

URBAN95



Feasibility Report Child Priority Zone – Ashok Nagar

Technical Partners



City Partner



Support



Contents

Contents.....	2
List of Figures	3
List of Abbreviations	6
Preface	7
Background	8
Executive Summary.....	9
1 Urban95	10
2 Introduction to Child Priority Zone	11
Social and Behavioral Change Communications (SBCC)	15
3 Site- Ashok Nagar	22
Findings:	30
Demographic Details of Respondents:	32
Response (Intercept Survey):	33
.....	33
Findings:	35
3.6.2	62
Action Plan for Semi-Permanent Project	66
7 Concept Design for Ashok Nagar	100
8 Financial Plans.....	114
9 Way Forward.....	115
10 Annexure	116

List of Figures

Figure 1 - Child priority zone, source- BvLF Urban 95.....	12
Figure 2 Snippet of first tactical intervention at a Child Priority Zone in Udaipur.....	14
Figure 3 Objective of the ITC Neighbourhood, Source: ITCN Policy Framework, BvLF. Error! Bookmark not defined.	
Figure 4 Map showing proposed sites for Child Priority Zone.....	19
Figure 5 Locating the site at city level.....	22
Figure 6 Land use and area mapping.....	23
Figure 7 The site's main access road,(Ashok Nagar Road No. 18), has a higher risk of accidents and requires interventions to improve ITC's safety and security.	24
Figure 8 Silent Street outside Hanuman Park, facing hostel	24
Figure 9 The access road leading towards (anchor institute) Hanuman Park, and Ashok Nagar main road requires Interventions considering ITC's friendly designs and interventions.	25
Figure 10 Road leading to main entrance of Hanuman Park.....	25
Figure 11 Ashok Nagar main road..... Error! Bookmark not defined.	
Figure 12 Anchor Institute: Hanuman Park	26
Figure 13 Highlighting Anchor Institute context and other ITC destinations on site	27
Figure 14 Avg. frequency of visit to the park in a week.....	39
Figure 15 Avg. time spent by caregivers in the park.....	39
Figure 16 Ratio of male/female caregivers..... Error! Bookmark not defined.	
Figure 17 Trip chaining route map for Ashok Nagar.....	40
Figure 18 Hard landing surface (risk of getting injured)	42
Figure 19 Weathering of concrete surface resulting in injuries	42
Figure 20 Harit Haveli Thikana Restaurant chowk.....	43
Figure 21 Absence of sidewalks, parking on shoulders of the street	43
Figure 22 Junction north to Harit Haveli thikana Restaurant Chowk	44
Figure 23 Absence of sidewalks near grocery stores, open drains & ramps	44
Figure 24 Street opposite Hanuman Park Gate 1	45
Figure 25 Open drains and encroachment on street by ramps and parked vehicles	45
Figure 26 Accessibility challenge	51
Figure 27 Safety challenge	52
Figure 28 Green challenge	53
Figure 29 Playful challenge	54
Figure 30 Inclusivity challenge	55
Figure 31 Trees act as natural shading elements on the stretch, adequate light poles, and pre-school available.....	60
Figure 32 Community retail shops.....	60
Figure 33 Shaded resting spaces at Hanuman Park.....	61
Figure 34 Playing equipment's in decent condition	61
Figure 35 Open drains on street, harmful for young children while walking or cycling.....	62
Figure 36 On street parking forces people to walk in the middle of the road	62
Figure 37 Garbage being dumped outside Hanuman Park, restricting people from visiting	63
Figure 38 Absence of footpath, benches and active facade, no eyes on street.....	63
Figure 39 Hanuman Park entrance is an issue for strollers to access.....	64
Figure 40 No ramp access for the pathway inside the park	64
Figure 41 In discussion with various stakeholders.....	66

Figure 42 PSC meeting I	66
Figure 43 Elements like demarcated sidewalks, active façade and cycle stands to increase accessibility to the site and anchor institute	66
Figure 44 Elements like demarcated sidewalks, active façade and cycle stands to increase accessibility to the site and anchor institute	66
Figure 45 Safety elements like colourful crossings act as speed breaking components and increase pedestrian safety	67
Figure 46 Safety elements like colourful crossings to act as speed breaking component and increase pedestrian safety	67
Figure 47 Playful activities – like children play equipment's and engaging with natural material	68
Figure 48 Playful activities – like children play equipment's and engaging with natural material	68
Figure 49 Interventions on approach road to Anchor Institute (park)	69
Figure 50 Interventions on approach road to Anchor Institute (park)	69
Figure 51 <i>Elements like demarcated sidewalks, an active façade and cycle stands to increase accessibility to the site and anchor the institute</i>	70
Figure 52 Interventions on approach road to Anchor Institute (park)	70
Figure 53 Proposed Semi-Permanent Ideas at Road Junction.....	71
Figure 54 Semi-Permanent Intervention at Neighbourhood Intersections.....	71
Figure 55 Proposed Street Sections for Semi-Permanent	72
Figure 56 On site meetings with UMC Engineers and Contractor along with PMU	74
Figure 57 Measuring and road markings for design interventions.....	74
Figure 58 Inauguration of the implementation by UMC and BvLF officials.....	77
Figure 59 BvLF officials along with PMU and PMSU	77
Figure 60 Neighbourhood children actively participating in the implementation	78
Figure 61 Engaging pre-school children in the implementation process	78
Figure 62 Engaging wall paintings for active facade.....	79
Figure 63 Safe junction	79
Figure 64 PSC Meeting II	Error! Bookmark not defined.
Figure 65 Active participation of stakeholders in the on-going discussion	Error! Bookmark not defined.
Figure 66 Isometric view of Ashok Nagar Neighborhood – Depicting potential areas and highlighting key proposed solutions.....	102
Figure 67 Ashok Nagar Street Network - Conceptual Proposal	102
Figure 68 Details of proposed plan	103
Figure 69 Existing & Proposed Street Section for 7m ROW.....	104
Figure 70 Existing & Proposed Street Section for 9.2m ROW.....	104
Figure 71 Anchor Institute Concept & Zoning.....	105
Figure 72 Conceptual Plan for Dedicated Children Zone	106
Figure 73 Natural play elements, toddler swings, sandpits and rolling ground	106
Figure 74 Hanuman Park – Conceptualize Visual.....	107
Figure 76 Intersections – Conceptualize Visual- outside of hanuman park	108
Figure 76 Outside Hanuman Park – Conceptualize Visual of sidewalks along hanuman park	108
Figure 78 Intersections – Conceptualize Visual showing the sidewalks and traffic calming measures	109
Figure 78 Intersections – Conceptualize Visual	109
Figure 79 Typical details for Junctions	110
Figure 80 Design detail for Junction 1.....	110
Figure 81 Typical details for Junctions	111

Figure 82 Design detail for Junction 2.....	111
Figure 83 Layout Plan, Ashok Nagar, CPZ	112
Figure 84 Typical details for road signages, planters & way finding road markings.....	112
Figure 85 Typical details for intersections 5 & 6.....	113
Figure 86 Typical section and compound wall details	113
Table 1 List of Abbreviations.....	6
Table 2 Site comparison.....	20
Table 3 Site comparison: Infrastructural aspect	20
Table 4 Site comparison: Stakeholder insights	21
Table 5 People moving count sample	29
Table 6 Age and mode count sample.....	29
Table 7 Accessibility issues.....	51
Table 8 Safety issues	52
Table 9 Green issues	53
Table 10 Issues related to playfulness	54
Table 11 Inclusivity issues	55
Table 12 Identification of motivators and barriers at Ashok Nagar	59
Table 13 Theme based solutions to convert barriers into motivators	65
Table 14 Design solutions for physical barriers	Error! Bookmark not defined.
Table 15 Estimation for Testing the Designs.....	73
Table 16 List of ITC design elements for conceptual design.....	101
Table 17 Block cost for Final CPZ project.....	Error! Bookmark not defined.

List of Abbreviations

BvLF	Bernard Van Leer Foundation
UMC	Udaipur Municipal Corporation
CPZ	Child Priority Zone
SP	Sensory Park
CFJTJ	Child and Family Friendly Traffic Junctions
AWC	Aanganwadi Centre
PHC	Primary Health Centre
ITC	Infant, Toddler and Caregiver
ITCN	Infant, Toddler and Caregiver Friendly Neighbourhood
SOR	Schedule of Rates
BSR	Basic Schedule of Rates
PMSU	Project Management Steering Unit
PMU	Project Management Unit

Table 1 List of Abbreviations

Preface

Creating children priority zones for the youngest people and their caregivers

Experiencing the city from an elevation of 95 cm, we are creating spaces/zones specific to young children and their caregivers, which will further improve:

- The quality and frequency of interactions between young children and their caregivers, and the well-being of these caregivers
- Through the provision of early childhood services, public space, transport, and planning neighbourhoods
- Need frequent, warm, responsive interactions with loving adults and a safe, stimulating physical environment to explore
- Experience the world at a much smaller scale and have a dependent and far the shorter range of mobility than the typical city-dweller is particularly vulnerable to air and noise pollution
- Need to travel regularly to early childhood services such as PHC, aanganwadi and childcare is always to be found with their caregivers.
- This means walkable neighbourhoods that cater for the basics of a young family needs, public spaces close to home that attract all generations while allowing small children to explore safely, and reliable transport that makes it easy, affordable, and enjoyable for families with young children to travel where they need to go

Children and their caregivers are more likely to thrive in cities when they have access to:



Clean air

The effects of poor air quality are felt disproportionately by the youngest, and especially those in low-income areas.



Nature

Exposure to nature for play, exercise and rest is beneficial for mental and physical health at all ages.



Proximity to services and healthy spaces

Ensuring that key early years services and spaces are easily accessible provides support to caregivers and the children they care for.

Figure 1 - Source BvLF- Urban95

Background

Indian cities are urbanizing and growing at an unprecedented speed in recent decades, and the growth has been so rapid and uncontrolled, that cities infrastructure services has been outstripped to meet the physical and social needs much faster than anticipated. With increase in urbanization and population, India is witnessing robust growth in younger population, with 10% (~36 million) is constituted by children below 6 years and another 32% of its population (~120 million) is constituted by children between 6 to 18 years of age.

Growing up in the cities is as complex as it is exciting, as with plenty of opportunities- access to better schools, sports facilities and health care, the urban environment is also wrought with threats- pollution, lack of independent mobility, inadequate play spaces, lack of recreational/ public spaces and break down of community support structures, that impact the overall growth and development of a child.

It is a well- known fact that issues that make urban life difficult for an infant, toddler or a grown-up child also make it difficult for their care giver too- parents, grand parents, and other vulnerable section of society in general- women, elderly, and disabled people. Thus, making cities more infant, toddler, and their care giver (ITC) friendly is an objective that cuts across many overlapping problems and doesn't just benefit children. The overall focus on Early Childhood Development (ECD) into planning and management of cities is a matter of great concern in India.

As stated based on the success of Urban95 Phase-I, Udaipur now has moved into a bigger & larger phase, i.e. Urban95 Phase-II, which is envisaged for three years, starting from February 2021, focusing on scaling up and sustainability of various projects through various "lighthouse" projects in neighbourhoods, streets and junctions, parks, and health facilities, incorporating Urban95 components in policy, enhance institutional capacities through trainings and peer learning, and build a broad coalition of support by involving relevant stakeholders in projects and other initiatives to be undertaken over the period of 36 months.

Our aim here would be to align the existing information under caregivers and service providers. The PMU team will streamline the information under these categories based upon the nature of responses to be received from the caregivers in terms of their requirements. This information will be mapped and compared with the barriers faced by the service providers (Udaipur Municipal Corporation) in fulfilling the needs of the young children and their caregivers. While conducting the formative research the PMU team will also define the specific behaviours to be targeted under the next-generation 1+1+1 approach which will comprehend the understanding of the barriers and motivators for caregivers and service providers. This document will support UMC in imbibing the ECD lens in other urban development projects and shall be targeted for long term scale & sustainability.

Executive Summary

This document is structure in following parts

Aim and Objective:

To Develop Child Priority Zone in Udaipur which facilitates young children and their caregivers. This facility will be planned at the neighbourhood level and will disseminate the idea of an anchor institute with dedicated children play area, a better journey experience and traffic calming measures which motivates caregivers to walk with their young children

Purpose of this Document:

A. This document will give a detail understanding of the site selection and the feasibility parameters of the same. The feasibility reports cover surveys data, site assessment strategy, motivator and barriers, list of ITC friendly elements, semi-permanent project details and post impact assessments.

B. The Urban Built Environment has a direct impact on children's safety. An unsafe environment in and around ITC facilities can increase the likelihood of accidents and injury, which can have physical as well as psychological implications for the child. Therefore, it is imperative to have a set of guidelines that can provide a safe built environment for young children in cities.

Way Forward :

1. Child Priority Zone be inclusive of child safety and security in terms of infrastructure, which will, also have an impact on social behavioural changes that will create a safer environment
2. Interventions supporting child safety and security in terms of social behaviour and infrastructure are required
3. According to the findings, and stakeholder/community meetings the it was suggested to redesigns and organizing the children play area of the park to increase ITC's footfall
4. Interventions for engaging people for longer period needs to be addressed. As a result, interaction, and engagement of children with ITC's and natural environment would be promoted
5. Dedicated play area in the neighbourhood/anchor institute for development of children gross motor skills and early childhood development
6. Things that enhance the experiential qualities of the space should be incorporated into the design, hence increasing the footfall.
7. Creating a sustainable and scalability model for the city, which can be replicable at any ward level In the city

1 Urban95

1.1 About Urban95

Urban95 is BvLF's global initiative, aims to create healthy, prosperous, and vibrant cities where babies, toddlers and their families can thrive. The initiative is meant to make lasting change in the urban landscape and provide opportunities that can shape the crucial first five years of children's lives. The goal of this initiative is to support healthier, safer, and more exciting urban neighbourhoods for young children, for those who care for them, and for everyone.

1.2 Urban95 in India

The challenges of any urban city in India are mirrored across length and breadth of the country and can be broadly categorized into rapid and chaotic growth concentrated on informal, slum settlements with inadequate infrastructure; open defecation; parks not being accessible; lack of footpaths, streetlights, and safe places to crossroads; and children in some neighbourhoods needing to use public transport, which is not child-friendly, to get to the nearest school.

Thriving and happy children are indicators of a healthy and sustainable society with high levels of well-being. Children form an understanding of their environment through everyday discoveries and encounters in the park, at school, during a stroll in neighbourhood or by imagining and inventing games and stories. The built environment plays a crucial role in shaping young children's narratives of the city, and their understanding and experience of urban spaces.

Realizing the need to address the issues surrounding the ITC, **Bhubaneswar in Odisha, Pune in Maharashtra, and Udaipur in Rajasthan** became the part of the Urban 95 program as a part of its Phase-I which was for 1 year period.

1.3 Urban95 in Udaipur

Realizing the need to transform its urban built environment into more Infant, Toddler, and their Caregivers (ITC) responsive and ITC friendly, Udaipur in Rajasthan has agreed to be part of Urban95 Program, and in process has join hands with BvLF via a formal Memorandum of Understanding (MoU). The Phase-I of the Program began in June 2019 for a period of 18 months and given the success of the same, Udaipur now has moved into larger and bigger phase starting Feb'21, planned for 36 months.

2 Introduction to Child Priority Zone

Introduction for Child Priority Zone (CPZ):

C. Children live in a world constructed by and for adults. Since birth, young children undergo developmental changes in physical, cognitive, psychological, and social abilities that influence their curiosity, perceptions, risk-taking behaviour, judgement, their actions, and reactions to environmental stimuli, thereby affecting their susceptibility to injuries and accidents. Young children (0-5 years) are particularly vulnerable to accidents, and their physical and emotional safety requires a different approach than that of adults.

D. Generally, there is a lack of knowledge and focus related to child safety (0-5 years) aspects both at the home (by caregiver) and in the Urban Built Environment (by service provider).

E. It is essential to look at child safety from a different perspective and evolve measures to improve child safety and well-being.

F. At present, there are no specific guidelines available for the physical safety of young children (specifically from 0-5 years of age) in urban areas/cities of Rajasthan. The Urban Built Environment has a direct impact on children's safety. An unsafe environment in and around ITC facilities can increase the likelihood of accidents and injury, which can have physical as well as psychological implications for the child. Therefore, it is imperative to have a set of guidelines that can provide a safe built environment for young children in cities.

G. Behaviour of caregivers directly impacts the physical, social, and emotional security of a young child. Frustration, phobia, anxiety etc. in the early years can lead to a long-lasting impact on a young child.

H. Specific behaviour guidelines which could sensitise and empower the caregivers on all the aspects of child safety and security can help in preventing all sorts of inadvertent injuries, accidents etc.

I. Capture Behavioural Changes for:

Pre - Connect with people for behavioural impact and assess patterns in using the children CPZ/Anchor Institute.

During - what are the current ideas we are bringing with the partners and monitoring the impact on the end-user/community.

Post-Impact assessment and user observations on the final implementation, will also increase local community engagement.

2.1 Introduction- Anchor Institute and its Catchment Zone- 600M Radius

“Establishing a children’s priority zone starts with finding an anchor institution – perhaps a childcare centre, playground, or health clinic – and defining a perimeter around it. Initial events are held to raise awareness and bring families in the community together. Issues affecting children are researched, and solutions proposed – for example, safer road crossings near schools or parks, the rehabilitation of abandoned space into a garden where families grow healthy food, or the allocation of land for a health outpost to increase accessibility for families.”

[Source – BvLF | Urban 95](#)

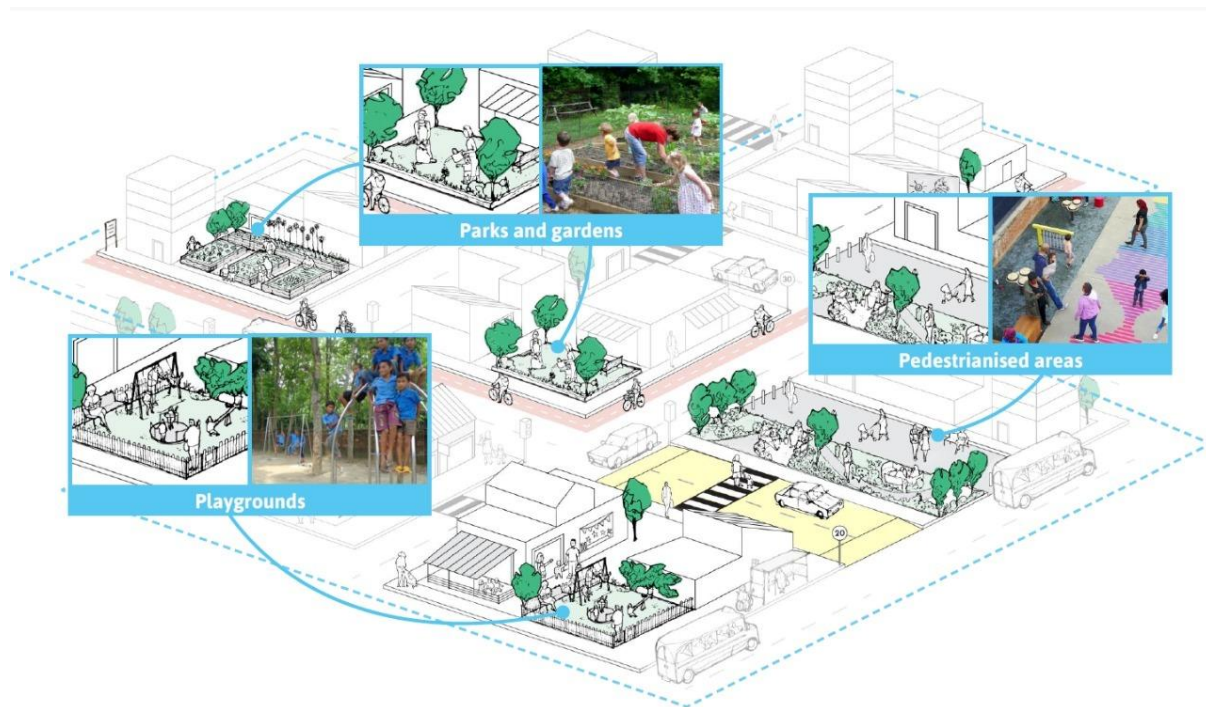


Figure 2 - Child priority zone, source- BvLF Urban 95

2.2 Scope and Limitations

2.2.1 Develop 2nos CPZ in Udaipur surrounding an Anchor institute used by young children (0-5 years)

2.2.2 Selection of potential sites having Infrastructure challenges related to the limitations in the social behaviour and early childhood development – limited use of parks, Selected trips due to weak infrastructure, limited accessibility due to stray, fast-moving traffic, garbage dumping, open junctions, etc.

2.2.3 Primary surveys of the caregivers and young children and one to one interview with impacting behavioural components

2.2.4 Early Childhood Development will help in imbibing and engaging community briefing, through the list of strategies/actions (shown in the slide community engagement)

2.2.5 Document the expected outcomes using the existing Urban95 tools such as Gehl tool to understand the behavioural changes

2.2.6 Capture Behavioural Changes for:

Pre – Connect with people for behavioural impact(preconceived)

Engaging community and city official stakeholder to understand what are the basic requirement of the neighbourhood community and how we can ensure people participating in to it.

During - Stakeholder/community engagement during the work progress to involve them in to the ownership of the programme/site works and how will the changes be envisaged with evaluating existing patterns with the local resident

Post – Post impact assessment and users' behaviour impact will be mapped using the Ghel survey kit and a detailed project progress would be given, to assess how the city/neighbourhood is being responding to the implemented interventions under Urban95 principles.

2.3 Outcomes



Figure 3 Snippet of first tactical intervention at a Child Priority Zone in Udaipur

- 2.3.1 Increase in the number/ percentage of caregivers and young children (0-5 years old) within the children priority zone using sustainable mobility options such as walking, cycling, public transport etc. and as an opportunity ground to enhance learning while playing via recreational activities
- 2.3.2 Increase in the time spent outdoors by the caregivers and their young children
- 2.3.3 Presence of unobstructed continuous footpath/ ramps, their condition. Encouraging Safety and Security-Safer Street crossings, the aspect of eyes on street, Traffic calming parameters/ measures
- 2.3.4 Availability of public transport, parking area, their location
- 2.3.5 Dedicated spaces for children & caregivers
- 2.3.6 Games, sidewalks
- 2.3.7 Active façades to engage young children
- 2.3.8 Lights, bollards, safety signage(s)
- 2.3.9 Shaded areas, seating/ resting places
- 2.3.10 Utilities- toilets/ drinking water, condition, and usage of same

Social and Behavioral Change Communications (SBCC)

Social and Behavior Change Communication uses communication strategies that are based on behavioural science to positively influence knowledge, attitudes and social norms among individuals, institutions and communities. SBCC is a process of interactively communicating with individuals, communities and societies as part of an overall programme for information dissemination, motivation, problem-solving and planning. The process understands the targeted audience's needs, drives and preferences to conceptualize and helps a person to understand the information and efforts to bring about desired behaviour change easily and feasibly while protecting and improving outcomes.

A comprehensive SBCC approach can be a very resourceful tool when implemented in a planned, coordinated manner and within a wide range of interventions which can result in a sustained change in an individual or community adopting new behaviours and social norms or participating in the civic engagement process.

In continuation to the above, a strategy has been planned for CPZ, Ashok Nagar and has been explained below:

Pre – Implementation

- **Awareness-raising** communication and social behaviour change communication (SBCC) methods are to be applied effectively
- **Community Engagement sessions** for sensitizing active and more importantly passive users about the importance of using the facility and its numerous benefits via extensive Information Education Communication (IEC) and/ or Communication & Outreach (C&O) within (and outside the park as well- set periphery (600m or 20 mins walk, more based on the need) on sample size basis (nearby Residential Colonies, local community- household having a children below 6 years of age - Mix of HIG, MIG, LIG & EWS, NGOs, CBOs, RWAs– if any, Community groups etc.) using various means such as In-Depth Interviews, Focused Group Discussions (FGDs), Key Informant Interviews (KIIs) etc., disseminating information on the overall objective, design, benefits etc. All the above shall be conducted via specifically designed questionnaires and aesthetically designed outreach material (Banner/ Poster, Leaflets for

distribution- if required);

- **Advocacy meetings** with Service providers and stakeholders

During – Implementation

- Community Engagement with various stakeholders is to be conducted
- Conducting **Capacity Building programs** for caregivers
- **Sensitizing caregivers** towards the advantages of outdoor exposure for young children
- FAQs with different methods and details of specifications as well as features in the park
- It is also planned to have **visually compelling signages** in form of posters and/or banners, disseminating information in form of 'scientifically proven facts', strategically placed not only in and around ITC dedicated zones but also at places having a huge gathering of caregivers such as open gym, general exercise zones, yoga zones (if any), laughing clubs and many more including in route of walkers, joggers, at resting spaces etc. The same is also planned to be placed/hung at all the identified ITC destinations;
- Age-appropriate **ECD messages to be displayed** in the facilities in the form of wall paintings or posters for parents and caregivers
- ECD messages to be supplemented near ITC destinations by the use of visually appealing ECD content and play equipment which include, colourful alphabets, numbers, fruits, animals, short stories, etc.
- To **Promote participation of family members** other than mothers, while playing, conversing, singing, and storytelling interacting with the children, encouraging positive learning experiences through specially designed events, disseminating information about ECD's objective, design, benefits, etc., and discussing the same with the stakeholders regularly.
- Encouraging caregivers to take their children to ITC destinations regularly and **interact with children from different sections of society** (HiGs, MiGs and LiGs)

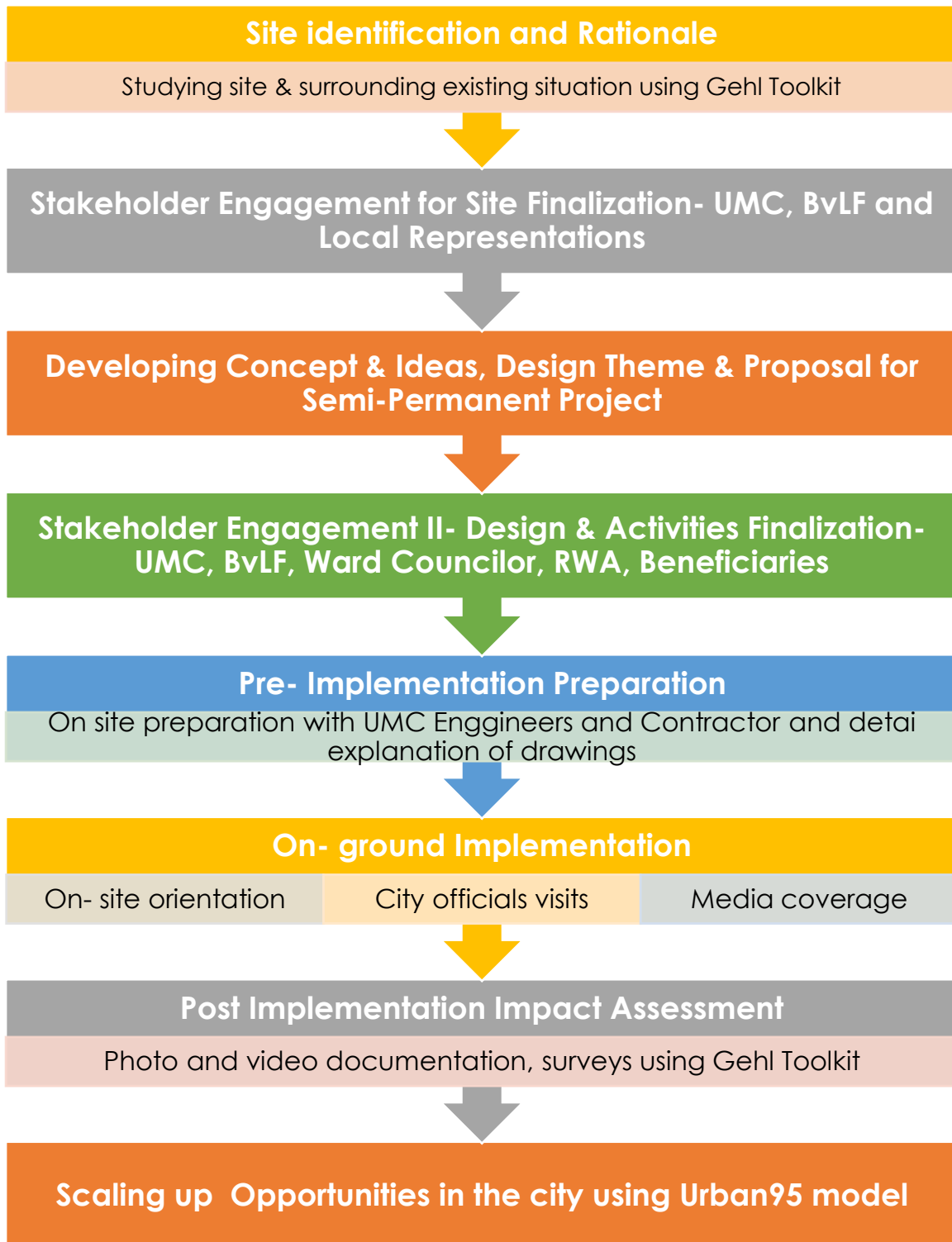
(involve external Advisor) for sensitizing active and more importantly passive users about the importance of sensory parks and their numerous benefits

- **Dialogue with caregivers** and local CBOs and RWAs in nearby Residential Colonies- by providing a stimulating and active atmosphere which will greatly impact their physical as well as mental growth & development
- Advocacy meetings with Service providers and stakeholders

Post - Implementation

- **Use of mass media** like radio and TV ads to create buzz around the features and benefits associated with Parks and playing together
- **Use of Mass Media** for popularizing the project objectives and to create buzz around the features and benefits associated with Parks and playing together for larger visibility of the new facility to the targeted audience including means such as Digital/ Electronic- TV, Radio, Print- Newspaper, Magazines and social media- Facebook, Instagram, Twitter, WhatsApp etc.;
- **Conducting facilitation Sessions**, also planning and organizing events.
- Dialogue with caregivers via specifically designed questionnaires and aesthetically designed outreach material (Banner/ Poster, Leaflets for distribution- if required)
- Using Social Media Platforms for sharing Feedback
- Organizing events during certain intervals, as appropriate for each project, in the form of musical and playing activities and/or singing and dancing competitions to raise awareness of the project's objectives and increase the visibility for the same to the intended audience
- Managing, IPC, FGDs and Counselling sessions for sensitizing, the ECD benefits and understanding the importance and advantages of AWC, Outdoor

visits **2.4 Methodology and Approach**



2.5 Proposed Sites for Child Priority Zone

The three sites for developing a Child Priority Zone were shortlisted after several discussions with UMC officials and PMSU team. The choices were based on varied land use typology and functionality of the sites.

Ashok Nagar is a densely populated HIG and MIG neighbourhood area, which is connected with the city main road of Ashok Nagar to the University Road.

Neemach Kheda is one of the oldest settlements of the city which caters to LIG and EWS and has small pockets of public spaces, which can be made into better attraction points for young children.

Meera Park and Sahiwalo ki Gali is a major node in the wall city area, with open spaces for public gatherings and children, and play area.

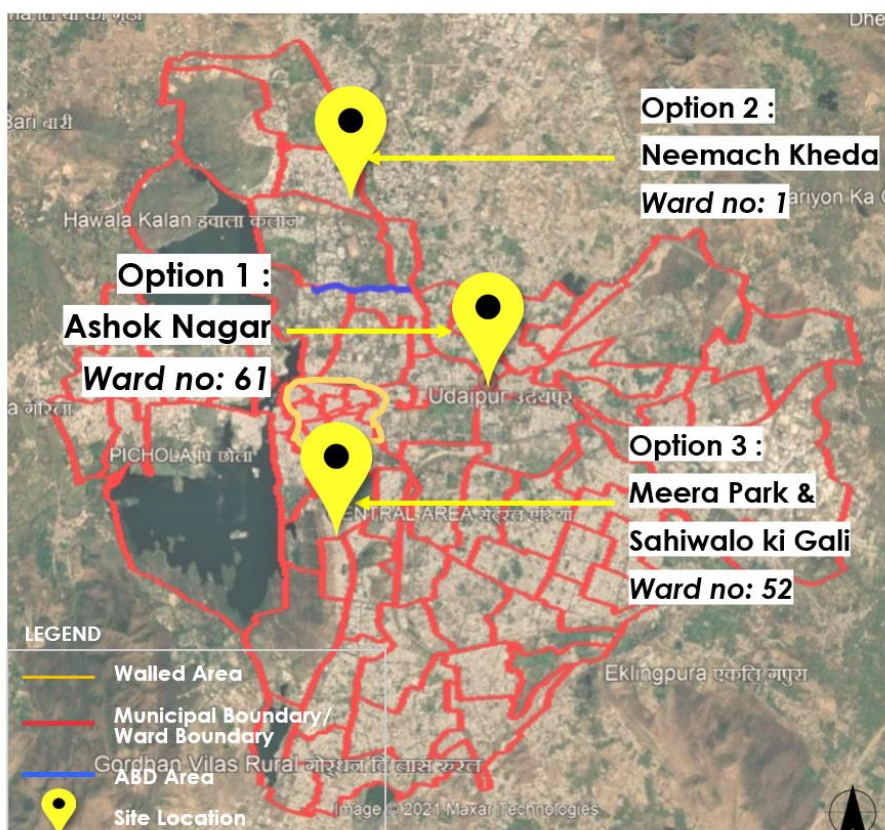


Figure 4 Map showing proposed sites for Child Priority Zone

SITE	ASHOK NAGAR	NEEMACH KHEDA	MEERA PARK & SAHIWALO KI GALI
WARD NO.	61	1	52
TOTAL POPULATION	6779	9112	6538
TOTAL CHILD POPULATION (0-6 AGE)	235	318	115
AREA TYPOLOGY	MIG and HIG housing and mixed use	LIG and MIG housing and mixed use	MIG and HIG housing, old city area
POTENTIAL FOR SCALING AND SUSTAINABILITY	<ul style="list-style-type: none"> Centrally located Wider road network, availability of ITC facilities 	<ul style="list-style-type: none"> Maximum potential for ITC usage Availability of <i>chawk</i> and nearby ITC destinations like AWC and PHC 	<ul style="list-style-type: none"> High potential of ITC development One of the prominent areas of the walled city

Table 2 Site comparison

2.6 Site Comparison

Infrastructural Aspect



Indicators	Ashok Nagar	Neemach Kheda	Sahi Walo Ki Gali/ Meera Park
Pedestrian walkway	Available	NA	NA
Availability Of Public Transport, Parking Area, Their Location	Available	Intermediate Public Transport (IPT)	Intermediate Public Transport (IPT)
Dedicated Spaces For Children & Caregivers	Available (In Anchor Institute)	NA	Available (In meera Park)
Children playing equipment's	Available (Can be ITC oriented)	Partially Available (A Large School Playground)	Available (In meera Park)
Active Facades To Engage Young Children	Available	NA	NA
Adequate lighting	Available	Available	Available
Safety Signages	NA	NA	NA
Shaded Areas, Seating/ Resting Places	Available (Seating Space Needs To Be Created)	Available (Seating Space Needs To Be Created)	NA
Utilities	Available	NA	Available
AWC in 600 m radius	Available	Available	Available
PHC in 600 m radius	NA	Available	NA
Feasible Zone			Less Feasible
Highly Feasible Zone			

Table 3 Site comparison: Infrastructural aspect

Stakeholder Insights

	Ashok Nagar	Neemach Kheda	Sahi Walo Ki Gali/ Meera Park
KNOWLEDGE			
Usability of Anchor institute	<ol style="list-style-type: none"> 1. The neighbourhood is aware of Hanuman Park, Library, and Community centre 2. Anchor institute is used for kids playing, temple visits, strolling and visiting the library 	<ol style="list-style-type: none"> 1. Community is engaged in visiting PHC & AWC 2. No awareness of available spaces/chawks which are potential for ITC elements 	<ol style="list-style-type: none"> 1. People using the Park & Chowk for Kids playing 2. Due to unorganised parking the chawk is not preferred for kids playing anymore
Approach to the anchor institute	5-10 mins approx.	5-10 mins approx.	2-5 mins approx.
ATTITUDE			
Duration of time spent	30 – 45 mins	15 – 30 mins	10-15 mins
Trip behaviour	4-5 times a week	3-4 times a week	2-3 times a week
PRACTICE			
Constraints	Parks lacks ITC infrastructure The approach can be safe	No magnet /stopping points to attract the community to use the near by facility	Unorganized parking and stray constantly demotivates to use the anchor facility

Table 4 Site comparison: Stakeholder insights

Based on the infrastructural and stakeholder insight comparisons of the three sites, Ashok Nagar and Neemach Kheda are chosen to be feasible for developing two Child Priority Zones.

