

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
APPEAL NO. 112 OF 2018

IN THE MATTER OF:

UNIVERSITY OF DELHI

... APPELLANT

VERSUS

MINISTRY OF ENVIRONMENT, FOREST
AND CLIMATE CHANGE & ORS

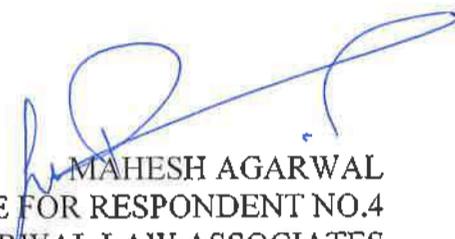
... RESPONDENTS

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Place: New Delhi
Dated: 18.01.2021

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
APPEAL NO. 112 OF 2018**

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... RESPONDENTS

**WRITTEN SUBMISSIONS IN REPLY ON BEHALF OF
RESPONDENT NO. 4 (YOUNG BUILDERS (P) LTD.)
TO THE WRITTEN SUBMISSIONS FILED BY THE APPELLANT
DATED 15.01.2021**

The Respondent No.4 states as under:

1. The Appellant has filed the captioned Appeal impugning the grant of Environment Clearance (“EC”) by the State Environmental Impact Assessment Authority (“SEIAA”) (Respondent No. 2) to Young Builders Pvt. Ltd., Respondent No. 4 herein, on 23.03.2018, for the construction of a multi-storey residential complex at Delhi. The Respondent No. 4 is undertaking a residential group housing project (“**the Project**”) adjoining the Vishwavidyalaya Metro Station on the land leased by the Delhi Metro Rail Corporation (“DMRC”), Respondent No. 3 herein, pursuant to an open public auction conducted in 2008, on payment of Rs. 218.20 crores.
2. By way of the Order of this Hon’ble Tribunal dated 27.02.2020, an Independent Expert Committee (“**the Committee**”) was formed by this Hon’ble Tribunal to assess the environmental viability of the Project.
3. Thereafter, the Order of this Hon’ble Tribunal dated 27.02.2020 was appealed to the Hon’ble Supreme Court, which passed an Order on 10.06.2020 in Civil Appeal No. 2485 of 2020 (*Young Builders Pvt. Ltd. v. University of Delhi & Ors.*) observing as follows,

(6) We direct the Committee to examine various aspects including the viability of the Project without being influenced by any of the opinions expressed by the National Green Tribunal in the impugned order. The appellant, University of Delhi and Delhi Metro Rail Corporation are at liberty to file their respective representation along with requisite documents before the Committee within the period of two weeks. The Committee before it starts its first deliberation shall afford an opportunity of preliminary hearing to the appellant, University of Delhi and Delhi Metro Rail Corporation. Likewise, the

Committee shall also afford a further opportunity of hearing to the appellant, University of Delhi and Delhi Metro Rail Corporation before it submits its final report before the Tribunal.^[L]_[SEP]

(7) The Committee shall complete the deliberation and submit its final report within two months from the date of the representation being filed by the appellant and University of Delhi and Delhi Metro Rail Corporation. The Member Secretary, Central Pollution Control Board, shall coordinate and take necessary steps for convening the meeting of the Committee. The meeting of the Committee shall be conducted by virtual hearing, or video conferencing, and afford an opportunity of hearing to the representatives of the parties, mentioned above.

(8) After submission of the final report by the said Committee, the appellant, University of Delhi and Delhi Metro Rail Corporation are at liberty to raise all the contentions/points before the National Green Tribunal.

(9) Since we have directed the Committee to examine the issue without being influenced by any of the opinions expressed by the National Green Tribunal, it is not necessary to pass any further direction. The civil appeal is accordingly disposed of with the above direction and observation.

4. The Committee uploaded its Rapid Indicative Environment Assessment Report dated 10.12.2020 on 11.12.2020 (“**the Report**”) wherein it was concluded by the Committee that,

*“In view of the impact analysis, **the project seems viable** as environmental impacts, including impact on traffic congestion and urban infrastructure/services, are minimal/nominal.”*

5. This Hon’ble Tribunal *vide* its Order dated 13.01.2021 permitted the Appellant to file its Written Submissions against the Report by 15.01.2021 and also granted liberty to the Respondent No.4 to file its Written Submissions by 18.01.2021. The present Written Submissions in Reply are filed to the Written Submissions filed by the Appellant on 15.01.2021.
6. At the outset, the Respondent No. 4 denies all that is stated in the Written Submissions of the Appellant dated 15.01.2021 and states that nothing stated therein shall be deemed to be admitted for want of a specific traverse, unless specifically admitted in the present Written Submissions in Reply.

PRELIMINARY SUBMISSIONS

7. At the outset, it is submitted that the Written Submissions filed by the Appellant contain glaring factual inaccuracies, technical inconsistencies and

are further not based upon any Notification, Guidelines, Office Memorandum issued by a statutory authority.

8. The Ld. Committee was formed by this Hon'ble Tribunal pursuant to various objections raised by the Appellant against the Environmental Clearance granted by the SEIAA on 23.03.2018. It was alleged by the Appellant that amongst others, it was a category 'A' project and the State Expert Appraisal Committee ("SEAC") and SEIAA, both expert bodies comprising technical members, did not apply their mind before granting the EC and thereby sought fresh examination of the environmental viability of the Respondent No.4's Project. (*Prayer B, Appeal*)
9. A bare perusal of the Report would show that the Ld. Committee undertook a detailed analysis on the issues raised by the Appellant as well as the observations of this Hon'ble Tribunal in the Order dt. 27.02.2020 including the following,
 - A. Impact on population density,
 - B. Incremental Air Pollution Load From the Project,
 - C. Estimating Additional Water Requirement,
 - D. Waste Water Generation,
 - E. Solid Waste Management,
 - F. Existing Noise Levels,
 - G. Impact on Traffic Congestion
 - H. Stability of Structure with respect to Earthquake
 - I. Compliance Status
10. After receiving the Report of the Ld. Committee, the Appellant has sought to raise frivolous and erroneous objections against the "sanctity of the process" adopted by the Ld. Committee as well as the technical and scientific analysis conducted by the Ld. Committee.
11. It is submitted that the Ld. Committee conducted its proceedings in an extremely transparent manner which is evident from the Minutes of the six (6) Meetings conducted by the Ld. Committee, which are annexed to the Report. (*Pg. 92-106, Report*) The Appellant was present during the meeting on 08.07.2020 and made submissions before the Ld. Committee. (*Pg. 93-94, Report*) Thereafter, from the 2nd Meeting, the Appellant chose not to take part in the proceedings before the Ld. Committee due to its objections against the constitution of the Ld. Committee. Admittedly, the Appellant had notice of

the Meetings and still opted to not join. It is thereby not open for the Appellant at this stage to claim that the process followed by the Ld. Committee was not transparent or was violative of the principles of Natural Justice. Further, the Appellant has raised extremely questionable arguments and attributed bias to the Ld. Committee by stating in its Written Submissions that, “*meeting itself was not conducted in a transparent manner as the representatives of the Appellant were kept out of the meeting on 08.07.2020 when the presentation of other parties*” (**Pg. 1938 of WS**) However, the Appellant has conveniently omitted the fact that this procedure was followed uniformly by the Ld. Committee for each of the parties, i.e., the Appellant, the Respondent No. 4 as well as the DMRC. Even the Respondent No. 4 herein was not allowed to be a part of the proceedings when the Appellant or the DMRC were making their submissions. The Appellant has also submitted that “*the Appellant was not informed of the field visit made by the Committee on 17.08.2020 of the site in question for the appraisal of the project and was therefore conducted without the participation of the Appellant. On the contrary, the members of Respondent No. 4 (M/s Young Builders) were present on site*”. (**Pg. 1938, WS**) It is pertinent to note that even the Respondent No. 4 was not notified about the visit, however, the caretaker and security guard employed by the Respondent No. 4 who are always at the Project site were present. None of the management or authorised representatives of the Respondent No. 4 were present for the site visit. However, it is natural that the Respondent No. 4 has employed personnel to ensure the safety and security of the Project Site. The aforesaid allegations levelled by the Appellant against the conduct and alleged partiality of the Ld. Committee are extremely regrettable and the Appellant must be put to strict proof regarding the same.

12. Furthermore, contrary to the submissions of the Appellant, the Ld. Committee has specifically noted in the Report that the contentions of the Appellant were examined while also referring to the Documents relied upon by the Appellant. (**@ Pg. 9-10 of the Report**) The Ld. Committee has conducted an evaluation of each of the environmental issues while relying on independent statistical data and findings, being un-influenced by the Order of this Hon’ble Tribunal dated 27.02.2020, and recorded reasons for each of its inferences with respect to the said environmental issues. Therefore, it is patently incorrect to suggest

that the Report of the Ld. Committee is unreasoned, displays non-application of mind or that the process it followed was not transparent.

13. It is submitted that the Ld. Committee comprised of the following experts who were nominated from institutions as mentioned in the Order of this Hon'ble Tribunal dated 27.02.2020,

Sr. No.	Name & Designation	Organisation/ Institution	Committee Member
1.	Dr. Prashant Gargava, MS	CPCB	Coordinator
2.	Dr. Vinod K. Singh, Scientist - 'E'	MoEF& CC	Member
3.	Mr. N Bala, Scientist - 'F'	Indian Council of Forestry Research and Education, Dehradun	Member
4.	Mr. Jyoti Kumar Nalli	Central Ground Water Board, New Delhi	Member
5.	Dr. Meenakshi Dhote, Professor	School of Planning and Architecture, New Delhi	Member
6.	Dr. Vikram Gupta, Scientist - 'F'	Wadia Institute of Himalayan Geology, Dehradun	Member
7.	Mr. S. Tarafdar, Scientist - 'E'	G.B. Pant Institute, Srinagar-Garhwal	Member
8.	Dr. Mukesh Sharma, Professor	IIT Kanpur	Member
9.	Mr. Shambhu Sharma, Joint Adviser	National Disaster Management Authority, Govt. of India	Member

14. The Ld. Committee also raised specific queries to the Respondent No. 4 in its 5th Meeting dated 08.10.2020 stated hereinbelow, (**@Pg. 102 of the Report**)

- Site distance from the sensitive and seismic zone.
- Design considerations by the builder to make the project earthquake resistant and whether the design is in line with ISO specifications.
- Duration of the construction phase
- Demand and source of water during construction phase on daily basis or for completion of total project and on which basis supplier had been requested to supply the same amount of water.

Further, the Ld. Committee has (i) conducted a land-use and ward distribution analysis of the various wards in the Project Impact Zone, (ii) calculated

Construction Waste as per the CPCB SA Rules, 2010, (iii) assessed the annual average concentration for the years 2018 and 2019 for SO₂, NO₂, NH₃, Benzene, PM_{2.5}, PM₁₀ and CO for ascertaining the ambient air quality with data from the North Campus Station (iv) used the ARAI- TERI Report of 2018 for analysing vehicular pollution, (v) used the National Building Code, 2016 to estimate drinking water standards, (vi) used the Census Data of 2011 for estimating the average population density, (vii) analysed the annual noise pollution data with average values from 2018 from the nearest noise quality monitoring station in Civil Lines (viii) conducted a fresh Traffic Count Survey. Therefore, it is clear, in light of the aforementioned points, that the Ld. Committee has closely applied its mind to the contentions raised by all parties, conducted an in-depth inquiry based on relevant scientific data and statutory guidelines and thereafter rendered its findings.

15. It is settled law that the nature of reasoning in the Report/Order of a quasi-judicial body or an Expert Committee is different from that rendered in a Judicial Order. Since an Expert Committee is not a Judicial Body, it is not required to give elaborate reasons *qua* each of the point raised by the parties, however, its Report must be in the nature of a speaking Order and contain adequate and tangible reasons for arriving at its conclusions.
16. The Appellant has sought to question the validity of the Ld. Committee's Report on the erroneous premise that while the Ld. Committee has only referred to each of its arguments, it has not given reasons for denying each and every submission of the Appellant. It is submitted that the nature of enquiry conducted by an Expert Committee ought to be scientifically sound and exhaustive, however, requirements for noting lengthy reasoning akin to a Judgment cannot be imposed on an Expert Committee.
17. The Apex Court has held in the case of *S.N. Mukherjee v. Union of India*, reported at (1990) 4 SCC 594 held that,

“ 36. [...] In our opinion, therefore, the requirement that reasons be recorded should govern the decisions of an administrative authority exercising quasi-judicial functions irrespective of the fact whether the decision is subject to appeal, revision or judicial review. **It may, however, be added that it is not required that the reasons should be as elaborate as in the decision of a court of law. The extent and nature of the reasons would depend on particular facts and circumstances. What is necessary is that the reasons are clear and**

explicit so as to indicate that the authority has given due consideration to the points in controversy.”

(Emphasis Supplied)

18. Further, in the recent Judgment of the Hon’ble Apex Court in ***Rajeev Suri v. DDA & Ors. Transferred Case (Civil) No. 229 of 2020*** dated 05.01.2021, the Hon’ble Court laid down the law *qua* the necessity of giving reasons by a Committee/quasi-judicial body and held that,

“288. [...]Merely because the minutes do not advert to any specific documents already placed before the members of the Committee, it does not follow that the members did not discharge their duty properly. Indisputably, the relevant documents were placed before all the members at least a week before the Committee meeting and understandably, a week’s time was granted to all the members for examining the documents. In such circumstances, it cannot be assumed that the documents and presentations escaped the minds of the Committee members until and unless a demonstrable infirmity is shown.

289. It is noticed that the argument of non-application of mind has been invoked by the petitioners, irrespective of the nature of body whose decision has come to be assailed. The requirement of due application of mind is one of the shades of jurisprudential doctrine that justice should not only be done but seen to be done. It requires a decision-making body, judicial or quasi-judicial, to abide by certain basic tenets of natural justice, including but not limited to the grant of hearing to the affected persons. Rules of natural justice are not embodied rules. They are means to an end and not end in themselves. The goal of these principles is to prevent prejudice. It is from the same source that the requirement of application of mind emerges in decision making processes as it ensures objectivity in decision making. In order to ascertain that due application of mind has taken place in a decision, the presence of reasons on record plays a crucial role. The presence of reasons would fulfil twin objectives of revealing objective application of mind and assisting the adjudicatory body in reviewing the decision. The question that arises here is, whether the statement in the recorded minutes of the CVC meeting (“the features of the proposed Parliament building should be in sync with the existing Parliament building”) is or is not indicative of application of mind.

290. In cases when the statute itself provides for an express requirement of a reasoned order, it is understandable that absence of reasons would be a violation of a legal requirement and thus, illegal. However, in cases when there is no express requirement of reasons, the ulterior effect of absence of reasons on the final decision cannot be sealed in a straightjacketed manner. Such cases need to be examined from a broad perspective in the light of overall circumstances. The Court would look at the nature of decision-making body, nature of rights involved, stakeholders, form and substance of the decision etc.

The list is not exhaustive for the simple reason that drawing a conclusion of non-application of mind from mere absence of reasons is a matter of pure inference and the same cannot be drawn until and unless other circumstances too point in the same direction. The aforesaid factor of nature of rights has been considered by this Court in E.G. Nambudiri thus:

*“8.The question is whether principles of natural justice require an administrative authority to record reasons. Generally, principles of natural justice require that opportunity of hearing should be given to the person against whom an administrative order is passed. The application of principles of natural justice, and its sweep depend upon the nature of the rights involved, having regard to the setting and context of the statutory provisions. Where a vested right is adversely affected by an administrative order, or where civil consequences ensue, principles of natural justice apply even if the statutory provisions do not make any express provision for the same, and the person concerned must be afforded opportunity of hearing before the order is passed. But principles of natural justice do not require the administrative authority to record reasons for its decision as there is no general rule that reasons must be given for administrative decision. Order of an administrative authority which has no statutory or implied duty to state reasons or the grounds of its decision is not rendered illegal merely on account of absence of reasons. It has never been a principle of natural justice that reasons should be given for decisions. See: Regina v. Gaming Board for Great Britain, ex p. Benaim and Khaida, (1990) 2 QB 417 at 431.
...”*

(emphasis supplied)

295. Therefore, the requirement of reasons in cases which do not demand it in an express manner is based on desirability and the same is advised to the extent possible without impinging upon the character of the decision-making body and needs of administrative efficiency.

Further, the Petitioner's in *Rajeev Suri (Supra)* also challenged the recommendation of the SEAC for granting an Environmental Clearance. The Petitioners in that case raised an argument identical to the one raised by the Appellant herein, i.e., that the SEAC did not give reasons for rejecting the objections of the Petitioner and neither did it refer to the documents/evidence produced by the Petitioners. In this regard, the Hon'ble Supreme Court observed that,

“ 366. The minutes of the two meetings of EAC are self-explanatory and reveal due application of mind, in light of the principles relating to application of mind enunciated above. We do not wish to repeat the same to avoid prolixity. EAC is an expert body and it is amply clear that it has been made aware of all relevant information relating to the project and it has applied its mind to the proposal. Even

on settled principles of judicial review, it is clear that relevant material has been considered by the committee and no reliance has been pointed out on any irrelevant material. The specific recommendations given by the committee do indicate that the committee was aware of the need for precautionary measures in environmental matters and accordingly, it suggested requirement of further permissions on certain counts.

367. Once an expert committee has duly applied its mind to an application for EC, any challenge to its decision has to be based on concrete material which reveals total absence of mind. Absent that material, due deference must be shown to the decisions of experts.

(Emphasis Supplied)

19. That in the landmark Judgment in the case of *Siemens Engg. & Mfg. Co. of India Ltd. v. Union of India*, (1976) 2 SCC 981, the Hon'ble Supreme Court was pleased to explain the role of a quasi-judicial authority as compared to a Judicial authority and held that,

6. [...]He did not deal in his order with the arguments advanced by the appellants in their representation dated December 8, 1961 which were repeated in the subsequent representation dated June 4, 1965. It is not suggested that the Collector should have made an elaborate order discussing the arguments of the appellants in the manner of a Court of law. [...]

20. In the case of *CCT v. Shukla & Bros.*, reported at (2010) 4 SCC 785, the Hon'ble Supreme Court held that,

*"14. The principle of natural justice has twin ingredients; firstly, the person who is likely to be adversely affected by the action of the authorities should be given notice to show cause thereof and granted an opportunity of hearing and secondly, the orders so passed by the authorities should give reason for arriving at any conclusion showing proper application of mind. Violation of either of them could in the given facts and circumstances of the case, vitiate the order itself. Such rule being applicable to the administrative authorities certainly requires that the judgment of the court should meet with this requirement with higher degree of satisfaction. **The order of an administrative authority may not provide reasons like a judgment but the order must be supported by the reasons of rationality.** The distinction between passing of an order by an administrative or quasi-judicial authority has practically extinguished and both are required to pass reasoned orders."*

21. In fact, the *mala fide* motives of the Appellant are clear from its selective conduct inasmuch as it has only challenged the EC granted to the Respondent's Project whereas several building and construction projects in the immediate vicinity of the Appellant University which have been granted

1	Young Builder (P) Ltd	22.03.18	1,17,733	DUs 258 EWS152	139.6	2	854	1800	500
2	North Delhi Metro Mall	12.04.16 15.11.19	1,60,375	Not available	44.1	4	1,894	1300	--
3	Parsvnath Landmark	02.07.07 14.07.20	2,55,262	DUs - 505 EWS - 390	125.6	3	3,256	40	180
4	Negolice India (M2K)	16.05.07 13.01.21	1,72,855	DUs - 488 EWS - 287	235.0	3	1,804	4980	4070
5	Delhi Floor Mills Co. Ltd	17.09.19	1,32,957	DUs - 346 EWS - 276	165.0	3	1,143	2860	420
6	DCM Ltd	19.09.17	10,05,604	Not available	180.0	3	9,858	3970	
7	DLF Home Developers	11.10.19	10,00,727	DUs - 2900 EWS - 1862	179.2	4	8,836	7900	--

23. It is submitted that the Appellant University has sought to mislead this Hon'ble Tribunal by raising false and factually inaccurate arguments in its Written Submissions including the following,

- i. It has been stated by the Appellant that *“There is no proof that the Soil investigation report of 2018 was presented to SEIAA” (Pg. 1960 of the WS)*. However, it is clear that the Appellant had sent the 2018 Soil Report dated March, 2018 conducted by M/s Ground Engineering Ltd., to the Ld. SEAC *vide* its Letter dated 13.03.2018 which has been placed on record. *(Report @ Pg. 741 – 764, Letter @ Pg. 733, I.A. No. 75 of 2020)*.

- ii. Further, the Appellant has baldly stated in its Submissions that “*Various shortcomings towards waste management such as on permission from SPCB under Solid Waste Management Rules 2016, no plan or details of STP, location of plant area required among others.*” It is relevant to note that the Respondent No. 4 has submitted a detailed schematic drawing of the proposed STP with technical details such as the units of the Raw Sewage Transfer Pump, Sludge Recycling Pump etc. along with revised water calculations for the enhanced capacity as per the recommendations of the Ld. SEAC on 09.03.2018 which is also on record. (**@ Pg. 646, I.A. No. 75 of 2020**).
- iii. Further, the Appellant has also questioned the “*very sanctity of the assessment carried out by the Committee*” (**@ Pg. 1946 of WS**) since the Ld. Committee has held that the Project does not fall in a “Silence Zone” as prescribed under MoEF Noise Pollution (Regulation and Control) Rules, 2000 read with Notification issued by the GNCT of Delhi dated 03.04.2008, since there is no educational institution/hospital within a distance of 100 metres of the Subject Property. The Appellant has sought to deceive and mislead this Hon’ble Tribunal by arguing that hostel buildings of the Appellant amount to Educational Institutions whereas the Notification of the GNCT of Delhi clearly specifies that the Silence Zone of 100 metres is restricted to “Educational Institutions” having more than 1,000 students. It would be farcical for the Appellant to argue that the statutory “Silence Zone” comprises 100 metres around any building of the Appellant University, even though it may not be used for educational purposes. In fact, the colleges of the Appellant University in its North Campus are not within 100 metres of the Project Site of Respondent No. 4 even as per the Maps annexed by the Appellant in its Appeal. (**Pg. No. 253-254, Appeal**) Further, the Patel Chest Institute/ Department of Central Institute of Education is more than 600 metres from the Subject Property, which the Appellant has wrongly stated to be within 100 metres of the Subject Property, in its Appeal.
- iv. The Appellant has wrongly stated in paragraph A(10) (**Pg. 1943, WS**) that the Ld. Committee has limited the potential air pollution impact to only vehicular emissions. In fact, the Ld. Committee has considered

the impact from the following, (*@Pg. 18, Report*) which has been conveniently omitted by the Appellant in their Written Submissions,

- a. Construction and Excavation Activities - TSP (total suspended particles) of 1.2 Tons/Acre/ Month of activity were estimated based on the CPCB SA Study, 2010.
- b. Impact from Diesel Generator (“**DG**”) sets – The Ld. Committee noted that as per Form 1A in the Application for EC, DG set will run only intermittently as back up. Further, the Ld. Committee also considered the Monthly outage data of scheduled and unscheduled power outages for Timarpur ward, available on Tata Power website. It is was found that that power outage varies seasonally from approx. 3 hours to up to 18 hours in a month. Hence, during the construction phase of the project only intermittent operation of back up DG set will be required.

Therefore, the Appeal as well as the Written Submissions are deeply misleading and have been drafted so as to incorrectly create prejudice against the Respondent No.4

24. It is submitted that the Respondent No. 4 is undertaking a residential group housing project near the Vishwavidyalaya Metro Station on the land leased by the DMRC, Respondent No. 3 herein, pursuant to an open public auction conducted in 2008 on payment of Rs. 218.20 crores. The land was leased for a 90-year period. Despite 12 years having elapsed, the Appellant has not been able to undertake the construction solely on account of the frivolous and vexatious litigation at the behest of the Respondent University. The Respondent No.4 has already suffered huge financial losses on account of stagnation of the Project since the last 12 years apart from suffering on account of loss of opportunity and reputation due to the protracted litigation at the behest of the Respondent University. In fact, the Hon’ble Apex Court on 17.12.2019 dismissed the SLP (C) No. 5581-5582 of 2018 filed by the Appellant University with respect to this very Project where the change of land use, FAR, high rise construction and grant of authorization to construct the group housing project by the DDA was in challenge. However, the Appellant has re-agitated these exact points in its WS despite two Orders of the Hon’ble High Court of Delhi dated 27.04.2015 and 29.10.2018 as well as the Order of the Hon’ble Supreme Court dated 17.12.2019 which have

finally dismissed the aforesaid contentions. Thus, the conduct of the Appellant is extremely selective and driven by oblique motives to stall the Respondent's Project.

PARAGRAPH-WISE REPLY

25. In Re: Objection to the Composition of the Committee

The contents of paragraph A(1) are denied as being legally erroneous. It is submitted that the principle of *nemo judex causa sua*, i.e. being a judge in your own cause is wholly inapplicable to the facts of the present case since the role being fulfilled by the member in question, who was also a part of the SEAC granting the EC, is in the nature of a remand. In the case of *Mahashwari Synthetics Pvt. Ltd. v. Commissioner of Income-Tax*, reported at **2009 SCC OnLine P&H 11653**, the Hon'ble High Court held that,

"10. Questions Nos. (i), (iii) and (vi) are, thus, not substantial questions of law. As regards question No. (ii), we are unable to hold that merely because an authority has to deal with the matter again, after remand, such authority suffers from judicial bias. The Tribunal rejected the contention of the appellant, relying upon the judgment of the Hon'ble Supreme Court in Union of India v. Vipin Kumar Jain, [2003] 260 ITR 1, holding that there could be no apprehension of bias merely because the authority under section 132 of the Act and the Assessing Officer is the same.

