Petition under Right to Information Act, 2005

From:
Divya Arvind
New No: 246 (old no: 277-B)
TTK Road (JJ Road)
Alwarpet
Chennai 600018

Chennai
01/04/2022

To:
The Public Information Officer
Chennai Smart City Limited
(Executive Engineer)
Special Projects,
Greater Chennai Corporation,
Amma Maligai,
Ripon Building Campus,
Chennai-600 003.

Dear Sir/ Madam,

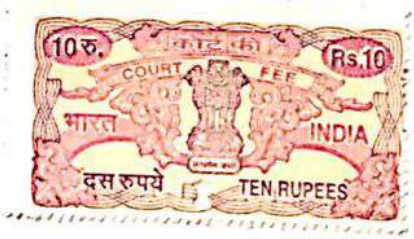
Sub: Seeking information under RTI Act, 2005

I am an Indian citizen and I seek the following information under the Right to Information Act, 2005. I have affixed the fees of Rs. 10 court fees stamp on this letter. I am also ready to pay any other charges that I am required to pay under the act for photocopies, CDs, etc. Kindly provide the information sought in soft copy (such as CD/DVD) if possible.

Please provide the following information on Chennai Mega Streets project:

1) DPR for all the Chennai Mega Streets project by location
2) ToR with the 6 consultants chosen for the Mega Streets project
3) Minutes of citizen consultation meetings/public hearing meetings organised
4) Schedule of any upcoming citizen consultation meetings/ public hearing meetings
5) Meeting minutes from discussions with other stakeholders including empanelled agencies that are working in the Chennai Mega Street Projects.

Thanking you
Divya Arvind
A Divya



Greater Chennai Corporation
Special Project Department

C.S.C.L.C.No.A1/0114/2022, Dt. 04.04.2022

I.	RTI application number and date	:	01.04.2022
II.	Date of Receipt of the RTI application by PIO	:	04.04.2022
III.	If transferred under section 6(3) of the Act	:	
	a) Details of PIO to whom transferred	:	Nil
	b) Date of transfer	:	Nil
	c) Points (Sl.Nos.) which are to be answered by that P.I.O	:	Nil
IV.	Reply (excluding points transferred)	:	Nil

Sl. No.	Information requested	Information given and details of documents, if any, furnished. **(or)** If information is denied, reason for denial and relevant Section of RTI Act.
1	DPR for all the Chennai Mega Streets project by location	Finalization of Detailed Project Report is in progress. Final Detailed Project Report is yet to be submitted.
2	ToR with the 6 consultants chosen for the Mega Streets Project	Terms of Reference is attached.
3	Minutes of citizen consultation meetings / public hearing meetings organised	Minutes of the consultation meetings are attached.
4	Schedule of any upcoming citizen consultation meetings / public hearing meetings	Yet to be scheduled.
5	Meeting minutes from discussions with other stakeholders including empanelled agencies that are working in the Chennai Mega Street Projects	Meeting minutes of discussion held with line departments are attached.

If the petitioner desires to file an appeal on this, he must do so within 30 days of receipt of this reply.

The appeal should be addressed to the Appellate Authority given below :

a) Name of the Appellate Authority	:	Thiru B. V. Babu, M. E.,
b) Designation	:	Superintending Engineer
c) Department	:	Special Projects Department
d) Office Address	:	Amma Maligai, "D" Wing, 5th Floor, Greater Chennai Corporation Chennai – 600 003.
e) Office Tel. Ph. No.	:	044 – 2561 9270
f) E-mail ID	:	sespecialprojects@gmail.com

Signature of PIO :

Name of the PIO	:	Th. B. Vijay Aravindh
Designation	:	Executive Engineer
Off. Tel. Number	:	044 – 2561 9270
E-mail ID	:	sespecialprojects@gmail.com

To

Divya Arvind
New No.246 Old No. 277B
TTK Road (JJ Road)
Alwarpet
Chennai 600 018.

5 Scope of work

5.1 Introduction:

GCC endeavors to redesign and develop streets in Chennai to be future-ready and NMT-friendly (Non-Motorised Transport),incorporating various aspects of mobility, utility and livability.As the first phase of this project, six packages, focusing on different neighbourhoods in Chennai , have been defined as in 10.5 Project Packages.The purpose of this project is to engage technical consultants to produce detailed designs for the selected mobility corridors within their allocated packages, and also develop a street network.

5.2 Definitions

Definitions of key terminologies used in the context of this document have been explained below:

1.**Vision:** The term refers to what the consultant envisions for the various neighborhoods and other connecting spaces within the allocated package. The vision should conceptually cover the elements of, and ideas for,mobility, livability and utilities.

2. **Primary network:**Primary network comprises of streets along existing/proposed transport corridors and with related hubs such as railway stations, MRT station, bus terminal/stand, etc.to enhance last-mile connectivity and multi-modal integration

3. **Secondary network:** Secondary network refers to streets that connect the primary network to other landmarks and activities in the neighborhood. They can also be streets supplementing the primary network by breaking down a larger block for ease of mobility.

Streets with high visitor intensity for work, education or recreation tripscould also fall in this category. For instance, streets connecting to markets, institutions, public spaces, schools,anganwadis(day care centers), religious spaces, central business district, heritage zones, tourist attraction etc. can be identified as secondary network.

4. **Public Space projects:** It refers to public spaces or streets that have the potential to transform the image of the city at a national/international level because of its character, location, and association with citizens.

Listed below are some projects in this category:

- Greenways network around water bodies and other ecological hotspots.
- Other projects such as spaces under flyovers and above subways, streets integrated with parks and reclaimed lands, etc.

5. **Quick Win project:**It refers to pilot projects that would have significant visibility and have a positive impact on the neighborhood, highlighting the benefits of NMT infrastructure.

5.3 Objective of the Project

a. To **develop a vision for the area of** the allocated package.
b. To **develop detailed street designs for the identified primary mobility corridors**, employing a holistic approach, incorporating utility, mobility and livability elements
c. To **identify secondary streets and other public space projects** within the allocated package in order to **form astreetnetwork;** and to**develop detailed designs** for the same.
d. To propose **a phasing plan,** which specifies the order in which streets will be taken up for redesign, with **5km of primary streets as quick wins**
e. To ensure that the network plan and street design are based on scientific assessment of needs and behaviorof street users, as observed in the surveys as part of this study.

5.4 Detailed Scope of Work

The Scope of work broadlyincludes:

A. Developing a vision for the area and creating a street network plan for theallocated package

a. Developing a Vision for the allocated package area
b. Studying reports related to transport and urban infrastructure plans, including utility plans collated by GCC &mapping ongoing and future projects, to inform the detailed design of primary streets and the phasing plan.
c. Mapping landmarks, land uses and activities to inform identification of secondary networks and other public space projects
d. Identifying and developing designs for Quick Wins
e. On-site verification, cyclist interviews and focus group discussionsto understand on-ground reality, and issues and concerns from different stakeholders involved
f. Develop astreet networkfor the respective package
g. Create a phasing plan and estimates for each phase

B. Detailed design for the allocated package

a. Study and survey including topography survey, land use, pedestrian and cyclist facilities and movements, parking study, vending and landscape study
b. Identifying 5km of primary streets as a quick win.
c. Public / Stakeholder Consultation
d. Detailed designs and drawings
e. Finalize Schedule of Rates
f. Bill of quantities
g. Preparation of Terms of Reference (TOR) for contractors for construction and O&M
h. Design support and validation during Implementation
i. Post Implementation Survey

The Scope of work is explained in detail below:

A.Developing a vision and creating a street network plan for the allocated package

a. Developing a vision for the allocated package area

The vision for the package should be in line with that adopted by the city under its NMT Policy, i.e. "*Chennai will be a city with a general sense of well-being through the development of quality and dignified environment where people are encouraged to walk and cycle; equitable allocation of public space and infrastructure; and access to opportunities and mobility for all residents.*" As part of the vision for the package, the consultant should provide design themes and concepts for different neighborhoods which will inform the detailed street design. The consultant shall also propose ideas for the three broad aspects of the project - Mobility, Livability and Utilities. The consultant is encouraged to think of innovative ideas for utilities beyond the specified templates, for instance bio-swales for runoff-management, etc.

b. Studying reports related to transport and urban infrastructure plans collated by GCC& mapping ongoing and future projects to inform the detailed design of primary streets and phasing

At the commencement of the project the Consultants are recommended to study all relevant reports on transport and urban development projects. This includesexisting NMT infrastructure, pedestrian networks, mass transit corridors, public transport routes, bus stops, street hierarchy and accident hotspots presented in the reports given by GCC. Particular attention must be given to the Comprehensive Traffic and Transportation Study, Comprehensive Mobility Plan, Multi-modal Integration plans, Comprehensive Development Plan, Parking study, Detailed Development Plan by CMDA, policy initiatives and guidance, as well as any other transport plans related to the study area provided by GCC. All streets in the allocated package, along with their legal ROWs, should be mapped using GIS or AutoCAD. The consultant should also study other relevant reports which could inform the primary network such as disaster assessment maps, ongoing water body projects, solid waste management plans, etc. These engineering parameters should be mapped using the GIS platform or other illustration soft wares. The Consultant should also identify transport system goals that are stated in these reports.

c. Mapping landmarks, land uses and activities to inform identification of secondary networks and other public space projects

The consultant should map

i. Landmarks such as schools, colleges, markets, parks, hospitals, religious places, industries, museums, etc.

ii. Land uses and key activity areas like commercial streets, business districts, shopping stretches, temple streets, etc

This mapping exercise will help in identifying secondary networks and potential public space projects within the allocated package. **Volume 3 of the Complete Streets Toolkit prescribed by MoHUA can be used for reference.**

d. Identifying and developing designs for Quick Wins Project

The consultant should identify at least 5km of streets from the primary network to be redesigned immediately as quick wins for the Greater Chennai Corporation.

e. On-site verification, cyclist interviews and focus group discussions

Once the maps are prepared, the consultant should verify on ground and cross-check the identified networks to understand how they are used. The consultant should conduct on ground interviews with cyclists and other users to understand their concerns and needs.

The consultant shall conduct at least 3 focus group discussions with women, girls, schools tounderstand which public spaces they visit frequently or avoid and why, role of design and other measures to improve their experience. The discussions shall be organized to cover the following groups: college/university female students, women in informal settlements or informal women workers, professionals and homemakers.

These exercises will help finalise the secondary network and public space projects.

e.Develop a street network

The consultant shall prepare a plan identifying street networks for redesign that is implemented over the years. The output created through this process includes a long-term street network plan, for the allocated package -including estimated budget and phasing for implementation. The plan includes secondary networks of streets irrespective of RoW, to provide traffic calming measures, safe walkways and cycling facilities, safe intersections, proportionately-scaled carriageways, parking bays wherever possible, safe crossings, etc. The plan will also include certain public space projects as an added layer such asgreenways, pedestrian-only streets, non-motorisedand public transport-priority streets, shared-streets etc.

The street networks should include intersection redevelopment to ensure integrated street design.

f. Create a phasing plan and estimates for each phase

After the creation of the network plan, the consultant should develop a phasing indicating the street networks which will be redesigned in different phases along with cost estimates for each. The phasing should be done in discussion with GCC, with high-priority networks redesigned first - such as accident-prone streets, streets with high mode share of walking and cycling, streets within a neighborhood etc. The phases of streets to be redesigned can also be decided based on estimates and available funds.

B. Detailed design for allocated package

a. Study and survey

The consultant should conduct the following surveys for the streets from the study area. Wherever possible, the data should be recorded using GIS or AutoCAD.

i. Topography Survey

The Consultant shall conduct total-station survey to prepare base plans for the streets to be improved. The survey must cover all streets in the package. In the topography survey, all the above-ground utilities including electricity overhead lines, utility and feeder boxes, and all other utilities should also be recorded.

Specific elements that must be surveyed include the following:

1. Existing buildings/structures (indication only)
2. Main roads, sub roads including diversions/de-tours
3. Signals /road marks
4. Junctions
5. Roundabouts
6. Medians / bollards /permanent barricades
7. Compound walls
8. All utility (electricity, telephone etc.) poles/boxes
9. Overhead high tension lines
10. Trees: to be indicated in 2 categories, above and below 30 cm of main trunk circumference
11. Footpaths/pathways/platforms/sidewalks etc. with all the features
12. Kerbs
13. Manholes
14. Drains (covered and uncovered)
15. Sign boards/markings
16. Survey of cables
17. Difference in levels wherever it occurs
18. Width of the road survey shall cover compound wall to compound wall showing the access of each and every property. If there are cross roads then 100 m or till

the end of first few property boundaries along the perpendicular streets that connects to the main road that is being surveyed.

19. Detailed study of flyover both top and bottom including ascending and descending points, pillar positions, varying widths/heights, grid levels, hand rail/barricading detail, lamp posts, service lines, structural dimensions of the flyover, any structure underneath the flyover etc.

The final survey drawings should satisfy the following requirements:

- Each element should be in a separate layer.
- AutoCAD file should be shared with PCMC.

ii. Study of land use and activity

The Consultant will compile land use information to help inform street design decisions. Important activity generators adjacent to all Study Area streets, such as shopping areas, theatres, and housing developments, should be identified.

iii. Traffic and transportation surveys

The consultant will conduct a series of traffic surveys to determine travel patterns along the corridor. The surveys and the required number of locations are presented in the table below. The details including location and timing of surveys should be finalised in consultation with the client.

Survey locations

Description	Number of survey stations
Classified volume and occupancy surveys	At periodic mid-block locations
Classified intersection volume counts	At all major intersections
Pedestrian crossing movement surveys	Throughout the corridor

Classified volume and occupancy survey

The classified traffic volume and occupancy counts should be carried out for 3 morning and evening peak hours on weekday and weekend at each location and should be conducted for each direction separately. The survey should record volumes of all motorised vehicles, non-motorised vehicles, and pedestrians. The vehicle classification system as given in IRC **–9** should be followed. This survey records both the number of vehicles observed and the number of passengers per vehicle. For public transport and paratransit (i.e. shared rickshaws) modes, the surveyors should record the number of passengers in each vehicle observed during the count. For personal vehicles, an average occupancy rate determined from a representative sample in each study area can be applied to the traffic counts.

All the results should be presented in tabular and graphical form. Daily and weekly variations in traffic volumes should be presented. Charts should also be created to compare the passenger mode split at each location and the proportion of street space occupied by each mode. Volumes and mode shares should be mapped to show traffic patterns along each corridor. **The data shall be converted into mode wise pphpd (people per hour per direction) and used for the designing purpose.** The traffic and trip projections are excluded from this study, however the consultant shall refer to the vision mentioned in the NUTP- mentioned in the section above- for planning for future trips.

Classified intersection volume counts

The classified intersection counts should be carried out for 3 hours during the morning peak period and 3 hours during the evening peak period at each location. The methodology for the surveys should be as per IRC: SP: 41-1994 and other relevant codes. Each direction and turning movement should be counted separately. The survey should record volumes of all motorised vehicles, non-motorised vehicles, and pedestrians. The vehicle classification system as given in IRC **–9** should be followed.

Pedestrian crossing movement surveys

The consultant should conduct a tracking survey of pedestrian crossing movements along each corridor in the Study Area.

iv. Survey of pedestrian and cyclist facilities

The Consultant will document the quality of existing pedestrian facilities on all streets in the Study Area, noting aspects such as the clear width of the footpath, the number of obstructions and the presence of shade at 2 p.m. (from buildings or trees). If cycle tracks are present in the Study Area, a similar survey should be carried out wherever they are present.

v. Survey of pedestrian and cyclist movement

Surveys shall be carried out to assess non-motorised transport (NMT) user flows at important locations in the study area. The survey shall be from 06:00 to 22:00 on a normal working day. The Consultant will record the number of pedestrians and cyclists moving along the road on important corridors. The actual pedestrian movement lines should be mapped.

vi. Analysis of crash data

The consultant will collect data on traffic crashes over the past 3 years from the Traffic Police, PCMC, and other relevant bodies. The crash location, type, and users involved (i.e. pedestrian, cyclist, two-wheeler, car, bus, etc) will be mapped on the base map. This information will enable the consultant to identify major traffic safety "black spots" and suggest traffic calming,

intersection modifications, and other interventions to improve safety for vulnerable street users.

vii. **Parking study**

A parking study must be carried out to identify parking patterns, demand and occupancy rates, both on street and off-street in public spaces. The parking demand survey shall be conducted for one hour during morning peak and one hour in the evening peak period in such areas. **If the street falls under the city's parking management system, the consultant is required to consult with GCC to coordinate the design of parking slots with the Parking Management Plan.**

viii. **Study of street vending and related activities**

The consultant should study vending activities in the identified streets to generate an inclusive design. Information about vending should be collected from the Revenue Department and all zones within the study area. The survey also should capture social gathering spaces and other activities found in the streets. This information will inform the placement of street furniture and other elements in the final design.

ix. **Landscape study**

The consultant must make note of all the trees and shrubs in the Study Area. The survey should note the type of trees and their current state. The consultant will coordinate with the Parks Department in GCC to collect this information.This will inform the placement of additional trees of native species in such a way that the final design results in a well-shaded street.

b. Detailed designs and drawings

i. **Line drawings**

The Consultant shall prepare line drawings for all streets in the Study Area. Line drawingsmust clearly show the new kerb line in reference to the road median. The drawing must becomplete with dimensions at 2m intervals. Line drawings shall be tested and should be marked on the road with chalk to ensure the survey drawing resembles on site conditions. The Consultant shall monitor the on-site markings and review the design as per site conditions.

ii. **Conceptual designs**

The Consultant shall prepare detailed street designs for all streets in the Study Area. The design must be consistent with relevant plans, including plans for mass transit networks, multi-modal integration, cycling networks, pedestrian networks, and pedestrian zones. The designs shall be prepared following relevant Indian Roads Congress standards, especially IRC 103:2012,

Guidelines for Pedestrian Facilities. **The Consultant should also refer to the Chennai Street Design Guidelines.**

iii. Street Design

The consultant is encouraged to come up with interesting concepts and themes for the streets that correspond to the character identified for that neighborhood.
Street designs should include but are not limited to the following elements:

1. Mobility:

- Dedicated pedestrian footpaths.
- Dedicated cycle tracks (if the corridor falls on the cycle priority network).
- Pedestrian crossings, including formal speed table crossings as well as median breaks that serve as informal crossing locations.
- Bus stops and Para transit stops.
- Medians.
- Traffic calming elements, where needed to reduce vehicle speeds.
- Physically demarcated on-street parking areas
- Signage locations.
- Pedestrian refuge islands.
- Carriageways, ensuring that the width remains uniform between intersections.
- Street lighting.

