No. K-15016/185/2015-SC-I Government of India Ministry of Urban Development Smart Cities Division

Nirman Bhawan, New Delhi Dated: - 7th June, 2016

OFFICE MEMORANDUM

Subject: - Co-creation through an extensive consultation by involving citizens in the design of area based development.

As part of the Smart City Mission, the selected Smart Cities have now initiated process of converting plans to projects and are gearing up to begin the roll out of these projects. Cocreating every step (ideas, strategies, innovative and frugal solutions) through an extensive consultative process with all stakeholders is mandated in the Smart Cities Mission Guidelines (annexure 4.1, 6-a). The process of co-creation through cooperative-competition seen during the preparation of the Smart City Proposals (SCP) has to be continued during implementation.

2. To help the Cities to initiate citizen consultation during the implementation process, this Ministry has developed guidelines for holding competitions to design Streets & Junctions and Parks. The competition is called *Make Your City Smart*. The process for organising the *Make Your Cities Smart* competition is given in Annuexure'1'. The Audit Tools of Streets & Junctions and Audit Tool of Parks are given in Annexure-2 &3 respectively.

3. If required, Ministry will initially send the crack team to conduct the audit of some selected Streets & Junctions and Parks in the ABD, which can be replicated by the SPVs in the other parts of the ABD.

Encl:- As above

(Munish Kumar Garg) Director (Smart Cities-I) Tel. – 23062399

То

- 1) Principal Secretary (UD)/ Mission Directors of all 98 shortlisted Smart Cities.
- 2) Municipal Commissioners/ CEO of SPVs of all 98 shortlisted Smart Cities.

Copy to: CEO, MyGov Cell, D/o Electronics & IT.

MAKE YOUR CITY SMART

Co-creating every step (ideas, strategies, innovative and frugal solutions) through an extensive consultative process with all stakeholders is mandated in the Smart Cities Mission Guidelines (annexure 4.1, 6-a). The process of co-creation through cooperative-competition seen during the preparation of the Smart City Proposals (SCP) has to be continued during implementation.

One way of doing this is by involving citizen in the design of Area-based development such as streets, junctions, parks etc. For more complex developments requiring technical expertise in design and development (e.g. riverfront developments, multi-modal transit hubs, multi-level car parks, adaptive reuse of heritage structures etc.), the cooperative-competition may be limited to people with technical skills such as architects/ planners etc. as given in the Architectural Design Competition Guidelines of the Council of Architecture.

Salient features of the competition

The salient features of such a cooperative-competition will be as follows:

- 1. The competition will cover all Smart Cities, starting with 20 cities.
- 2. A note on the existing condition will be prepared and provided to participants.
- 3. The participants have to design and give the desirable situation (target). The design will be assessed by the Smart Cities on its doability and innovation.
- 4. The competition will be organized using the MyGov platform. Additionally the Smart Cities are free to use any other platforms/ websites, etc.
- 5. The participants of the competition can be from any walk of life and may include citizens, students, technical experts, teachers and others.
- 6. Top three winning entries will receive prizes and the top winning entries will be converted into DPRs/RfPs by the PMC after modification, if any.
- 7. In each city, the final winning entries will be selected by a jury comprising local officials and eminent citizens and experts.
- 8. The prizes will be given by the Smart Cities from their funds. However, the prizes may be sponsored by local industry/business/trusts/ foundations.

Preparation of existing condition brief for each Smart City by the SPV

- The ULB/SPV will divide the ABD into *Parts.* A *Part* is the basic unit for applicants to prepare their proposal leading to a desirable situation. The *Part* may be:
 - Street plus junctions (junctions on either side of the stretch). Length of the street should be more than 1.5 km
 - Very large junctions may also be a separate *Part* without any streets
 - o A park
- Audit of the existing conditions will be conducted by the SPV.

- The methodology for assessing the existing condition/audit by the SPV is given in Annex -1; Survey format for street & junctions is given in Annex -2; for the audit of parks survey format is given in Annex -3.
- After the audit is completed the draft audit report should be discussed with junior or superintending/executive engineers who are fully familiar with the sites/locations being considered for intervention.
- Base maps for ABD containing location of all the *Parts* (including parks) must be prepared. Additionally, a separate map should be prepared containing details such as topography etc.

Reference documents for preparation of competition entries

The audit reports of streets & junctions and parks will be made available on the MyGov website on the day of the launch of the competition by the SPV.

Competition Rules

- All entries must be submitted on the MyGov website in the form of one PowerPoint file, with PDF version of the same file
- Only those entries which are received on MyGov platform by the due date and time will be considered for appraisal
- All entries will be screened for compliance with competition guidelines and requirements
- While the audit reports will be shared with the competitors, they will abstain from disagreements or criticism of the audit reports
- All competition designs, including those disqualified or rejected by the Jury, shall be exhibited for at least one week, together with a copy of the signed report of the Jury members. The exhibition shall be hosted/sponsored by the concerned ULB and will be open to public free of charge.

Eligibility and Authorship

- Individual group of peoples, groups, experts, professionals etc. are eligible.
- While any person may submit an entry, site visit is highly recommended.
- Any competitor can submit maximum one competition entry for each *Part*. The prize will be given to the author of the competition entry.
- Participants must provide their identity information in a separate information sheet, which will be kept confidential and will not be shared with evaluators.
- The copyright of entries will be with ULB/SPVs. No fees or royalty from their city SPV or municipality can be claimed except the prize money.

Submission Guidelines

• The design entries will be presented in the form of maximum 15 Power point slides. For each *Part* of the ABD one entry will be given. More than one *Part* cannot be submitted as a single entry. Also a *Part* cannot be broken further.