The question of bias has to be decided on the facts of each case and the mere fact that the officer associated with the search, made the assessment, was not by itself a ground to impute bias. While making assessment, the Assessing Officer had to apply the judicial norms. We are, thus, unable to hold that the question raised is a substantial question of law."

In the case of *G.N. Nayak v. Goa University & Ors.* reported at **2002 2 SCC 712**, the Hon'ble Supreme Court held that,

33-Bias may be generally defined as partiality or preference. It is true that any person or authority required to act in a judicial or quasi-judicial matter must act impartially. "If however, 'bias' and 'partiality' be defined to mean the total absence of preconceptions in the mind of the judge, then no one has ever had a fair trial and no one ever will. The human mind, even at infancy, is no blank piece of paper. We are born with predispositions and the processes of education, formal and informal, create attitudes which precede reasoning in particular instances and which, therefore, by definition, are prejudices".

34-It is not every kind of bias which in law is taken to vitiate an act. It must be a prejudice which is not founded on reason, and actuated by self interest whether pecuniary or personal. Because of this element of personal interest, bias is also seen as an extension of the principle of natural justice that no man should be a judge in his own

cause. Being a state of mind, a bias is sometimes impossible to determine. Therefore, the Courts have evolved the principle that it is sufficient for a litigant to successfully impugn an action by establishing a reasonable possibility of bias or proving circumstances from which the operation of influences affecting a fair assessment of the merits of the case can be inferred.

36- As we have noted, every preference does not vitiate an action. If it is rational and unaccompanied by considerations of personal interest, pecuniary or otherwise, it would not vitiate a decision. For example, if a senior officer expresses appreciation of the work of a junior in the Confidential Report, it would not amount to bias nor would it preclude that senior officer from being part of the Departmental Promotion Committee to consider such junior officer along with others for promotion.

It is an admitted position that even the Appellant has not attributed any extraneous motive to the said member which would lead to any reasonable apprehension of prejudice or bias of a pecuniary or personal nature. The Hon'ble Supreme Court has held in *G. N. Nayak (Supra)* that there must be an element of self-interest which unfounded on any reason for the principle of *nemo judex causa sua* to apply. In the instant case, there is absolutely no evidence to point towards the likelihood of any personal/pecuniary bias on the concerned member. Therefore, merely because the member was also a part of the SEAC granting EC, it would not ipso facto mean that she has a predisposition to a particular outcome.

26. In Re: Meeting not conducted in a transparent manner

The contents of paragraph A(2) are denied as being factually incorrect. It is important to clarify that the Appellant has conveniently omitted the fact that this procedure was followed uniformly by the Ld. Committee for each of the parties – the Appellant, the Respondent No. 4 as well as the DMRC. Even the Respondent No. 4 herein was not allowed to be a part of the proceedings when the Appellant or the DMRC were making their submissions

27. In Re: Appellant was not informed of the field visit made by the Committee

The contents of paragraph A(3) are denied as being factually inaccurate. It is pertinent to note that even the Respondent No. 4 was not notified about the visit, however, the caretaker and security guard employed by the Respondent No. 4 who are at the Project site were present. None of the management or authorised representatives of the Respondent No. 4 were present for the site

visit. However, it is natural that the Respondent No. 4 has employed personnel to ensure the safety and security of the Project Site.

In Re: Credentials of the Site Visit Team of the Committee is questionable

28. The contents of paragraph 4 are denied as being misconceived. It is submitted that the Site Visit was conducted on 17.08.2020 and the members of the Ld. Committee who were based in Delhi attended the said site-visit. (**Report @ Pg. 4**) Further, it is absurd for the Appellant to challenge the credibility of the members who conducted the site-visit. In any case, the four members out of nine members who visited the site were from CPCB, MoEF& CC, School of Planning and Architecture and the National Disaster Management Authority. All these 4 members are competent to analyse the project site and vicinity.

29. **In Re: Non-Compliance of the Order dated 10.06.2020 of the Hon'ble Supreme Court**

The contents of paragraph A(5) are denied as being based on a mis-interpretation of the Order dated 10.06.2020 passed by the Hon'ble Supreme Court in CA No. 2485 of 2020. In the said Order, the Hon'ble Supreme Court directed that,

“The Committee before it starts its first deliberation shall afford an opportunity of preliminary hearing to the appellant, University of Delhi and Delhi Metro Rail Corporation. Likewise, the Committee shall also afford a further opportunity of hearing to the appellant, University of Delhi and Delhi Metro Rail Corporation before it submits its final report before the Tribunal.”

The Appellant has incorrectly stated that *“The use of the word “final report” signifies that opportunity was supposed to be given while finalizing the Draft report and therefore the Draft report should have been availed to the Appellant.”*. A perusal of the Order dated 10.06.2020 would show that the Hon'ble Supreme Court nowhere stated that the Ld. Committee was to supply the Draft Report to any of the parties and therefore the Appellant cannot claim to be prejudiced by the same. In light thereof, the Ld. Committee has complied with the directions of the Hon'ble Supreme Court.

30. **In Re: Assessment done contrary to the decision taken in the meeting held on 05.08.2020**

The contents of paragraph A(6) are denied *in toto* as being factually and legally unsustainable. It is submitted that in the Minutes of the Meeting dated 05.08.2020, the Ld. Committee noted as follows,

“ Area within five km radius of the project site may be considered for examining available data on various environmental parameters, such as air quality, water quality, ground water levels, waste management plans during construction stage and post construction stage, etc., though, as informed by the representative of MoEFCC, impact zone is defined only for the projects covered under A category. The present project fall under B category. [L] [SEP]”

A perusal of the above passage would show that the Ld. Committee deliberated on how to select impact area and the representative of the Respondent No.1/MoEF & CC noted that the impact zone is defined only for the Projects covered under Category A of the Environmental Impact Assessment Notification dated 14.09.2006 (“**2006 EIA Notification**”). It is an admitted position that the Project of the Respondent No. 4 falls under Category B. In view of the same, the Ld. Committee chose the area of 2km x 2km as the impact zone to assess the viability of the Project. Therefore, it cannot be said that the Ld. Committee did not supply reasons or did not apply its mind since the minutes of the meeting and the explanation rendered therein reflect the decision making process adopted by the Ld. Committee.

31. In Re: Impact on population density is more significant than what is reported:

The contents of paragraph A(7) are denied *in toto* as being factually and legally erroneous. The Ld. Committee notes that the Project Impact Zone/Grid falls in 6 wards and out of these most of the area lies in the Timarpur ward (59.7%). (@. **Pg. 14 of the Report**) The Ld. Committee further notes that since Timarpur ward is the largest ward in the grid, the increase in population density due to the Project was estimated using present population density in Timarpur ward as baseline. (@. **Pg. 17 of the Report**) In view thereof, it is evident that the Ld. Committee has given cogent reasons for choosing Timarpur Ward as the baseline and by no stretch of imagination can it be said that the Ld. Committee has not applied its mind while analysing the Impact on Population Density. Further, the Appellant has presented an

incomplete picture with respect to the findings of the Ld. Committee *qua* population density. In fact, the Ld. Committee notes that,

*Population density: Timarpur ward is the largest ward in the grid and an incremental increase in the population was estimated in this ward. The estimated increase in the population density in the Timarpur ward will be 6777 persons per sq. km. **The percentage increment in the ward will be 14%. This increase is significant; however, tall residential buildings do give higher population density. This increase in density is not likely to impact the urban infrastructure/ services, as noted above.***

(emphasis supplied)

32. It is crucial to note that the increment in population density worked out at 14% is actually correctly 11%, if the correct calculations are made basis the population / density in the Layout Plan approved by the North DMC. In the said Layout Plan, (**Pg. 1886, Short Affidavit filed by Respondent No.4 dated 08.01.2021**) the total number of residents are calculated as 1541 persons against 1947 calculated by Ld. Committee. Even with a higher figure, the Ld. committee has found the impact as insignificant vis-à-vis the impact on the urban infrastructure and services.
33. The present objection raised by the Appellant is emblematic of the approach of the Appellant which has sought to substitute its own suggestions for that of the Ld. Expert Committee and has thereby argued that the process undertaken by the Ld. Committee is arbitrary in nature. In fact, the Ld. Committee has given thorough reasons for each of its inferences as is clear from the foregoing paragraphs.
34. **In Re: Assumptions made for calculating vehicular pollution has no basis and Vehicles plying are considered to be petrol or CNG and not diesel for evaluating vehicular pollution without any basis:**

The contents of paragraph A(8) - A(10) are wholly denied as being factually erroneous. With respect to the Vehicular emissions, the Ld. Committee has observed that,

With respect to vehicular emissions, the total road length in the grid is 34 km, out of this, major roads are 4.7 km and minor roads are 29 km. NH-44 passes through the grid crosses having approximately length of 2.5 km inside the grid. A snapshot of road length in grid is

presented below,

As per Form 1A, proposed parking is 854 ECs (including visitor parking)

Total road length within the grid = 34 km

Considering one fourth of total road length in grid is travelled by each car per day = $34 / 4 = 8.5$ km

No. of cars owned by occupants = 410 unit's x 2 cars per household

Considering 1.5 cars used daily,

No. of occupant's cars on road daily = 615 cars (considering all cars on BS IV petrol or CNG)

Considering, car usage 235 days per year

It is submitted that the Ld. Committee as per the Form 1-A in the Application for EC, used the figure of 854 ECS (Equivalent Car Space). Further, based on the number of dwelling units in the Project, as per the Layout Plan, it came to the figure of 615 cars. However, it is pertinent to note that the said figure is inflated since the 2 cars per household of 410 units has been considered whereas 152 units out of 410 total units are EWS which are only 1 BHK flats. The correct figure in such case, could be 501-539 (when 1.5 cars for 258 units (non-EWS) are considered and assuming usage of 0.75-1 car for 152 units (EWS)). It is further evident that each car would not ply on all days and thereby the Ld. Committee has taken reasonable estimates of 235 days, or approximately 2/3rds of the year, and the fact that 1.5 out of 2 cars per household would be used. The Appellant has sought to question the aforesaid figures which are extremely reasonable and rational. Further, it is pertinent to note that the Expert Committee has been formed by this Hon'ble Tribunal to give its Expert Advice, based on their knowledge, qualifications, experience, etc. In the said backdrop, it is irrational that the Appellant University is seeking to question the Advice/Calculation of the Committee and substitute its own opinion.

35. However, even if it is assumed that there would be 615 cars, the percentage increase in pollution due to the inflated figure is insignificant. It is pertinent to note that the Project is adjacent to a Metro station, therefore, the usage of cars would be much lesser, as most of the people will use metro for travelling purposes.

36. It is submitted that BS-IV compliant engines were made mandatory from 2010. The ARAI-TERI, 2018 report relied upon by the Ld. Committee at **Pg. 21 of the Report** states that the BS IV engines do not generate Particulate Matter. It is pertinent to note that BS-IV is a standard for automobile engines which also includes diesel engines. In fact, the data used in the said report is for 2016, wherein most of the vehicles were complying to norms prior to BS IV norms, wherein the emission was higher. Furthermore, from 01.04.2020, the Central Government has mandated that vehicle makers must manufacture, sell and register only BS-VI (BS6) vehicles which are compliant with BS-VI norms which are even more environmental friendly. Furthermore, the Respondent No. 4 is providing electronic charging points for electric cars which will also be used in the in times to come. Lastly, in case it is assumed that the Project is for high income group, in such case, in the operational phase which will happen after 4 years, i.e., 2025, if construction is commenced as on date, and the cars used will be with latest technology registered after 2010 or 2020 (not prior to 2010 as cars after 15 years are banned in Delhi) which, if not BS VI, will be atleast BS IV compliant.
37. In the Order of the Hon'ble Supreme Court dated 24.10.2018 in **M.C. Mehta v. Union of India [W.P. (C) No. 13029 of 1985]** it was observed that,
“15. When we compare BS-VI fuel with BS-IV fuel, there is a massive improvement in environmental terms. Once BS-VI emission norms are enforced, there will be a 68% improvement in PM2.5. This is not a small change.”
38. It is pertinent to note that the Ld. Committee estimated the ambient air quality annual average concentration for the years 2018 and 2019 for SO₂, NO₂, NH₃, Benzene, PM_{2.5}, PM₁₀ and CO. The Ld. Committee found that *“Statistically insignificant increment is noted in CO (0.25%), HC (0.09%) and NOx (0.1%) emissions due to proposed project.”*
39. The Appellant has wrongly stated in paragraph A(10) that the Ld. Committee has limited the potential air pollution impact to only vehicular emissions. In fact, the Ld. Committee has considered the impact from the following, (**@Pg. 18, Report**) which has been conveniently omitted by the Appellant in their Written Submissions,

- a. Construction and Excavation Activities - TSP (total suspended particles) of 1.2 Tons/Acre/ Month of activity were estimated based on the CPCB SA Study, 2010.
- b. Impact from Diesel Generator (“DG”) sets – The Ld. Committee noted that As per Form 1A in the Application for EC, DG set will run only intermittently as back up. Further, the Ld. Committee also considered the Monthly outage data of scheduled and unscheduled power outages for Timarpur ward, available on Tata Power website. It is was found that that power outage varies seasonally from approx. 3 hours to up to 18 hours in a month. Hence, during the construction phase of the project only intermittent operation of back up DG set will be required.

40. In Re: Ambient PM Level of the area is already alarming:

In response to the contents of paragraph A(11) it is submitted that the Ld. Committee was formed to assess the environmental footprint of the Respondent’s Project on the vicinity and thereby to assess the carrying capacity. While it is true that the PM levels in the Capital are higher than notified standards, the same ought not to act as a complete bar to any developmental activity. It is submitted that the principle of sustainable development requires that developmental activity must continue in a controlled manner so as to strike a balance between environmental protection and development.

41. In the recent Judgment of the Apex Court in *Rajeev Suri (Supra)*, the Hon’ble Supreme Court was considering the impact of the construction of the new Parliament having regard to the deteriorating ambient air quality in Delhi. The said Project is also a Category B-2 Project having built up area of 1,09,940 sq. metres, similar to that of the Appellant which has a built-up area of 1,17,733.81 sq. metres. In *Rajeev Suri (Supra)*, the Hon’ble Supreme court observed that,

374. Indubitably, environment and development are not sworn enemies of each other. It would be an anomalous approach to consider environment as a hurdle in development and vice-versa. The entities like EAC and NGT are created to strike a just balance between two competing interests and a time-tested principle of striking this balance is timely invocation of mitigating environmental measures amidst a development activity. True that

*mere application of certain mitigating measures may not alleviate environmental concerns in all matters and in some circumstances, the project is simply incomprehensible with the environment. **But as long as a legitimate development activity can be carried on in harmony with the idea of environmental protection and preservation including sustainable development, the Courts as well as expert bodies should make their best endeavour to ensure that harmony is upheld and hurdles are minimized by resorting to active mitigating measures.***

375. *The principle of sustainable development and precautionary principle need to be understood in a proper context. The expression “sustainable development” incorporates a wide meaning within its fold. It contemplates that development ought to be sustainable with the idea of preservation of natural environment for present and future generations. **It would not be without significance to note that sustainable development is indeed a principle of development – it posits controlled development.** The primary requirement underlying this principle is to ensure that every development work is sustainable; and this requirement of sustainability demands that the first attempt of every agency enforcing environmental rule of law in the country ought to be to alleviate environmental concerns by proper mitigating measures. The future generations have an equal stake in the environment and development. They are as much entitled to a developed society as they are to an environmentally secure society. By Declaration on the Right to Development, 1986, the United Nations has given express recognition to a right to development. Article 1 of the Declaration defines this right as:*

“1. The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.”

376. **The right to development, thus, is intrinsically connected to the preservance of a dignified life.** *It is not limited to the idea of infrastructural development, rather, it entails human development as the basis of all development. The jurisprudence in environmental matters must acknowledge that there is immense inter-dependence between right to development and right to natural environment. In International Law and Sustainable Development, Arjun Sengupta in the chapter “Implementing the Right to Development³⁷⁴” notes thus: “... Two rights are interdependent if the level of enjoyment of one is dependent on the level of enjoyment of the other...”*

The concern of the regulatory agencies is to weed out the unsustainable from the development plan and to parallelly ensure that right to development is not trumping upon any other right. Sengupta further notes:

“... There is an improvement in the right to development only if at least one of the constituent rights improves and no other right

deteriorates or is violated, which means the right to development conforms to the principle of the indivisibility of human rights....”

*380. They must always look for a careful balance when two equally relevant interests compete with each other. The task may not be easy, but is the only reasonable recourse. **For the proper application of these principles, the first and foremost thing to be kept in mind is the nature of the project. In the present case, the subject project is an independent building and construction project wherein one-time construction activity is to be carried out. It is not a perpetual or continuous activity like a running industry. It is absolutely incomprehensible to accept that a project of this nature would be unsustainable with the needs and aspirations of future generations.** Furthermore, the increase in footprint is not shown to be substantial and the inclusion of new members of Parliament after the delimitation exercise is anyway going to lead to an inevitable increase in footprint (floating though) that cannot be countenanced as a concern here.*

381. We, therefore, upon a thorough examination, decline to interfere in the grant of EC. The expertise developed by the EAC cannot be undermined in a light manner and as noted above, due deference must be accorded to expert agencies when their decisions do not attract the taint of legal unjustness. We, however, feel the need to record that the mitigating measures must be observed by the project proponent in letter and spirit during the construction and operational phase. Waste management methods, inclusive of hazardous wastes, must be subject to regular monitoring. The construction debris must be subjected to immediate removal as per the Construction & Development Plan. The project proponent may also install permanent high-capacity smog tower as part of the Project and use adequate number of smog guns to minimise pollution levels during the construction activity is in progress on the site.

382. We deem it fit to call upon the respondent MoHUA to consider issuing appropriate general directions so as to ensure that adequate use of smog guns during the construction of development projects and setting up smog towers is made a mandatory requirement, particularly involving government buildings, townships or other major private projects. Time has come to advance the intent behind improving air quality a mandatory feature for modern buildings and more particularly during the phase of construction of such major projects in the cities most affected by air pollution. In other words, directions be issued for the areas with deteriorating air quality index. We call upon the respondents (MoEF) to finalise the nuances in this regard and issue appropriate directions.

42. Thus, the Hon’ble Supreme Court has carved a distinction for independent building and construction projects wherein one-time construction activity is to be carried out as opposed to perpetual or continuous activity like a running a factory unit or industry. The Respondent No. 4 herein is also seeking to

construct a Residential Project. In fact, the Ld. SEAC as well as the Ld. Expert Committee have independently arrived at the finding that the Project of the Respondent No. 4 is viable and the additive load in terms of air pollution is not significant. Therefore, it would be wholly inequitable for the Respondent No. 4's Project to be hindered on account of the general rise in ambient air quality levels which are not sourced from the Respondent No. 4's activities. Further, in the vicinity of the Project, ECs have been granted in as late as 2020 by the Respondent No.1 for other building projects having higher magnitude in terms of height, basements and dwelling units.

43. In Re: Traffic Analysis based on wrong data and Width of the roads not considered

The contents of paragraph 12-13 are denied as being based on incorrect factual analysis. It is submitted that the Ld. Committee assessed *“The impact of additional cars on road during occupancy phase of the project was assessed on five road sections namely, Chatra Marg, Vishwavidyalaya to Vidhansabha Road, Vidhansabha to Vishwavidyalaya, GC Narang Road and Cavalary Road.”* Further, a traffic count survey was done by CPCB on October 12, 2020. (**@ Pg. 27-28 of the Report**) It is submitted that the COVID-19 lockdown had been substantially lifted in New Delhi when the said study was conducted as a part of the COVID-19 Unlock 5 Guidelines. The study was conducted from 10AM-7:30PM which are the peak hours for traffic.

44. Further, the Ld. Committee conducted the traffic study on the basis of the internationally recognised standard of “Volume to capacity ratio (V/C)” which estimates the current capacity of the Road and adds the additive load of the cars introduced by the Project under assessment to see whether the capacity of the road is saturated after the inclusion of the new vehicles. When the v/c ratio value equals 'one', it signifies the complete saturation of capacity of the road, resulting in congestion. Whereas, value towards '0', implies free flow condition. In the present case, the Ld. Committee added the 615 passenger cars and found that the VC Count did not even reach close to the figure of 1. (**Pg. 28 of the Report**) Thereafter, the Ld. Committee inferred that, (**Pg. 29 of the Report**)

“Based on analysis, it is inferred that the inclusion of additional 615 passenger cars on the road from the project will result in marginal increase in volume to capacity ratio (ranging 0.04 to 0.16). For the

various section of roads, it is also observed that increase in volume to capacity ratio during the morning peak hours (0.04-0.06) and evening peak hours (0.05-0.08) is less, as compared to the ratio during afternoon time (0.09-0.16). Overall, there will a marginal degradation in level of service.”

45. As per the U.S. Department of Transportation, Federal Highway Administration, the V/C Ratio count has to be assessed in the following manner,

“ The v/c ratio, also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected. ”

In the present case, the highest V/C ratio is 0.71 on the Vishwavidyalaya to Vidhansabha Road which further points towards the sustainability of the Project.

46. The Appellant has falsely alleged that the Opinion of Prof. Geetam Tiwari regarding the Traffic Assessment was not assessed. (@ Pg. 154-158 of IA 67 of 2020 filed by the Appellant) However, the same is listed in Pg. 10 of the Report (Item 17). Thus, the Ld. Committee has taken the same into account. In any case, instead of relying on the Traffic Analysis Report of 2018 submitted by the Respondent No.4 (@Pg. 661-689, I.A. No. 75 of 2020, Vol III filed by the Respondent No.4) or the Appellant, the Ld. Committee conducted an independent inquiry.
47. In any case, the opinion of Prof. Geetam Tiwari refers to a previous Traffic study of 2011 conducted by the Respondent No. 4 and not the most recent study of 2018. Further, a bare perusal would indicate that the opinion of Prof. Tiwari does not consider any data but merely makes general remarks. It is surprising that the said report does not calculate the V/C ratio on cavalry lane, though it claims that the same will exceed 1, without any basis or calculation.
48. The Appellant has claimed that the width of the roads has not been considered while assessing the Traffic Impact which. However, the Ld. Committee has referred to the capacity of each of the roads in its Report at Pg. 28 (Column

13). Further, the Appellant has incorrectly stated that the width of cavalry lane is 8.5mtrs and that of Chhatra marg 10.80 mtrs. whereas in the Layout Plan as approved by the North MCD, i.e. the municipal authority, it is clearly mentioned that width of cavalry lane is 24 meters and that of Chhatra Marg is 18.00 mtrs. as mentioned in approved Layout Plan annexed at **Page 191** of the report. It is further clarified that the existing width of Cavalry lane is 13.50 meters as mentioned on Page 192 of the report. Open space of 5.25 meters on both side which makes the total width as 24 meters (i.e. 13.5 + 5.25 + 5.25 m) is for road widening. This is yet another instance of the Appellant relying on wholly concocted and fictitious figures to create prejudice against the Respondent No.4 and the Appellant must be put to strict proof against its claims.

The Sanctioned LayOut Plan for the Project, as approved by the North MCD is annexed herewith and marked as **ANNEXURE A-1.**

49. In fact, since the actual width of the Cavalry lane is more than Chhatra Marg, coupled with the fact that the latter is a busier road, it is evident that the capacity of Cavalry Lane would be more than Chhatra Marg.
50. It ought to be noted that the EC granted to the Appellant has also stated in its “Other Specific Conditions”, upon analysis of the Traffic Study present by the Respondent No.4, that, **(Pg. 57, Appeal)**

“1.Chhatra Marg should only be used for pedestrian and non-motorised vehicles only or only in case of emergency with restricted motorised vehicles”

Further, even the Traffic Study of 2018 has suggested that “ *It is suggested that access maybe drawn from cavalry lane to avoid direct conflict with cycles and e-rickshaws plying on chhatra marg, though the Chhatra Marg may also be utilised for access from the west.* ” (**@Pg. 666, Vol. III, I.A. No. 75 of 2020 filed by the Respondent No.4**) Therefore, the Respondent No.4 will not use Chhatra Marg for access and as per the EC it will only be used “*for pedestrian and non-motorised vehicles only or only in case of emergency.*”

51. Further, the entire point of planning the Respondent’s Project adjacent to the Vishwavidyalaya Metro Station is to permit the residents to use public transportation facilities without burdening the existing road infrastructure.

52. **In Re: No suggestions on Solid Waste Management including C&D waste as well as Hazardous Waste Management**

The contents of paragraph A(14) are denied *in toto* as being factually and legally erroneous. With respect to the waste generated during the construction phase, it is submitted that as per the Construction and Demolition Waste Management Rules, 2016, the following are the duties of the Waste Generator,

(4) Duties of the waste generator –

(1) Every waste generator shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with these rules.

(2) The generator shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately.

(3) Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work and keep the concerned authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.

(4) Every waste generator shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorised processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.

(5) Every waste generator shall pay relevant charges for collection, transportation, processing and disposal as notified by the concerned authorities; Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall have to pay for the processing and disposal of construction and demolition waste generated by them, apart from the payment for storage, collection and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.

A Copy of the Construction and Demolition Waste Management Rules, 2016 are annexed herewith and marked as **ANNEXURE A-2**.

53. In this regard, as per the estimates on C&D wastes likely to be generated and as given by the Technology Information Forecasting and Assessment Council (“TIFAC”), it is expected that the C&D waste will not be more than 50 kg/m²

of built-up area (Total 1,17,733.82 m² x 50 kg = 5886.7 Tons). If it is assumed that the construction at the very least will take 3 years i.e. 36 months as construction period, average monthly waste will be approximately 163 tonnes. Therefore, as per Regulation 4(3), the Respondent No.4 does not fall within the bracket of generating 300 tonnes of waste a month and thereby does not require to seek approval of the Waste Management Plan as per the C&D Regulations, 2016.