2. Livability

- Street furniture, including benches, stools, tables, and other seating arrangements.
- Spaces for street vending.
- Trees of native species to provide shade for pedestrians and cyclists as well as decorative landscaping, including compensatory afforestation for the trees removed as part of the project

3. Utility

- Storm water drains
- Ducts/pipes for electric cables, both LT and HT
- Ducts/pipes for telecomm cables
- Provisions for metro water
- Provisions for gas pipes
- Rider sewers, wherever required;

- Pipes for cables for street lighting
- Utility access points

3.1 Utility design

All the utility service lines are to be shifted to extreme edge of the road and Separate compartmental provisions are to be made for Electricity & telephone lines, Water lines and Strom water drains. RCC chambers or buried PVC ducts of required size depending upon the width of road shall be provided for accommodating the utility lines, as per IRC: 98-1997 Guidelines on Accommodation of Utility Services on Rods in Urban Areas. The laying and maintenance of the utility services should be planned in a manner that it does not affect the operational safety and functional integrity of the road facility.
The ducting system shall be designed based on the following:

- All the utility service lines are to be shifted to either extreme edge of the road and provide connectivity across the road at pre-determined intervals.
- Wherever necessary rider sewer and rider water line shall be provided.
- Separate compartmental provisions are to be made for Electricity & telephone lines, Water lines and Strom water drains.
- RCC chambers or buried PVC ducts of required size depending upon the number of service lines the road is expected to serve shall be provided for accommodating the utility lines
- For prevention of on-line theft of power and aesthetics all the overhead power lines are to be shifted as underground cables with in duct system.
- For change in direction of utility lines from one side of road to other side, cross ducts are to be provided at a regular interval across the road.
- Chambers are to be provided at the intersection of ducts to maintain the utility lines.

Design for Shifting of utilities shall be carried out as per IRC: 98-1997 "Guidelines on Accommodation of Utility Services on Roads in Urban Areas". Utility lines can be grouped under the following four categories, each having distinct characteristics:

1. Electricity cables
2. Telecommunication cables
3. Water supply lines
4. Gas pipelines carrying combustible material
5. Storm Water Management

Other infrastructure lines running along and across the roads need to be located and placed in order such that frequent cuts are to be prevented while attending to faults.

The depth of installation depends on the type of service line accommodated. The minimum depth is from considerations of providing a minimum cover to safeguard the line from any superimposed loads or impact, or from erosion, and this should not be less than 0.6m and as per IRC 98. The different service lines are also to be located at different depths so that a cross connection of a service line is not obstructed by another line.

Gravity sewer lines, from operational angle are required to be laid at substantial depth, from 2 to 6 m depending on the topography of the area. As regards electricity cables, high tension (HT) lines should be at greater depth than low tension (LT) ones from safety considerations.

Location of the various utility services will depend on several factors such as class of road, the land width available, the size and type of utility lines to be accommodated and other related factors and Land width recommended by the Indian Roads Congress, vide IRC: 69-1977.

All the field particulars regarding number of cables that shall be taken through the respective chamber ear marked for each service department will be collected from the concerned department, taking into consideration their future need. Future projection and capacity increase of number of cables will also be ascertained with the help of the concerned department officials before finalizing the ducting design.

Storm water management

Consultants to decide appropriate "Return period: considering the local rainfall pattern. Appropriate reasoning needs to be included in the designs and assumptions. In built up areas and junctions, a network of sub-surface drains with interception chambers need to be proposed to intercept the surface flow. The system design also should suit the individual sections / locations. The system shall be designed following IRC: SP-42 "Guidelines on Road Drainage". The designed drainage system would also inter-alia show locations of turnouts/ outfalls with details of outfall dissipation structures. All the structures shall be designed to match the landscape of the area.

Effects of drainage conditions on pavement performance can be treated by applying drainage coefficients to the individual unbound pavement layers. The AASHTO Design Guide, Part II, Table 2.4 provides recommended drainage coefficients as a function of the quality of drainage and the per cent of time during the year the pavement structure would normally be exposed to moisture levels approaching saturation.

Storm water removal standards

Quality of drainage	Water removed within
Excellent	2 hours
Good	1 day
Fair	1 week
Poor	1 month
Very Poor	Water will not drain

Saturation levels

Quality of Drainage	Per cent of time pavement structure is exposed to moisture levels approaching saturation			
	<1%	1-5%	5-25%	>25%
Excellent	1.40-1.35	1.35-1.30	1.30-1.20	1.20
Good	1.35-1.25	1.25-1.15	1.15-1.00	1.00
Fair	1.25-1.15	1.15-1.05	1.00-0.80	0.80
Poor	1.15-1.05	1.05-0.80	0.80-0.60	0.60
Very Poor	1.05-0.95	0.95-0.75	0.75-0.40	0.40

If the road constructed is partly in cutting and partly in embankment and provisions are to be made in the design to drain the pavement structure by extending permeable pavement layers to drainage ditches. For the purpose of the pavement design it is proposed to use a drainage coefficient of 0.95 for the granular sub-base and granular base course corresponding to fair to good drainage quality and saturation 5-25% of the time.

iv. Intersection design

Intersection designs should promote pedestrian safety through elements such as pedestrianrefuge islands, reduced angles of approach, reduced turning radii, and traffic calming. Thedesign of pedestrian crossings at intersections and in mid-block locations should ensure thatpedestrians do not need to cross more than 2 lanes at a time. Where extra ROW isavailable, the Consultant should identify opportunities to improve and/or create plazas,markets, and other public spaces.

With support from GCC, the Consultant is expected to discuss on existing and proposed arrangements/ shifting of the utilities above and underground with concerned departments during the preparation of conceptual drawings.

The Consultant will submit a plan drawing as well as cross-sections at every 50m. The planswill be submitted in hard copy and electronic format. It must include at least two 3Drenderings and photomontages of the design proposal.

v. **Draft Conceptual Designs**
The draft conceptual designs will be evaluated by the Project Committee before preparing the final working drawings. The Consultant may be required to present the plans at a public stakeholder meeting. The designs would be reviewed on basis of the prescribed 9. Performance indicators by the Review committee.

vi. **Final Conceptual Designs**
The Consultant will prepare Revised Conceptual Designs based on the feedback receivedfrom the Review Committee and stakeholders. The Revised Conceptual Design must besubmitted to GCC for approval.

vii. **Draft working drawings**
Following approval by GCC of the conceptual designs, the Consultant will prepare
detailed construction drawings for the Study Area. The designs should include geometric andvertical profiles and should incorporate drainage designs (see below). The designs shouldinclude the following components:

- Typical sections at every 50m.
- Street plan.
- List of existing street elements to be demolished.
- Proposed, retained and relocated underground and overground utility location plans.
- Utility relocation plans (wherever necessary).
- Materials as per Clients specifications.
- Construction details for each element.
- The Draft Working Drawings must be submitted to the Client for approval.

viii. **Good for Construction Drawings**
The Consultant will prepare Good for Construction (GFC) Drawings based on the feedback received fromthe Client. The GFC Drawings must be submitted to GCC for approval.The Consultant will submit all conceptual designs and GFC drawings to GCC inhard copy and electronic format (DWG format).

C. Bill of quantities

The Consultant is expected to prepare specifications, bills of quantities, cost estimates, andbid documents as per the TT Act and WB for the implementation of the proposed streetimprovements, including pavements, furniture, street lighting, landscaping and othercomponents. Bid documents shall be given item-wise (i.e. streets, lighting, landscaping, roadmarkings, etc.). The Consultant will work with GCC to include appropriate mechanismsin the bid documents to facilitate long-term maintenance, such
as annuity-basedcompensation of contractors.

During the preparation of BoQ, the consultant is expected to go through any and all Schedule of Rates (SOR) and ensure that the proposed design elements are listed in the SOR. In case of any elements / material has been used in the design that's not listed in the SOR, the consultants are expected to work with the engineering team of GCC to reduce discrepancies.

D. Preparation of RfP for Construction

The Consultants will be required to prepare an RfP for the construction of the street. GCC will coordinate with the Consultants to prepare the RfP.

E. Public / Stakeholder Consultation

The consultant shall conduct regular and continuous public / stakeholder consultation to get inputs from them and shall make all necessary efforts to include their feedback in the design. The key stakeholders are including but not limited to TNEB, BSNL, Highways, Transport Department, Traffic Police, Resident Welfare Associations, Vendors Association, Any Civic Associations, and Educational Institutions etc.

F. Support in Bid Process Management.

The consultant providesbid process management support which includespreparation of bid documents, managing bid process including assist in issuing of bid invitation, addendum/corrigendum, and clarifications to the bidders queries, bid evaluation, selection of contractors, assist in awarding of contract and signing of contract.

The consultant shall ensure that the draft contract to be included in the bidding document shall among other things,clearly define the obligations of the implementing agencies including specifyingrules and procedures to address non-performance of
contractual obligations.

Greater Chennai Corporation may getthe bid document certified / accredited by

Independent Agency.

G. Design support and validation during Implementation

The firm shall provide the detailed street designs to the project management consultant who will be responsible for the execution of the project. The firm shall however be responsible for ensuring compliance with the design. The consultant shall provide periodic design validation (minimum 2 visit per month) to monitor that the design being executed in accordance with the plans, design and drawings submitted and that the quality of construction and/or products/ equipments / etc. is satisfactory. Any modifications to the approved design shall be discussed with the Review Committee and carried out by the firm.

H. Completion Drawings

The consultant should produce completion drawings including modifications made on site due to site conditions. The completion drawings shall be submitted to GCC. It is expected that the final drawing shall completely match the actual project implemented on the ground.

RfP for Selection of Consultants for Preparation of Street Network Plan and Detailed Design under Mega Streets Project in Chennai

Corrigendum

Social and Environmental Impact Assessment Report Scope

a. Social Impact Assessment

The purpose of the proposed Social Impact Assessment is:

- Determine key social issues associated with the proposed sub-project;
- Identify potential adverse social impacts associated with the proposed project and recommend measures to mitigate impacts;
- Carry out an analysis of the vulnerable communities associated with the project, identify their concerns with regard to social aspects (including inclusion), and recommend measures to mainstream these into project design;
- Determine the applicability of Involuntary and or Indigenous Peoples Policies for the identified impacts and carry out additional surveys, consultation to prepare mitigation plans in accordance with the provisions of ESMF, if required.

Methodology: The consultant should devise appropriate methodology to carry out the various tasks towards realizing the above objectives. SIA should also include a census and socio-economic survey of Project affected households and the results will provide basis for preparation of Resettlement Action Plan in order to mitigate adverse impacts and enhance development outcomes of the project. The strategy for socio-economic survey should be drawn up based on findings of the above SIA exercises carried out through quick reconnaissance surveys, public consultations, and stakeholder analysis. (The indicative list of information to be gathered is provided in V below).

Stakeholders: Identify the various groups who have an interest or a stake in the project. Stakeholders are those who are likely to be affected by a project, as well as those that may influence the project's outcomes. In addition to the beneficiaries of the project and other groups directly affected by it, stakeholders may include organized groups from the public and private sectors as well as civil society who have an interest in the project. Based on the findings of the stakeholder analysis, the Consultant will undertake a comprehensive consultation and participation process in the project area. This will include specific consultation with intended project beneficiaries and likely affected social groups on the proposed project objectives, components and implementation arrangements.

Participation: Examine opportunities and conditions for participation by stakeholders – particularly the excluded groups and women – in the project (e.g. implementation and/or monitoring; influencing decision-making; holding public institutions accountable for the services they are bound to provide; access to project benefits and opportunities; etc.).

b. Preparation of RAP, if needed. Based on the outcome of SIA, additional surveys and consultations need to be carried out to prepare Resettlement Action Plan, if needed and should be prepared in line with the process described in paras 26-29 of ESMF. If private land acquisition is involved, then the applicable process under RTFCTLARR Act, 2013 should also be followed as required in the state. The respective ULB/ implementing agency need to approve the final report and need to disclose in their websites.

c. Outputs: The final outputs includes (i) social Impact Assessment; and (ii) Resettlement Action Plan, if needed. If Tribal persons are affected the required consultations and documentation needs to be discussed with the World Bank. All the draft reports will be reviewed by TNUIFSL/ Bank and the comments need to be incorporated.

d. Consultant Team: The key Social Safeguard person on consultants' Team should have a post-graduation in social sciences with at least 10 years of professional experience in carrying out tasks related to SIA, resettlement and rehabilitation related studies, consultations, community development and related activities. .

e. Indicative Data Requirements for Census and Baseline Socio-Economic Surveys

Socio-economic survey is meant to convert information gathered during initial consultative SIA exercises into measurable data, required for providing R&R assistance for different categories of PAPs, and for monitoring changes in people's conditions beyond the project period. The Socio-economic survey should provide information including but not limited to the following. The information gathered during the census and socio-economic surveys will form the basis for designing the Social Management and Tribal Development Plans.

- Social status of the affected families/persons: Caste/ tribe/gender category of families
- Economic status of the affected families/persons: source of livelihood, monthly incomes; number of bread earners in family and types of incomes, land ownership, household assets, ineptness, etc.
- Residential families: nature and quantity of likely loss-homestead area, residential structure, agricultural land, cattle shed; types of RR assistance preferred
- Commercial Units: nature of land and structure affected, title, business type, legal status of business, monthly incomes; number of employees;
- List of landless wage labourers, employees working in formal or informal sector who may have been adversely affected due to the project with data on nature of occupation, education and skill level, social category, age, and income.
- Common properties affected (grazing fields, community land, cultural properties, ponds, schools, community centres, dispensaries, emergency shelters; community forests; etc.)
- List of vulnerable persons/families: (poor, SC/ST, women headed, aged/infirm, physically or mentally challenged) with socio-economic profile;
- Other key information: travel time to work place; access to basic services; health status; participation in development schemes of the government; level of mainstream linkage;
- Any other information considered important in the local context.

- The outcome of the census and baseline survey should be in the form of a report and include but not limited to:(1) lists of PAPs according to their socio-economic and impact category (residential-legal and squatters; commercial-legal and squatter category; and encroachers-residential and commercial); (2) aggregated data on mean/ average household incomes, access to basic services, social and economic categories affected; common properties; and other details. (3) R&R impacts showing impacted lands and structures (type, quantity) across specific sections in line with the finalized alignment maps.

Guidelines for preparation of Environmental Assessment Report as per ESMF, TNSUDP

1.0 Brief Introduction

A brief introduction to the project shall be provided in this section
A brief description of the project area / city and salient features of the city shall be presented in this section, such as geographic location, climate, rainfall, soil profile, wind direction, existing drainage system, need for the proposed project etc.

2.0 The Project Objectives and Need

A brief profile of the status of existing infrastructure in the project city with respect to the proposed project, service levels, problems & issues and salient features of the proposed project shall be discussed in this section along with the environmental implications of the proposed project by covering the following objectives.

- Establish the environmental baseline in the study area
- identify and assess the adverse environmental impacts; and provide requisite measures to address these impacts
- identify the opportunities for environmental enhancements in the project area and provide requisite guidance/plans in this regard
- Identify and assess the climate change related aspects of the project
- Wherever relevant integrate the measures (mitigation and enhancement related) in the project planning and design;
- Develop appropriate management plans and codes of practices for implementing, monitoring and reporting of the environmental mitigation and enhancement measures suggested.

The EA shall be carried out in line with the Government of India (GoI)'s regulations (EIA Notification), and to suit ESMF.

The EA shall comprise filling the screening format, Environmental screening, Project EA, and the Environmental Management Plans (EMPs) & Mitigation measures. The EA shall be carried out in a consultative manner through "Stakeholder Consultations", at various stages, with the affected communities, NGOs, selected government agencies and other stakeholders.

3.0 Scope of Work

The following are the tasks to be performed by the consultants while conducting Environmental Assessment for the project including nature, scale and magnitude of impacts that the project is likely to cause on environment.

Task 1 Description of Project

A succinct description of the proposed project shall be provided covering: (a) status analysis of the existing infrastructure (b) description of each of the proposed components, activities and sub-activities. The task shall also bring out the rational, the need for the proposed project and list out the various benefits of project implementation. As part of this activity, the consultant shall provide necessary maps to scale

Task 2 Review of Earlier Studies

The consultants shall review various earlier studies such as feasibility and detailed project reports, etc., of the project and understand the project and various aspects associated with the same. This shall provide a base to formulate the environmental surveys necessary for the project and assessing impacts of the same.

Task 3 Legislative and Regulatory Considerations

A review of the legal and regulatory provisions applicable for the project shall be carried out in this task and provide relevance of the law or regulations to the sub-project. The objective of the review is to bring out the legal and policy issues to be addressed in the project at various stages of project development such as planning, design, execution and operation. In addition to the environmental laws such as EP Act, Water Act, Air Act, SWM rules, EIA notifications etc., the consultants shall review applicable operational policies / directives of the EFA.

The review shall thus provide a complete list of regulatory formalities required for the project and various clearances required from different regulatory agencies including State Pollution Control Board.

Task 4 Preparation of Environmental Profile

An environmental profile of the project influence area shall be prepared, based on appropriate primary & secondary surveys and field investigations. The objective of this profile is to establish existing environmental conditions of the project area, in terms of air, water, noise, soil and other environmental parameters, which should form the basis for prediction of impacts due to proposed project activities. As part of this, the environmentally sensitive land uses (protected natural areas, areas of ecological value, sensitive receptors like schools, hospitals etc) would also be identified and plotted on a map to scale.

