view of what is happening outside to ready their minds before exiting the school with a good memory and a great knowledge learned ready to come back to school the next day

KENNEDY-WALKER LTD An International Franchise System	MOORE POINT 	Plans for additional development projects in the area	In the process of developing new projects in the area	Currently in the planning stage	Plans for additional development projects in the area	Currently in the planning stage	Plans for additional development projects in the area



DWG NO	DATE	DRAWING TITLE	ISSUED FOR	STUDENT NAME	STUDENT ROLL NO	ISSUED BY
		FLOORING MATERIAL LAYOUT	PLAN STUDY	SASHWANATH. S	40102C06	SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

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12.GROUND AND FIRST FIRE ALARM AND SPRINKLER SYSTEM LAYOUT

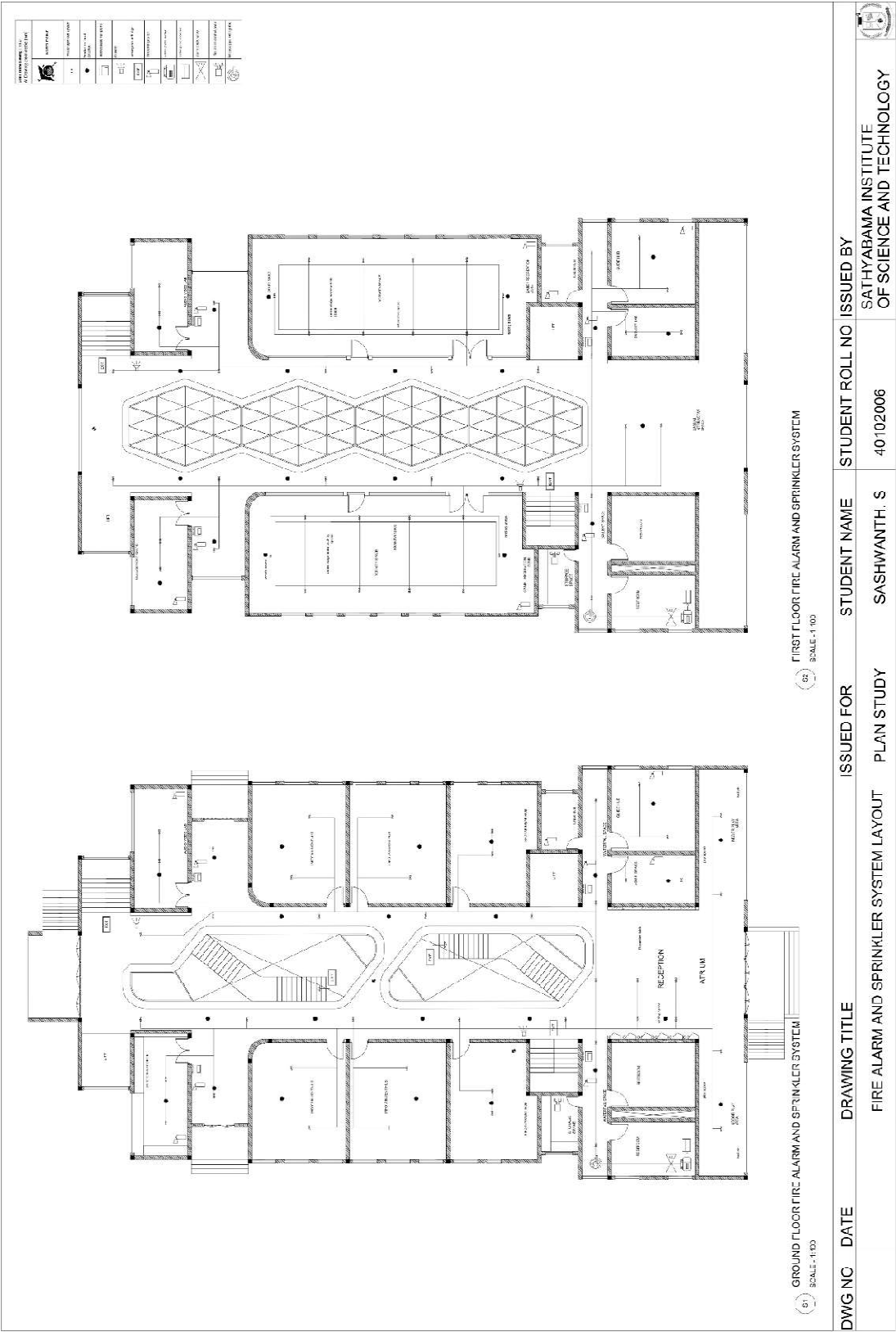


Plate 12.1 – Ground and first fire alarm and sprinkler system layout

13.1 Indoor play area drawings

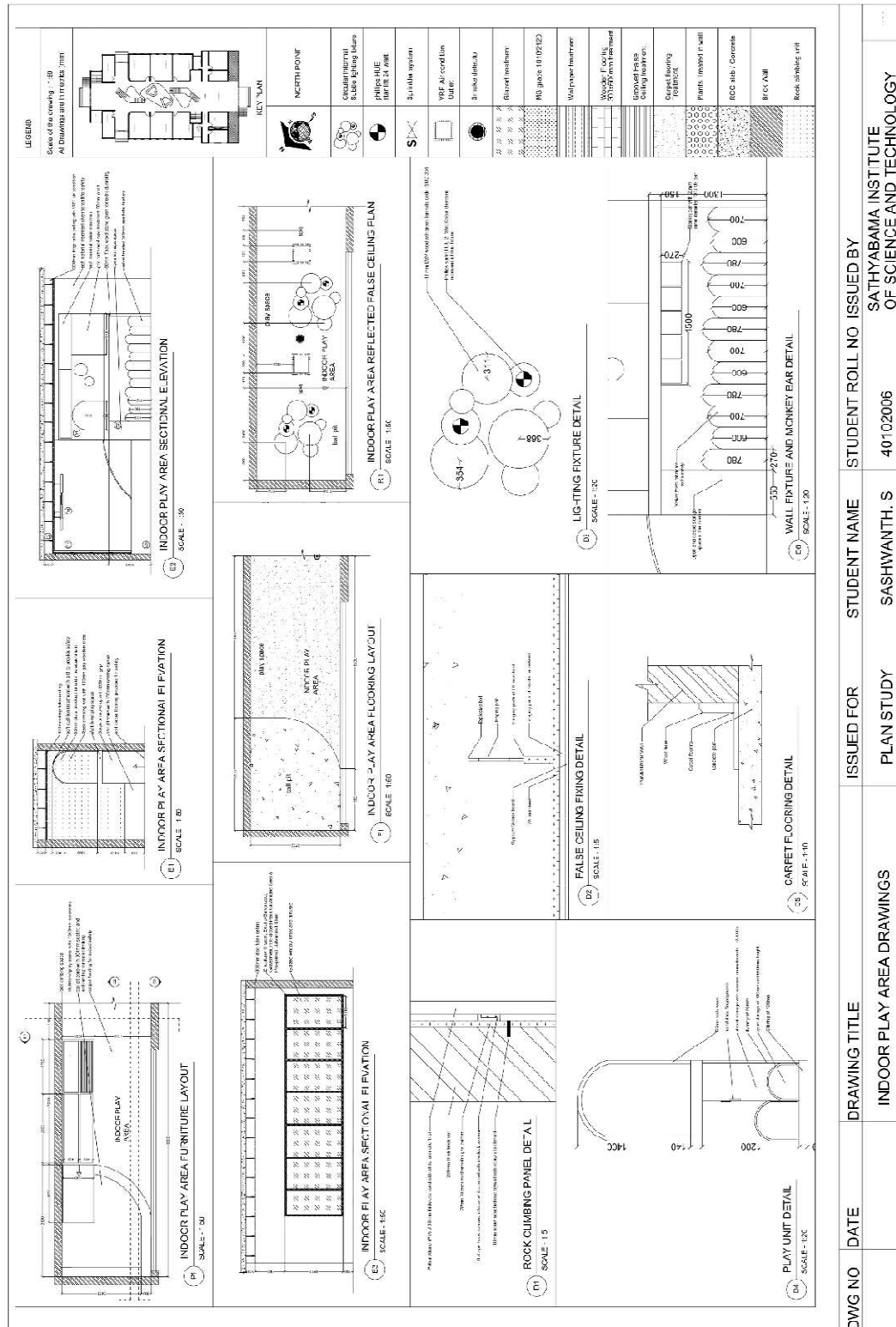


Plate 13.1 – Indoor play area drawings

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13.3 Infotainment hub drawings