- The entry can contain text and free hand drawings and sketches and/or drafted drawings. The author of each entry is free to use colours as appropriate.
- Any photographic images used in the entry must carry the credits for each image used.
- The language for the entries will be preferably English. Local language may also be used.
- Quantities and numbers must be given in metric units.
- All entries will be in specific response to a call for entry for a particular city posted on the MyGov portal.

Slides	Content	Description
Slides 1-2	Problem statement	 Key issues identified by the participant based on: Own assessment/ observation Data available as part of the Audit report
Slide 3-4	Salient features of the proposed solution	 Description of the key solutions proposed and how these will help address the issues identified Key benefits that can be expected due to implementation of the proposed design
Slides 5-10	Graphical presentation of proposed solution	 The proposed concept may be explained through sketches, artist impressions, maps, architectural drawings, 3D visualizations as per the preference of participants Details of individual components such as furniture, horticultural elements, signages etc. may be provided Textual detailing/explanation of design elements (wherever needed)
Slides 11-16	Any additional details	

• Broad structure for the competition entry is given below:

- For yardsticks the applicants may see the following reference documents on the Mission website (www.smartcities.gov.in>downloads):
 - Smart City Proposals for cities
 - Road design Codes (prepared by the Institute of Urban Transport: IUT)
 - Service Level Benchmarks for roads and NMT (prepared by IUT)
 - Street Design Guidelines (prepared by UTTIPEC, DDA)

Selection Process

- Selection of shortlisted entries will be conducted by teams assigned by the SPV.
- Shortlisted entries will be presented before a jury comprising five members. The jury members are given below:
 - i. The CEO of the city SPV or the Municipal Commissioner or the District Magistrate, as appropriate
 - ii. Nominee of MoUD or as delegated to a State/ULB entity
 - iii. The Executive Engineer or Chief Architect or Chief Planner of the ULB or the local Development Authority
 - iv. Eminent citizen residing in the concerned city
 - v. Eminent architect/urban designer residing in the city
- There will be a Jury for each of the twenty cities. The Jury will evaluate all entries in the Smart City.
- The members of the jury will not evaluate an entry with which they are closely associated in any manner; if any conflict of interest is discovered even after the award of prizes, the author will be disqualified and the prize money will be recovered.

Prizes

- The top three competitors in each city will be awarded the First, Second and Third prizes respectively. The jurors may choose, if they deem appropriate, to award additional prizes for commendable effort, to a maximum of two other participants.
- The top three prizes will carry a citation and a cash award. The range of First prize is Rs. 50,000-1,25,000. The SPV will decide the exact amount within this range depending upon the number of *Parts* in the ABD and complexity of the street/junction/park. The Second and Third prizes may range between Rs. 20,000-30,000 and Rs. 10,000-20,000, respectively. Additional prizes for commendable effort, if any, will not carry any cash award.
- The prizes will be announced on MyGov.
- The winning entries will be showcased on MyGov as well as the website/s.
- The city SPV and/or the municipality may provide the benefit of putting a plaque with the name of the winning applicant; however, this would not be a matter of right for applicants.

METHODOLOGY FOR AUDIT OF STREETS & JUNCTIONS AND PARKS

ASSESSING EXISTING SITUATION OF STREETS AND JUNCTIONS

The assessment may be undertaken in three parts:

- 1. Land use and activity survey: To be undertaken at the area level to understand traffic characteristics in relation to the activities in the area. The specific characteristics that need to be documented are:
 - A. Land Use mapping to indicate location of traffic generating and receiving points like schools, offices, commercial areas, etc. – Based on reconnaissance survey and Secondary data, Desk job
 - B. Traffic directional flows with respect to times of the day Based on reconnaissance survey
 - C. Responsibility matrix of activities within the Right of Way (Construction of roads, footpaths, Maintenance of utilities, Traffic management, Hawking and street vendors, Parking, Location of bus stops, gates, Streetlights, etc.) Secondary data, Desk job
- **2. Road Survey:** To be undertaken for each identified road as per the Smart City Proposal. All features within the Right of Way need to be inventoried with supporting photographs on a map. These have been categorized as below:
 - A. Carriageway Details
 - B. Speed Regulating Mechanisms (SRM)
 - C. Median Details
 - D. Storm Water Drainage infrastructure
 - E. Footpath and Pedestrian facilities
 - F. Lighting
 - G. Pedestrian Crossings
 - H. Street Signage
 - I. Trees and Street furniture
 - J. Intersections
 - K. Traffic Nodes
 - L. Parking

Survey kit, How to plan for survey and Survey formats are annexed for ready reference.

3. Preparation of existing road maps: Will include locations and quantum and quality of infrastructure available for pedestrians and cyclists on a particular road. Maps may be prepared on a GIS platform with a 3D model and qualitative details as attribute data. These maps may be made accessible to the general public to corroborate the ground realities.

A. WHAT TO TARGET:

- 1. Benchmarks: The design for roads should follow standards as set out in the
 - Institute of Urban Transport (IUT) Codes and
 - Street Design Guidelines, UTTIPEC.

These documents specify design speeds for different hierarchy of roads and accordingly recommend cross sectional designs for the same with solutions for seamless pedestrian and cyclist movement to ensure safety and convenience of NMT users.