The parameters are driven from the site study and understanding the Urban95 objectives to be driven from the selected interventions.

The reasons for finalising these two sites are due to higher ITC footfall and a greater number of ITC destinations in the neighbourhood as compared to the other site. Which was rationalised for the site selection.

3 Site- Ashok Nagar

3.1 Introduction & Characterization- in & around Land use & Socio- Economic, Urban Built Environment, Approach & Access

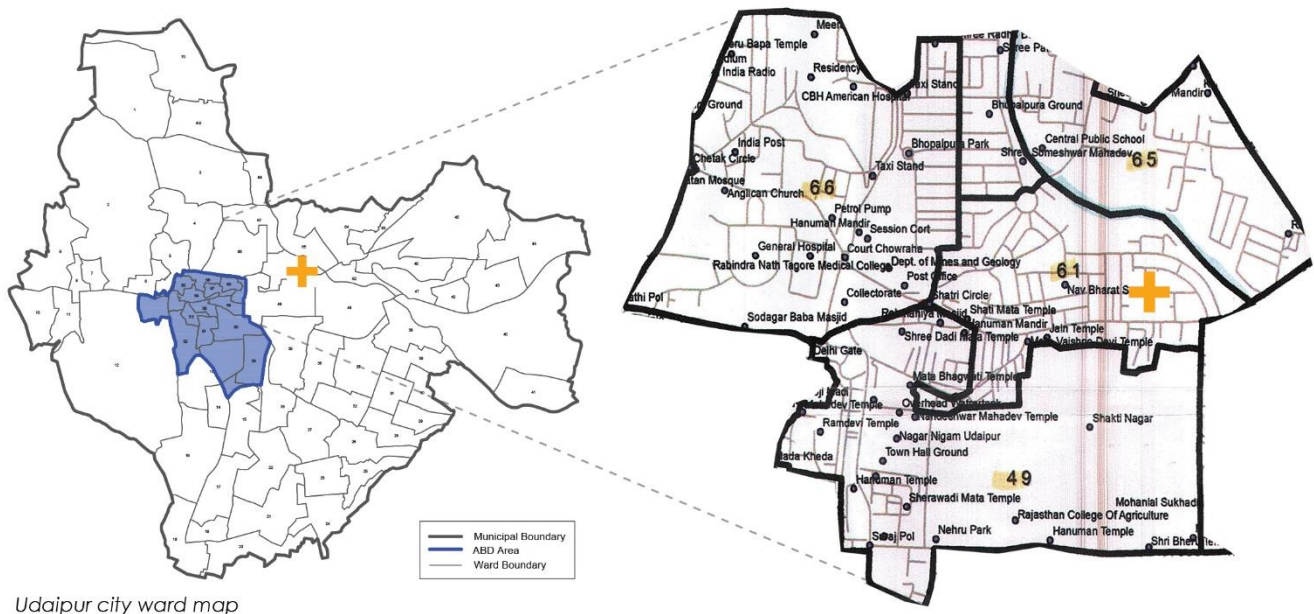


Figure 5 Locating the site at city level

1. Ashok Nagar located in ward no. 61 is one of the oldest neighbourhoods of Udaipur city
2. It comes under the land use of HIG and MIG, also the adjoining university road had become a major commercial street, which engages a lot of local crowds in the city.
3. The community is very active and well-engaged in the social development of the neighbourhood
4. There are creches, day schools and childhood hospitals available in the neighbourhood, which attract a lot of footfalls of young children and their caregivers in and around Ashok Nagar
5. Ashok Nagar is a well-planned neighbourhood with proper street width which varies from 7m to 10m ROW and planned intersections, wall allows easy flow of traffic and pedestrian moments
6. It has a high potential neighbourhood for the ITC destinations as it comprises hanuman park, hanuman temple, a community library and small grocery shops where we see high several footfalls of caregivers with their young children.

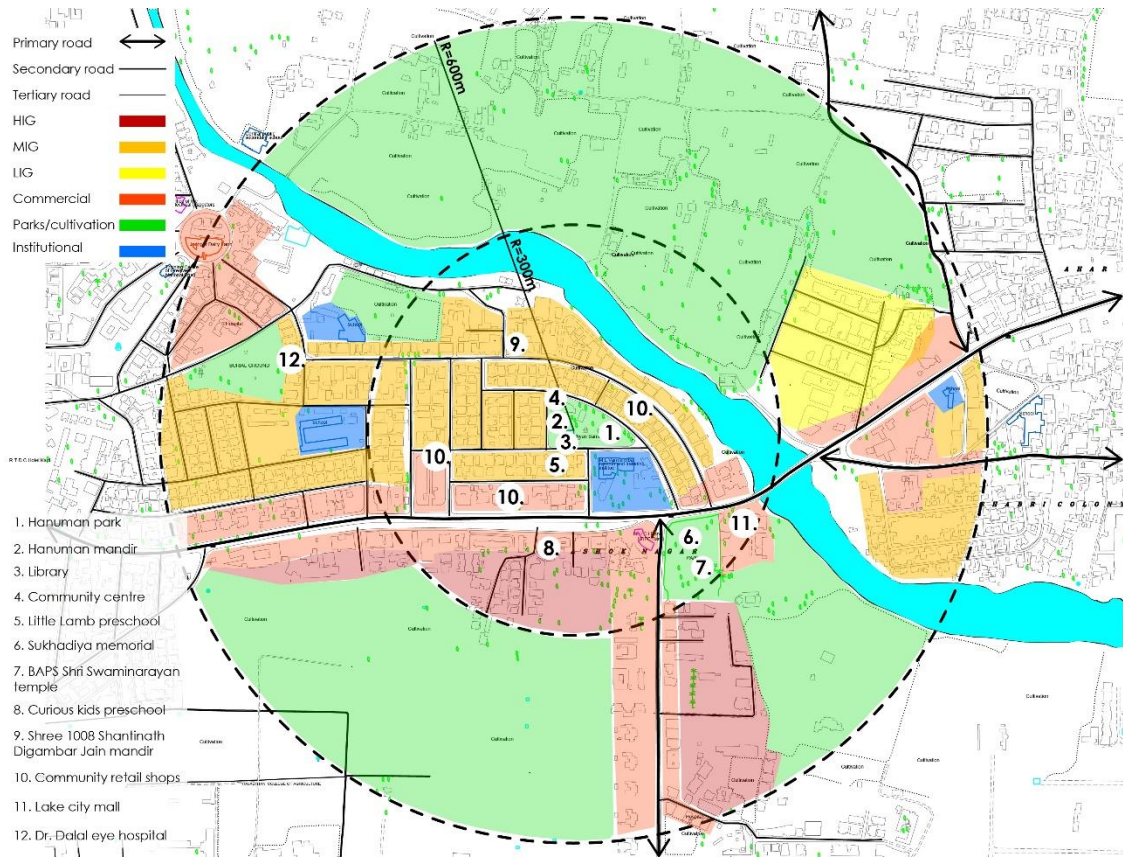


Figure 6 Land use and area mapping

7. The land use showing ITC destinations in the vicinity of 300m/600m radius of the neighbourhood
8. It also gives a clear understanding of the available road network within and periphery of Ashok Nagar.

3.1.1 Site approaches and access

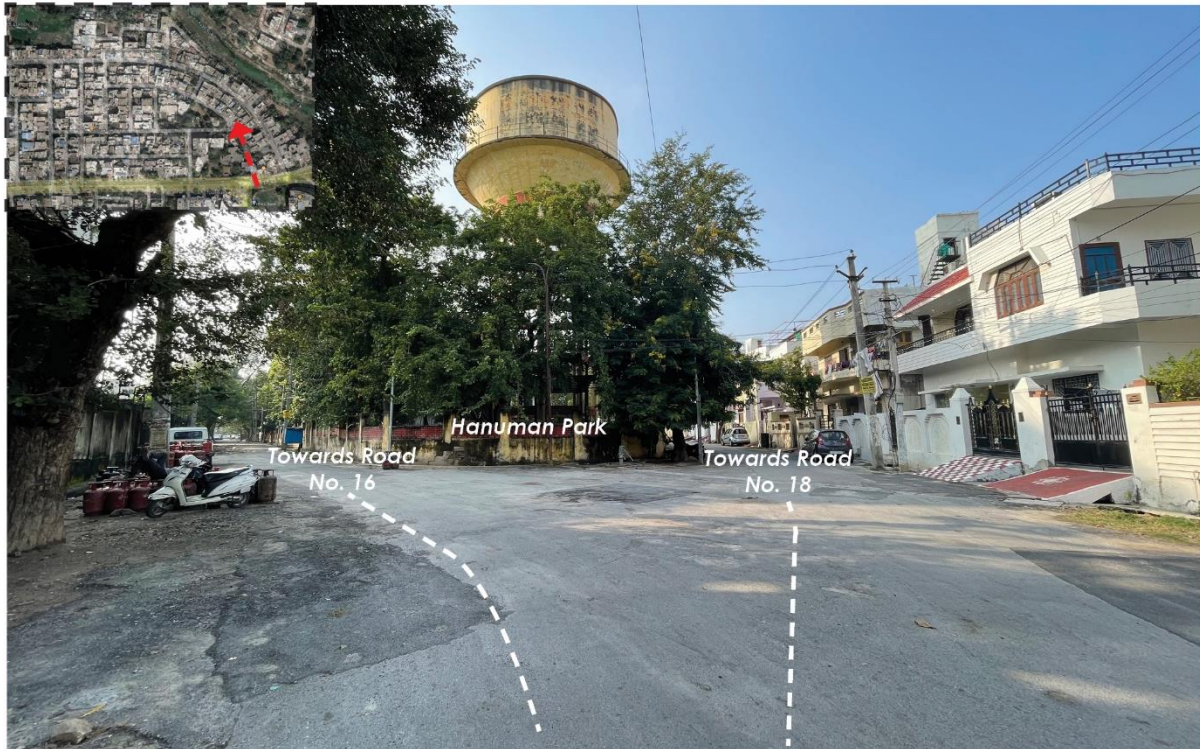


Figure 7 The site's main access road, (Ashok Nagar Road No. 18), has a higher risk of accidents at the junction and requires traffic calming measures to improve ITC's safety and security

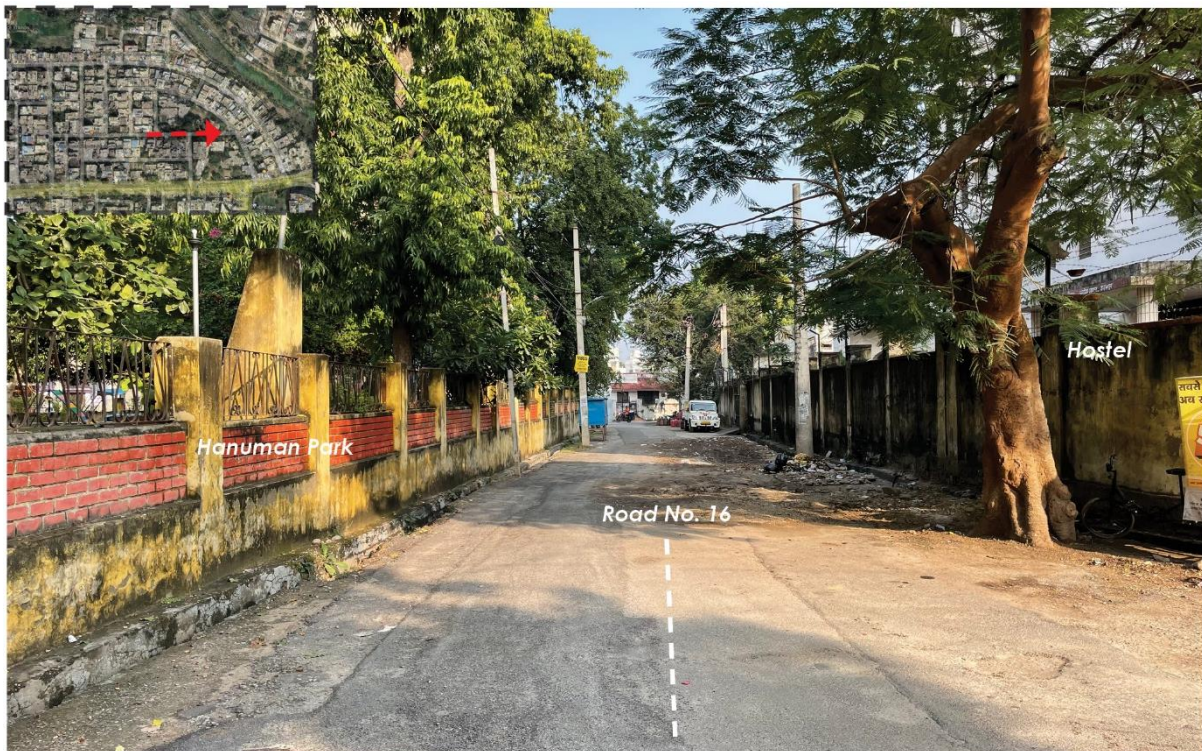


Figure 8 Open Drains one either side of the roads, making it difficult for the pedestrian movement



Figure 9 The access road leading towards (anchor institute) Hanuman Park, and Ashok Nagar main road requires ITC's friendly designs on the intersection for engaging young children



Figure 10 Road leading to main entrance of Hanuman Park - abrupt parking needs to be solved, for easy pedestrian movement

3.1.2 Identifying Anchor Institute

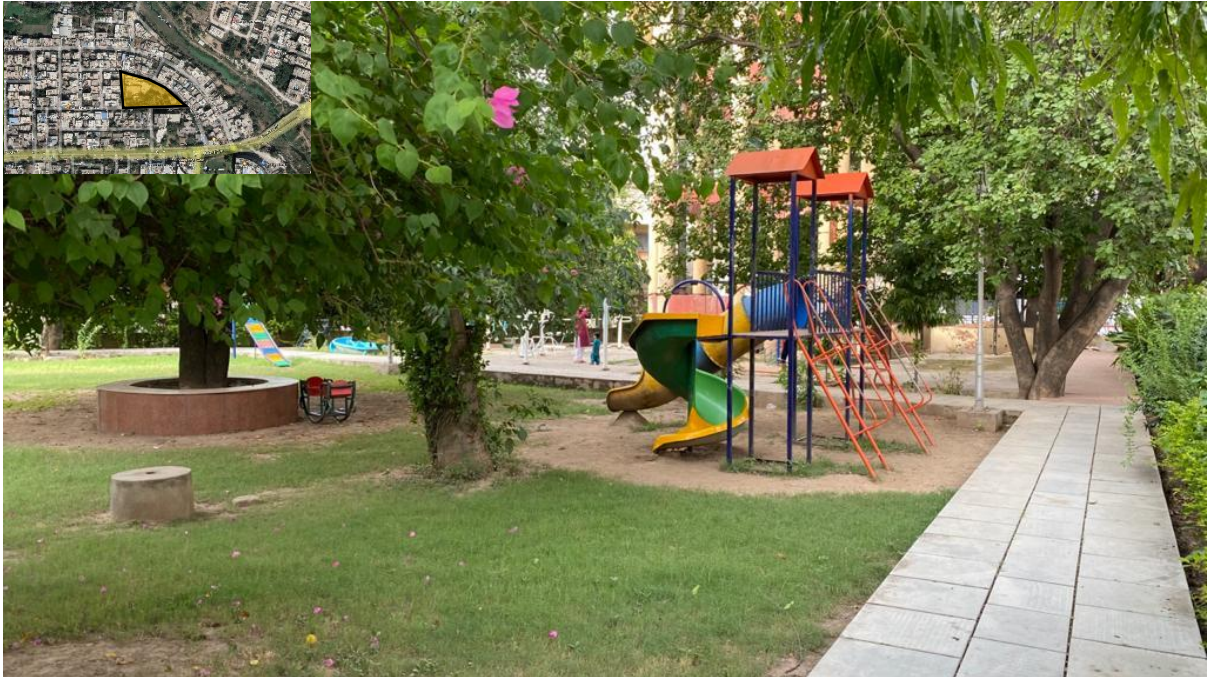


Figure 11 Anchor Institute: Hanuman Park

The anchor institute – hanuman park has been shortlisted due to its various characteristics, which makes it a high potential for a child priority zone:

1. The selection of an anchor institute was done based on ITC footfall, awareness of the park among the community, the assessment of the Gehl survey tool kit and HP acting as a centroid for all of the neighbourhood, which makes it a high potential area as an anchor institute
2. It has ample green cover and footfall at various times of the day
3. People of all age groups are being seen there, performing activities like sitting, chit-chatting, walking, and playing.
4. The anchor institute- Hanuman Park has the potential to become a major attraction point for young children and their caregivers by addressing Urban95 principles
5. By using park as a centroid, the idea is to motivate caregivers and their young children to use the available public space and encourage outdoor playtime
6. It has a kid's play area, open gym, hanuman temple, seating benches and a large community gathering point.
7. The park is well-lit in the evening, allowing users to use it throughout the day.

3.1.3 Anchor Institute Context

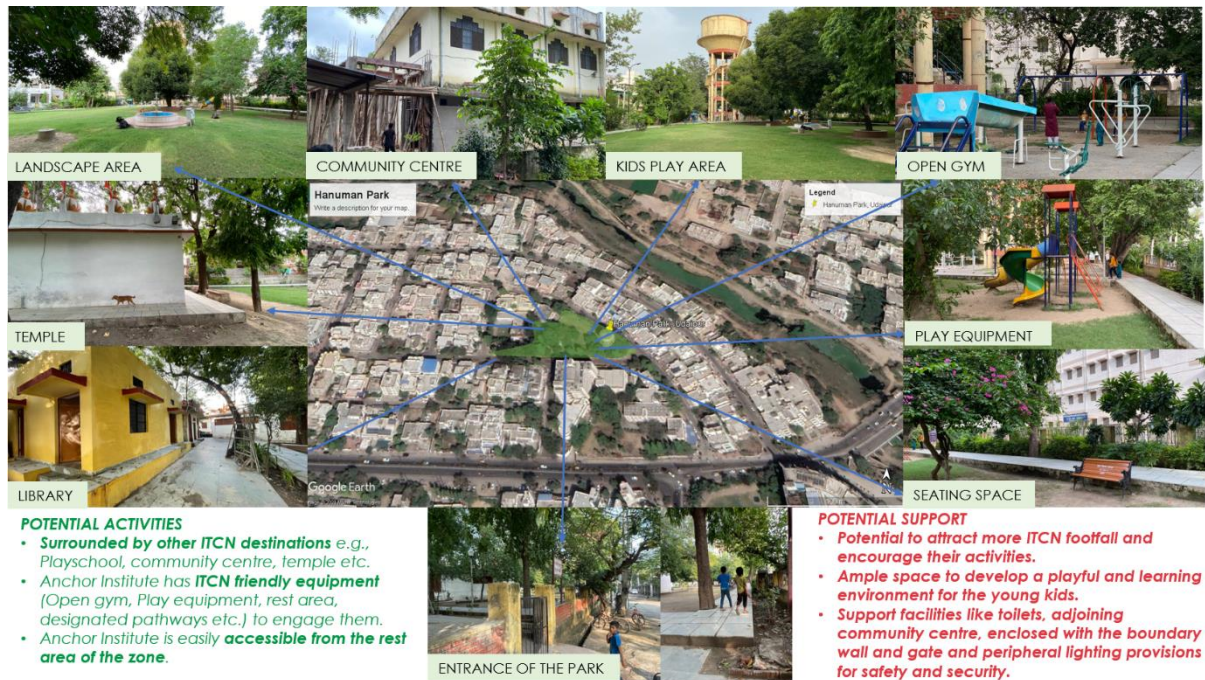


Figure 12 Highlighting Anchor Institute context and other ITC destinations on site

1. As can be seen in the image above, the anchor institute- Hanuman Park is surrounded by multiple ITC destinations like a community centre, library, temple, and preschool. Being a residentially dominant neighbourhood, it caters to a broader age group and higher footfall.
2. As of now, Hanuman Park is being used at selected times of the day which is morning and evening peak hours. The main reason of usage is due to the availability of the temple.
3. Since caregivers come to the temple, they carry their children along with them and spend some time in the park. Due to limited playing equipment's, sitting spaces and non-availability of engaging games for young children, they tend to lesser time in the park.
4. Caregivers visits mostly at the time of presence of other young children in the park, this motivates them to being their kids at the similar time to socialize and play with other children.

3.2 Using Gehl Toolkit to Determine the Availability Of Children & Their Care-Givers, Durations, Activities They Are Engaged In, Existing Usage, Typology etc.

Types of Surveys conducted

Based on the Gehl Toolkit, following surveys were conducted on site:

1. People moving count
2. Stationary activity mapping
3. Intercept survey
4. Urban95 quality criteria

Few additional surveys like route mapping and observational studies were done to gather more in- dept understanding of site.

Duration of Surveys

For surveys like people moving count wherein figures/people had to be counted, it was conducted for 10-minute slots in the morning, afternoon, and evening peak hours at all the locations.

Location of Surveys conducted on site



Following are the nodes where the Gehl toolkit was used to conduct surveys for CPZ Ashoknagar

Figure 13 - Location of Survey done

3.3 Gehl Toolkit Survey Findings

3.3.1 People moving count

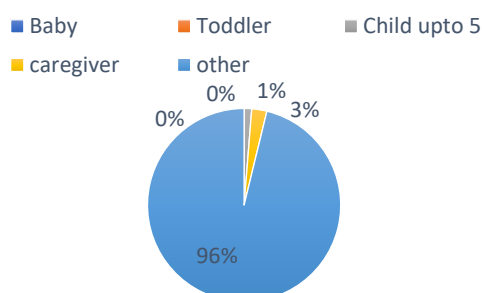
People moving count was conducted at Ashok Nagar site, near the hanuman park and junctions "C" "E" & "F" of Ashok Nagar site in evening hours (5:30pm – 5:40 pm). Survey count was observed and documented for 10 minutes.

People Moving Count			
Sr. no.	Category	Time 10 mins	Total no. of people
1	Baby	0	–
2	Toddler	0	–
3	Child up to 5	1	1.26%
4	caregiver	2	2.53%
5	other	76	96.20%
Total no. of samples		79	

Table 5 People moving count sample

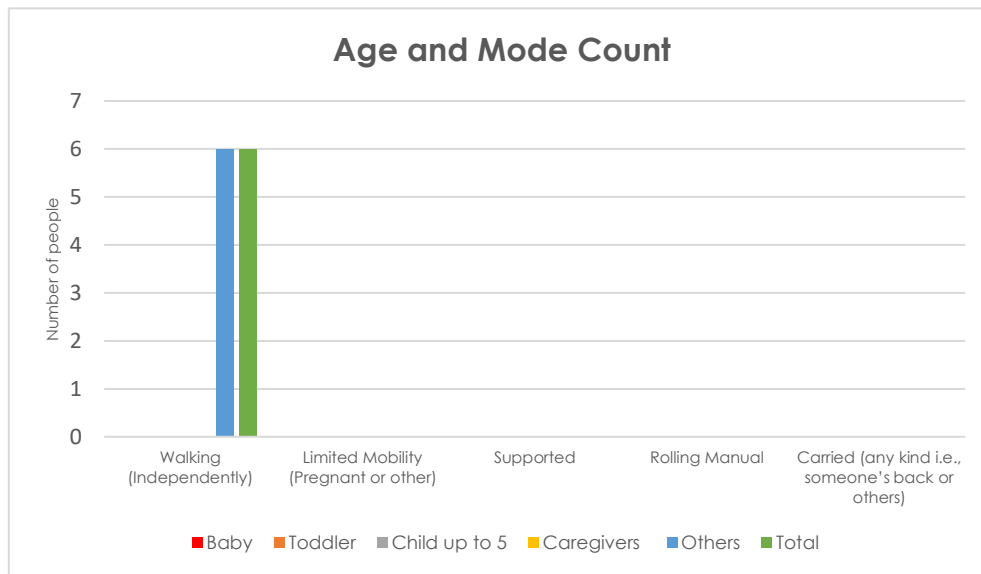
Age and Mode Count							
Sr. No	Mode Categories	Baby	Toddler	Child up to 5	Caregivers	Others	Total
1	Walking (Independently)	-	-	-	-	6	6
2	Limited Mobility (Pregnant or other)	-	-	-	-	-	-
3	Supported	-	-	-	-	-	-
4	Rolling Manual	-	-	-	-	-	-
5	Carried (any kind i.e., someone's back or others)	-	-	-	-	-	-
Total		-	-	-	-	-	6

Table 6 Age and mode count sample



People moving Count

People moving count



Findings:

- It was observed that the site received maximum footfall in the **evening** as compared to morning and afternoon time
- The presence of **ITC was negligible** as compared to others despite having prominent ITC destinations on site.
- The most prominent mode of transport used while moving was private vehicles like cars and 2-wheelers
- Children were seen cycling during the evening hours on weekdays and morning hours on weekends, but their **movement was restricted** and unsafe due to the fast-moving cars
- **Presence of strays** made ITC un-safe for walking in the park

Way forward:

- As the presence of ITC was observed to be minimum, Intervention to increase the footfall of ITCs could be made
- Planning and designing of child Safety measures on the site.
- improving the experiential qualities of the area to increase the footfall of ITCs.
- Safety in terms of walking, cycling and user experience of ITCs needs to be catered

3.3.2 Stationary Activity Mapping

Quantitative data collection was used to evaluate how a particular place is performing for people. All the stationary activities happening on site are observed and further analysis is done based on what is working well and what can be improved to enhance the experiences of people. The tool helps in tracking various activities, who is doing them and what type of interaction is happening. This begins to give an understanding of how inviting a place is for different categories of people.

Stationary activity mapping was conducted at two major junctions around the anchor institute- Hanuman Park to understand the existing activity patterns. They were conducted at peak morning and evening hours to document the various activities and uses in the place. Conducting it at junctions enabled in comparing the two sites and the activities that were taking place.

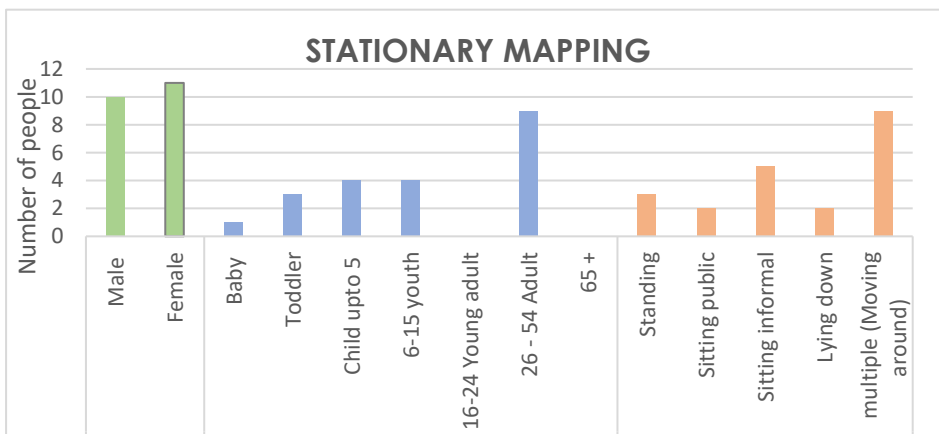


Figure 14 - Demographic of Stationary Mapping

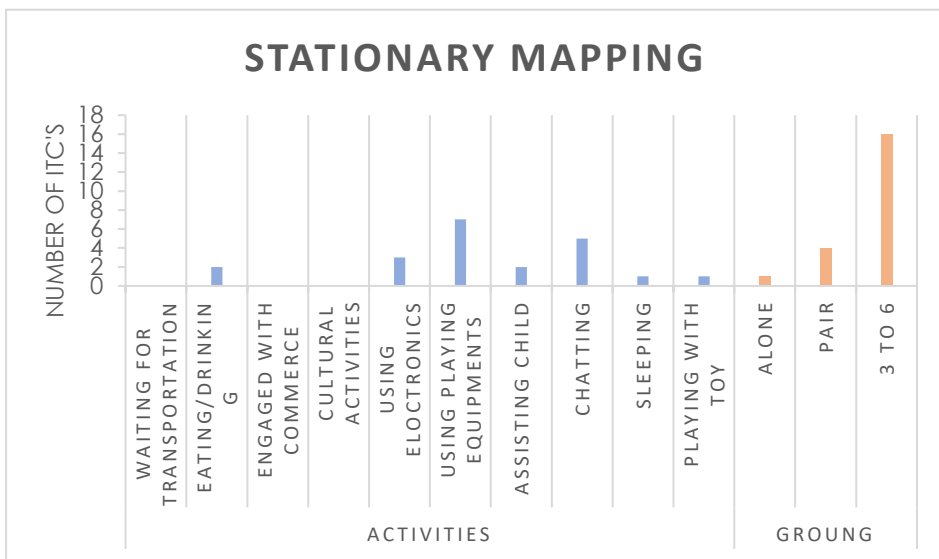
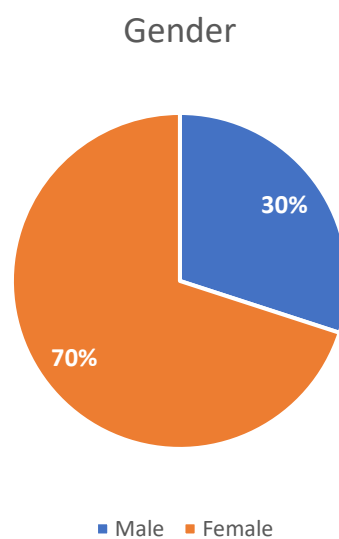
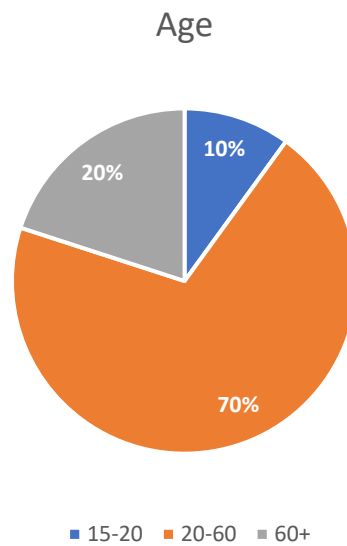


Figure 15 - This tool observers what kind of stationary activities are happening in the place

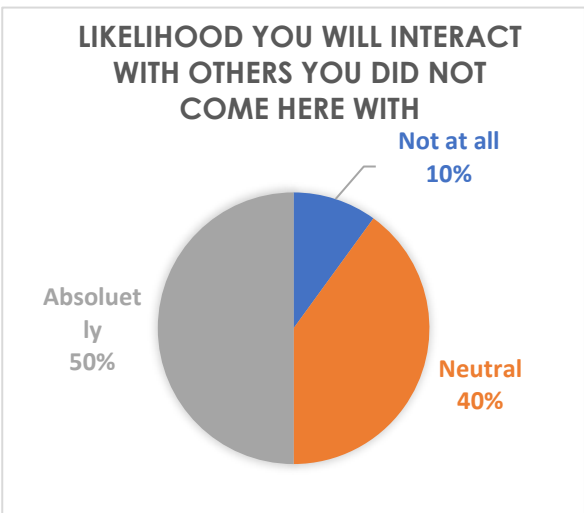
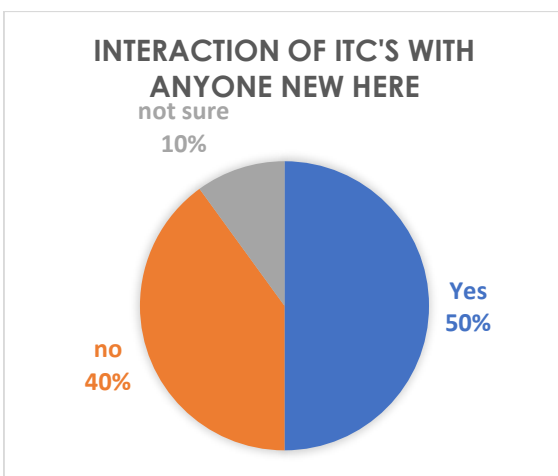
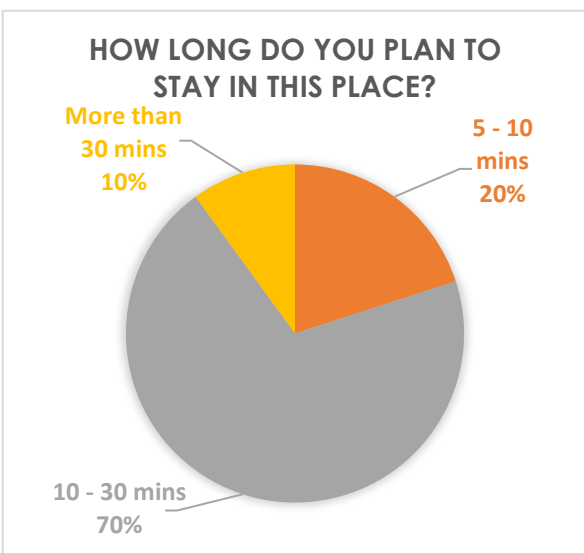
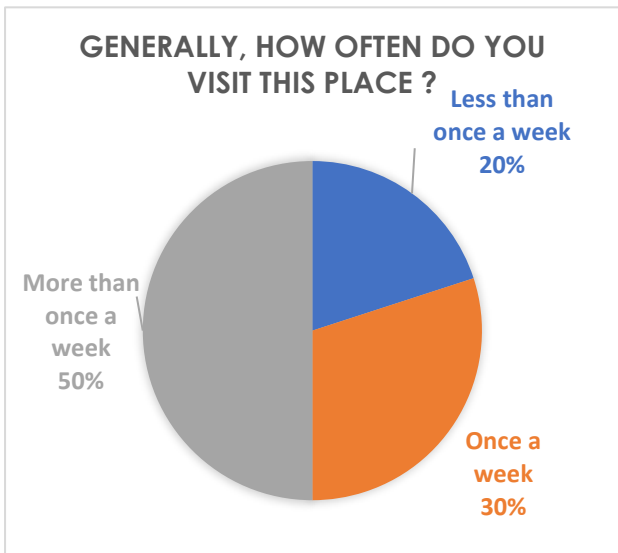
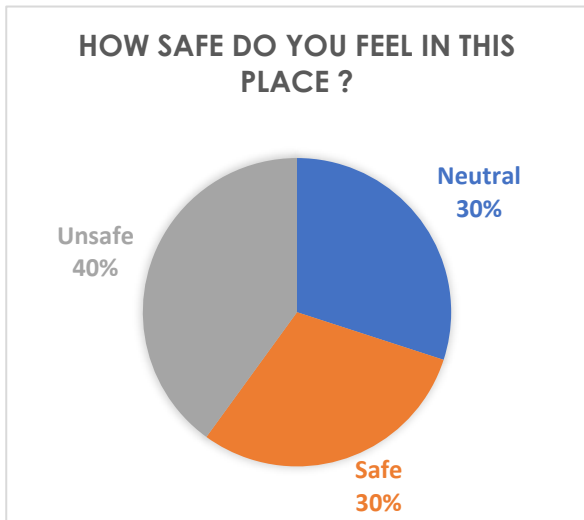
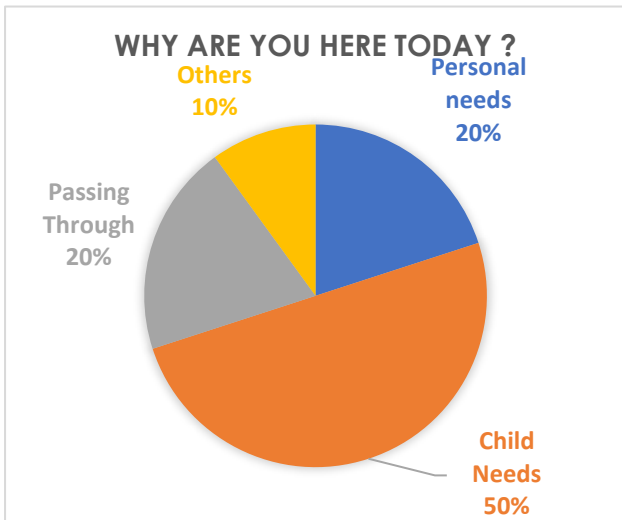
3.3.3 Intercept Survey

- 4 Qualitative surveys were conducted in the form of a questionnaire to gather information about why caregivers and their children are spending time in a place. The survey helps in building analysis on why people are visiting a specific place, the duration of their stay and other insights or concerns they have regarding their experience of that place.
- 5 Several intercept surveys were conducted in and around the anchor institute- Hanuman Park, within 600m radius. The questions were asked only to the targeted group of people- ITCs to understand their behaviour on site.