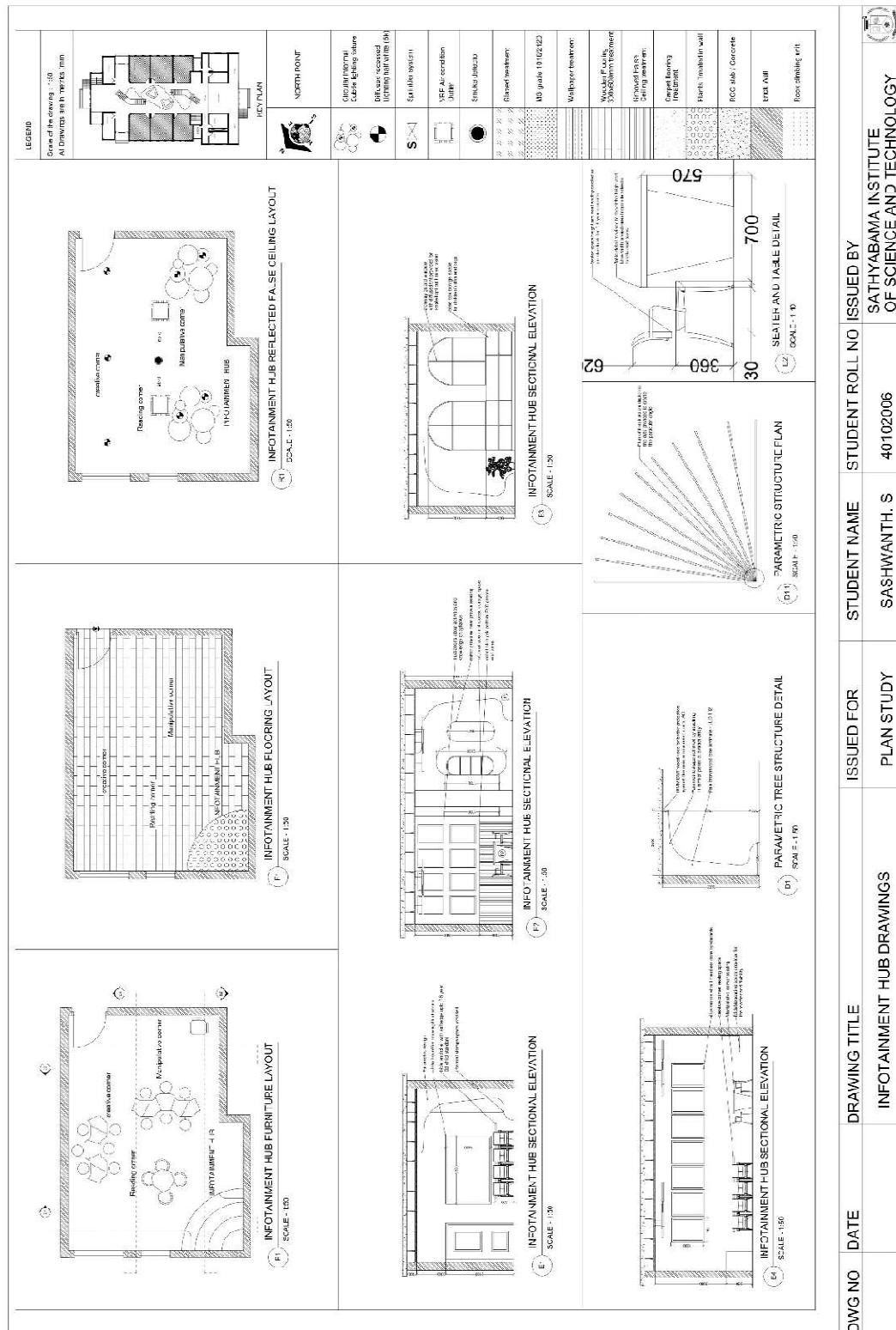


Plate 13.3 – Infotainment hub drawings

13.4 Waiting and transition space drawings

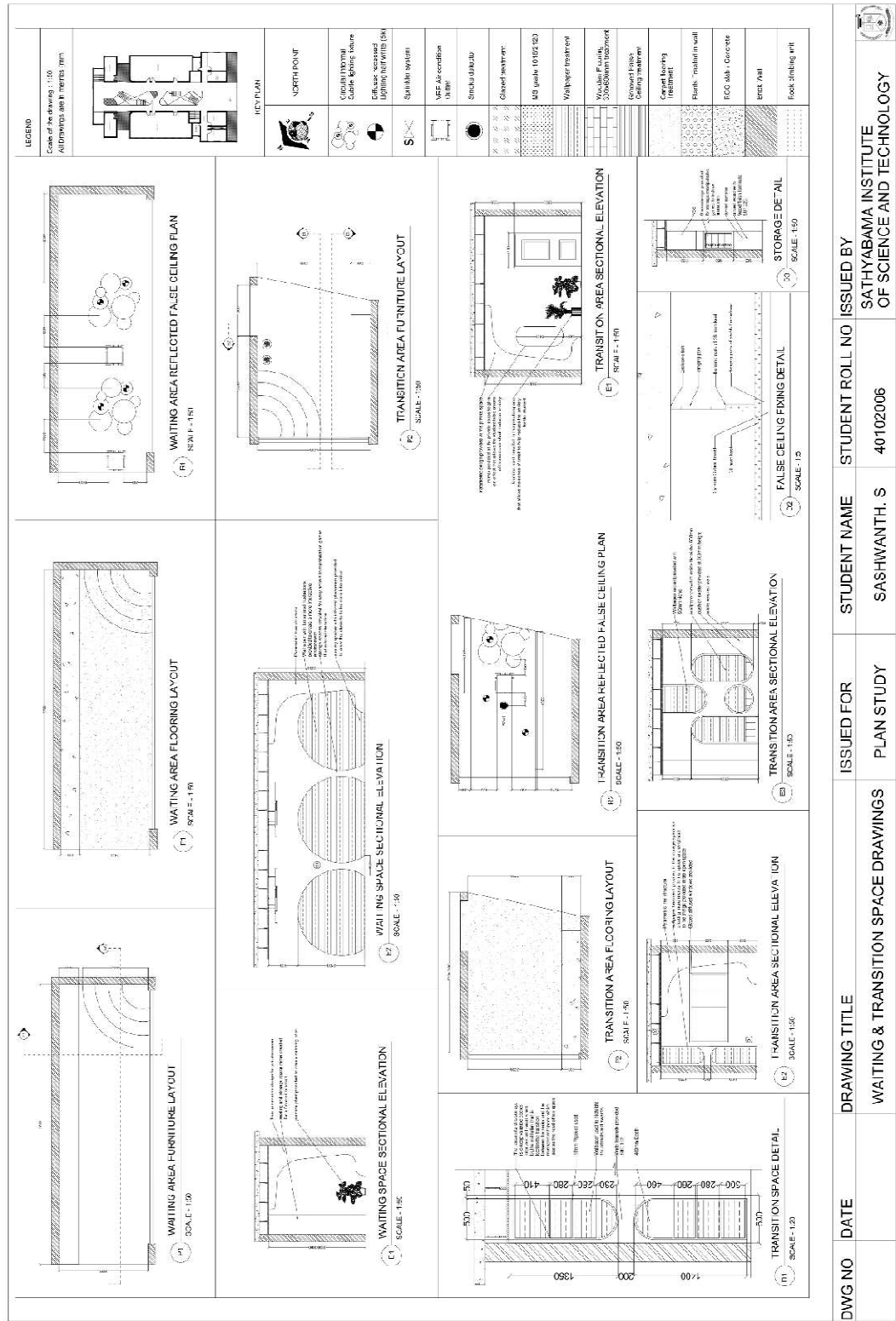


Plate 13.4 – Waiting area and transition space drawings

13.5 Activity space plans

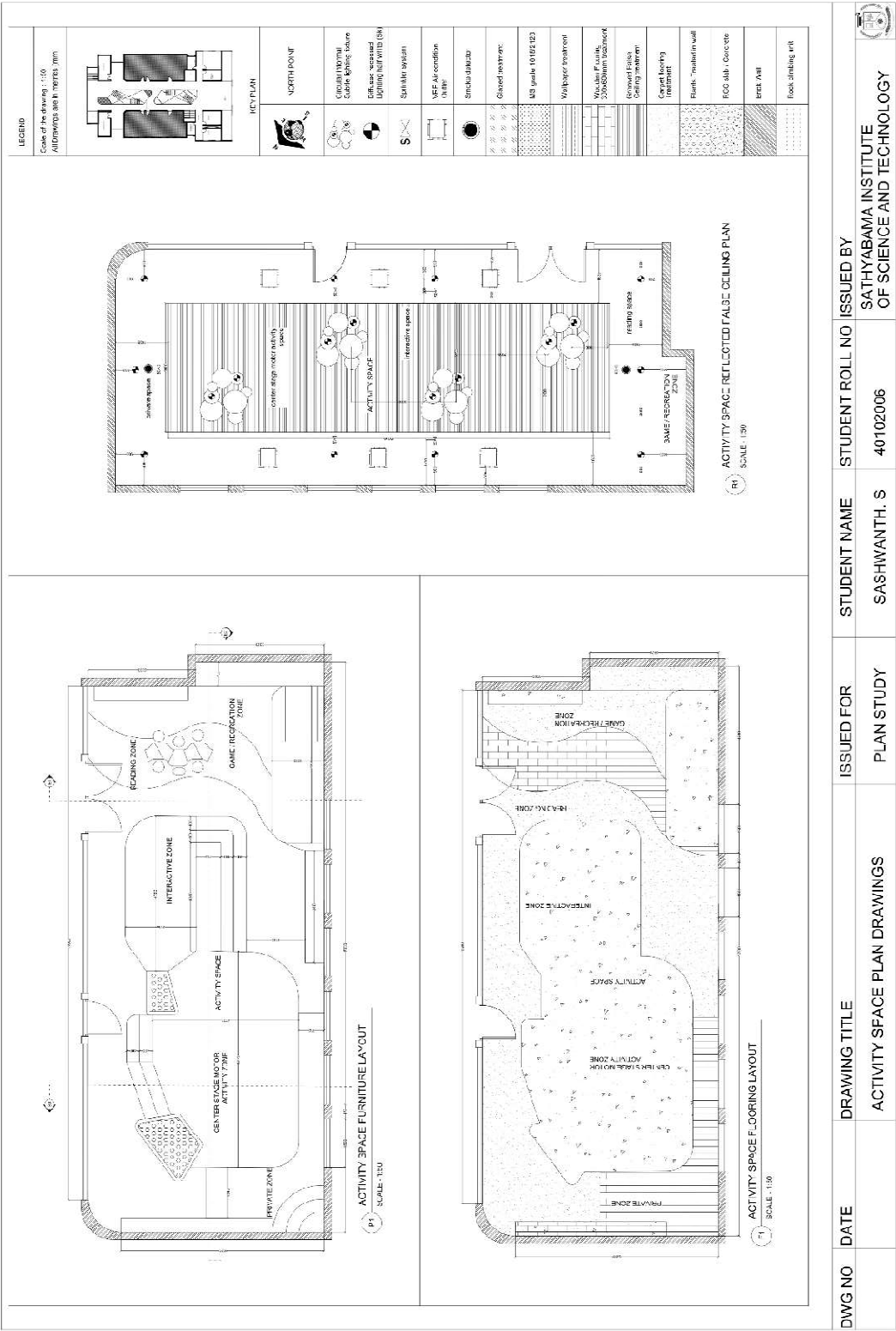


Plate 13.5 – Activity space plans

13.6 Activity space elevations

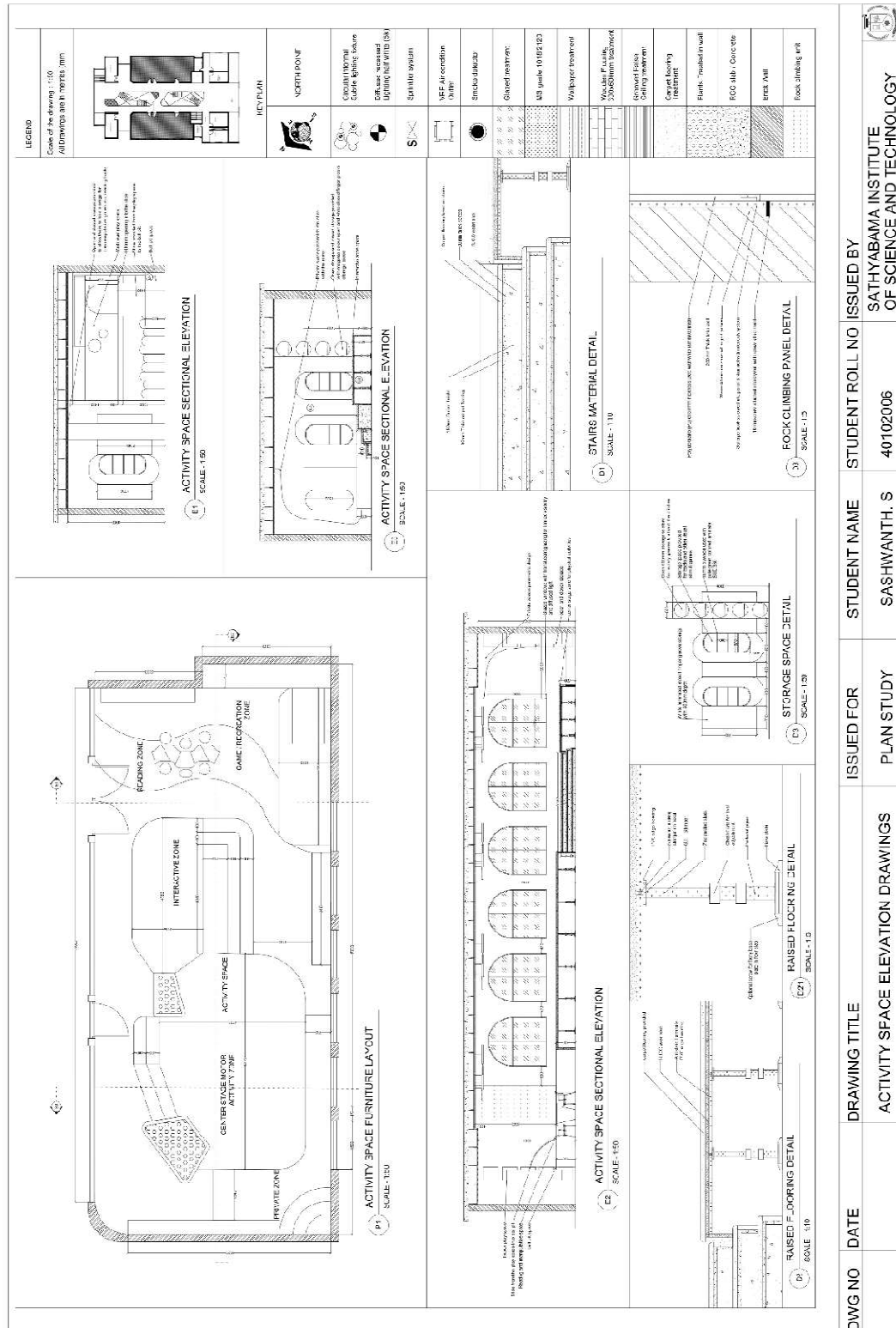


Plate 13.6 – Activity space elevations

13.7 Atrium space drawings

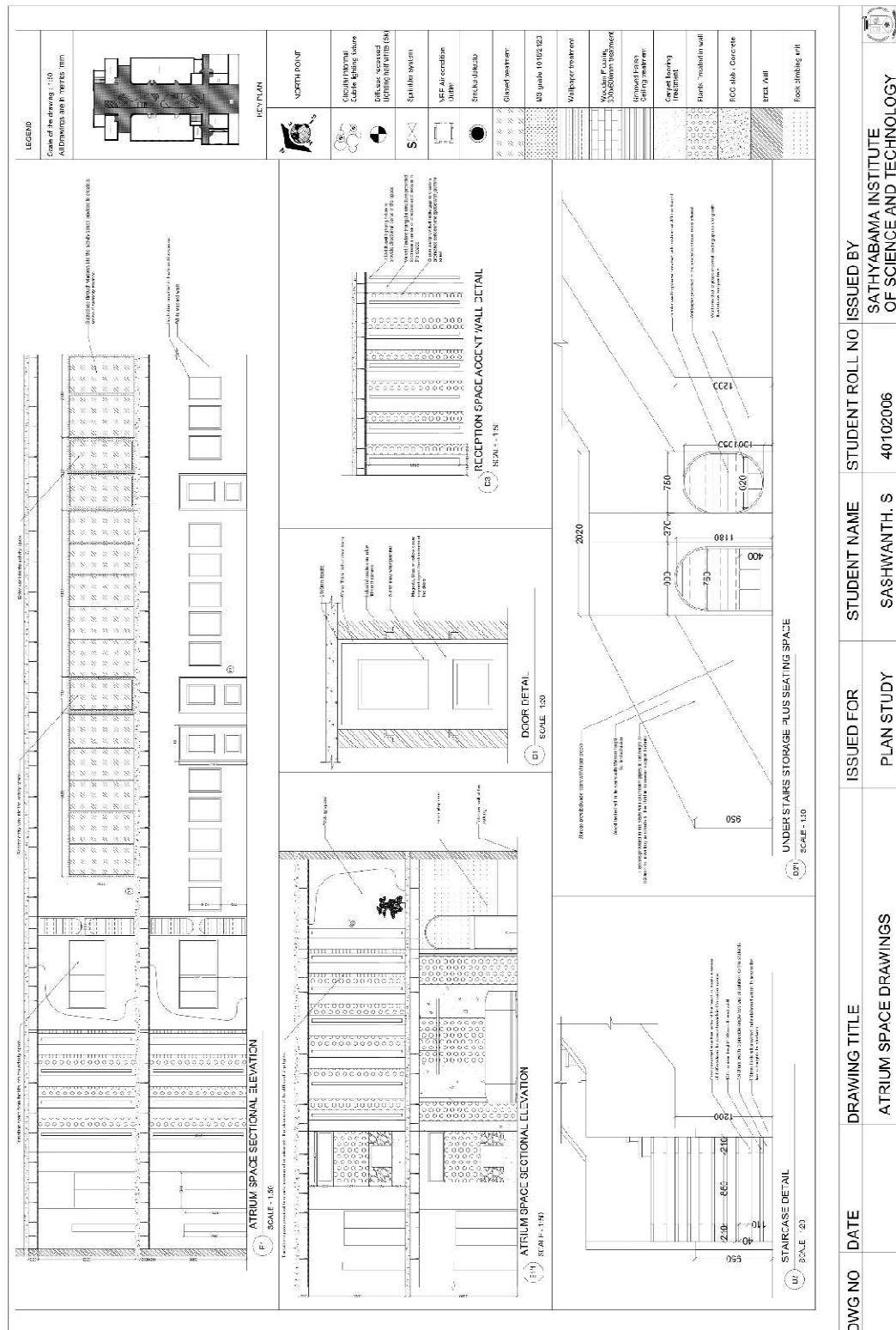


Plate 13.7 – Atrium space drawings

14.INDOOR PLAY AREA AND RECEPTION SPACE

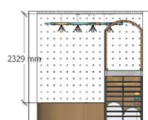
14.1 INDOOR PLAY AREA AND RECEPTION SPACE PRESENTATION SHEET



This space consists of a multi level play space seen in the activity space along with a simple waiting space and a reception desk to allow the visitors to have a seat in the space while waiting for their loved ones



INDOOR PLAY SPACE ELEVATION



INDOOR PLAY SPACE ELEVATION



The reception area along with the waiting space to allow the visitors to wait for their wards comes with a minimal seating space along with a unique back wall with velvet and artificial grass treatment



The indoor play space seems small but with the full length windows placed gives them an illusion that the space is bigger and this also allows them to see what's happening inside the space before entering the space



The reception space has a minimalist reception desk with a gold trim and a green back wall to create a sense of fragrance that can be correlated with the space and the concrete texture gives a more natural feel while entering the space for the first time that makes it seem more familiar



The indoor play space comes with a ball pit and slide that slides directly into the pit and has a rock climbing that is above the ball pit space to have a safer landing in case of a fall