Road Typology/ Characteristic Arterial		Sub Arterial	Collector/ Distributor	Access
RoW	50m – 80m	30m – 50m	12m – 30m	6m – 15m
Number of lanes	Minimum 6	Minimum 4	Maximum 4	1 or 2
	with median	with median	with/ without median	No median
Width of lanes	3.0 m – 3.5 m	3.0 m – 3.5 m	3.0 m – 3.5 m	2.75 m – 3.0 m
Width of bus lanes	3.5 m	3.5 m	Mixed traffic	Mixed traffic
NMV track width	Segregated lane 2.2 m – 5.0 m	Segregated lane 2.2 m – 5.0 m	Separate lane 1.5 – 2.5 m	Mixed traffic
Location	Between Carriageway or street parking and footpath on either edge of the carriageway		On the edge of the carriageway, adjacent to the footpath or parking.	
Footpath width	1.8 m – 5.5 m	1.8 m – 5.5 m	1.8 m – 3.0 m	1.8 m – 2.5 m

The minimum clear width should be 1.2m in order to accommodate wheelchair users. Comfortable minimum width is 1.8m. The footpath surface should be even and without any irregularities. The use of guiding and warning blocks should be used.

Source: Code for Urban roads, Vol. 1

ASSESSMENT PLANNER

1. Planning parameters

- a. Site Visits and documentation tentative time for each road stretch is 16 man hours per kilometer which may vary depending on the level of activities and nature of the road
- **b.** Preparation of existing maps with other data this will require daily inputs from the survey team to the mapping team to avoid loss or distortion of data and help in

reviewing the need for any additional details that may be required. Tentative time required for mapping would be 4 man hours per kilometer which may vary depending on the level of activities and nature of the road.

Suggested structure – Team leads may alternate between site and office to communicate survey details.

c. Preparation of Artists' conceptualization – This can only be started once all maps are ready.

Requirements: Power point presentation with details of each road and one consolidated view of site wide proposals. This should include the #D street views existing on site.

2. Composition of teams:

Survey team: Minimum 5 persons per team.

- a. 2 technically qualified as planner/ urban designer/ engineer to lead, guide and manage the survey
- b. 1 assistant with experience of survey to record all features on the maps
- c. 2 foot-soldiers to measure, click photographs and fill up survey formats
- d. 1 professional photographer for capturing a 3D street views (optional)
 Mapping team: Minimum 1 lead and 1 each per survey team
- a. 1 urban planner or transport planner for coordinating mapping of all roads
- b. 1 draftsman for mapping with each team

3. Orientation of survey teams:

- a. Objective of survey, Project conceptualisation
- b. To Do Guide demonstration
- c. How to click photographs and videos
- d. Other features to be recorded

4. Survey Kit

- 1. Key Map of identified roads as per SCP: Google Earth images of high resolution may be downloaded and printed on A3 size sheets for ready reference on site
- 2. Base map series of each road stretch, properly numbered as per key map and printed on A3/A4 sheets for easy handling on site.
- 3. Survey formats for each stretch with extra sheets for further detailing
- 4. Mobile phones with internet connectivity for photographs and videos through mobile application OR Cameras / Smart Phones of good resolution
- 5. Stationery required: Laser instrument, Measuring tape, Writing Board with clip, Color pens, Pens, Pencils, Markers, Folder, Bag,
- 6. Safety gear: Fluorescent Jackets, Traffic Cones, Stop Tape, Caps, Umbrellas/ Raincoats (for rainy weather)
- 7. Instructions to traffic personnel, advisories and letters of authorization

5. Equipment required (per team)

S. No.	Items	Quantity			
Per te	Per team				
1.	Кеу Мар	1			
	Series of road maps	2 sets			
3.	Survey formats	1 each for each road map			
4.	Tracing paper	1 each for each road map			
5.	Mobile phones with Application or Cameras	2			
6.	Laser measuring instrument	1			
7.	Measuring tape	1			
8.	Traffic Cones	4			
9.	Stop tape	1			
10.	Letter of authorization	1			
11.	Color pens and color pencils	1 set			

S. No.	Items	Quantity
Per p	erson and for a team of 5	
1.	Bag	1 x 5 = 5
2.	Folder	1 x 5 = 5
3.	Fluorescent Jackets	1 x 5 = 5
4.	Umbrella / Raincoat	1 x 5 = 5
5.	Сар	1 x 5 = 5
6.	Writing Board with clip	1 x 5 = 5
7.	Marker	1 x 5 = 5
8.	Scale	1 x 5 = 5
9.	Sharpener	1 x 5 = 5
10	Pencils	2 x 5 = 10
11.	Eraser	1 x 5 = 5
12.	Pen	1 x 5 = 5

ASSESSING EXISTING SITUATION OF PARKS

Following steps are involved in park assessment

	-		
	Assemble following items before undertaking the assessment:		
	Measuring Tape (25 M),		
	GPS & Data enabled Camera Mobile,		
Step 1:	Mobile App,		
•	 Map of the Park obtained from the ULB/ UDA (preferably GIS) etc. 		
	Pen & Pad		
	Blank Paper		
Step 2:	Download an app and check the functionality of GPS, Data, and Camera etc.		
Step 3:	Undertake the Audit as Rating Scaling provided in this Toolkit.		
	Allocate 'Unique ID' to parks and save photographs and other info with the same		
Stop 4:	Unique ID (Unique ID can be formulated beforehand having Municipal Ward No.,		
Step 4:	Name of the park, Sub-element/ features highlighted, date and serial number of		
	Photograph.		
	Saved photograph would be automatically uploaded on associated webportal and		
Step 5:	can be retrieved by using the same login-in ID. All photographs would be stored		
	datewise and would be easily retrievable.		
Step 6:	Tabulate Audit results in the form of an excel MIS that could be put to analytics, as		
Step 0.	per requirement e.g. Preparation of Parks Brief for Competition/ Design.		