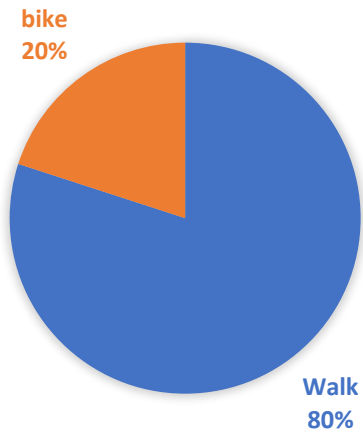
Demographic Details of Respondents:



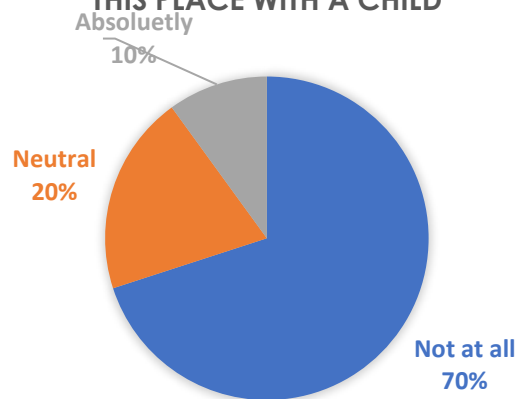
Response (Intercept Survey):



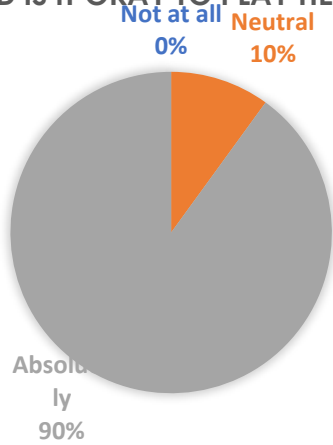
HOW DID YOU GET HERE TODAY?



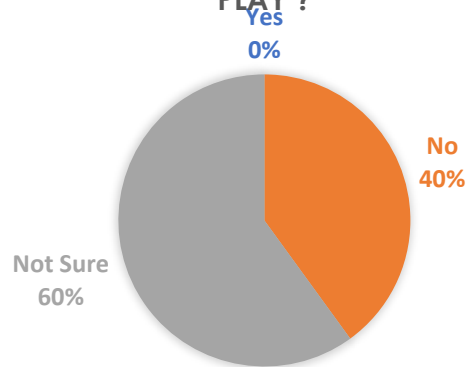
IS IT EASY TO MOVE AROUND AT THIS PLACE WITH A CHILD



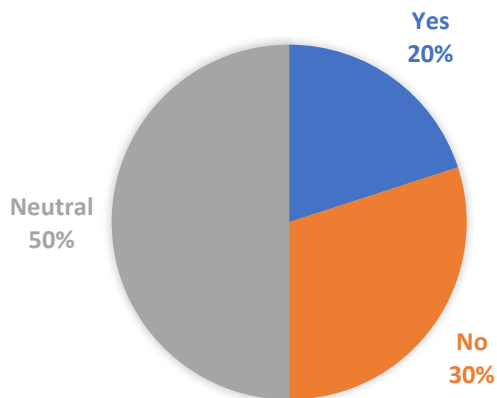
IS IT CLEAR IF THIS IS PLAY AREA, AND IS IT OKAY TO PLAY HERE ?



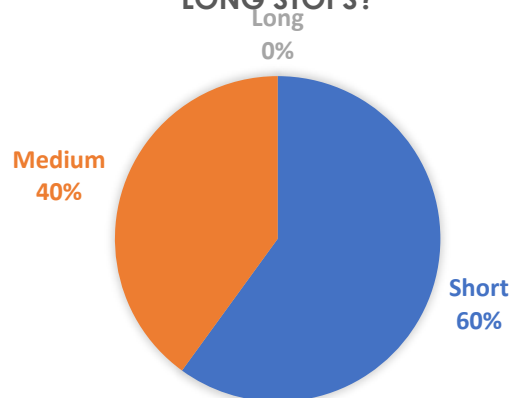
DO YOU FEEL THAT THIS IS A HIGH QUALITY SPACE FOR A CHILD TO PLAY ?



DO YOU LIKE THIS PLACE ?



IS THIS PLACE FOR SHORT OR LONG STOPS?



Findings:

- According to the Intercept data, majority of people do not feel safe on the site's premises
- 40% of the people do not prefer to visit the Anchor institute more than twice a week
- According to the data, people prefer not to spend longer time in this park
- Most people walk to reach to the anchor institute
- The play area is easily visible; however, its quality is inadequate
- 50% of people have a neutral attitude toward the facilities and liking towards visiting this park
- According to the parents, the area is not at all safe for children
















Way forward:

1. Interventions addressing child safety and security in terms of infrastructure are required, which will, also have an impact on social behavioural changes that will create a safer environment
2. Interventions supporting child safety and security in terms of social behaviour and infrastructure are required
3. According to the findings, the park could be made more appealing to children by providing new amenities, improved overall infrastructure, and redesigning and organizing the children play area of the park to increase ITC's footfall
4. Interventions for engaging people for longer period needs to be addressed. As a result, interaction, and engagement of children with ITC's and natural environment would be promoted
5. Development of infrastructure taking into consideration safety protocols for ITC's should be addressed
6. Redesigning and rearranging the play area is needed to attract the children and make them stay longer on the site for better early childhood development
7. Things that enhance the experiential qualities of the space should be incorporated into the design, hence increasing the footfall.
8. Increasing the safety and security of children by providing necessary street furniture, sidewalks, Traffic calming measures, also making the area more playful and inclusive

5.3.2 Quality criteria

The qualitative tool is used to assess the public spaces available in the chosen site which is frequently visited by caregivers and young children. The assessment is based on five key categories: Protection, basic needs, comfort, interaction, and connection. The method helps in getting deep insights on both physical and experiential aspects. It looks at the quality of spaces, how accessible it is, what kind of amenities are available and how the built environment supports interaction between caregivers and young children.

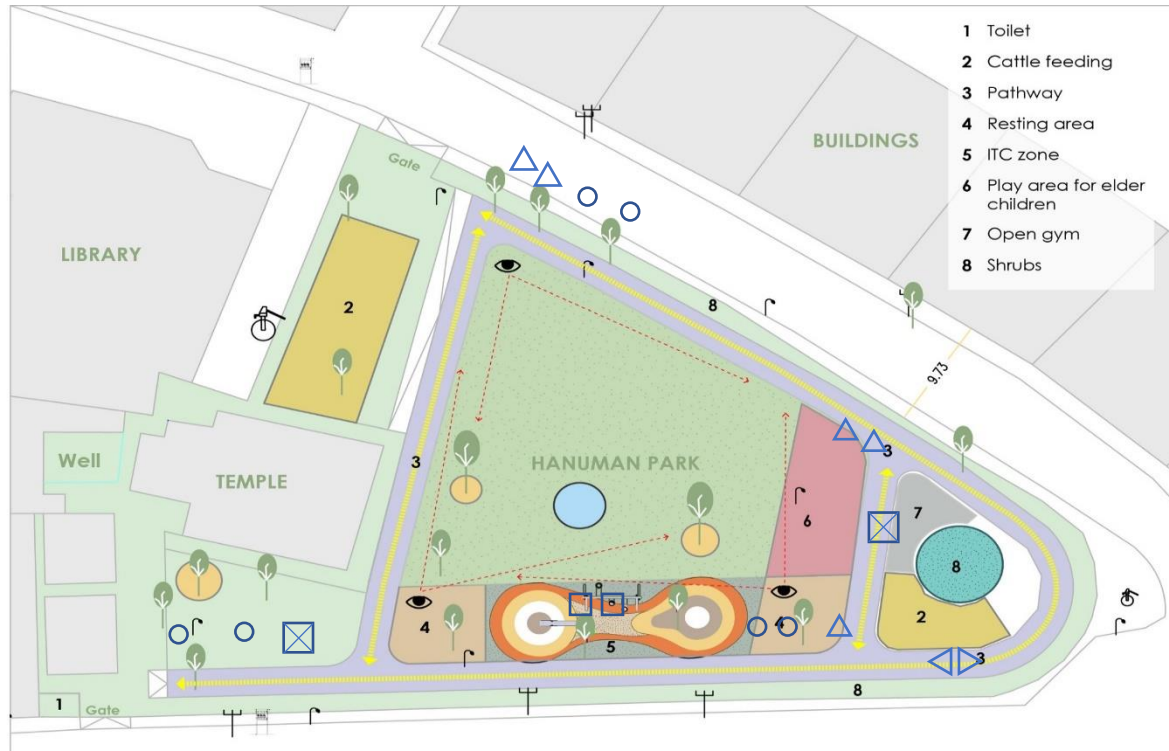
Quality criteria was conducted for the anchor institute- Hanuman Park to evaluate the various features of the park from ITC perspective.

Urban 95 Quality Criteria			
Protection	Protection against traffic and accidents	Protection from crime and violence	Protection against unpleasant sensory experiences
			
Basic Needs	The Feeling of comfort	Opportunities for good hygiene and health	Convenient opportunities for Consumption
			
Comfort	Opportunities to walk and cycle	Opportunities to walk and stay	Opportunities to see
			
Interaction	Invitations to interact with environment	Opportunities to talk and listen	Opportunities for play and Exercise
			
Connection	Opportunities for Flexibility	Opportunities to access	Highly Integrated
			

Findings	Way forward
<p>Unsatisfactory and neutral response for protection against</p> <ul style="list-style-type: none"> • Traffic and accidents • Crime and violence • Unpleasant sensory experiences 	<p>Interventions to</p> <ul style="list-style-type: none"> • Traffic Calming measures, such as tabletops, zebra crossing, rumble strips and street furniture to be included in the design • Safety concerns in terms of behavioural changes and violence to be addressed. • Improving the quality of the space through greening and creating sensory experiences
<p>Unsatisfactory and neutral response for Basic needs</p> <ul style="list-style-type: none"> • Feeling of comfort • Good hygiene and health • Consumption 	<ul style="list-style-type: none"> • Incorporating Interventions which makes the space more comfortable and inclusive, taking care of hygiene and health, hence ensuring maintenance of the site
<p>Unsatisfactory and neutral response for comfort</p> <ul style="list-style-type: none"> • Opportunities to walk and cycle • Opportunities to walk and stay • Opportunities to see 	<ul style="list-style-type: none"> • Developing walking and cycling infrastructure, and visually appealing aesthetics.
<p>Unsatisfactory and neutral response for Comfort</p> <ul style="list-style-type: none"> • Interact with Environment • Talk and Listen • Play and exercise 	<ul style="list-style-type: none"> • Improving the overall space, by sensitizing the approach towards components such as inclusiveness and playful spaces
<p>Unsatisfactory and neutral response for Connection</p> <ul style="list-style-type: none"> • Towards flexibility, Access, and integration 	<ul style="list-style-type: none"> • Integration of elements and components while designing, and inculcating visual connectivity, incorporated with accessibility.

5.3.3 Sensory Mapping

Sensory mapping was conducted at Anchor Institute – Hanuman Park to identify ITC behavioral prompts of children and document their responses to the built environment.



Finding from Sensory Mapping

1. There is a lack of dedicated playing areas for 0-5 years children, activities, play equipment and stimulating built environment for ITC.
2. Non-porous boundary walls restrict visual engagement of ITC with the surroundings inside and outside of the park
3. High level of noise pollution from moving traffic affects health of young children.
4. It also reduces chances of meaningful interaction of ITC with different groups.
5. Absence of walkways inside the park and park approach roads discourages safe and comfortable mobility of ITC.
6. Foul smell of garbage outside the park, creates a negative impact on accessibility of ITC movement in and around the park.

Way Forward –

- 1. Touch - Create a dedicated play are for young children, where they can feel the sense of safety and feel and touch with play equipments which will consist of EPDM flooring, sand pits and bamboo furniture
- 2. See – Access to the nature to be created, a hedging around the play area, so the kids can always play and see around the nature
- △ 3. Hear - Create sound barriers through landscaping and dedicated car parking away from the anchor institute.
- ◀▶ 4. Smell – Clear out the garbage disposal area from the neighborhood and create small shrubs barrier along the boundary wall.
- 5. Balance – Sidewalk level to be maintain throughout the park, for ease of access to ITC

3.4 Supporting surveys

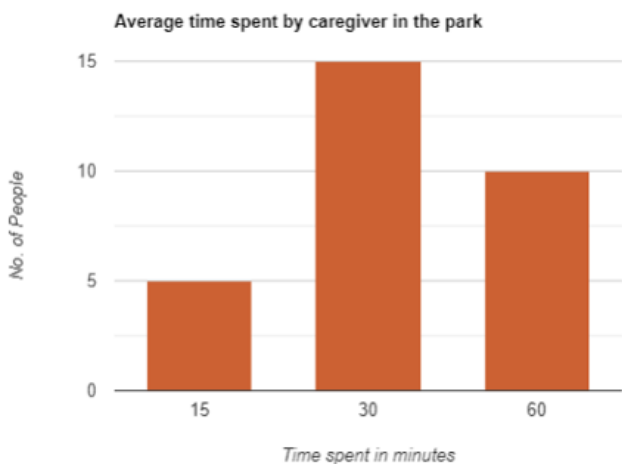


Figure 18 Avg. time spent by caregivers in the park

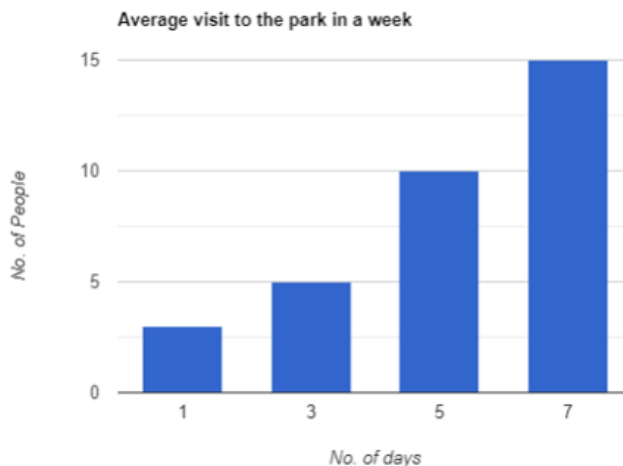


Figure 16 Avg. frequency of visit to the park in a week

Caregivers

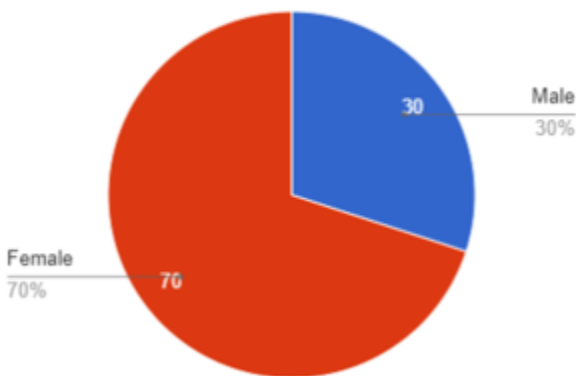


Figure 19 - Ratio of male/female caregivers

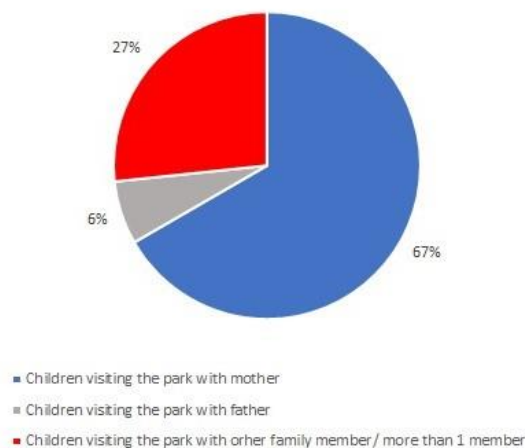


Figure 17 - Ratio of children visiting the park with mother/other family members

The survey was taken between 5-6 pm on a weekday to understand the footfall in the park. The visiting hours are similar and coordinated amongst caregivers so that their children can socialize and play with other children.

Way forward:

- People who visit the park from far away locations are irregular and come once or twice a week (600m to 1000m)
- Mostly the caregivers were female
- Average time of half an hour is restricted in the evening hours due to the higher age group involved in the park

3.5 Trip chaining route map for ITC

- a. Trip chaining is process to start understanding the movement of the people in the neighbourhood and to give a detail understanding which are the highlight possible routes being used by the people for their day to day commute from their home to nearest ITC destination



Figure 20 Trip chaining route map for Ashok Nagar

Inferences:

- The commercial shops on the periphery which include grocery stores, tea stalls, laundry shops and retail stores are regular ITC destinations or stoppage points
- Within the 600m radius, the average time taken to reach the anchor institute ranges between 10-15 minutes

- While reaching the anchor institute, the commercial shops become stoppage points hence caregivers tend to choose routes where they can complete other routine tasks as well
- Few inner silent streets are used as meeting points by neighboring children to play games like cricket, hopscotch, etc.
- Temple and park are an essential ITC destination, but the main gate of park is regulated by temple staff who keep it locked periodically during cultural events

3.6 Observational Study - Hanuman Park

1. Broken tiles of the walking track restrict movement on the track and limit the daily playful activities of toddlers and young children.
2. Lack of sitting space near play equipment makes it uncomfortable for caregivers to stand near the children.
3. Narrow entry gate on the southern side of the park restricts entry for caregivers with infants and increases the distance travelled to enter the park.
4. Caregivers can't walk side by side with the child because of the larger height and smaller width of the existing walking track due to the risk of falling off the walking track.
5. Reduced green cover around the play equipment demotivates caregivers to let children use play equipment because of the risk of falling and injuring themselves. It also creates water puddles around the play equipment.
6. Weathering of concrete under the play equipment may result in injury concerns for the child while playing near broken concrete chips.
7. Shade needed to be safe from different weather. Currently, they either stand under trees or run home during extreme heat or rain.
8. Non-functional fountain creating mosquito breeding site.
9. Benches placed far from the play equipment; caregivers stand near the equipment while child plays for safety.
10. Teenagers create a nuisance demotivate caregivers to bring young children to the park.
11. Lack of play equipment dedicated to toddlers (age 1-3 years).



Figure 21 Hard landing surface (risk of getting injured)



Figure 22 Weathering of concrete surface resulting in injuries

3.7 Observational Study - Harit Haveli Thikana Restaurant chowk

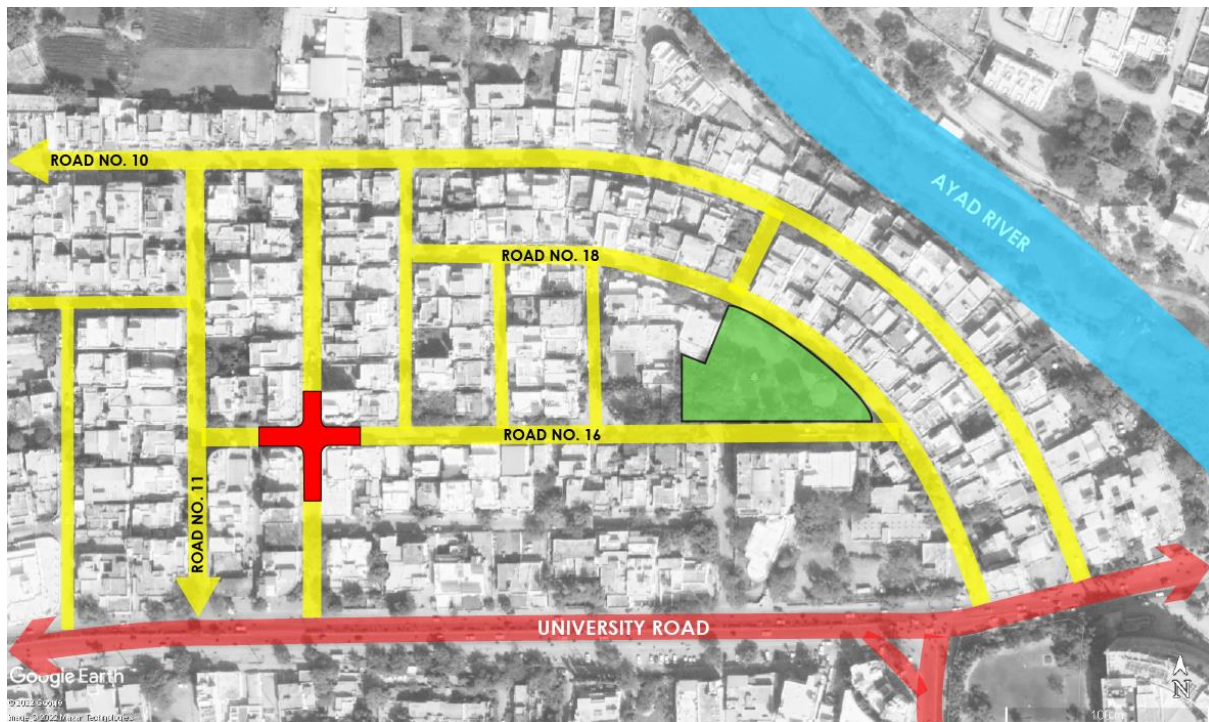


Figure 23 Harit Haveli Thikana Restaurant chowk

1. During the interviews on the street, it was observed that the streets were lacking sidewalks / paved areas. This sometimes made the caregivers uncomfortable to bring their child on the streets, as then they would have to carry them while walking to their destination.
2. Lack of sidewalks were also supported by encroached street area by the ramps of the houses, this resulted in a walking space with multiple level differences. Hence, the caregiver with the child had to walk on the street.
3. The area that was flat / paved and without ramps were then obstructed by parked vehicles
4. Walking on the street with a child was difficult for the caregivers due to high traffic. This results in caregivers bringing their own vehicles out on streets to take their child nearby.



Figure 24 Absence of sidewalks, parking on shoulders of the street

3.8 Observational Study - Junction north to the Harit Haveli Thikana Restaurant Chowk

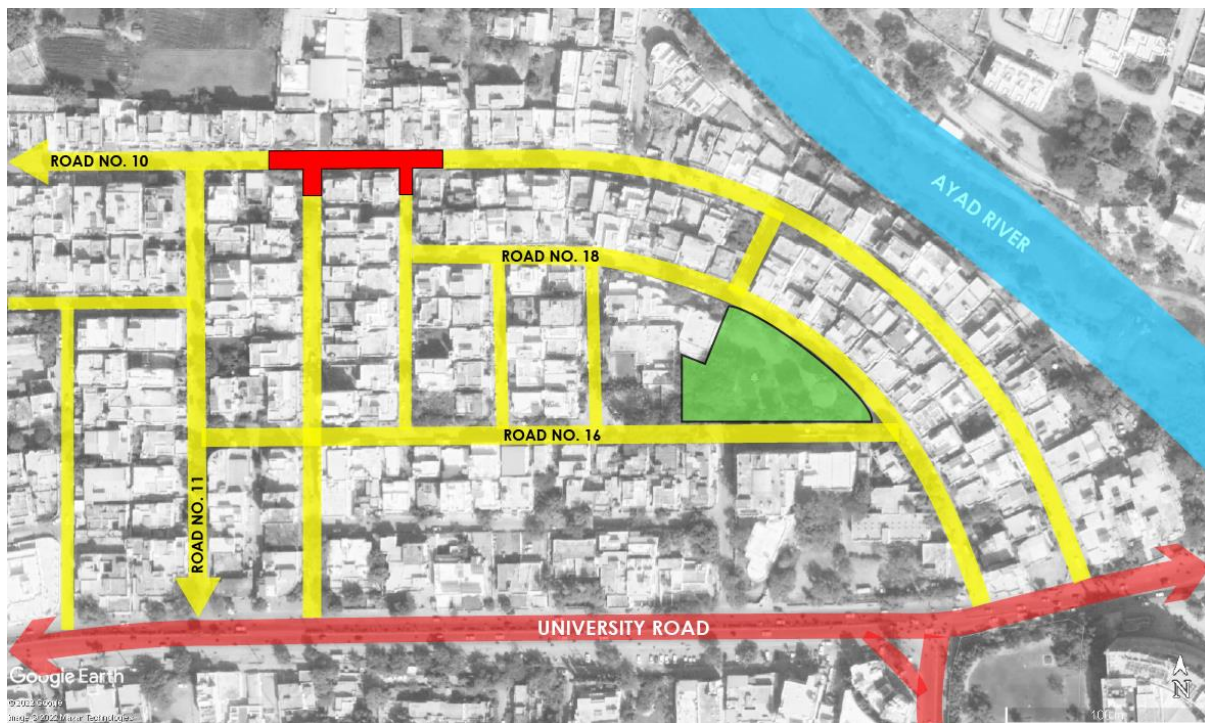


Figure 25 Junction north to Harit Haveli thikana Restaurant Chowk

1. As per the interviews, the families living far from the Hanuman Park, tend to let their children play in the boundary of their houses. They occasionally bring their children to the park (sometimes during weekends).
2. Usually, the caregivers who brought their child with them on the streets, went to shop at the nearby grocery store. The main issue with this is that the grocery stores do not have an interactive space / a comfortable seating space where the child can get engaged while the caregiver does the shopping. This results in either with caregiver finishing the shopping as soon as possible or wait till the time the child is comfortable with the environment
3. Sometimes during the evening, there are power cuts in the area that result in dark streets. This makes the child and caregivers feel unsafe, making them leave the park / street and go back to their houses as soon as possible.



Figure 26 Absence of sidewalks near grocery stores, open drains & ramps

3.9 Observational Study - Street opposite Hanuman Park Gate-1

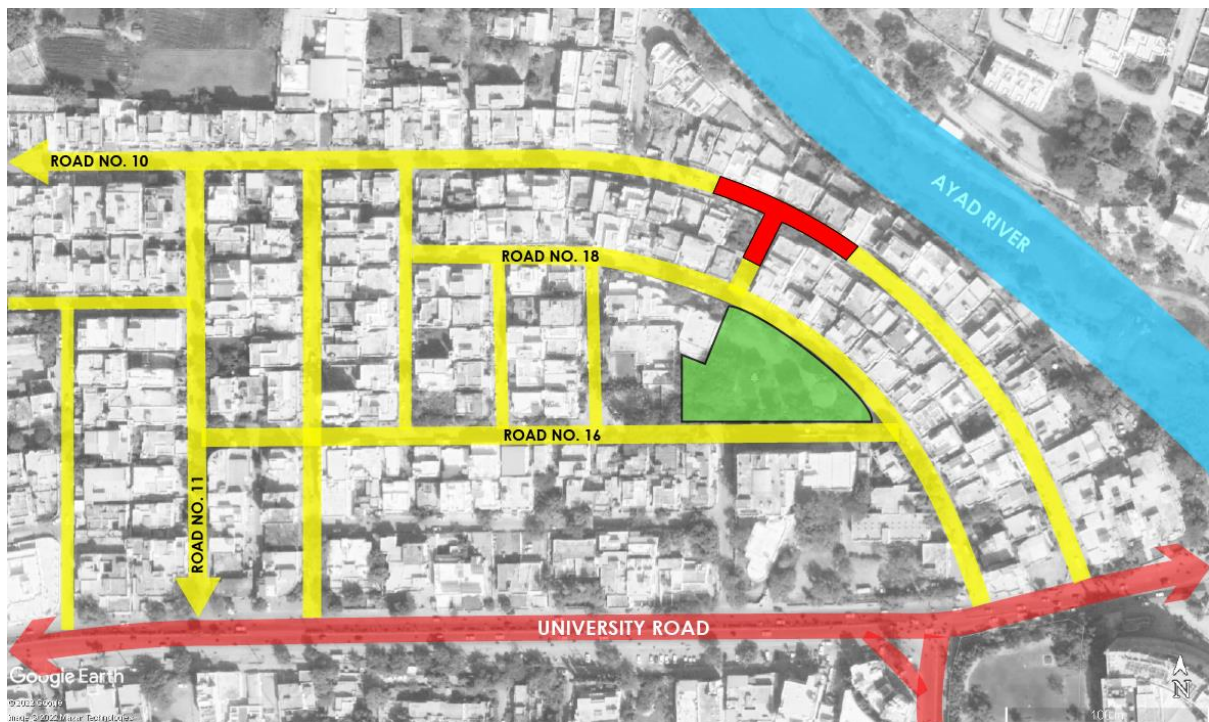


Figure 27 Street opposite Hanuman Park Gate 1

1. A few male caregivers were seen bringing their young children to the park after office hours. These caregivers usually are in a hurry to go back to their homes and relax after coming back from their offices, resulting in reduced playtime for their children. Lack of engagement for the caregivers in the park. While the child plays, they do not have any place to relax comfortably.
2. During sudden rains, there is no shaded space within the public realm, where the child and the caregiver can feel safe. They must run near a shop, where the shop owner has created the roofing. This sometimes is uncomfortable as there are multiple other people coming there as well, crowding the small, shaded area.
3. There is a lack of opportunity with respect to playing and learning within the park. Almost all the play equipment in the park is only for play. There is no engagement other than the physical engagement in the park.



Figure 28 Open drains and encroachment on street by ramps and parked vehicles

3.10 Summary of Findings from Focus Group Discussion and Participatory Learning & Action from Rapid Behaviour Assessment

1. This approach involves active participation of community members to gain an in-depth understanding of a community or situation. PLA can be implemented in different ways depending on the circumstances. The main characteristic of this approach is: researchers or project agents try to learn with their target group. It is a unique way to let the people who are the key stakeholders of projects or programs play a defining role in planning and implementing the actions. It also helps to acquire local knowledge and voices. The methods used during PLA approach differ from case to case but can include interviews, focus group discussions, observation, social mapping, transect walks, etc.
2. For this assessment, social mapping was used. Social mapping explores where and how people live and the available social infrastructure: roads, drainage systems, schools, drinking water facilities, etc. A social map is made by local people and is not drawn to scale, illustrating what the local people believe to be relevant and important for them. This method is an authentic way of determining what the social reality looks like for locals through social stratification, demographics, settlement patterns, social infrastructure, etc

PLA Findings:

1. People from higher socio-economic backgrounds usually send their kids to private playschool/other facilities due to safety concerns.
2. The caregivers walking with their children stopped at facilities like the retail shop, clothing shop, street food stalls, vegetable vendors and ice-cream vendors.
3. Most of the caregivers were observed waiting or walking through the street
4. Caregivers prefer walking to various ITC facilities in and around the CPZ
5. Fathers take their children for short-distance bike rides when they get time
6. Caregivers pointed out that the major street in the CPZ area is narrow and has a lot of traffic/vehicles
7. Two/four wheelers are used by most of caregivers as a mode for commuting across the neighbourhood. The streets are not pedestrian friendly due to lack of footpaths and shading elements
8. Commercial area present near CPZ, southwest of the anchor institute, results in a higher traffic.
9. Additionally, the street is busy with high-speed vehicles
10. Caregivers highlighted that there is a dedicated park in the CPZ. Park's walking track is used by teenagers for cycling, and the track is high, resulting

in toddlers not using the walkway. There is a presence of streetlight that is obstructed by dense trees that shade the streets.