The extent and duration (at least one season for rapid assessment and the three seasons for full detailed assessment) of surveys shall be judiciously decided by the

consultant as per requirements of the environmental regulations applicable in India and guidelines of international funding agencies. The profile prepared shall be adequate enough to predict impacts of the project and shall cater to the requirements of obtaining necessary environmental clearances from the authorities.

The profile shall essentially include all physical, ecological and socio-economic components of the project environment and bring out the salient and sensitive features of the same. Important aspects such as reserve forests, national parks, major water bodies, structures of archaeological / historic importance, and other environmental resources (if any) shall be identified and salient features of the same shall be presented.

In addition to the basic environmental profile, quality of water supplied by the present water supply system, potential points of cross contamination and health profile of the project area population shall also be brought out in detail through appropriate sampling surveys and field investigations.

Detailed activities to be carried out under environmental assessment are given under section 4.0 below.

Task 5 Determination of Potential Impacts

Based on the environmental profile of the project area prepared above and the proposed project activities discussed under Activity 1, the consultants shall carry out environmental screening to determine the nature of impacts and level of Environmental Assessment to be carried out (Section 5.0 provide the details to be carried out).

1. In case of low or insignificant level of impacts, where an EMP will suffice, the consultant shall review the recent versions of generic EMPs available with TNUIFSL and carry out necessary changes to suit the project requirements.
2. As part of screening, if medium to high impacts, requiring a detailed EA and standalone EMP, the consultant shall carry out detailed impact analysis. The consultant shall predict environmental impacts of the project components, activities and sub-activities on various environmental attributes (bio, geo and physical) through appropriate analytical tools and techniques such as modelling techniques, over lays, etc. Significant or insignificant, permanent or temporary, reversible or irreversible, negative or positive impacts shall be categorised separately and presented for each phase of project development.
3. Based on the outcome of the screening, if subsequent relevance to climate change is envisaged in the project implementation or during operation, then the consultants shall collect relevant information and appraise the climate change impact. The consultants shall identify adaptation needs of the project, review for greenhouse gas reduction potential and identify necessary measures for

implementation.

All identified impacts shall be summarised in an easily understandable format and the magnitude and significance of each impact shall be explained in detail.
An analysis of various project alternatives, including the 'Project' and 'No Project' scenario shall be brought out and impacts shall be analysed for each scenario. Based on the above analysis the best alternative that causes minimum or no impact shall be recommended for implementation.

Task 6 Stakeholder Consultations

The consultants shall carry out consultations with Experts, NGOs, Forest Department (if applicable) and other selected Government Agencies and other stakeholders to (a) collect baseline information, (b) obtain a better understanding of the potential impacts (c) appreciate the perspectives/concerns of the stakeholders, and (d) secure their active involvement during subsequent stages of the project as appropriate. For E1 projects at least two consultations shall be conducted, one after screening and the second with the draft final EA / EMP.

Consultations shall be preceded by a systematic stakeholder analysis, which would (a) identify the individual or stakeholder groups relevant to the project and to environmental issues, (b) include expert opinion and inputs, (c) determine the nature and scope of consultation with each type of stakeholders, and (d) determine the tools to be used in contacting and consulting each type of stakeholders. A systematic consultation plan with attendant schedules will be prepared for subsequent stages of project preparation as well as implementation and operation, as required, where community consensus is required in respect of proposed mitigation measures for impacts on community assets including water bodies, places of worships etc., and specific plan for modification/relocation etc., have to be disclosed and consensus obtained.

Task 7 Development of an Environmental Management Plan / Determination of Mitigation measures

The consultants using outputs of the above tasks shall develop an implementable Environmental Management Plan (EMP) for the project. Development of an Environmental Management Plan is detailed under Section 5.0 below

4.0 Environmental Screening and EA activities to be carried out in detailed

4.1 Environment Screening

a) Environmental screening shall be undertaken to identify the environmental hot spots along the project corridors, project relevance to climate change and determine the level of environmental analysis required for

the EA. The consultant shall carry out a preliminary analysis to assess the nature, scale and magnitude of the impacts that the project is likely to cause on environment. In case of significant environmental impacts encountered (may be applicable to the entire project/specific project interventions/specific locations), The consultants shall explore possible alternatives to the project and/or project components in a consultative manner. The deliverable at this stage will be Environmental Screening Report.

b) The screening exercise shall be supported through secondary and primary information collection and, stakeholder consultations on existing environment scenario. As part of the screening exercise the consultants shall:

(i) Identify sensitive locations in the project area including regionally or nationally recognized environmental resources and sensitive manmade land uses like hospitals, schools, etc

(ii) Establish baseline environmental quality with regard to air, water and noise at sensitive receptors.

(iii) List and map common property resources such as roadside trees; forests, large water bodies; and major physical cultural properties, etc.

(iv) Identify Human settlement, physical infrastructure and project activities that would result in severance.

c) The consultants shall also appraise the project in terms of substantial greenhouse gas reduction potential and substantial need of adaptation to possible climate change.

4.2 Project EA

i. Existing Environment and Baseline Conditions: Baseline assessment shall be carried out based on the outcome of Environmental Screening carried out for the project. The baseline conditions shall be established through detailed primary level field surveys. At this stage the consultants shall prepare detailed maps showing candidate sites for environmental improvements. The specific tasks under this include the following:

ii. Data Collection: Data shall be collected on relevant physical, biological and socio-economic conditions to establish the current environmental status of the project area. The data collection should be undertaken to arrive at meaningful information that will facilitate assessment of impacts and preparing management plan. Broadly, the following form of the data categories shall be covered (the consultant is also encouraged to use professional judgement and local knowledge in defining other data requirements):

The current land uses at the proposed project site and the study area using maps plotted to appropriate scale, covering lakes/ponds and their uses, forests and its classification, ecologically sensitive areas (sanctuaries, national parks, wildlife corridors, identified areas of nesting, mangroves and / or of interest of

migratory birds, etc.), prominent land marks, sensitive receptors, community severance, village settlements, agricultural lands, pasture and barren lands, various categories of CRZ areas if any, etc.

Physical - Geology, topography, soils, climate and meteorology (with emphasis on critical season considering water bodies and air quality), ambient air quality, surface and groundwater hydrology, existing sources of air emissions, existing water quality status of water bodies of importance.

iii. Biological and Ecological assessment covering water bodies, fauna & flora, ecologically sensitive areas (perceived as well as officially listed).

iv. Based on the outcome of screening report, the consultants shall carry out additional air and noise quality monitoring, which in future may depict the base line conditions for EMP monitoring.

Critical areas of environmental importance shall be identified as an output of the current environmental status of the project sites

4.3. Impact Prediction: The Consultant shall identify positive and negative impacts likely to result from the proposed project, interpreting "environmental" throughout the EA to include socio-economic impacts as well as impacts on the natural environment. All the project activities during pre-construction, construction and operation phases shall be considered to assess the impacts. The impact assessment shall necessarily cover "no action" alternative in the analysis. The consultants shall regularly interact with technical and social team of the project to share the findings of the impact assessment. The assessment of environmental impacts shall necessarily cover (but not limited to) the following:

(a) Impacts on the water bodies (including, but not limited to the impacts on water source proposed to be developed for the project in case of a water supply scheme)
(b) Impacts on topography and surface drainage due the proposed project activities in the project area,
(c) Community and cultural severance, identified through consultations
(d) Expected impacts on the land use patterns at and around the proposed project facilities/components
(e) Impact on ecologically sensitive features including spawning areas in creeks/estuarine areas, etc.
(f) Detailed assessment of impacts on receiving water bodies (including source of water bodies and downstream impacts on riparian rights)
(g) Assess the change of stream course due to diversion channels to construction intake structures and its impact on downstream users
(h) Impact on Socio-economic aspects of the projects area
(i) The noise and air quality related impacts during construction period on sensitive receptors shall be assessed
(j) Impact on Trees, public utilities and other community structures, crossovers, etc to be assessed.

(k) Any impacts that are irreversible and/or cannot be avoided or mitigated should be identified

(l) The consideration of the aspects in terms of climate change adaptation (Climate Proofing) should ensure that the desired developmental impacts of the strategy or measure are not endangered despite the forecasted effects of climate change. Furthermore the assessment should analyse whether the capacity for adaptation can be further increased in the framework of the strategy or measure. In this regard the expected climate changes and their consequences for the strategy or measure will be analysed. This includes both direct effects (e.g. more frequent flooding or drying out of water sources) and indirect effects of climate change. The analysis will also examine the longer targeted period of impacts beyond the formal period of the strategy or measure. On this basis, options will be developed and implemented to increase the capacity of the project to adapt.

(m) The assessment and consideration of the potential for greenhouse gas reduction (Emission Saving) to avoid substantial greenhouse gas emissions. First, the expected development of greenhouse gases in the project area/sector will be assessed, followed by review of the planned strategy or measures for their contribution to greenhouse gas emissions and if there are potentials for reducing greenhouse gas emissions. On this basis, options to contribute to greenhouse gas reduction shall be developed, and if applicable taking into consideration the developmental impacts.

5.0 Environmental Management Plan

The EMP should suggest ways / options for mitigating negative impacts of the project, the preventive measures necessary. Where required, EMP shall include community consensus for the mitigation measures proposed. The EMP shall identify the means / agency responsible for implementation of the same and recommend suitable monitoring mechanism for the EMP. The EMP shall be in the form of contract covenants and shall provide detailed cost estimates converted into BOQ items wherever necessary and applicable for implementation of the same. The consultant shall also recommend an appropriate institutional mechanism as per the requirements of EMP.

The above referred activity shall be applicable for Generic EMPs as well as specific EMPs developed as an outcome of detailed EAs

The consultant shall prepare a detailed EMP covering the measures to mitigate and/or minimize the negative impacts, including the implementation arrangement and a monitoring plan for the same with site specific requirements. EMP shall cover the following details:

a) Management/Mitigatory / Enhancement measures:

(i) For each of the significant negative impact, the consultant should recommend measures to eliminate or mitigate the impact. In case any impact is non-mitigable, the cost of damage shall be estimated and adequate compensatory measures shall be recommended.

(ii) Consultants shall recommend enhancement measures for incorporation in the design for attaining energy efficiency, reuse of treated water, control of water leakage, energy generation etc.

(iii) The cost (capital and recurring) of all the mitigation measures and the responsible parties for implementation should be clearly identified and shall be translated in to BOQ items. Wherever possible the measures should be drafted as contract clauses, which can be incorporated in construction/operational phase agreements

(iv) The mitigatory measures should necessarily contain conceptual designs wherever necessary. The consultants should also specify neighbourhood committees to supervise effective implementation of the proposed mitigatory measures.

b) Landscape plan: Wherever necessary, the Landscaping plan should be prepared considering the project area as a whole and shall meet project specific requirements. Considering the nature of the project area, the EA should provide a conceptual landscape plan for all the project components while considering the special environmental and social needs.

c) Budget Estimates: The EMP budget estimates shall be prepared for each of the project component and the shall be integrated with the overall project cost estimates and the relevant costs shall be included in the BOQ provisions.

d) Monitoring Plan: The Consultant should specify the types of monitoring needed for potential environmental impacts during construction and operation. As in the case of the mitigation plan, requirements should be specific as to what is to be monitored, how and by whom along with reporting formats and recommendations if any Cost estimates are necessary and where monitoring reports are to be prepared, the recipient responsible for review and any corrective action should be identified. The monitoring plan should be supplemented with a detailed schedule of implementation of EMP measures.

e) Institutional Arrangement to Manage Environment Impacts Effectively: The consultants shall identify institutional/organizational needs to implement the recommendations of the project EA and to propose steps to strengthen or expand, if required. This may extend to new agency functions, inter-sectoral arrangements, management procedures and training, staffing, operation and maintenance, training and budgeting.

6.0 Public Disclosure

The consultants are to provide support and assistance to the Client in meeting the disclosure requirements, which at the minimum shall meet the EFA's policy on public disclosure. The consultants will prepare a plan for in-country disclosure, specifying the timing and locations; translate the key documents, such as the EA Summary in local language; draft the newspaper announcements for disclosure; and help the client to place all the EA reports in the client's website.

The consultants shall prepare an Executive Summary of the draft EA Report in both English and Tamil for public disclosure. In addition, for E1 projects, the consultants shall provide for the initial consultation a summary of the proposed project's objectives, description, and potential impacts; a summary of the EA's conclusions for consultation after the draft EA report is prepared.

7.0 Inputs to be provided by the Client

The client shall make available all relevant documents, reports in connection to the project area/study area and facilitate procurement of data to the consultants.

HCP DESIGN, PLANNING AND MANAGEMENT PVT. LTD.
Paritosh, Usmanpura, Ahmedabad 380013

Project:	Chennai Street Design - Package 1 Anna Nagar
Date:	23rd November 2020
Time:	03:00 pm to 04:30 pm
Venue:	Zoom Call - Video Conferencing
Agenda:	Stakeholders' Consultation

MINUTES OF MEETING

PRESENT:		
	B. V. Babu, SE	GCC
	AV Venugoal, TD Achutan	ITDP
	Ronak Asrani, Selvaraj V	PMC, CSCL
	Kunal Patel, Director	HCPDPM
	Niket Jain, Burhan Taher, Anand Shah, Hussain Basuwala	HCPDPM
	Kaja Modideen, Manager - Vihaa Hospital	Stakeholder
	Rajesh, Manager - Jockey Showroom	Stakeholder
	Selvadurai, Manager - Seashell Restaurant	Stakeholder
	Murugan, Owner - Pazhalmudir Nilagam Supermarket	Stakeholder

INTRO: HCP commenced the meeting by formal introduction of all the Stakeholders, HCP as the consultant and GCC as the client. Then, HCP gave a brief introduction of the project, the existing street & its issues. After explaining the different issues, HCP then presented the proposed solutions with 3D visualization. With this understanding of the existing and proposed street, Stakeholders raised their concerns and shared their suggestions as follows:

SR NO. **CONCERNS, SUGGESTIONS & RESPONSES:**

1 **CONCERNS & SUGGESTIONS:**

Mr. Kaja Mohideen asked for a U-turn provision in the central median along the 3rd avenue road, Anna Nagar near Vihaa hospital (right next to the Anna nagar east bus depot) for easy access & entry to the hospital by emergency vehicles, ambulances etc.

Mr. Kaja suggested that a provision similar to that made on the highway for vehicles to take U-turn can be done so as not to disturb the moving traffic.

RESPONSE:

HCP acknowledged his concern and replied that they will discuss with GCC for their policy on the matter and check its feasibility. Also, in response to Mr. Kaja's suggestion for a U-turn like on highways, the restricted ROW of 3rd Avenue does not allow for a wide central median to accomodate highway like U-turn.

2 **CONCERNS & SUGGESTIONS:**

Mr. Kaja Mohideen mentioned that the capacity of the existing dustbins and frequency of waste collection near his hospital needs to be addressed. At present, there is only a single dustbin outside the Vihaa hospital which caters to a lot of nearby establishments, resulting in overflow of dustbins, unhygenic & dirty environment and bad odour.

RESPONSE:

HCP acknowledged his concern and replied that they will address the issue in the design and provide aprropriately sized and numbered dustbins. Also HCP & GCC will establish a standard SOP for regular cleaning and removal of waste.

3 **CONCERNS & SUGGESTIONS:**

Mr. Rajesh mentioned that on regular days the vehicular traffic and parking is average . However during special occasions such as marriage gatherings, banquets etc in the nearby marriage hall, there is a heavy movement of vehicular traffic and haphazard parking on street creating parking issues near his store.

He suggested that if a metering system is installed, these haphazard parking along the road can be avoided.

RESPONSE:

HCP acknowledged his concern and replied that they will discuss with GCC for their paid parking policy and prioritize on-street parking in their design.

4 **CONCERNS & SUGGESTIONS:**

All the stakeholders collectively raised a concern that since this is majorly a commercial street, ample designated parking should be provided to avoid haphazard parking being done.

RESPONSE:

HCP acknowledged their concern and replied that they will do sufficient design arrangements for ample parking space.

5 **CONCERNS & SUGGESTIONS:**

When asked about the existing illumination and safety on street, the stakeholders raised the concern that the stretch on 3rd Avenue between Anna Nagar Rountana and 5th Main road have a service road and that service road have no existing street light or any illumination.

RESPONSE:

HCP replied that necessary street lights will be planned for the said area in their detailed design.

6 **CONCERNS & SUGGESTIONS:**

When asked about the need for street furniture, stakeholders unanimously replied that it is required. They also mentioned that the existing trees should be retained, and regular maintenance should be done, for the newly proposed trees as well.

RESPONSE:

HCP acknowledged their suggestion and also explained the design philisophy for placing a landscape bay between the carriage way and the pedestrian walkway.

7 **CONCERNS & SUGGESTIONS:**

Stakeholders also mentioned that the existing public toilets and utilities are not maintained well. They also raised their issue regarding nuisance of vendors / hawkers causing litters and garbage on street. They also pointed out nuisance by auto-rickshaws, cabs, taxis which stand at wait near the property enctrances.

RESPONSE:

GCC & HCP acknowledged their concern and assured them that the new designs for utilities will be designed such that the maintenance would be done with minimum disturbance and no digging of the carriageway. HCP also explained that they have proposed dedicated locations for street vendors with sufficient waste disposal facilities to minimize any nuisance created by them. HCP will also look into for allocating designated locations for auto-rickshaws/cabs/taxis etc.

8 **CONCERNS & SUGGESTIONS:**

Mr. Rajesh, raised his concern about the nuisance faced because of the squatters encroachment along the 3rd avenue road, Anna Nagar between the clock tower junction and 5th main road junction (walkway along the service lane). He mentioned that these squatters have encroached the pedestrian walkway from a long time and their number even increased (around 15-20) during lockdown worsening the situation with squatter's openly littering and defecating along the pedestrian walkway, roaming there without mask.

Further to this, Mr. Rajesh also mentioned that these squatters are also misusing the public toilet (opposite to his shop, near the mosque) and creating nuisance.

RESPONSE:

GCC acknowledged his concern and said that they will take immediate actions to clear the squatters' encroachments from the said area.

9 **CONCERNS & SUGGESTIONS:**

Mr Selvadurai requested to make a provision for car and bike parking in front of their restuarent.