INDOOR PLAY & RECEPTION SPACE PRESENTATION SHEET

SASHWANTH 40102006 SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

Plate 14.1 – Indoor play area and reception space Presentation

14.2 INDOOR PLAY AREA AND RECEPTION SPACE DETAILS

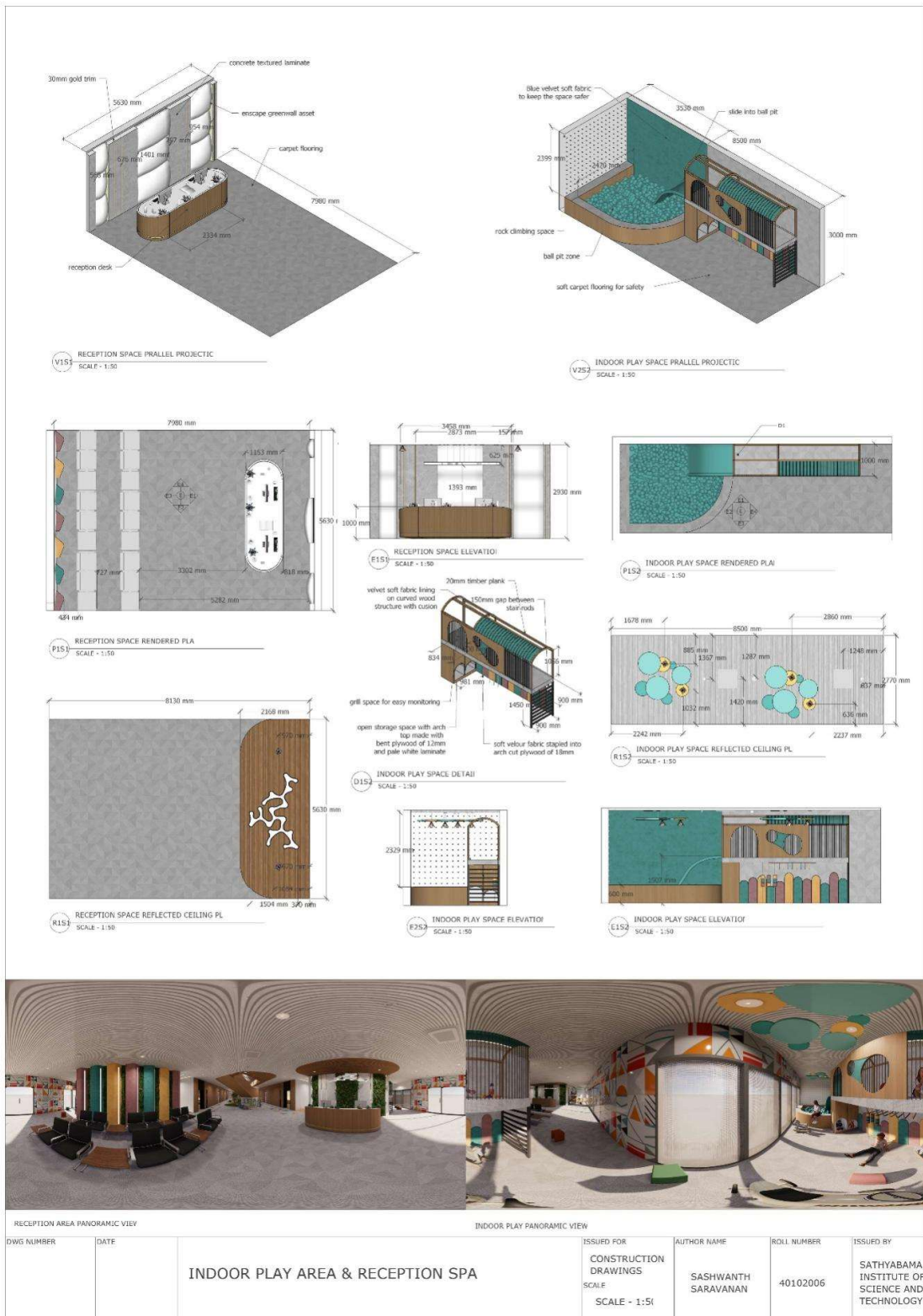


Plate 14.2 – Indoor play area and reception space detail

15. INFOTAINMENT HUB

15.1 INFOTAINMENT HUB PRESENTATION SHEET



The space is an amalgamation of whites and browns with the accent touches of blues seen in the acoustic boards and wallpapers to best induce interest into the space yet keeping the minds of the children cool due to the simplicity of the space



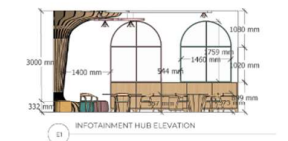
The space has white washed walls to provide a sense of minimal accent to compliment the contrasting furniture of floor's wood tone to best keep the minds of the children in a safe zone



The private space featuring informal seating spaces



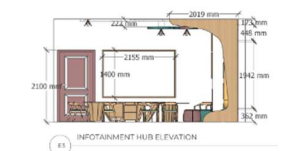
The wallpaper of orange and yellow acts as a wall the can best correlate to the private space since all the private spaces across the school have this particular accent given for easier recognition



Rear wall facing the pyramid diffused windows



The space also has enough wall space to attach course details and syllabus to be allow the children to correlate the activity done in the space to the images on the walls



INFOTAINMENT HUB PRESENTATION SHEET SASHWANTH 40102006 SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

Plate 15.1 – Infotainment hub Presentation

15.2 INFOTAINMENT HUB DETAILS



Plate 15.2 – Infotainment hub space detail

16.INTERACTIVE AND TRANSITION SPACE

16.1 INTERACTIVE AND TRANSITION SPACE PRESENTATION SHEET



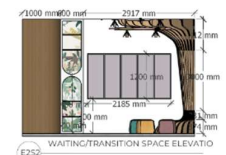
These spaces are a great space to induce interaction during a waiting period with their unique seating spaces and the storage spaces for keeping manipulative games or books can help make the time more informative and fun



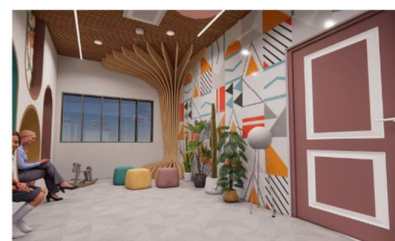
Due to the large windows in the space that leads directly to the main entrance, The children can see exactly what is happening outside before leaving the space or anytime they are in the space which allows them to think and anticipate what happens before exiting the school in the afternoon and what they have to do for the next day of school



Thus the space becomes one that is more in power with leaving the space but the interactive games and the informal seating spaces also allow the children to make good memories before leaving the space thus giving them motivation to come back the next day



This space is near the lift lobby thus making it a seating space or a waiting space to enter the activity space or the conference rooms or the audio visual rooms, Thus it becomes a transition space before a major activity and keeping such seating spaces resets the mind before entering the next space



Like all the other spaces this space also has a parametric seating that acts as a private space for the children to go in an sit quietly and calm themselves in case of extreme emotional distress

CASUAL INTERACTIVE & TRANSITION/ WAITING SPACE

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Plate 16.1 –Interactive and transition space Presentation

The image displays a comprehensive set of architectural drawings for a project titled "WAITING/TRANSITION & CASUAL INTERACTIVE SP.". The drawings are organized into two main sections: "CASUAL INTERACTIVE SPACE" and "WAITING/TRANSITION SPACE".

CASUAL INTERACTIVE SPACE:

- V1S1:** Isometric view showing a storage space, flooring pattern to create direction, provision for seating spaces, and a parametric structure. Dimensions: 8500 mm, 2770 mm, 3000 mm, 600 mm.
- P1S1:** Plan view of the casual interactive space. Dimensions: 8479 mm, 2770 mm, 1170 mm, 800 mm.
- R1S1:** Reflected ceiling plan of the casual interactive space. Dimensions: 8500 mm, 1470 mm, 790 mm, 1330 mm, 650 mm.
- E1S1:** Elevation of the casual interactive space. Dimensions: 8500 mm, 2003 mm, 923 mm, 2003 mm, 923 mm.
- D1S1:** Detail of the parametric structure. Dimensions: 2770 mm, 3000 mm, 600 mm, 1170 mm, 800 mm, 1330 mm, 650 mm.