11. Teenagers use the park's area to play cricket, resulting in a reduction of the lawn in the park.
12. Park has a space where the temple's priest has tied up cattle that is just beside the play equipment. This poses a threat for young toddlers, as they run nearby those cattle.
13. There is a high rate of stray dogs and animals that move around the streets which also poses a threat to young children and their caregivers.
14. There are open drains that, at many points, have large widths that would not be safe for young children.
15. Lack of common drinking water facilities and public toilets in the park.
16. Some caregivers walk with their child/ren on the streets esp. during evening hours as there are no parks or gardens in the vicinity. However, they feel unsafe due to the unsuitability of concrete roads for children and speeding vehicles.
17. Mothers identified as the primary caregiver, are also responsible for taking children to the nearby facilities
17. There are no footpaths in the area.
18. Most caregivers at CPZ sites were observed facing infrastructural challenges such as unavailability of walking space or footpaths, difficulty in crossing roads due to traffic, difficulty in walking on uneven roads, un and -planned parking at the observed sites. Additionally, the sites were observed to be crowded.
19. Caregivers said that other than the play equipment such as swings and slides, there are no dedicated age-appropriate materials/tools available in the park to engage with children under 6 years
20. Children were found playing with other children of their age
21. Mothers usually take their children to the park on a regular basis, while they go to shop for groceries. FGD participants across all facilities also said that mothers are the primary decision-makers regarding when to take children out to play and fathers are only able to spend time with children on weekends or after coming back from work. In a few cases, the father or grandparents also decide when to take the child out to play.
22. Caregivers engage with their children outside the home by visiting nearby parks and playing with them.
23. Some participants convey their park-related feedback to the Ward Parishad. Previous feedback was regarding lights, and cleanliness.

- 24. There is a lack of irrigation system for plants and the lawn in the park. The park caretakers use pipelines for watering that results in muddy patches and potholes that are uncomfortable for caregivers and young children.
- 25. Majority of the caregivers rated cleanliness and safety aspects of the parks as satisfactory, poor, or very poor. Caregivers said that there were no drinking water facilities or a breastfeeding room. Toilet facilities were also not available.

Observations:

1. Observer's feedback:



2. Caregiver's feedback:



Overall Ashok Nagar and Hanuman Park Specific Recommendations:

These recommendation were derived from Gehl Survey Kit, FGDs, and Community engagement.

A. Infrastructure related:

1. Shaded footpath with seating arrangements that are devoid of any encroachments and stray animals.
2. Development of dedicated open play spaces with sand pits and well-maintained functional play equipment for children under 6 years.
3. Availability of age-appropriate play and learning materials at all the facilities.
4. Regular cleaning and maintenance of all facilities which are commonly visited like – “Panghat” (Public Drinking water facility), Neighbourhood walking streets, Park, Library, Temples, public toilets, etc.
5. Install or refurbish handwashing or hand sanitization facilities at Park, temple, library, etc.
6. Caregivers prefer spaces which are well-lit, have a drinking water facility, functional toilets, and adequate seating arrangement across sidewalks.
7. Maintaining green spaces (colourful flowers and grass) in parks can increase caregiver and young children footfall.
8. Additional equipment like open gym facilities can be repaired in parks to encourage caregivers to visit parks or remain engaged during their stay.
9. Separate play areas for younger children or separate timings to access the park facilities.
10. Sandpits – a popular and low-cost option can be installed.
11. Adequate lighting arrangements to be made available in the streets, nearby and within the parks.
12. Covering the existing open drains, which allows maximum pedestrianisation.
13. The inclination angle of the ramp outside the park should be adjusted according to the children.
14. The height of the sidewalk inside the park is high with respect to young children and toddlers, it needs to be reduced.
15. Seating spaces for caregivers near children's tot-lots should be added.
16. Pruning of trees, so that the light from the streetlights can reach the street surface, currently, the trees obstruct the light and make the street dark, after evening.
17. Introducing low-height bollards for safety and security.

B. Social Behaviour Change (SBC) :

1. Use of visually appealing content and play equipment - colourful alphabets, numbers, fruits, animals, short stories, etc. in all facilities for children below the age of 6 years.
2. Display age appropriate ECD messages in the facilities in the form of wall paintings, posters, and hoardings for parents and caregivers.
3. Display of SBCC materials on COVID-19 appropriate behaviours at all facilities
4. Counselling sessions at AWC, Creche and Playschool for caregivers on the benefits of pre-school engagement and interactive play (at the facility and at home).
5. There should be road markings for parking. Awareness should be spread among the people that either the vehicle should be parked at the dedicated space marked or parked inside the house.
6. Addition of active facades of public walls on streets.
7. Dedicated walkways should be constructed on the streets, to increase pedestrian usage and activeness.
8. Addition of floor paintings on the dedicated walkway, to make the walkway attractive.
9. Road signages to be added to create indicators of the nearby ITC destinations.
10. Use of digital media (esp. YouTube, WhatsApp) and regular group meetings to share.
11. ECCD-related information.
12. Services available at the nearby ITC destinations.
13. Importance of pre-school education.
14. Role of family members in caregiving.
15. Inexpensive and easy methods of engaging with children.
16. Feedback sharing mechanism.

C. SBC campaign:

1. To encourage the involvement of family members other than mothers in playing, talking, singing, storytelling and engaging with children
2. On simple, inexpensive ways to engage with children at home (sans mobile phone)

D. Regular training of service providers on ECCD-related topics:

1. Empathetic consultation and counselling of parents/caregivers.
2. Use of SBCC materials while engaging with young children, counselling parents, etc. and feedback sharing mechanism

3.5 Behavioural Challenges for ITCs identified site

3.5.1 Accessibility Issues

Barrier	Behaviour Challenges
Absence of dedicated footpath	ITCs resort to walking on the street which is mixed with fast-moving traffic making it unsafe for their mobility
High compound walls	Makes the neighbourhood non-porous and unsafe as it creates a visual barrier for users which demotivates them
Revolving the entry gate of the park	Due to the restricted entry at gate no.2, people with strollers/ disabled/ elderly cannot access the park

Table 7 Accessibility issues



Figure 29 Accessibility challenge

3.5.2 Safety Issues

Barrier	Behaviour Challenges
Absence of pedestrian crossings, signages, traffic calming measures	Caregivers find it difficult and unsafe to walk around the neighbourhood with children due to the fast-moving cars and hence avoid stepping outside their houses
Unorganised parking	Due to parked vehicles on street, no space is left in the ROW to walk which demotivates people
Surface materials and textures inside Hanuman Park	Hard surfaces make it unsafe for children to use play equipment and lacks hygiene too
Open Drains	Due to open drains, caregivers with their children avoid walking on sides of the road

Table 8 Safety issues



Figure 30 Safety challenge

3.5.3 Green Issues

Barrier	Behaviour Challenges
Lack of natural elements inside Hanuman Park	It restricts children's access to nature and disables them from connecting with it
Vehicle dominance	Creating high air pollution and higher exposure to young children due to exhaust pipes

Table 9 Green issues



Figure 31 Green challenge

3.5.4 Playful

Barrier	Behaviour Challenges
Absence of playful elements	Leading to inactive streets which further make them unsafe Limits the scope of interaction between caregiver and children
Children playing on internal street	Children resort to playing on streets outside their homes even after the availability of a park because the park lacks engaging and attractive elements for the children

Table 10 Issues related to playfulness



Figure 32 Playful challenge

3.5.5 Inclusive

Barrier	Behaviour Challenges
Lack of consideration for people with strollers/ disabled/ elderly	The entry gate of Hanuman Park itself restricts people with strollers, etc and inside the park as well, the pathway is raised without the provision of a ramp leading to inaccessibility
Absence of footpaths	Leading to vehicle dominance as pedestrians are not prioritised hence people hardly prefer walking on the site
Absence of private areas/amenities for caregivers	Demotivates caregivers to step out of homes due to lack of services
Joyful and missing engaging activities	Caregivers are not motivated to take the children outside/park because of non-preference activities

Table 11 Inclusivity issues



Figure 33 Inclusivity challenge

3.6 Identification of Motivators and Barriers

Post observing the outcomes from the existing situation and behavioural analysis, barriers and motivators are identified for better understanding of existing site facilities. Mapping for the same is done for supporting the development of the designs.

Indicator	Availability	Motivator/ Barrier	Reason
Streets			
Footpath	N	Barrier	Makes it difficult for ITC to walk around safely
Kerb ramp	N	NA	NA
Cycle stand	N	NA	NA
Cycle track	N	Barrier	Unsafe for children to cycle on carriageway
Ramps for ITC	N	NA	NA
Waiting area	N	NA	NA
Handicapped Parking	N	NA	NA
Side-walk games	N	NA	NA
Active facade along route	N	NA	NA
Surface material and textures	N	NA	NA
Benches	N	Barrier	No resting points for ITC demotivate them from going out
Shading devices	Y	Motivator	Trees provide natural shade on streets which makes it more comfortable to walk
Lighting	Y	Motivator	Lighting makes the street safe to use at night

Indicator	Availability	Motivator/ Barrier	Reason
Streets			
ITC playful furniture	N	Barrier	No engaging activities for ITC
Planters	N	Barrier	ITC do not get any direct access to nature due to the absence of it
Bollards	N	NA	NA
Seating along planters	N	NA	NA
Way-finding signages for destinations and utilities	N	Barrier	Having ITC destinations, makes it difficult for them to reach due to the absence of signages
Safety signages for traffic	N	Barrier	Fast moving vehicles cause threat for ITC to move around
Safe crossings	N	NA	Unsafe to cross at important junctions
Kerb extensions	N	NA	NA
Rumble strips	N	NA	NA
Lane marking	N	NA	NA
Chicanes	N	NA	NA
Public art	N	NA	NA

Indicator	Availability	Motivator/ Barrier	Reason
Park and open public spaces			
Fencing/ Permeable perimeter	Y	Motivator	Provides safety to ITC while using the park
		Barrier	Height of fencing is too high which restricts from getting a vision of activities happening inside/outside the park
Camera monitoring	N	NA	NA
Ramps for ITC	N	Barrier	Due to the absence of ramps, the park is inaccessible while carrying strollers as it has steps and raised pathway at the entrance itself
Benches	Y	Motivator	Resting spaces for ITC when using the park
Shading devices	Y	Motivator	Trees provide natural shade on streets which makes it more comfortable to walk
Lighting	Y	Barrier	Most of the lights do not function has it becomes difficult to use park in the late evening hours
ITC playful furniture	N	Barrier	No engaging activities for ITC
Play equipment	N	Barrier	No dedicated equipment for ITC
Planters	Y	Motivator	Provide direct access to nature
Public Art	N	NA	NA
Surface materials & Textures	N	NA	NA
Natural Play elements	N	NA	NA

Indicator	Availability	Motivator/ Barrier	Reason
Utilities			
Breast feeding booths	N	Barrier	Absence of it makes it difficult for mothers to feed their babies in public due to lack of privacy
Drinking water facility	N	Barrier	Absence of basic facility
Toilets	Y	Motivator	Supporting ITC facility
Dustbins	N	NA	Creates hygiene issues due to randomly disposed waste

Table 12 Identification of motivators and barriers at Ashok Nagar

After detail assesment of the the available and missing motivators and barriers with define reaosing, some of the ideas will tested in the semi-permanent project, to see the usability and how people are responding to the site interventions.

3.6.1 ITC Motivators



Figure 34 Trees act as natural shading elements on the stretch, adequate light poles, and pre-school available



Figure 35 Community retail / grocery shops



Figure 36 Shaded resting spaces in Hanuman Park



Figure 37 Playing equipment's and Open Gym in Good condition

3.6.2 ITC Barriers



Figure 38 Open drains on street, harmful for young children while walking or cycling



Figure 39 On street parking forces people to walk in the middle of the road



Figure 40 Garbage being dumped outside Hanuman Park, restricting people from visiting



Figure 41 Absence of footpath, benches and active facade, no eyes on street



Figure 42 Hanuman Park entrance is an issue for strollers to access



Figure 43 No ramp access for the pathway inside the park

3.7 Solutions for Converting Barriers to Motivators

Barriers	Temporary Design Solutions/Proposed Interventions
Accessibility	
Lack of awareness of the presence of park	Way- finding signages
	Way- finding road markings
Demotivated to use mobility options like cycles to reach ITC destinations due to the absence / dedicated cycle laned	Cycle stand
People with strollers/ wheelchairs/ elderly unable to access park/ path-ways due to the absence of ramps and raised pathways	Ramps, maintained level difference of ground with path way inside the park
Safety	
Lack of road safety elements for pedestrians, heavy vehicular traffic	Safe crossings, traffic calming measures
Unsafe pavements for ITC in and around the park	Covered drains, Soft surface materials and textures
Lack of awareness of basic hygiene	Informational signages, dustbins
Parking on-street	Dedicated parking spaces for vehicles

Barriers	Design solutions/interventions
Playful	
Absence of engaging and playful elements for ITC to interact with in public spaces	Active Facades
	Playful Floor Games
	Dedicated Play Area For ITC
	Puzzles, Abacus On Side Walls
	3D Murals Of Animals & Other Elements In The Park
	Pathway Signages
Awareness regarding ECCD practices	Key Messages On ECCD
	Informed caregivers
	Motivated/Converted Caregivers
	Transformed, Engaged Caregivers

Table 13 Theme based solutions to convert barriers into motivators

3.8 Infrastructure Barriers and Design Solutions

Physical Barriers	Design solutions/Interventions
Open drains	Covering the drains for safety
On- street parking	Dedicated parking spaces
Dumping of garbage on street	Facilitating the permanent removal of garbage
Absence of footpath and benches	Provision of dedicated footpath space along with benches
Entrances to anchor institute not catering to all people	Providing ramps and easy access to the park

Action Plan for Semi-Permanent Project

5.1 Semi- Permanent Design Concepts

5.1.1 Theme ACCESSIBLE

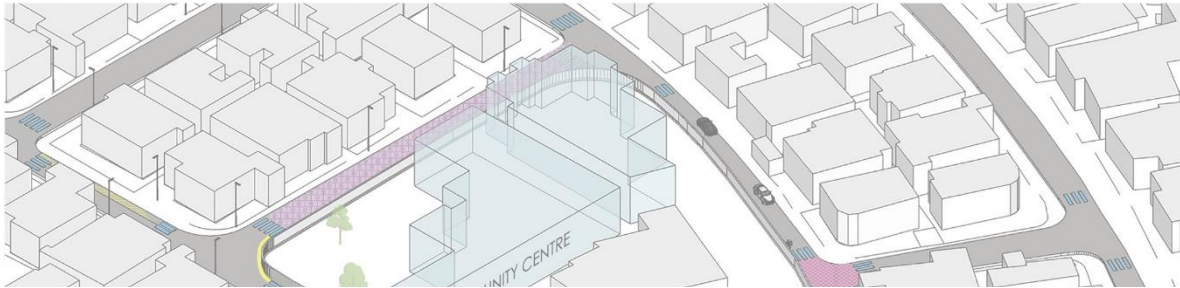


Figure 45 PSC meeting 1

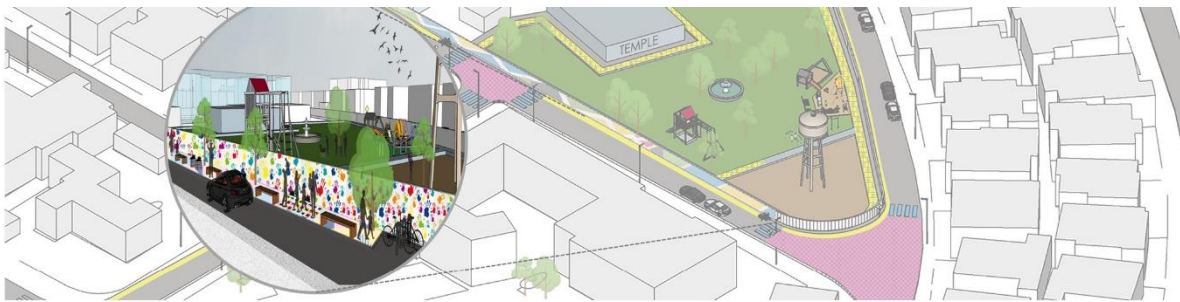


Figure 46 Elements like demarcated sidewalks, active façade and cycle stands to increase accessibility to the site and anchor institute



Figure 47 Elements like demarcated sidewalks, active façade and cycle stands to increase accessibility to the site and anchor institute

5.1.2 Theme SAFE

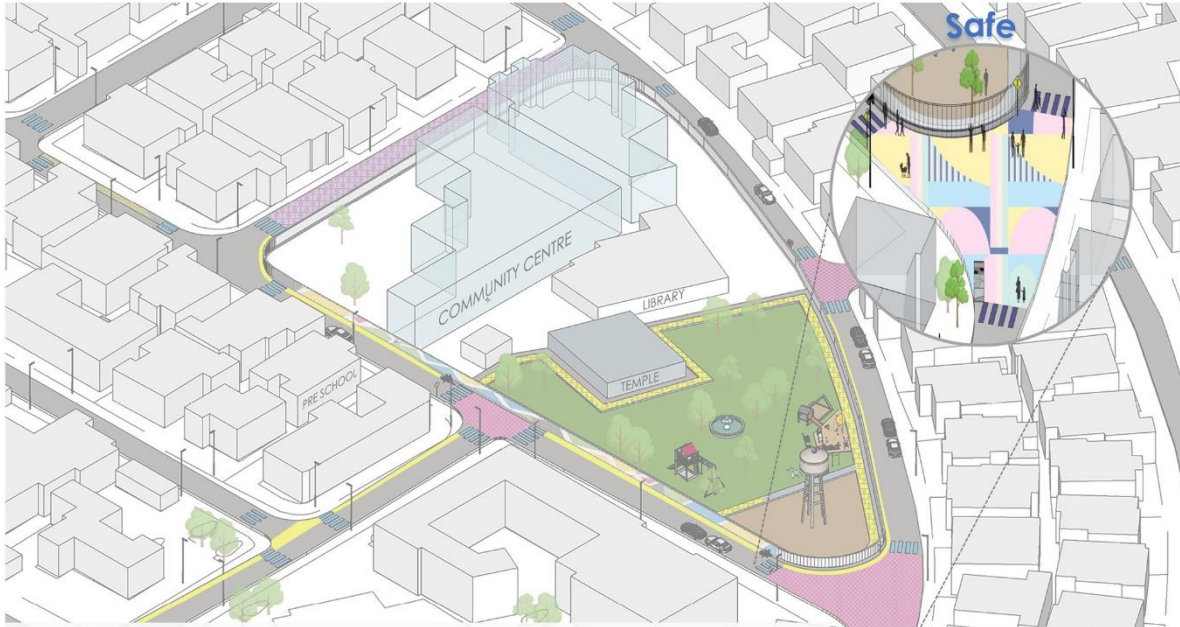


Figure 48 Safety elements like colourful crossings act as speed breaking components and increase pedestrian safety

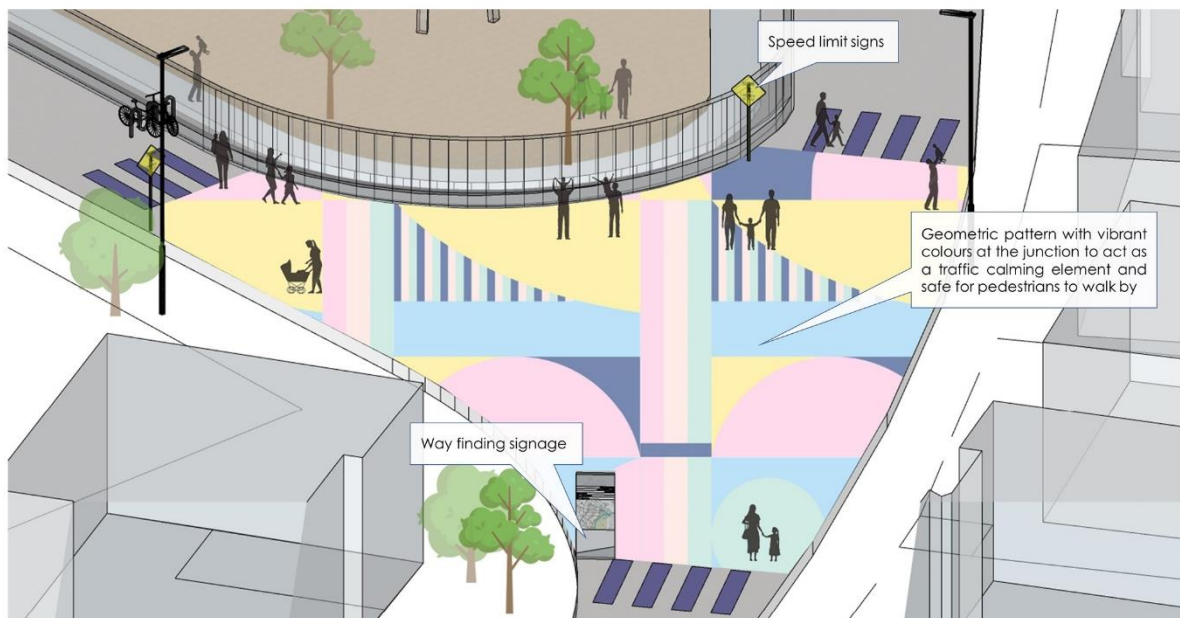


Figure 49 Safety elements like colourful crossings to act as speed breaking component and increase pedestrian safety

5.1.3 Theme PLAYFUL



Figure 50 Playful activities – like children play equipment's and engaging with natural material

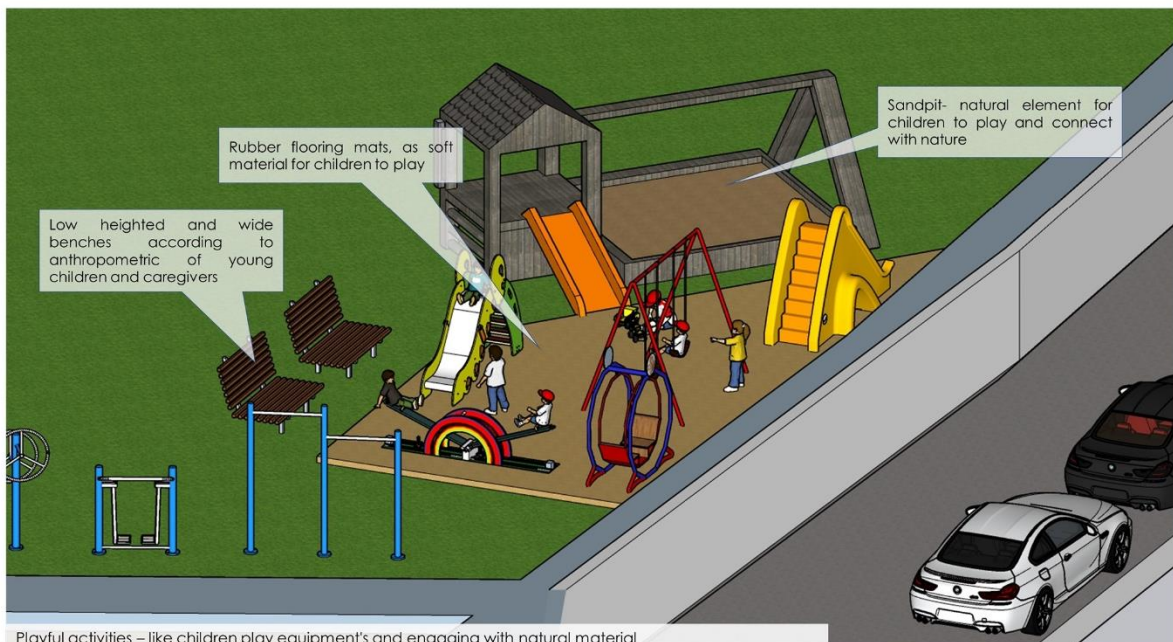


Figure 51 Playful activities – like children play equipment's and engaging with natural material

5.1.4 Street views with design implementations

- **Active facades and floor games** will include the engagement of community while being implemented which will help in increasing ownership of the place by the community
- **Cycle stand** will motivate community to use cycle as a mobility option

Before

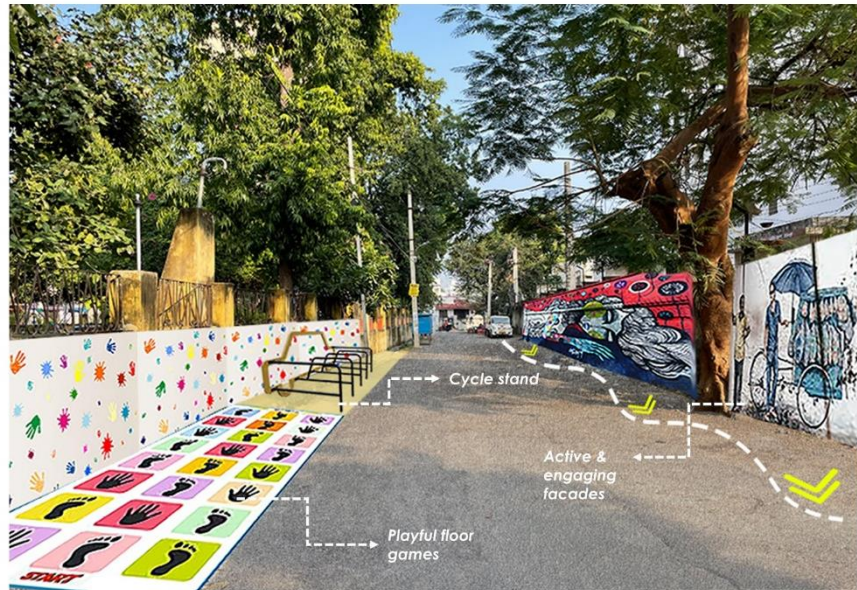


Figure 52 Interventions on approach road to Anchor Institute (park)

- **Way finding road markings and signages** will ease access for the park(Anchor Institute)
- **Improved road pavements and ramp** of the park will also help in increasing footfall

Before



Figure 53 Interventions on approach road to Anchor Institute (park)

5.2 Proposed Semi-permanent Intervention Ideas

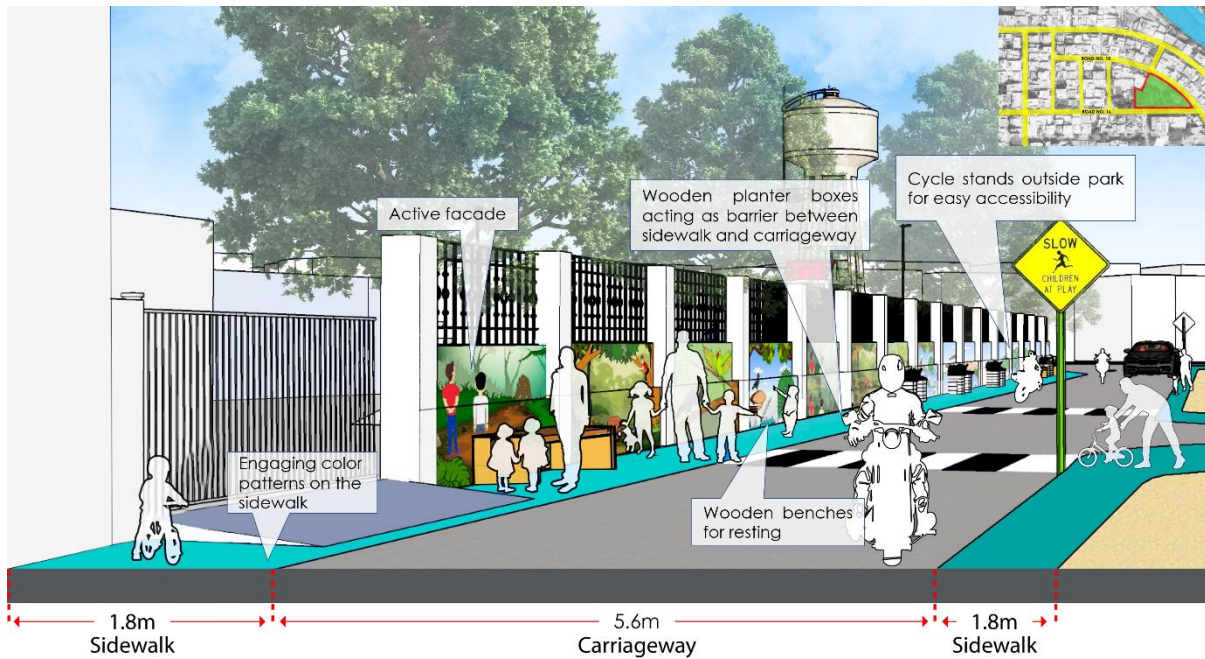


Figure 54 Elements like demarcated sidewalks, an active façade and cycle stands to increase accessibility to the site and anchor the institute

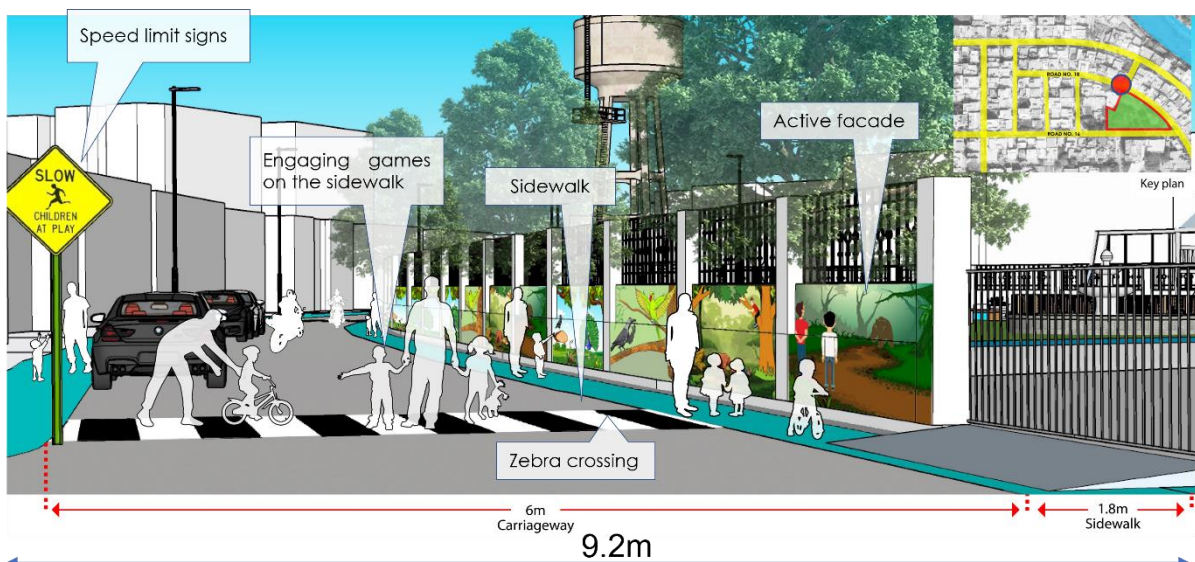


Figure 55 Interventions on approach road to Anchor Institute (park)