RESPONSE:

HCP noted his request and explained that parking provision will be made in the design proposal wherever sufficient ROW is available.

END: Concluding the meeting, HCP asked the stakeholders to rate the existing street condition, air & noice pollution and its cleanliness. All the Stakeholders gave an average rating to the existing street, except Mr. Rajesh, who gave low rating because of the encroachment and littering by squatters near his shop.

Stakeholders emphasized on their need for ample designated parking space on street. They also pointed the need of rain shelters on street as Chennai have frequent rains.

DISTRIBUTION:

1) SE, Special Projects, GCC
3) PMC, CSCL
4) ITDP

File Ref: 20014/Admin/B7

HCP DESIGN, PLANNING AND MANAGEMENT PVT. LTD.
Paritosh, Usmanpura, Ahmedabad 380013

Project:	Chennai Street Design - Package 1 Anna Nagar
Date:	21st January 2021
Time:	05:00 pm to 06:00 pm
Venue:	Zoom Call - Video Conferencing
Agenda:	Stakeholders' Consultation

MINUTES OF MEETING

PRESENT:	B. V. Babu, SE	GCC
	Ronak Asrani, Selvaraj V	PMC, CSCL
	Hardik Baldania, Burhan Taher, Anand Shah, Hussain Basuwala	HCPDPM
	Kshaumesh Antani	Kadam Associates
	Mr. Ravindran, Resident	Stakeholder
	Dr. Shafath Ahmed, Resident	Stakeholder
	Mr. Chinni Krishnan, Resident	Stakeholder
	Amutha Amutha	Stakeholder
	Dr. Jancy Suresh - Secretary, Shenoy nagar Welfare association	Stakeholder
	Dr. Junaid Ghatala - Principal, Olive International School	Stakeholder
	Siva - Merchant Accosiation, Shenoy Nagar	Stakeholder
	Sundari Meyyen - Founder,Gokulam Child Rehab Centre	Stakeholder
	Mr Mohan - Founder,Gokulam Child Rehab Centre	Stakeholder
	Selvakumar Muthudorai- President, Shenoy Nagar Welfare Association Jebaraj Samuel - Member, Shenoy Nagar Welfare Association	Stakeholder
	Sanico	Stakeholder
	Jayakumar	Stakeholder

INTRO: HCP commenced the meeting by formal introduction of all the Stakeholders, HCP as the consultant and GCC as the client. Then, HCP gave a brief introduction of the project, the existing street & its issues. After explaining the different issues, HCP then presented the proposed solutions with 3D visualization. With this understanding of the existing and proposed street, Stakeholders raised their concerns and shared their suggestions as follows:

SR NO. CONCERNS, SUGGESTIONS & RESPONSES:

1 **CONCERNS & SUGGESTIONS:**

Mr. Selvakumar Muthudorai was concerned about the the central median not being continuous on the Pulla Avenue road between the Thiru Vi. Ka Park and Kilpauk road Junction. He suggested that the central median has to be continued all the way to Thiru Vi Ka park for disciplined traffic movement .

RESPONSE:

In response to Mr. Selva kumar's concern, HCP explained that as part of the redevelopment all central medians will be made continuous to facilitate disciplined traffic movement and also ensure pedrestrian safety

2 **CONCERNS & SUGGESTIONS:**

Mr. Selvakumar Muthudorai also mentioned about a lot of trees being harmed by the CMRL construction on the pulla avenue road. The recent construction work has uprooted trees in a few places. It also hinders pedestrian movement.

RESPONSE:

HCP noted his suggestion and mentioned that a utility bay along with medium size trees and shrubs is planned between the carriage way and cycle track in the design proposal. Also the exising trees and its roots will be guarded with robust concrete paver blocks around the tree pit.

3 **CONCERNS & SUGGESTIONS:**

Mr. Chinni Krishnan was concerned about the impact on the neighbouring inner streets in terms of parking, because of the regulation imposed imposed on the main street. His concern was if the parking fee along the street is going to be lower that the parking in the proposed CMRL constructed underground complex, then a lot of onstreet parking issues will be faced,thereby impacting the neighbouring inner streets.

RESPONSE:

In response to the above, GCC assured that such policies have already been enforced on the T- Nagar Pondy bazaar project and similar policies will be framed with concern from the CMRL department.

4 **CONCERNS & SUGGESTIONS:**

Mr. Chinni Krishnan also mentioned the one way violation around the road abutting the Thiru. Vi.Ka park. Also Mr. Junaid Ghatala added that the road is mainly used for parking of school vans. lorries and handcarts, autorickshaws etc. These vehicles are sometimes left overnight and in some cases even for days.

RESPONSE:

HCP and GCC acknowledged their suggestion and explained that necessary action and policies will be enforced for the same.

5 **CONCERNS & SUGGESTIONS:**

Mr. Chinni Krishnan suggested that CCTV should be installed at various locations and effectively used to penalize vialotors and defaulters.

RESPONSE:

HCP and GCC acknowledged his suggestion and explained that CCTV provision is part of the design proposal

6 **CONCERNS & SUGGESTIONS:**

Dr. Junaid Ghatala, Principal of Olive International school mentioned that due to the traffic congestion along the pulla avenue road, it is extremely difficult for his students to cross over to the other side of the road. He suggested a pelican crossing system can be installed near his school for student crossing.

RESPONSE:

HCP and GCC acknowledged his concern and mentioned that the pedestrian crossing provison can be made near the school.

7 **CONCERNS & SUGGESTIONS:**

Dr. Junaid Ghatala also mentioned the menace due cattle and stray animals along the road and near the school. He pointed at the low hygeine maintained by the street vendors outside his school and along the road. Due to the current vending activity the cattles flock near his school causing traffic congestion.

RESPONSE:

HCP and GCC acknowledged his concern and mentioned that the street vending activity will be limited and also policies will be put in place for regular garbage collection and cattle removal.

8 **CONCERNS & SUGGESTIONS:**

Dr. Junaid Ghatala mentioned about the nuisance during monsoon season due to the accumalation of muddy water outside his school premise. He pointed that the reason for accumalation is due to the openly disposal of vegetable and fruit waste by the street vendors which inturn cuase clogging of storm water drains

RESPONSE:

HCP acknowledged his concern and mentioned that the same will be taken care of in the design proposal.

9 **CONCERNS & SUGGESTIONS:**

Dr. Junaid Ghatala mentioned that there is sanitation and other infection issues due to the presence of street vending activity. He mentioned that the vendors be given a dedicated market space by GCC for such activities.

RESPONSE:

HCP and GCC acknowledged his concern and mentioned that necessary action will be taken.

10 **CONCERNS & SUGGESTIONS:**

Mr. Jebraj Samuels who is a resident on the pulla avenue mentioned about the street vendor right in front of his house prepares unhygenic food and litters the road. He had also given a complain through the Namma Chennai portal for clearance of vending activity outside his house, but remained unaddressed.

RESPONSE:

HCP and GCC acknowledged his concern and mentioned that necessary action will be taken.

11 **CONCERNS & SUGGESTIONS:**

Mr. Mohan mentioned had a query regarding the efficiency of on street parking. He was also concerned that the students visiting his facility either use their private vehicles or public vehicle (autorickshaw). His concern was the approach in terms of disabled movement from parking to the facility

RESPONSE:

HCP noted his request and explained that parking provision will be made in the design proposal wherever sufficient ROW is available. Futhermore all the elements of street design are such that they adhere to IRC standards which ensures provision for disabled movement.

12 **CONCERNS & SUGGESTIONS:**

Mr. Ravindran mentioned that there is a TASMAC near the Olive International school on the pulla avenue road. As per regulation no TASMAC is allowed to function within a 50m radius of any eductional instituition or place of workship

RESPONSE:

HCP and GCC acknowledged his concern and mentioned that necessary action will be taken.

END:

DISTRIBUTION:

1) SE, Special Projects, GCC
3) PMC, CSCL
4) ITDP

20014/Admin/B7

Chennai Mega Street Network Project

Report of the Public Consultation on Quick Win 2 proposal for Street Design of Washermanpet MC/GA Road

20 January 2021

1. Background

The Greater Chennai Corporation (GCC) has initiated the Mega Street Network project in Chennai with a vision to strengthen non-motorized transport and enable safe pedestrian experience. The overall focus is to improve the mobility, livability and utility conditions in the project area. A total of 6 different packages have been introduced in Anna Nagar, North Chennai (Tondiarpet- George Town-Thiruvottiyur) Area, Nungambakam, Mylapore, Velachery and Adyar.

Oasis Designs Inc. are commissioned for developing street design and management proposals for Package 2: north Chennai area Tondiarpet – Washermanpet – Royapuram, as part of the Chennai Mega Streets project. Centre for Environment Education and Madras Hives are part of the team coordinated by Oasis.

In this context, Oasis Design team has conducted detailed observations, analysis and come out with a conceptual plan for the Quick Win 2 area and developed the broad designs and activities. These are proposed for the MC Road/ GA Road stretch.

The purpose of the public consultation was to introduce the Chennai Mega Streets project, and to present the situation analysis and design proposal for the MC/GA Road, Washermanpet and obtain the concerns and suggestions of the residents, representatives of commercial enterprises and various other users of the streets.

The local partners, Madras Hives contacted and invited a wide range of stakeholders in the area to the consultation a few days prior to the event. They also oriented the stakeholders on how to use the Zoom platform and join the consultation in virtual mode.

The meeting was attended by diverse members of the public, especially from Washermanpet area. The participants represented different segments of society including residents, shopkeepers, street vendors, autorickshaw drivers, school management representatives, temple trust representatives, hospital representatives etc.

Senior officials of the Greater Chennai Corporation and the Principal Architect of Oasis Designs Inc and the team of urban designers and EIA & SIA consultants were present at the consultation.

2. Stakeholder Representation

Greater Chennai Corporation

- Superintendent Engineer BV Babu
- Assistant Executive Engineer G Roseline
- Ms Christy Chennai Smart City Ltd

Team Members from Oasis Design, Centre for Environment Education and Madras Hives

- Mr. Akash Hingorani, Oasis Design
- Ms. Ruchita Rana, Oasis Design
- Ms. Khushboo, Oasis Design
- Ms. Meenakshi, Oasis Design
- Mr. Abhiram, Madras Hives
- Mr. Ronald, Madras Hives
- Mr. Nandhan, Madras Hives
- Ms. Sanskriti Menon, CEE
- Mr Sujeet Dongre, CEE
- Ms Divya Arvind, CEE (Intern from CEPT)

The stakeholders invited and present included residents, institutional representatives from schools, temple trust, shop owners/ staff, street vendors, autorickshaw drivers and others.

The list of stakeholders who participated and were invited is placed in the Appendix 1

3. Consultation format

The consultation was held online.

Date: 20th January, 2021

Time: 5:00pm to 7:00 pm

Zoom online platform link https://us02web.zoom.us/j/85295321977

Overall, around 45 participants participated in the online Zoom consultations.

The feedback from participants could be sent to following email ids:
christycscl@gmail.com and northchennai.msp@gmail.com WhatsApp:9445190856 (Christy)

4. Proceedings of the online zoom multi-stakeholder consultation

Ms Sanskriti Menon (Senior Programme Director, CEE) welcomed all and presented the meeting purpose and requested participants to contribute their observations about the current experience of the streets in the neighbourhood and suggestions for the design solutions being proposed.

GCC Superintending Engineer Shri Babu provided a background of the project from the perspective of the local body. Mr Babu explained the larger initiative taken up by the Greater Chennai Corporation government for enhancing the facilities for non-motorized transport for improved road safety and social and environmental benefits to the citizens. Mr Babu also stated the purpose of the meeting and invited all the participants to share their views about the street designs proposed and issues to be addressed.

Ms Ruchita Rana, Senior Urban Designer, Oasis presented an overview of the area and streetscape, based on the studies carried out, and with a focus on MC Road/ GA Road. Mr Ronald presented the same in Tamil.

The North Chennai includes the historic core of the city – George Town situated north of the Chennai Central Railway Station and the Fort. Flanked by the Port and the Fishing harbour along the eastern coastline and the railway line along the western edge, North Chennai is divided into two parts by the east-west railway lines. The east-west belt of land between the Cemetery Road and the Old Jail Road physically divides George Town from the rest of North Chennai. This east-west belt houses the institutional plots of the Stanley Hospital and College and heritage structures like the City-wall and Old Jail and the historic Royapuram Railway station

The three connections across this east-west belt are:

- The Flyover from Mint Tower to the Pencil Factory – along the Washermenpet Transit Hub – that includes the railway, metro and bus integration.
- The Royapuram one-way loop flyover – that connects the Beach Road or the Burma Market to the Ennore High Road
- Connecting the Broadway road to the GA road of MC Road – there is an underpass that goes below the railway lines.

The larger issues noted in the studies include:

- All the connections going over or below the East-West railway lines are not pedestrian friendly – and effectively only cater to vehicular traffic
- Complete lack of pedestrian connectivity between the George Town and the rest of North Chennai has distanced the communities with the North of Cemetery Road being more industrial in character
- Both George Town and the rest of North Chennai – north of the Cemetery Road are very dense urban developments – and lack public open space

• Aerial view of North Chennai clearly shows the dense urban fabric of North Chennai – and the east-west railway line with the huge campuses looks as a green belt dividing North Chennai into two distinct parts.

The vision for this entire area is to design the region as a 'new cultural hub', with an art district, tourism hub, heritage Zone, new food hub and as a 'vibrant public place' in Chennai. Served by a host of transit options – metro, train, bus – all integrated to connect this new landscape destination in the heart of Historic North Chennai – this new public parkway system shall reconnect the city with its soul – and showcase the best of Chennai's cultural heritage for the rest of the world'.

The MC Road streetscape and characteristics were presented highlighting the following:

• MC Road is a busy market street lying within a densely populated neighborhood, and has a north south orientation with varying width in different stretches
• The street hosts a range of shops, micro and small manufacturing units, enterprises, street range of vendors
• Parks at the southern end of the street provide open space for the neighborhood, but the edge of the park is not visible and inviting, but has some parking and other constraints for pedestrians; the park on the other side has a Metro Water filling station
• Metro Water filling station at the southern end of the street
• There is a wide range of users and uses of space on the street, including pedestrians, motorized vehicles, especially auto rickshaws and on-street parking

The design proposals seek to streamline the street in terms of clear useable spaces. Based on the varying widths available, all the current activities shall be accommodated, and parking and vending reorganized in designated areas – to help decongest the bottlenecks on the street. The streamlining shall prioritize the facilities for pedestrians and NMT users, to provide service space for street vending in line with Street Vending Act, to reduce the motorized traffic and shift on-street parking to off-street and in the vicinity. A major need is to provide safe pedestrian access joining the north and south precincts.

The design proposals presented included:
Entry Nodes 01 & 02 – The two entry nodes are major junction one either side of the MC road pedestrianisation project .They are marked as major entry points to the project.
Entry 01- Connecting Cemetery road and MC road
Entry 02 –BSNL Junction
The junction is made pedestrian friendly by rectifying the road geometry, providing safe pedestrian crossings.
The junction will be equipped with wheelchair-accessible pedestrian ramps making it possible for the differently abled to access the promenade.
The junction shall also have pick up –drop off bays for shuttle vans.

Street Typology 01: 15m Wide Street

The street has a ROW of 15 mt for 150 mt length.
This shall have 6 mt wide movement lane –which can be used during emergencies by ambulance, fire trucks etc., it can be used for vehicular movement during off peak hours by service vehicles, maintaining a speed of 15kmph.

During peak hours – where there is an increase in the footfall of visitors and shoppers, the street could be closed to create a pedestrian-only street; where even the 6 mt shall be used by the pedestrians and the occasional battery-operated shuttle vans to move. This battery operated people-mover shall be like a golf-cart to enable old people, small kids, pregnant ladies, and physically challenged people to be ferried around the shopping street.

The entry points shall be flanked by hydraulic bollards to control access for vehicular traffic.
This part shall ensure 2 mt clear pathway along with multi utility zone which shall provide spaces for vendors, seating, and other interventions which shall improve the experiential experience of the shoppers.

Street Typology 02 – 9m-12mt Wide Street –
This segment of the street shall maintain the 6 mt wide movement lane.

Rest of the space is used for walkway on either side minimum 1.8 mt on either side with a narrow multi-utility zone to accommodate the utilities like light poles, utility manholes etc.

Even where the street section is narrow, the design provides for the 6mt. wide emergency access, in the north-south direction – which can be selectively opened up for vehicular movement if required and also be planned for a pedestrian-only street during peak-rush hours to allow improve the overall experience for all the shoppers

All along the street the important east-west connections are maintained as vehicular – and shall have proper junctions to ensure pedestrian safety.

The responses and suggestions from the participants included:

1. The project and design concepts are welcome

2. Heavy traffic
   - Heavy traffic on MC road needs to be reduced and diverted, and the idea of blocking motorized traffic in the entire stretch is good
   - Retractable Bollards (proposed in the design) need to be removed and 2-wheeler should be allowed to enter the road.