WAITING/TRANSITION SPACE:

- V1S2:** Isometric view showing a unique storage space, informal seating space, parametric design, seating space at 400 mm, interesting illustration, and an arched seating space. Dimensions: 4500 mm, 3520 mm, 3000 mm.
- P1S2:** Plan view of the waiting/transition space. Dimensions: 5000 mm, 3520 mm, 2800 mm, 1330 mm, 4750 mm, 4270 mm, 600 mm.
- R1S2:** Reflected ceiling plan of the waiting/transition space. Dimensions: 5000 mm, 3520 mm, 2800 mm, 1330 mm, 4750 mm, 4270 mm, 600 mm.
- E1S2:** Elevation of the waiting/transition space. Dimensions: 5000 mm, 3520 mm, 2800 mm, 1330 mm, 4750 mm, 4270 mm, 600 mm.
- D1S2:** Detail of the waiting/transition space seating. Dimensions: 5000 mm, 3520 mm, 2800 mm, 1330 mm, 4750 mm, 4270 mm, 600 mm.

Table of Contents:

DWG NUMBER	DATE	ISSUED FOR	AUTHOR NAME	ROLL NUMBER	ISSUED BY
WAITING/TRANSITION & CASUAL INTERACTIVE SP.		CONSTRUCTION DRAWINGS	SASHWANTH SARAVANAN	40102006	SATHYABAM INSTITUTE OF SCIENCE AND TECHNOLOGY

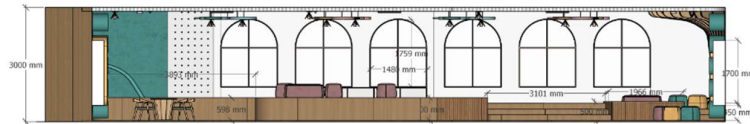
45

17.ACTIVITY SPACE

17.1 ACTIVITY SPACE PRESENTATION SHEET



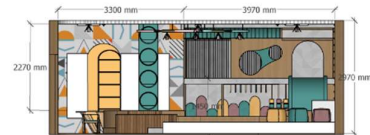
The space includes a multi step level flooring to increase the practice of logical thinking when it comes to normal motor skilled activity that is difficult for autistic children and induce a fun environment by walking up to different spaces for different needs.



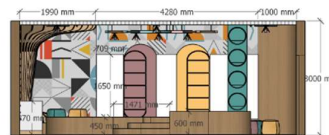
E1 ACTIVITY SPACE ELEVATION



Reading & manipulative game space with unique storage



E2 ACTIVITY SPACE ELEVATION



E3 ACTIVITY SPACE ELEVATION



Leading lines provided in the ceiling in a subtle manner to create a sense of direction along with the wallpaper zone to create emphasis



A space that allows children to sit at different levels and interact with each other and creates a sense of zoning indirectly by creating different levels in the particular space



A multi level play space with interesting monkey bars, slide space, ball pit space, rock climbing and manipulative games in built into the game zone for having a fun experience

ACTIVITY SPACE PRESENTATION SHEET

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Plate 17.1 – Activity space Presentation