54. There are 04 construction and demolition waste processing facilities in Delhi, located at Burari, Jahangirpuri, East Kidwai Nagar and Shastri Park. The Respondent No. 4 will enter into an agreement with one of these units for handling and disposal of C&D wastes, as and when required. The Respondent No. 4 further undertakes that hazardous wastes such as paint, varnish, solvents, adhesives carrying containers will be kept in separately designated, fully lined and covered sheds with a gulland drain, and will be handed over to the recyclers authorized by the State Pollution Control Board / Committee.

55. In fact, the EC granted to the Appellant lays down the following conditions, **(Pg. 54, 58 of the Appeal)**

“Construction Phase [...]

v. Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed off taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. The Rules on Solid Waste Management, including Construction Waste issued by MoEF & CC as amended will be applicable.

vi. Construction spoils including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.

vii. Any hazardous waste generated during construction and operation phase should be disposed of as per applicable rules and norms with necessary authorization from Delhi Pollution Control Committee.[...]

Other Specific Conditions,

14. Construction & Demolition waste should be disposed of at authorised C&D waste processing unit. ”

56. The Ld. Committee has considered the following for the waste generated during the Occupancy phase, **(Pg. 25 of the Report)**

“ In a High-Income Group residential society 0.6 kg/ capita/ day of solid waste is expected to be generated (CPEEHO, MoUD). Total occupants = 194(waste from visitors has not been taken into consideration) Estimated municipal waste generated per day = 1957 X 0.6 = 1168 kg/ day”

Further, the Ld. Committee, on the basis of the Swacchh Bharat Manual - II, has estimated the solid waste generation as the following,

Only Inert waste is to be disposed off from the project site = 294 kg/day

Present generation of solid waste in the grid = 38,475 X 0.6 = 23,085 kg/ day (information on recycling or composting not available for the grid)

An increase of 1.27% from the present generation of solid waste in the grid is estimated.”

Further, contrary to the contention of the Appellant, the Ld. Committee notes that,

“A solid waste management plan for occupancy phase has been examined. It is noted that waste will be collected into separate biodegradable and non-biodegradable waste bins. Biodegradable waste will be treated in organic waste convertor in the premises, however capacity of convertor and technical details are not being provided. The recyclable waste will be handed to recyclers. The horticulture waste and STP sludge will reportedly be composted and used as manure.”

It is concluded that,

“An increase of 1.27% from the present generation of solid waste in the grid is estimated due to the project.”

57. This clearly shows application of mind on behalf of the Ld. Committee which has used statutory guidelines for arriving at the calculation for solid waste, as opposed to the contention raised by the Ld. Appellant that the Ld. Committee has not considered any statutory notifications or guidelines. In any case, it is pertinent to note that the Solid waste management has been examined on the basis of 1957 persons against 1547 persons calculated as per Layout plan sanctioned.

58. **In Re: Incomplete noise impact analysis**

The contents of paragraph A(15) are denied as being legally and factually incorrect. It is submitted that the Project Site does not fall in a “Silence Zone” as prescribed under MoEF Noise Pollution (Regulation and Control) Rules, 2000 read with Notification issued by the GNCT of Delhi dated 03.04.2008, since there is no educational institution/hospital within 100m of the Subject Property. The Appellant has sought to deceive and mislead this Hon’ble Tribunal by arguing that hostel buildings of the Appellant amount to Educational Institutions whereas the Notification of the GNCT of Delhi clearly specifies that the Silence Zone of 100 mtrs. is restricted to “Educational Institutions” having more than 1,000 students. It would be farcical for the Appellant to argue that the statutory “Silence Zone” comprises 100 mtrs. around any building of the Appellant University, even though it may not be used for educational purposes and may not house 1000 students. In fact, the colleges of the Appellant University in its North Campus are not within 100 mtrs. of the Project Site of R4 even as per the Maps annexed by the Appellant in its Appeal. (*Pg. No. 253-254, Appeal*) The Appellant has not pointed out any Institute or Hostel mentioned having more than 1000 students in the 100 mtrs. radius around the Project Site. The same is admitted from the fact that the appeal (*@Pg 19, Appeal*) mentions that the Faculty of Education accommodates 550 students, however, the distance of the said institute is more than 100 meters.

A Copy of the MoEF Noise Pollution (Regulation and Control) Rules, 2000 are annexed herewith and marked as **ANNEXURE A-3.**

A Copy of the Notification issued by the GNCT of Delhi dated 03.04.2008 is annexed herewith and marked as **ANNEXURE A-4.**

59. It is evident from the Report (*@Pg. 7-8 of the Report*) that the Ld. Committee has visited the Meghdoot Hostel as well as School of Open learning is evident from the pictures enclosed in report. They have categorically stated that the only institute is a hospital i.e. Patel Chest Institute at a distance of 600 meters. Therefore, the project area does not fall under silence zone.
60. In Form-I in the Application for EC, the Respondent No. 4 has undertaken that Noise Source in the operational phase will be from Diesel Generator (“**DG sets**”) (which will be in operation only during power failure) and pumps & motors. All the machinery will be of highest standard of reputed

make and will comply with standard, i.e., the DG set room will be provided with acoustic enclosure to have minimum 25 dB (A) insertion loss or for meeting the ambient noise standard whichever is on higher side as per E (P) Act, GSR 371 (E) and its amendments which relate to Noise Limit For Generator Sets Run With Diesel. Therefore, no significant impact due to operation of machinery is anticipated.

61. In addition, to control the noise generated due to the proposed project, during the construction phase, Wind & Noise barrier of 10m height will be provided and further during the operational phase there will be a 9-inch thick brick boundary wall and tree plantation at the periphery of the site and further a no honking zone shall be maintained.
62. Lastly, as a matter of abundant caution, even the EC granted to Respondent No. 4 specifically records that during the construction Phase, the ambient noise levels should conform to prescribed standards, both during the day and night. (*@Sr. No. 12, Pg. 55, Appeal*). Further, during the Construction Phase, a condition has been imposed that Respondent No.4 must only use Diesel Generators of low-sulphur diesel type, which conform to prescribed standards for air and noise emission. (*@Sr. No. 10, Pg. 54, Appeal*)
- In Re: Location of the project viz-a-viz its surroundings have not been considered properly**
63. The contents of paragraph A(16) are denied as being legally and factually incorrect. The Project has been given approvals from the relevant statutory authorities,
- i. National Monument Authority Approval dated 26.12.2012 (*@ Pg.174, Report*): Project falls beyond the regulated area of centrally protected monument.
 - ii. Archaeological Survey of India Approval dated 08.05.2009(*@ Pg. 171, Report*): Area falls neither within the prohibited nor regulated area of any centrally protected monument.
64. The contention with respect to the privacy of Girls Hostel has been raised by the Appellant before the Hon'ble High Court as well as the Hon'ble Supreme Court in proceedings that initially arose out of a Writ Petition (Civil)

filed by the Appellant University before the Hon'ble High Court of Delhi at New Delhi. The Appellant University made baseless allegations against the legality of the Project, as a result of which Lt. Governor of Delhi, in a meeting of the DDA dated 17.02.2010, constituted a Committee under the Chairmanship of the Chief Town Planner, MCD with the Engineer Member, DDA and the Chief Engineer, DMRC as members, to survey the entire area and examine the implications on the proposed high-rise buildings, on the privacy and integrity of the environment at the University of Delhi. A Joint Inspection was conducted by the Committee formed by the Lt. Governor of Delhi, and a Joint Inspection Report was issued in March 2010, which highlighted the following points: (*Pg. 112-120, C.A. filed by the Respondent No.4 dated 08.2018*)

- (i) The proposed high-rise property development will not add to the parking problem in the area, as there is ample parking on both sides of the Metro Station;
- (ii) The Project will not aggravate the parking problem in the area, as sufficient parking has been envisaged at the site itself;
- (iii) The project is an iconic development project, which will serve as an island of excellence;
- (iv) The construction is not debarred as per the Master Plan of Delhi – 2021 (“MPD-2021”).
- (v) The proposed high-rise property development on 2.0 Ha. plot will not affect the privacy of the girls’ hostel nearby, as these are either at a distance (e.g. Miranda House) or interspersed by other buildings (Meghdoot Hostel).

65. In fact in the Order dated 27.04.2015 in W.P. 2743 of 2012 *Registrar, University of Delhi v. Union of India*, it was noted that, (*@ Pg. 33-76 @67,68, Counter Affidavit filed by R-4 dated August, 2018*)

“51. Thereafter, the matter was considered in DDA’s meeting held on 17.02.2010, whereby the Lt. Governor constituted a Committee under the Chairmanship of Engineer Member, DDA with Chief Town Planner, MCD and Chief Engineer, DMRC as members to survey the entire area and examine the implications on the proposed high-rise buildings on the privacy and integrity of the Delhi University environment. Accordingly, the Lt. Governor directed that the Committed would give its report within a week. Pursuant to the said direction, a joint inspection of the site was conducted by the

committee members on 19.02.2010 whereby observed and concluded that the proposed high rise property development on 2.0 Hectare plot will not affect the privacy of the girls' hostel nearby, will not add to any parking problem and will also not affect the serenity / tranquillity of University area."

The said Order has attained finality since SLP(C) No. 5581-5582 of 2019 filed by the Appellant herein, challenging the order in LPA No. 89 of 2018 (which had challenged the Order dated 27.04.2015 in WP(C) 2743 of 2012), was dismissed by the Hon'ble Supreme Court *vide* Order dated 17.12.2019. Therefore, an Independent Committee constituted by the Lt. Governor, the Hon'ble High Court as well as the Hon'ble Supreme Court have not found the apprehensions of the Appellant to be unwarranted insofar as it relates to the privacy of the Women's hostels. Further, the Appellant filed an IA before the Hon'ble Supreme Court as well pertaining to the privacy of women's hostels which was disposed of *vide* Order dated 17.12.2019.

A Copy of the Order of the Hon'ble Supreme Court dated 17.12.2019 is annexed herewith and marked as **ANNEXURE A-5.**

66. In Re: No findings provided on adverse effects of DG Sets being used

The contents of paragraph A(17) are legally incorrect and irrelevant to the facts of the present case. The Appellant is admittedly relying on the case of *Bharti Infratel Ltd. & Ors. vs. State of M.P. & Ors. O.A. No. 83,77 (Thc) of 2012* which relates to provision of cellular services which requires uninterrupted use of DG Sets. In fact, in the said Order it is noted that, "*DG Set is an integral part of a process to provide cellular services to the people at large. It is strictly speaking not a standalone plant but is part of the entire process as it is a source of uninterrupted and continuous energy to the tower to ensure that there is no disruption of signals.*" (@. **Pg. 1948 of the WS**) However, in the present case DG set will run only intermittently as back up. Further, during the Construction Phase, a condition has been imposed in the EC that Respondent No.4 must only use Diesel Generators of low-sulphur diesel type, which conform to prescribed standards for air and noise emission. (@**Sr. No. 10, Pg. 54, Appeal**) Furthermore, any hazardous waste generated by the use of oil in the DG Sets, as informed to the Ld. Committee, will be kept in separately designated, fully lined and covered sheds with a garland drain, and will be handed over to the recyclers authorized by the State Pollution Control Board / Committee. Further as per Condition No.7 in the

Construction Phase (*@ Pg. 54, Appeal*), any hazardous waste will be disposed off as per the applicable rules and norms.

67. **In Re: Change in layout and modification on basement and parking suggested due to impact on groundwater discharge zone - Consequential impact of suggestions not studied and moreover fresh EC would be required:**

The contents of paragraph A(18) are denied as being misleading. The Respondent No.4 has only stated that restricting the Project to one basement will require major design changes, however, that would not make the Project unviable. The Respondent No.4 seeks to refer to its Short Affidavit dated 08.01.2021 for the purpose of the present argument.

68. **In Re: Analysis of seismic stability has various shortcomings and irregularities:**

The contents of paragraph A(19) are denied as being factually and legally erroneous. It is submitted that as per the National Building Code , Para 12.2.8, it is provided that the certificate for Structural Safety shall be issued by a Structural engineer. In light of the same, STR certificate was obtained on 10.01.2018. (*Pg. 107, Report*) Even, UBBL-2016 as amended provides that for purposes of Structural Safety, the responsibility lies with the owner and its structural engineer. Therefore, as provided under law, the STR certificate was obtained which has been relied upon by the expert committee.

A Copy of the relevant extracts of the National Building Code,2016 are annexed herewith and marked as ANNEXURE A-6.

A Copy of the relevant extracts of the UBBL-2016 are annexed herewith and marked as ANNEXURE A-7.

A Copy of the relevant provisions of the IS Code are annexed herewith and marked as ANNEXURE A-8.

69. Further, the Appellant has placed reliance on the Report of KS Rao, (*@Pg. 159 of IA 67/2020 of the Appellant*) which is only a single page opinion in general pertaining to Delhi as whole, whereas the report of Prof. V S Raju (*Pf. 108-168 of the Report*), the 2011 Report of M/s Rao Engineering as well as the 2018 Soil Analysis done by M/s Ground Engineering Ltd. (*Pg. 741-764, I.A. No. 75 of 2020 filed by Respondent No.4*) are site-specific Reports

relating to the subject Project and which discuss in detail the impact on soil, structure and seismic zone as well as the liquefaction potential. In fact, in the Report of 2011, the Liquefaction Potential at the Project Site was analysed by two separate methods, and it was concluded that there is no possibility of liquefaction. (*@ Pg. 458 of the I.A. No. 75 of 2020 filed by the Respondent No.4*)

70. In Re: No clarity towards Ground Water Usage

The contents of paragraph A(20) are denied as being factually erroneous and misleading. It is clarified that the Respondent No.4 will not be extracting ground water for purposes of usage, however, during the dewatering process, the excess water which is abstracted will be used on a strictly need basis subject to approval from the DJB. Therefore, there is no intention to use groundwater for construction purposes, however, any excess water generated during dewatering may be used subject to approval of the DJB and the CGWA. Further, the Respondent No.4 will not use the water in case the Hon'ble Tribunal opines it would be harmful towards the environment.

71. It is submitted that the process of dewatering cannot be equated to the use of ground water. Further, the NOC for dewatering sought by the Respondent No.4 is pending before the District Advisory Committee on Ground Water of the Govt. of NCT Delhi. It ought to be noted that the said NOC is granted as per the "Guidelines to regulate and control ground water extraction in India" ("the Guidelines") dated 24.09.2020 (*@ Pg. 1981-1919 of the Short Affidavit filed by Respondent No.4 dated 08.01.2021*) issued by the Ministry of Jal Shakti, Union of India pursuant to the Orders of this Hon'ble Tribunal and the Hon'ble Supreme Court. The Guidelines contain an exhaustive and detailed list of measures to be adopted by the Applicant for monitoring and safe use of ground water. Further, specific conditions are mandatorily to be followed by the Applicant such as regular monitoring of dewatering discharge, installation of a STP and payment of abstraction charges/ground water restoration charges depending on the level of ground water in the area. Further, the Applicant must submit an impact assessment report prepared by an accredited consultant on the ground water situation in the area giving detailed plan of pumping, proposed usage of pumped water and comprehensive impact assessment of

the same on the ground water regime. Therefore, the entire process enshrined under the Guidelines ensures that environmental risks are considered and management strategies to overcome any significant environmental issues such as ground water level decline, land subsidence are proposed and implemented. The Respondent No. 4 has filed its Application for seeking NOC from the Executive Engineer, Delhi Jal Board on 30.12.2020. (@ Pg. 1920-1921 of the *Short Affidavit filed by Respondent No.4 dated 08.01.2021*)

72. In fact, the said District Advisory Committee on Groundwater will also be equipped to assess whether two basements in the Project of the Appellant are viable, in light of the groundwater scenario of the area.
73. It is further submitted that the Groundwater will be recharged after sometime post the dewatering. In fact, the process of dewatering and recharge of groundwater thereafter were explained in the *Guidelines on safe and efficient basement construction directly below or near to existing structures GU35 9LU 2nd Edition ISBN: 978-0-9545370-4-3, ASUC July 2016*, wherein it is reported that,

2.Lowering the water table below the formation level of the basement allows construction within the dewatered area to be completed using standard construction methods. The principal technique for achieving safe local dewatering is to use a specialist well point dewatering system usually installed and operated by a specialist contractor. In these systems a series of submersible pumps is installed at below basement formation level down drilled well points around the perimeter of the site. The submersible pumps are each installed with a slotted pipe, wrapped in geotextile material and surrounded by a free draining material. The geotextile material allows water to pass but blocks movement of any ground including fine material suspended in the groundwater. The pumps are usually left running continuously to keep the water table lowered during the work. The water removed by the pumps should usually be passed through a settlement tank in order to monitor for removed ground and also to ensure that no material is discharged into the drains. A license is usually needed from the water utility company for discharge of groundwater into the drainage system. Once the water table has been lowered construction work can continue in the now dry ground within the well points. After completion of the basement the dewatering system is removed and the water table will return to its original level. ”

(Emphasis Supplied)

A Copy of the General Building requirements issued by the MoHUA are annexed herewith and marked as **ANNEXURE A-9.**

A Copy of the *Guidelines on safe and efficient basement construction directly below or near to existing structures GU35 9LU 2nd Edition ISBN: 978-0-9545370-4-3, ASUC July 2016* are annexed herewith and marked as **ANNEXURE A-10.**

74. Lastly, during the occupancy phase, the Respondent No.4 has been granted Water supply approval from Delhi Jal Board (DJB) on 07.10.2015. (***Pg.176-177 of the Report***)
75. **In Re: Colourable violation of Precautionary Principle**
It is submitted that there has not been any colourable violation of the Precautionary Principle by the Ld. Committee. The recommendation of a single basement and the Project allegedly falling in a ground water discharge zone are not contradictory in nature.
76. **In Re: No Analysis of Impact on the Ridge**
The contents of paragraph A(22) are denied *in toto* as being legally erroneous. The Northern Ridge is 500 mtrs away from the Project Site. There is no legal restriction on the existence of a Project 500 mtrs. away from the ridge. The Hon'ble Supreme Court in *DDA v. Kenneth Builders (2016) 13 SCC 561*, held that the approval of the Ridge Management Board is sought when the Project Site falls in the Ridge area or area which is morphologically similar to and adjacent to the Northern Ridge. The Project site of the Respondent No.4 falls beyond 0.5 Km from the Northern Ridge and has no tangible or direct impact, environmental or otherwise, on the Northern Ridge area in North Delhi and neither is it being constructed on land morphologically similar to the Northern Ridge.
77. **In Re: No Analysis on Critically Polluted Areas**
The contents of paragraph A(23) are denied *in toto* as being factually erroneous. The Ld. Committee notes that the Project is at a considerable distance from critically polluted areas, i.e. 37 km from Najafgarh drain, 5 km from Wazirpur, 10 km from Naraina and 5 km from Anand Parbat.
78. It is crucial to note that the General Condition appended to the schedule of the EIA Notification of 2006 does not apply to the Respondents No.4's Project

since it is a building and construction project falling under item 8(a) to the Notification and is thereby appraised as a Category B-2 Project. The General Condition states that Category B Projects, which are within 10 kms from any protected areas, critically polluted areas eco-sensitive areas and inter-state boundaries will be appraised as Category A. However, the same will not apply to the Project for the following reasons,

- i. As mentioned above, the Schedule to the EIA Notification dealt with various category of projects which require prior EC and with the threshold limit for the purpose of such categories and further, with Conditions, if any. During the period relevant to the present Appeal, the list of various projects was categorised under eight heads. Relevant extracts of Item 8 of the Schedule read as under

Project or Activity		Category with threshold limit		Conditions
(1)	(2)	(3)	(4)	(5)
8		Building/Construction Projects/ Area Development Projects and Townships		
8 (a)	Building and Construction Projects		>20,000 sq. mtrs and <150,000 sq. mtrs of built-up area #	# (built-up area for covered construction; in the case of facilities open to the sky, it will be the activity area)
8 (b)	Townships and Area Development projects		Covering an area > 50ha and or built-up area > 150,000 sq. mtrs. ++	++All projects under Item 8 (b) shall be appraised as Category B1.

- ii. It is noteworthy that the EIA Notification in a Note after the Schedule, also provided for General Condition (GC) and Special Condition (SC) as well. However, the said Conditions were specifically made applicable to certain project activities wherever mentioned in Column 5 of the Schedule. Further, on applicability of the General Condition, any project or activity in Category 'B' will be treated as Category 'A' if the location is within 10Km boundary of protected areas, critically polluted areas eco-sensitive areas and inter-state boundaries. Insofar as the Building and Construction projects are concerned, as is clear from the above table, no such conditions were prescribed.

- iii. On 24.05.2011, while clarifying certain doubts relating to applicability of an earlier Office Memorandum dated 28.04.2011, the MoEF specifically stated that the building and construction projects under Item 8 (a) and township and area development projects under Item 8 (b) of the 2006 EIA Notification did not attract the General Condition and hence, such projects will continue to remain as Category 'B' irrespective of their location with respect to identified critically polluted areas and will continue to be appraised by the SEIAA. The Hon'ble Supreme Court in *Jal Mahal Resorts Private Limited vs. K.P. Sharma & Ors., (2014) 8 SCC 804* at Para 100 has taken note of the aforementioned clarification to observe that building and construction projects fall in Entry 8.
- iv. Further, on 22.12.2014, the MoEF&CC issued a Notification, being S.O. 3253(E) inter alia clarifying that the General Conditions of the 2006 EIA Notification are not applicable to Construction Projects, covered under Item 8(a) and 8(b) of the Schedule.
- v. Therefore, the General Condition does not apply to Entry 8 of the Schedule to the EIA Notification and thus, does not apply to the Respondent No.4's Project.
- vi. On 22.12.2014, by way of Notification SO No. 3252 (E), wherein while amending Item 8 of the Schedule to the 2006 EIA Notification to explain 'built-up area', Note 2 was added to the conditions specifically stating that "General Conditions" shall not apply to the said Entry 8.

A Copy of the Notification dated 24.05.2011 is annexed herewith and marked as **ANNEXURE A-11.**

A Copy of the Notification dated 22.12.2014 is annexed herewith and marked as **ANNEXURE A-12.**

79. **In Re: Contrary information submitted with regards to Najafgarh Drain**
 The contents of paragraph A(24) are denied *in toto* as being factually erroneous. It is clarified that Najafgarh Drain or Najafgarh Nallah is actually located near Najafgarh, south Delhi which is approx.. 37 km away from the Project site. So the information shared in relation to critically polluted area at Pg 30 of the Report is correct. However, the drain is flowing through parts of Delhi which is ultimately getting merged with Yamuna River. Now, that drain flows, approx. 500 metres from the project site is also correct, which was

referred in terms of flow of water at Pg 23 of the Report by the Ld.committee. Therefore, there is no contrary information.

80. In Re: Incorrectly notes distance with interstate border

It is submitted that the correct distance as per Google Maps is 9.8 Km from the Project to Loni border. Further, the General Condition in the 2006 EIA Notification does not apply to the Project of the Respondent as stated hereinabove and therefore the distance to an Inter-State Boundary is not relevant.

81. In Re: Factual Inaccuracies

The contents of Paragraph A(26) are a matter of record and do not merit any response.

82. In Re: No consideration of the detailed written representation of Appellant sent to the Committee

The contents of paragraph A(24) are denied *in toto* as being factually erroneous and legally unsustainable. Contrary to the submissions of the Appellant, the Ld. Committee has specifically noted the contentions of the Appellant in the Report while also referring to the Documents relied upon by the Appellant. (*@ Pg. 9-10 of the Report*) The Appellant has erroneously argued that, *“That the Committee ought to have provided its inputs towards each of the contention raised by the Appellant under the said Representation which has not been done.”* It is reiterated that the nature of reasoning in the Report/Order of a quasi-judicial body or an Expert Committee is different from that rendered in a Judicial Order. Since an Expert Committee is not a Judicial Body, it is not required to give elaborate reasons *qua* each of the point raised by the parties, however, its Report must be in the nature of a speaking Order and contain adequate and tangible reasons for arriving at its conclusions. The contentions in paragraph 15-20 of the present Reply Affidavit are reiterated herein and are not being repeated for the sake of brevity.

83. At the outset it is submitted that the objections raised by the Appellant with respect to non-application of mind of the Ld. Committee are plainly frivolous. In fact paragraph A(27)(a)- (f) do not even relate to environmental factors which the Ld. Committee was supposed to evaluate.

84. The contents of paragraph A(27)(b) are denied as being factually and legally incorrect. The Ld. Committee took note of the objections of the University of Delhi and analysed the same as is clear from its discussions in the following Minutes of the Meetings

i. 08.07.2020 (**@Pg. 93-94 of the Report**),

“Representative of University of Delhi objected to the nomination of Dr. Meenakshi Dhote, School of Planning & Architecture, New Delhi on grounds that she was also a Member of the State Environmental Assessment Committee, which had granted environmental clearance to the project. It also sought another date in the next week for making their presentation. [...]

3. With regard to continuity of Mrs. Meenakshi Dhote as a member of the Committee, members opined that she is a respectable professional, who has been nominated by Director, School of Planning and Architecture, and not serving as Chairperson or Coordinator. Besides, the Committee also includes other Experts as Members. As such, she may continue. However, CPCB may seek opinion from its legal department on the issue.

ii. 14.07.2020, (**@Pg. 96 of the Report**),

“Member Secretary, CPCB welcomed the participants. It was informed that the representative of Delhi University did not join and had sent communication that with regard to their objection on continuity of Prof Meenakshi Dhote, representative of the School of Planning & Architecture, Delhi, as mentioned in the previous meeting, the University of Delhi has filed an IA (Interlocutory Application) before Hon’ble NGT against nomination & continuation of Prof Meenakshi Dhote.