3. Water logging during rainy days should be addressed and storm water drain to be provided (Stanley Hospital to MC Road)

4. Metro water tank entry needs to be changed as it creating too much traffic

5. Street Vending
   - Road design should not disturb the street vendors
   - Around 500 vendors are vending in this area for over 15-20 years. Hence, organized spaces need to be provided for the street vendors and they should not be displaced to any other location
   - A shop owner suggested that platform should not be given to street vendors

6. Parking
   - Too much space is occupied by on-street two-wheeler parking, especially from Veeras to Annamalai textiles; mini vans should not be allowed to be parked (opposite to Veeras)
   - However, as 90% of the customers are coming by 2-wheeler, so 2-wheeler parking needs to be provided
   - Un-used space and playgrounds around MC road can be used for parking, or a multi-level parking may be provided to solve the parking problem;

7. Temple zone/ entrance
   - There is encroachment around the entrance
   - Idea of clearing up the area in front of the temple is welcomed

8. School zones
   - Students traveling to and from the schools in the area face difficulties due to traffic from school vans and autos
   - Speed breakers not been very helpful near the school zones
   - Pedestrian crossing needs to be incorporated near school zone for safe walking.
   - Compound wall of school are heavily encroached by bike parking
   - Urination on school compound wall and waste disposed around the school compound need to be addressed

9. There are two toilets existing near the site. These shall be refurbished.

Appendix 1

Stakeholder Attendance

Sl	Name	Number	Designation	Category	Location/ Area
1	Ramakrishnan	9940029897	Manager	Large Retail	Veeras
2	Senthil Kumar	9500049914	Manager	Large Retail	GRT
3	Abdul	9940621825	Manager	Large Retail	Arihant textiles
4	Sekar	8124878687	Owner	Large Retail	Sekar Textiles
5			Manager	Large Retail	Annamalai Textile
6	Prashanth		Manager	Large Retail	Kalanthar Madeena textiles
7	Mohammed Farook	9940084497	Secretary	Commercial Association	Madras Washermanpet Cut Piece Cloth Merchants Association
8	Muthulakshmi	9884784169	Co-ordinator	Street vending	TN Street Vendor Association - Chennai & Tondiarpet
10	Meena	9025561985	Vendor	Street vending	MC road
11	Meenakshi	9080008367	Vendor	Street vending	MC road
12	Visalatchi	8610060530	Vendor	Street Vending	MC road
13	Mohana	7200729919	Leader	Street vending	39 Sangam
14	Senthil	9884985410	Vendor	Street vending	Food push cart
15	Balaram	9444030185	Vendor	Street vending	Vanigar Valagam
16	RajaGuru	9080626225	Vendor	Street vending	Vanigar Valagam
17	Karuppaiah	9786016850	Manager	Restaurant	Hotel Parijatha
18			Manager	Restaurant	Kababy Restaurant
19	Ali Bhai	9940254047		Auto	Veeras Stand
20	Deena	9940030737	Leader	Auto	Veeras Stand
21		9884598716	Treasurer	Auto	Veeras Stand
22	Manickam	9840367857	Leader	Auto	Bashiam street stand

23	Vasanthi	9941604150		School	Dhanalakshmi Primary School
24	Jayapriya	7299413535		School	Macaulay School
25	Joseph	9092583263		School	Govt School
26	Prakasham	8610388963	Head Master	School	Govt School
27	Ramesh Kumar	9884482973		School	Govt School
28	Anitha	9840997932	DGO	Hospital	RSRM
29	Anthony Selva	9840280333	Manager	Religious	St Roque's Church
30	Thangamani	944443280	Trustee	Religious	Kamachi Amman temple
31	QCOM BTD				
32	Selvimahi Teju				
33	Soniya Madhan				
34	Krishniah Chetty				

Officials from GCC and CSCL and staff of consultants (Oasis, Madras Hives, Centre for Environment Education) also attended the consultation.

Stakeholders invited through personal meetings and messages

Sl	Name	Number	Designation	Category	Location/ Area
1	Ramakrishnan	9940029897	Manager	Large Retail	Veeras
2	Senthil Kumar	9500049914	Manager	Large Retail	GRT
3	Abdul	9940621825	Manager	Large Retail	Arihant textiles
4	Sekar	8124878687	Owner	Large Retail	Sekar Textiles
5	Mohamed Basheer	9940084497	Secretary	Commercial Association	Madras Washermanpet Cut Piece Cloth Merchants Association
6	Babu	9841115410		Commercial Association	Singara Garden Readymade Merchants Association
7	Ilayaperumal	9962421116	Head	Commercial Association	Goni Association
8	Rajarajan S	9840775676	Secretary	Commercial Association	Goni Association
9	Nandha Gopalan	9840226930		Commercial Association	Goni Association
10	Bhaskar	9841021943		Commercial Association	All Vendors Association
11	Muthulakshmi	9884784169	Co-ordinator	Street vending	TN Street Vendor Association - Chennai & Tondiarpet
12	Meena	9025561985	Vendor	Street vending	MC road
13	Meenakshi	9080008367	Vendor	Street vending	MC road
14	Mohana	7200729919	Leader	Street vending	39 Sangam
15	Senthil	9884985410	Vendor	Street vending	Food push cart
16	Balaram	9444030185	Vendor	Street vending	Vanigar Valagam
17	RajaGuru	9080626225	Vendor	Street vending	Vanigar Valagam
18	Varadharajan	9940919803	Manager	Restaurant	Hotel Durga
19	Karuppaiah	9786016850	Manager	Restaurant	Hotel Parijatha
20	Ali Bhai	9940254047		Auto	Veeras Stand
21		9940030737	Leader	Auto	Veeras Stand
22		9884598716	Treasurer	Auto	Veeras Stand
23	Manickam	9840367857	Leader	Auto	Bashiam street stand
24	Thanalakshmi	9884413255	Head Mistress	School	Arumuganadar Girls School
25	Vasanthi	9941604150		School	Dhanalakshmi Primary School
26	Baskar	8681922952		School	Dhanalakshmi Primary School
27		6383871757		School	Macaulay School

28	Jayapriya	7299413535		School	Macaulay School
29	Isakki Selvam	9176536311		School	Macaulay School
30	Jaya Nathan	9944923512		School	St Mary's School
31	Joseph	9092583263		School	Govt School
32	Prakasham	8610388963	Head Master	School	Govt School
33	Ramesh Kumar	9884482973		School	Govt School
34	Ramamoorthy	9095346385	Incharge	Library	Govt Library
35	Anitha	9840997932	DGO	Hospital	RSRM
36	Anthony Selva	9840280333	Manager	Religious	St Roque's Church
37	Thangamani	944443280	Trustee	Religious	Kamachi Amman temple
38	Kumar	9884669198	Trainer	Ground	Robinson Park
39	Felix	8939233053	Cycle Mayor	Cycling	Chennai Cycle Group

Chennai Mega Streets: Package-03 Nungambakkam
Stakeholders Consultation - 01
Minutes of the Meeting

18.11.2020

Project	Chennai Mega Streets: Package-03 Nungambakkam Quick Win Phase 01
Agenda	To understand the challenges, expectations and vision of the stakeholders of the package.
Venue	Microsoft Teams, online meeting
Time	05:30 PM

Members

Name	Organization/ Designation	Name	Organization/ Designation
Mr Babu (Meeting Chair)	SE special projects, Greater Chennai Corporation (GCC)	Mr Rithvik Raja	Resident and Performer at Music Academy
GCC Team	Other Engineers	Mr Felix John	Cycle Mayor Chennai, BYCS
Mr Raj Cherubal	CEO, Chennai Smart City + Team Members for CSCL	Mr George	Architect and active stakeholder on KNK Road
Ms Philarisa	World Bank representative	Nithya Ramesh	Jana Urban Space Foundation
Mr Vaidyanathan	World Bank representative	Representatives	ITDP
Mr Rohit Gupta	Resident - Rutaland Gate	Shashank Achanthodi	Jana Urban Space Foundation
Dr Sruthi Shankar	Anaesthetist at Apollo Hospitals	Venkat Jayagopi	Jana Urban Space Foundation
Ms Nazneen Mogrelia	Professor at WCC	Saheel Birewar	Jana Urban Space Foundation

The meeting commenced with a brief presentation by Nithya Ramesh on the Jana USP's proposal for the package.
Overviewing the vision for the neighbourhood and the conceptual design for phase 01.
Discussing the selected street network for intervention, challenges and issues of the site concluding with the overall design approach, methodology and proposed design features.
This was followed by inputs on challenges, expectations and feedback by each the stakeholders and corresponding response to the same by the Jana USP team and GCC team.

Sl.No	Points Discussed	Action Items
1	**Service Infrastructure** From Mr. George - the presence of overhead wires as a major threat for safety as well visibility on the streets.	***Jana USP team acknowledged the discussed issues and briefly explained the service infrastructure integration in the proposed design and emphasised on an effective storm water management network and***

	From Mr.Rithwik - the improper and ill-maintained waste collection points creates unhygienic conditions and disrupts the usability of the streets. Unorganized underground utilities. From Mr. Rohit -the faulty storm water management which results in flooding of streets during monsoon as an issue of major point of inconvenience and a safety hazard for the residents of this neighbourhood.	*underground power lines for safer streets.*
2	**Safety** From Mr. Rohit -the recently installed lighting at flyovers causes visibility issues or the drivers and the lighting treatments in the future should be sensitive to the visibility and usability of the infrastructure for enhanced safety. From Ms Nazneen Mogrelia- need for safer roads from the perspective of cyclists and pedestrians for school and college going children. From Mr. Rohit- lack of sufficient lighting on roads especially for pedestrians. From Mr. Felix John- Roads are highly unsafe for cyclist especially in peak hours. The current scenario discourages people to use cycles- a healthier and sustainable mean of commute.	*Jana USP team acknowledged the discussed issues and responded with the overview of included street design element like dedicated and continuous routes, boulders and railings to safe guard the pedestrian and cyclists on streets.* *Representative from GCC acknowledged the lighting issue at the flyovers and assured an effective response in regards with the same.*
3	**Cycling** From Mr. Felix John- mentioned the importance inclusion of cycling infrastructure. And it benefits. Talked about the current challenges of safety for riders due to traffic, encroachment on cycle tracks, its usage by motorized vehicles and irregularity of cycle tracks. Need for an effective grievance system for cyclists. Emphasized the need by mentioning this package as a highly active cycling zone.	*Jana USP team acknowledged the discussed issues.* *She mentioned provision of continuous cycle track across the scheme and effective design features like boulders, planters to prevent encroachment of cycle track.* *The need for grievance system for cyclists was duly noted.*

4	**Walkability/ Pedestrians** From Mr. George - mentioned the frequent obstruction likes parked vehicles, manhole covers, vendors as an issues for ease of movement for pedestrians. From Mr.Rithwik – irregularity of footpaths, insufficient width and improper maintenance are major issues. From Ms Nazneen Mogrelia- need for safer footpath for school and college students. Also talked about the frequent encroachment of footpaths	*Jana USP team acknowledged the discussed issues.* *She mentioned provision of uniform, regular and accessible footpath, designed service access points and dedicated space for parking and vending for tackling the discussed issues.* *Representative from GCC acknowledged the maintenance issue and assured an effective response.*
5	**Mobility** From Ms Nazneen Mogrelia- need for effective placement of para transit points like auto bays along educational and institutional spaces for seamless mobility. From Mr. Rohit – Traffic congestion especially at bottle necks a major cause of inconvenience and longer commute time and lack of sufficient parking spaces. From Mr.Rithwik – need for inclusion of varied means of transport like shared cycles and bikes for seamless mobility especially for public transport users.	*Jana USP team acknowledged the discussed issues.* *She mentioned provision of uniform width of travel lanes to tackle the issues of congestion.* *The effective placement of para transit point and inclusion of diverse means of commute was duly noted.*
6	**Street Character** From Mr George- Emphasized on the retaining of the local character of the street while upgrading the infrastructure and enhancing the liveability.	*His input was acknowledged by the Jana USP team.*
7	**Maintenance** From Mr. George – mentioned the possibility of a system for involvement of users and locals in maintenance of infrastructure.	*Representative from GCC acknowledged the maintenance issue and assured an effective response.* *The suggestions for maintenance were duly noted.*

	From Mr. Rohit – emphasized on sound maintenance of the newly created infrastructure.	
8	**Project execution/ Construction** From Mr.Rithwik – talked about the inconvenience caused by the delays in construction. From Mr. George – mentioned the need for better management of traffic and rerouting during the process of construction.	***Representative from GCC acknowledged the issue in regards with better management during construction phase.*** ***The issues faced were duly noted.***

MINUTES OF MEETING - STAKEHOLDERS PRESENTATION FOR QUICK WIN ON 02 DECEMBER 2020

Project: Chennai Mega Streets – Package 4- Mylapore
Subject: Stakeholders Meeting - Quick Win
Date: 2nd December 2020
Time: 18:00 – 19:50
Format: Zoom online

ATTENDEES

Team: Meghal & Vijay Arya, Ayushi Sharma, Vishwa Patel, Nandni Shah, Sarang Pingale, Tahaer Zoyab, Roshini Ganesh, Ashmitha Athreya, Vigneswaran J, Varshil Parikh

GCC: Achuthan TD, Christy Leema, Keerthi Sureshbabu, BV Babu, Raj Cherubal, Santhosh, Selvaraj V

Stakeholders:

S.No	Name	Designation
1	Aruna Subramaniam	CEO of Bhoomika Trust, Resident of Mylapore
2	Bala Subramanian	Resident, Activist, Mylapore
3	Bhanu Kumar	Resident, Activist, Mylapore
4	Bharath Natarajan	Resident, CP Ramaswamy Road
5	Bharathi Jayakar	Resident, Member of ATSERA
6	CR Balaji	Resident, Activist, Mylapore
7	Deeptha	Architect, Urban Planner, Resident of CP Ramaswamy Road
8	Dr Karthick Sridhar	Resident, CP Ramaswamy Road
9	Girija Ramanathan	Resident, CP Ramaswamy Road
10	Juzer	Architect, Urban Planner
11	Kalyani	Resident, CP Ramaswamy Road
12	Kannan	Resident, Member at CARWA
13	Mallika Iyer	Architect, Urban Planner, Resident of CP Ramaswamy Road
14	Meenakshi Karuppiah	Resident, CP Ramaswamy Road

15	Mihir Sriram	Architect, Resident of Mylapore
16	Ranjani Raghupathi	Architect, Resident of Mylapore
17	Revati Narayan	Architect, CityWorks, Mylapore
18	Sanjay Pinto	Journalist, Lawyer, Resident of CP Ramaswamy Road
19	Sekar Kanuswamy	Resident, Member Abhiramapuram Residents Association
20	Sidharth Hande	CEO Kabbadiwala Connect, Resident of Mylapore
21	Sridevi Pattabhiraman	Resident, Member ATSERA
22	Sridhar Venkatraman	Resident, Activist, Mylapore
23	Sriram Sivaraman	Resident, CP Ramaswamy Road
24	Sushila Natraj	Resident, Abhiramapuram
25	Manasarovar Swamy	Resident, CP Ramaswamy Road
26	Vallabha Srinivasan	Resident, CP Ramaswamy Road
27	Varadan AVR	Resident, Abhiramapuram
28	Vidya Pinto	Resident, CP Ramaswamy Road
29	Vincent D'Souza	Journalist,Mylapore Times, CP Ramaswamy Road
30	Viswanathan	Resident, Representative MRWA
31	Yashodara Nararayanan	Resident, Abhiramapuram
32	Zoyab Kadi	Architect, Master Planner ,Resident of Mylapore

KEY POINTS COVERED IN THE PRESENTATION TO STAKEHOLDERS

The team presented the scope, demonstration of vision and future impact of the redevelopment of the streets which came about as a result of a study and understanding of the package area of Mylapore which falls under the Chennai Megastreets Project. It aims at redesigning and redeveloping about 100km of streets in Chennai through the perspective of mobility, utility and livability. The project has been distributed in 6 packages, each focusing on different neighborhoods of Chennai and intends to make the city future-ready and NMT (non-motorized transport) friendly.

The design development of Mylapore has been anchored deep in its heritage, urban fabric, and various other layers that make the process richer.
The presentation that was made to be discussed in the meeting covered the following key points-

1. The design principles and concept have been derived from a thorough study of the area that included its heritage, historicity, traffic congestion and movement analysis, public activity, institutions and landmarks, event venues, tourist attractions, open and built relationship, blue-green infrastructure, water flow pattern and water clogging patterns. A detailed understanding of the public activities, the natural and cultural diversity that exists in the neighborhood helps in enhancing the character during the design process.
2. The presence of a number of institutions, historic water elements, large old trees, diversity in the RoWs along with the above aspects makes it an extremely challenging project as the streets today cater to a large number of activities and to be able to address to all of has helped in harnessing the unique experience of the neighborhood.
3. The main concept being- giving the streets back to people, the design attempts to address the multiple layers that coalesce to form the city that will make it culturally rich, vibrant and safe for all.
4. The design focuses on enhancing the livability through various aspects such as equity in access and allocation of public spaces, seamless interactions and overlaps in utilities- their upgradation with enhanced capacities are proposed to make them future ready.
5. Prioritization of pedestrian movement and ensuring accessibility to the public institutions throughout the design.
6. Creating a water sensitive urban design which explored and utilized the existing water elements after a thorough analysis.
7. Proposal to add few other streets to complete the world-class street network experience.
8. Identification of nodes to develop into new public spaces for the city.
9. Creation of public plazas and shared streets wherever possible
10. Creation of on street parking after RoW has been made uniform
11. Creation of safer crossings for pedestrians using barrier free design principles, tactile elements and at grade crossings
12. Traffic calming measures such as table-top crossing and change in materials have been incorporated in the design to slow down the traffic at critical locations.

The identified quick-win project which constitutes few arterial roads of Mylapore- CP Ramaswamy Road, Eldams Road, TTK Road and CV Raman Road, were briefed to the stakeholders. Quick-win as the pilot project aims to demonstrate to the citizens the serious intent of GCC to do comprehensive work rather than superficial beautification. The following few points were highlighted upon-

1. The quickwin roads have immensely varying RoW, various challenges were faced while taking the design decisions. To provide a safe and smooth vehicular traffic flow, all the roads were designed with consistent and continuous carriageway. This also helps in avoiding the congestion caused due to the bottlenecks to deliver better mobility experience to the users.

2. Provisions have been made to prioritize the pedestrians by providing continuous sidewalks, safe pedestrian crossovers.
3. Utilities have been made future ready, taking into account the future needs in terms of storm water, electrical lines, gas lines along with the existing water and sewer network.
4. Compact junctions for smooth flow of traffic and to ensure that pedestrians need not cover long distances to safely cross the road.
5. Existing landscape were assessed and protected along with the addition of new landscape elements
6. Development of the space under the TTK Flyover as a public space.

Various visuals and renders to help the stakeholders visualize the kind of development that we aim to bring in were also portrayed. After briefing them about our vision and design for the entire neighborhood as well as quick win, the questions that were raised by the stakeholders follow-

QUESTIONS RAISED

From Mr Sanjay Pinto:

The overspeeding along the stretch calls for a speedbreaker and signals, at the junction just before Eating Circles off Abhiramapuram 4th street. The overspeeding makes it almost impossible for senior citizens to cross this stretch safely and without help, especially at night and at peak hours during the day. Have you factored in speed breakers in the design for this stretch?