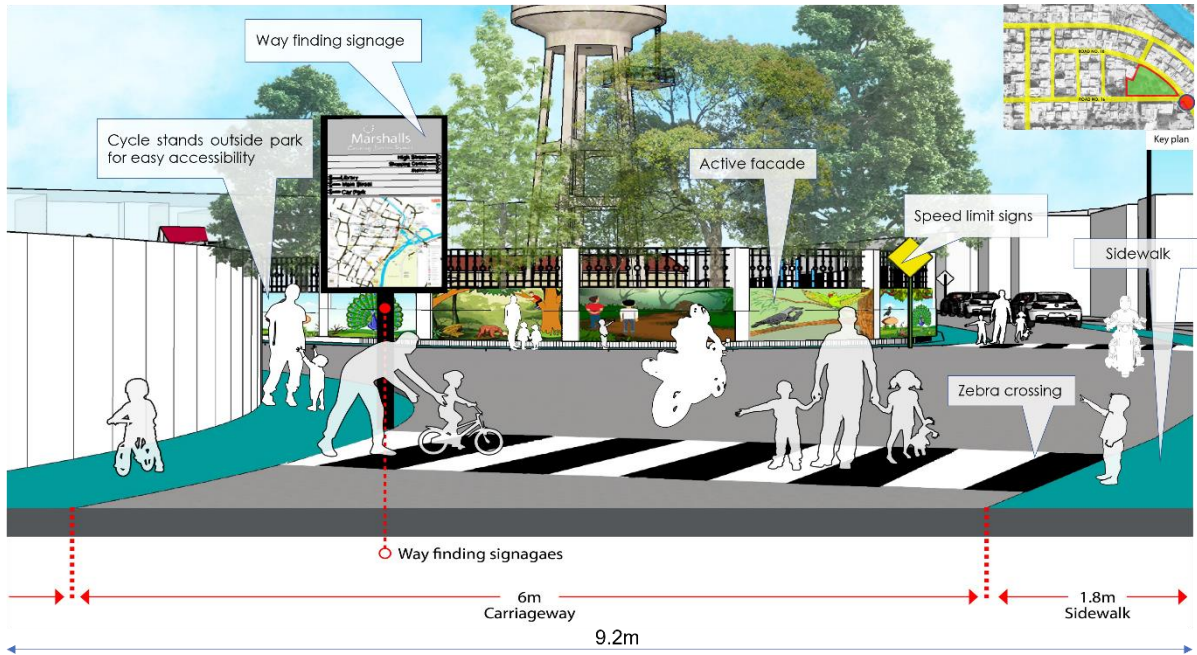


Figure 56 Proposed Semi-Permanent Ideas at Road Junction

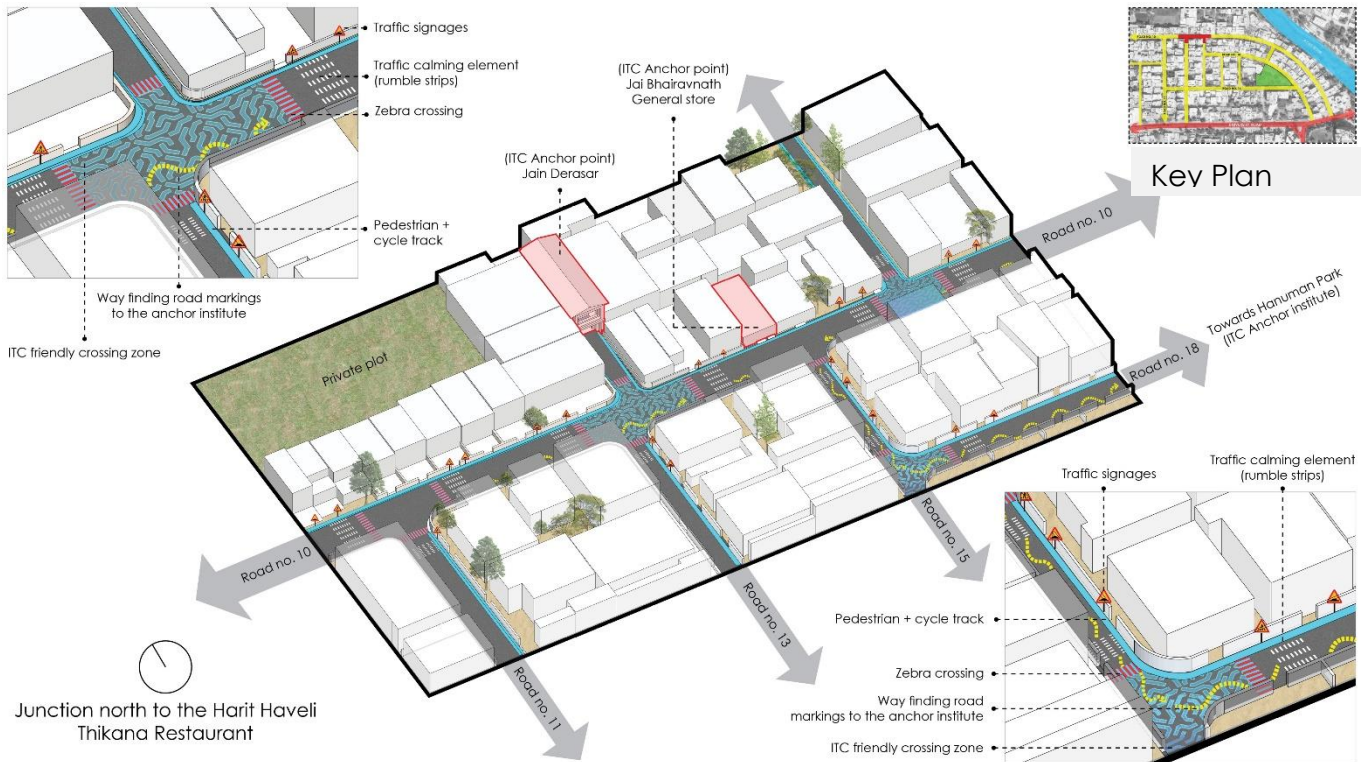


Figure 57 Semi-Permanent Intervention at Neighbourhood Intersections

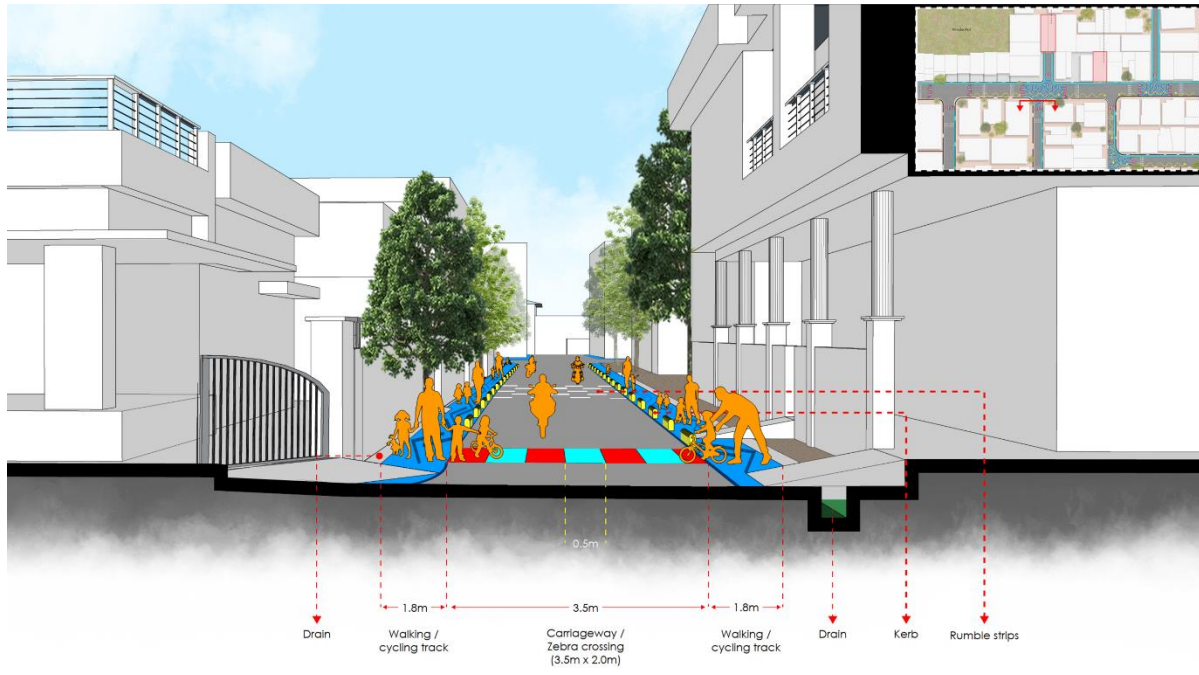


Figure 58 Proposed Street Sections for Semi-Permanent

ECD will be promoted through various elements/activities:

1. Engaging and playful sidewalks with floor activities and active facades
2. Cognitive Development (Different shapes, colours, and creative floor games options)
3. Socio-Emotional: Asking about different Facades and arts; Uses of sidewalks/ Cycle stands etc)
4. Safe crossing
5. Creative development (with puzzles, floor art)
6. Language development- interact with other kids and their caregivers, listening to different nature voices, and queries)
7. Gross motor skills (walk, run, jump, tot lots etc)
8. Cognitive Development (Green and engaging pathway, tot lots, Sing, drama)

5.3 Quantities & Estimation for Implementation

Cost Estimates for Tactical Interventions at Hanuman Park, Ashoknagar							
S.No.	Items	Description	Unit	Nos	Area	Rate	Amount
1	Flooring - Street around Hanuman Park	Coloured paint	Litre	36	337.5	320	12,248
		White paint / Primer	Litre	36		290	10,524
		Wall art by artist	Sq.m.				
2	Boundary Wall - Street around Hanuman Park	Coloured paint	Litre	46	430	320	14,796
		White paint / Primer	Litre	46		290	13,340
		Wall art by artist	Sq.m.				
3	Boundary Wall fencing - Iron fencing around Hanuman Park	Oil paints for fencing	Litre	50		125	6,250
4	Signages	Way finding signages	Nos.	5		5000	25,000
		Traffic signages	Nos.	5		5000	25,000
5	Seating	Wooden benches	Nos.	15		1500	22,500
6	Plantations	Pots / boxes	Nos.	50		300	15,000
		Plants	Nos.	50		150	7,500
7	Cycle stands	Steel cycle parking stands	Sq.m.	2		17600	35,200
8	Intersections -	Junction north to the Thikana restaurant - Coloured paint	Litre	42	390	320	13,419
		Thikana Intersection - Coloured paint	Litre	30			
		Opposite Hanuman Park - Coloured paint	Litre	24			
9	Jute Rassi	For road segregation	KG	50		67	3,350
TOTAL AMOUNT							2,21,504

Table 14 Estimation for Testing the Designs

1. Total estimated value for the proposed intervention is **Rs 2.21 Lacs**
2. This will include painted surfaces of Wall, Flooring and Anchor Institute peripheral wall

5.4 Getting site ready for Implementation- Cleaning, Repair Work, and Maintenance



Figure 59 On site meetings with UMC Engineers and Contractor along with PMU



Figure 60 Measuring and road markings for design interventions

5.5 Project Progress

The inauguration of the semi-permanent intervention of the Child Priority Zone in Hanuman Park took place on 29th September 2022 in the presence of the Mayor of UMC, Mr Govind Singh Tank Deputy. Mayor, Mr Paras Sanghvi from UMC and Country representative of the Bernard Van Leer Foundation, Mrs Rushda Majeed along with Project Monitoring & Steering Unit (PMSU), Urban95 and PMU members. The inauguration took place with the involvement of young children from the neighbourhood as well as students from a preschool, The Einstein Kids, Udaipur.

The children along with their caregivers were made a part of the intervention by making them hand paint on the facades of Hanuman Park which is the anchor institute of the Child Priority Zone. A walk was taken with the mayor and other UMC officials throughout the periphery of Hanuman Park to discuss and assess the potential of the site for permanent interventions.

Key steps involved:

There was a preparatory phase before the inauguration, followed by a post-implementation analysis. The key steps included:

1. Conceptual drawings and presentation were taken for approval from UMC officials with a detailed costing of the project
2. Discussion with UMC Engineers on site regarding work to be taken up for semi-permanent implementation
3. Contractor was appointed by UMC and further instructed to visit the site and understand the concept from PMU
4. Cleaning and maintenance work done in and around Hanuman Park
5. Road markings and measurements were done for thermoplastic paint to indicate clear sidewalks.
6. Installation of wall art, traffic signages, plantations and cycle stand
7. Social media engagement of community people, to encourage participation in the development of CPZ
8. Inauguration was the plan of the Child Priority Zone by UMC and BvLF officials, technical partners, and young children & their caregivers
9. Post-implementation media outreach and engagement (print, electronic, digital, highly visible, and popular city-level social media handles) and updates on social media.

10. Post-implementation stakeholder engagement on-site through intercept survey feedback.

Challenges overcome by the organising team:

1. Dumping of wastage was the major challenge observed from the inception of the project, however, the community was sensitised by advocating the use of the Nigam vehicle for disposing of garbage
2. Over speeding vehicles were seen taking speeding turns, to prevent that traffic calming measures like rumble strips, road signages and colour coding were introduced on site
3. This improved their access to visit the park more often and retention of the caregivers to spend more time in the park
4. The park recognising was done as children park by placement of sign board(Urban95 Child Priority Zone) and caregivers started understanding that the park will be used for their young children without any hurdles
5. Community stakeholders meeting was conducted to sensitise the usage of outdoor play for young children and how the park space can be utilised for a longer duration.

5.6 On- ground Implementation of Semi-permanent Intervention along with stakeholders and community engagement



Figure 61 Inauguration of the implementation by UMC and BvLF officials



Figure 62 BvLF officials along with PMSU & PMU Team



Figure 63 Neighbourhood children actively participating in the implementation of Semi-Permanent Project



Figure 64 Engaging pre-school children in the implementation process



Figure 65 Engaging wall paintings for active façade on Hanuman Park Walls



Figure 66 Traffic Calming Measures at Intersection to motivate safe crossing



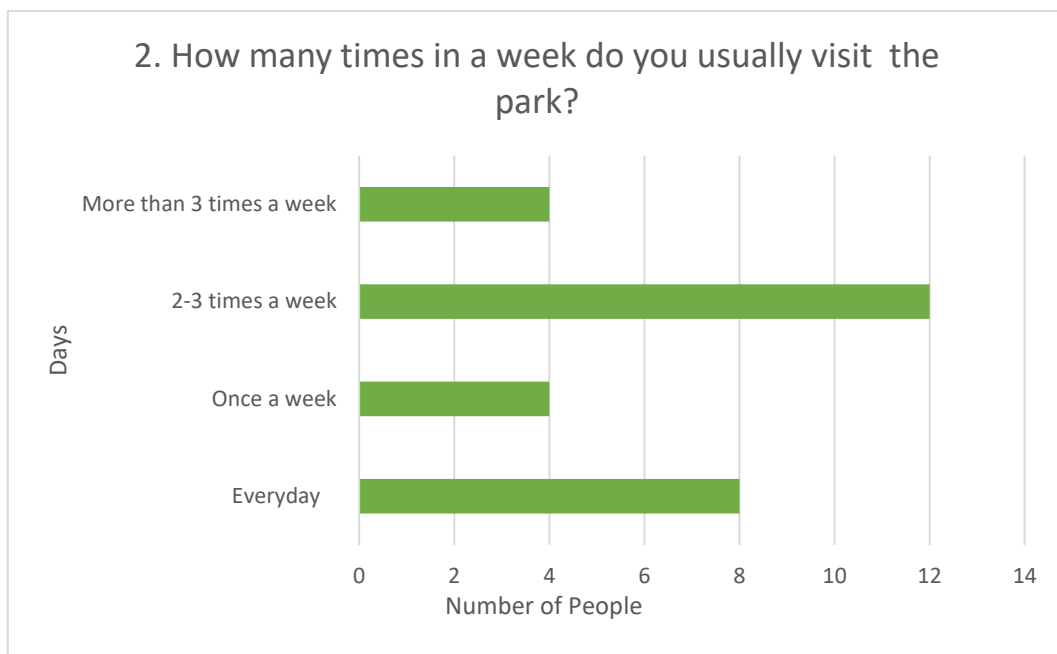
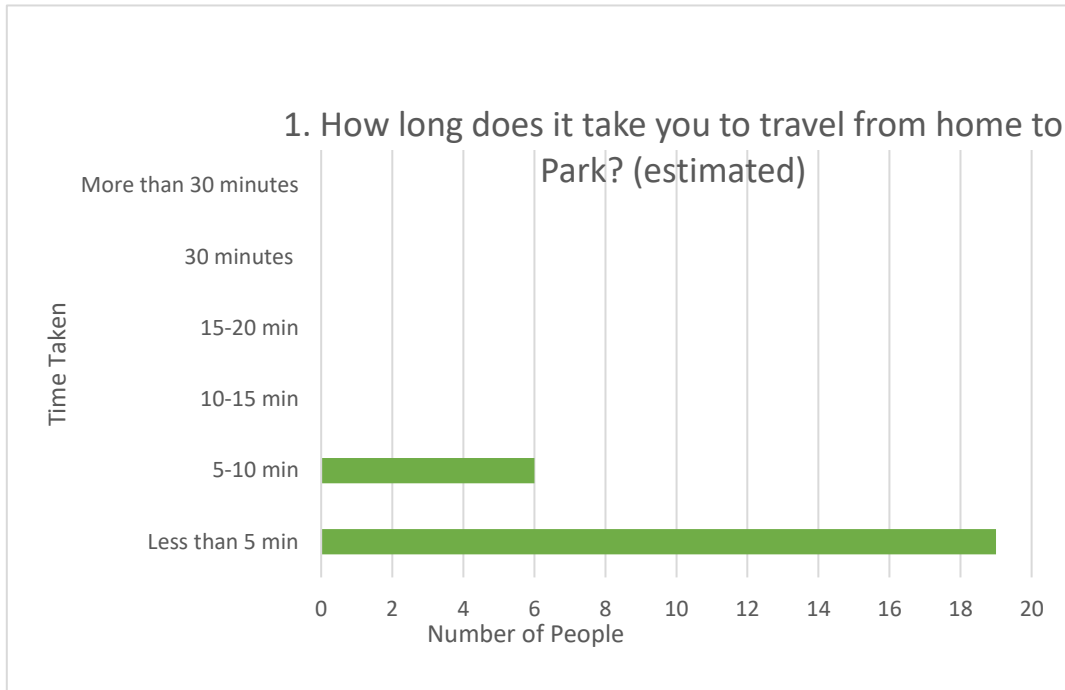
Figure 67 - Children Engagement Outside Hanuman Park

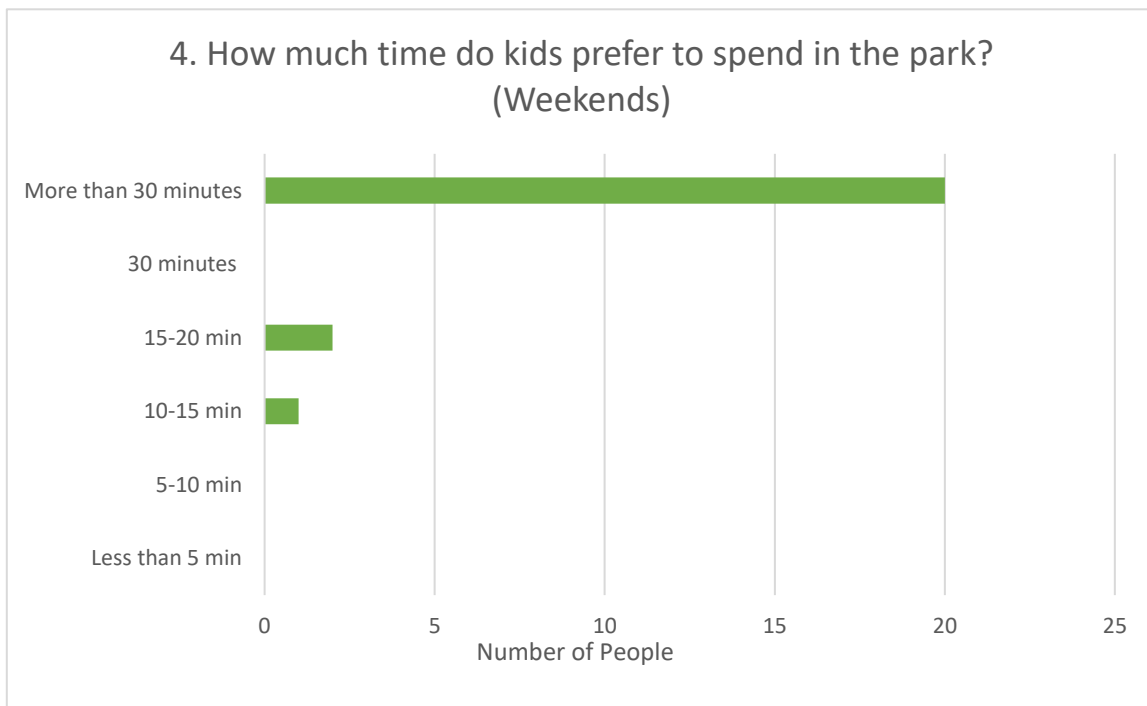


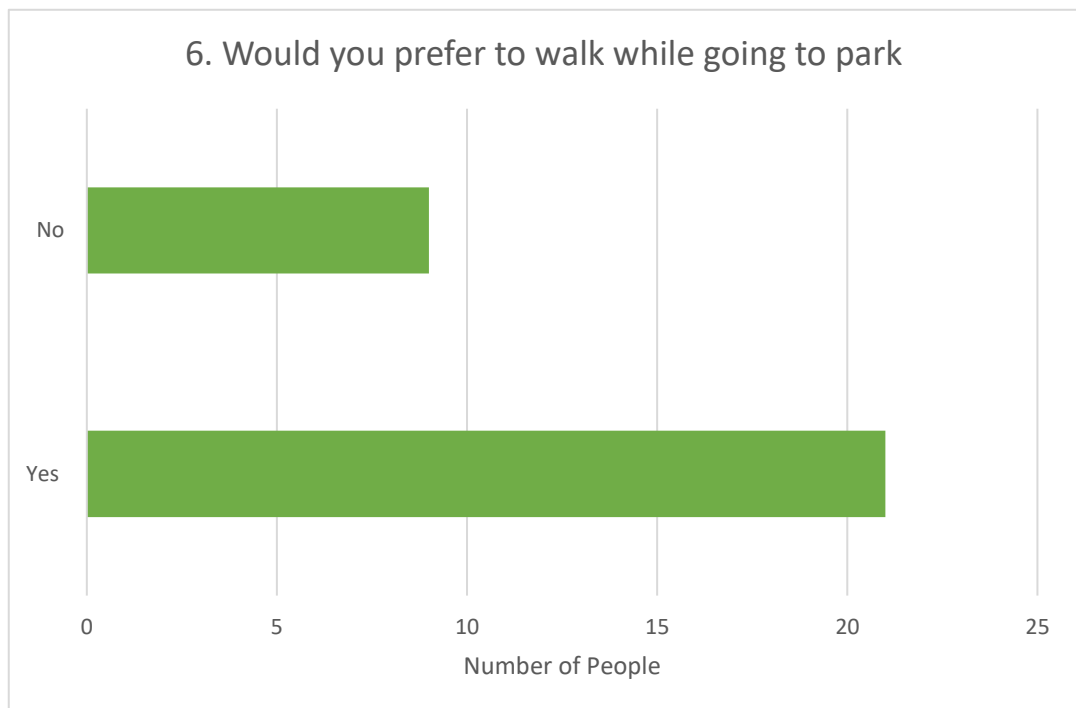
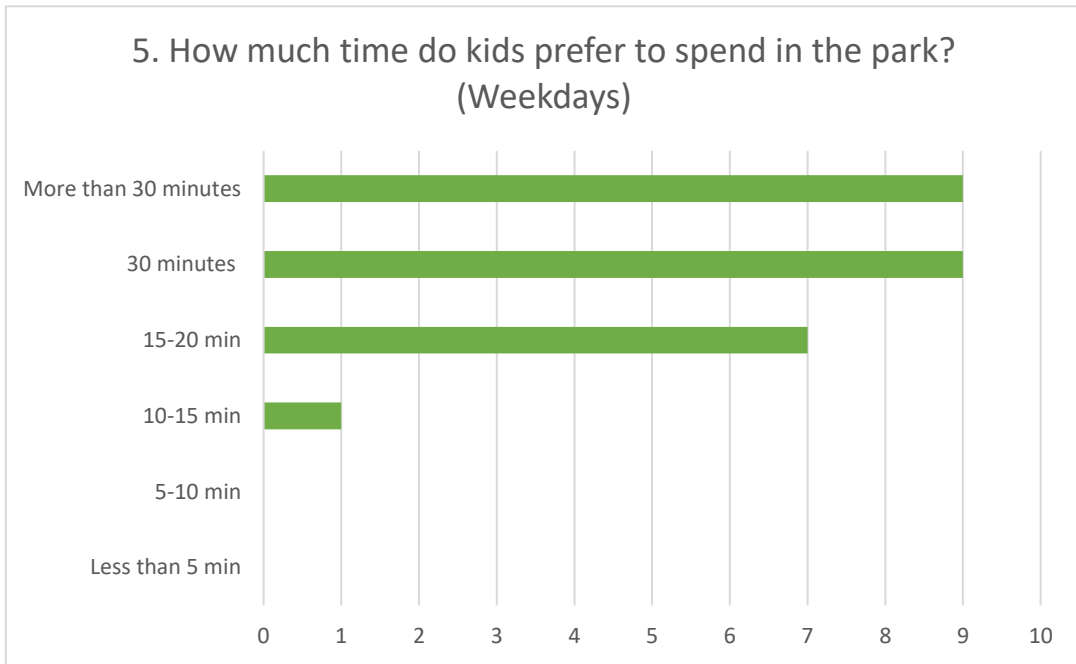
Figure 68 - Artistic Painting at Junction

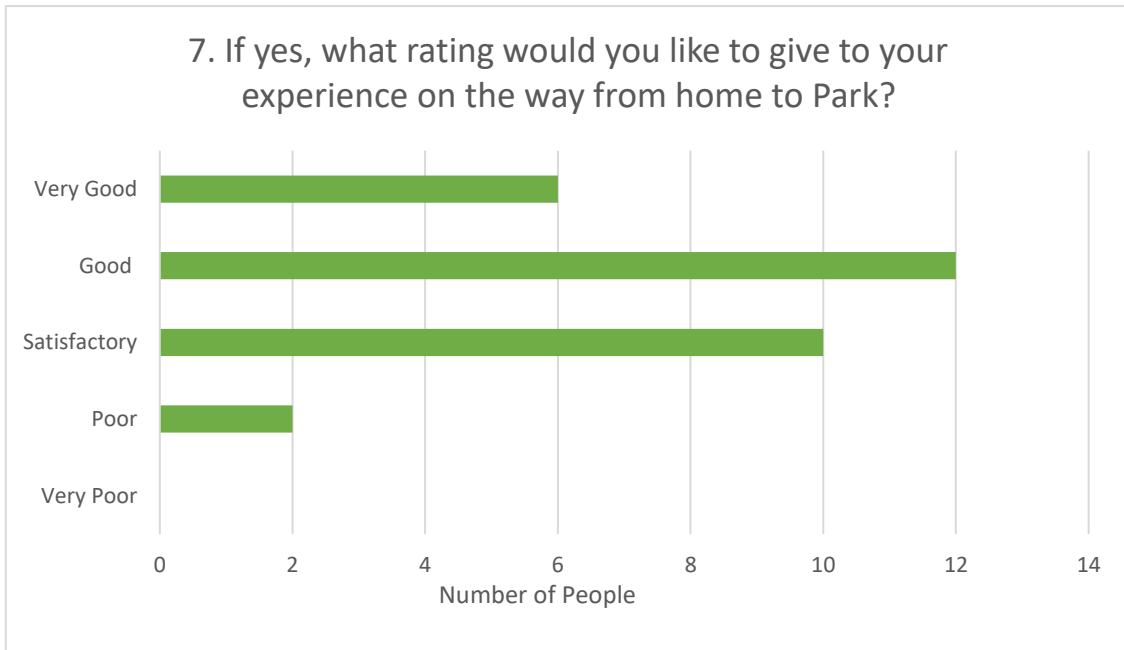
5.7 Post-Implementation Impact Assessment

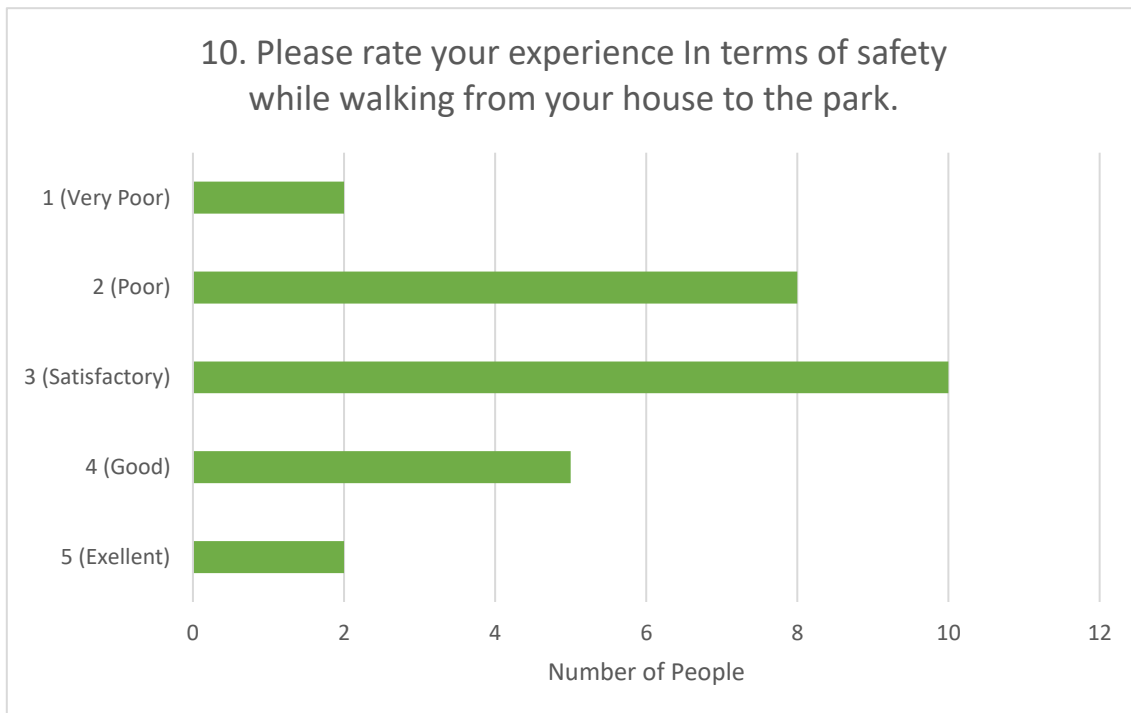
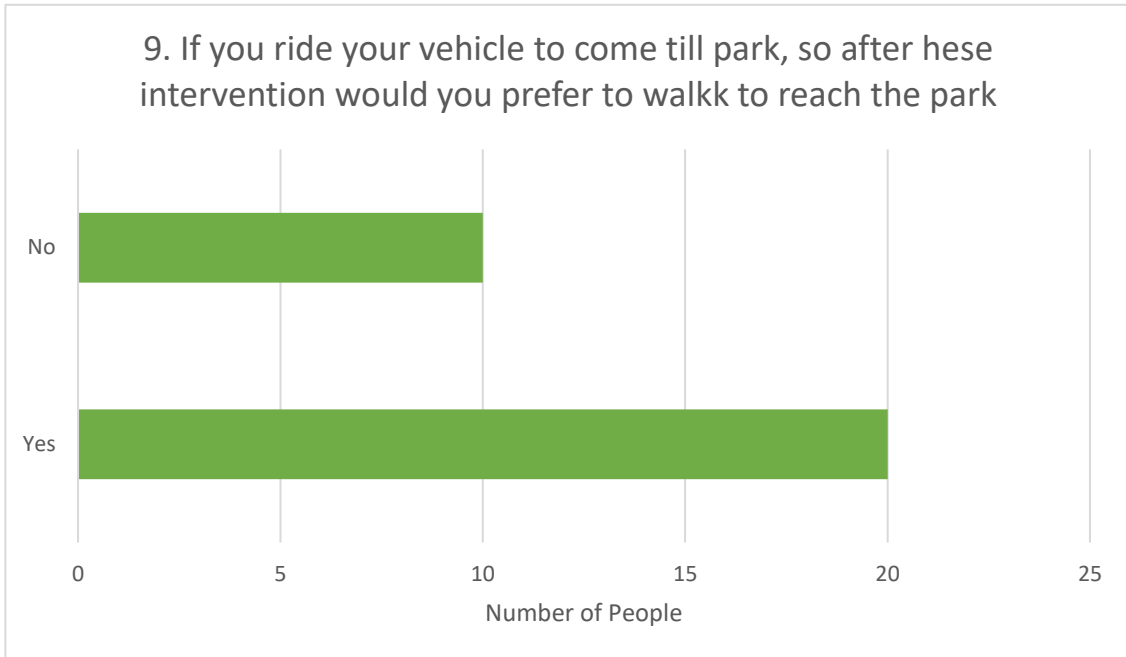
5.7.1 Intercept Survey (Post-implementation)

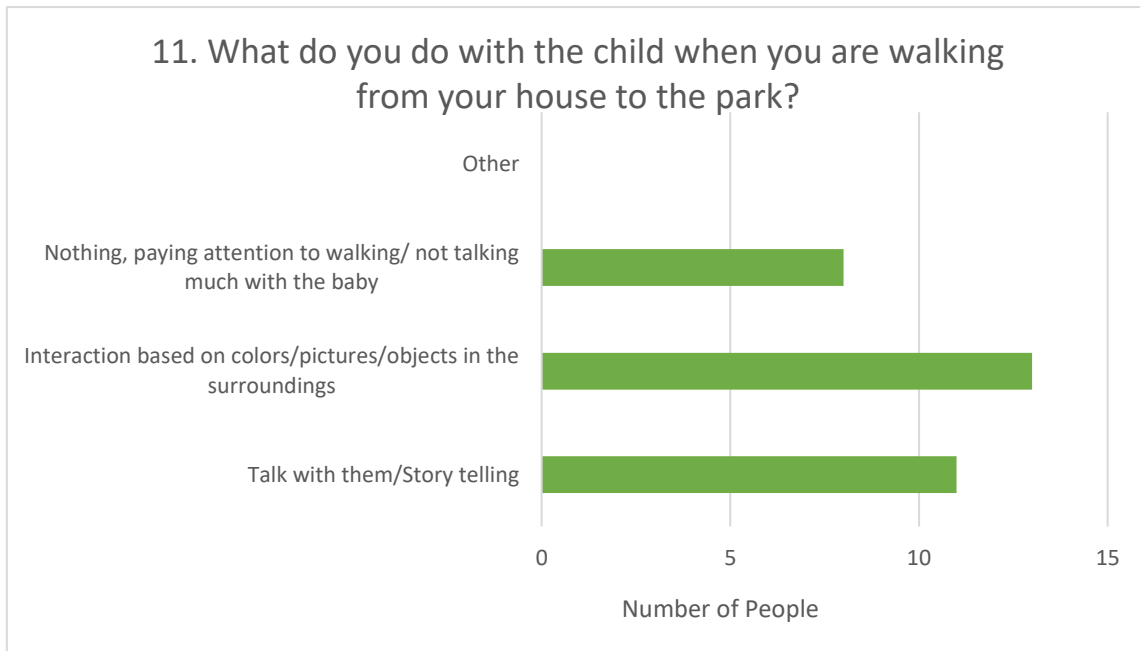












12. Is there any difference observed in the behaviour of kids, between the previous walking and the experience after intervention in the area?

- They feel happy while walking on the road
- Get excited as they see colourful paintings while walking
- Curiosity increases, and more time spent near the park
- Children find the environment attractive
- Motivation to go to the park has increased

13. Why it is necessary to spend time with kids?

- For their growth and development
- Social behavioural development
- Enhancement and improvement of mental Health
- Decrease in screen time
- Importance of Physical Activity
- Improved health
- Socializing skill Development
- Child needs care and concern especially an early age for emotional health improvement

- Going in an open Environment is important
- Kids regularly come out on the roads to see paintings and colours on the walls
- Increase Bonding with Parents
- Kids feel irritated if they are kept at home for a longer time

14. Suggestions from Respondents
















While interacting with the caregivers during the intercept survey, the improvements and changes suggested by the caregivers are listed below:

- As some of the existing play equipment's are in a broken condition, hence there is a need of maintenance for play equipment's, that will help the children to play freely
- Young children require more play equipment than what is already available, hence installation of any such equipment is requireds to maximise their engagement in the park
- Fencing and gates at the road endings, could be installed, to save children from accidents or other unwanted mis happenings, as the gates directly open on the main road
- The issue of waste accumulation on the site needs to be resolved as it creates cleanliness issues, and is one of the major concerns to be resolved.
- The design and developments inside the park should also be considered specific for young children
- Dedicated Footpaths are required especially in consideration towards safety and security concern of children
- Open drains should be covered since they appear unsanitary and may increase the risk of disease
- Traffic calming measures to be considered, for maximizing pedestrian movement and to improve safety and security
- Dustbins to be placed at specific interval in the area to avoid the dumping of any waste nearby the neighbourhood vicinity
- Dedicated and Differentiated zone for young children (0-5) in the park is needed to address the safety concerns of caregivers for young children.
- To shift the Gas agency hawkers which is always present on the interacts
- Resolving the Issue of Door-to-door Solid Waste Collection, as currently people are dumberg the waste on the corner of the street.