17.2 ACTIVITY SPACE DETAILS

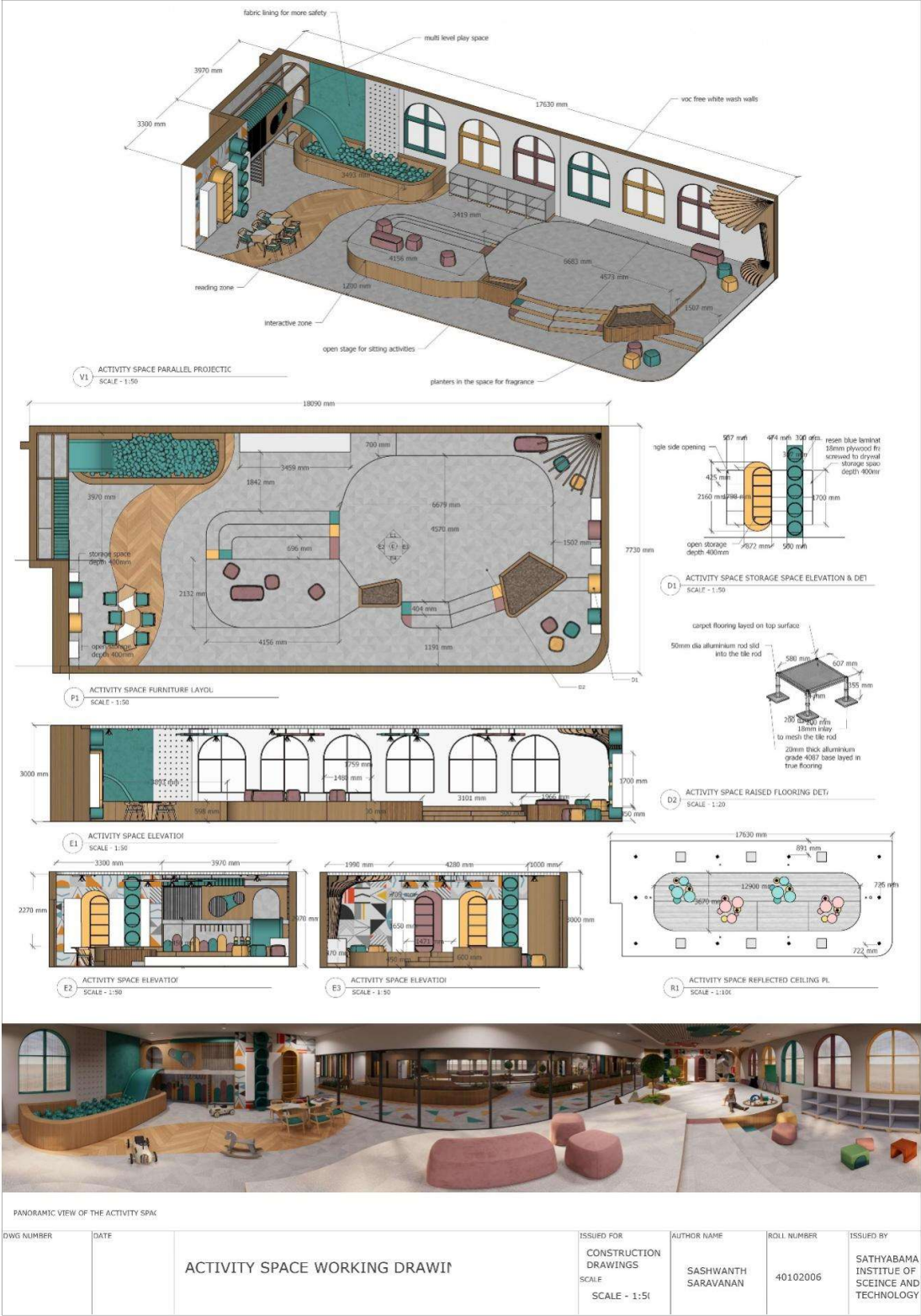


Plate 17.2 – activity space detail

18. ATRIUM SPACE

18.1 ATRIUM SPACE PRESENTATION SHEET



All the transition spaces plays a major role in how the artistic child interacts the major spaces thus it is given utmost importance from the material of grass carpet used in the atrium space to bring out the tactile senses of the child to the use of soft fabric as a wall treatment



The transition space between the calm hub and the staff room to the rest of the spaces been treated with a particular fragrance from the plants in the space that correlates to the psychology of calmness in the space thus relating that to the interaction between teachers.