A: Ar Meghal Arya: The road aspires to be universally inclusive and to achieve this we are introducing traffic calming measures. One such measure is a tabletop crossing that functions much like a speed breaker but does not harm the vehicle. At critical locations, these tabletop crossings will be introduced which will be at the same height as the footpath but at an elevated height from the road. We are also considering a different material for these crossings which is slightly rougher than bitumen to cause the vehicle to slow down.

The canopy above CP Ramaswamy Road is a blessing but it comes with an element of danger in the monsoons with trees falling? Have we done an auditing of the trees to ensure they'll withstand the onslaught of the monsoons in the future?

A: Ar Meghal Arya: We will audit the trees to find the ones susceptible to falling and prop some of them in order to prevent losing the trees. We will also work around the trees to prevent cutting of roots to make room for the utilities as much as possible.

From Mr Bharath Natarajan:

One particular aspect which I wanted clarity on is the utilities, where the roads are dug up frequently. This causes a lot of hindrances. It would be good if a plan is created which ensures that no roads are dug up regularly which often leads to the roads getting weaker and aspects such as tree roots getting cut. Could you please comment on that?

We spoke about the roads and the surface. What about the aerial element with the poles and cabling which create chaos, may fall and are threats to safety? Is there a way of streamlining these elements?

A: Ar Meghal Arya & Ar Vijay Arya: Both of these concerns are interlinlinked and can be addressed from the point of view of utilities. We are making necessary provisions to take telecom lines, gas lines and water lines below ground level in independent chambers. We are working to ensure that these systems are future ready and equipped to support future technologies and adjustments to a significant extent. We have developed the design based on inputs from engineers from various departments and service providers to understand their requirements.

Most digging up happens due to the absence of drawings and data, but now, after the implementation of this project, all consolidated data will be ready and it will help in case any other utility has to be incorporated in the future.

A: Mr Babu: The vision for the road design is for something that will support infrastructure for the next 30 years. While it cannot be avoided 100%, we wish to minimise road digging. In anticipation of projects such as the citywide Gas Pipeline project that will be implemented in the future, provisions are being made in the design proposal for these roads. As far as drainage and water lines are concerned, we are implementing rider sewers and rider water lines. These lines are going to be given as additions on both sides of the road on the footpath side.
The Megastreets project will help in setting higher standards/ benchmarks.

From Ms Sushila Natraj:

Table top crossings and uninterrupted pedestrian ways have been implemented in other parts of Chennai, particularly close to Binny Road. However they are not effective as they clog up traffic and are not used as intended. Have you checked the practical usage of table top crossing in other parts of Chennai?

A: Ar Tahaer Zoyab: One of the reasons why there is a problem at Binny road is the height at which the footpath is elevated. This makes the experience of walking on the footpath as well as crossing equally challenging. The ideal height for a table top to work effectively along with the footpath is about 15cm, and 20cm at the most. The optimum height and the consistency/

continuity between the footpath and the tabletop are elements that make movement seamless for the pedestrian. This is something that we are conscious about and will ensure to implement on site.

Could we see any examples of completed projects where an architectural drawing has been translated into reality?

A: Mr Babu: The pedestrian plaza at T Nagar is an example of an effective translation from drawing to reality. During construction, a certain allowance is made for modifications to respond to the site conditions. T Nagar to a large scale has been successful in realising the transformation envisioned. Parts of GN Chetty Road and Venkatnarayana Road can also be considered. While T.Nagar is largely commercial and CP Ramaswamy Road is of a mixed nature of use, all necessary surveys are being conducted to ensure accurate representation and understanding of the stretch for the design.

From Ms Vidya Pinto:

No one wants dustbins outside their gate. Have you considered waste collection points and systems in CP Ramaswamy Road? Are you also considering community compost areas along the road as well as E- Waste collection and waste segregation?

A: Ar Meghal Arya: We have taken cognizance of the waste management that is there in the city currently. The processes such as E- Waste and composting will be taken up as a separate project and will not be part of this project because this is something that needs to be centralised throughout the city. The design however makes provisions for spaces for segregated waste collection.

A: Mr Raj Cherubal: Waste is a mega project that extends beyond the street network. Plans are being drawn up to create systems for waste management throughout the city separately. However, we will arrange for a meeting to create a common layer between both of these projects. Garbage is something that will be taken seriously and integrated into this design as an independent project.

Have you also planned dedicated car parking spaces along the road factoring in the existing parking behaviour?

A: Ar Meghal Arya: Yes we have planned for dedicated parking areas at different points along the road. We are aiming at providing all kinds of parking while at the same time not compromising on design. While we have definitely factored in parking, we do not want to prioritise car parking over pedestrian movement. We wish to encourage commercial enterprises to take some responsibility for their parking share.We would like to work towards a balance and equity of the use of road space and give equal space to all users.

From Ms Deeptha:

I am an avid cyclist. I cycle around to get by the neighborhood extensively. The interaction between the fast moving traffic and the slow moving traffic on the road is a major concern. While Nilgiris is extremely beneficial to everyone for shopping, the parking around the area is not something that we have been able to handle and is a hindrance to moving traffic. I see that the design accounts for parking but I'm not sure if it is sufficient for stretches and situations like these. Accommodating for extra parking in these areas will really help.

The other thing about parking is that we haven't spoken about 3 wheeler parking. There are many auto stands along this stretch, especially close to Abhiramapuram.

A: Ar Meghal Arya: As far as parking for commercial establishments are concerned, we will make provisions for some of the parking in the area. But we would like to make sure that the establishment itself takes responsibility to create systems because they are profiting out of it. We do this primarily to create space for other kinds of road users including cyclists and pedestrians.

A: Mr Raj Cherubal: The issue of parking is relevant. As Mr Babu mentioned, the T Nagar pedestrian plaza now has an organised and efficient system in place for parking. This is because the design works hand in hand with the enforcement of a parking management system with technology and regulations in place. Parking Management is critical for the success of Mega Street. It is yet another layer that will be incorporated for the area by the GCC much like the waste management system.

I understand that the Mega Streets look at arterial roads but many of the small roads that connect to it such as the 3rd street of Abhiramapuram are low lying areas. I am concerned whether the implementation of a system on the main road will affect or address the level of water inundation in our street during the monsoons.

I would also like to know if any information design is being planned along with the implementation to take people through how to use a particular element or space.

A: Ar Meghal Arya: The project has included in it all levels of streets. While the Quick Win is an arterial street, we have also proposed to include certain smaller roads around to create a network and to achieve a trickle down effect with primary, secondary and tertiary scales of road working together.

As far as flooding is concerned, we are trying to understand if some amounts of water can be recharged which is going to be challenging considering the water table, some amount can be retained in parks for instance as well as some Corporation grounds that are being considered and whether the Buckingham Canal can be used as a reliable water artery to let water out depending on the location, topography and context. We're also looking at gradient sensitive designs for storm water drainage along the roads. At the same time, we have to ensure that the

utilities are not seen in isolation for a particular area of the city and are designed to connect to the larger network. We are cognizant about the water sensitivity in the area and will try to deal with it in as sensitive a manner as possible.

From Mr Swami:

Unlike T Nagar or other commercial areas, this area has got three different types of parking requirements based on time - all day, few hours and momentary. Presently the road has a changing carriageway size - it is wide in some portions and narrow in other portions. When a consistent carriageway is created how will it accommodate the peak hours and lean hours parking and will it create further traffic jams?

This road not only has motorists and pedestrians, it also has cyclists. Have we factored in a cycling lane?

On utilities, there is a 33mm ID duct given. This seems to factor only the telecom service provider. If so, only 7-10 24 fiber cables can be inserted. If it is factored for the service providers alone, it is better to have the cable laid to prevent all parties from trying to cut open the duct because each person will use a different vendor's cables. I also think the cable operators should be considered along with the service providers while calculating the ducting needed because they use thick cables as well.

About the trees, many of them are about 50-60 years old. Many of them were planted when there were no concrete buildings. The fibrous rooted ones are losing strength because of the concrete buildings leading to them falling. We should think about tap root trees that will not be impacted because of concrete. Trees that withstand heavy rains are also important so that the branches do not droop because of the moisture intake. Please also consider whether the tree roots will impact the underground cabling or interact with them.

Street maps are another suggestion to help people move through the area.

A: Ar Meghal Arya: As far as the cables are concerned, we will be ensuring that they are laid during the project and not by the service providers.

We will try to avoid situations/ incidents where there is an entanglement of trees with the utilities.

We will take all the factors that you have given us when we work with the trees of the area and while selecting trees. We are working with local native species for the design.

A: Mr Babu: Many of the trees that have been planted earlier are not native trees, they are rain trees that are foreign species. We will replace the trees that are not stable and look at selecting new trees that are native to and familiar with the Chennai environment.

From Ms Aruna Subramaniam:

In the context of Smart Cities - For a city that is so rich in history, what are the elements or vignettes of the city that you are looking at bringing in that are not synthetically smart but bring out the typical old Madras character using local practices whether it is the materials that are used or certain points that are created within the street?

Why was the concept of seating on the sideways imagined for the road, which is just a busy thoroughfare?

A: Ar Meghal Arya: One of the reasons why we wanted to take up Mylapore was to work with its heritage and cultural activity. We are working to be local and be sensitive to its local qualities. In terms of materials, we are limited in terms of expression of historicity because we will only be working with road surfaces. But we are looking at small interventions such as using natural stone instead of bitumen in certain areas as surfaces and are trying to incorporate maps and wayfinding along with some form of art work that the design will supportbeinging in the character of the locality as a principle.

From Mr CR Balaji:

The median portion is usually neglected with monotonous black and white edges. The pavement should also be free of encroachments. It should be barricade/ obstruction free and clean, and the bus stops should be beautified. Is there a proposal for a storm water drain in this road? Will cabling be taken underground as in Nungambakkam?

A: Ar Meghal Arya: Yes, we're looking at creating storm water drains on both sides of the road.

With respect to the median, we have proposed a green median throughout the stretch. For encroachments, we're looking at stricter implementation for the management of the streets. Yes, we're looking at cables being taken underground.

A: Mr Raj Cherubal: Maintenance will be part of the project taken care of by GCC, and not an afterthought.

From Mr Sridhar Venkatraman:

TTK Road and CP Ramaswamy Road are the busiest roads in this area that connect two extremes of the city. They are not just used by the residents here, but by people coming from the OMR side towards the city, people coming from T Nagar side crossing to Mylapore. If the thoroughfare beside the flyover is blocked, the access from T Nagar side is hindered. The change in directional flow might lead to a lot of difficulties as per past experiences where the

change faced a lot of resistance from the residents. So changing the traffic flow is something that needs to be addressed by considering all directional flow at all junctions.

Please share any slides offline that you are seeking input on

A: Ar Vijay Arya: We will have to study the traffic volumes and consider traffic under the flyover to make sure traffic is not held up. By doing a one way loop, there will be easy flow of traffic considering only a small part is being converted into a shared street network. We have considered these factors and routes in the proposal but based on your suggestion we will relook upon the possibilities and will work with you to better understand the traffic flow.

From Ms Meenakshi Karuppiah:

Are there going to be more discussions further down the design process? And before implementation?

A: Ms Keerthi:(chat): Yes, we will be holding many more discussions and engage with you throughout the process. We intend for this to be a collaborative exercise throughout.

A: Ar Tahaer Zoyab: We will be extremely conscious of any kind of activity happening on the street. We aim to keep updating and factoring any new data/ modifications.

From Mr Viswanathan:

Along CP Ramaswamy Road there are 2 GCC owned old shopping complexes. We would want them to be redeveloped into a larger facility with basement parking followed by Mega Streets Project.

A: Mr Babu: It falls under a different category but this can be taken up under a shopping complex project to create captive car parking.

From Mr Vincent D'Souza:

What real change will this project bring if it is a project in isolation? All that can be done is neaten it up a bit. There is nothing smart or mega about this. The other projects in this neighbourhood - Luz Church Road, Kalvi Varu Street, Mada Streets have come to naught. What have we really gained from this project? Can you manage traffic/ parking? T Nagar has been whitewashed. The project needs to be humble and do something basic. CP Ramaswamy Road will be an island of development.
Is there a timeline?
What is the communication that is taking place during execution?
The management is absolutely poor.

A: Mr Raj Cherubal: Pedestrian Plaza was a project that everyone was cynical about on its announcement. Today it is one of the most popular places in the city. We will try to emulate the system where policy and management go hand in hand which is a key element for the plaza's success.

A: Ar Meghal Arya: CP Ramaswamy Road is not being done in isolation. The megastreets project looks at the streets in a holistic manner and constitutes the redevelopment of 100km of streets which has been divided into 6 package areas with each of them allocated to 6 different consultants instead of 1 which allows to zoom in to each area in great detail as well as to seek innovations. This is one of the largest sets that any corporation in this country has taken up. No corporation in the world will be able to execute something of this scale at one go, hence a stepwise process has to be followed. This particular meeting is the way forward to bring in people's perspective and the residents into the game of design.This is the second meeting and we will continue to have more such meetings. This meeting is to take your suggestions and we will float the drawings to coordinate with and get a better understanding from you. We will look at issues such as parking from multiple perspectives. We are looking at not just arterial roads, but all layers of road across the city on a pilot basis so we can see what the successes are that can be replicated. It is a complex organisation, therefore we are aiming at bringing in the perspective of residents who will consequently be the owners or primary users of these spaces.

From Ms Yashodhara Narayanan:

If you're looking for help from the residents please approach us so it can become a very collaborative project.

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Minutes of Meeting:

To/Attention	**GCC**	**Date**	08.12.2020
From	Design team - IBI Group & CUBE	**Project Ref**	S.P.D.C 0259/2020
Subject	MOM with Stakeholders for Chennai Mega Streets – Package 05		
Present	**GCC, PWC, CSCL, IBI, CUBE, ITDP, Velachery Stakeholders [list of stakeholders in annex]**		

The Stakeholder Engagement for Chennai Mega Streets – Package 5 was conducted as an online meeting due to the pandemic situation limiting face to face interactions. The agenda of the Meeting was to

a. Introduce the Mega Streets Project
b. Explain the Vison and scope of the project
c. Discuss the challenges and opportunities at ground
d. Discuss the design proposal for the Quick Win Stretch
e. Get feedback on the design, existing challenges and answer any queries regarding the project

Sl. No	Concern	Location	Name of Stakeholder	Comments from Stakeholder	Response
1	**Existing activities on the street**	**Segment 5**	**Mr. Vijaykumar**	Since the width available in segment 5 is not consistent, the design could look to incorporate parks children, play area and walking spaces to deter other activities like cab parking and dumping of material from happening. We would like a walking area that is part of a network.	Has been taken into design consideration. The Segment 5 has been designed as an NMT priority street with walking/cycling trails and pocket plazas along the travel lane.
2	**Vending areas**	**Segment 2**	**Ms. Ashwathy**	Vendors opposite Park Hyatt that occupy the footpath which is largely male dominated, making it unsafe for women and children to walk near Nilgiris at night.	Has been taken into design consideration. The vendor zone has been re organised within the space with additional lighting, seating and dustbins with clear space left to walk on.

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3	**Seating near Vendors**	**Segment 5**	**Ms. Ashwathy**	Racecourse Road tend to be dark and unsafe especially for women.	Measures to increase time specific pedestrian footfall have been taken by introducing activities like parks, walking cycling trails, open gyms, obstacle courses and art walls.
4	**Pedestrian crossings near schools**	**Segment 2**	**Mr. Senthil**	Poor signage near the schools and to warn that traffic needs to slow down since there are 3 schools.	Tabletop crossings have been provided with signage and lighting
5	**Pedestrian crossings near schools**	**Segment 2**	**Ms. Ashwathy**	Intersections are too wide and are difficult to cross	Intersections have been compacted and segregated crossings for pedestrians and cyclists have been provided.
6	**Garbage dumping**	**Segment 5**	**Mr. Senthil**	Stray dogs along the street since the Golf Club Annex Kitchen dumps waste at night, making it unsafe even for drivers.	GCC will ensure enforcement against dumping of waste in areas without dustbins and coordinate with waste collection management system.
7	**Poor Street lighting**	**Segment 5**	**Mr. Revi Thomas**	Unsafe to be used in the early morning and after sunset due to poor street lighting.	Street lighting for pedestrians as well as travel lanes have been provided at regular intervals along with activity areas to attract pedestrians making the area safer.
8	**Data cables**	**All Segments**	**Mr. Vijaykumar**	Data cable on trees cause multiple problems as they fall, weigh down trees and break branches. This also cuts across the street when users cross the street.	Has been taken into design consideration in underground utilities by providing dedicated lines for all utilities.
9	**Garbage bin locations**	**Segment 1**	**Mr. Vijaykumar**	The location of the bins curb visibility and take away useable space. The collector trucks need to place it back in the demarcated location.	Has been taken into design consideration by consultant and GCC will look into the enforcement of the same.
10	**Existing Cycle Paths/Markings**	**All Segments**	**Mr. Revi Thomas**	Existing cycle path is not useful as cyclist don't stand a chance between all the traffic and the space is taken over by other users.	Buffer between motorised and non-motorised lanes to ensure safe movement of cyclists on the street where vehicular speeds are higher.
11	**Play area for children**	**Segment 1**	**Ms. Ashwathy**	Would like the green space outside Park Hyatt to have some play equipment and	Activity equipment's have been introduced within the Corporation Park and on the

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				safe pedestrian crossings to access it.	opposite side of road for the ease of access of residents.
12	**Traffic Flow & Public Space**	**Segment 1**	**Mr. Revi Thomas**	Prefers the road to be made 2-way local streets and prioritise it as a pedestrian area and a destination.	The section is proposed as a 2 Way local street with pedestrian priority in the design.
13	**Paver Blocks**	**All Segments**	**Ms. Ashwathy**	How will paver blocks be layed keeping in mind the finished level and see to it that it does not come off over time and usage.	Ensuring sound base layers during implementation and monitoring by GCC appointed Project Mgmt Consultants will be taken into consideration.
14	**Encroachments**	**Segment 3**	**Mr. Revi Thomas**	Kanigapuram was a village and now uses the sidewalk with spill over activities	Has been taken into design consideration and addressed with maintaining a uniform travel lane and re organising the remaining space efficiently between parking, walking public useable space.
15	**Check post Junction traffic jam**	**Segment 3**	**Mr. Revi Thomas**	Check post Jn needs to be opened to make space for traffic.	Has been taken into design consideration by redesigning the intersection geometry.
16	**Rainwater drainage**	**All Segments**	**Ms. Ashwathy**	Rainwater currently stagnates on the road and makes it difficult for users.	Has been taken into design consideration in underground utilities using SUDs and rain gardens
17	**Maintenance and operations**	**All Segments**	**Mr. Vijaykumar**	What are the measures that will be taken to maintain this design after implementation?	Based on the learning from the T-Nagar Plaza, we are working together across the departments and make sure that maintenance can be done by setting up a dedicated operations and maintenance team as part of the processes.
18	**Maintenance and operations**	**All Segments**	**Mr. Dilip**	People should also take responsibility and ownership of spaces around their properties.	GCC to look into the matter during setting up processes for operations and maintenance
19	**Stakeholder inputs and water logging.**	**Segment 2**	**Mr. Srinivasan**	Since the road is finished as a concrete road, there are multiple water logging issues.	Will be taken into consideration as per each site condition. CSCL will also get more inputs from stakeholders to understand on ground realities.