AUDIT TOOL OF STREET & JUNCTIONS

For each Part of the ABD do the following activities

Base map for recording land uses and activities: Google earth images of high resolution

Land Uses to be recorded

- The land uses are to be recorded for properties along the identified roads.
- The area is to be colored as per color code and features are to be recorded in writing on the map with popular name for reference

Land Use	Color code	Features	
Residential	Yellow	Group Housing/ Plotted housing/Planned colony / Village /	
		Unauthorized colony	
Commercial	Red	Office / Retail Shops/Malls/ Wholesale markets/ Hotels/	
		Restaurants/ ATM/ Bank/ Warehouse/ Street vendors	
Industrial	Purple	Workshops/ Manufacturing Industry	
Institutional	Blue	Schools/ Colleges / Government office/ Doctors Clinics/	
		Dispensaries/ Hospitals/ Community Halls/ Police station/ Fire	
		Station/ Armed forces establishments/ Petrol Pumps/	
		Crematorium and Graveyard	
Transport	Grey	Roads/ Bus Stops and Depots/ Railway yards/ Railway	
		Stations	
Utility	Deep Blue	Water pumping stations/ Electricity transformers and sub	
		stations	
Recreational	Green	Parks and Gardens/ Stadium/ Amusement parks/ Playgrounds	

Activities to be documented

Street vending – As per time of day and areas occupied by hawkers with description of type of wares or services offered

Hawking Site				
Time of Day	Total Vendors	Wares sold	Number of handcarts	Number without handcarts
Till 12 noon				
12 noon to 8pm				
8pm to late night				

Parking – On street and at designated sites with variation during different times of the day. Also note the total number of vehicles and their types

Parking Site					
Time of Day	Total Vehicles	Cars	Two wheelers	Cycle	Cycle Rickshaw
Till 12 noon					
12 noon to 8pm					
8pm to late night					

A. STREET & JUNCTION SURVEY FORMATS

INSTRUCTIONS

- 1. Please \checkmark tick where multiple options have been listed
- 2. All photographs to be located on map / All features to be captured in photographs through the mobile based Application
- 3. Maintain objectivity in description
- 4. Specify and elaborate any details which may not be included in format of questionnaire on separate blank sheet
- 5. All measurement should be shown in meters unless specified.
- 6. For each component give details of accessibility for differently abled.

TEAM LEADER	
DATE OF SURVEY	
ROAD SERIAL NO.	
ROAD NAME	

COMPONENTS

- 1. CARRIAGEWAY
- 2. SPEED REGULATING MECHANISMS (SRM)
- 3. MEDIAN
- 4. STORM WATER DRAINAGE
- 5. FOOT PATH / PEDESTRIAN FACILITIES
- 6. LIGHTING
- 7. PEDESTRIAN CROSSINGS
- 8. STREET SIGNAGE
- 9. TREES, STREET FURNITURE
- **10. INTERSECTIONS**

11. TRAFFIC NODES

12. PARKING

B. PREPARATION OF MAPS

- 1. List the features identified on site and finalise a legend
- 2. Prepare maps for each road stretch at a scale of 1:500 (1:1000 if not many features exist)
- 3. Prepare consolidated map of the area at a scale of 1:1000 to 1:2000
- 4. Cross check and verify maps on site

Features to be shown on detailed maps

- Land Use along roads
- Carriageway condition, lane markings, speed breakers, zebra crossings, signals, paint markings, fly overs, etc.
- Median Height, material, continuity, width and variations, condition, presence of trees, poles, signage, billboards, streetlights, etc.
- Footpaths Height, material, continuity, width and variations, condition, presence of trees, poles, signage, billboards, streetlights, other obstructions, street hawkers, parking on street, dustbins, benches, etc.
- Manholes, storm water drains, HT lines, transformers, dustbins, etc.
- Bus stops, taxi stands, cycle rickshaw and auto stands, etc.
- Foot over bridges, subways, etc.
- All and any other feature within the Right of Way needs to be marked.

Features to be shown on consolidated maps

- Comprehensive land uses
- Network continuity
- Nodes Metro Stations, Bus stops, , taxi stands, cycle rickshaw and auto stands, etc.
- Foot over bridges, Subways, etc
- Other features important at the area level

1	1. CARRIAGEWAY			
		National Highway		
		Arterial Road		
1.	Type of Road	Collector Road		
		Internal Road		
2.	Width of ROW			
Ζ.	(In case of variation in width pls. show on the map as VCW1, VCW2, etc. and record total number of variations)			
3.	Type of Carriageway	Dual Single		
5.	Type of Camageway			
4.	Width of Carriageway			
	Whether lanes are marked,	Yes Number of marked lanes		
5.	if yes specify number of lanes			
6.	Width of each lane marked	Lane 1 Lane 3		
		Lane 2 Lane 4		
7.	Condition of the Carriageway	Good / Damaged / Potholed <i>(Take Photo)</i>		
		(Take FIIOLO)		

2	2. SPEED REGULATING MECHANISMS (SRM)			
1.	Is there any SRM installed?	Speed Limit Signage Speed Breaker Rumble Strip Textured Patch Others, pls. specify		
2.	Dimensions (Show in sketch)			
3.	Location	(Show on Map with Photo)		
4.	Condition	Maintained / Worn Out / Broken (Take Photo)		

3. MEDIAN					
1.	Width (cms.)				
	(In case of variation in width pls. show on the	ne map as VMW1, VM2)			
2.	Height (cms.)				
	(In case of variation in height pls. show on	(In case of variation in height pls. show on the map as VMH1, VH2)			
3.	Material used in Median	Tiled / CC / Unpaved / Other (Specify color, texture)			
4.	Condition of the Median	Good / Broken / Poorly Maintained (Take Photo)			
5.	Is there any fence?	Yes No			
6.	Material of fence	Metal / RCC / Other <i>(Take Photo)</i>			

