

Date 28-11-2012

Speed Post & Email: dirplgmpr tc@dda.org.in

To

Director (Plg) Master Plan Review & Technical Committee

Delhi Development Authority

6th Floor, Vikas Minar, new Delhi 110002

Dy. Dir. (P.L.)
Diary No. L-671
Date 18.12.12

Sub: Master Plan 2021 Review Notes on Chapter 12 & 19 as per material circulated on 24-09-2012 during the workshop held on 24-09-2012.

Dear Sir,

Thank you for including me in the expert panel during the deliberations held in Review meeting & Theme based Group Discussions of Group IV related to Transport with focus on Improved Mobility.

Since the draft of the suggested modifications were only handed out on the day of the congregation, we would request you to accept the review feedback being submitted along with this letter as enclosed while the review is still ongoing.

Please find enclosed a detailed note on suggested further modifications related to Chapter 12.

You are requested to provide me the details as enumerated in the enclosed notes regarding Chapter 19 at the earliest, to be able to review the provisions suggested therein in a responsible manner.

Sincerely Yours,




Anupam Vibhuti

B Arch., M Plan (Transport), SPA

Enclosed:

1. Review Notes for Chapter 12 MPD 2021
2. Review Notes for new Chapter 19

may like to see the suggested modifications on chapter 12 and 19 by one of the Expert Panel on the workshop held on 24/9/12. If agreed, we may also forward them to Drr (P.L.) OTTPEC.

AZ (mpd) for taking further a/c. 
ADP/STT PI keep the copy and original send it to Drr (P.L.) OTTPEC. 
1 of 14
Hmt 3/12/12

copy of the P.V.C. retained in unit if agreed we may send this to Dir (UTTIPEC).

Shikha
14/12/12
A.D. (Pq) MPR

Dir (Pq) MPR & TC

As discussed, the copy is sent to Dir (UTTIPEC).
The copy of this recommendation
be kept in workshop file.

AD (PS) II

These suggestions/modifications have
been received from Anupam Vikhuti,
expert panel during the workshop organized
for MPD-2021.

you are requested to take
n/a accordingly.

Shikha
14/12/12

Dir (PS) UTTIPEC

AD (PS) II
17/12/12

DD (II)

Suggestions will be discussed in
next HRA core group meeting and
Dr. Vikhuti may also be invited as
desired by Dir (PS) UTTIPEC. Copy of
these suggestions already sent to
Dr. Vikhuti for his review.
May keep reference in the MPD file.

Copy of this may pl also be sent to Dr. Consultant-II
for n/a.

Dir (PS) UTTIPEC

Copy has been
sent - keep in record
of also call Dr. Sharma in Enquiry

Shikha
18/12/12

Dr. Sharma? organization
dept? Director (UTTIPEC)

Shikha
20/12/12

PT (PS) II
21/12/12

By: Dir. (PS) UTTIPEC
Copy No. 1-1420
Date: 17/12/12
File No. 18.12.12

Review Notes - Chapter 12 : Transportation

Review Point 1: Status of Transportation Land Use Norms for T2 in light of Proposed TOD Norms

Clarification required with respect to the status of Land Use Norms for erstwhile land Uses T2 & T3 in light of the proposed TOD norms. T2 & T3 being the very reason for proposed TOD norms would the norms for development be fully guided by the TOD norms?

If 'NOT' then the following Review Points 2 need to be recognised as suggested.

Review Point 2: Use premise Mix for Transportation Land Uses T2 & T3 needs to be expanded and refined.

T2 Use Zone

DMRC corridors needs to embark on a property development exercise with the following objectives. The same would be required for monorail / BRT corridors whenever mandated.

- Explore best configuration of commercially exploitable use premises for best 'value capture' as per MoUD mandate.
- Explore ways to exploit the available land for Commercial Property Development within the available & acquired mandates.

Master Plan 2021 Provisions vis-à-vis Allotment Conditionality (Case of DMRC)

Land has been allotted to DMRC vide Intergovernmental Transfers at scheduled rates with 'explicit' conditions to adhere to the Zonal Plan Land uses & related development Controls while Master Plan 2021.