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20	**Project timeline**	**All Segments**	**Mr. Senthil & Mr. Vijaykumar**	Possible estimation of time that will be taken to finish implementation of the project.	The project is currently in design phase across all 6 packages. The tendering for the quick win stretch will be done in the coming few months after which capable and experienced contractors will be hired for execution. The execution will take about a year or so.
21	**Vandikarna Theru/ Cart track Road**	**All Segments**	**Mr. Revi Thomas**	Can this be included into the package as it has a lot of history and is an important link	May be included into the package in subsequent phases.
22	**Velachery Lake**	**All Segments**	**Mr. Revi Thomas**	Lake has shrunk, if it can be cleaned, it can be made a destination and be used as public space.	The Lake development is under the purview of PWD but may be considered in the future if ownership is transferred to GCC.

Attachment 1
Chennai Mega Streets | Velachery Stakeholder Consultation
2020-12-08

Stakeholder Attendees List for Quick Win				
Sl. No	**Key Local Stakeholders**	**Contact**	**Phone No**	**email id**
1	Bicycle Mayor of Chennai	Felix John	8939233053	fmrock@gmail.com
2	Resident	Aswathy Dilip	9840269226	aswathy.dilip@itdp.org
3	Resident	Achuthan	9445967430	achuthan@itdp.org
4	Resident	Mr. Mootha	9383441414	rajmootha@respark.iitm.ac.in
5	Resident	Mr. Prabu M	9677786886	prabumanivannan@gmail.com
6	Resident	Mr. Vijaykumar M	9500035956	terrainlabs@gmail.com
7	Resident	Ms. Elakkiya	9176622901	office@cubeiitm.org
8	Resident	Mr. Gobi	7829607979	kevingobi@gmail.com
9	Resident	Ms. Madhavi	NA	madhavi@iitm.org
10	Resident: Selvaranjaraja Street	Professor Kumar	9841783850	gkumarchemist@gmail.com
11	Resident: Alsa Deer Park	Srinivasan K	9841424270	ppsrini@hotmail.com
12	Resident: Sudarshan Apartments	Dilip K J	9840070385	dilip@nkefloors.com
13	Arsha Vidya Mandir	Mr. Senthil Kumar	9500013107	r_senthil@rediff.com
14	Nexa Showroom	Mr. Ramanan	9789482661	NA
15	Resident	Mr. Revi Thomas	9884499456	revithomas@gmail.com
16	Resident: SICAL Raceview Apts	Mr. VijayKumar	9884090417	evk27@yahoo.com
17	Resident: SICAL Raceview Apts	Mrs. Vijaykumar	NA	evk27@yahoo.com
18	Resident	Mr. Vinoth	NA	wenodragon@gmail.com
19	Resident	Mr. Rakshit	NA	rakshu51087@gmail.com
20	Resident	Mr. Parameshwaran	NA	NA
21	Resident	Ms. Tiriputara	NA	tiripuratiripura08165@gmail.com
22	Resident	Ms. Nirupama	NA	NA
23	Resident	Mr. Bhrigu Sasson	NA	bhrigusasson1@gmail.com
24	Resident	Mr. Aditya	NA	NA

STAKEHOLDER ENGAGEMENT MEETING FOR CHENNAI MEGA STREETS PROJECT

Date: **19 November 2020**

Venue: **Online (Zoom Meeting)**

Time: **4:30 pm – 6.30 pm**

Program:

4:30 PM to 4:45 PM – **Introduction to the project**

4:45 PM to 5:20 PM - **Presentation of vision and designs for quick win stretches i.e. Taluk Office Road, Gandhi Mandapam Road and Canal Loop roads**

5:20 PM to 6:30 PM – **Q+A session with attendees**

LIST OF ATTENDEES

1. **Mr. Babu,**
   Superintending Engineer/ Special Projects – Greater Chennai Corporation and GCC team.
2. **Mr. Biju Kuriakose,**
   Urban Designer- Partner, architectureRED and other team members
3. **Vidhya Mohankumar**
   Urban Designer – Founder, Urban Design Collective and other team members
4. **Complete list of invitees** – Anx 01 – Stakeholders Invitees List
5. **Complete list of attendees** – Anx 02 – Stakeholders Attendees List

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KEY TAKEAWAYS

1. Road safety for pedestrians and cyclists was highlighted by several attendees as a major concern especially on arterial roads such as Taluk Office Road, Sardar Patel Road and Gandhi Mandapam Road.
2. Encroachments in some stretches (Ponniamman Koil Street, Gandhi Mandapam road) were also brought up as hindrances to creating dedicated space for walking and cycling.
3. Poor lighting resulting in reduced feeling of safety and security after dark was also raised as a concern on Ponniamman Koil Street.
4. Need for programming to include all ages and gender was highlighted.
5. Services upgrade and reorganizing was also raised as a matter of immediate concern.
6. Pick-up/ drop-off points outside schools and campuses need to be integrated with the ROW design.

SUMMARY OF PROCEEDINGS

6 neighbourhoods have been identified by the GCC under the Chennai Mega Streets project. **ArchitectureRED and Urban Design Collective** are working on **Package 6**, which is a 21 km stretch in Adyar. On 19th November 2020, the two teams discussed the **Quick Win projects** coming under this package. This includes **Taluk Office Road, Gandhi Mandapam Road and a loop connecting the Madhya Kailash junction, West Canal Bank Road and East Canal Bank Road.**

Vidhya Mohankumar from Urban Design Collective gives a background of what we will be discussing today. **Biju Kuriakose from architectureRED** explains how the project is envisioned to build upon the existing character of Adyar as a neighbourhood of trees (as it currently has the highest percentage of trees in the city) and acts as a portal into the city. He talks about how we are looking to strengthen this identity through the power of place-making. We will be looking at the project with 5 major design principles in mind – the environment (by using permeable pavers, green infrastructure etc.), mobility (to connect the entire neighbourhood for non-motorised transit), liveability, inclusivity, and functionality (integrating the utilities, both above and below, into the design). We are also looking to increase tree cover and give the people a sense of pride and belonging by making the roads safer for pedestrians and cyclists.

Taluk Office Road:

In Taluk Office Road, there is a lot of activities that happen on the carriageway itself, because of the lack of sidewalks. The width of the carriageway is also wide, making it challenging for pedestrians to cross the road. The bicycle track that is on the road level is completely taken over by cars and bikes. He explains how the Taluk Office road is designed to act as a gateway/ portal to Adyar. He talks about carving out continuous parks on the western side of the road and creating a plaza at Little Mount junction, where the metro is coming in. An open space system will be introduced, linking the proposed metro station for residents and students of Adyar. A safe network for pedestrians and cyclists will be created. Wider footpaths would be given for to accommodate the extension of existing activities on the eastern side of the road. The proposal includes a plaza outside the court and an organised place for retail activities on the northern side of the road. The park on the western side of the road will house multiple programs to engage a variety of users from all age groups. A two-way cycle paths will be integrated along these parks as well. It would not just be a space to walk, but will also become a place to congregate, with the addition of different street furniture. The bicycle track will be protected from the road by introducing a green strip in between them. An ecological park will be introduced along the Governor's bungalow junction and will be transformed into a ceremonial place.

Gandhi Mandapam Road:

In Gandhi Mandapam Road, what is unique about it is that half of the entire road has an institutional character, dotted by dead compound walls, and our challenge here was to streamline the traffic in the sea of asphalt. The other half of the road is largely mixed use, housing commercial and residential activities. There are no sidewalks in many places, and people end up parking along the edges of the road. We want to widen the sidewalk and introduce a protected bicycle lane. Additionally, we will integrate street furniture along institutional entries like Anna library and AMM School treat the space in front of institutions as an extension of this street, to allow for proper crosswalks, we will be streamlining the vehicular traffic at the intersections by widening the sidewalks. Commercial activities spill out into the plaza of sorts. We will be widening the footpath and integrating seating in front of school. One lane of the carriageway in front of the school will be dedicated to slow-moving traffic. As we come towards the Kotturpuram Bridge, there is a temple which makes the carriageway tight. We are exploring the potential of making that space as a table-top plaza to slow down the traffic there.

Madhya Kailash Junction:

In Madhya Kailash junction too, we are looking to maximise the public space by making the carriageways efficient and allocating a well-defined drop-off zones for buses and autos.

West Canal and East Canal Bank Roads:

Vidhya Mohankumar from UDC starts to explain The Loop connecting the Madhya Kailash Junction, Kasturibhai Nagar station, Canal bank road, and Kotturpuram Bridge. There is a PWD land that abuts the Buckingham Canal, which will be designed as a linear park. On this loop, right of ways vary from 9–11m. There is a small stretch with a 6 m right of way from the Ponniamman junction. To design a greener neighbourhood, we will be adding 242 trees along the loop which will help alter the microclimate of this loop, making it significantly cooler. The proposed alignment of West Canal Bank Road includes two 3 m wide carriageways and minimum 1.8m as footpath. Landscaping, sporting and play areas are planned in the linear park. The 6m wide section stretch is designed as a paved shared space, in an effort to make it safe for pedestrians. The intersection on the junction of Ramachandra Adithanar road, which houses several schools is being treated differently so as to slow down the traffic as this cross road.

DISCUSSION HIGHLIGHTS

Mr. Babu, Superintending Engineer, GCC Special projects division:

Please note that there is a proposal for a L-shaped bridge on the Madhya Kailash Road.

Prashanth Raju, resident of Srinagar Colony off Taluk Office road:

- At Taluk Office Road, it is difficult to cross the road. There is a foot overbridge that is sparingly used.
- There are lots of vehicles that are parked in front of the court.
- There are many vendors and lots of intrusions that spill onto the road.

Biju Kuriakose, architectureRED:

- We are proposing a signal in the Srinagar Colony junction. In addition to that, we are adding many tabletop pedestrian crossings.
- We are widening the sidewalks and integrating auto stands, vendors and parking spaces within it. This will stop the activities from spilling over into the carriageway, reducing the chaos.
- We are streamlining the traffic by standardising the width of carriageway throughout the road.

Prashanth Raju, resident of Srinagar Colony:

- Could you explain the triangular recreational loop that is being designed?

Biju Kuriakose, architectureRED:

- The proposed metro station is the one that is closest to Adyar. If we give proper infrastructure and enhance the experience by introducing a park, people (students and residents alike) will be encouraged to cycle, walk and use the metro.

Manoj Thangavelu, resident of Gandhinagar:

- When we develop the Canal Bank loop, it becomes a bypass to the main road. Is there a possibility to restrict heavy vehicles traffic into Gandhinagar when developing the loop?
- First right on the East Canal Bank road is the First Main road of Gandhinagar. It houses a lot of commercial activities, making it a heavy traffic zone. If we could develop this road to act as a bypass road for heavy vehicles, it would lighten up the traffic on the Fourth Main road of Gandhinagar which has a lot of student activity. There is a lot of heavy vehicle traffic on the Fourth Main road from 7:30 to 9:30 am and 4:30 to 6:30 pm.

- Do we have space in the Ramachandra Adithanar intersection to do the tabletop crossing and pedestrian walkway?
- When is the road along Adyar Bridge to Kotturpuram coming up?
- I have shared a report of our vision, as residents of Gandhinagar.

Vidhya Mohankumar, UDC:

- Residents of Gandhinagar who want to avoid the Madhya Kailash signal take the Ponniamman Koil street from Anna Salai to reach Sardar Patel road.
- There is a limitation in terms of taking traffic counts due the pandemic, but most people in our team are residents of Adyar and both our offices are also located in the neighbourhood; so our design is a reflection of our collective experience.
- The report shared is very comprehensive, but the scope of the project is to develop the primary road network. We've also identified certain secondary streets that complete the primary street network. Our ideas to develop the neighbourhood are in concurrence, but our design is a reflection of the amount of space available in reality and the scope of project.

Smitha Sadasivan, Accessibility and Inclusion Consultant, Disability Rights Alliance TN and resident of Ponniamman Koil Street:

- There's heavy traffic in the mornings and evenings in the Ponniamman Koil junction and the space available is quite tight. How do we make it a safe space for wheelchairs? This junction connects various activities like school, commercial activities etc.
- There was a proposal for an overhead bridge to which the residents opposed and so GCC has dropped plans to execute it.

Greater Chennai Corporation:

- Smitha, there is no overhead bridge proposal.
- Manoj, the proposal for a road along the banks of Adyar (Kotturpuram to Adyar) comes under CRZ and requires a clearance. That's why the project is stuck. It is in the planning stage. But we need support from residents and associations like RWS. Kindly give your support in writing. There is a list of roads in the architect's scope but they can add this to their proposal additionally, if required.

Manoj Thangavelu, resident of Gandhinagar:

- Sure, we can give it you.

Vidhya Mohankumar, UDC:

- We would be willing have a separate meeting with DRA to explain our design but we have ensured that all the streets designed by us are wheelchair friendly.

Ranee Vedamuthu, Dean of SAP Anna University, Chennai:

- Taluk Office road and Gandhi Mandapam road have fast-moving traffic. With universities and schools along Gandhi Mandapam road, many accidents happen and some are fatal. This is especially the case in front of Anna University, Anna Gems School etc. Introduction of table top crossings would be helpful.

Biju Kuriakose, architectureRED:

- There are table top crossings every 200–250 m, since we are looking at these roads as urban streets.

Ranee Vedamuthu, Dean of SAP Anna University, Chennai:

- It would be nicer to have signals that operate at specific times of the day since it is extremely difficult to cross the roads.
- A lot of taxis and autos wait outside the campus. These pick-up points need to be integrated as a part of the design.
- To GCC – Many structures on the Ranjith Road-Gandhi Mandapam road-Ponniamman Street junction are encroachments. Nobody is addressing that. Copper Kitchen which was constructed recently, right next to Kotturpuram Police Station has encroached the pavement, which is a public space.

Dr. Elango Lakshmanan, Professor at Dept. Of Geology in Anna University:

- The use of permeable pavements and environment-friendly pavers instead of the use of stone slabs on pedestrian pathways is commendable.
- We could introduce railings at the edge of pedestrian pathways because accidents often happen once in a week at these critical junctions.
- Bunch of cables running along the median, get cut and lie on the road often. It is hazardous for the bike riders.
- Current storm water drains are not effective. Soon after the rains, water gushes out of the universities since they are at a higher a higher level than the road.

- We must provide cycle track throughout the entire length, taking back the space encroached by some commercial establishments.
- Table top pedestrian crossings are necessary.
- Platform work has commenced in front of CLRI already.
- 2.1 m pedestrian pathways are not required, there are not so many pedestrians.

Biju Kuriakose, architectureRED:

- Cycle track is continuous. In some places it is protected by a green layer which is missing when the space is tight. It will be a continuous network.
- Work that is happening now is not a part of this project.
- Permeable paving along sidewalk needs to be friendly for disabled people as well. So though it is used in particular places, we have to look at walkability of all users when deciding materials and finishes.
- Wider driveways lead to a messier street as traffic changes lanes etc., making it important to organise the street. Minimum 1.8 m clear is required for sidewalk and the rest is organised for cycle track etc.

Poonam Natarajan from Vidya Sagar school for the disabled, located on Ranjith road off Gandhi Mandapam road:

- The height of the pedestrian path is always varying. It becomes most inaccessible for wheelchairs. We need the same height of pedestrian pathways all across the city. The width for the wheelchair to go clear of the trees, stones, utility etc. We need a clear space for wheelchairs to move.
- How are we addressing the land in front of Planetarium on Gandhi Mandapam Road?

Vidhya Mohankumar, UDC:

- Varying carriageway widths leads to crisscrossing movement of vehicles, overtaking, speeding etc. It is critical to streamline vehicles.
- In the reclaimed spaces, we've provided a minumum of 1.8 m for pedestrians. A minimum of 1.2 m is required for a wheelchair to pass through. We have given bicycle tracks in the rest of the available space, which also requires a minimum of 1.5 m. If there is not enough space for a 1.5 m cycle lane, we have opted to avoid the bicycle track in such spaces and give more space for pedestrians and planting strips. The idea being that the street itself will become safer for cyclists after streamlining the traffic.
- Regarding the issue of cables hanging along the median, utilities both above and below ground are being addressed in the project. So, most of these cables will run below grade.