5.7.2 Overall outcomes from Intercept Survey

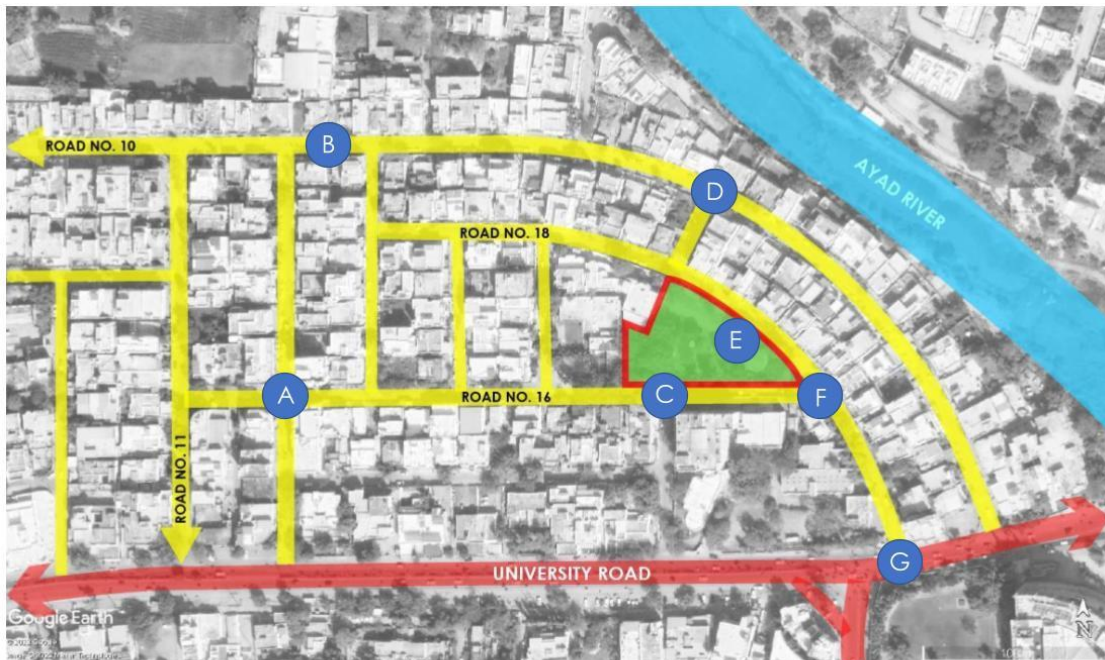
- After the intervention, Increased footfall in the park is observed.
- Behavioural Changes especially in children and some changes in Caregivers are observed:
 - ❖ Such as an increase in curiosity, asking questions from Parents regarding the visuals and paintings.
 - ❖ Watching and learning good habits, the Solar system, and planets, understanding colours and more children-specific content painted on the wall.
- Recent Changes to the area have helped improve the walking experience of people visiting the area
- The children who regularly visit the park have started spending more time in Park
- ITC's who were not accessing the park before the intervention, few of them are observed, visiting the park, due to the curiosity of the kid
- During an interaction with the caregivers, they spoke about the change in behaviour of children specifically, on Interaction based on colours/pictures/objects visible in the surroundings
- Issues such as traffic and safety concerns, were addressed, as traffic calming measures were observed to have a positive impact on the area
- People were getting engaged in watching the artistic patterns at road junctions, which resulted in slowing down the car/vehicle's speed for a specific duration of time.
- Overall, Positive impact is observed in the area after intervention for the targeted population.
- It was also observed that people who access the area regularly, were inclined towards having proper sidewalks and increased social safety.
- Hence, Permanent interventions need to have Safety, cleanliness, Proper sidewalks, and street Furniture as important element guiding the design further

5.7.3 Urban95 Quality Criteria (Post-Implementation)

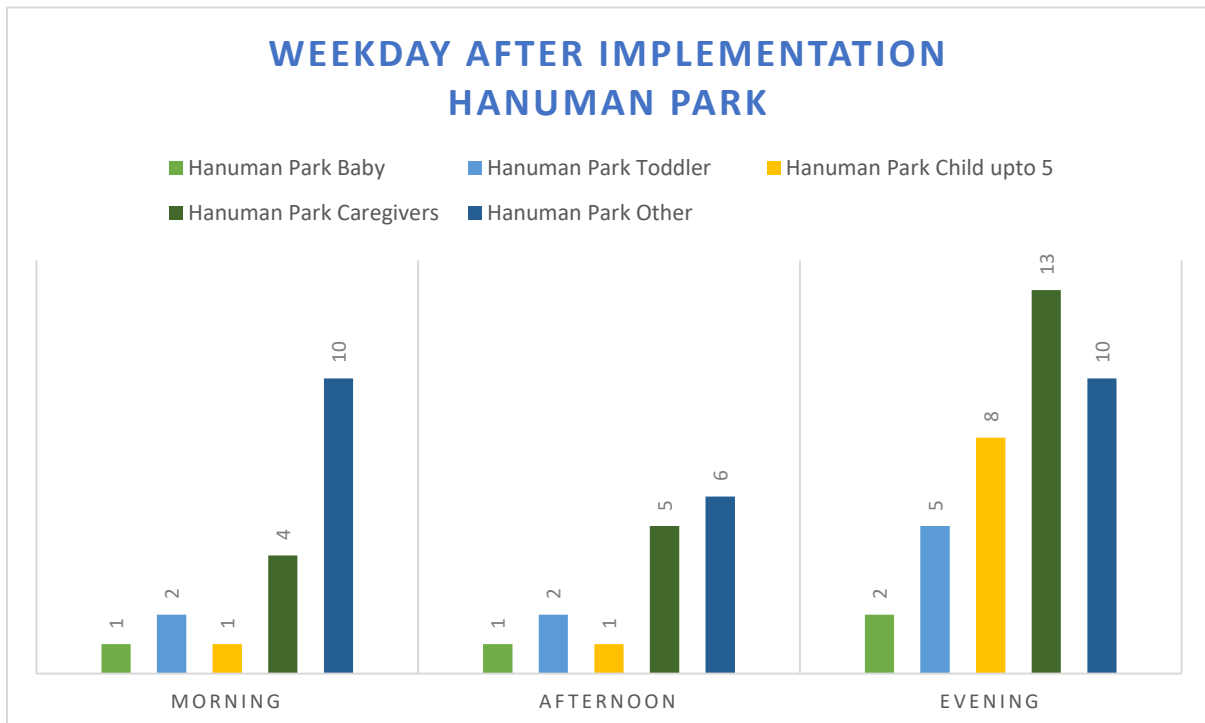
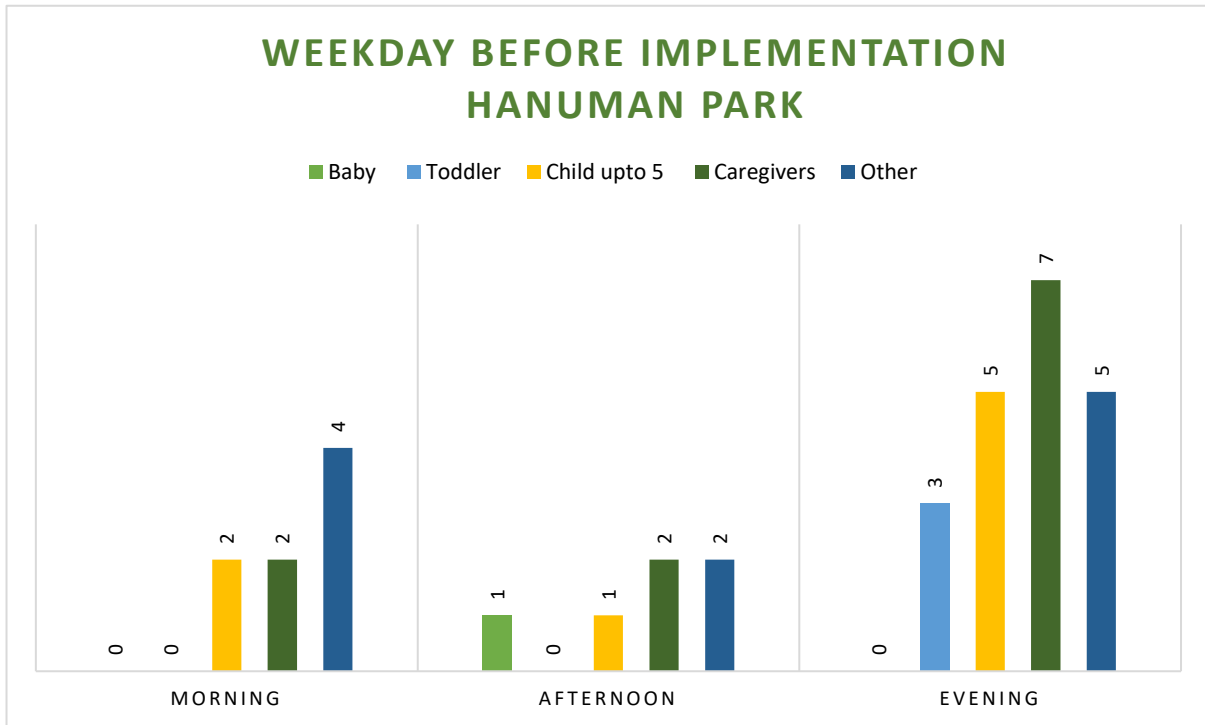
Urban 95 Quality Criteria			
Protection	Protection against traffic and accidents	Protection from crime and violence	Protection against unpleasant sensory experiences
			
Basic Needs	The Feeling of comfort	Opportunities for good hygiene and health	Convenient opportunities for Consumption
			
Comfort	Opportunities to walk and cycle	Opportunities to walk and stay	Opportunities to see
			
Interaction	Invitations to interact with environment	Opportunities to talk and listen	Opportunities for play and Exercise
			
Connection	Opportunities for Flexibility	Opportunities to access	Highly Integrated
			

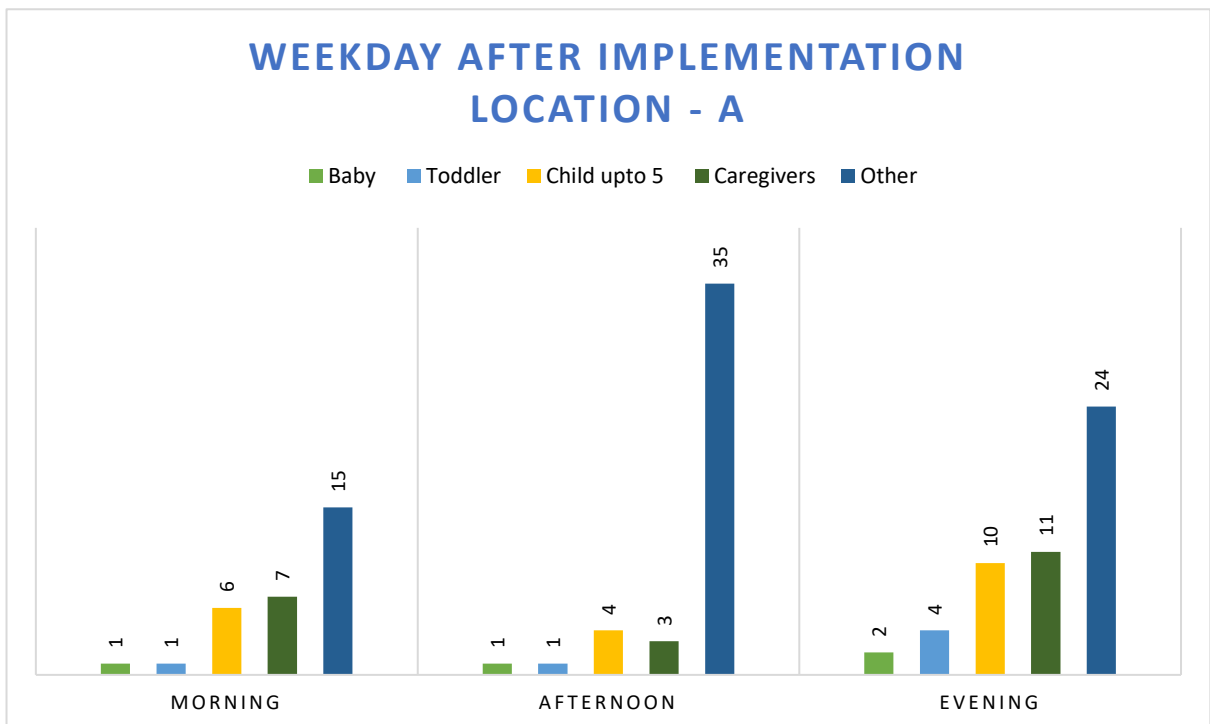
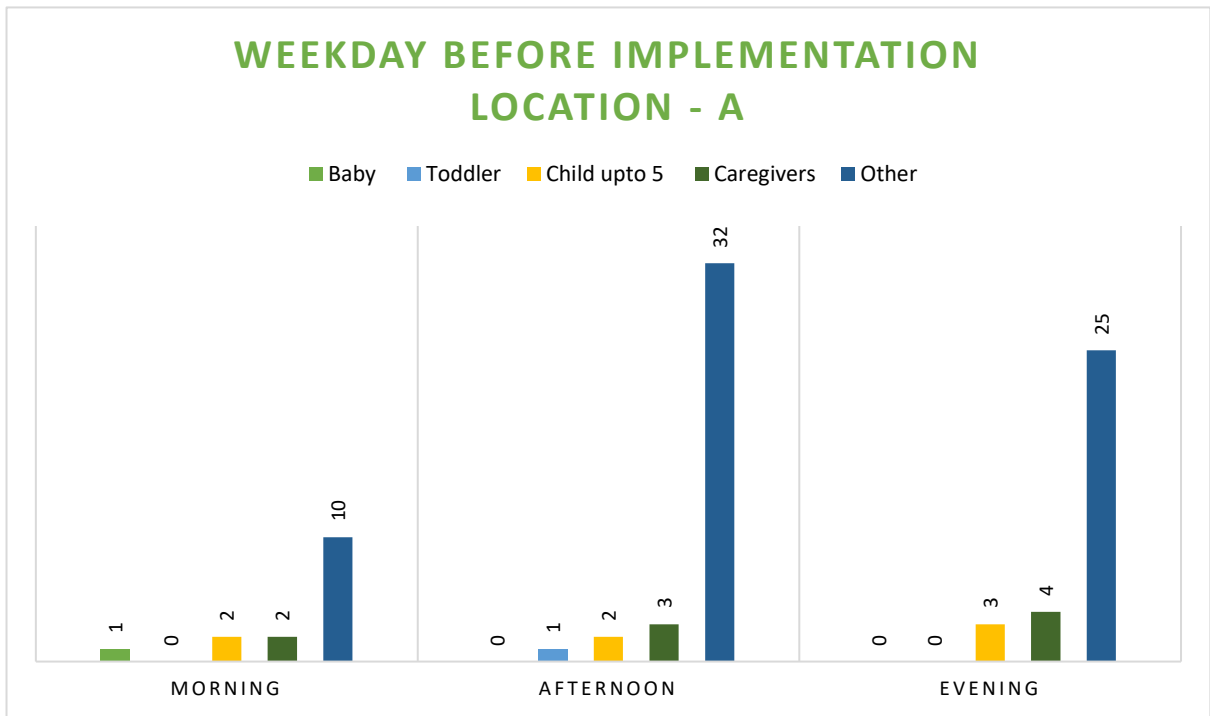
It is observed that the Urban 95 quality criteria, before implantation had unsatisfactory and neutral responses, whereas, after implementation, some amount of change was observed in this. Positive responses were observed in Visual connectivity, improvement in accessing the park, interaction with environment, feeling of comfort, better sensory experiences, etc.

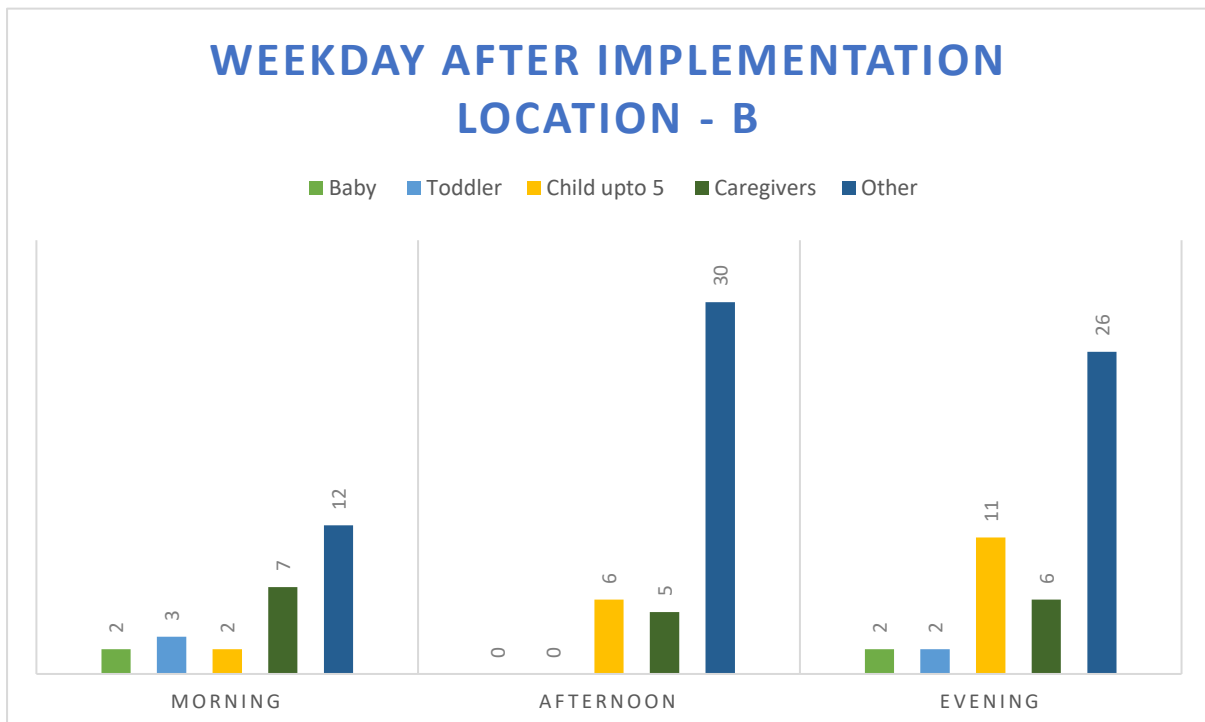
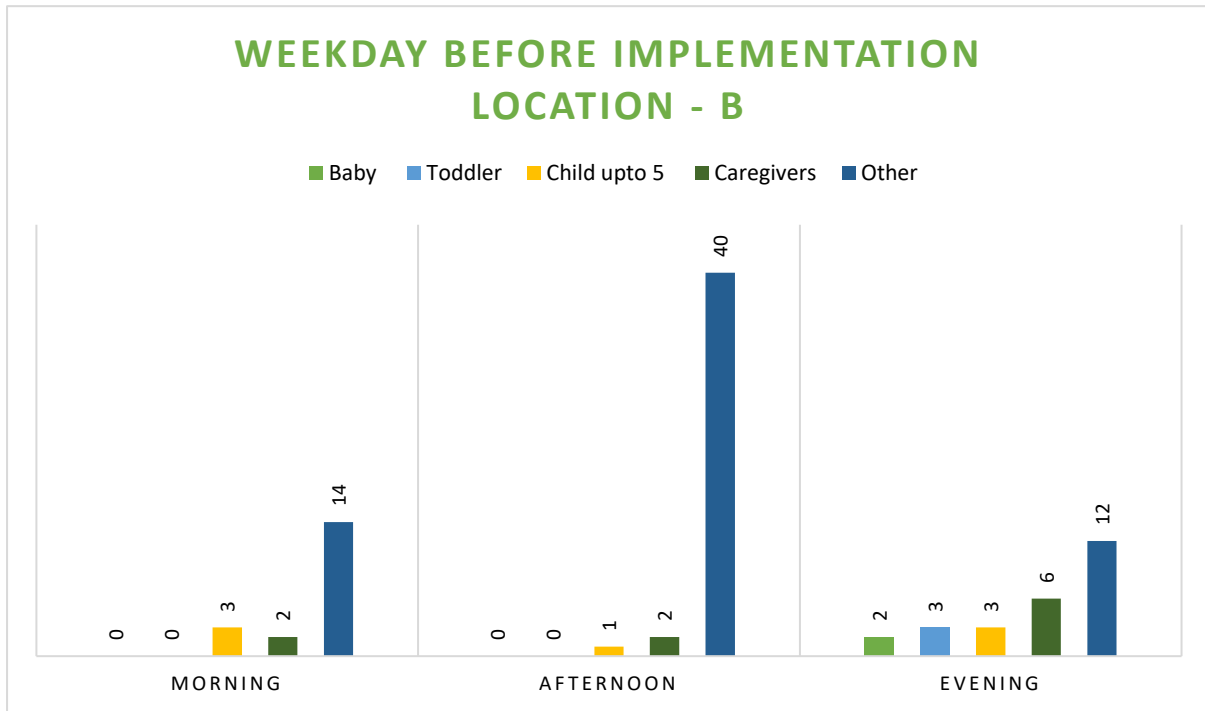
5.7.4 Comparative Data set, Weekdays (From Gehl toolkit)

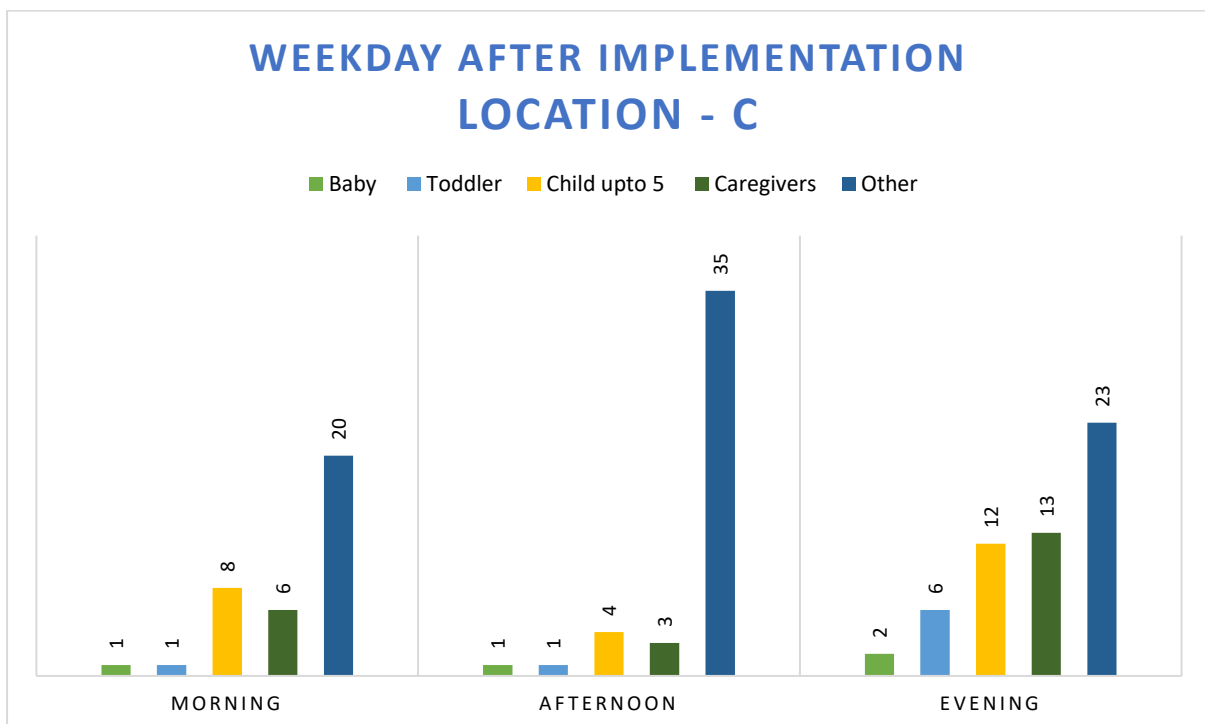
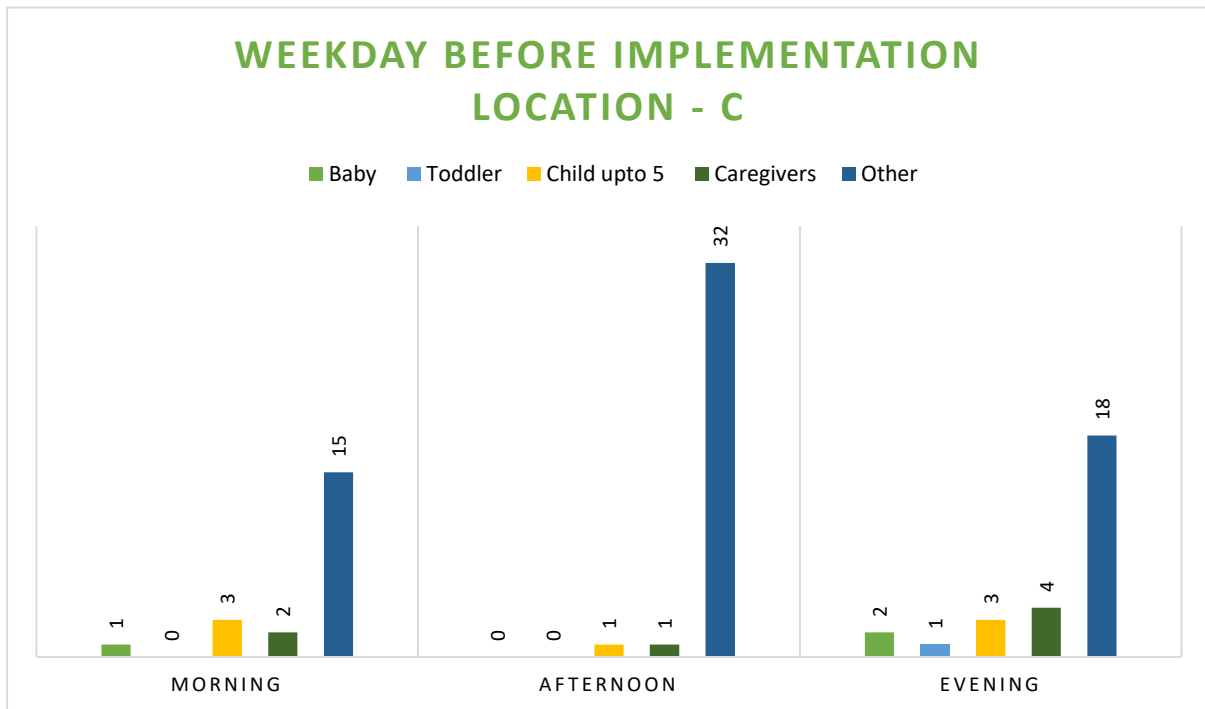


Following are the nodes where the Gehl toolkit was used to conduct surveys for CPZ Ashoknagar

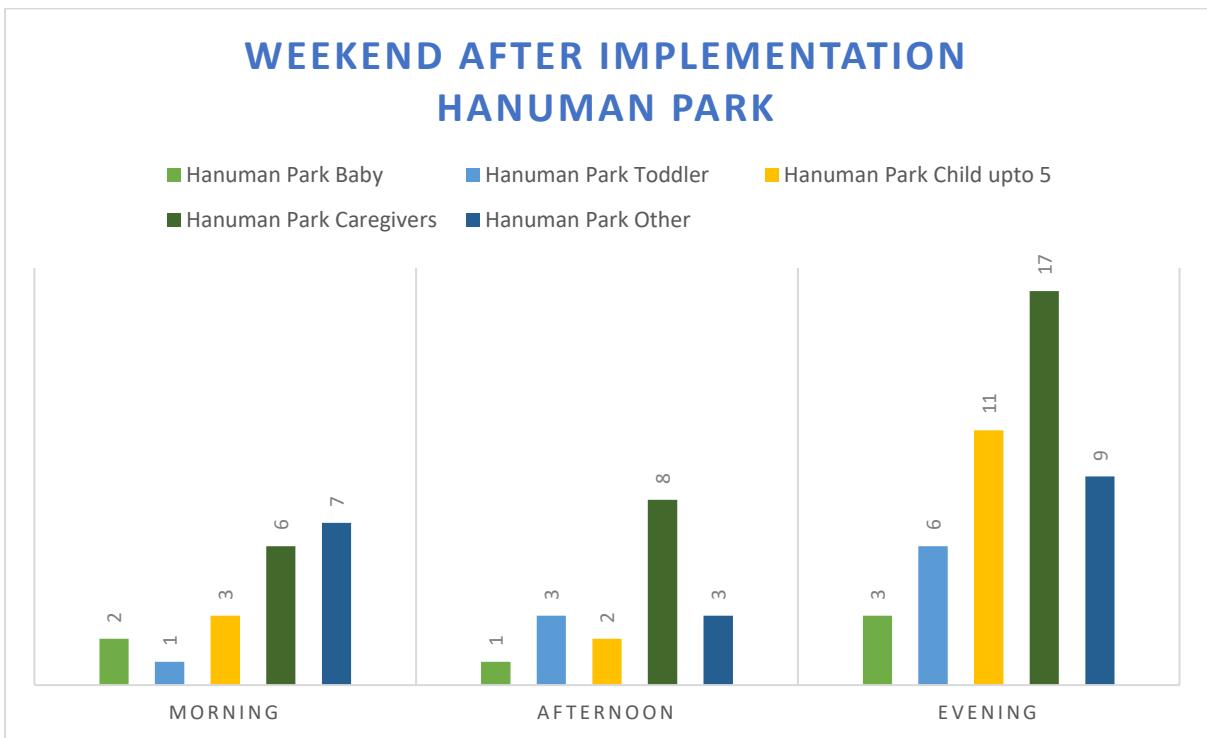
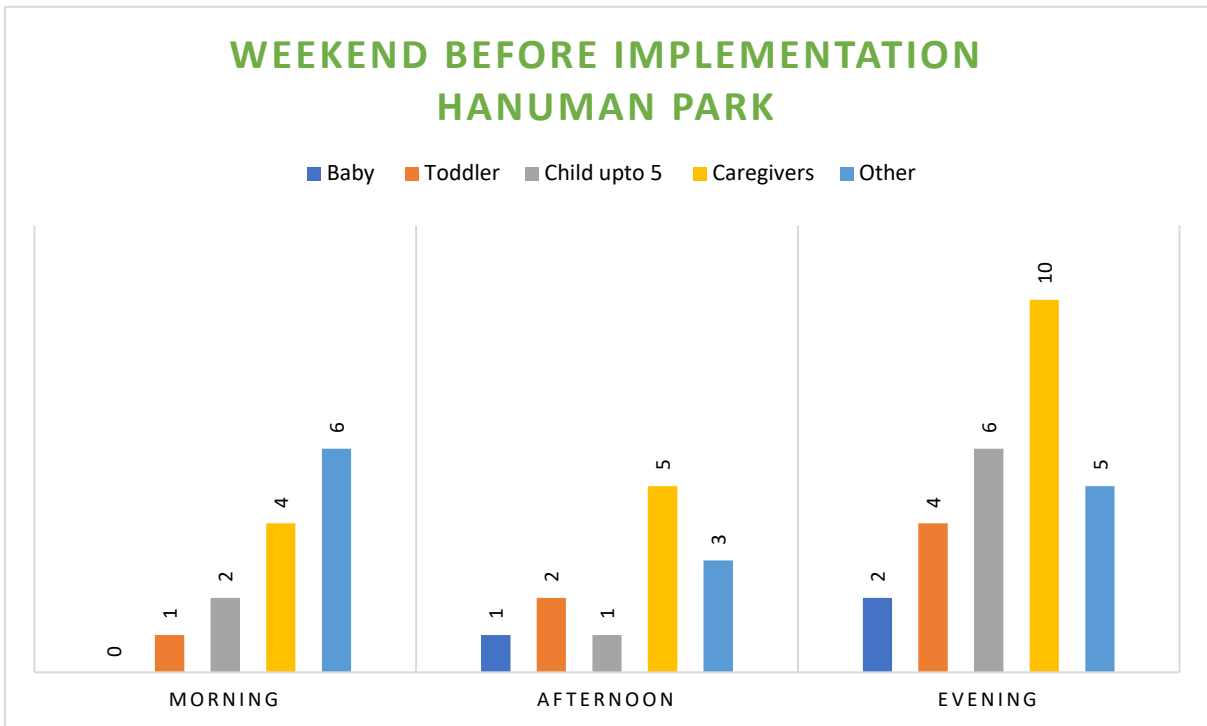