4	4. STORM WATER DRAINAGE		
1.	Location of storm water drain	One side/ both side/ no drain	
2.	Condition of drain	Covered / Uncovered Good / Broken Choked / full of garbage / clear	
3.	Width of Drain		
4.	Grits chambers available	Yes No	

5	5. FOOT PATH / PEDESTRIAN FACILITIES		
1	Is the footpath present on both sides?	Yes No	
2	Existing Width (mtrs.)		
	(In case of variation in width pls. show on t	he map as VFW1, VFW2)	
3	Existing height (cms.)		
	(In case of variation in width pls. show on t	he map as VFH1, VFH2)	
4	Material used	Tiled / CC / stone / unpaved / other (Specify color)	
5	Texture	Rough / smooth / very smooth	
6	Condition	Good / broken / poorly maintained / dug up	
7	Kerb stones installed along the foot paths?	Yes No	
8	Height of kerb stones (cms.)		
9	Condition of kerb stones	Good / broken / poorly maintained / missing	
10	Is the footpath unobstructed & continuous?	Yes No	
11	Are the footpaths encroached / obstructed by If yes, tick the box and show the code on map	 Street vendors / informal shops 01 Auto/taxi stand 02 Electrical transformers 03 Telephone junction box 04 Property owners 05 Parking 06 Others 07 	
12	Discontinuity of Footpath	(Show on map)	
13	Are there breaks in footpath at property entrance / side streets?	Yes No (Show on map)	
14	Is the footpath uneven with ruts or ditches?	Yes No (Show on map with photo)	

15	Is there any segregation mechanism between footpath and carriageway?	Railing / bollards / fence / none / other (pls specify) (show on map with photograph)	
16	Condition of railing / bollards / fence / other	Maintained / damaged/ broken / missing	
17	Does footpath have textured paving strips to guide visually impaired?	Yes No	

6	6. LIGHTING		
1	Whether street lights available along foot paths	Yes No	
2	Spacing of light poles	(show on map with photograph)	
3	Height of poles		
4	Whether street and footpaths are properly	Yes No	
4	illuminated	(Take Photo)	

7	7. PEDESTRIAN CROSSINGS		
	Are there pedestrian crossings at regular	Yes No	
1	intervals (150 - 200 mtr) on the		
	carriageway?	(show on map with photograph)	
		At grade: signalised / un signalised /	
2	Type of crossing	zebra / pelican signal	
		Other: foot over bridge / subway	
	Are there caution signs for the drivers	Yes No	
3	where there are pedestrian crossings?	(show on map with photograph)	
	Are there gaps in median barricades at	Yes No	
4	pedestrian crossings?		
		Yes No	
5	Are the pedestrian crossings given		
	priority at intersections?		
6	Foot over bridge / subway	Height/ Depth	
7	Are there disabled friendly systems in	Ramps / elevators / escalators	
'	foot over bridge / subway	(Specify slope/ Height)	
		Steps: maintained / worn out / broken	
		Railing: maintained / worn out / broken /	
8	Condition of FOB/ subway infrastructure	missing	
Ŭ		Ramps: maintained / worn out / broken	
		Escalators / elevators: working / not working /	
		dismantled	
	Is the approach to escalators & elevators		
9	disabled friendly?	(support with photograph)	
	-		

8	8. STREET SIGNAGE		
1	Locations of traffic signage	(show on map with photograph)	
2	Height of signage		
3	Visibility of signage	Clear / obstructed / hazy	
4	Condition of signage	Maintained / faded / rusted / physical distortion / broken <i>(Take photo)</i>	
5	Weather roads have proper signage near intersection?	Yes No	
6	Markings at intersections for vehicle movement give route information?	Yes No	
7	Any marking for cyclists / pedestrians on roads ?	Yes No	
8	Is the signage visible at night?	Yes No	
9	Any hindrance to traffic signage?	Hoardings / banners / trees / others (pls. specify)	

9	9. TREES, STREET FURNITURE		
1	Are there any dustbins along the footpath?	Yes No	
2	Material of dustbins	Metal / Plastic / Other	
3	Condition of dustbins	Maintained / dirty / broken / missing	
4	Has segregation of bio and other waste been done?	Yes No	
5	Are there any trees along the footpath/median?	Yes No	
6	Diameter of tree trunks		
7 Is the height of the tree more than the street light pole?		Yes No	
8	Spread of tree foliage	Diameter	
9	Are there any shrubs/grass along the footpath/median?	Yes No	
10	Are there any benches along the footpath?	Yes No	
11	Condition of benches	Maintained / dirty/ broken	
12	Material and color of benches		
13	Are there any billboards along the footpath/median?	Yes No	
14	Does the location of the following elements act as an obstruction for pedestrians?	Trees / dustbins / bill board / bench/ other	

1	10. INTERSECTIONS		
1	Specify type of junction	At grade / grade separated	
2	Sub type of at grade junction	Round-about / signal / unmanned	
3	Sub type of grade separated junction	Fly over /over bridge / clover leaf / underpass other (specify)	
4	Is there any special treatment of footpath at intersections?	Describe: (show on map with photograph)	
5	Is there any special treatment of median at intersections?	Describe: (show on map with photograph)	
6	Whether any provisions for pedestrian movement in traffic signals available?	Yes No	
7	Existing conditions of signals	Working / Not working	
8	Any hindrance to traffic signals	Hoardings / banners / trees / others (pls. Specify)	

1	11. TRAFFIC NODES			
1	Are there any nodes along the street?	Metro station / bus stop/ cycle rickshaw stand/ battery rickshaw stand/ tempo van stand / auto stand/ taxi stand (show on map with photograph)		
2	Does node have shade?	Yes No		
3	Does node have seating facility?	Yes No		
4	Condition of seating	Maintained / dirty / broken		
5	Does node have any public washroom facility?	Yes Nearby No		
		(if yes, specify location)		
			Yes	No
6	Does the public washroom facility have	Water		
		Separate men and women		
7	Condition of public washrooms	Maintained / Not Maintained		

1	12. PARKING		
1	Designated Parking Sites Specify parking charges (support with photograph)	Location	Show on map
		Capacity (No. of Cars)	
	Cycle Stand	Specify parking c	bargos
2 Rickshaw stand		larges	
2	Auto Stand	(show location on map)	
	Taxi Stand		

AUDIT TOOL OF PARKS

This audit tool is meant for the observer recording the existing situation of parks proposed to be undertaken for redevelopment/ rejuvenation under ABD proposal of Smart Cities Mission.