Felix John, Cyclist:

- The current problems we face is that when we cycle from Little Mount, it is very difficult to cross and go to the other side. If we cycle from Anna University, the track suddenly disappears. The road shrinks and after Madhya Kailash, there is no track.
- Speeding vehicles are the biggest challenge. Cycle lanes need to be continuous.
- People are going to feel very uncomfortable, giving up so much space. We need to create awareness during this transition phase, which will help people adapt to this new alignment of roads.
- There are a lot of schools in this locality. Introduction of cycle tracks will encourage students to cycle more often.
- Generally, what has happened in the past is that large plans are made. But it becomes inefficient during the execution phase. It is crucial that proper enforcement is supplied and rules are enforced.
- Some times of the day, there might not be any traffic on the cycle track. When it is empty, people shouldn't encroach this space. It shouldn't become a daily challenge for cyclists to avoid these encroachments. Which is why it is important to have a transition plan.

Aditi Subramanian, resident of Kotturpuram:

- There is a Tasmac on Ellaiamman Koil Street. That stretch does not have good lighting. Walk from the MRTS becomes unsafe at night because of the kind of street activities that happen here, the bad lighting and the insufficient amount of space.
- This junction has a lot of male-dominated activities; including activities for women and children will help make it safer.
- Utilities keep getting dug up and become a nightmare during monsoons.
- It is very difficult to cross the road. The width of footpath becomes narrower. So we end up negotiating spaces with trucks, cyclists etc.

Biju Kuriakose, architectureRED:

- All the streets are designed with lighting in mind, we are working with lighting designers. We are also opening up the intersection to make it a plaza, with the introduction of pedestrian lights in addition to street lights.

World Bank officials:

- How do we intend to continue the discussion with citizens and residents of the area?
- What is the feedback mechanism we are looking at, during the construction period?

- What are some of the points that consultants and contractors need to keep in mind during the construction phase?

Manoj Thangavelu, resident of Gandhinagar:

How are we addressing the issue of parking along the roads of Gandhinagar?

Vidhya Mohankumar, UDC:

There isn't much of an issue of parking because one side is the hospital and other side has residential homes that front onto the other streets like Adithanar road and main road.

Manoj Thangavelu, resident of Gandhinagar:

Services underneath the roads of Gandhinagar are a disaster. How are we addressing that?

Vidhya Mohankumar, UDC:

- We have been in touch with all the agencies that provide these utilities. We will be reorganising and accommodating them along the right of way, in a manner that it works with our design of the above grade. This is a scope of the project.
- There will be a mild disruption during its implementation but those will be dealt with during the project management and construction stages. We hope that there will be adequate communication with the residents beforehand.

Manoj Thangavelu, resident of Gandhinagar:

A survey of services must be done of the overall neighbourhood.

Biju Kuriakose, architectureRED:

Though we are calling it the next phase, it is very much a part of our plan. We will be completing the neighbourhood in totality. The phasing is majorly done for construction feasibility.

Manoj Thangavelu, resident of Gandhinagar:

What is the timeframe for that?

Biju Kuriakose, architectureRED:

We will start looking at the details for this road once we issue tender drawings for these roads, possibly in a month or month-and-half. We work on the next phase soon after that and we will not be waiting for construction of this to complete to start work on that.

Manoj Thangavelu, resident of Gandhinagar:

What is the current right of way and are you shrinking the roads?

Vidhya Mohankumar, UDC:

The current right of way will be around 7 m and we will be shrinking the roads to 6m in the interest of road safety.

Manoj Thangavelu, resident of Gandhinagar:

What about the existing trees that are on the footpath?

Vidhya Mohankumar, UDC:

They will be retained and more will be added.

Manoj Thangavelu, resident of Gandhinagar:

They are on the sidewalk, in addition to utility boxes, manholes etc.

Vidhya Mohankumar, UDC:

Utility boxes will be moved and we are making sure to provide an unobstructed 1.8 m clear walkway as mandated by IRC standards.

Conclusion:

The meeting was closed with thanks expressed by the GCC and the architects to the participants for their time and participation. The participants also expressed their encouragement and optimism on the design schemes presented and the solutions proposed for various issues currently present. They also promised their support and assistance to the project by means of meaningful engagement with the team.

Minutes of the Co-ordination meeting for "Preparation of Street Network Plan and Detailed Design under Mega Streets Project in Chennai" held on 18.09.2020 at BSNL Office, Nungambakkam.

In the Chair:

Ms. S. Renukadevi, Deputy General Manager (CP&MM), BSNL

List of Participants:

1) Mr. Logeswaran, Assistant Executive Engineer, Special Projects, GCC
2) Ms. B. Anandhi, Assistant General Manager(CP&DCM), BSNL
3) Divisional Engineers, BSNL
4) Sub-Divisional Engineers, BSNL
5) Junior Engineer, BSNL
6) Junior Telecom Officers, BSNL
7) Programme Management Consultant/CSCL
8) Representative from ITDP
9) Consultant team of 5 packages

Points Discussed:

The Chair welcomed all members and briefed on the agenda of the meeting. In continuation to Pedestrian plaza, GCC is planning to carry out complete street network plan for about 100 more km across Chennai. This is an introductory meeting with the consultants and officials of BSNL to have a seamless coordination with regard to data collection, understanding site issues, future proposals, etc.

Programme Management Consultant, CSCL apprised BSNL officials about the mega street project with regard to concept of

the project, list of areas/package considered under project, list of corridors taken under quick win project in each package, etc.

Consultant presented about list of roads in Mylapore area under the project and detailed about the arrangement of Underground utilities through tentative cross section of the road.

DGM (CP&MM) insisted that GCC team shall ensure minimum hindrance to the existing customers during execution of the project. Further, it was explained about the issues faced during the execution of Pedestrian plaza at T.Nagar.

DGM (CP&MM) informed that due to shortage of manpower in BSNL, concerned contract team shall be in continuous co-ordination with the officials of BSNL during execution.

Consultants enquired about the provision of sharing of ducts along with private operators.

DGM (CP&MM) informed that ducts provided for BSNL are exclusive line and private operators are not allowed to share the ducts of BSNL ducts. Further, it was informed that ducts are provided and in major road networks and cables are laid directly on interior roads.

DGM (CP&MM) informed that list of BSNL officials for each package will be shared with GCC shortly.

The meeting ended with the Chair thanking all the members for their participation.

G. Rogram 18/9/20

Asst. Executive Engineer

Special Projects department, GCC

Minutes of the Co-ordination meetingfor "Preparation of Street Network Plan and Detailed Design under Mega Streets Project in Chennai" held on 07.01.2021 at Urban Administrative Building, MRC Nagar, Chennai.

Conducted by:

The Superintending Engineer, Special Project, GCC

The Superintending Engineer (Central), CMWSSB

The Superintending Engineer (Planning & Design), CMWSSB

List of Participants:

1) Assistant Executive Engineers, Special Project, GCC
2) Assistant Executive Engineer (P&D), CMWSSB
3) Deputy Area Engineers, CMWSSB
4) Assistant Engineers, Special Project, GCC
5) Assistant Engineers, CMWSSB
6) Programme Management Consultant/CSCL
7) Representatives from ITDP
8) Representatives from Consultants

PointsDiscussed:

SE, Special Project, GCC briefed that the agenda of the meeting is to finalise the design and material specification of various components such as Rider Water line, Rider Sewer line, House connections, etc.

Rider Water Line:

The pros and cons of various materials such as DI, CI and HDPE were discussed before finalizing the material for Rider water line.

SE (Central), CMWSSB informed that average life span of DI pipes would be 10 to 15 years only

AEE (P&D), CMWSSB conveyed that operation and maintenance of HDPE pipes would be difficult

SE (Central), CMWSSB recommended to consider **CI pipes with minimum size of 150mm dia.** Further, it was informed that CI pipes would be coming with inner coating and gasket joint (Tyton).

DAE, CMWSBB informed that at junction locations, T-connection shall be provided and with pipeline for 30mts. in the lateral direction

SE (Central), CMWSSB conveyed that house connection shall be extended to the individual property up to an average distance of 5mts inside the property area. There are different size of ferrule and connecting pipes such as 15mm, 20mm, 32mm and 40mm dia. The size of the ferrule and pipes depends on the property size / number of tenements. It was informed that a chart is available to calculate the size of the pipes and the same will be shared by CMWSSB. **The house connection pipe shall be MDPE pipe with saddle connection**.

SE, Special Project, GCC informed the consultants that all the components should be included in the BOQ.

SE (Central), CMWSSB informed that Valve chamber should be provided at every location wherever the proposed line joins the existing main line and at all junction locations.

SE, Special Project, GCC enquired about the removal of existing dormant water lines and availability of rates for the same.

SE (Central), CMWSSB informed that salvage rate is available and the same will be shared with GCC.

DAE, CMWSBB informed that Sleeve provision should be considered wherever water line is crossing SWD alignment.

SE, Special Project instructed the consultants to consider the cost of damage to the other services and inter connections.

Rider Sewer Line:

The pros and cons of various materials such as CI, Stoneware and HDPE were discussed before finalizing the material for Rider sewer line.

SE (Central), CMWSSB recommended to consider **CI pipes with minimum size of 250mm dia.** The CI pipes will be coming with Tyton joints.

DAE, CMWSBB informed that size of the pipe should be based on the population projection/house hold size.

SE, Special Project, GCC enquired whether DAE's can help out the consultants in the calculation to arrive at the size of the pipes. Further, it was advised that the design shall be carried out by considering the future requirements i.e., for the actual FSI of the land area.

SE (Central), CMWSSB informed that DAE and AE's would extend their support for arriving at the pipe sizes as per the design.

Package-5 Consultant displayed the drawings of existing lines along Velachery Main road and informed that there are currently 4 to 5 lines available.

SE (Central), CMWSSB clarified that the lines could be pumping mains or feeder mains. Also, informed the consultants to visit the site along with DAE and confirm the same.

SE (Central), CMWSSB further advised that any lines which are old and damaged shall be replaced with new lines.

SE, Special Project, GCC suggested to have 600 x 600mm chambers for the house connections.

DAE, CMWSBB conveyed that Insertion manhole would be of varying depth such as 1m, 1.5m, 2m and 2.5m. Further, it was informed that the consultants have to design the depth. Insertion manhole shall be precast RCC.

SE (Central), CMWSSB in discussion with the Engineers, recommended that **UPVC (orange colour) with a minimum dia. of 160 mm (6kg/cm^2)** shall be considered for house sewer connections. The size of pipes shall be decided as per the chart to be furnished by the CMWSSB.

SE (Central), CMWSSB advised that a filter chamber (similar to silt catch pit concept) shall be designed and provided inside the property area.

SE (Central), CMWSSB informed that inspection chamber would be of 2 feet depth and rates are available for the same. The chamber shall be provided at min.15m interval or as per site condition.

DAE, CMWSBB insisted on the Sleeve provision at every SWD crossings.

SE, Special Project, GCC enquired about the availability of precast manholes.

AEE, CMWSSB informed that circular precast manholes of 1.2m dia. are available and may be preferred.

DAE, CMWSSB informed that the precast RCC manhole may be considered for a depth of 2 to 2.5m.

SE, Special Project, GCC enquired about inner coating and opined that without inner coating with FRP, the material would peel off after 2 years. Also, it was suggested that the cost of Manhole rehabilitation shall be considered in the BOQ.

SE (Central), CMWSSB informed that Manhole cover shall be provided with DI material. However, it was suggested to go with FRC manhole cover as per the current practice.

DAE, CMWSSB insisted that distinct logo/emblem should be provided over the manhole covers for identification of service underneath.

SE, Special Project, GCC conveyed that standardization of the emblem has to be done. Further, it was informed that proper hook type (eye type) provision shall be considered over the manhole covers for easy lifting and to avoid breaking issues.

SE (Central), CMWSSB informed that the consultants shall analyse the pros and cons of various manhole covers and suggest an appropriate material and sizes.

Existing Main Water line and Deep Sewer line:

SE (Central), CMWSSB suggested that based on the age of exiting sewage pumping main lines and water trunk main lines, replacement of those lines may be decided. Further, it was advised that lines that are old/damaged may be considered for replacement.

SE, Special Project, GCC enquired whether officials of CMWSSB can assess the above requirement at site and recommend the consultants on the same.

SE (Central), CMWSSB informed that consultants may contact the respective AE, DAE's and they would help out in identifying the age of the existing main lines.

SE, Special Project, GCC informed that we shall have a next meeting after 10 days.

7.1.21

Assistant Engineer
(Special Project)

7.1.21

Assistant Executive Engineer
(Special Project)

07/01/2021

Superintending Engineer
(Special Project)

Minutes of the meeting chaired by Deputy Commissioner (Works), Greater Chennai Corporation on 19.04.2022 at Commissioner's conference hall, 1st floor, Ripon Building on Chennai Mega Streets Programme with TANGEDCO

Present: Thiru. M S Prasanth, I.A.S

The following officials attended the meeting:

1. Superintending Engineer, Special Projects & Bridges Dept.
2. Assistant Executive Engineers, Special Projects Dept.
3. Superintending Engineers, Executive engineersAssistant executive engineers and Assistant engineers from TANGEDCO
4. Representatives from ITDP
5. Mega Streets Consultants from Adyar, Nungambakkam and Velachery package
6. Mega Streets Consultants from Tondiarpet, HCP and Arya architects were present via Video Conference

DC (W) welcomed the TANGEDCO officials and introduced the Mega Streets project under World Bank programme - Chennai City Partnership. He established that the intent of the meeting was to bring the TANGEDCO officials up to speed on the Mega Street project, Timelines of the Quickwins and their roles in the same. DC (W) also informed the officials about the six neighborhood packages under Mega Streets and the roads selected under each of the packages for the initial pilots called "Quickwins".

Post the introductory remarks by DC (W), SE (SPD) informed the officials of the need for seamless and timely coordination with the consultants and the engineers from SPD, in order to ensure successful completion of the Quick win estimates and tender documents. He emphasized that the vision of the project is to incorporate utility requirements for upto 25 years in the project and to provide specifications in consideration of the same.

Main Discussion Points:

1. SE (SPD) briefed on the following requirements of utilities (below ground level and above ground level), and shared the common reference guidelines for the same, as follows:
    - The sizes, numbers and locations of the utility pipelines, with dedicated chambers for LT and HT lines
    - Intervals of chambers for the dedicated pipelines
    - House connection chambers and Pillar box specifications
    - Manholes, sizes and frequency
    - Street crossing details, manhole and chamber intervals
    - Transformers location and pipe sizes between transformers

The Guidelines discussed are also shared along with the minutes for your reference.

2. SE (SPD) also briefed the TANGEDCO officials on how the packages with different land uses (residential and commercial) and streets with different ROW shall have varying challenges, and **the utility specifications for the same shall be provided based on the site conditions, yet must ensure that there is no hindrance to pedestrian movement due to utility elements such as pillar boxes and transformers**. He also mentioned a few key pointers to consider in the designs for the utilities:
   - All pillar boxes shall be aligned parallel to the pedestrian path, at the edge of the carriageway (in the Multi-Utility zone) in streets with wide ROW, and alongside the property walls in streets with lesser ROW.
   - The transformers shall be compacted and aligned towards property edges, wherever possible
   - House connection chambers shall be provided for every two houses, or every 10m (whichever is higher).

   Following the instructions, SE (SPD) also introduced the TANGEDCO Engineers to their respective consultants and Assistant Executive Engineers (SPD) across all six packages, in order to ensure smooth coordination going forward.

3. DC (W) asked the TANGEDCO officials to share their perspective on the Quick win streets, put forth the challenges with their respective neighborhoods and also suggest recommendations to deal with the same. Responding to the same, the TANGEDCO officials pointed out the challenges in streets of narrow ROW (Tiruvottiyur high road, in this case) where transformers occupy a majority of the pedestrian space. The consultants (OASIS and HCP, in this case) also responded with their design solutions and best practices for compact transformers. The TANGEDCO officials agreed to incorporate the aforementioned recommendations in their estimates as well.

4. Post the technical discussions with specific packages, DC (W) requested TANGEDCO officials to work on the pending estimates, and provide full support to the consultants and the GCC engineers (SPD) in providing the detailed estimates for the utilities. **As requested by DC (W), the TANGEDCO officials agreed to provide the estimates for the Priority Quick wins, before the end of next week (29th April, 2022).**

   Priority Quick Wins

   1. Khader Nawaz Khan road
   2. MC road
   3. Thiruvottiyur High Road

and Arunachaleshwarar road

4. Washermanpet MMI
5. Guindy Race course road

Following this discussion, **DC (W) instructed the consultants to follow up with the concerned TANGEDCO officials and ensure the incorporation of the pending estimates in the BOQs by 2nd May, 2022**, with consensus of cooperation from the TANGEDCO engineers as well. The meeting concluded with the chair thanking the TANGEDCO officials and the consultants for their presence.

Asst. Ex.Engineer
(SPD)

19/04/22
Superintending Engineer
(SPD & Bridges)

19/4/22
Deputy Commissioner
(Works)

Guidelines* for the specifications of the utilities are as mentioned below:-

	TANGEDCO Utilities			
		Material specification		
S.no.	Description (Utility / Component)	Dimension (LxBxH)	Material	Location (Interval for chamber/ other provisions)
1	LT - Line	200mm - 3 no.s per side	HDPE	Should be provided next to the LT line on the property side
2	Chamber for LT	2000mm x 1000mm x 1000mm	RCC	At every 20m once
3	Chamber door for LT	900mm x 900mm	Ductile Iron	Hinged door
4	HT - Line	300mm - 2 no.s per side	HDPE	Should be provided on the carriageway kerb side
5	Chamber for HT	1200mm x 900mm x 1000mm	RCC	At every 20m once
6	Chamber door for HT	1200mm x 900mm x 1000mm	Ductile Iron	Hinged door
7	Chamber for HT and LT at Junctions	1200mm x 1200mm x 1000mm	RCC	Every junctions
8	Chamber door for HT and LT at Junctions	1200mm x 1200mm x 1000mm	Ductile Iron	Hinged door
9	Transformer to Transformer connection	300mm - 4 no.s per transformer	HDPE	
10	Transformer to pillar box connection	200mm - 2 no.s per side	HDPE	
11	House connection from pillar box	100mm	HDPE	For all house connections according to site condition

*The Guidelines indicated above are provided as references for the consultants and TANGEDCO officials, however, the specifications shall be finalized based on the site conditions post discussion with the Mega Streets design consultants and TANGEDCO engineers.