PD for Metro Stations has been dealt with in the Transportation Section of the Master Plan 2021, so it 'could' be assumed to have a Transportation Land Use. Whether PD area can be deemed transportation land use within MPD 2021 'automatically' with DMRC vesting operational and ownership controls over such allotted land is not clear.

Development Code Limitations in MPD 2011 - Definition for Metro Yards & Metro Stations with Property Development

Property Development format (Use Premise Mix or Permissibility) for Metro Stations / Depots not clearly defined in the MPD 2021 and neither available since Transportation Land Use was never thought to have any other usage other than Transport 'Operations'. Development norms for ISBT have been clearly articulated in the MPD 2021 for the first time vis-à-vis MPD 2001 with a view on the need for 'Composite Development' as a Mode Interchange Station. PD norms for DMRC 'needs' similar articulation with respect to FAR, GC, parking and use premise mix based upon TOD, composite development and value capture concepts.

Whether PD will be governed by 'development' or 'redevelopment' rules not clear and is debatable (only redevelopment schemes within MRTS influence corridors attract 50% additional FAR over MPD 2021 prescribed limits). This is discriminatory in spirit with respect to optimal land utilization and overall holding capacity.

Whether Land allotted to DMRC (in case of adjacent land pockets aggregated for operational reasons) be dictated by erstwhile land uses of respective land components or can be considered as per major land use - otherwise composite development may suffer. For example smaller pockets of recreational land use conjoined with larger industrial or commercial land use. There may not be an incentive to conceive composite development without composite treatment and 'unified' and 'distinct' land use status.

Whether floor area of 'operational structures' is exempt from FAR calculations is not explicit, however it can be derived from similar usages of land under 'Transportation' where Areas under operations is exempt from FAR calculations.

Review of Master Plan 2021

PD for Metro Stations was a nascent & evolving subject at the time of finalization of MPD 2021 (Final Notification Feb 2007), therefore development norms for Metro Depots as well as Metro Stations were not mature and therefore not clearly defined.

Several Notifications have been issued thereafter impacting the development norms for Metro Station property development

- MoUD (MRTS Cell) Order No. K-14011/8/2000-MRTS Dated 30-03-2009 after consultation with Internal Finance Division vide their Dy. No. 243/D-2/FD/09 dated 20-03-2009
- MoUD (Delhi Division) Notification Dated 18-04-2011

The spirit of the above orders / notifications has to be reduced to a working code to be read in conjunction with the Master Plan 2021 as per the following specific amendments / addendums.

Issue 1

'Automatic' Change of Land Use consideration for Metro Yards / Metro Station properties from respective Land Uses to 'T2' Use Zone consists of Terminals/Depots – Rail/MRTS/Bus/Truck.

Issue 2

Enhanced FAR considerations for Property Development at Metro Yards, Metro Stations, BRTS stations, DTC yards & depots - as per the latest requirements.

- 50% enhancement over permissible FAR on account of proximity to MRTS corridor has already been awarded by way of the MoUD notification
- 50% enhancement over permissible FAR on account of revenue incentive for redevelopment projects in Existing Planned areas. A precedence is available by way of similar treatment of land pockets in Industrial Use Zones where all plots of >1000 sqm enjoy 1.5 times the FAR as outlined in MPD 2011 by way of DDA Notification dated 01 April 2011.

Issue 3

Since land available to DMRC is not contiguous, but usually separated by Master Plan Roads (varying ROW), the only way to look at 'composite development' is to integrate the development in respective land pockets using pedestrian access ways (over bridges or subways). Some have argued for property development sitting over the footprint of a metro station conceived as a composite building block (like in many other countries) in line of the composite development idea, but that may pose as a security risk for a transportation trunk line and should remain detached from the trunk line remaining connected with walkways for easy accessibility.

Since some land pockets may not necessarily accommodate a building because of shortcomings by way of land geometry arising out of

An operational structure (ESS, Chilling Plant, Escalator, ventilation shaft etc) covering a substantial portion of the land.

Residual configuration of land that cannot accommodate a functional building because of set back limitations.