- 1. Please ($\sqrt{}$) tick where multiple options have been listed.
- 2. Maintain objectivity during audit.
- 3. All area measurements should be given in sq.m. and distances in metres unless otherwise specified.
- 4. All photographs should be GPS tagged and be located on park layout map.
- 5. Specify and elaborate any details which may not be included in format of questionnaire on separate blank sheet.

Name of Surveyor	
Date of Survey	
Name/ No. of Ward/ Zone	
Name of the Park:	
Names of the Neighboring	
Streets	
Area of Park (In sq.m.):	
Category of Park:	1. Housing Area Park (HAP) (Less than 5,000 sq.m.)
Tick the category	2. Neighbourhood Park (NP) (5,000 -10,000 sq.m.)
(As per URDPFI Guidelines)	3. Community Park (CP) (10,000 - 50,000 sq.m.)
	4. District Park (DP) (50,000 – 2,50,000 sq.m.)
	5. Sub-City Park (SCP) (2,50,000 sq.m. & above)

Audit Tool for Parks (existing situation) would focus on basic park elements and subelements that could be grouped as:

- 1. Physical Activity Resources: Paved pathways, Kabaddi & Badminton courts, play area etc. encouraging physical activity, facility for differently abled.
- 2. Family Facilities: Child-friendly play equipment's, picnic spots, dustbins, park furniture benches and garden tables, pathways / green areas with trees, facility for differently abled etc.
- **3. General Services:** Boundary Wall/ Fenced Area, Public Conveniences, Tubewell/ Piped Water Supply (For watering and drinking water facilities), illumination, parking space & compost area (wherever possible), semi-pucca huts, facility for differently abled.
- 4. Aesthetics: Enhancing overall park attractiveness by making attractive entry gates, illumination using LEDs, fountain area, landscaped manicured area, flower and shrubs, waterbodies with aquaculture (wherever possible), and, accessibility.

Rating Scale to be used during Park Audit

A. PEX Scaling

1	2	3
Poor	Fair	Excellent

B. NATE Scaling

1	2	3
Not at all	Somewhat	Mostly to Extremely

C. NOAL Scaling

1	2	3
None at all	Some	All

D. PER Scaling

1	2	3
0-33%	34-66%	67-100%

E. PROX Scaling

1	2	3	4	5
<25 Ft.	25-50 Ft.	51-100 Ft.	101-200 Ft.	>200 Ft.

A. Large General Area				Scaling
How much population is catered by the park? (Mention the population	Per	rsons (App)		
of the catchment area of the park)				
How many persons visit the park per day, on an average?	Per	rsons/ day		
Does the Park has Large General Area?	1 2 Yes N			
How is the Condition?		2 3 Fair Exc	cellent	PEX
What is the Level of Flatness?	1 Not at all	2 Somewhat	3 Mostly to Extremely	NATE
What is the Level of				
Cleanliness?		2 Somewhat	3 Mostly to Extremely	NATE

B. Open Green Space: Open/ Green space, landscaped area (manicured etc.),							
and general areas for large organised/ unorganised social interaction.							
How is the Condition?	-	2 Fair	3 Excell	ent		PEX	
What is the Level of Flatness?	123Not at allSomewhatMostly to Extremely			NATE			
What is the Level of							
Cleanliness?	1	2		3			
	Not at all	Not at all Somewhat Mostly to Extremely		NATE			
				÷			

Does the par		-	2
proximity to	Water	Yes	No
Areas?			

C. Landscaped Area: Flowers, shrubs/ bushes, landscaping, manicured garden and					
compost beds. Play Squares/ Circle integrated with fountains, sculptors of personali					
Drawing wall for child	ren, Illumination, Garden Clocks etc.				
C.1 Landscaped Beds		Scaling			
Does the Park has	1 2				
Landscaped Bed?	Yes No				
How is the Condition?	1 2 3				
	Poor Fair Excellent	PEX			
What is the Level of	1 2 3				
Flatness?	Mostly to	NATE			
	Not at all Somewhat Extremely				
What is the Level of					
Cleanliness?	1 2 3				
Clear miless:	Somewhat	NATE			
	Not at all clean Mostly clean				
	Cicali				
C.2 Flowers					
Are Flowers present in	1 2				
the Landscaped Area?	1 2 Yes No				
	Tes No				
Flower Variety?					
	1 2 3				
	Not At All Some what Mostly to	NATE			
	Extremely				
How is the Condition?	1 2 3	DEV			
(Alive, Weeded)	Poor Fair Excellent	PEX			
Are Markers Provided?					
(Names of the Flowers)	1 2				
	Yes No				

C.3 Shrubs & Bushes		
Presence of Shrubs & Bushes	1 2 Yes No	
How is the Condition?	123PoorFairExcellent	PEX
Colourful? (Range of Colours)	1 2 Yes No	