The matter was discussed by the Committee and following was agreed:

1. The Committee may wait till the outcome of the hearing of IA filed by University of Delhi by the Hon’ble NGT.

2. The matter may be brought to the knowledge of the Director, School of Planning and Architecture, Delhi for his information and necessary action in the matter. ”

iii. And 05.08.2020, (**@Pg. 98-99 of the Report**).

Member Secretary, CPCB welcomed the Members. It was informed to the Committee that a communication, in consultation with the members, was sent to the Delhi University requesting for personal hearing on 5.08.2020, else Committee may proceed, based on the available written submissions, for timely completion of the assignment. Further, Delhi University expressed their inability to attend the meeting and communicated the following:

i. IA (Interlocutory Application) filed before Hon’ble NGT against nomination & continuation of Prof Meenakshi Dhote has been

registered on 17.07.2020. However, it is still not taken up by Hon'ble NGT and awaited.

ii. Reiterated their objection on continuity of Prof Meenakshi Dhote, representative of the School of Planning & Architecture, Delhi, as already mentioned in the meeting dated 08.07.2020 and communication dated 14.07.2020.

iii. University of Delhi has requested for postponing of this meeting till the issue is decided by Hon'ble NGT.

The matter was discussed by the Committee and following action points were agreed:

1. Committee shall abide by the Order of the Hon'ble Tribunal on hearing of IA filed by University of Delhi. However, meantime, the Committee may continue its proceedings in the matter for completion of task on-time. [...]"

85. The contents of paragraph A(27)(b)-(e) are denied as being factually incorrect and covered by previous Orders of the Hon'ble High Court of Delhi and the Hon'ble Supreme Court. Therefore, these submissions are clearly hit by the principle of *res judicata* and constructive *res judicata*.
86. The contents of paragraph A(27)(b) are denied as being factually incorrect. In fact, the Ministry of Defence has also filed an Application (I.A. No. 628 of 2019) seeking for withdrawal of the Affidavit dated 01.02.2019 which is being relied upon by the Appellants. The Appellant has suppressed this information in their Written Submissions. Further, the Appellant is trying to mislead the Hon'ble Tribunal by raising issues which are not within the terms of reference as set out by this Hon'ble Tribunal to the Ld. Committee and has already been considered by Hon'ble Supreme Court in a separate set of proceedings initiated by Appellant. **[SLP (C) No. 5581-5582 of 2019]**
87. The contents of paragraph A(27)(c) are denied as being factually incorrect. The Letter dated 25.10.1943 is a pre-independence era letter having no legal sanctity upon the enactment of Municipal Laws for New Delhi as well as the MPD-2021.
88. The contents of paragraph A(27)(d) are denied as being factually incorrect. Further, with respect to height restrictions, in the Order dated 27.04.2015 in W.P. 2743 of 2012 **Registrar, University of Delhi v. Union of India**, it was noted that, (@ Pg. 33-76, @72-73 C.A. filed by R-4 dated August, 2018)

“ 58. The claim of the petitioner is that the 3.05 Hectare land falls in the 'controlled zone' of Delhi University and that a height restriction ought to have been imposed on the Project otherwise it will be in direct conflict with MPD 2021. However, as submitted by ld. Counsel for

*respondents that there is nothing called "controlled zone" of Delhi University under MPD 2021 or Zonal Development Plan for Zone-"C". **However, MPD 2021, Chapter 11-Urban Design, Para 11.3 provides that restriction on tall buildings would be necessary in important areas like Lutyen's Bungalow Zone, Civil Lines Bungalow Zone and North Delhi Campus. The plot in question does not fall within any of these restricted areas.** In any case, the same was also established by respondent No.12 during arguments by showing the Zonal Development Plan for Zone-'C' (Civil Lines Zone) that the land in question does not fall within any restricted area in Zone-"C" i.e. the Civil Lines Bungalow Zone or the North Delhi Campus. In fact that land does not fall within Delhi University North Campus which is established from the information obtained by respondent No.12 under RTI wherein it is stated that the 3.05 Hectare plot is not a part of Delhi University."*

59. It is pertinent to mention here that two independent committees have submitted the report that the development is within the control norms applicable to this area and that it will not affect the aesthetic beauty of the North Campus of Delhi University. In the present case the relevant amendment in the Master Plan was required to be made in respect of change of land use from PSP to residential. This was done by DDA following due process of law as contemplated in Section 11-A of DD Act,1957. Accordingly, the DDA had issued a Public Notice dated 19.12.2004 inviting objections before changing the land use of the plot from PSP to residential. The respondents did not receive any objection from any corner, thereafter, issued Notification dated 23.09.2005 changing the land use of the plot.

It is reiterated that the aforesaid said Order has attained finality since SLP(C) No. 5581-5582 of 2019 filed by the Appellant herein was dismissed by the Hon'ble Supreme Court vide Order dated 17.12.2019.

89. The contents of paragraph A(27)(e) are denied as being factually incorrect. The Appellant has grossly mischaracterised the Report of the Committee constituted by the Lt. Governor in 2010. ***(Pg. 112-120, C.A. filed by the Respondent No.4 dated 08.2018)*** The said Report in fact noted that the Project poses no danger to the aesthetics, heritage or privacy of the students of the University. Further, it was noted that the Project complies with municipal norms enshrined in the MPD-2021. The findings of the Report are summarised in paragraph 65 of the present Reply Affidavit and are not being repeated for the sake of brevity.
90. The contents of paragraph A(27)(f) are denied as being factually incorrect. Again, the Appellant has mischaracterised the Report of the sub-committee of the SEAC constituted in 13.12.2011 which actually found in its Report dated

09.02.2012 that:- (*Pg. 79-89, C.A. filed by the Respondent No.4 dated 08.2018*)

- (i) The apprehensions of the Respondent University regarding parking blockage and projected traffic were not correct.
 - (ii) The permission for removal and transportation of trees was received by the Appellant from the Forest Department and hence, the apprehensions in this regard were also not correct.
91. The contents of paragraph A(27)(g) are denied as being factually incorrect. The Ld. Committee has considered the annual average concentration for the years 2018 and 2019 for SO₂, NO₂, NH₃, Benzene, PM_{2.5}, PM₁₀ and CO as per the nearest ambient air quality station to the project site in North Campus. (*Pg. 20 of the Report*)
92. The contents of paragraph A(27)(h) are denied. The submissions made by the Respondent No.4 in the present Reply Affidavit at paragraphs 40-42 are reiterated and are not being repeated for the sake of brevity.
93. The contents of paragraph A(27)(i) are denied. The Ld. Committee has taken note of the fact that Patel Chest Institute at a distance of 600 meters.
94. The contents of paragraph A(27)(j-k) are denied.
95. The contents of paragraph A(27)(l) are denied as being factually incorrect. The Respondent No.4 has submitted an updated Traffic Analysis Report of 2018 which looks at the latest data. (*Pg. 661-689, I.A. No. 75 of 2020, Vol III filed by the Respondent No.4*) The same was also submitted to the Ld. Committee, however the Ld. Committee has chosen to undertake an independent Traffic Count Analysis in the Report.
96. The contents of paragraph A(27)(m) are denied as being factually incorrect. In this regard, please refer to paragraph no.48 of the present Written Submissions.
97. The contents of paragraph A(27)(n) are denied as being factually incorrect. It is submitted that reason for decline at some instances of traffic flow in 2018 from 2011 is due the reason the battery rickshaws have emerged as a mode of local transport. Further, in most indices considered in the Traffic Management Reports, the figures for traffic count are higher in 2018 as compared with

2011. Therefore, the Appellant is cherry picking data to suit its argument. (*Pg. 661-689, I.A. No. 75 of 2020, Vol III filed by the Respondent No.4*)

98. The contents of paragraph A(27)(o) are denied as being factually incorrect. It is submitted that the Ld. Committee has closely evaluated the fact of a silence zone around the Project Site. In fact, the Faculty of Education being referred to by the Appellant, is beyond 100 metres and is thereby not falling in a silence zone and has students less than 1000. The contents of paragraph no.(s) 23(iii), 58-62 of the present Reply Affidavit are reiterated herein and are not being repeated to avoid any repetition.
99. The contents of paragraph A(27)(p)-(q) are denied as being factually incorrect. The DJB has correctly considered the demand of water in the Water Supply Approval dt. 07.10.2015 (*Pg.176-177 of the Report*) and it is inapposite for the Appellant to question the decision of a statutory authority in absence of any concrete evidence. Further, Ld. Committee has used parameters as per the NBC, 2016 of 135 litres water per person per day. (*Pg. 23 of the Report*) However, the approval of the DJB is for 144 litres water which is much higher. In fact, the DJB Approval records that in case, there is increase in demand, the same may be applied for. Therefore, the Appellant has not correctly appraised the statutory scheme and has raised a legally incorrect argument with respect to water requirement. (*Pg.176-177 of the Report*)
100. Further, it is wrong to compare the requirement of 332 KLD which is the entire water requirement for the Project with the approval of water requirement per person. In fact, the fresh water requirement for the Project is only 202 KLD as per the Respondent No.4 which is clear from Page 735 of IA 75/2020, Vol III which is the revised water mass balance chart submitted by the Respondent No.4, whereas the approval given by DJB is for 257 KLD (approx.) as mentioned in the EC *on page 52 of the Appeal*.
101. In response to A(27)(r), it is submitted that the region of the Project is not in an “over-exploited” area but a “semi-critical” area. Further, the Appellant will not draw any ground water without the permission of the District Advisory Committee on Ground Water of the Govt. of NCT Delhi.

A Copy of the relevant extracts of the CGWA notification regarding Block Wise Ground Water Resource Assessment categorising regions in Delhi is annexed herewith and marked as **ANNEXURE A-13.**

102. The contents of paragraph A(27)(s) are denied as being factually incorrect. It is submitted that the Ld. SEAC has considered the OM dated 10.11.2015 in letter and spirit. The said Office Memorandum was issued by the MoEF dealing with ECs issued by SEIAA/SEAC with respect to building and construction projects under Entry 8 to the EIA Notification. In fact, in the said Memorandum, while taking note of the delays caused to the processing of cases at the end of the SEIAA/SEAC, the MoEF emphasised that additional information sought during the processing of applications for EC should concern with the environment clearance along and duplication of efforts with other civic bodies should be avoided and the SEIAA/SEAC should not focus on other issues which are normally looked after by the concerned local bodies/State Departments/SPCB. (**@Pg. 160—163, I.A. No. 67 of 2020 filed by the Appellant**). Further, even the OM dated 25.10.2017 has been analysed by the Ld. SEAC before granting the subject EC. In the Minutes of the 95th Meeting of SEAC, the Ld. SEAC raised point-wise queries to the Respondent No.4 including requiring “*Point wise comments on the issues raised vide circular no. J- 11013/71/2016-IA.I(M) dt: 25 October, 2017 are required to be furnished.*” The same were submitted to the Ld. SEAC vide Letter dated 09.03.2018 (**Pg. 703-704, Vol III, IA No. 75 of 2020 filed by the Appellant**). Therefore, the contention of the Appellant deserves to be set aside.
103. The contents of paragraph A(27)(t) are irrelevant and ought not to be considered. Further, the said dissents are an afterthought, as these members have duly given consent as per the Minutes of the 96th Meeting of the SEAC and only in 2020, they have written letters as mentioned in Pg. No. 191-196 of the IA 67/2020 filed by the Appellant.
104. The contents of paragraph A(27)(u) are denied as being factually incorrect. It is relevant to note that the Respondent No.4 has submitted a detailed schematic drawing of the proposed STP with technical details such as the units of the Raw Sewage Transfer Pump, Sludge Recycling Pump etc. along with revised water calculations for the enhanced capacity as per the recommendations of the Ld. SEAC on 09.03.2018 which is also on record. (**@Pg. 646, I.A. No. 75 of 2020**). Further, the Appellant will seek the relevant permission as required under the Solid Waste Management Rules,2016 as maybe applicable.

105. The contents of paragraph A(27)(v) are denied as being factually incorrect. The Respondent No.4 has received a valid Fire Clearance dated 08.09.2017 which has been further buttressed by the Affidavit filed by the Delhi Fire Service (Respondent No.12 herein) before this Hon'ble Tribunal dated 10.10.2018. *(Pg. 731-735 of the Affidavit dated 10.12.2018 filed by the DFS)* In fact, the said Approval has been considered by Ld. Committee at Pg. 30 of the Report. In its affidavit, DFS has stated that

“ 6. I state that it is imperative to mention here that in the matter titled Vikas Singh V. Lieutenant Governor and Ors. being W.P.(C.) 1476 of 2014 dated 20.01.2016 the issue that was considered was different from the issue in present Appeal. I further state that in above mention case the petitioner had a proposal for construction of a residential building with a height of 16.16 meter as per MPD-2021, but the fire safety provisions in regard to the proposed Group Housing is in regard to a high rise building which are not incorporated in the building plans as per the requirement of Delhi Fire Service Act, 2007, Delhi Fire Service Rules, 2010 and National Building Code of India Part-IV.

7. I further state that In present Appeal the Architect/Owner had incorporated and has also complied with provisions of High Rise Buildings in building plans in accordance with National Building Code of India, Part- IV.”

Further, the width of the Access Road considered by the DFS is in line with the calculations of the North DMC and cannot be faulted.

It is further submitted that UBBL provides that the competent authority for clearance under Fire safety is Delhi Fire Services. The approval has been obtained. UBBL Para 9.3, referring to Fire Safety records at the bottom of 9.3.12 that the use of type of detectors shall also be to the satisfaction of Delhi Fire Services. It is submitted that when there are statutory provisions and approvals have been obtained thereto, there is no question of any lack of consideration.

106. The contents of paragraph A(27)(w) are denied as being general in nature and irrelevant to the facts of the present case.

107. The contents of paragraph A(27)(x) are denied as being factually incorrect. The Appellant has also submitted a Supplementary Soil Analysis Report of 2018 as well as the Report of Professor VS Raju.

108. The contents of paragraph A(27)(y) are denied as being factually incorrect. It is submitted that the Appellant had sent the 2018 Soil Report dated March,2018 conducted by M/s Ground Engineering Ltd., to the Ld. SEAC vide its Letter dated 13.03.2018 which has been placed on record. (**Report @ Pg. 741 – 764, Letter @ Pg. 733, I.A. No. 75 of 2020**). Further, there is no scientific basis for the Appellant to say that the project is subject to liquefaction in case the excavation depth is around 12 meters. In fact, in the Soil Testing Report of 2011, the Liquefaction Potential at the Project Site was analysed by two separate methods, and it was concluded that there is no possibility of liquefaction.
109. The contents of paragraph A(27)(z) are denied. The Respondent No.4 has no intention to suppress any documents before this Hon'ble Tribunal.
110. The contents of paragraph A(27)(aa) are denied. It is submitted that the Respondent No.4 has applied for extension for plantation of trees since it could not plant trees as the project site is not available for plantation due to delay in the construction process due to litigation by the Appellant. However, the Respondent no.4 has complied with the conditions of the approval and paid requisite fees.
111. The contents of paragraph A(27)(bb) are denied. It is crucial to note that during the pendency of the present Appeal, the MoEF and the SEIAA have granted Environmental Clearances to at least thirteen (13) other large-scale Building & Construction projects in Delhi, which are currently under construction, of which six (6) projects are in the vicinity of the Appellant's Project. It is pertinent to point out that, during the same SEAC / SEIAA meeting dated 22.03.2018, wherein the Respondent No.4 herein was granted an EC, another Group Housing Project at Plot No. 1, Canal Road, which is a project in the vicinity of the Project located merely 1700 mtrs. away from the Project and 300 mtrs. away from Daulat Ram College in the Appellant University, was also considered by the SEIAA, and approval thereof was granted for issuing an EC to the said Project. However, no objection has been raised against the aforesaid Projects by the Appellant University, even though many of the Projects are in the same area, i.e. Civil Lines/North Delhi.

112. The contents of paragraph A(27)(cc) are denied. The contents of paragraph 65 of the present Written Submissions are reiterated herein and are not being repeated for the sake of brevity.
113. The contents of paragraph A(27)(dd) are denied as being factually incorrect.
114. The contents of paragraph A(27)(ee) are denied as being factually incorrect. The entire Report of the Ld. Committee is geared towards assessing the carrying capacity of the area.

115. **In Re: Objections/Observations against Short Affidavit dated 08.01.2021 filed by Respondent No.4**

The contents of paragraph B(1) & B (2) are denied as being factually incorrect. It is clarified that the basement will be constructed at a level of 10.05 metres as also mentioned in the Prof. VS Raju Report at Page 114 of the report. Infact, the other 2.45 metres calculated will be used for constructing a Raft. Therefore, the excavation will be done upto the depth of 12.45 meters for which the application has been made before the District Advisory Committee of NCT, Delhi. The recommendation was accordingly made by Prof V S Raju (*@Page 132 of the Report*) of going further below 1 metre for lowering the water table i.e. upto 13.05 meters (which was based on provisional raft of 2 meters). The said recommendation will be duly explained while submitting the plan for dewatering at suitable stage before the Committee. Further, it is denied that the said recommendation was the basis for the expert committee to restrict the construction of basement to one instead of proposed two basements, in this regard reference is made to Page 23 of the Report.

Validity of the 2018 EC

116. Without prejudice to the aforesaid contentions, it is humbly submitted that the process conducted by the State Expert Appraisal Committee and the State Environmental Impact Assessment Authority in granting the Environmental Clearance to the Respondent No. 4 on 22.03.2018 was valid insofar as that the Respondent No. 4 had submitted all information and documents before the Committee and the Statutory Authority, and that the SEAC/SEIAA had applied their expert mind to the same before taking the decision to grant the EC to the Respondent No. 4.

117. The brief background of the project is that the Respondent No. 4 had acquired 2.0 Ha. land adjoining the Vishwavidyalaya Metro Station, Delhi, on a 90-year lease for a consideration of INR 218.20 Crores in an open auction conducted by the Delhi Metro Rail Corporation (“DMRC”) on 28.07.2008. The DMRC leased out this surplus land to the Respondent No. 4, granting development rights for constructing a Group Housing Project (“Project”) and accordingly executed a Lease Agreement on 15.12.2008 and a Lease Deed on 19.02.2013.
118. Thereafter, in 2009, the Respondent No. 4 applied to the State Expert Appraisal Committee (“SEAC”) for grant of an Environmental Clearance (“EC”) for its Project under the 2006 Environmental Impact Assessment (“EIA”) Notification.
119. At the time, the Appellant University had raised allegations against the legality of the Respondent No. 4’s Project, as a result of which Lt. Governor of Delhi, in a meeting of the DDA dated 17.02.2010, constituted a Committee under the Chairmanship of the Engineer Member, DDA with the Chief Town Planner, MCD and the Chief Engineer, DMRC as members, to survey the entire area and examine the implications on the proposed high-rise buildings, on the privacy and integrity of the environment at the University of Delhi. This Committee conducted a Joint Inspection in March 2010, the report whereof highlighted *inter alia* the following points:
- a. The proposed high-rise property development will not add to the parking problem in the area, as there is ample parking on both sides of the Metro Station;
 - b. The Project will not aggravate the parking problem in the area, as sufficient parking has been envisaged at the site itself;
 - c. The project is an iconic development project, which will serve as an island of excellence;
 - d. The construction is not debarred as per the Master Plan of Delhi – 2021 (“MPD-2021”).
120. Thereafter, on 13.12.2011, the SEAC constituted a Sub-Committee for the examination of social and environmental impacts associated with the EC of the Project. The SEAC held a meeting on 24.01.2012 wherein the Appellant

University and Respondent No. 4 made representations. The Sub-Committee filed its Report on 09.02.2012, noting *inter alia* the following points:

- (i) The apprehensions of the Respondent University regarding the parking blockade and the projected traffic are not correct, as there is no traffic problem on Cavalry Lane, neither would the movement and inflow of students be hampered, as a result of the Project;
- (ii) The Appellant has received the requisite tree-cutting permission, and, therefore the contentions of the Respondent University regarding the Environment are mere apprehensions.

121. It is pertinent to note that the SEAC, after considering all documents and information submitted by Respondent No. 4 along with the Form – 1 and Form 1 – A, came to the conclusion that the EC ought to be granted to the Project. Accordingly, an EC was granted to the Respondent No. 4 for an initial period of five (5) years, which was thereafter extended by a period of two (2) years, making the EC valid for a total of seven (7) years.
122. Accordingly, in light of the upcoming termination of the earlier EC on account of efflux of time, the Respondent No. 4 filed an application through the Online Portal of the MoEF & CC for Amendment in the earlier EC, on 31.01.2018.
123. It is pertinent to note that, subsequent to the Respondent No. 4 filing all the information and documents in Form – 1 and Form 1 – A, the SEAC, at its 95th Meeting on 24.02.2018, raised certain queries regarding the Respondent No. 4's Project, and requested for additional documents/ reports from the Respondent No. 4 on eight (8) aspects/points. The Respondent No. 4, on 09.03.2018, sent a letter to the SEAC, providing its point-wise response, with supporting documents, to the queries raised in the Minutes of the 95th Meeting of SEAC dated 24.02.2018.
124. Thereafter, the SEAC, in its 96th Meeting, recommended that since construction had not started on the Project site, the Respondent No. 4's Application for grant of an EC would be treated as a "Fresh Application",

and the previous EC dated 13.08.2012, would be treated as null and void. Further, it is specifically recorded in the Minutes of the Meeting dated 13.03.2018/17.03.2018 that the Respondent No. 4 produced all the relevant information which was previously sought by the SEAC, and therefore, after due deliberation and appraisal by the SEAC, the application of the Respondent No. 4 was recommended to the State Environmental Impact Assessment Authority (“SEIAA”) for grant of an EC. The Respondent No. 4 made a detailed presentation before the SEAC regarding the queries which were raised on 24.02.2018, and furnished the latest data related to the Traffic Management in the area around the Project.

125. Upon the recommendation of the SEAC, the SEIAA at its 57th Meeting on 22.03.2018 granted a Fresh EC to the Respondent No. 4 subject to the terms and conditions stated therein. It is pertinent to mention that, in the 2018 EC, the SEIAA took note of all the discussions that occurred during the meetings of the SEAC dated 24.02.2018 and 13.03.2018, wherein the Respondent No. 4 had furnished its responses to all the queries of the SEAC.
126. The Appellant University has challenged the grant of this Fresh EC given to the Respondent No. 4 on 22.03.2018.
127. It is pertinent to note that, in parallel to the above, the Appellant University had also challenged the validity and legality of the Project before the Hon’ble High Court of Delhi at New Delhi *vide* WP (C) 2743 of 2012. It is humbly submitted that the Writ Petition was dismissed on 27.04.2015, on merits as well as delay. The LPA being LPA No. 89 of 2018, filed by the Appellant University against the dismissal of the WP (C), also came to be dismissed by the Hon’ble High Court of Delhi at New Delhi on 29.10.2018. Thereafter, the Appellant University filed SLP (C) Nos. 5581-5582 of 2019, which came to be dismissed by the Hon’ble Supreme Court on 17.12.2019.
128. Therefore, what is to be seen is the process that has been prescribed for the grant of an Environmental Clearance.
 - (i) First, an Application is made in Form – 1 and Form 1 – A, along with detailed data and documents being submitted.

- (ii) Thereafter, meetings are held by the State Expert Appraisal Committee, where specific queries are raised and additional documents/data is requested from the Applicant.
- (iii) Thereafter, representations and presentations are made by the Applicant before the SEAC.
- (iv) Upon examining and analysing the documents, data and representation of the Applicant, the SEAC makes a recommendation to the State Environmental Impact Assessment Authority, the Statutory Authority, for grant of an EC.
- (v) Thereafter, the SEIAA issues the EC.

129. Thus, from the above, it can be seen that, in light of the fact that the SEIAA granted the Respondent No. 4 a Fresh EC on 22.03.2018, the same establishes the following points:

- (i) The Respondent No. 4 had made full disclosures of relevant facts to SEAC / SEIAA in Form-1, 1-A read with additional documents called for, and
- (ii) SEAC / SEIAA had issued EC after due application of mind in appraising the environmental sustainability of the project.

130. Thereafter, in the captioned matter, this Hon'ble Tribunal formed an Independent Committee comprising of nine (9) expert members, to *inter alia* examine various aspects including the viability of the Project. This Independent Committee has, *vide* its report dated 10.12.2021, come to the conclusion that:

“In view of the impact analysis, the project seems viable as environmental impacts, including impact on traffic congestion and urban infrastructure/services, are minimal/nominal.”

131. Therefore, looking at this history of this Project, it is humbly submitted that the environmental aspects and impact has been assessed by various authorities at the following stages:

- (i) In March 2010, the Lt. Governor of Delhi had constituted a committee to look into the legality and viability of the Project. **The Committee, after a Joint Inspect, held in favour of the Project.**
- (ii) In 2011/2012, when the Respondent No. 4 had applied for an EC, the SEAC, on the Appellant University's insistence, constituted a Sub-Committee to deal with the contentions of the Appellant University. **The Sub-Committee and SEAC held in favour of the Project, and EC was granted. Appellant did not file appeal challenging this EC.**
- (iii) In 2018, the Respondent No. 4 applied for amendment to the earlier EC. The SEAC held multiple meetings, examined the documents and data submitted by the Respondent No. 4, asked for additional documents and data with respect to certain aspects, and took representations from the Respondent No. 4. **The SEAC/SEIAA, after due deliberation, consideration and examination of all material, held in favour of the Project, and Fresh EC was granted. In fact, the SEAC/SEIAAs examination of the issue was so detailed, that the EC was issued with 83 Specific Conditions and 21 General Conditions.**
- (iv) In 2020, the Independent Expert Committee set up by this Hon'ble Court, after detailed examination of the records and materials submitted by the Appellant University, the Respondent No. 4 and the Delhi Metro Rail Corporation ("DMRC), i.e., Respondent No. <, and after giving opportunity of hearing on two (2) occasions, has submitted its report. **The Independent Expert Committee has held in favour of the Project *inter alia* holding that the impact of the Project on the environment is minimal, and that, as such, the Project is viable.**
132. With respect to the inquiry conducted by the Independent Expert Committee formed subsequent to the order of this Hon'ble Tribunal, it is also pertinent to note that the Committee has collected and examined latest data, independent to the data submitted by the parties, has looked at the data and reports submitted by the parties, and has also conducted a site visit at the Project.