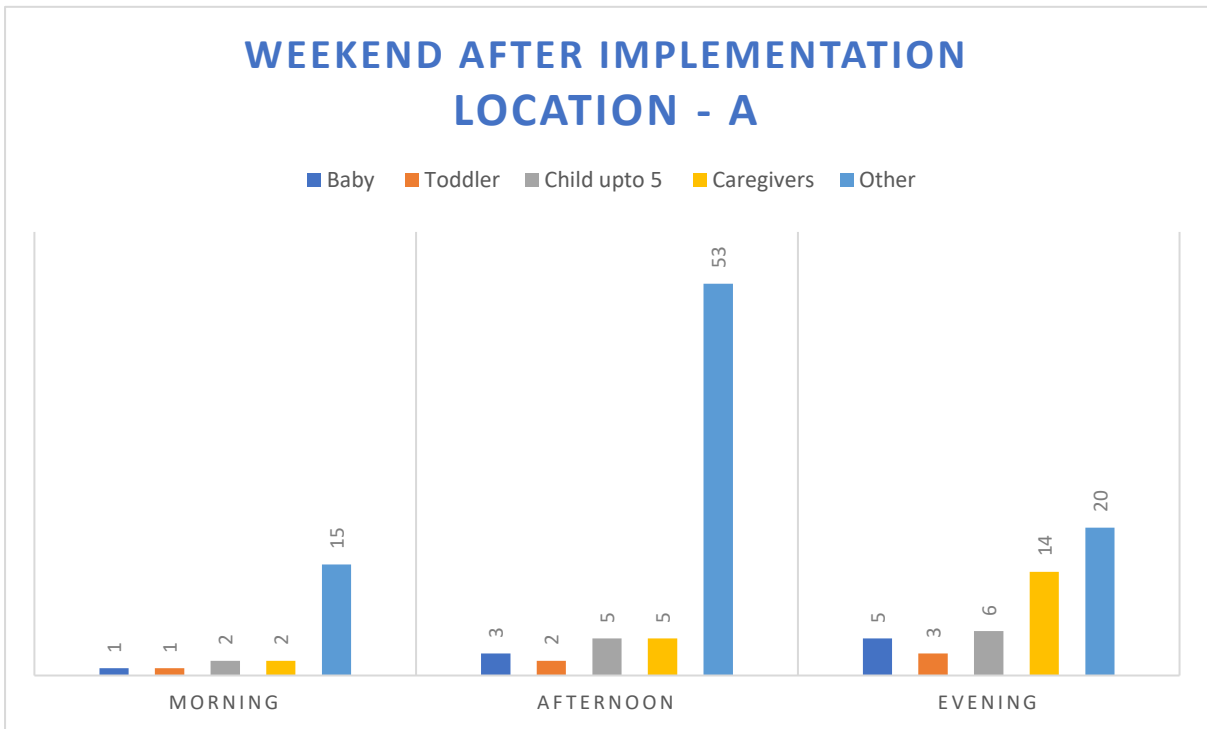
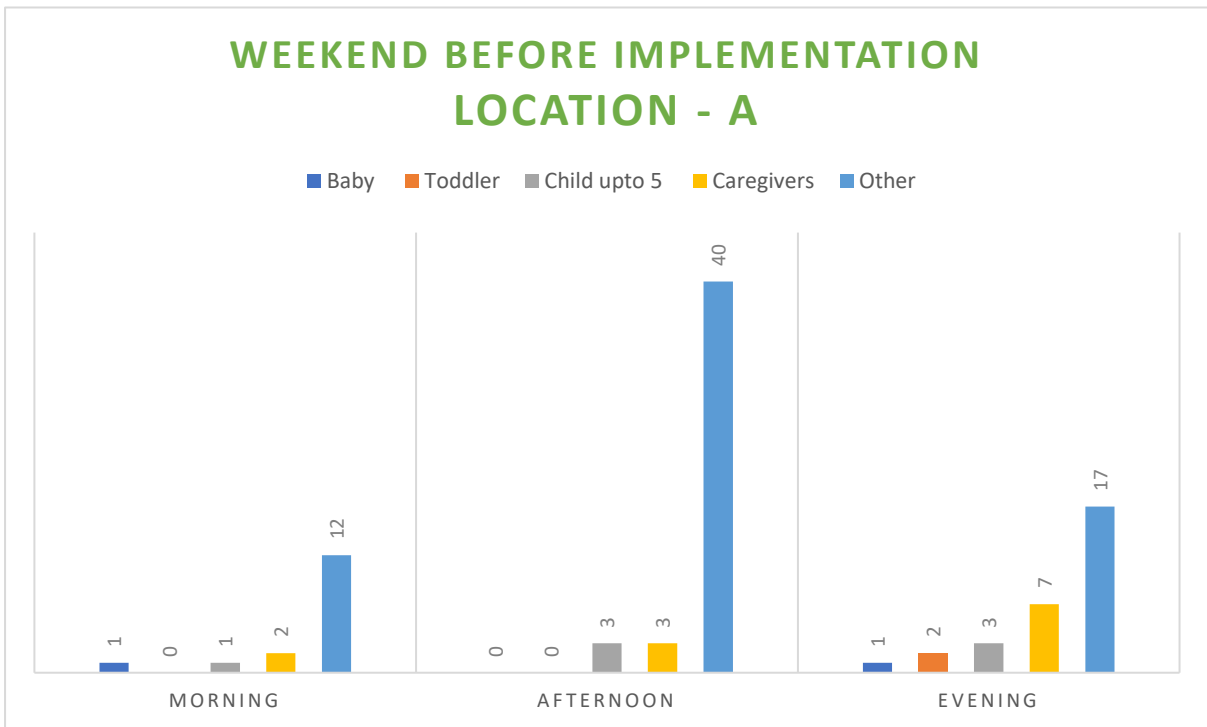




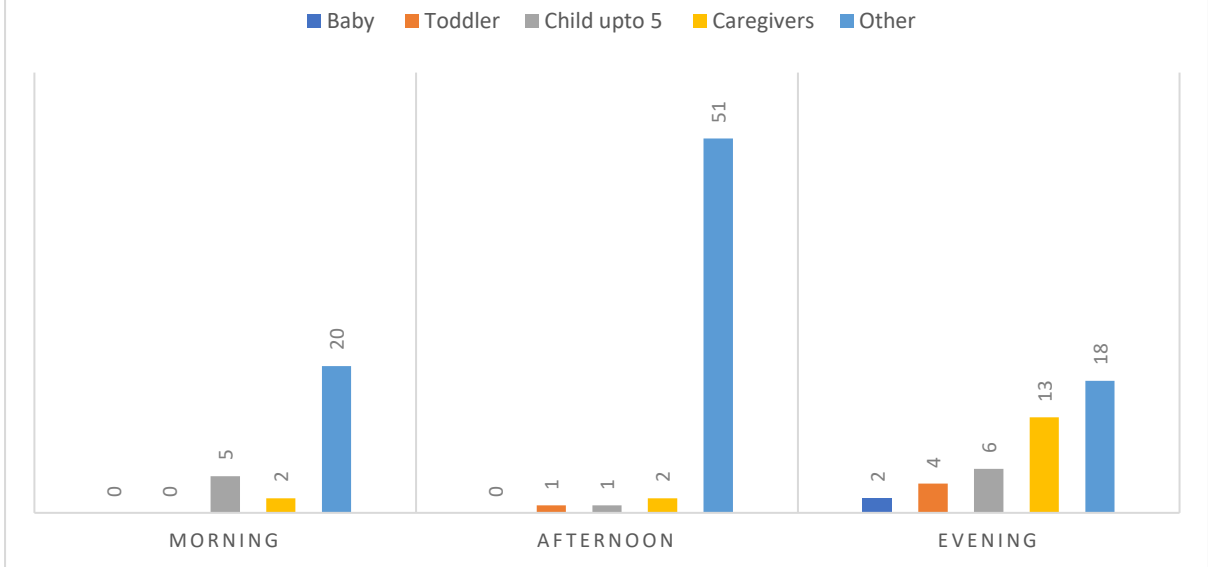


5.7.5 Comparative Data set, Weekends (From Gehl toolkit)

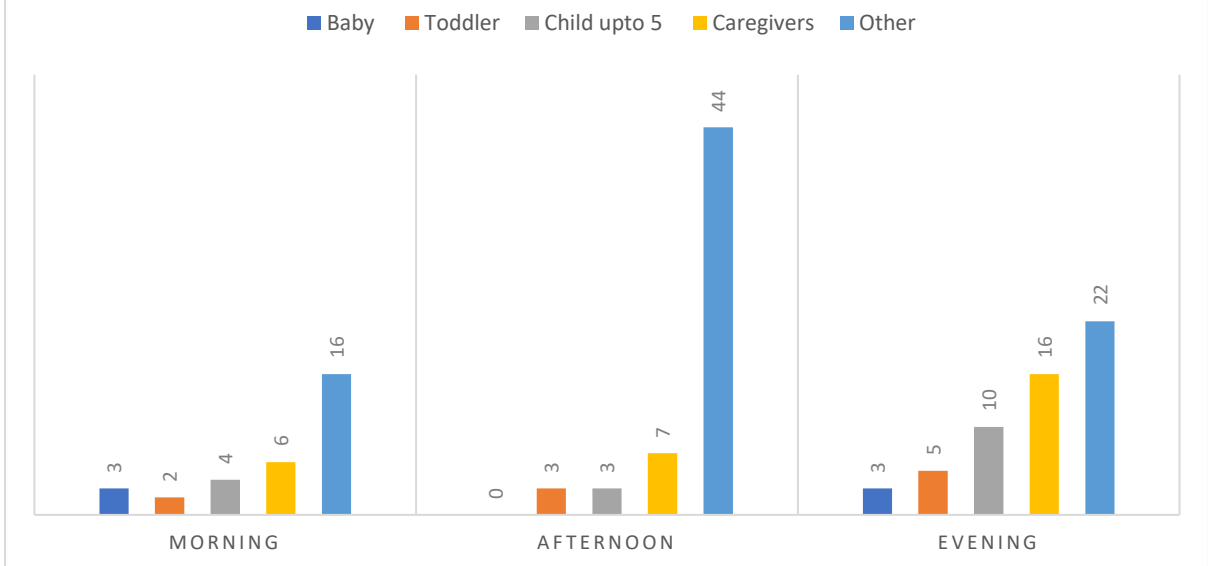


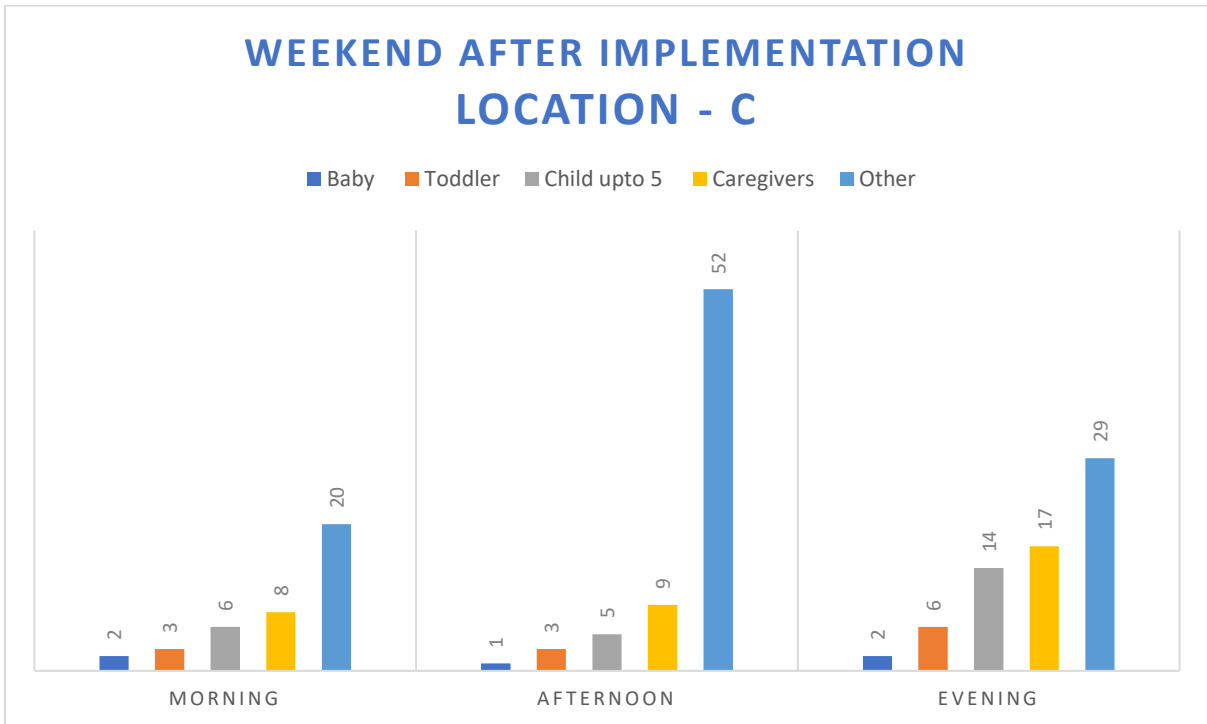
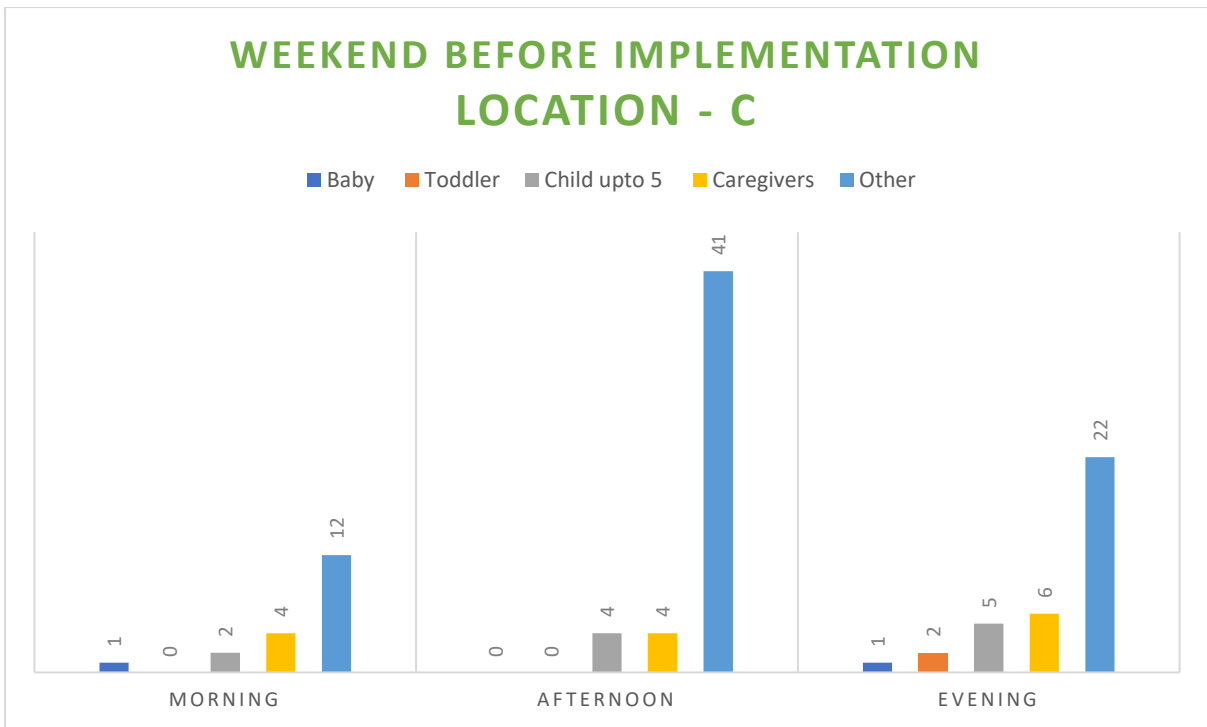


WEEKEND BEFORE IMPLEMENTATION LOCATION - B



WEEKEND AFTER IMPLEMENTATION LOCATION - B





Inferences –

- According to the survey after post implementation, the basic increase is in the number children in their caregiver walking on the road
- In Anchor institute, children with their caregivers have increase in the weekend peak hours

5.8 Learnings from Semi-Permanent Implementation

What worked well:

The Hanuman Park periphery has been re-developed, and the damped walls re-furbished this has been well acknowledged by the community and thrown light on the need for more such child-friendly spaces in Udaipur. Moreover, it served as an important example for the city to restore existing urban spaces and city parks that can be revived by doing small interventions to promote Urban95 principles.

The intervention has also been successful in increasing awareness among children and their caregivers on how a journey experience can be created as vibrant and engaging for young minds.

Scope for improvement:

The neighbour community continued to dispose of garbage in the nearby dumping zone despite advocacy and awareness attempts to promote garbage disposal in Nigam garbage vans.

Recommendations for the next phase of the project:

1. Building the capacity of caregivers and showcasing the advantage of outdoor play areas for young children
2. Improvement in the road width and geometry and drain cover along the path with attractive way finders and vibrancy on the road
3. To scale up media visibility of such events for wider dissemination of ECD and social behaviour change objectives
4. From the experience gained from the semi-permanent Interventions conceptual design have been prepared for taking up the permanent development of the spaces in the CPZ
5. A detail project report will envisage design elements, dedicated space marking, furniture, lights and necessary landscape to have a vibrant space for the young children and their caregivers.
6. Traffic calming measures were highlight appreciate at the junctions by the community, this encourages safe and secure crossing.
7. Active/painted facades across the streets of the Ashok Nagar, will make it engaging for young children and making an enjoyable experience while walking in the Neighborhood.

7 Concept Design for Ashok Nagar

7.1 Defining Vision- Setting the Outcomes

Based on the findings of surveys and behavioural analysis, the conceptual design is derived for 600m radius of Ashok Nagar, Hanuman Park being the centroid and anchor institute for the same.

As is evident from the surveys, currently the site lacks interaction and engagement of any kind which is due to the absence of activities which promote engagement. The tactical (temporary) design interventions focus on introducing temporary elements like way finders, painted sidewalks, engaging activities, etc. to start developing a sense of child-friendliness in the neighbourhood.

Even after the presence of park in the neighbourhood, it is not being used to its full potential. The young children in the vicinity restrict their playing activities to the porch of their houses which certainly limits their interaction with other children and overall/cross learning and development which is required at that age. To encourage young children and their caregivers to step of the house and engage in available resources in the neighbourhood.

Hence the design targets in Hanuman Park to highlight it to increase its usage, both quantitatively and qualitatively. It focuses on **increasing safety, accessibility, and playful** nature of the site. Along with the park, all the approach roads are also planned to have way wayfinding elements which will not only increase access to the park, but also make the site more walkable.

Based on these design elements, a certain behavioural change is expected as an outcome wherein the caregivers start using the ITC destinations more frequently. Caregivers prefer walking as a mode of commute, and overall help in achieving a thriving neighbourhood through increased interactions leading to a stronger community and making it playful and lively wherein the children prosper leading to their early childhood development.

ECD will be promoted through the following elements and designs:

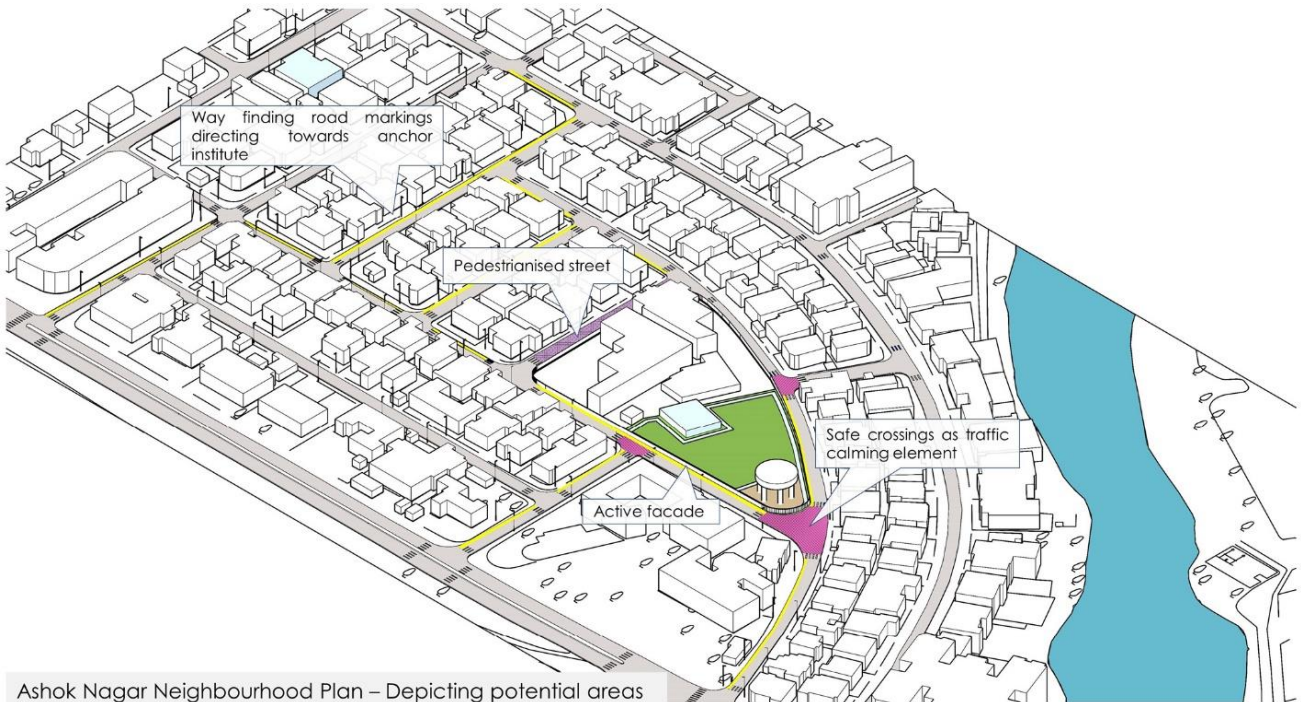
1. Safe and interactive pathways – ROADS AND STREETS
2. Socially interactive, joyful, and playful – DESIGNS ON ROADS AND WALLS
3. Dedicating area helps to spend more time – EXCLUSIVE PLAY AREA IN THE PARK
4. Gross motor skills (Play in Sandpits, walk, run, jump, tot lots etc)
5. Cognitive Development – GREEN AND VARIOUS MATERIAL FINISHES
6. Socio-emotional Developments (seating and interacting with other kids and their caregivers) – SEATING AREAS IN ROAD CORRIDORS IN THE PARK
7. Creative development – INNOVATIVE DESIGN THEMES
8. Language Development: Interact with other kids and their caregivers, listening to different nature voices, and queries) – WALL ARTS
9. Increased footfall to the park, which will help, shape and enhance, physical and mental wellbeing of infants, toddlers and caregivers.
10. Increased interaction between children will improve the social competence in children from early age.
11. A greater sense of curiosity will enhance mental capacity and accelerate brain growth.

Proposed ITC Design Elements:

Streets	Park and Open Public Spaces	Utilities
Footpath	Camera monitoring	Breastfeeding booths
Cycle stand	Ramps for ITC	Drinking water facility
Ramps for ITC	Benches	Toilets
Waiting area	Shading devices	Dustbins
Handicapped parking	Lighting	
Side-walk games	ITC playful furniture	
Active façade along the route	Public art	
Surface material and textures	Surface material and textures	
Benches	Natural play elements	
Shading devices	Engaging floor games	
Lighting	Adequate lighting	
ITC playful furniture	Dedicated Space	
Planter		
Seating along with planters		
Wayfinding signages		
Safety signage for traffic		
Safe crossings		
Public art		

Table 15 List of ITC design elements for conceptual design

7.2 Concept Plan for CPZ



Ashok Nagar Neighbourhood Plan – Depicting potential areas

Figure 69 Isometric view of Ashok Nagar Neighborhood – Depicting potential areas and highlighting key proposed solutions

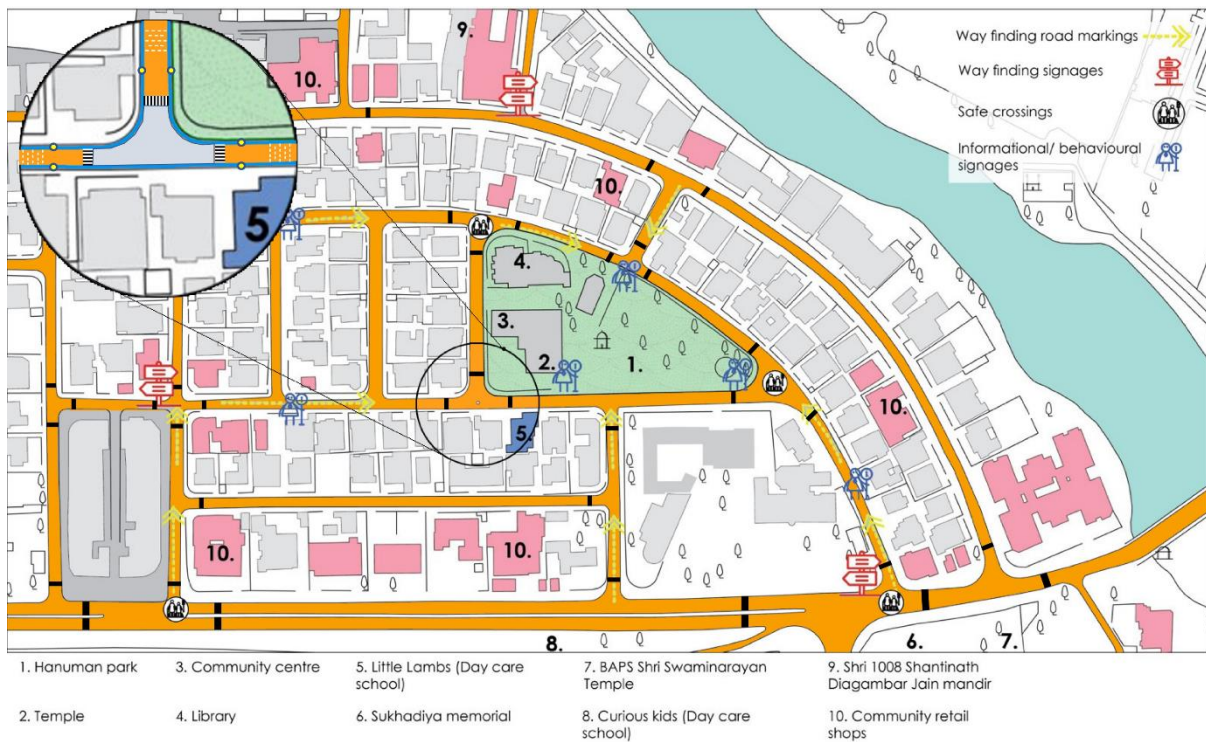


Figure 70 Ashok Nagar Street Network - Conceptual Proposal

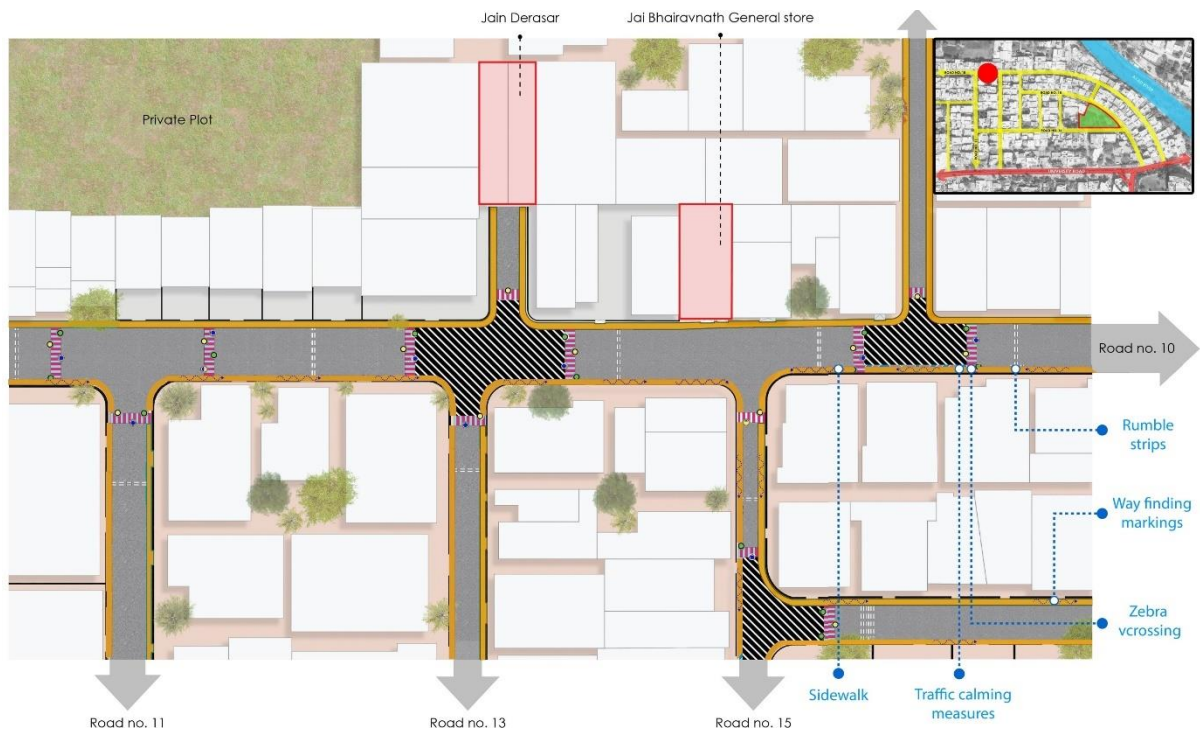


Figure 71 Details of proposed plan

Key Features

- Proposing road safety elements like zebra crossings, rumble strips, and traffic calming measures
- Proposing sidewalks on both sides of the street throughout the Child Priority Zone to promote safe walkability
- Adding way finding signages and road markings to help young children and caregivers easily navigate towards the anchor institute and other ITC destinations
- Marking in the roads for the nearest ITC destination

7.3 Street Sections

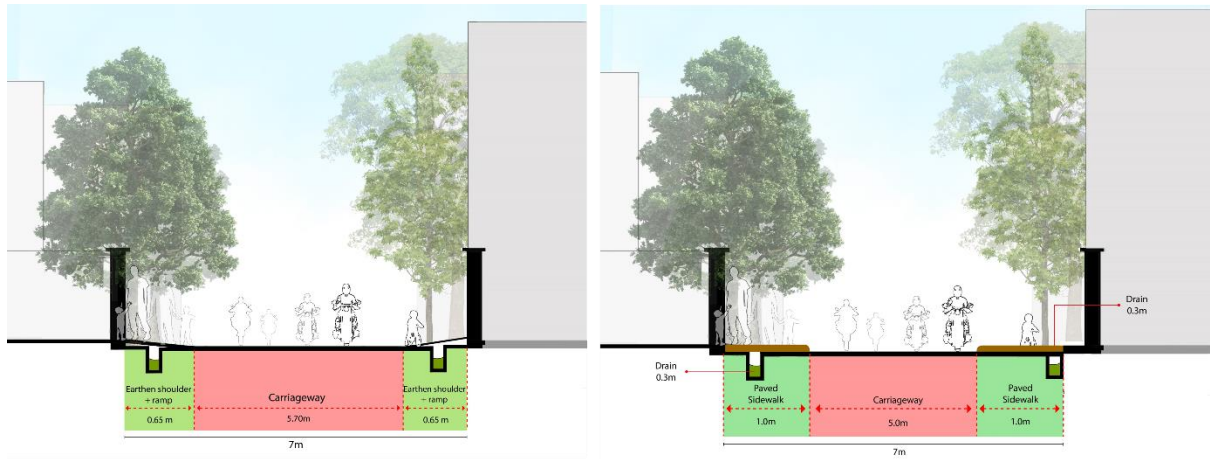


Figure 72 Existing & Proposed Street Section for 7m ROW

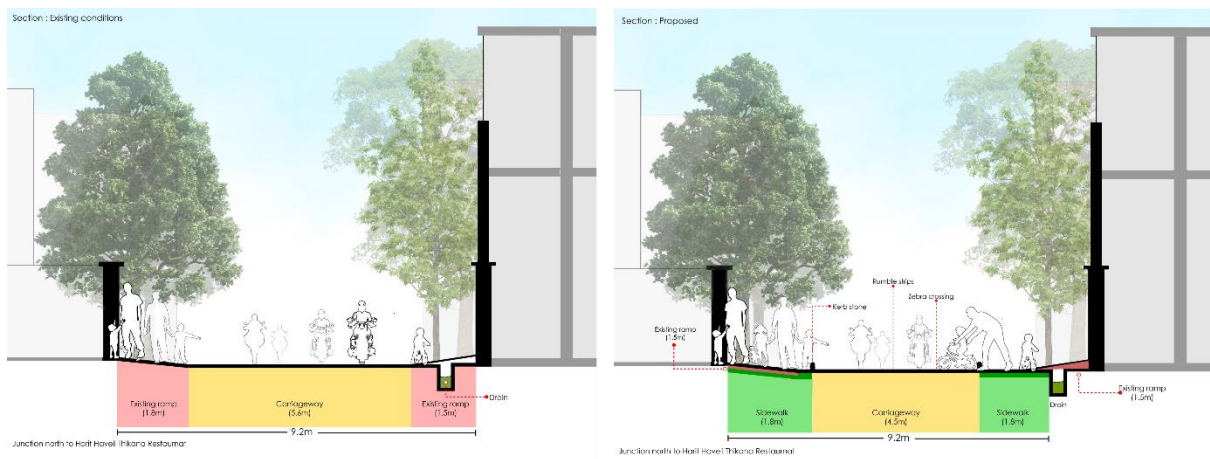


Figure 73 Existing & Proposed Street Section for 9.2m ROW

7.4 Anchor Institute Concept & Zoning



Figure 74 Anchor Institute Concept & Zoning

Key Features

- Glancing into the design approach of anchor institute- Hanuman Park
- Dedicated play area for ITC inside the park
- Engaging floor games, geometric patterns, and active facades as sidewalks to make the park more accessible and increase footfall
- Cycle stands and dedicated parking spaces to resolve the issue of unorganized parking
- Introducing shared streets to increase engagement between caregivers and children of the neighbourhood