Such land pockets occupy a valuable area of the city. The Master Plan 2021 emphasizes on the optimum utilisation of available resources, hence it could be argued that the area of these disaggregate land pockets 'need to be counted in the FAR calculations' of the main property

development. This will ensure that the proposed development and creation of the elements contributing to the 'composite' character have the requisite incentive for the developer and the overall vision of the Master Plan may be respected.

These disaggregated land pockets sit on different land uses as outlined in the Zonal Plan or the Master Plan 2021. Without contradicting these constraints, the predominant land use of the specific land pocket, where property development is conceived shall be adopted.

Issue 4

Clause 8(2) Permission of Use premise in use Zones for T2 Use Zones

'T2' Use Zone defined in MPD 2021 as Terminals/Depots – Rail/MRTS/Bus/Truck

As per International best town planning practices, all interchange / halt points for commuters / vehicles requires associated functions / areas in addition to the core operational functions / areas need to be conceived as 'composite development' also espoused by the MPD 2021.

Composite development needs a 'mixed land use' character with 'use premise' mix that is 'symbiotic, sustainable & self supporting' for the best possible 'value' capture of the urban land. This development would not only serve as the transportation hub for the city residents but also encourage creation of the living microcosm which would 'never' necessitate the use of a car for commuting for home based work, home based other (entertainment, school, shop) trips helping DMRC to even enhance its rider ship revenues.

A suggestive minimum mix of residential (40%), commercial (15%), recreational (10%), government offices (25%) & public semi public facilities (10%) space may be advocated to ensure that the complex remains alive & commuter friendly during most parts of the day & possibly at night.

Since only the commercial component shall demand Parking an overall reduced Parking Standard of 1 ECS for entire development may be considered.

Permissibility of Use Premise in Use Zones 'T2' requires to be added as an extra column as follows to be adopted while conceiving development on such properties.

S No.	Use Premises	Use Zones	Remarks
		T2	
RD	Residential		
i	Residential plot – Plotted Housing	NP	
ii	Residential plot – Group Housing	NP	

iii	Residence – cum – Work Plot	NP	
iv	Foreign mission	NP	
v	Hostel/ Old age home	NP	
vi	Guest House, Boarding and Lodging House	P	Service Apartments of appropriate sizes / Studio Apartments under lease
vii	Dharamshala and its equivalent	NP	
viii	Community Hall/ Barat Ghar	P	Required for the Residents
ix	Night Shelter	NP	
x	Community/ Recreational Hall, Library, Reading Room, Society Office, Creche and Day Care Center.	P	Required for Office Goers
C	COMMERCIAL		
i	Local Level (Convenience/ Local Shopping centre)	P	Required for the Residents
ii	Cinema/ Multiplexes	P	Required for the Residents/ Floating Metro Users
iii	Service markets/ Informal Bazaars	P	Required for the Residents/ Floating Metro Users
iv	Wholesale Trade	NP	
v	Storage, godown and warehousing, cold storage & Ice factory, gas godown	NP	
R	RECREATIONAL		
	Recreational (Park, Play grounds, Swimming Pool)/ Sports Complex/ Stadium/ Amusement parks/ Recreational Clubs etc.	P*	No Sports Complex/ Stadium/ Amusement parks in Metro Stations

M	INDUSTRY		
i	Industrial Plot, flatted group industry	NP	
ii	Service centre & Service industry	NP	
T	TRANSPORTATION		
	Circulation (Road network with street furniture, Bus terminal, MRTS stations, Parking etc.)	P	
	Bus depot & Workshop	NP	
G	GOVERNMENT		
i	Local/ Government maintenance Offices	P	Spaces leased out to Government Offices & Institutions
ii	Offices of utility services providing agencies	P	Spaces leased out
PS	PUBLIC AND SEMI PUBLIC FACILITIES		
i	Hospital (upto 100 beds)	P	Required for the Residents/ Floating Metro Users
ii	Primary Health Centre/ Family Welfare Centre/ Maternity Home/ dispensary etc.	P	Required for the Residents/ Floating Metro Users
iii	Nursing Home/ poly clinic/ clinic/ clinical laboratory etc.	P	Required for the Residents/ Floating Metro Users
iv	Dispensary for pet and animals	P	Required for the Residents/ Floating Metro Users
v	Primary school/ Middle school	P	Required for the Residents/ Floating