133. Therefore, from the above, it cannot be said that there is non-application of mind as, over the period of the last eleven (11) years, various Committees and Experts have, under various Terms of Reference, and on at least four (4) separate occasions, held in favour of the Project, aside from the Courts holding in favour of the legality of the Project in light of the Master Plan of Delhi – 2021 (“MPD – 2021”).
134. The validity of the EC granted to the Respondent No. 4’s Project in 2018 can also be seen from the fact that the Independent Expert Committee, having assessed the various environmental issues, has given a go-ahead to the Project with certain conditions. **All conditions imposed/ reiterated by the Independent Expert Committee already form part of the conditions of the 2018 EC. Thus, the Expert Appraisal done in 2018 has been validated/upheld by the Independent Expert Committee in 2020.**
135. Further, it is important to consider the Terms of Reference under which the Independent Expert Committee has been constituted by this Hon’ble Tribunal. This Hon’ble Tribunal had, upon a *prima facie* examination of the 2018 EC granted to the Respondent No. 4, held that the EC may have been granted without proper evaluation and that the Project cannot be allowed to continue without such proper evaluation. Thus, this Hon’ble Tribunal had directed an Independent Evaluation in the interest of environment and public health.
136. In light of the above, the Independent Expert Committee has examined all aspects that are required under environmental law, norms and regulations. Thus, this Hon’ble Tribunal’s apprehension with regards to the environment and public health have been looked into by the Committee, within the four corners of law. In fact, the Committee, at Page 31 of its Report, records that:
- “Specifically, all environmental and other components, water, air, solid waste, traffic congestion, population density (representing impact on services), load on urban infrastructure, structural design adequacy have been examined.”*
137. Further, it is humbly submitted that this Hon’ble Tribunal has, at other occasions in the past, comprised similar Independent Expert Committees. In

fact, in OA No. 635 of 2017 titled *Ramesh Chand Vs State Of Himachal Pradesh*, this Hon'ble Tribunal had constituted a Committee comprising of members from a list of institutions that is identical to the list of institutions from which members have been referred to form the Committee in the captioned matter. The same had been done in 2017 for the assessment of the Carrying Capacity of McLeodganj and Manali in Himachal Pradesh.

138. It is pertinent to note that this Hon'ble Tribunal had also accepted the Report filed by the Committee in the said matter, and thus, this Hon'ble Tribunal is cognizant of the competence, work, expertise and recommendations of the Committee, and has been in the past.
139. It is also pertinent to note that this is a Residential-Group Housing project in a residential area. This project has been harshly treated, in comparison against several other completed / under construction high rise residential projects in the vicinity. Few of these projects have more built-up area, more height, more number of basements / depth, more population and more parking compared to the Respondent No. 4's project. EC for all such projects have been issued by the same SEAC/SEIAA Committee and subsequently by MoEF&CC in 2018.

<u>S. No</u>	<u>Project</u>	<u>EC Date</u>	<u>Built-up (Sqm)</u>	<u>DU / EWS (Nos.)</u>	<u>Height (Mtr)</u>	<u>Basement</u>	<u>Parking (ECS)</u>	<u>Distance Yamuna (Mtr)</u>	<u>Distance Ridge (Mtr)</u>
1	Young Builder (P) Ltd	22.03.18	1,17,733	DUs - 258 EWS - 152	139.6	2	854	1800	500
2	North Delhi Metro Mall	12.04.16 15.11.19	1,60,375	Not available	44.1	4	1,894	1300	--
3	Parsvnath Landmark	02.07.07 14.07.20	2,55,262	DUs - 505 EWS - 390	125.6	3	3,256	40	180
4	Negolice India (M2K)	16.05.07 13.01.21	1,72,855	DUs - 488 EWS - 287	235.0	3	1,804	4980	4070

5	Delhi Floor Mills Co. Ltd	17.09.19	1,32,957	DUs - 346 EWS - 276	165.0	3	1,143	2860	420
6	DCM Ltd	19.09.17	10,05,604	Not available	180.0	3	9,858	3970	
7	DLF Home Developers	11.10.19	10,00,727	DUs - 2900 EWS - 1862	179.2	4	8,836	7900	--

140. Further, it is humbly submitted that the Respondent No. 4 has already taken various clearances, approvals, etc., as required within the statutory and regulatory framework relating to environmental laws and group housing projects, and the Respondent No. 4 has, for ease of this Hon'ble Tribunal's convenience, extracted the details of such clearances and approvals hereinbelow:

S. NO.	SUBJECT	STATUTORY APPROVALS AND CONDITIONS IN THE ENVIRONMENTAL CLEARANCE dated 22.03.2018 ("EC")
1.	<u>Water Usage</u>	<p>Approvals</p> <ol style="list-style-type: none"> 1. Water Supply Scheme Approval dated 07.10.2015 by Delhi Jal Board (DJB) which has further been updated on 11.07.2019 [Pg.8-11]. 2. Storm Water Drainage Scheme Approval dated 24.11.2015 by North Delhi Municipal Corporation [Pg.12-15]. 3. Sewerage Scheme Approval dated 11.01.2016 by DJB which has further been updated on 11.07.2019 [Pg.16-19]. <p>Conditions in the EC:</p> <ol style="list-style-type: none"> 1. Notes the Water requirement during the construction and the operational phase [Pt. 2/Pg.22] 2. <u>Pre-Construction Phase</u>: Water assurance to be taken from NDMC/DJB [Pt. 2/Pg.24] 3. <u>Construction Phase</u>: Ensure non-contamination by construction spoils and hazardous materials. Dump sites must be secured to avoid filtration into ground water [Pt.6/ Pg.27]. Pre-mixed concrete and curing agent to be used to minimize water demand [Pt. 15/Pg.29]. Prior permission for ground water withdrawal from DJB [Pt. 16/Pg.29]. Low flow fixtures to be used for showers, drinking and toilet flushing [Pt. 17/Pg.29]. 4. <u>Operation Phase</u>: Zero wastewater discharge condition, Onsite sewage treatment plant, Electromagnetic water meter [Pt. 1-2/Pg.31]. Quality

		<p>of fresh water usage and water recycling must be measured and recorded to monitor the water balance, as projected by the Appellant, and the same shall be submitted to SEIAA, DPCC and Regional Office of MoEF & CC, on a biannual basis. [Pt.3/Pg.32]</p> <p>5. <u>Specific Conditions</u>: Rainwater harvesting plant, as proposed, to be installed [Pt. 6/Pg.36].</p> <p>6. Only treated water of Sewage Treatment Plant should be used for construction purposes. [Pg.37]</p> <p>7. During the entire life of the Project, any groundwater withdrawal shall only be done with the prior permission of the DJB [Pg.36]</p>
2.	<u>Noise Levels</u>	<p>Conditions in the EC:</p> <p><u>Construction and Operation Phase:</u></p> <p>1. Ambient noise levels should conform to prescribed standards, both during the day and night. [Pt.12/Pg.28]</p> <p>2. Noise level monitoring should be done by an accredited lab and data should also be submitted, on six monthly bases, with DPCC & Regional Office of MoEF & CC [Pt.12/Pg.29]</p> <p>3. Only DG sets of low-sulphur diesel type to be used which conform to prescribed standards for noise emission. [Pt.10/Pg.28]</p> <p><u>Entire life:</u></p> <p>4. Incremental pollution loads on the ambient air quality, noise, stack and water quality must be periodically monitored. [Pt.7/Pg.36]</p>
3.	<u>Traffic Congestion and Parking</u>	<p>Approvals</p> <p>1. Layout Plan of the Project was approved on 17.11.2017 after taking note of parking norms for Equivalent Car Space (“ECS”), in a residential group housing project as prescribed in Chapter 17, Clause 8(4) of the MPD 2021 and the Unified Building By-Laws, 2016 [Pg.135-140]</p> <p>Conditions in the EC</p> <p>1. ECS of 854 numbers taken specified [Pt. 5/Pg.22]</p> <p><u>Operation Phase and Entire Life:</u></p> <p>2. Traffic Congestion near entry and exit points, from the roads adjoining the Project site must be avoided [Pt. 18/Pg.35]</p> <p>3. Parking should be fully internalized, and no public space should be utilized for the same [Pt. 9/Pg.37].</p> <p><u>Specific Condition:</u></p> <p>4. Chhatra Marg should be used for pedestrian and non-motorized vehicle or only in case of emergency with restricted motorised vehicles. [Pt.1/Pg.37]</p>

4.	<p><u>Height of the Buildings</u></p> <p>[Details of Appellant's Project – Height – 139.60 Mtrs, Floors – 39]</p>	<p>Approvals</p> <ol style="list-style-type: none"> 1. “Group Housing” in MPD-2021 specifies that there is no height restriction for the Appellant's Project. [Pg. 211] 2. Airport Authority of India granted height clearance for the Project initially on 16.04.2009 and 28.06.2011 [Pg.230-236]. However, post the latest Building Plan for the Project, there was no requirement for Height Clearance for structures upto a height of 155 mtrs in the area/zone of the Project. [Pg.237] 3. Layout Plan was approved on 17.11.2017 and Building Plan was sanctioned on 31.07.2019 by the North MCD. [Pg.256-259] 4. Fire Safety Clearance is applicable given the Height of the Project which was taken on 08.09.2017 and updated on 12.07.2019 [Pg.238-249]
5.	<p><u>Air Pollution</u></p> <p>[Built-up Area of Appellant's Project – 1,17,734 sq. mtrs.]</p>	<p>Approvals: Green Building Certification dated 12.06.2015 [Pg.254]</p> <p>Conditions in the EC:</p> <ol style="list-style-type: none"> 1. Notes that total green area proposed is 6079 sq. mt and 268 number of trees are to be planted [Pt. 7/Pg.23] <p>Construction Phase:</p> <ol style="list-style-type: none"> 2. Vehicles hired for construction material should have pollution check certificate and should be operated only during non-peak hours. [Pt. 8/Pg.27] 3. DG sets of low-sulphur diesel type to be used which conform to prescribed standards for noise emission. [Pt. 10/Pg.28]. 4. Ambient air monitoring should be done by an accredited lab and data should also be submitted, on six monthly bases, with DPCC& Regional Office of MoEF&CC. Incremental pollution loads on the ambient air quality should be closely monitored during construction phase. [Pt.12/Pg.28-29] 5. Precautionary measures mandated by the NGT in Vardhaman Kaushik <i>[Order dated 04.12.2014]</i> and Sanjay Kulshrestha <i>[Order dared 09.05.2015]</i> to be followed. [Pt.2/Pg.26] <p>Operation Phase and Entire Life:</p> <ol style="list-style-type: none"> 6. Thick green belt as per the plan submitted should be raised along the periphery [Pt. 8/Pg.37]
6.	<p><u>Impact on Northern Ridge</u></p>	<p>No Approval required from the Northern Ridge Management Board since the Appellant's Project is not in the <u>Ridge area</u> and is 585mtrs away.</p>

141. It is submitted that the arguments of the Respondent no.4 supporting the process of grant of EC by the SEAC and SEIAA in its Written Submissions dated 12.02.2020 should be taken as part and parcel of the present Written Submissions. The Respondent No.4 humbly seeks liberty to refer to the same, if required.
142. In light of the above, it is submitted that the Report of the Ld. Committee ought to be upheld subject to the Objections raised by the Respondent No.4 in its Short Affidavit dated 08.01.2021.

FILED BY



MAHESH AGARWAL
ADVOCATE FOR RESPONDENT NO.4
AGARWAL LAW ASSOCIATES
19, BABAR ROAD, BENGALI MARKET,
NEW DELHI – 110001
PH.: 011-42200000
EMAIL: rohan.talwar@aglaw.in, mail@aglaw.in
Mob.: 9810306655

Place: New Delhi
Dated: 18.01.2021

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
APPEAL NO. 112 OF 2018

IN THE MATTER OF:

UNIVERSITY OF DELHI

... APPELLANT

VERSUS

MINISTRY OF ENVIRONMENT, FOREST
 AND CLIMATE CHANGE & ORS

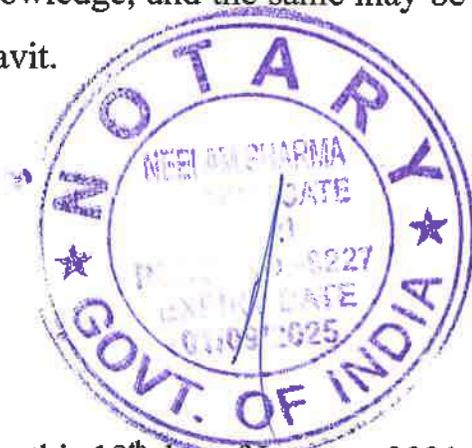
... RESPONDENTS

AFFIDAVIT

I, Rajiv Ranjan Sharma, son of Sh. B. Sharma, resident of House No. 1033, Sector 23A, Gurgaon, Haryana 122017, aged about 53 years, do hereby solemnly state on oath as under:

1. That I am presently employed as Vice President - Project in the Respondent No. 4 Company, and as such I am well conversant with the facts and circumstances of the present case, and competent to swear the present Affidavit.
2. That the accompanying Written Submissions have been drafted by my counsel under my instructions.
3. That the contents of the accompanying Written Submissions are true and correct to my knowledge, and the same may be treated as part and parcel of my present affidavit.

Identify the Deponent who has signed/put T - in my presence



For Young Builders (P) Ltd.

Rajiv Ranjan Sharma
 Authorised Signatory
 DEPONENT

VERIFICATION:

Verified at New Delhi on this 18th day of January, 2021 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom.

ATTESTED

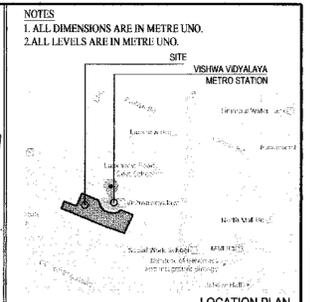
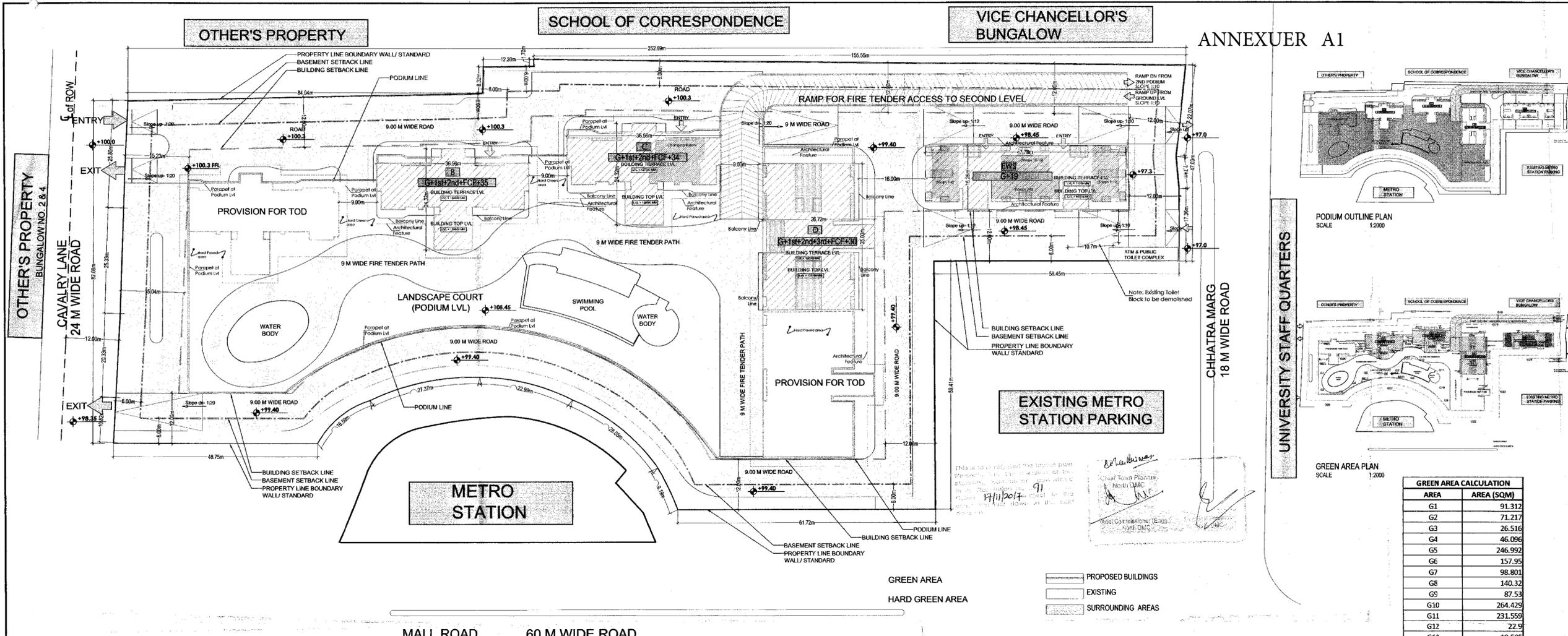
NOTARY (Govt. of India)
 Neelam Sharma
 Advocate
 Ch. No. 167A, Gate No. No. 11,
 Patiala House Courts,
 New Delhi-110001
 (M): 9899408301

For Young Builders (P) Ltd.

Rajiv Ranjan Sharma
 Authorised Signatory

DEPONENT

18 JAN 2021



AREA	AREA (SQM)
G1	91.312
G2	71.217
G3	26.516
G4	46.096
G5	246.992
G6	157.95
G7	98.801
G8	140.32
G9	87.53
G10	264.429
G11	231.559
G12	22.9
G13	19.505
G14	81.99
G15	34.359
G16	176.886
G17	81.03
G18	111.848
G19	20.587
G20	80.474
G21	287.936
G22	135.461
G23	308.53
G24	148.458
G25	73.35
G26	116.051
G27	52.59
G28	41.96
G29	97.21
TOTAL	3353.849

NOTES:
 1. ALL DIMENSIONS ARE IN METRE UNO.
 2. ALL LEVELS ARE IN METRE UNO.

Architects: ARCOF ASSOCIATES PVT. LTD.
 Plot: 36b, Sec-32, Gurgaon-122001
 Ph: +91-124-4595530 FAX: +91-124-4595550

Services Consultant: AECOM INDIA PVT. LTD.
 A-197, Sector-63, Noida (UP) INDIA
 TEL: 0120-4049000 FAX: 0120-4049001
 www.aecom.com

Site Area	PERMISSIBLE		ACHIEVED	
	20000 SQM	2Ha	4.94 Acres	
(A) Permissible FAR (Main FAR)	200	40000 sqm	39998.59 sqm	199.99
EWS requirement	15% of FAR (min)	6000 sqm	8306.52 sqm	20.77%
Permissible Ground Coverage (Max.)	33.3%	6660 sqm	1881.6 sqm	9.4%
Area of Podium at Second level inc. staircases			6826.42 sqm	34.1%
Ground Coverage including Podium*			8708.02 sqm	43.5%

UNIT TYPE	NO. OF UNITS	PERSONS/UNIT	NO. OF PERSONS
MAIN DWELLING UNITS	258	4.5	1161
EWS	152	2.5	380
TOTAL	410		1541

Density (Upper Limit)
 (as per MoUD notification dated 13.05.2013) 200 DU/ Ha or 900 PPH 129 DU/ Ha or 581 PPH

TOTAL SITE AREA	20000	SQM
PROPOSED GROUND COVERAGE	1881.6	SQM
PROPOSED FAR inc. EWS	48805.11	SQM
PROPOSED DENSITY	129 DU/S/ Ha	
PROPOSED GREEN AREA	3411.97	SQM
PROPOSED ROAD AREA	7146.28	SQM
PROPOSED PARKING	854	

PERMISSIBLE (50% of Plot Area- Permissible Ground Coverage)	ACHIEVED
10000-6660 = 3340	3353.85
Water Body	58.12
Total	3411.97

SHOPS	AREA OF EACH SHOP	HEIGHT (SOFFIT OF SLAB)
Shop 1,4	2 shops	19.27
Shop 2,3	2 shops	19.98
Shop 5,8	2 shops	19.96
Shop 6,7,9,10,11	5 shops	20
Shop 12,15	2 shops	19.27
Shop 13,14	2 shops	19.98
TOTAL AREA	296.92	SQM

TOTAL BASEMENT AREA inc. SERVICES & CUTOUTS	SERVICE AREA	SERVICE AREA PERCENTAGE	TOTAL PARKING AREA	PARKING ACHIEVED
UPPER BASEMENT 15870.13 SQM	2250 SQM	14.2%	13620.13 SQM	187 ECS
LOWER BASEMENT 15870.13 SQM	2250 SQM	14.2%	13620.13 SQM	186 ECS
TOTAL 31740.26 SQM	4500 SQM		27240.3 SQM	373 ECS

Tower Type	Description	No. of Floors					Tower Height in mm		Total No. of DU	Ground Coverage	Area at Ground Level	Area at First Floor Level	Area at Second Floor Level	Area at Third Floor Level	Area at Typical Level	Total Area of Tower	Size of Dwelling Unit (FAR)	
		Podium @ Ground	Podium @ 1st	Stilt @ 2nd	Fire check Floor	Typical Floors	Terrace Level	Building Top Level										
B	2 DU per floor 3 BHK- Dwelling Unit	G	1st	2nd	FCH	35	39	130600	139600	70	373.19	41.2	41.2	Core & lobby area	14.56	369.91	13043.81	184.96
C	2 DU per floor 3 BHK- Dwelling Unit	G	1st	2nd	FCH	34	38	127300	136300	68	373.19	41.2	41.2	Core & lobby area Changing Rms	14.56 119.97	369.91	12793.88	184.96
D	4 DU per floor 2 BHK- Dwelling Unit	G	1st	-	FCH	30	-	120700	129700	120	638.15	Core & lobby area	132.08	41.64	443.95	13492.22	110.99	
	Community Building under Tower D			2nd + 3rd		35		120700	129700		NA			582.22	586.46	1168.68	NA	
TOTAL NO. OF DWELLING UNITS										258	TOTAL AREA ACHIEVED							40498.59

Tower Type	Description	Podium @ Ground	Podium @ 1st	Stilt @ 2nd	Fire check Floor	Typical Floors	Total Floors	Terrace Level	Building Top Level	Total No. of DU	Ground Coverage	Area at Ground Level	Area at First Floor Level	Area at Second Floor Level	Area at Third Floor Level	Area at Typical Level	Total Area of Tower	Size of Dwelling Unit (FAR)
EWS (inc. shops & PSP Facilities)	8 DU per floor 15 Shops at Ground Lvl	G				19	20	71200	80200	152	497.07	Core Area Shops area Total	74.82 296.92 371.74	NA	417.62	8306.52	33.31 (CARPET AREA)	
TOTAL NO. OF DWELLING UNITS										410	TOTAL AREA ACHIEVED							48805.11

External road level (MSL +100.00m) is considered to be ± 0.0m for this project.
 *Tower Heights are considered from External Road level.

REQUIRED IN NOS.	ACHIEVED IN NOS.	TOTAL
Parking required @ 2 ECS per 100 sqm FAR (as per MOUD Notification dated 23.09.2013)	Podium lvl 1 (GF) 101	235
Parking required @ 0.5 ECS per 100 sqm FAR for EWS (as per MOUD Notification dated 23.09.2013)	Stack Parking on Podium lvl 1 (GF) 134	
Total Parking	Podium lvl 2 (FF) 110	246
	Stack Parking on Podium lvl 2 (FF) 136	
	Upper Basement 187	
	Lower Basement 186	186
	TOTAL	854

NOTE 1:
 Heights considered:
 Ground Level- Podium level 1 = 4.2 M (Floor to Floor)
 First Floor Level- Podium level 2 = 4.8 M (Floor to Floor)
 Second Floor Level- Podium landscape & Stilt level = 2.4 M (Floor to soffit of beam)

NOTE 2:
 As per New Unified Building Bye-Laws for Delhi, 2016 (vide DDA Notn.No.S.O.1191 (E), dt. 22.03.2016, Clause 8.4.7 (b), Ramp may be provided in Setback area.

NOTE 3:
 As per New Unified Building Bye-Laws for Delhi, 2016 (vide DDA Notn.No.S.O.1191 (E), dt. 22.03.2016, Clause 8.10 (m), Podium shall be free of FAR & Ground Coverage calculations.