See through seating spaces below the staircase gives a timeless touch to the space yet being an interactive transition space allowing the children to talk and have fun



Seating spaces provided before entering the staircase allowing the children to sit and relax before entering the major space in the first floor which leads to them having a better mood before entering the next space from the classrooms



The lift lobby with gold doors and the velvet textured soft fabric along with artificial plants in the space allows the children to be careful and correlate the soft fabric to a focus based space since it is kept in the risky play spaces throughout the building

ATRIUM SPACE PRESENTATION SHEET

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Plate 18.1 – Atrium space Presentation

18.2 ATRIUM SPACE DETAILS

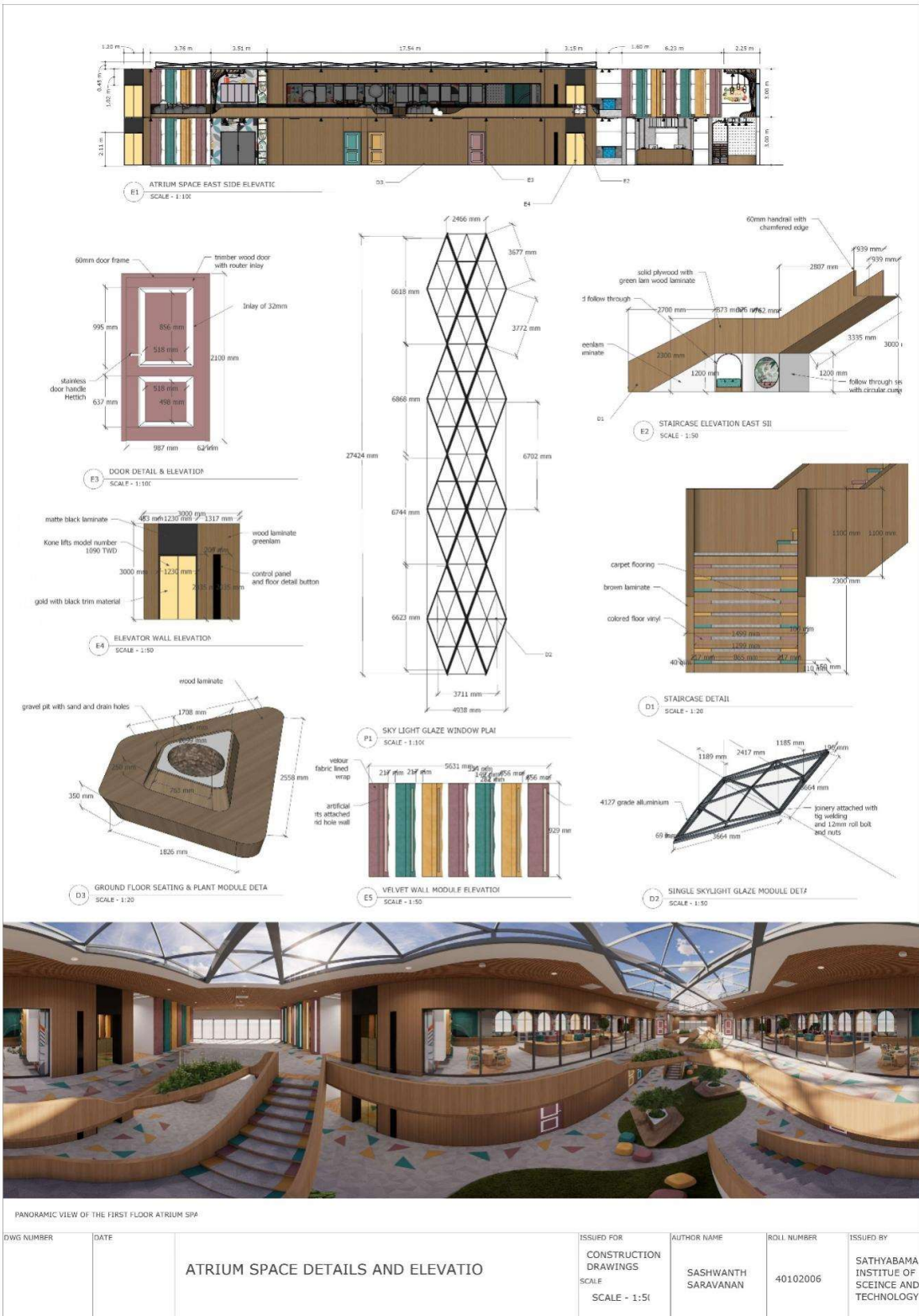


Plate 18.2 – atrium space