			Metro Users
vi	Sr. Secondary School	NP	
vii	School for Mentally/ Physically Challenged	NP	
viii	Technical Training centre (ITI/ Polytechnic/ Vocational/ Training Institute/ Management Institute/ Teacher Training Institute, etc.	P	Required for the Residents/ Floating Metro Users
ix	Facilities – Bus Terminal, taxi stand, milk/ vegetable booth, petrol/ CNG filling pump, recreational club, police post, police station, fire station, post office, telegraph office and telephone exchange	P	Required for the Residents/ Floating Metro Users

Issue 5

Development Control Norms in T2 Use Zones for Metro Yards and Metro Stations along with PD to be modified / added in the following Table of the MPD 2021.

Table 12.7: Development Controls for Transportation

S No.	Use Premises	Activities Permitted	Development Controls
8	Metro Yards, Bus Parking yards	Idle Parking of Coaches, washing and cleaning facilities, maintenance related facilities, watch & ward and staff related facilities. All & any Use Premise permissible in T2 as part of Property Development	Ground Coverage: 25% FAR: 1.50 X of Current Land Use Zone Provisions as per Zonal Plan & MPD 2021, subject to following: Maximum Area up to 6 Hac in all Use Zones except in Recreational and Regional Park/Ridge Use Zone, Lutyen's Bunglow Zone and Heritage Zones. Operational Areas - 67% Land Area Mixed Use Property Development - 33% Land Area

			<p>Parking in addition to Operational Areas shall be at the rate of 2 ECS per 100 sqm of floor area of Property Development Commercial Component and 1 ECS per 100 sqm for the balance component</p> <p>No Height Restrictions subject to approval of statutory bodies such as ASI, Airport Authority, DUAC, UTTIPEC etc</p> <p>Operational Areas, ancillary buildings for housing services, Parking to be exempt from FAR calculations</p>
9	<p>Metro Stations / Bus terminal / Bus depots with Property Development</p>	<p>All facilities related to Metro & passengers, parking including watch & ward, Soft Drink & Snack Stall, Shops, Administrative Office for Operations & Policing, Recruitment and Training centres for Staff, Housing for Metro Staff & Security personnel</p> <p>All & any Use Premise permissible in T2 as part of Property Development</p>	<p>Ground Coverage: 25%</p> <p>FAR: 1.50 X of Current Land Use Zone Provisions as per Zonal Plan & MPD 2021, subject to following:</p> <p>Maximum Area up to 6 Hac in all Use Zones except in Recreational and Regional Park/Ridge Use Zone, Lutyen's Bunglow Zone and Heritage Zones.</p> <p>Mixed Use Property Development</p> <p>Parking in addition to Operational Areas shall be at the rate of 2 ECS per 100 sqm of floor area of Property Development Commercial Component and 1 ECS per 100 sqm for the balance component</p> <p>No Height Restrictions subject to approval of statutory bodies such as ASI, Airport Authority, DUAC,</p>

			<p>UTTIPEC etc</p> <p>Development to be undertaken in a composite manner.</p> <p>Disaggregate yet connected land pockets where Property Development cannot be considered to be considered in overall FAR calculations</p> <p>Operational Areas, ancillary buildings for housing services, Parking to be exempt from FAR calculations</p>
--	--	--	--

Review Point 3: T3 Use Zone –Use Premise Mix Expanded

Circulation Use Zones consumes ~18% of the Master Plan Area of a total of 22% earmarked under Transportation. This distribution was conceived within the MPD 2001 and MPD 2021 assuming a certain scale and character of transportation systems. With an unprecedented scale of private vehicles introduced to the city, a correspondingly high pressure has been created on the infrastructure required for the operations of each of the modes that occupies or is destined to occupy the ROW. On-street parking has resulted in constricting the flow channels and thereby reducing flow capacities below acceptable operational levels.

All road ROWs have been mandated to accommodate optimum parking bays for idle paratransit vehicles, hawkers, amenities (UTTIPEC guidelines)

A lot of space is available under the roads for creating additional uses like underground parking stations. Underground ROW space may be judiciously utilized to accommodate a number of essential usages which have become a need of the hour.