NOTE 4:
 Area of ATM with Guard room is 9 sqm

Architects: ARCOF ASSOCIATES PVT. LTD.
 Plot: 36b, Sec-32, Gurgaon-122001
 Ph: +91-124-4595530 FAX: +91-124-4595550

Clients: YOUNG BUILDERS PVT. LTD.
 45, Baker Road, Bengali Market, New Delhi - 110001
 Ph: 011-42355235

Job Title: REVISED LAYOUT FOR GROUP HOUSING PROJECT AT 1,3 CAVALRY LANE & 4 CHHATRA MARG NEAR VISHVA VIDYALAYA METRO STATION NEW DELHI - 110007

Architect's Signature: [Signature]

Owners Signature: [Signature]

Drawing Title: LAYOUT PLAN

Job No: 2014/01
 Drawing Released For: []
 Drawn: [] Checked: [] Approved: []

2662
ANNEXURE A-2

[Published In the Gazette of India, Part-II, Section-3, Sub-section (ii)]
Ministry of Environment, Forest and Climate Change

NOTIFICATION

New Delhi, the 29th March, 2016

G.S.R. 317(E).-Whereas the Municipal Solid Wastes (Management and Handling) Rules, 2000 published vide notification number S.O. 908(E), dated the 25th September, 2000 by the Government of India in the erstwhile Ministry of Environment and Forests, provided a regulatory frame work for management of Municipal Solid Waste generated in the urban area of the country;

And whereas, to make these rules more effective and to improve the collection, segregation, recycling, treatment and disposal of solid waste in an environmentally sound manner, the Central Government reviewed the existing rules and it was considered necessary to revise the existing rules with a emphasis on the roles and accountability of waste generators and various stakeholders, give thrust to segregation, recovery, reuse, recycle at source, address in detail the management of construction and demolition waste.

And whereas, the draft rules, namely, the Solid Waste Management Rules, 2015 with a separate chapter on construction and demolition waste were published by the Central Government in the Ministry of Environment, Forest and Climate Change vide G.S.R. 451 (E), dated the 3rd June, 2015 inviting objections or suggestions from the public within sixty days from the date of publication of the said notification;

And Whereas, the objections or suggestions received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 6, 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Municipal Solid Wastes (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby notifies the following rules for Management of Construction and Demolition Waste –

1. Short title and commencement.-(1) These rules shall be called the Construction and Demolition Waste Management Rules, 2016.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Application.-The rules shall apply to every waste resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority who generates construction and demolition waste such as building materials, debris, rubble.

3. Definitions –(1) In these rules, unless the context otherwise requires,-

(a) “ ACT’ means the Environment (Protection) Act, 1986 (29 of 1986);

(b) "**construction**" means the process of erecting of building or built facility or other structure, or

building of infrastructure including alteration in these entities,;

- (c) **"construction and demolition waste"** means the waste comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure;
- (d) **"de-construction"** means a planned selective demolition in which salvage, re-use and recycling of the demolished structure is maximized;
- (e) **"demolition"** means breaking down or tearing down buildings and other structures either manually or using mechanical force (by various equipment) or by implosion using explosives.
- (f) **"form"** means a Form annexed to these rules;
- (g) **"local authority"** means an urban local authority with different nomenclature such as municipal corporation, municipality, nagarpalika, nagarnigam, nagarpanchayat, municipal council including notified area committee and not limited to or any other local authority constituted under the relevant statutes such as gram panchayat, where the management of construction and demolition waste is entrusted to such agency;
- (h) **"schedule"** means a schedule annexed to these rules;
- (i) **"service provider"** means authorities who provide services like water, sewerage, electricity, telephone, roads, drainage etc. often generate construction and demolition waste during their activities, which includes excavation, demolition and civil work;
- (j) **"waste generator"** means any person or association of persons or institution, residential and commercial establishments including Indian Railways, Airport, Port and Harbour and Defence establishments who undertakes construction of or demolition of any civil structure which generate construction and demolition waste.

(2) Words and expressions used but not defined herein shall have the same meaning defined in the ACT.

(4) Duties of the waste generator -

(1) Every waste generator shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with these rules.

(2) The generator shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately.

(3) Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work and keep the concerned

authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.

(4) Every waste generator shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorised processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.

(5) Every waste generator shall pay relevant charges for collection, transportation, processing and disposal as notified by the concerned authorities; Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall have to pay for the processing and disposal of construction and demolition waste generated by them, apart from the payment for storage, collection and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.

(5) Duties of service provider and their contractors -

(1) The service providers shall prepare within six months from the date of notification of these rules, a comprehensive waste management plan covering segregation, storage, collection, reuse, recycling, transportation and disposal of construction and demolition waste generated within their jurisdiction.

(2) The service providers shall remove all construction and demolition waste and clean the area every day, if possible, or depending upon the duration of the work, the quantity and type of waste generated, appropriate storage and collection, a reasonable timeframe shall be worked out in consultation with the concerned local authority.

(3) In case of the service providers have no logistics support to carry out the work specified in sub-rules (1) and (2) , they shall tie up with the authorised agencies for removal of construction and demolition waste and pay the relevant charges as notified by the local authority.

(6) Duties of local authority-The local authority shall,-

(1) issue detailed directions with regard to proper management of construction and demolition waste within its jurisdiction in accordance with the provisions of these rules and the local authority shall seek detailed plan or undertaking as applicable, from generator of construction and demolition waste;

(2) chalk out stages, methodology and equipment, material involved in the overall activity and final clean up after completion of the construction and demolition ;

(3c) seek assistance from concerned authorities for safe disposal of construction and demolition waste contaminated with industrial hazardous or toxic material or nuclear waste if any;

(4) shall make arrangements and place appropriate containers for collection of waste and shall remove at regular intervals or when they are filled, either through own resources or by appointing private operators;

- (5) shall get the collected waste transported to appropriate sites for processing and disposal either through own resources or by appointing private operators;
- (6) shall give appropriate incentives to generator for salvaging, processing and or recycling preferably in-situ;
- (7) shall examine and sanction the waste management plan of the generators within a period of one month or from the date of approval of building plan, whichever is earlier from the date of its submission;
- (8) shall keep track of the generation of construction and demolition waste within its jurisdiction and establish a data base and update once in a year;
- (9) shall device appropriate measures in consultation with expert institutions for management of construction and demolition waste generated including processing facility and for using the recycled products in the best possible manner;
- (10) shall create a sustained system of information, education and communication for construction and demolition waste through collaboration with expert institutions and civil societies and also disseminate through their own website;
- (11) shall make provision for giving incentives for use of material made out of construction and demolition waste in the construction activity including in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.

(7) Criteria for storage, processing or recycling facilities for construction and demolition waste and application of construction and demolition waste and its products-

- (1) The site for storage and processing or recycling facilities for construction and demolition waste shall be selected as per the criteria given in **Schedule I**;
- (2) The operator of the facility as specified in sub- rules (1) shall apply in **Form I** for authorization from State Pollution Control Board or Pollution Control Committee.
- (3) The operator of the facility shall submit the annual report to the State Pollution Control Board in **Form II**.
- (3) Application of materials made from construction and demolition waste in operation of sanitary landfill shall be as per the criteria given in **Schedule II**.

(8) Duties of State Pollution Control Board or Pollution Control Committee-

- (1) State Pollution Control Board or Pollution Control Committee shall monitor the implementation of these rules by the concerned local bodies and the competent authorities and the annual report shall be sent to the Central Pollution Control Board and the State Government or Union Territory or any other State level nodal agency identified by the State Government or Union Territory administration for generating State level comprehensive data. Such reports shall also contain the comments and suggestions of the State Pollution Control Board or Pollution Control Committee with respect to any comments or changes required;

(2) State Pollution Control Board or Pollution Control Committee shall grant authorization to construction and demolition waste processing facility in **Form-III** as specified under these rules after examining the application received in **Form I**;

(3) State Pollution Control Board or Pollution Control Committee shall prepare annual report in **Form IV** with special emphasis on the implementation status of compliance of these rules and forward report to Central Pollution Control Board before the 31st July for each financial year.

(9) Duties of State Government or Union Territory Administration-

(1) The Secretary in-charge of development in the State Government or Union territory administration shall prepare their policy document with respect to management of construction and demolition of waste in accordance with the provisions of these rules within one year from date of final notification of these rules.

(2) The concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition waste.

(3) The Town and Country planning Department shall incorporate the site in the approved land use plan so that there is no disturbance to the processing facility on a long term basis.

(4) Procurement of materials made from construction and demolition waste shall be made mandatory to a certain percentage (say 10-20%) in municipal and Government contracts subject to strict quality control.

(10) Duties of the Central Pollution Control Board - (1) The Central Pollution Control Board shall,-

(a) prepare operational guidelines related to environmental management of construction and demolition waste management;

(b) analyze and collate the data received from the State Pollution Control Boards or Pollution Control Committee to review these rules from time to time;

(c) coordinate with all the State Pollution Control Board and Pollution Control Committees for any matter related to development of environmental standards;

(d) forward annual compliance report to Central Government before the 30th August for each financial year based on reports given by State Pollution Control Boards of Pollution Control Committees.

(11) Duties of Bureau of Indian Standards and Indian Roads Congress -The Bureau of Indian Standards and Indian Roads Congress shall be responsible for preparation of code of practices and standards for use of recycled materials and products of construction and demolition waste in respect of construction activities and the role of Indian Road Congress shall be specific to the standards and practices pertaining to construction of roads.

(12) Duties of the Central Government -

- (1) The Ministry of Urban Development, and the Ministry of Rural Development, Ministry of Panchayat Raj, shall be responsible for facilitating local bodies in compliance of these rules;
- (2) The Ministry of Environment, Forest and Climate Change shall be responsible for reviewing implementation of these rules as and when required.

13. Timeframe for implementation of the provisions of these rules -The timeline for implementation of these rules shall be as specified in **Schedule III:**

14. Accident reporting by the construction and demolition waste processing facilities-In case of any accident during construction and demolition waste processing or treatment or disposal facility, the officer in charge of the facility in the local authority or the operator of the facility shall report of the accident in **Form-V** to the local authority. Local body shall review and issue instruction if any, to the in-charge of the facility.

Schedule I**Criteria for Site Selection for Storage and Processing or Recycling Facilities for construction and demolition Waste****[See Rule 7(1)]**

- (1) The concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition and hand over the sites to the concerned local authority for development, operation and maintenance, which shall ultimately be given to the operators by Competent Authority and wherever above Authority is not available, shall lie with the concerned local authority.
- (2) The Local authority shall co-ordinate (in consultation with Department of Urban Development of the State or the Union territory) with the concerned organizations for giving necessary approvals and clearances to the operators.
- (3) Construction and demolition waste shall be utilized in sanitary landfill for municipal solid waste of the city or region as mentioned at Schedule I of these rule. Residues from construction and demolition waste processing or recycling industries shall be land filled in the sanitary landfill for solid waste.
- (4) The processing or recycling shall be large enough to last for 20-25 years (project based on-site recycling facilities).
- (5) The processing or recycling site shall be away from habitation clusters, forest areas, water bodies, monuments, National Parks, Wetlands and places of important cultural, historical or religious interest.
- (6) A buffer zone of no development shall be maintained around solid waste processing and disposal facility, exceeding five Tonnes per day of installed capacity. This will be maintained within the

total area of the solid waste processing and disposal facility. The buffer zone shall be prescribed on case to case basis by the local authority in consultation with concerned State Pollution Control Board.

- (7) Processing or recycling site shall be fenced or hedged and provided with proper gate to monitor incoming vehicles or other modes of transportation.
- (8) The approach and or internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
- (9) Provisions of weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.
- (10) Utilities such as drinking water and sanitary facilities (preferably washing/bathing facilities for workers) and lighting arrangements for easy landfill operations during night hours shall be provided and Safety provisions including health inspections of workers at landfill sites shall be carried out made.
- (11) In order to prevent pollution from processing or recycling operations, the following provisions shall be made, namely:
 - (a) Provision of storm water drains to prevent stagnation of surface water;
 - (b) Provision of paved or concreted surface in selected areas in the processing or recycling facility for minimizing dust and damage to the site.
 - (c) Prevention of noise pollution from processing and recycling plant:
 - (d) provision for treatment of effluent if any, to meet the discharge norms as per Environment (Protection) Rules, 1986.
- (12) Work Zone air quality at the Processing or Recycling site and ambient air quality at the vicinity shall be monitored.
- (13) The measurement of ambient noise shall be done at the interface of the facility with the surrounding area, i.e., at plant boundary.
- (14) The following projects shall be exempted from the norms of pollution from dust and noise as mentioned above:

For construction work, where at least 80 percent construction and demolition waste is recycled or reused in-situ and sufficient buffer area is available to protect the surrounding habitation from any adverse impact.
- (15) A vegetative boundary shall be made around Processing or Recycling plant or site to strengthen the buffer zone.

Schedule II**Application of materials made from construction and demolition waste and its products.****[See Rule 7(3)]**

Sl. No.	Parameters	Compliance Criteria
1	<p>Drainage layer in leachate collection system at bottom of Sanitary Landfill Gas Collection Layer above the waste at top of Sanitary Landfill and Drainage Layer in top Cover System above Gas Collection Layer of Sanitary Landfill For capping of sanitary landfill or dumpsite, drainage layer at the top</p>	<p>Only crushed and graded hard material (stone, concrete etc.) shall be used having coarse sand size graded material (2mm – 4.75mm standard sieve size). Since the coarse sand particles will be angular in shape (and not rounded as for riverbed sand), protection layers of non-woven geo-textiles may be provided, wherever required, to prevent puncturing of adjacent layers or components.</p>
2	Daily cover	<p>Fines from construction and demolition processed waste having size up to 2 mm shall be used for daily cover over the fresh waste.</p> <p>Use of construction and demolition fines as landfill cover shall be mandatory where such material is available. Fresh soil (sweet earth) shall not be used for such places and borrow-pits shall not be allowed. Exception – soil excavated during construction of the same landfill. During hot windy days in summer months, some fugitive dust problems may arise. These can be minimised by mixing with local soil wherever available for limited period.</p>
3	Civil construction in a sanitary landfill	Non-structural applications, such as kerb stones, drain covers, paving blocks in pedestrian areas.

Schedule III
Timeframe for Planning and Implementation
[See Rule 13]

Sl. No.	Compliance Criteria	Cities with population of 01 million and above	Cities with population of 0.5-01 million	Cities with population of less than 0.5 million
1	Formulation of policy by State Government	12 months	12 months	12 months
2	Identification of sites for collection and processing facility	18 months	18 months	18 months
3	Commissioning and implementation of the facility	18 months	24 months	36 months
4	Monitoring by SPCBs	3 times a year – once in 4 months	2 times a year – once in 6 months	2 times a year – once in 6 months

**The time Schedule is effective from the date of notification of these rules.*

FORM – I
See [Rule 7 (2)]
Application for obtaining authorisation

To,
The Member Secretary

_____ Name of the local authority or Name of the agency :
appointed by the municipal authority

Correspondence address Telephone No. Fax No.	
Nodal Officer and designation (Officer authorized by the competent authority or agency responsible for operation of processing or recycling or disposal facility)	
Authorisation applied for (Please tick mark)	Setting up of processing or recycling facility of construction and demolition waste
Detailed proposal of construction and demolition waste processing or recycling facility to include the following Location of site approved and allotted by the Competent Authority. Average quantity (in tons per day) and composition of construction and demolition waste to be handled	

<p>at the specific site.</p> <p>Details of construction and demolition waste processing or recycling technology to be used.</p> <p>Quantity of construction and demolition waste to be processed per day.</p> <p>Site clearance from Prescribed Authority.</p> <p>Salient points of agreement between competent authority or local authority and operating agency (attach relevant document).</p> <p>Plan for utilization of recycled product.</p> <p>Expected amount of process rejects and plan for its disposal (e.g., sanitary landfill for solid waste).</p> <p>Measures to be taken for prevention and control of environmental pollution.</p> <p>Investment on project and expected returns.</p> <p>Measures to be taken for safety of workers working in the processing or recycling plant.</p> <p>Any preventive plan for accident during the collection, transportation and treatment including processing and recycling should be informed to the Competent Authority (Local Authority) or Prescribed Authority</p>	
Date:	Signature of Nodal Officer

Form-II

See [Rule (7) (3)]

Format for Issue of Authorisation to the Operator

File No.: _____

Date : _____

To,

Ref : Your application number _____ Dt.

The _____ State Pollution Control Board or Pollution Control Committee after examining the proposal hereby authorizes _____ having their administrative office at _____ to set up and operate construction and demolition waste processing facility at _____ on the terms and conditions (including the standards to comply) attached to this authorisation letter.

1. The validity of this authorisation is till _____. After expiry of the validity period, renewal of authorisation is to be sought.

2. The _____ State Pollution Control Board or Pollution Control Committee may, at any time, for justifiable reason, revoke any of the conditions applicable under the authorisation and shall communicate the same in writing.

3. Any violation of the provision of the construction and demolition Waste Management Rules, 2016 shall attract the penal provision of the Environment (Protection) Act, 1986 (29 of 1986).

Date:

(Member Secretary)

Place:

**State Pollution Control Board/
Pollution Control Committee**

Form –III

See [Rule 8(2)]

Format of Annual Report to be submitted by Local Authority to the State Pollution Control Board

- (i) Name of the City or Town.....
- (ii) Population.....
- (iii) Name and address of local authority or competent authority

Telephone No :

Fax :

Email ID:

Website:

- (iv) Name of In-charge or Nodal Officer dealing with construction and demolition wastes management with designation

1. Quantity and composition of construction and demolition waste including any deconstruction waste

- (a) Total quantity of construction and demolition waste generated during the whole year in metric ton

Any figures for lean period and peak period generation per day

Average generation of construction and demolition waste (TPD)

Total quantity of construction and demolition waste collected per day

Any Processing / Recycling Facility set up in the city

Status of the facility

- (b) Total quantity of construction and demolition waste processed / recycled (in metric ton)

Non-structural concrete aggregate :

Manufactured sand :

Ready-mix concrete (RMC) :

Paving blocks :

GSB :

Others, if any, please specify :

(c) Total quantity of Construction & Demolition waste disposed by land filling without processing (last option) or filling low lying areas

No of landfill sites used :
 Area used :
 Whether weigh-bridge : Yes No
 facility used for quantity estimation?

(d) Whether construction and demolition waste used in sanitary landfill (for solid waste) as per Schedule III
 : Yes No

2. Storage facilities

(a) Area or location or plot or societies covered for collection of Construction and Demolition waste

(b) No. of large Projects (including roadways project) covered

(c) Whether Area or location or plot or societies collection is Practiced (if yes, whether done by Competent Authority or Local Authority or through Private Agency or Non-Governmental Organization) :

(d) Storage Bins : -----

Specifications (Shape & Size)	Existing Number	Proposed for future

(i) Containers or receptacle (Capacity) :
 (ii) Others, please specify :

(e) Whether all storage bins/collection spots are attended for daily lifting : Yes No

(e) Whether lifting of Construction & Demolition Waste from Storage bins is manual or mechanical (please tick mark) please specify mode : Manual Mechanical Others,
 and equipment used (specify equipment)

3. Transportation

Truck :
 Truck-Hydraulic :
 Tractor-Trailer :
 Dumper-placers :
 Tricycle :

 Existing Actually Required/Proposed number

Refuse-collector :
Others (Please specify) :

4. Whether any proposal has been made to improve Construction and Demolition waste management practices

**5. Have any efforts been made to involve PPP for processing of Construction & Demolition waste :
If yes, what is (are) the technologies being used, such as:**

Processing / recycling Technology	(Quantity to be processed)	Steps taken
Dry Process	:	
Wet Process	:	
Others, if any, Please specify	:	

6. What provisions are available to check unauthorized operations of:

Encroachment on river bank or wet bodies :
Unauthorized filling of low line areas :
Mixing with solid waste :
Encroachment in Parks, Footpaths etc. :

7. How many slums are provided with construction and demolition waste receptacles facilities:

8. Are municipal magistrates appointed

for taking penal action for non-compliance with these rules: Yes No

[If yes, how many cases registered & settled during last three years (give year wise details)]

Dated:
Commissioner

Signature of Municipal

Form -IV

See [Rule (8)(3)]

**Format of Annual Report to be submitted by the State Pollution Control Board / Committees to the
Central Pollution Control Board**

To,

The Chairman,
Central Pollution Control Board,
PariveshBhawan, East Arjun Nagar,
Delhi-110032

1. Name of the State/Union territory :
2. Name & address of the State
Pollution Control Board/Pollution
Control Committee :
3. Number of municipal authorities
responsible for management of municipal
solid wastes in the State/Union territory
under these rules :
4. A Summary Statement on progress made
by municipal authorities in respect of
implementation of **Schedule III]** : Please attach as Annexure-I
5. A Summary Statement on progress made by
municipal authorities in respect of
implementation of **Schedule IV** : Please attach as Annexure-II

Date:

Chairman or the Member Secretary

Place:

**State Pollution Control Board/
Pollution Control Committee**

Form –V
See [Rule14]
Accident reporting

1. Date and time of accident :
2. Sequence of events leading to accident :
3. The type of construction and demolition waste involved in accident :
4. Assessment of the effects of the accidents
a. on traffic, drainage system and the environment :
5. Emergency measures taken :
6. Steps taken to alleviate the effects
a. of accidents :
7. Steps taken to prevent the recurrence
a. of such an accident :
8. Regular monthly health checkup of workers at

- a. Processing / recycling site shall be made
9. Any accident during the collection,
- a. transportation and treatment including
 - b. processing and recycling should be informed
 - c. to the Competent Authority (Local Authority) or
 - d. Prescribed Authority

Date :
Place:

Authorized Signatory
Designation

[18-6/2014-HSMD]
Bishwanath Sinha, Joint Secretary

MINISTRY OF ENVIRONMENT & FORESTS
The Noise Pollution (Regulation and Control) Rules, 2000;

(As amended till 10/08/2017 vide S.O. 2555(E))

S.O.123 (E).- Whereas the increasing ambient noise levels in public places from various sources, inter-alia, industrial activity, construction activity, (*fire crackers, sound producing instruments*)¹, generator sets, loud speakers, public address systems, music systems, vehicular horns and other mechanical devices have deleterious effects on human health and the psychological well being of the people, it is considered necessary to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards in respect of noise;

Whereas a draft of Noise Pollution (Control and Regulation) Rules, 1999 was published under the notification of the Government of India in the Ministry of Environment and Forests vide number S.O. 528 (E) dated the 28th June, 1999 inviting objections and suggestions from all the persons likely to be affected thereby, before the expiry of the period of sixty days from the date on which the copies of the Gazette containing the said notification are made available to the public-,

And whereas copies of the said Gazette were made available to the public on the 1st day of July, 1999.

And whereas the objections and suggestions received from the public in respect of the said draft rules have been duly considered by the Central Government-,

Now therefore, In exercise of the powers conferred by clause (ii) of sub-section (2) of section 3, sub-section (1) and clause (b) of sub-section (2) of section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986) read with rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following rules for the regulation and control of noise producing and generating sources, namely:

The Noise Pollution (Regulation and Control) Rules, 2000

1. Short title and commencement.

(1) These rules may be called the Noise Pollution (Regulation and Control) Rules, 2000.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions.- In these rules, unless the context otherwise requires,

(a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);

(b) "area/zone" means all areas which fall in either of the four categories given in the Schedule annexed to these rules;

1. In the said rules, in the opening para/portion after the words 'construction activity' additional words as at (1) above have been inserted vide **S.O.50 dated 11/01/2010**.

[(c) "authority" means and includes any authority or officer authorised by the Central Government, or as the case may be, the State Government in accordance with the laws in force and includes a District Magistrate, Police Commissioner, or any other officer not below the rank of the Deputy Superintendent of Police designated for the maintenance of the ambient air quality standards in respect of noise under any law for the time being in force;]²

[(d) "court" means a governmental body consisting of one or more judges who sit to adjudicate disputes and administer justice and includes any court of law presided over by a judge, judges or a magistrate and acting as a tribunal in civil, taxation and criminal cases;

(e) "educational institution" means a school, seminary, college, university, professional academies, training institutes or other educational establishment, not necessarily a chartered institution and includes not only buildings, but also all grounds necessary for the accomplishment of the full scope of educational instruction, including those things essential to mental, moral and physical development;

(f) "hospital" means an institution for the reception and care of sick, wounded, infirm or aged persons, and includes government or private hospitals, nursing homes and clinics;]³

[(g) "person" shall include any company or association or body of individuals, whether incorporated or not;]⁴

(h) "State Government" in relation to a Union territory means the Administrator thereof appointed under article 239 of the Constitution.

[(i) "*public place*" means any place to which the public have access, whether as of right or not, and includes auditorium, hotels, public waiting rooms, convention centres, public offices, shopping malls, cinema halls, educational institutions, libraries, open grounds and the like which are visited by general public; and

(j) "*night time*" means the period between 10.00 p.m. and 6.00 a.m.]⁶

3. Ambient air quality standards in respect of noise for different areas/zones.

(1) The ambient air quality standards in respect of noise for different areas/zones shall be such as specified in the Schedule annexed to these rules.

(2) The State Government (shall categorize)⁵ the areas into industrial, commercial, residential or silence areas/zones for the purpose of implementation of noise standards for different areas.

-
2. In rule 2 for clause "(c) *authority*" means any authority or officer authorized by the Central Government, or as the case may be, the State Government in accordance with the laws in force and includes a District Magistrate, Police Commissioner, or any other officer designated for the maintenance of the ambient air quality standards in respect of noise under any law for the time being in force;" has been substituted with a new clause as at (2) above vide **S.O.1046 (E) dated 22/11/2000.**
 3. In rule 2, after Clause (c) new clause (d) (e) & (f) have been inserted as at (3) above vide **S.O.1046 dated 22/11/2000.**
 4. In rule 2, clause (d) & (e) have been re-numbered as clauses (g) and (h) respectively and for (g) as so renumbered "(g) *person*" in relation to any factory or premises means a person or occupier or his agent, who has control over the affairs of the factory or premises;" has been substituted as at (4) above vide **S.O. 1046 (E) dated 22/11/2000.**
 5. In sub-rule (2) of rule 3 of the said rules, for the words "may categorize", the words "shall categorize" has been substituted as at (5) above vide **S.O.1046 dated 22/11/2000**
 6. In the said rules, in rule 2, after clause (h), the following clauses (i) & (j) have been inserted as at (6) above vide **S.O. 50 dated 11/01/2010.**

(3) The State Government shall take measures for abatement of noise including noise emanating from vehicular movements, (*blowing of horns, bursting of sound emitting fire crackers, use of loud speakers or public address system and sound producing instruments*)⁹ and ensure that the existing noise levels do not exceed the ambient air quality standards specified under these rules.