D. Wooded Area:					
Does the Park has Wooded Area?		2 No			
How is the Condition?	1 Poor	2 Fair	3 Exc	ellent	PEX
What is the Level of Flatness?	1 Not at all	2 Somew	/hat	3 Mostly to Extremely	NATE
What is the Level of Cleanliness?	1 Not at all	2 Some clean	what	3 Mostly clean	NATE

E. Paved Pathways: Existence and Surface					
Does the Park has Paved Pathways?	1 Yes	2 No			
How is the Condition?	1 Poor	2 Fair	3 Excellent		PEX

Mention Width	metres	
(If the width is varying		
mention average width)		
Is the Pathway		
Continuous?	1 2	
(If the pathway has	Yes No	
missing sections or	Tes No	
broken in between		
mention 'No')		
What is the Level of		
Flatness?	1 2 3	
	Not at all Somewhat Mostly to	NATE
	Extremely	
ls it clear from		
Obstruction?	1 2	
	Yes No	
What is the Level of		
Cleanliness?	1 2 3	
Cleaniness?	National Computed Mostly to	NATE
	Not at all Somewhat Extremely	
Does it have sitting/	1 2	
resting benches?	Yes No	
Does the pathways have	1 2	
shaded area, in	Yes No	
between?	res no	
If yes, are they well	1 2	
illuminated during night		
hours?	Yes No	

r Areas	(Shallow	Waterbodies	for	children,	ponds,	Scaling
	sq.m.					
-						
1	2	3				PEX
Poor	Fair	Excellent				/
		sq.m.	sq.m. sq. m. 3	sq.m.	sq.m.	1 2 3

What is the Level of		
Cleanliness?	1 2 3	
(Check for weed free,	Not at all Somewhat Mostly to	NATE
litter free etc.)	Extremely	
How frequently it is		
being cleaned?	1. Every Alternate Day	
	2. Weekly	
	3. Fortnightly	
	4. Monthly	
	5. Others(Pl. specify)	
Does it have Water		
Movement?	1 2	
	Yes No	
Does it have Water	1 2	
Bridges?	Yes No	
Does it have Sculptor/	1 2	
Statues?		
	Yes No	

G. Eating/ Drinking Features: Drinking water facilities, picnic areas, vending.			
Tubewell/ Piped water	r, Space for Vendors -	 local snacks, ice cream kiosks. 	
Does the park have			
availability of Drinking	1 2		
Water features (eg.	Yes No		
Taps, fountain etc)?		-	
If yes, then do the park		_	
has drinking water	1 2		
fountains for differently	Yes No		
abled visitors?			
What is the supply	1. Municipal Piped V	Vater	
source?	2. Underground Wat	ter – Hand pump	
	3. Others	(if others, then pl specify)	
Availability of Vending		1	
Machines? (Tea/	1 2		
Coffee, Snacks, Bottled	Yes No		
Water)			

Availability of Eating features?	1 2 Yes No	
How is the Condition of these Features?	123PoorFairExcellent	PEX
Openness	 4 Sides Open 3 Side Open 2 Side Open 1 Side Open Congested Access 	
Visibility	1. Easily Visible 2. Moderately Visible 3. Invisible	

Recreation Centre Shelte Amphitheatre, Basic Illumina Space, Compost Beds, Publi structures for paved area who	Boundary Wall, Theme based Entry Gate, ers/ Pavilions/ Entertainment venue/ Stage/ tion with designer lamps using LED lights, Parking c Conveniences, Dustbins, Rain Water Harvesting erever possible (for optimum utilisation of water),	Scaling
H.1: Boundary/ Fence Boundary Type	1. Pucca	
	2. Kuccha	
	3. Semi Pucca	
Boundary Wall 1. Concrete		
	2. Metallic Fence	
	3. Others (if others then pl specify)	
H.2: Entry Gates	1	
Number of Entry Gates		
Material of Entry Gates	1. Metallic Fence	
	2. Concrete	
	3. Wooden	
	4. Others (if others then pl specify)	

H.3: Recreation Centre		
Recreation Centre/	1 2	
Amphitheatre/ Stage	Yes No	
If yes, Condition	1 2 3	
	Poor Fair Excellent	PEX
H.4: Illumination in Park		
No. of Illumination Point (All)		
Type of Illumination	1. LED Lights	
	2. High Mast Lights	
	3. Conventional Tubelights	
	4. Others (if others then pl specify)	
Milesthern Oslan, illumination		
Whether Solar illumination	1 2	
being used	Yes No	
No. of Illumination Points		
(Solar)		
H.5: Parking		
Parking Space		
	1 2	
	Yes No	
Adequacy of Parking	1. No. of 2-Wheeler parking	
	2. No. of Car Parking	
H.6: Public Convenience Facility		
Public Convenience (Men)	1 2	
	Yes No	
Public Convenience (Women)	1 2	
	Yes No	
H.7 Dustbins/ Composting		
Availability of Dustbins	1 2	
	Yes No	
No. of Dustbins		
Availability of Compost Beds		
Availability of Compost Deus	1 2	
	Yes No	

H.8 Signages		
Availability of Signboards (Names, Direction etc.)	1 2 Yes No	
H.9 Rain Water Harvesting Struc	tures	
Availability of Rain Water Harvesting Facility	1 2 Yes No	

I. Sitting or Resting Features: Benches, Picnic Tables, Seat walls. Picnic shelters - Semi-Pucca/ Pucca Huts, (equipped with energy efficient solar			
panels & LED lights)			
I.1 Benches:			
Does the Park have Benches?	1 2 Yes No		
Seat Material Used in	1. Wood		
Benches (Number)	2. Metal		
	3. Plastic		
	4. Stone/ Concrete		
	5. Others(PI. Specify)		
Condition of Benches			
	1 2 3	PEX	
	Poor Fair Excellent		
How Comfortable	1 2 3		
Benches are?	Poor Fair Excellent	PEX	
How Clean are the			
Benches?	1 2 3		
	Not at all Somewhat Mostly		
	clean clean		
I.2: Tables			
Availability of Picnic			
Tables	1 2		
	Yes No		
Table Top Material	1. Wood		
(Number)	2. Metal		