S No.	Use Premises	Activities Permitted	Development Controls
1	Parking	<ul style="list-style-type: none"> • Idle Parking of Para-transit vehicles • Mobility Access Points • Underground Parking 	Ingress, Egress & Operations to be approved by UTTIPEC as per formats including micro-simulation
2	Services	<ul style="list-style-type: none"> • Services (Water, Sewer, Electrical, Communication) Trunk Lines • Ground Water Recharge wells • Rain water Runoff storage 	Operations to be approved by UTTIPEC as per formats
3	Shelter & Street Commerce	<ul style="list-style-type: none"> • Night Shelters under Flyovers • Hawkers 	As per rules formulated by GNCTD

Review Point 4: Modal Split Considerations for Mechanised Modes to be in line with Energy - Sustainability Principles & Policies of the GOI

Article 12.9 of the MPD 2021 describes the modal split in an ad-hoc suggestive manner whereas the energy & sustainability principles can be conjoined to provide a concrete basis to the modal mix considerations for the city.

The total demand on mobility of both passengers and goods being of the scale as anticipated, the demand has to be supported by a supply of sufficient multi-modal mobility infrastructure that reflects the vision of the government of India with respect to major policy issues of the Government of India especially related to NUTP (National Urban Transport Policy & National Action Plan on Climate Change (NAPCC)

Both policies advocate promoting energy efficiency as a core component of urban planning with a 'well-to-wheel' energy efficiency considerations. The operational 'modal mix' in the city therefore can be structured to reflect this concept where the sum operational energy requirements of different mechanized modes, benchmarked against consumed commuter trips, is defined, measured and targeted.

The energy consumed by transportation systems collectively and cumulatively has to be the least for the city. A modal split in line with this concept has to be established in the MPD amendments.

Review Point 5: Mobility Access Points with Spatial Geo Coded and Marked Locations

'Transport Operations' and growing demands on efficient functioning of the available transportation infrastructure demands that the city needs anchor points / mobility points / point addresses along the ROW which can be identified and where a specific travel mode can be made available to a citizen.

~ 5000 Km of roads in the city of Delhi has an equivalent number of bus stops that can be numbered, geo tagged and physically labeled (like Delhi Milk Scheme outlets) for the convenience of users of road based transport systems. Similarly TSR idle parking stands (on-street or off-street) needs to be numbered, geo tagged and physically labeled.

While the bus stops have established locations and footprint on the ROW, similar footprints need to be identified and located for the benefit of other paratransit modes.

Review Notes - Chapter 19 : Transport Oriented Development

Review Point 1: Erstwhile Use Zones Vs TOD - Clarifications Required

- In considering the TOD influence areas the relevance of erstwhile use zones and their respective spatial distributions is to be ignored? Needs clarification.
- Do the TOD norms overrule the development norms defined within various use zones sections in the MPD2021?
- When will 6B2. norms be published along with the basis of calculation so that the same may be reviewed?
- Status & Sanctity of Transport Landuse T2 - with respect to TOD
- Norms to be followed until the Influence Zone Plans are made available?
- What is the transition management plan from current standards to TOD policies?

Review Point 2: Basis of Calculations for Increased Ridership

- What is the current ridership from the impacted areas as defined by TOD influence zone of the metro corridor/s or MRTS influence zone as defined within the MPD 2021?
- What is the expected ridership to be generated from the TOD redensified areas and the basis of the calculations?

Review Point 3: Supply Vs Demand on Spatial Areas for Minimum Operational Requirements

- With no apparent increase in the overall Transport Land Use share (22%) or within the TOD considerations, what is the basis of calculations that confirms that availability of traffic flow 'spatial' requirements of the 30% private modes (70:30 split as per MPD 2021 and TOD benchmarks) along with their idle parking requirements within the TOD influence zone?

Review Point 4: Why Performance Benchmarks included in Spatial Plan Document

- Table 19.5 discusses performance benchmarks along with space & distance standards. Minimum Performance benchmarks could similarly be advocated for other components of the Masterplan especially in Chapter 14. Physical Infrastructure & Chapter 12. Transportation & Chapter 9. Environment.
- If this is not possible then TOD performance benchmark should be left out.