(4) All development authorities, local bodies and other concerned authorities while planning developmental activity or carrying out functions relating to town and country planning shall take into consideration all aspects of noise pollution as a parameter of quality of life to avoid noise menace and to achieve the objective of maintaining the ambient air quality standards in respect of noise.

(5) An area comprising not less than 100 metres around hospitals, educational institutions and courts may be declared (by the State Government)¹⁴ as silence area/zone for the purpose of these rules.

{Provided that, an area shall not fall under silence area or zone category, unless notified by the State Government in accordance with sub-rule(2).}¹⁴

4. Responsibility as to enforcement of noise pollution control measures.

(1) The noise levels in any area/zone shall not exceed the ambient air quality standards in respect of noise as specified in the Schedule.

(2) The authority shall be responsible for the enforcement of noise pollution control measures and the due compliance of the ambient air quality standards in respect of noise.

[(3) The respective State Pollution Control Boards or Pollution Control Committees in consultation with the Central Pollution Control Board shall collect, compile and publish technical and statistical data relating to noise pollution and measures devised for its effective prevention, control and abatement.]⁸

5. Restrictions on the use of loud speakers/public address system (and sound producing instruments).¹⁰

(1) A loud speaker or a public address system shall not be used except after obtaining written permission from the authority.

(2) A loud speaker or a public address system or any sound producing instrument or a musical instrument or a sound amplifier shall not be used at night time except in closed premises for communication within, like auditoria, conference rooms, community halls or during a public emergency.]¹¹

[(3) Notwithstanding anything contained in sub-rule (2), the State Government may subject to such terms and conditions as are necessary to reduce noise pollution, permit use of loud speakers or public address systems and the like during night hours (between 10.00 p.m. to 12.00 midnight) on or during any cultural, religious or festive occasion of a limited duration not exceeding fifteen days in all during a calendar year and the concerned State Government or District Authority in respect of its jurisdiction as authorized by the concerned State Government shall generally specify in advance, the number and particulars of the days on which such exemption should be operative.

Explanation.- For the purposes of this sub-rule, the expressions-

- (i) “festive occasion” shall include any National function or State function as notified by the Central Government or State Government; and

(ii) “National function or State function” shall include”-

- (A) *Republic Day;*
- (B) *Independence Day;*
- (C) *State Day; or*
- (D) *such other day as notified by the Central Government or the State Government.]¹⁵*

7. In rule 5 after sub-rule (2) new rule 3 has been inserted as at (7) above vide **S.O. 1088 (E) dated 11/10/2002.**
8. In rule 4 after sub-rule (2) new sub-rule (3) has been inserted as at (8) above vide **S.O. 1569 (E) dated 19/09/2006.**
9. In the said rules, in rule 3, in sub-rule (3) after the words “noise emanating from vehicular movements, the additional words as at (9) above have been inserted vide **S.O. 50 dated 11/01/2010.**
10. In rule 5, for heading after the words “public address system” new words has been inserted as at (10) vide **S.O.50 dated 11/01/2010.**
11. In rule 5, sub-rule (2) has been substituted by new sub-rule as at (11) above vide **S.O. 50 dated 11/01/2010.**
12. In rule 5, in sub-rule (3) for the words “public address systems during night hours” has been substituted by new words as at (12) above vide **S.O. 50 dated 11/01/2010.**
13. In rule 5, in sub-rule (3) after the words “a limited duration.....a calendar year” new sentence has been added as at (13) above vide **S.O. 50 dated 11/01/2010.**
14. In rule 3, in sub-rule (5) after the words “may be declared” the words “by the State Government” shall be inserted and there after new proviso is inserted as at (a) above vide **S.O. 2555 dated 10/08/2017.**
15. In rule 5, for the existing sub-rule “(3) Notwithstanding anything contained in sub-rule (2), the State Government may subject to such items and conditions as are necessary to reduce noise pollution permit use of loudspeakers or (public address system and the like during night hours)¹² (between 10.00 p.m. to 12.00 midnight) on or during any cultural or religious festive occasion of a limited duration not exceeding fifteen days in all during a calendar year.]⁷ (The concerned State Government shall generally specify in advance, the number and particulars of the days on which such exemption would be operative)¹³.” a new para is inserted as at (b) above vide **S.O. 2555 dated 10/08/2017.**

[(4) The noise level at the boundary of the public place, where loudspeaker or public address system or any other noise source is being used shall not exceed 10 dB (A) above the ambient noise standards for the area or 75 dB (A) whichever is lower;

(5) The peripheral noise level of a privately owned sound system or a sound producing instrument shall not, at the boundary of the private place, exceed by more than 5dB (A) the ambient noise standards specified for the area on which it is used.]¹⁶

[5A. Restrictions on the use of horns, sound emitting construction equipments and bursting of fire crackers.

(1) No horn shall be used in silence zones or during night time in residential areas except during a public emergency.

(2) Sound emitting fire crackers shall not be burst in silence zone or during night time.

(3) Sound emitting construction equipments shall not be used or operated during night time in residential areas and silence zones.]¹⁷

6. Consequences of any violation in silence zone/area.

Whoever, in any place covered under the silence zone/area commits any of the following offence, he shall be liable for penalty under the provisions of the Act:

(i) whoever, plays any music or uses any sound amplifiers,

(ii) whoever, beats a drum or tom-tom or blows a horn either musical or pressure, or trumpet or beats or sounds any instrument, or

(iii) whoever, exhibits any mimetic, musical or other performances of a nature to attract crowds.

[(iv) whoever, bursts sound emitting fire crackers; or

(v) whoever, uses a loud speaker or a public address system.]¹⁸

7. Complaints to be made to the authority.

(1) A person may, if the noise level exceeds the ambient noise standards by 10 dB(A) or more given in the corresponding columns against any area/zone (or, if there is a violation of any provision of these rules regarding restrictions imposed during night time,)¹⁹ make a complaint to the authority.

(2) The authority shall act on the complaint and take action against the violator in accordance with the provisions of these rules and any other law in force.

16. In rule 5, after sub-rule (3) new sub-rules (4) & (5) have been inserted as at (16) above vide S.O. 50 dated 11/01/2010.

17. In the said rules, after rule 5, new rule 5A has been inserted as at (17) above vide S.O.50 dated 11/01/2010.

18. In the said rules, in rule 6, after the clause (iii) new clauses (iv) & (v), as at (18) above have been inserted vide S.O. 50 dated 11/01/2010.

19. In the said rules, in rule 7 in sub-rule (1), after the words "in corresponding columns..... & ending with.....area/zone", new sentence as at (19) above has been inserted vide S.O.50 dated 11/01/2010.

8. Power to prohibit etc. continuance of music sound or noise.

(1) If the authority is satisfied from the report of an officer in-charge of a police station or other information received by him (including from the complainant)²⁰ that it is necessary to do so in order to prevent annoyance, disturbance, discomfort or injury or risk of annoyance, disturbance, discomfort or injury to the public or to any person who dwell or occupy property on the vicinity, he may, by a written order issue such directions as he may consider necessary to any person for preventing, prohibiting, controlling or regulating:

(a) the incidence or continuance in or upon any premises of -

(i) any vocal or instrumental music,

(ii) sounds caused by playing, beating, clashing, blowing or use in any manner whatsoever of any instrument including loudspeakers, (*public address systems, horn, construction equipment, appliance or apparatus*)²² or contrivance which is capable of producing or re-producing sound, or

*[(iii) sound caused by bursting of sound emitting fire crackers, or]*²³

(b) the carrying on in or upon, any premises of any trade, avocation or operation or process resulting in or attended with noise.

(2) The authority empowered under sub-rule (1) may, either on its own motion, or on the application of any person aggrieved by an order made under sub-rule (1), either rescind, modify or alter any such order:

Provided that before any such application is disposed of, the said authority shall afford to the applicant (and to the original complainant, as the case may be)²¹ an opportunity of appearing before it either in person or by a person representing him and showing cause against the order and shall, if it rejects any such application either wholly or in part, record its reasons for such rejection.

20. In rule 8, in sub-rule (1) after the words "received by him" the words " including from the complainant" has been inserted as at (18) above vide **S.O. 1569 (E) dated 19/09/2006**

21. In rule 8, in sub-rule (2) in the proviso, after the words "afford to the applicant", the words "and to the original complainant, as the case may be", has been inserted as at (19) above vide **S.O. 1569 (E) dated 19/09/2006**

22. In the said rules, in rule 8, in sub-rule (1), in clause (a) in sub-clause (ii), for the words, "public address systems, appliance or apparatus" new words have been substituted as at (20) above vide **S.O. 50 dated 11/01/2010.**

23. In the said rules, in rule 8, in sub-rule (1), in clause (a) after sub-clause (ii) new sub-clause (iii) as at (21) above has been inserted vide **S.O. 50 dated 11/01/2010.**

SCHEDULE
(see rule 3(1) and 4(1))

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
		Day Time	NightTime
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note:-

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq : It is an energy mean of the noise level, over a specified period.

24. In the schedule to the said rules, for the note 3 and the entries thereto. "Silence zone is defined as an area comprising not less than 100 metres around hospitals, educational institutions and courts. The silence zones are zones which are declared as such by the competent authority." has been substituted as at (22) above vide S.O. 1046 (E) dated 22/11/2000.

25. In the schedule to the said rules, in the note, paragraph ("3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions and courts, religious places or any other area which is declared as such by the competent authority ")²² has been omitted as may be seen above vide S.O. 2555 (E) dated 10/08/2017.

Note: The Principal rules were published in the Gazette of India vide Notification number S.O. 123(E) dated 14 February, 2000 and subsequently amended vide

- 1) S.O.1046(E) dated 22/11/2000;
- 2) S.O.1088(E) dated 11/10/2002;
- 3) S.O.1569(E) dated 19/09/2006;
- 4) S.O.50(E) dated 11/01/2010;
- 5) S.O.2555(E) dated 10/08/2017;

GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
(DEPARTMENT OF ENVIRONMENT)

6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-110002.

ANNEXURE A-4

F.12(1)N.P/Env/2005/---32---

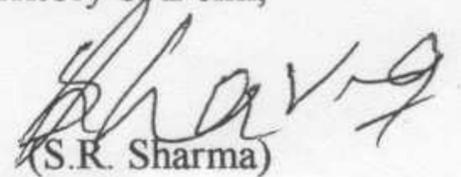
Dated the 3rd April, 2008.

NOTIFICATION

F. 12(1)N.P/Env/2005/---32---. In pursuance of provisions of sub-rule (5) of rule 3 read with clause (h) of rule 2 of the Noise Pollution (Regulation and Control) Rules, 2000 made under the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and in partial modification of earlier Notification No.F.23(1162)/Env/2001/223 dated the 21st May, 2004, the Lieutenant Governor of the National Capital Territory of Delhi hereby declares the following areas as " Silence Areas/Zones " for the purpose of the said Rules, in the National Capital Territory of Delhi, namely:-

1. An area of 100 meters around all Educational Institutions having more than one thousand students;
2. An area of 100 meters around all Courts;
3. An area of 100 meters around all Government Office Complexes;
4. An area of 100 meters around all 100-bedded and above hospitals.

By order and in the name of
Lieutenant Governor of the
National Capital Territory of Delhi,



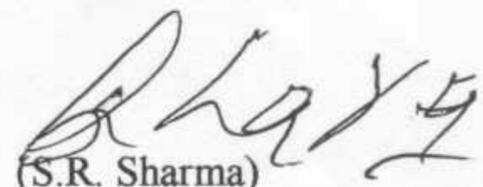
(S.R. Sharma)
Deputy Secretary (Environment)

F.12(1)N.P/Env/2005/---32---

Dated the 3rd April, 2008.

Copy forwarded for information and necessary action to:

1. The Deputy Secretary (GAD), Govt of NCT of Delhi (in duplicate) with the request to have this notification published in Delhi Gazette (Extraordinary) of today and send 10 copies of the Gazette to this Department for necessary action and record.
2. Secretary, Ministry of Environment & Forest, Govt. of India.
3. Joint Secretary (UT), Ministry of Home Affairs, Govt. of India.
4. Secretary to Lt. Governor, Govt. of NCT of Delhi
5. Principal Secretary to Chief Minister, Govt. of NCT of Delhi
6. Secretaries to all Ministers, Govt. of NCT of Delhi
7. PS to Speaker, Delhi Vidhan Sabha, Delhi
8. All Principal Secretaries/ HODs, Govt. of NCT of Delhi
9. Commissioner, MCD, Delhi
10. Chairman, NDMC, Delhi
11. Chief Executive Officer, Delhi Cantonment Board
12. Divisional Commissioner, Govt. of NCT of Delhi
13. The Secretary (Law, Justice and L. A.), Govt. of NCT of Delhi, New Delhi.
14. Principal Secretary, Department of Health & Family Welfare, Govt. of NCT of Delhi
15. Secretary, Directorate of Education, Govt. of NCT of Delhi
16. Director, Directorate of Higher Education, Govt. of NCT of Delhi
17. All Deputy Commissioners, office of Divisional Commissioner, Govt. of NCT of Delhi.
18. Commissioner of Police, Delhi
19. Chairman Delhi Pollution Control Committee
20. Guard File.



(S.R. Sharma)
Deputy Secretary (Environment)

ANNEXURE A-5

REPORTABLE**IN THE SUPREME COURT OF INDIA****CIVIL APPELLATE JURISDICTION****CIVIL APPEAL NOS. 9488-9489 OF 2019**
(Arising out of SLP (Civil) Nos.5581-5582 of 2019)

University of DelhiAppellant(s)

Versus

Union of India & Ors. Respondent(s)

J U D G M E N T**A.S. Bopanna,J.**

Leave granted.

2. These appeals have been preferred by the appellant-University of Delhi through its Registrar to challenge the common judgment and order dated 29.10.2018 whereby, the High Court of Delhi declined to condone the delay of 916 days in filing the appeal to challenge the judgment dated 27.04.2015 whereunder, the learned Single Judge had dismissed the W.P (C) No.2743/2012 filed by the University of Delhi.

3. The challenge in the writ petition was, *inter alia*, to the decision dated 12.5.2011 of the Delhi Development

Authority (hereinafter referred to as the, “DDA” for short) who had allowed respondent no.13-M/s Young Builders (P) Ltd. to construct a high-rise multistory group housing society in the control zone of Zone-C in the University campus, without any height restriction. The construction permission was allowed on the plot leased out to the Delhi Metro Rail Corporation (hereinafter referred to as the, “DMRC” for short) by permitting segregation of 2 hectares as a separate entity from the total 3 hectares of land, acquired for the metro station.

4. The principal contentions of the appellant-University on the merits of the challenge were as follows:

- a) the permission sought by Respondent No. 13 (namely, M/s Young Builders Private Limited) for the proposed construction of a group housing society on the land originally owned by the Ministry of Defence in the University enclave is violative of the MPD-2021 and is against the larger public interest, given the fact that the project site in question and its vicinity are within the North Campus of the University and that it contains various historical and archaeological buildings, apart from it being

the centre of higher education and advanced learning; and

- b) the change in the character of the subject land is impermissible in law, since the land having been acquired for public purpose for construction of the metro rail project, has suddenly been diverted to private commercial use and auctioned to private builder for building a group housing society in a manner contrary to the purpose and charter of incorporation of the Delhi Metro Rail Corporation (DMRC)
- c) The restriction on certain developments for Metro Station prescribed under Master Plan of Delhi – 2021 ('MPD' for short) was also a contention raised by the writ petitioner which imposed ban on construction of high-rise buildings in the control zone of the Delhi University. The location of various ladies' hostels of the University in close vicinity of the proposed construction site was highlighted as an important privacy concern. The impediment to access of thousands of students, teachers at the entrance of the University was the other main contention raised in the writ petition.

5. On the other hand, the DMRC had projected that after construction of the University Metro Station, 2

hectares of land remained surplus and the housing project was intended to generate revenue for the DMRC as per the policy of the Government. The formal application made to the authorities for change of land use and approval secured for conversion of the land for residential use, was also highlighted by the DMRC.

6. The learned Single Judge having noticed the entire sequence refused to entertain the writ petition of the University including on the ground of delay and laches. In the judgment dated 27.04.2015 the Court however observed that DDA is the master of the formulation and implementation of the Master Plan and, necessary approvals have been taken from various statutory authorities for the housing project. It was also observed that the change in the land use from “public” to “residential” is permissible by adverting to the Delhi High Court’s Division Bench Judgment in **Adil Singh vs. Union of India** (2010) 171 DLT 748. According to the Writ court, since it was a policy decision taken by the Government body and since the appellant-University has

failed to demonstrate any illegality, impropriety, mala fide in the decision making by the authority, interference of the Court with the policy decision, would not be justified.

7. It is the case of the appellant that following the dismissal of the writ petition and being concerned about the future use of the subject land, the University Authorities constituted a Committee to recommend the appropriate course of action to be taken by the University. The Committee's report furnished on 11.11.2016 is stated to have been laid before the Executive Council of the University and after due consideration of the report and the judgment of the learned Single Judge, the Executive Council of the University through their resolution dated 28.02.2017/07.03.2017 decided to prefer an intra-Court Appeal in the High Court.

8. While the above deliberations were on, accessibility concern to the University's Metro Station area was raised under the Rights of Persons with Disabilities Act, 2016 by persons with disabilities. The University also received a report on preventive measures to be taken in the accident-prone area of the Metro Station. With these and other

projection, the appeal in LPA No.89/2018 came to be filed on 01.03.2018 after a delay of 916 days, together with the C.M.No.8654/2018 for condonation of delay in filing the appeal.

9. The delay of 916 days caused in preferring the Appeal was explained in the application seeking delay condonation and the rejoinder to the reply to said application to the following effect;

(i) Non-convening of Executive Council and delay occasioned due to non-availability of Vice-Chancellor. The case in the present LPA is different from other routine litigation preferred or contested by the appellant. It is the only case where, the approval from the Executive Council of the University of Delhi was required to be taken and before such approval, various deliberations preceded so as to appraise the Executive Council of the different shades of the subject matter. Being a statutory body, an adherence to the just method of decision making requires consultations with affected departments of the University itself

and therefore, the final say in the matter rests with the Executive Council which is constituted under Section 21 of the Delhi University Act, 1922. The Council includes the senior most Deans, democratically elected representatives of teachers, the Visitor's nominee, the Registrar, and the Vice-Chancellor.

(ii) The judgment of learned Single Judge was sent by the Counsel representing the University quite late and it was, then, placed before the Legal Cell of the University for examining the matter. After going through the voluminous paper book, it was opined that the matter be referred to the Vice-Chancellor for consideration and pursuant thereto, a meeting was held, wherein it was decided that the matter needs to be dealt with holistically, having regard to all the issues decided and connotations thereof. The issue could not be taken up for consideration as the post of Vice-Chancellor had fallen vacant w.e.f. 28.10.2015 and could be considered only after the new Vice-

Chancellor had assumed office and taken stock of things. On 10.03.2016, the new Vice-Chancellor joined the office and in order to ensure democratic functioning of the University, he decided to constitute a Committee comprising of senior faculty persons representing different sections of the University. The terms of reference of the Five-member Committee were, to recommend the course of action to the University in the light of the dismissal of the Writ Petition filed by the University in the DMRC matter.

(iii) On 11.11.2016, the above constituted Committee gave its Report. Based on the Report of the five-member Committee, it was decided by the Competent Authority that the subject matter of the present case be referred to the Executive Council of the University for its final decision. In the Executive Council meeting held on 28.02.2017, the matter was discussed. The item was again discussed in the Executive Council meeting held on 7.3.2017 (continued meeting),

where the members of the Council referred to the earlier discussions and decisions of both the Academic Council and the Executive Council with respect to the same matter and it was decided unanimously to prefer an Appeal against the Order of the learned Single Judge dated 27.04.2015 after adequate preparation.

(iv) In the meanwhile, reservation was strongly put forth by the disabled students and faculty in the light of the proposed project by the private builder at the very main entrance of the University of Delhi. Such representations were received from individuals as well as groups which the University had to consider and were therefore forwarded to the Equal Opportunity Cell for consideration. The Equal Opportunity Cell, University of Delhi, which looks after the welfare of disabled students and others, in the light of the new enactment on the Rights of Persons with Disabilities Act, 2016, analyzed the probable outcome. After detailed deliberations, the Equal Opportunity Cell

submitted its Report on 28.04.2017 which was brought to the notice of Competent Authorities for their consideration. The Report was considered at various levels of the University including the Office of the Dean, Student Welfare, the Department of legal affairs, the Office of the Proctor, the Engineering Department, and the Department of Environmental Studies. Holding discussions and deliberations among these bodies and considering their inputs involved further time and it involved co-ordination and interaction with various authorities and stake holders. All this exercise involved a further period of five to six months before a considered opinion could be generated by the University of Delhi. Hence the representations and the Report of the Equal Opportunity Cell could be finally considered by the University of Delhi around the end of year 2017.

(v) In the interregnum, the accidents occurred at Chhatra Marg in December 2017 led to the

need for the preparation of a Report by the Office of the Proctor of the University dated 05.02.2018 wherein the Proctor recommended the area to be declared as accident prone. Both the Reports - one by the Equal Opportunity Cell and the other by the Office of Proctor -- were sent to the Counsel concerned who was holding the brief for the preparation of the Appeal memorandum.

Subsequently legal opinion was sought and the draft appeal and petition was prepared which was thereafter got vetted and settled by the Senior Counsel. The finalized Appeal was thereafter again considered at the highest level at the University to take the final decision, which entailed some time. On 01.03.2018, the LPA was filed before the Delhi High Court.

10. The above explanation for the delayed filing was however not accepted and the Division Bench of the High Court on 29.10.2018 dismissed the LPA on the ground of delay without considering the merits of the appeal. Thus,

aggrieved the appellant-University has filed this appeal.

11. Shri Mohan Parasaran, learned Senior Counsel for the appellant submits that the implication of the rejection of the writ petition and the LPA without considering the substantial contention raised by the University on merits would cause grave injury to the public institution. The learned Senior Counsel submits that the University Authorities have been pursuing the issue with due diligence but decision had to be taken after consultation with all the stakeholders and therefore, the delay in preferring the LPA should not be attributed to any inaction, much less a deliberate inaction. The endeavor of the Courts according to Shri Parasaran should be to do substantial justice to the parties by deciding the matters on merits but in the present case, neither the learned Single Judge nor the Division Bench of the High Court had considered the merit of the contention raised by the appellant-University. Shri Parasaran argues that the expression “sufficient cause” is elastic enough to enable the courts to apply the law of limitation in a meaningful manner. He also projects that since the builders are yet to

start their construction, the delayed filing of the LPA should not have resulted in non-consideration of the contention on merits, as major public interest issues have been raised in the present matter. The learned Senior Counsel argues that important questions effecting public interest cannot be defeated on technical objection, inasmuch as the proposed site for construction was originally owned by the Defence Ministry and the land was acquired for public purpose at public expense but is now sought to be given over to a private builder, for a profit oriented motive. The said contentions are also supplemented by Shri R. Venkataramani and Shri Ramji Srinivasan, learned Senior Advocates.

12. Ms. Meenakshi Arora, learned Senior Counsel representing the applicants/intervenors submits that six girl hostels are located near to the project site and if high rise apartments are allowed to be constructed, the privacy of the hostel residents would be compromised. Ms. Arora also refers to the letter dated 25.10.1943 of the Joint Secretary, Government of India, Department of Education addressed to the Chief Commissioner of Delhi conveying

the decision of the Government of India to ensure that no tall buildings are erected inside the Delhi University Campus and also the necessity of protecting University area, as an enclave. The Senior Counsel then refers to the Zonal Development Plan for Zone-“C” (Civil Lines Zone) of the DDA as approved by the Ministry of Urban Development to point out that the authorities have recognized the existence of number of old historical buildings of the colonial period within the Delhi University Campus and effort should be made to convert the Delhi University into an integrated Campus with restriction on tall buildings.

13. Shri Shyam Divan, learned Senior Counsel for respondent No.13- M/s Young Builders would at the outset contend that though the learned Senior Counsel for the appellant has referred to the merits of the case, keeping in view the position that the Division Bench of the High Court has dismissed the LPA on the ground of delay and laches, that aspect of the matter would require consideration at the threshold. He would assert that the delay of 916 days is an inordinate delay of more than two

and a half years and in such event the principle of applying the usual test for “sufficient cause” would not arise as it is not merely the number of days requiring condonation but also amounts to laches in filing the writ petition, as well as the LPA. Mere contention that the proceedings initiated by the appellant is in public interest would not advance the case inasmuch as the learned Single Judge having adverted to all these aspects has arrived at the conclusion that the petition suffers from laches in addition to there being no merit and in such circumstance when the LPA was once again delayed by 916 days the Division Bench was justified in its conclusion. It is pointed out that the said delay of 916 days is as against the period of 30 days which is allowed in law for filing the LPA. It is contended that the cause of action if any should be construed on 23.09.2005 when the area was converted into residential, but the writ petition was filed only on 07.05.2012 and despite the writ petition having been disposed of on 27.04.2015 the LPA was filed only on 01.03.2018 after a delay of 916 days. The reason assigned that a decision to file the LPA could not be taken

as the office of Vice-Chancellor had fallen vacant also cannot be accepted since such vacancy arose only on 28.10.2015 while the writ petition had already been disposed of on 27.04.2015 and there was sufficient time to file the LPA if they had the intention to do so. The learned Senior Counsel further refers to the large number of cases that was filed on behalf of the University during the said period. It is contended that while considering condonation of delay the prejudice that would be caused to the opposite side is also one of the aspects to be considered. If that situation is kept in view, in the instant case the request for proposal in favour of the respondent No.13 was notified on 23.06.2008 and the Letter of Acceptance was issued on 13.08.2008 and the lease being for 90 years, already 11 years have passed and by such belated proceedings the project is prejudicially hampered. The respondent No.13 has already spent Rs.233 crores being the lease amount paid to the DMRC and also for securing appropriate approvals. It is contended that the respondent No.13 had to face earlier litigation as well which has been taken note by the learned Single Judge and the respondent cannot be

exposed to such repeated litigations.