	 Plastic Stone/ Concrete Others(Pl. Specify) 	
I.3 Shelter/ Huts		
Availability of Semi- Pucca Huts	1 2 Yes No	
No. of Semi-Pucca Huts		
Whether Huts are Illuminated	1 2 Yes No	
Whether Solar Panels used for Illumination	1 2 Yes No	

J. Play Set/ Structures (for Children Age Group 1-10 Yrs): General play set, soft ball play area, thing to hang from, slide down, climbing, descending and standing features, swings, blacktop, spring, toys, imaginary play structures, hanging sets – sea saw etc.			
Presence of Play Set/ Structures	1 Yes	2 No	
If Yes, then No. of Structures	 Hanging Structures (eg. Monkey Bars etc.) Things to Climb On, Up or Through Swinging Structures 		
Ground Surface Material	 Spring Toys Loose Soil Felt Grass Gravel Concrete Rubberized Mat Sand Wooden Others (Pl. specify) 		

Openness/ Visibility	1	2	3	7	
	Not at		, Mostly to	,	NATE
	all	Somewh	at Extremely		
			,		
Seating Structure	1	2			
(Must be facing the		– No			
play area)					
Shaded Area		2	3		
	1				PER
		34-	67-		FER
	0-33%	66%	100%		
Condition					
	1	2	3		PEX
	Poor	Fair	Excellent		/(
Level of Access		cossibility	for Children		
	2. Uneasy	-			
	Z. Uneasy	access 10	Children		
Lighting in Dlay Area					
Lighting in Play Area	1	2			
	Yes	No			
Colourfulness	1	2			
	Yes	No			
	_				

J.1 Slide Down Structures	3		
If Slide Down	1. Straight Slides		
Structures are there,	2. Curved Slides		
mention type & number	3. Tube Slides		
	4. Poles		
	5. Pole Slides		
Material of Slide Down	1. Metal		
Structures	2. Plastic		
	3. Wood		
	4. Concrete		
	5. Others(Pl. specify)		

Height off ground to top	1. Less than 5 ft	
of sliding surface	2. 5-8 Ft	
	3. More than 8 Ft.	
J.2 Hanging Structures		
If Hanging Structures	1. Movable Rings	
are there, mention type	2. Others (Pl. specify)	
& number		
Material	1. Metal	
	2. Plastic	
	3. Wood	
	4. Rope	
	5. Rubber	
	6. Others(PI. specify)	
Height off ground	1. Less than 4 ft	
	2. 4-8 Ft	
	3. More than 8 Ft.	
1.2 Things to Climb On 1	n or Through	
J.3 Things to Climb On, L Presence of Functional	por inrough	
	1 2	
Stairs, Ladders, Ramps,	Yes No	
Bridges, Platforms etc.	res no	
Presence of Fun things		
to Climb On/ Up/	1 2	
Through	Yes No	
Type of Fun Type	1. Tubes	
	2. Web	
	3. Tires	
	4. Climbing Poles	
	5. Fun Ladders/ Stairs	
	6. Others(Pl. specify)	
Average Height off	1. Less than 5 ft	
ground	2. 5-8 Ft	
	3. More than 8 Ft.	

J.4 Swinging Structures		
If Swinging	1. Baby Swings	
Structures are there,	2. Strap Swings	
mention type & number	3. Bench Swings	
	4. Tyre Swings	
	5. Others(Pl. specify)	
Average Seat Height off	1. Less than 2 Ft	
ground	2. 2-4 Ft	
	3. More than 4 Ft.	
Swing Seat Material	1. Metal	
	2. Plastic	
	3. Wood	
	4. Rubber	
	5. Others(PI. specify)	
J.5 Spring Toys		
If Spring Toys are	1. Animals	
there, mention type &	2. Vehicles	
number	3. Others(PI. specify)	
Structure Material	1. Metal	
	2. Plastic	
	3. Wood	
	4. Rubber	
	5. Others(PI. specify)	

K. Play Area (for Ad	olescent & Adults): Badminton courts, Kabaddi area,	Scaling		
kite flying, flying discs, soft ball tossing area, Skating Area etc. Should be				
	or children (High tension line/ transformer must be			
relocated)				
Presence of General				
Play Area (Kite flying,	1 2			
flying disc, soft ball	Yes No			
toss area etc.)				
Badminton Court				
	1 2			
	Yes No			
Kabaddi Area				
	1 2			
	Yes No			
Skating Area	1 2			
	Yes No			
Others (Pl. specify)				
	PI. specify eg. Tennis, Volley Ball,			
	Basket Ball ets.)			
	1 2			
	Yes No			
0				
Condition	1 2 3	551		
	Poor Fair Excellent	PEX		
Ducing and				
Drainage	1. Properly Drainage			
	2. Improper Drainage			
	3. Mostly Inundated/ Flooded			

Click GPS tagged photographs to substantiate and upload in app.

L. Features for Differe built in design	ntly abled	: Differen	tly abled fr	endly features to be	Scaling
Existence of gentle ramps for rolling	1 Yes	2 No			
Condition	1 Poor	2 Fair	3 Excellent		PEX

Braille Script Used in Nameplates	1 2 Yes No	
Disabled Friendly Toilets	1 2 Yes No	
Do walking track for visitors have textured paved strips to guide differently abled persons?	1 2 Yes No	