7.5 Conceptual Plan for Dedicated Children Zone

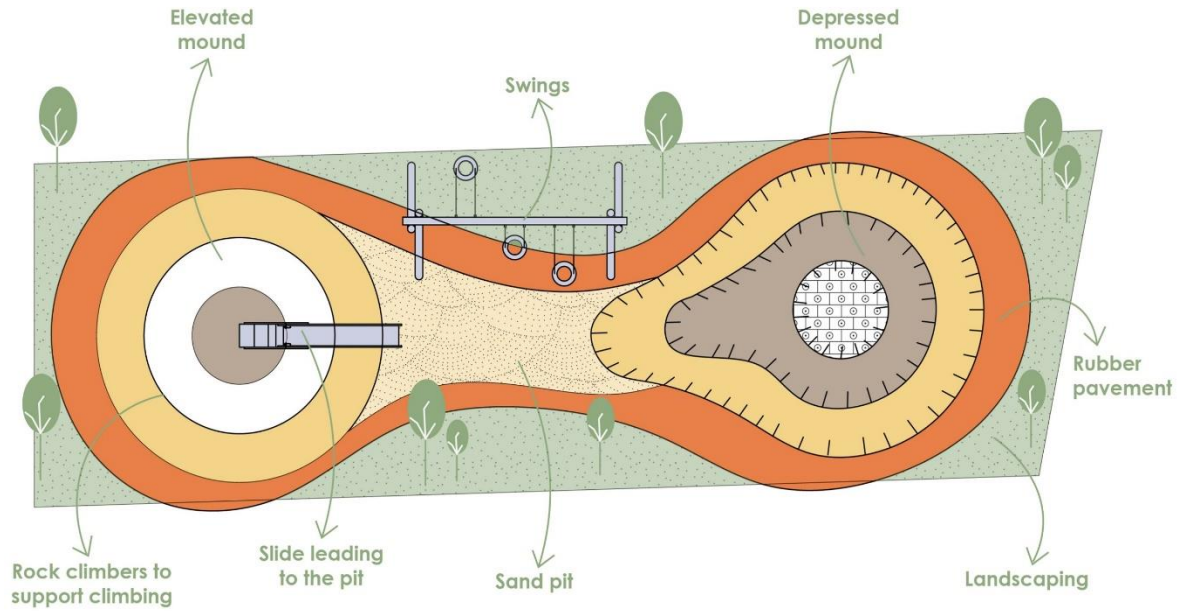


Figure 75 Conceptual Plan for Dedicated Children Zone

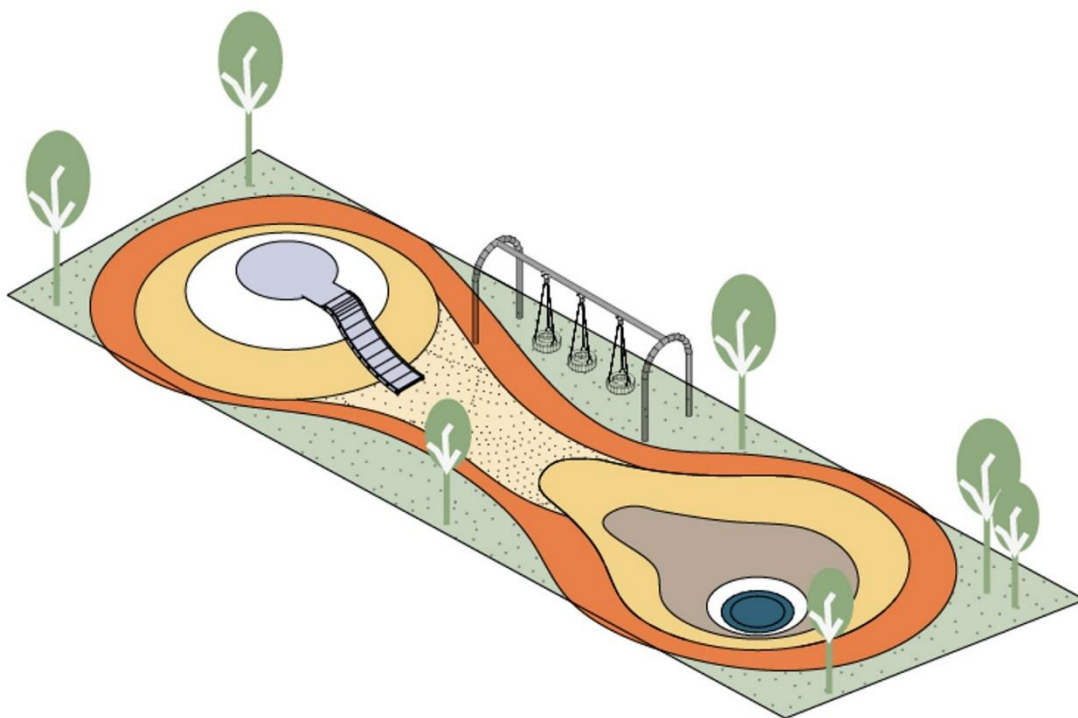


Figure 76 Natural play elements, toddler swings, sandpits and rolling ground



Figure 77 Hanuman Park – Conceptualize Visual

ECD will be promoted through

1. Engaging/interactive games are park
2. Cognitive Development (understanding of shapes, colours, numbers, alphabets, different figures/puzzles etc.)
3. Cognitive Development (Imagination, creativity, engaging environment)
4. Socio-emotional Developments (Join attention and social interactions)
5. Safe, Green, Engaging, and Socially Interactive
6. Visual perception
7. Environmental Influences.
8. Art and Craft
9. Try out new ideas and ways of doing things
10. Practice and improve social skills
11. Build vocabulary and memory

7.6 Conceptual Visuals of the Design



Figure 79 Intersections – Conceptualize Visual- outside of hanuman park



Figure 79 Outside Hanuman Park – Conceptualize Visual of sidewalks along hanuman park



Figure 81 Intersections – Conceptualize Visual showing the sidewalks and traffic calming measures



Figure 81 Intersections – Conceptualize Visual

7.7 Conceptual Drawings for Design Implementation

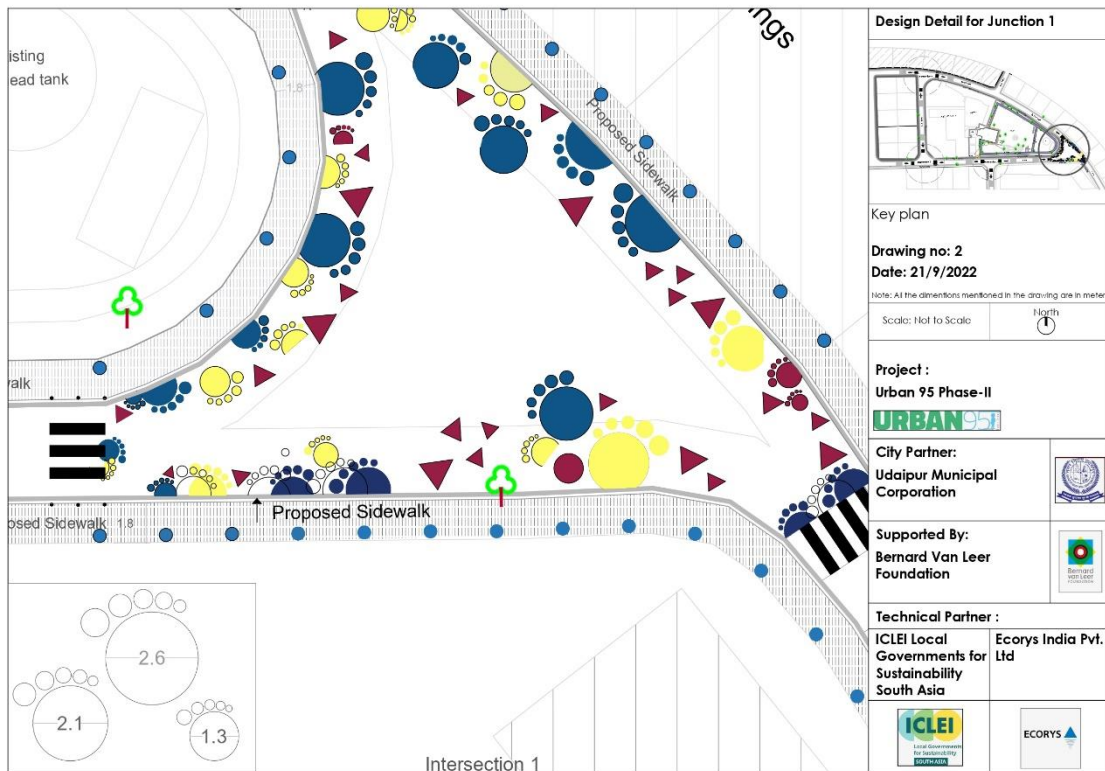


Figure 83 Design detail for Junction 1

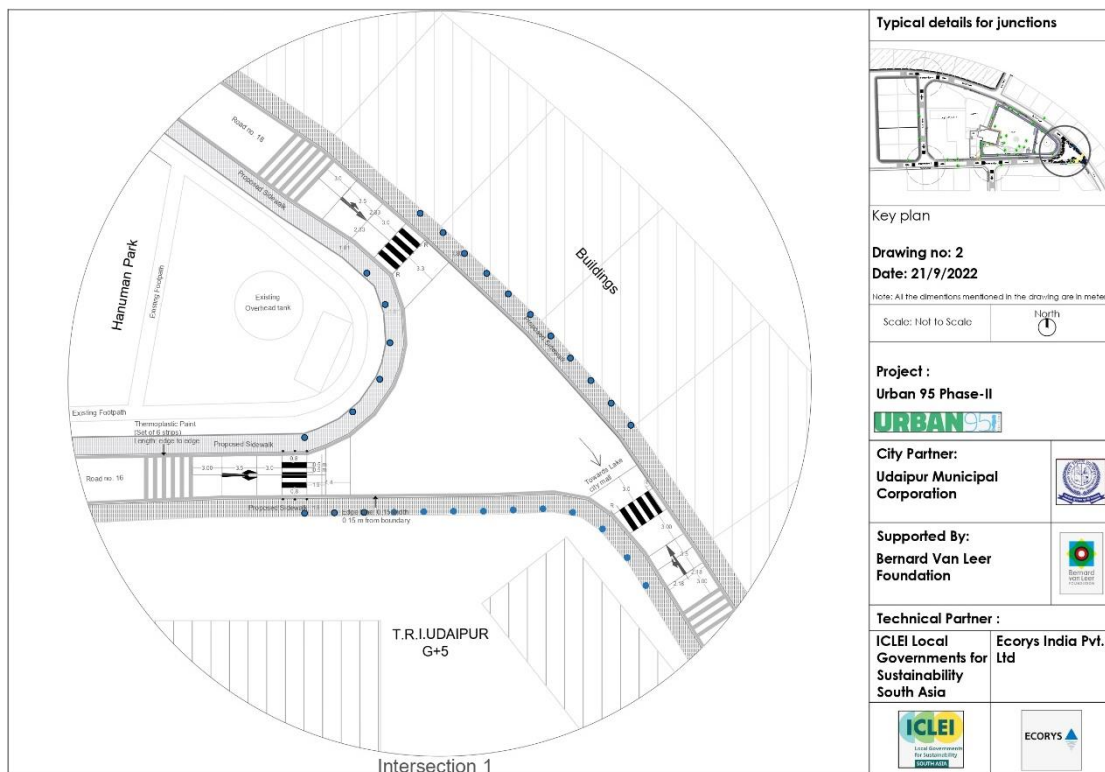


Figure 82 Typical details for Junctions

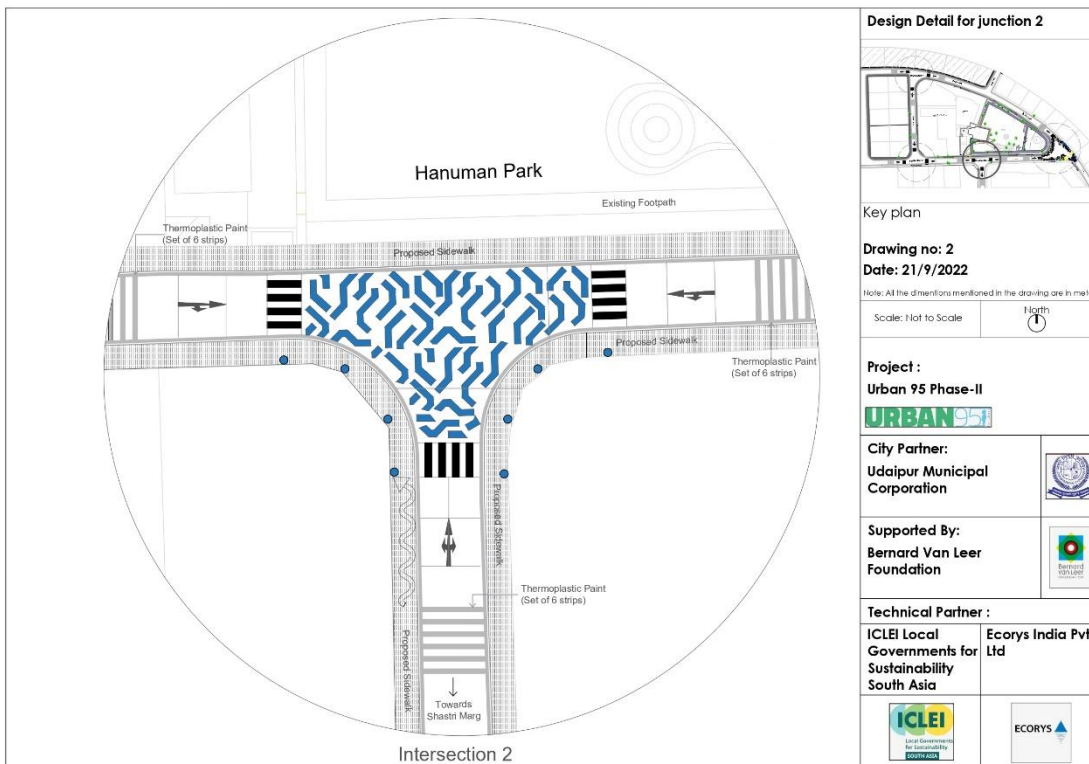


Figure 85 Design detail for Junction 2

Design Detail for junction 2

Key plan

Drawing no: 2
Date: 21/9/2022

Note: All the dimensions mentioned in the drawing are in meters

Scale: Not to Scale

Project :
Urban 95 Phase-II
URBAN95

City Partner:
Udaipur Municipal Corporation

Supported By:
Bernard Van Leer Foundation

Technical Partner :
ICLEI Local Governments for Sustainability South Asia and **Ecorys India Pvt. Ltd**

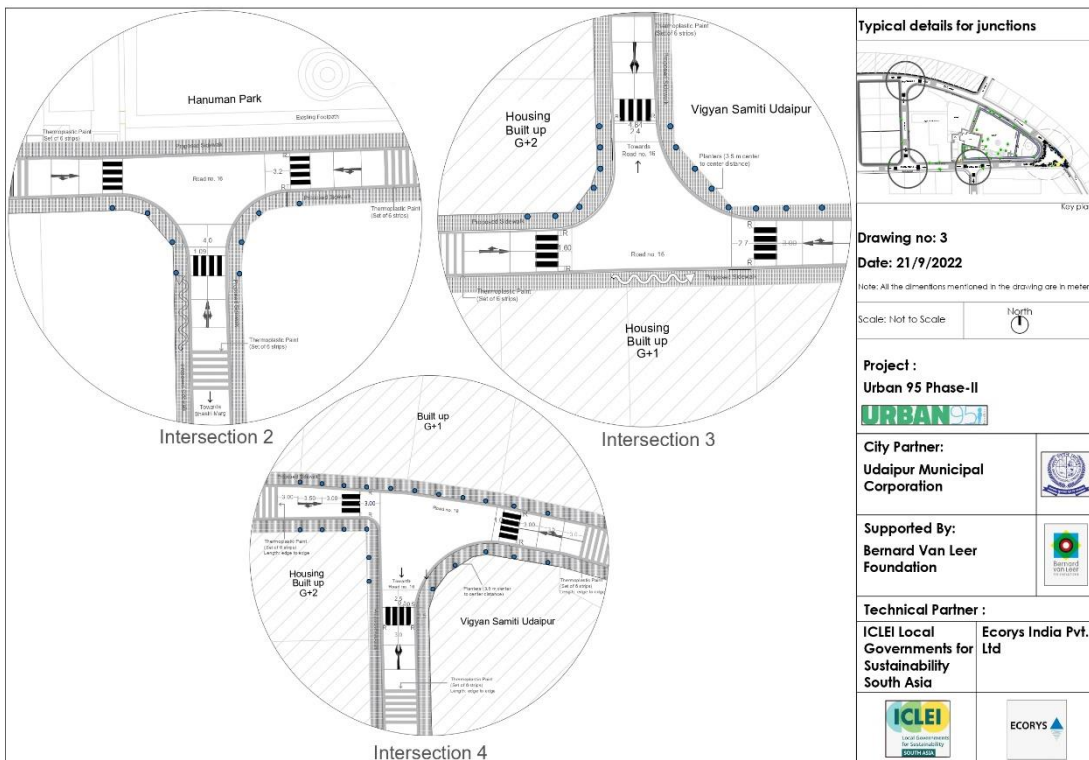


Figure 84 Typical details for Junctions

Typical details for junctions

Key plan

Drawing no: 3
Date: 21/9/2022

Note: All the dimensions mentioned in the drawing are in meters

Scale: Not to Scale

Project :
Urban 95 Phase-II
URBAN95

City Partner:
Udaipur Municipal Corporation

Supported By:
Bernard Van Leer Foundation

Technical Partner :
ICLEI Local Governments for Sustainability South Asia and **Ecorys India Pvt. Ltd**

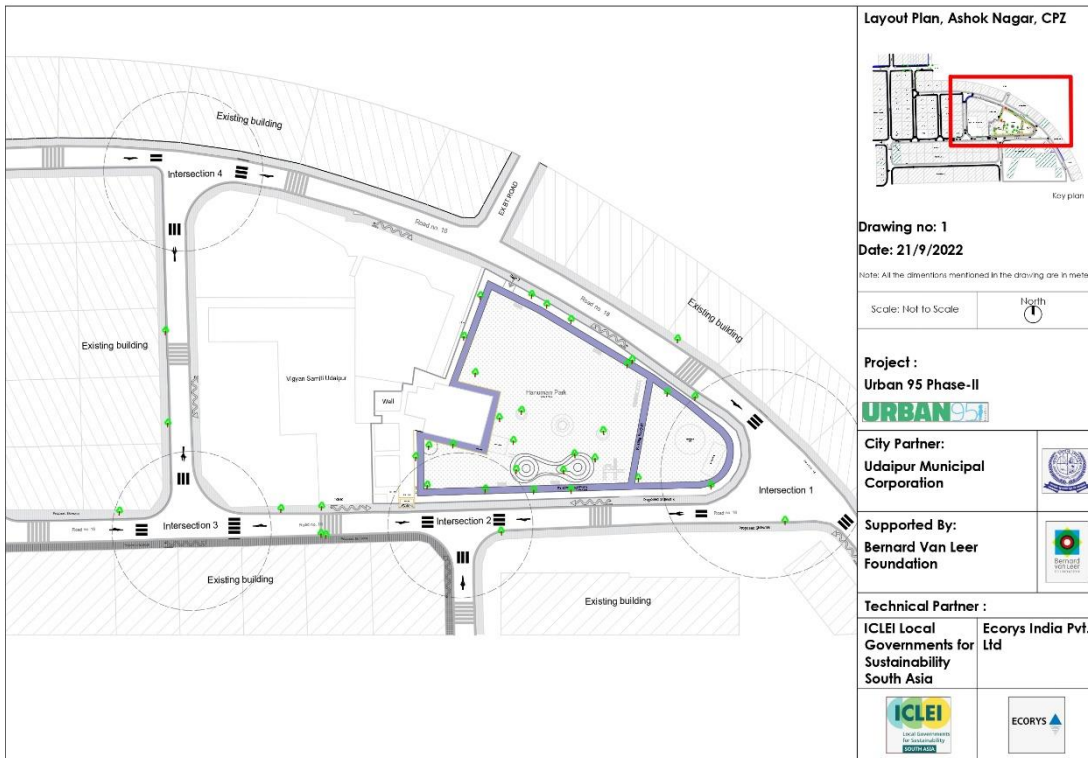


Figure 86 Layout Plan, Ashok Nagar, CPZ

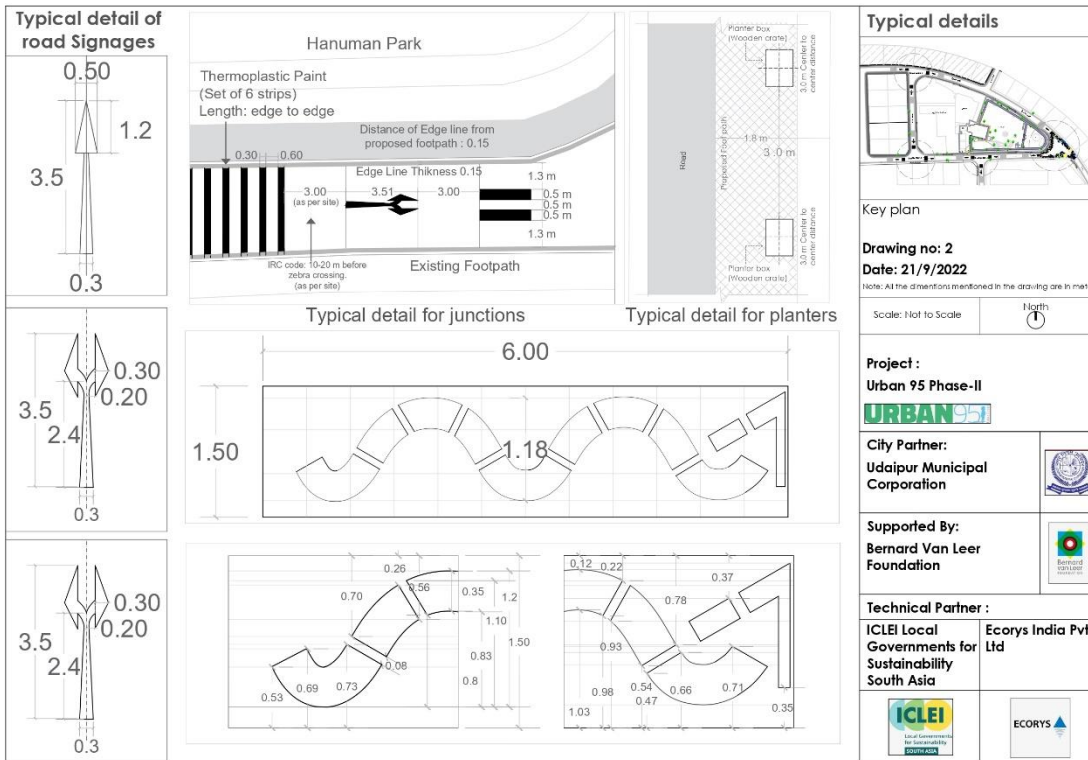


Figure 87 Typical details for road signages, planters & way finding road markings

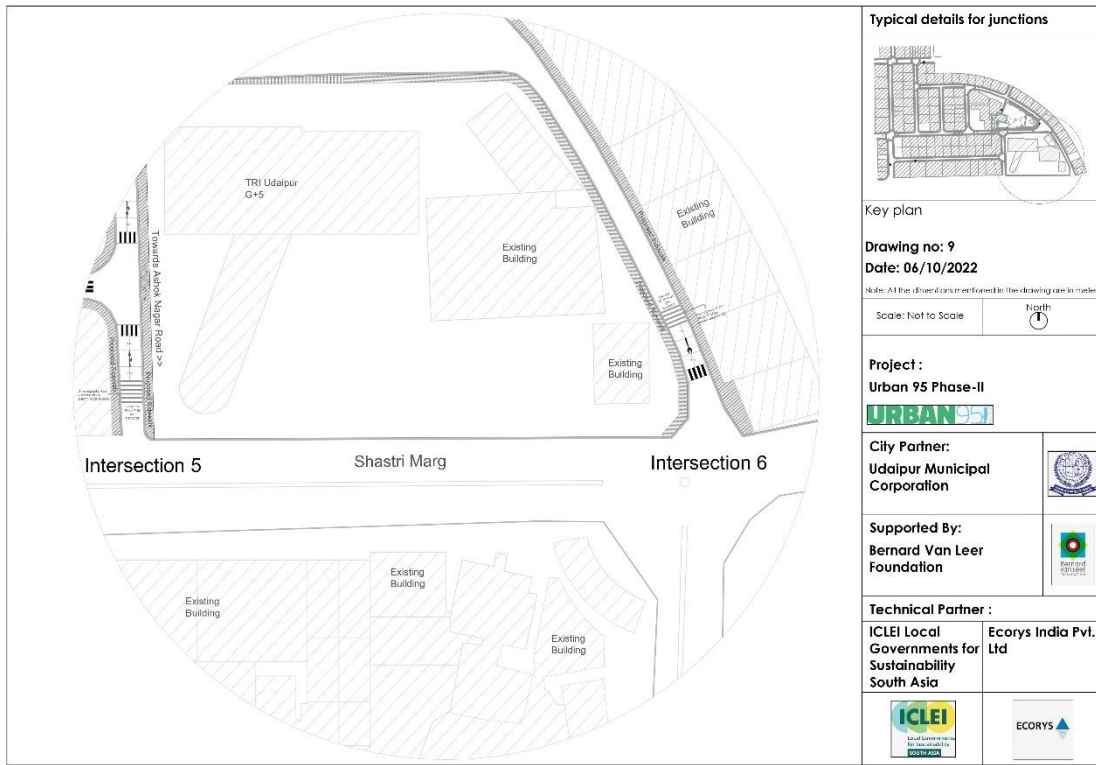


Figure 88 Typical details for intersections 5 & 6



Figure 89 Typical section and compound wall details

8 Financial Plans

8.1 Quantities & Broad Estimation

Overall Project Cost

Given the overall design and its elements/ components and based on the case-studies and derived from the semi-permanent project, the approximate cost for child priority zone is envisaged to be in range of Rs. 65 Lacs to Rs 75 Lacs

Below mentioned are the items/ elements and quantities of the same as per the design proposal based on which this approximate cost has been defined. The final cost shall be part of Detailed Project Report based on the finalized drawings and overall items/ elements and its quantities- mix of applicable Basic Schedule of Rates (BSR), in this case Rajasthan Urban Infrastructure Development Project (RUIDP), 2022 and Non- BSR items and rates.

10			
S.No.	Items	Unit /Nos	Area
1	Interlocking Paver Blocks	sqm	5000
2	Thermoplastic Paint	sqm	2000
3	Kerb stone	m	500
4	Way finding signages for destinations and Utilities	20	
5	Safety signages for Traffic	20	
6	Dustbins	20	
7	Drinking water facility	1	
8	Lighting	30	
9	shading devices	1	
11	Lean Conc with RCC	Cum	100
12	ITC Playful Equipments	5	
13	Emulsion Wall Paint	Sqm	1500
14	Site Cleaning	1	
15	Removing white or colour wash by scrapping	Sqm	2000
16	Dismantling of flexible pavements and disposal of dismantled materials Bituminous courses	Cum	1250

9 Way Forward

1. Permanent Interventions addressing child safety and security in terms of infrastructure which will, also have an impact on social behavioural changes that will create a safer environment
2. According to the semi-permanent implantation post impact assessment, The area will be planned with improved facilities appealing to young children and their caregivers
3. Capacity building of the service providers that supports long-term sustainability and scalability of ECD interventions in neighbourhood by transforming barriers into motivators
4. Comprehensive stakeholder engagement through widespread stakeholder discussions/ workshops/ training modules/ document learning
5. To involve local parshad members of the neighbourhood and engage them into the development of the area and community engagement
6. The detail project report will be prepared considering all the elements and indicators/ideas tried and tested in the semi-permanent project.
7. Detail working drawing would be made, for the consolidated BOQ for Civil, Electrical and horticulture works
8. Design ideas and solutions will be discussed with UMC engineers and concerned community stakeholder via 3D visualisation for the spaces designed in the child priority zones.
9. A pre – during – post analysis will be made in support of the infrastructural development to scaling the idea of Child Priority Zones in the City.

10 Annexure

10.1 People moving count sample

DATE	TIME	LOCATION	WEATHER
8/04/22	5:30 pm - 5:40 pm	Ashok Nagar	Sunny

People Moving Count

Timing Count for 10 minutes. If in a busy location - count only one age category at a time. This count will allow you to collect the total numbers of people moving according to the time of day, week, or year.

	10 MIN	TOTALS
BABY		
TODDLER		
CHILD UP TO 5	1	1
CAREGIVER	11	2
OTHER	 	7.6
NOTES		

DATE	TIME	LOCATION	WEATHER
8-04-22	5:30 pm - 5:40 pm	Ashok Nagar	Sunny

Age and Mode Count

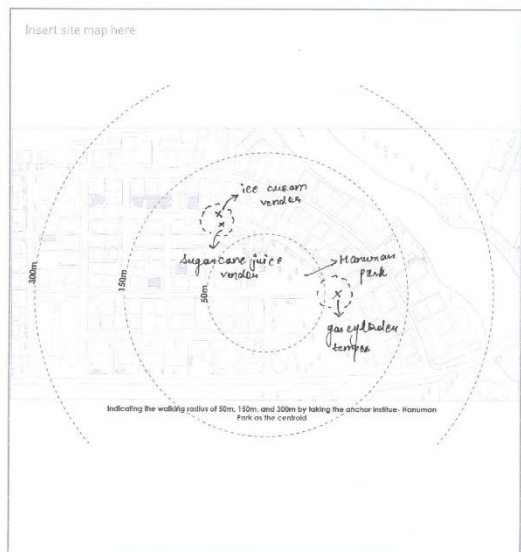
Timing Count at least 300 people to get a valid sample size for finding the percentage of different age groups or modes. It is not ideal to pair with another person to count each category if in a busy location.

MODE CATEGORIES	BABY	TODDLER	CHILD UP TO 5	CARE-GIVER	OTHER	TOTALS
PEDESTRIANS						
WALKING (Independent)					1	6
LIMITED MOBILITY (Using a device)						
SUPPORTED (Supported by caregiver, friend, or staff)						
ROLLING MANUAL						
CARRIED (Any hand, e.g. on someone's back or other)						
TOTAL AGE						

10.2 Stationary activity mapping sample

DATE	TIME	LOCATION	WEATHER
8/04/22	5:30 pm	Ashok Nagar	Sunny

Stationary Activity Mapping



Stationary Activity Mapping (Ashok Nagar)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
OTHER/INSURE																						
AGE																						
MALE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
FEMALE		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
BABY																						
TODDLER					✓																	
CHILD UP TO 5				✓																		
6-15 YOUTH						✓	✓	✓														
16-24 YOUNG ADULT																						
25-44 ADULT																						
45+																						
POSTURE																						
STANDING																						
STANDING - PUBLIC																						
SITTING - PUBLIC																						
SITTING - COMMERCIAL																						
SITTING - INFORMAL																						
LYING DOWN																						
MULTIPLE (MOVING AROUND)																						
ACTIVITIES																						
WAITING FOR TRANSPORT																						
EATING/DRINKING																						
ENGAGED WITH COMMERCE																						
CULTURAL ACTIVITY																						
USING ELECTRONICS																						
Using Playing Equipment																						
Assembling Craft																						
Chatting																						
Studying																						
Playing with toy																						
GROUPING																						
ALONE																						
PAIR																						
3+																						
7+																						

10.3 Intercept survey sample

URBAN95 TOOLKIT | PUBLIC SPACE & PUBLIC LIFE

Intercept Survey

Thank you for completing this questionnaire. Your response will be confidential.

DATE: 24/01/22 | TIME: 5:00 PM | LOCATION: Ashok Nagar | WEATHER: [Icon]

General

1. Why are you here today? (check all that apply)
 Personal need
 Child needs
 Passing through
 Other: Please describe: _____

2. How safe do you feel in this place?
 Safe
 Neutral
 Unsafe

3. Generally, how often do you visit this place?
 Once a week
 More than once a week

4. Who is in your party today? (Write the number of people in each category, include yourself)
 ___ Babies
 ___ Toddlers
 ___ Young children
 ___ [7-10] Older children
 ___ [11-14] Teen
 ___ [15-19] Teen
 ___ Parents
 ___ Friends
 ___ Caregiver/s
 ___ Other family members: _____

5. How long do you plan to stay at this place today?
 Less than 5 minutes
 5 - 10 minutes
 10 - 30 minutes
 More than 30 minutes

6. Have you or the children you are here with met or interacted with anyone new here?
 Yes
 No
 Not sure/ we just got here

7. What is the likelihood you will interact with others you did not come here with?
 Not at all — Neutral — Absolutely

8. How did you get here today? (check with all that fit)
 Walk
 Bike
 Bus/shuttle
 Private car
 Taxi/Rideshare
 Other: Please write: _____

9. Is it easy to move around in this place with a child?
 Not at all — Neutral — Absolutely

10. Is it clear that this is a play area or that it was okay to play here? (if applicable)
 Not at all — Neutral — Absolutely

URBAN95 TOOLKIT | PUBLIC SPACE & PUBLIC LIFE

Demographic Questions

Your information will be kept strictly confidential.

1. Do you identify as
 Male
 Female
 Other

2. What is your age?
 15-22
 23-40
 41+

3. Where do you live?
 Please write your post code: 313001

11. Do you feel that this place is a high quality place for a child to play?
 Yes
 No
 Not sure

12. What do you like about this place?
 Please write:

13. Is this place comfortable for you as a caregiver?
 Yes
 No
 Not sure

14. Is this a place for short or long stops?
 Please write:
 Depends on the situation

10.4 Urban95 quality criteria sample

URBAN95 TOOLKIT | PUBLIC SPACE & PUBLIC LIFE

DATE: 9/01/22 | TIME: 8:30 am | LOCATION: Hanuman Park | WEATHER: [Icon]

Urban95 Quality Criteria

Protection

fast moving traffic with no supervision of youngsters, causing fear among people

Protection against crime and accidents

- Eliminating fear of traffic
- Safe crossings with children
- Safe cycling routes
- Available width of sidewalks adapted to strollers
- Clear walking places
- Slow moving traffic

Protection from crime and violence

- Visible public realm
- Passive surveillance options
- Well lit
- Human scale
- Use of uses

No security measures and police not present

Protection against unpleasant sensory experiences

- Protection against:
 - Misodour
 - Flaunt/row
 - Cold/frost
 - Duck noise, glare
 - Free from trash

Basic Needs

The feeling of comfort

- Safe route to/at least
- Protection against pollution at 95cm eye-level
- Surroundings that feel safe for children and caregiver

Opportunities for good hygiene and health

- Access to fresh water
- Ability to be soiled in private
- Large changing areas separate from feeding areas
- Accessible bathrooms
- Well maintained bathrooms

No provision of fresh water/private areas

Convenient opportunities for consumption

- Close proximity to cafes or restaurants with eating and drinking possibilities
- Diversity in food options for shopping
- Near fresh food options for eating or buying

No options for food in the vicinity.

URBAN95 TOOLKIT | PUBLIC SPACE & PUBLIC LIFE

Comfort

Stroller cycle stand, long, friendly, pleasant and cycle

Opportunities to stop & stay

- Attractive & functional edges
- Invitations for intended use
- Zones for sitting with children
- Seats near play area
- Mix of seating typologies
- Seating opportunities
- Ability to park strollers
- Clear way-finding
- Sidewalk for stroller/good curb

Opportunities to see

- Opportunities to observe surroundings
- Lighting (when dark)
- Access to nature
- Visibility at 95cm eye level
- Risk sensory experiences
- Stimulating built environment

Interaction

Invitations to interact with environment

- Presence of interesting and inviting environmental elements
- Integration in the natural elements and built environment that is present
- Possibility to interact with nature at the height of 90cm

Opportunities to talk & listen

- Low noise levels
- Seating conducive to communicating
- Place for child & caregiver to talk about environment

Opportunities for play & exercise

- Inviting play spaces for a mix of ages
- Children's physical activities
- Street play spaces
- Temporary activities
- Ability to interact spontaneously
- Challenging play
- In summer (afternoon/evening)

Connection

Opportunities for flexibility

- Flexible and implement programming that encourages use at different times of day
- Commitment to spend time based on different purposes

Opportunities to access

- Ability to access the place with multiple modes of transportation
- Without physical barriers (e.g. fences or traffic)

Highly Integrated

- A close proximity to amenities and services - highly mixed
- Opportunity to integrate this place into daily patterns and activities
- Clear routes to/from/through