14. Shri Tushar Mehta, the learned Solicitor General appearing on behalf of respondent No.11-DMRC, has contended that the Ministry of Urban Development as a matter of Policy of the Government of India had permitted the DMRC to generate its own resources through property development and has accordingly permitted to carry out property development on the land transferred to it by the Government. In such event when the DMRC has taken such steps not only in the instant case but also in several other projects, any interference at this stage more particularly when there is belated challenge of the present nature, it would have a serious impact on the projects undertaken. It was submitted that due to certain changes affected in the manner in which the Metro Rail Project was to be implemented there was some excess land which has been put to use to generate resources for the project and in that regard when there is a contractual relationship with respondent No.13 if the much belated petition is entertained at this stage, there would be a great financial impact which is also a loss to

the public exchequer and in such event the public interest would be better served by not condoning the delay in such matters. Moreover, it is not a case of mere delay in filing the LPA but is a serious case of laches. It is also noticed by the learned Single Judge that the writ petition itself was filed after 7-8 years and in such event if the discretionary orders passed in the writ jurisdiction is interfered in the limited jurisdiction of this Court, it would set a bad precedent.

15. Shri A.N.S. Nandkarni, learned Additional Solicitor General would also refer to the aspect of delay and laches and supplement the arguments advanced by the learned Solicitor General. He would further contend that the Union of India being the owner of the land which was acquired does not have objection for the project and in such event interference at the instance of the appellant herein would not be justified. Ms. Binu Tamta, learned Counsel submitted in support of the contentions raised by the respondents.

16. Shri Mohan Parasaran, learned Senior Counsel in reply to the said contention would reiterate the contentions put forth relating to the explanation of delay and would contend that the conclusion of the learned Single Judge that the writ petition was hit by laches is fallacious inasmuch as the respondent No.13 themselves had filed a writ petition raising certain disputes with regard to the limit of FAR through the Notification dated 20.01.2005 and such challenge by the respondent No.13 had come to an end on 18.05.2011 and the NOC etc. were obtained subsequently, after which the writ petition was filed by the appellant herein in the year 2012. Hence the delay and laches has been explained and it is not a case of negligence. It is contended that the stand of the DMRC that it would be put to financial loss cannot be accepted at this point since the question as to whether they would be liable to pay interest or not are matters which would have to be considered in appropriate proceedings. Hence, he contends that the High Court ought to have condoned the delay and the matter should have been considered on its merits.

17. Though we have exhaustively referred to the pleadings and the contentions of the parties, including contentions put forth on merits, the same is only for completeness and to put the matter in perspective before considering the issue relating to delay and laches. In the instant case, considering that the Division Bench of the High Court has dismissed the LPA on the ground of delay of 916 days, that aspect of the matter would require consideration at the outset and the facts on merits is noted to the limited extent to find out whether in that background the public interest would suffer. The learned Senior Counsel for the appellant in order to impress upon this Court the principle relating to consideration of “sufficient cause” for condonation of delay and the factors that are required to be kept in view, has relied on the decision in the case of **Collector, Land Acquisition, Anantnag & Anr.vs. Katiji & Ors.**, 1987(2) SCC 107 wherein it is held as hereunder:

“3. The legislature has conferred the power to condone delay by enacting Section 5 [Any appeal or any application, other than an application under any of the provisions of Order XXI of the Code of Civil Procedure, 1908, may be

admitted after the prescribed period if the appellant or the applicant satisfies the court that he had sufficient cause for not preferring the appeal or making the application within such period.] of the Indian Limitation Act of 1963 in order to enable the courts to do substantial justice to parties by disposing of matters on "*merits*". The expression "sufficient cause" employed by the legislature is adequately elastic to enable the courts to apply the law in a meaningful manner which subserves the ends of justice — that being the life-purpose for the existence of the institution of courts. It is common knowledge that this Court has been making a justifiably liberal approach in matters instituted in this Court. But the message does not appear to have percolated down to all the other courts in the hierarchy. And such a liberal approach is adopted on principle as it is realized that:

"1. Ordinarily a litigant does not stand to benefit by lodging an appeal late.

2. Refusing to condone delay can result in a meritorious matter being thrown out at the very threshold and cause of justice being defeated. As against this when delay is condoned the highest that can happen is that a cause would be decided on merits after hearing the parties.

3. "Every day's delay must be explained" does not mean that a pedantic approach should be made. Why not every hour's delay, every second's delay? The doctrine must be applied in a rational common-sense pragmatic manner.

4. When substantial justice and technical considerations are pitted against each other, cause of substantial justice deserves to be preferred for the other side cannot claim to have vested right in injustice being done because of a non-deliberate delay.

5. There is no presumption that delay is occasioned deliberately, or on account of culpable negligence, or on account of mala fides. A litigant does not stand to benefit by resorting to delay. In fact he runs a serious risk.

6. It must be grasped that judiciary is respected not on account of its power to legalize injustice on technical grounds but because it is

capable of removing injustice and is expected to do so.

Making a justice-oriented approach from this perspective, there was sufficient cause for condoning the delay in the institution of the appeal. The fact that it was the "State" which was seeking condonation and not a private party was altogether irrelevant. The doctrine of equality before law demands that all litigants, including the State as a litigant, are accorded the same treatment and the law is administered in an even-handed manner. There is no warrant for according a step-motherly treatment when the "State" is the applicant praying for condonation of delay. In fact experience shows that on account of an impersonal machinery (no one in charge of the matter is directly hit or hurt by the judgment sought to be subjected to appeal) and the inherited bureaucratic methodology imbued with the note-making, file-pushing and passing-on-the-buck ethos, delay on its part is less difficult to understand though more difficult to approve. In any event, the State which represents the collective cause of the community, does not deserve a litigant-non-grata status. The courts therefore have to be informed with the spirit and philosophy of the provision in the course of the interpretation of the expression "sufficient cause". So also the same approach has to be evidenced in its application to matters at hand with the end in view to do even-handed justice on merits in preference to the approach which scuttles a decision on merits. Turning to the facts of the matter giving rise to the present appeal, we are satisfied that sufficient cause exists for the delay. The order of the High Court dismissing the appeal before it as time-barred, is therefore, set aside. Delay is condoned. And the matter is remitted to the High Court. The High Court will now dispose of the appeal on merits after affording reasonable opportunity of hearing to both the sides."

18. Further the decision in the case of ***M/s Dehri Rohtas Light Railway Company Ltd. Vs. District Board, Bhojpur & Ors.*** (1992) 2 SCC 598 is relied upon, wherein this Court has indicated the real test to determine the delay is that the petitioner should come to Court before a parallel right is created and that the lapse of time is not attributable to any laches or negligence.

19. The learned Senior Counsel for respondent No.13, on the other hand, has relied upon the decision in the case of ***Postmaster General & Ors. vs. Living Media India Limited & Anr.*** 1992 (3) SCC 563 wherein it is held as hereunder:

“28. Though we are conscious of the fact that in a matter of condonation of delay when there was no gross negligence or deliberate inaction or lack of bona fides, a liberal concession has to be adopted to advance substantial justice, we are of the view that in the facts and circumstances, the Department cannot take advantage of various earlier decisions. The claim on account of impersonal machinery and inherited bureaucratic methodology of making several notes cannot be accepted in view of the modern technologies being used and available. The law of limitation undoubtedly binds everybody, including the Government.

29. In our view, it is the right time to inform all the government bodies, their agencies and instrumentalities that unless they have reasonable and acceptable explanation for the delay and there was bona fide effort, there is no need to accept the usual explanation that the file was kept pending for several months/years due to considerable degree of procedural red tape in the process. The government departments are under a special obligation to ensure that they perform their duties with diligence and commitment. Condonation of delay is an exception and should not be used as an anticipated benefit for the government departments. The law shelters everyone under the same light and should not be swirled for the benefit of a few.”

20. From a consideration of the view taken by this Court through the decisions cited supra the position is clear that, by and large, a liberal approach is to be taken in the matter of condonation of delay. The consideration for condonation of delay would not depend on the status of the party namely the Government or the public bodies so as to apply a different yardstick but the ultimate consideration should be to render even- handed justice to the parties. Even in such case the condonation of long delay should not be automatic since the accrued right or the adverse consequence to the opposite party is also to be kept in perspective. In that background while considering condonation of delay, the routine explanation

would not be enough but it should be in the nature of indicating “sufficient cause” to justify the delay which will depend on the backdrop of each case and will have to be weighed carefully by the Courts based on the fact situation. In the case of **Katiji** (Supra) the entire conspectus relating to condonation of delay has been kept in focus. However, what cannot also be lost sight is that the consideration therein was in the background of dismissal of the application seeking condonation of delay in a case where there was delay of four days pitted against the consideration that was required to be made on merits regarding the upward revision of compensation amounting to 800 per cent.

21. As against the same, the delay in the instant facts in filing the LPA is 916 days and as such the consideration to condone can be made only if there is reasonable explanation and the condonation cannot be merely because the appellant is public body. The entire explanation noticed above, depicts the casual approach unmindful of the law of limitation despite being aware of

the position of law. That apart when there is such a long delay and there is no proper explanation, laches would also come into play while noticing as to the manner in which a party has proceeded before filing an appeal. In addition in the instant facts not only the delay and laches in filing the appeal is contended on behalf of the respondents seeking dismissal of the instant appeal but it is also contended that there was delay and laches in filing the writ petition itself at the first instance from which the present appeal had arisen. In that view, it would be necessary for us to advert to those aspects of the matter and notice the nature of consideration made in the writ petition as well as the LPA to arrive at a conclusion as to whether the High Court was justified.

22. The entire explanation for the inordinate delay of 916 days is twofold, i.e. the non-availability of the Vice-Chancellor due to retirement and subsequent appointment of new Vice-Chancellor, also that the matter was placed before the Executive Council and a decision was taken to file the appeal and the said process had

caused the delay. The reasons as stated do not appear very convincing since the situation was of availing the appellate remedy and not the original proceedings requiring such deliberation when it was a mere continuation of the proceedings which had already been filed on behalf of the appellant herein, after due deliberation. Significantly, the Vice-Chancellor who was at the helm of affairs when the writ petition was filed, prosecuted and disposed of on 27.04.2015 was available in the same office till 28.10.2015, for about six months which was a long enough period as compared to 30 days limitation period for filing appeal. In that circumstance when the said Vice-Chancellor who had prosecuted the writ petition was available, the submission of the learned Senior Counsel for the appellant that unseen hands are likely to have prevented the filing of the appeal also cannot be accepted. Secondly, the reason sought to be put forth about the decision required to be taken by the Executive Council is also not acceptable when it was just the matter of filing the appeal. In fact, in the writ petition an affidavit was filed referring to Resolution No.56 and

173 of Academic Council and Executive Council authorising for filing writ petition. When the writ petition was filed based on such authorisation and the stand of the appellant, as the writ petitioner was put forth and had failed in the writ petition, it cannot be accepted that the appellant with all the wherewithal was unable to file the appeal, that too when the same Vice-Chancellor was available for six months after dismissal of the writ petition. Hence the reasons put forth cannot in our opinion constitute sufficient cause.

23. That apart, as rightly noticed by the Division Bench in the LPA, the approval from the Executive Council was obtained on 28.02.2017 / 07.03.2017, the appeal was ultimately filed on 01.03.2018 after an year from the said date which only indicates the casual approach which is now sought to be overcome with the plea of public interest despite there being no explanation for the delay at every stage. It is true that as held in the case of Mst. Katiji (supra) that every day's delay need not be explained with such precision but the fact remains

that a reasonable and acceptable explanation is very much necessary. The Division Bench apart from noticing these aspects had also noted that the learned Single Judge too found the writ petition to be hit by delay and laches.

24. In that backdrop, a perusal of the order dated 27.04.2015 passed by the learned Single Judge would indicate that the learned Single Judge in para – 65 of the order with reference to his earlier observation has arrived at the categorical conclusion that the petition suffers from laches and has been filed with delay of 7-8 years. The learned Senior Counsel for the appellant while seeking to dispel such conclusion by the learned Single Judge contended that the respondent No. 13 themselves had filed a writ petition being aggrieved by the restricted FAR and the said writ petition was disposed only on 18.05.2011 and the need for the appellant herein to file the writ petition arose only thereafter. The said contention is also not acceptable if the entire sequence is noticed.

25. In that regard there can be no dispute to the fact that the Respondent No. 13 being aggrieved by the decision of DDA had filed a petition bearing W.P. No.3135/2010 assailing the letter dated 19.08.2009 and the same was disposed of only on 18.05.2011 but the appellant cannot take shelter under the same to explain the laches. This is because much water had flown under the bridge before the said development and those events ought to have triggered action from the appellant in challenging, more so when there were other litigations relating to the same subject, as noticed in the order of the learned Single Judge.

26. In the present matter, the land was converted to residential use in 2005 and Respondent No.11 – DMRC had invited bids and public auction was conducted on 28.07.2008 which ought to have awakened the appellant herein for the first time since the fact of conversion of the land into residential development was in public domain even if it is assumed that the earlier process of approval etc. by the DDA on the approval request of DMRC are

internal process and not be known to the appellant. In fact, the learned Single Judge while taking note of the challenge raised by the appellant herein has also taken note of an earlier petition bearing W.P (C) No.8675/2011 filed by the Association of Metro Commuters wherein also the residential development was an issue, which came to be dismissed by order dated 14.02.2011. Similarly, another petition in W.P(C) No.6624-6625/2012, though challenging the acquisition was filed, the same was also dismissed. Thereafter the writ petition of the appellant filed in the year 2012 was pending till it was disposed on 27.04.2015.

27. Despite the writ petition having been filed belatedly in respect of certain actions which had commenced in the year 2005 and even though the writ petition was filed after obtaining approval of the Executive Council, no steps were taken to file the writ appeal for 916 days after disposal of the writ petition. In such circumstance, the cumulative effect of the delay and laches cannot be ignored. The decisions referred by the

learned Senior Counsel for the appellant noted *Supra* cannot, therefore, be applied in the present facts and circumstance inasmuch as the consideration hereunder was not merely the explanation for the delay of few days in filing the appeal. Though contention is put forth that the delay is required to be condoned since public interest is involved, the nature of the proceedings that have taken place thus far would indicate that the matter has been examined at different stages in the earlier litigations and if the grounds on which the appellant was assailing the action of the respondents were to be examined on merits, they ought to have been more diligent in prosecuting the matter before the Court.

28. In the matter of condonation of delay and laches, the well accepted position is also that the accrued right of the opposite party cannot be lightly dealt with. In that regard, rather than taking note of the hardship that would be caused to the respondent No.13 as contended by the learned Senior Counsel, what is necessary to be taken note is the manner in which the respondent No.11

– DMRC has proceeded in the matter. The respondent No.11- DMRC is engaged in providing the public transport and for the said purpose the Government through policy decision has granted approval to generate resources through property development and in that regard the development as earlier indicated, is taken up. Pursuant thereto the respondent No.11 has received a sum of Rs.218.20 crores from respondent No.13 as far back as in the year 2008. The said amount as indicated is used for its projects providing metro rail service to the commuting public. In such circumstance, if at this stage the inordinate delay is condoned unmindful of the lackadaisical manner in which the appellant has proceeded in the matter, it would also be contrary to public interest.

29. Therefore, taking into consideration all these aspects of the matter, we are of the opinion that not only the learned Single Judge was justified in holding that the writ petition *inter alia* is hit by delay and laches but the decision of the Division Bench in dismissing the LPA on

the ground of delay of 916 days is also justified and the orders do not call for interference.

30. Accordingly, the appeals being devoid of merits stand dismissed with no order as to costs. All pending applications shall stand disposed of.

.....**J.**
(R. BANUMATHI)

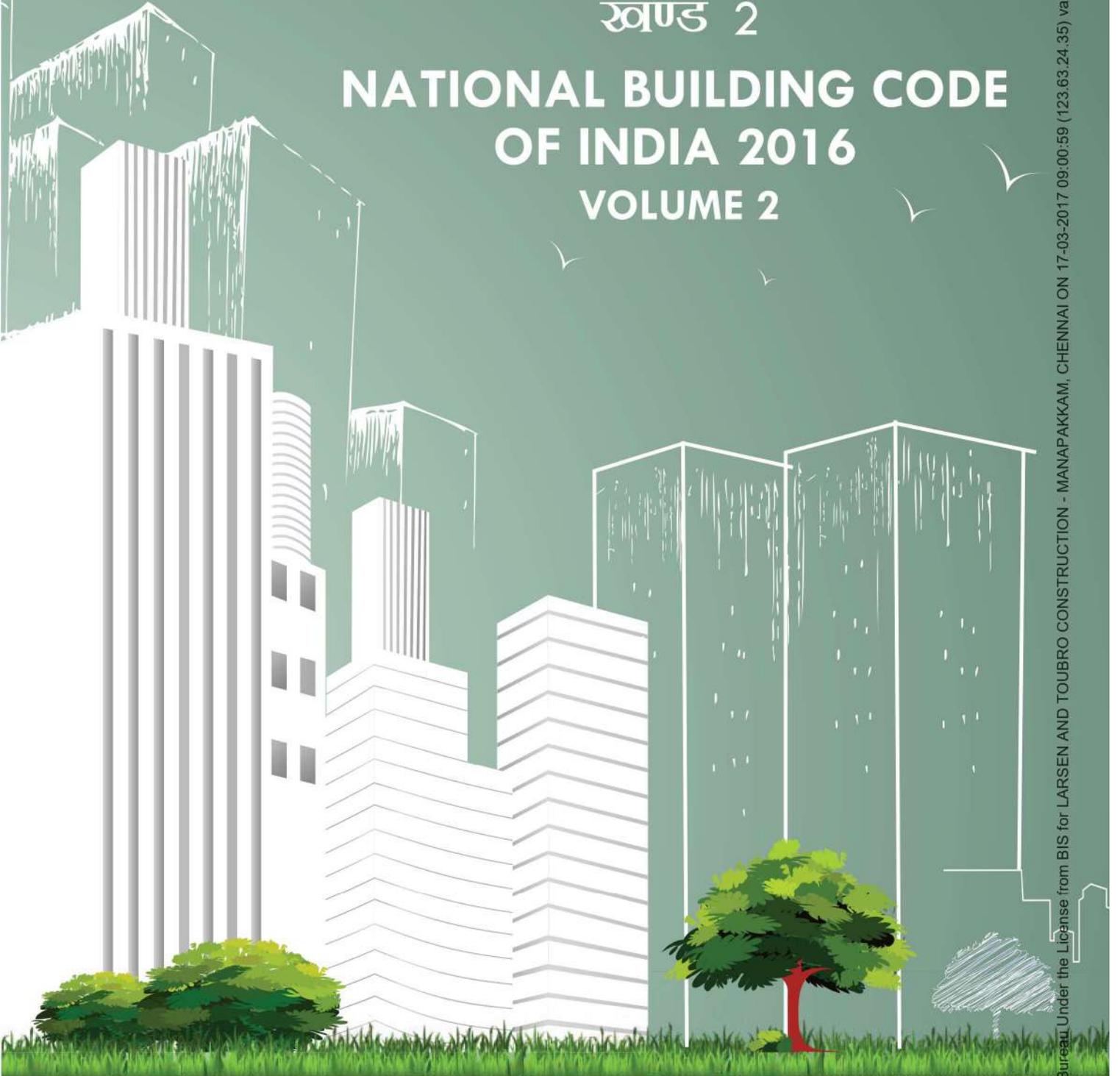
.....**J.**
(A.S. BOPANNA)

.....**J.**
(HRISHIKESH ROY)

New Delhi,
December 17, 2019

भारत की राष्ट्रीय
भवन निर्माण संहिता 2016
खण्ड 2

NATIONAL BUILDING CODE
OF INDIA 2016
VOLUME 2



भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

भारत की राष्ट्रीय
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Stage 1: First stage for planning clearance

The following additional information shall be furnished/indicated in the building plan in addition to the items given in **12.2.5** as applicable:

- a) Access to fire appliances/vehicles with details of vehicular turning circle and clear motorable accessway around the building;
- b) Size (width) of main and alternative staircases along with balcony approach, corridor, ventilated lobby approach;
- c) Location and details of lift enclosures;
- d) Location and size of fire lift;
- e) Smoke stop lobby/door, where provided;
- f) Refuse chutes, refuse chamber, service duct, etc;
- g) Vehicular parking spaces;
- h) Refuse area, if any;
- j) *Details of building services* — Air-conditioning system with position of fire dampers, mechanical ventilation system, electrical services, boilers, gas pipes, etc;
- k) Details of exits including provision of ramps, etc, for hospitals and special risks;
- m) Location of generator, transformer and switchgear room;
- n) Smoke exhauster system, if any;
- p) Details of fire alarm system network;
- q) Location of centralized control, connecting all fire alarm systems, built-in-fire protection arrangements and public address system, etc;
- r) Location and dimensions of static water storage tank and pump room along with fire service inlets for mobile pump and water storage tank;
- s) Location and details of fixed fire protection installations, such as, sprinklers, wet risers, hose-reels, drenchers, etc; and
- t) Location and details of first-aid fire fighting equipments/installations.

Stage 2: Second stage for building permit clearance

After obtaining the sanction for planning (Stage 1) from the Authority, a complete set of structural plans, sections, details and design calculations duly signed by engineer/structural engineer (*see Annex A*) along with the complete set of details duly approved in Stage 1 shall be submitted. The building plans/details shall be deemed sanctioned for the commencement of construction only after obtaining the permit for Stage 2 from the Authority.

12.2.6 Services Plans

The services plans shall include all details of building and plumbing services, and also plans, elevations and sections of private water supply, sewage disposal system and rainwater harvesting system, if any (*see Part 8 ‘Building Services’ and Part 9 ‘Plumbing Services’*).

12.2.7 Specifications

Specifications, both general and detailed, giving type and grade of materials to be used, duly signed by the registered architect, engineer, structural engineer or supervisor shall accompany the notice (*see Annex B*).

12.2.8 Structural Sufficiency Certificate

The plans shall be accompanied by structural sufficiency certificate in the prescribed form (*see Annex C*) signed by the engineer/structural engineer (*see Annex A*) and the owner jointly to the effect that the building is safe against various loads, forces and effects including due to natural disasters, such as, earthquake, landslides, cyclones, floods, etc as per Part 6 ‘Structural Design’ and other relevant Codes. The engineer/structural engineer shall also have the details to substantiate his design.

12.2.9 Supervision

The notice shall be further accompanied by a certificate in the prescribed form (*see Annex D*) by the registered architect/engineer/structural engineer/supervisor/town planner (*see Annex A*) undertaking the supervision (*see 9.3*).

12.3 Preparation and Signing of Plans

The registered architect/engineer/supervisor/town planner/landscape architect/urban designer/utility service engineer shall prepare and duly sign the plans as per their competence (*see Annex A*) and shall indicate his/her name, address, qualification and registration number as allotted by the Authority or the body governing such profession. The structural plans and details shall also be prepared and duly signed by the competent professionals like registered engineer/structural engineer (*see Annex A*). The plans shall also be duly signed by the owner indicating his address. The type and volume of buildings/development work to be undertaken by the registered professionals may generally be as in Annex A.

12.4 Notice for Alteration only

When the notice is only for an alteration of the building (*see 3.5*), only such plans and statements, as may be necessary, shall accompany the notice.

12.4.1 No notice and building permit is necessary for the following alterations, and the like which do not otherwise violate any provisions regarding general

provisions, consumer will need to submit to the electrical supplier the details regarding the accommodation of substation including transformers, switch-rooms, standby power, solar photovoltaic panels, lightning scheme for the approval. Additional information may be sought by the Authority regarding cable ducts, rising mains and distribution cables, sub-distribution boards, openings and chases in floors and walls for all required electrical installations, etc.

4.1.4 Before starting wiring and installation of fittings and accessories, information should be exchanged between the owner of the building/architect/ consultant/ electrical contractor and the local supply authority in respect of tariffs applicable, types of apparatus that may be connected under each tariff, requirement of space for installing meters, switches, etc, and for total load requirements of lights, fans and power.

4.1.5 While planning an installation, consideration should be taken of the anticipated increase in the use of electricity for lighting, general purpose socket-outlet, kitchen equipment, air conditioning, utility sockets, heating, etc.

It is essential that adequate provision should be made for all the services which may be required immediately and during the intended useful life of the building, for the householder, who may otherwise be tempted to carry out extension of the installation himself or to rely upon use of multi-plug adaptors and long flexible cords, both of which are not recommended.

4.2 Substation and Switchrooms

4.2.1 Location and Other Requirements

The location and other requirements of a substation and switchrooms shall be as given below:

- 1) Availability of power lines nearby may be kept in view while deciding the location of the substation.
- 2) The substation should preferably be located in a separate utility building and may be adjacent to the generator room, if any. Location of substation in the basement should be avoided, as far as possible.
- 3) In case there is only one basement in a building, the substation/switchroom shall not be provided in the basement. Also, the floor level of the substation shall not be lowest point of the basement.
- 4) Ideal location for an electrical substation for a group of buildings will be at the electrical load centre. Generally the load centre will be somewhere between the geometrical centre and the air conditioning plant room, as air conditioning plant room will normally be the largest load, if the building(s) are centrally air

conditioned.

- 5) In order to prevent storm water entering the transformer and switch rooms through the soak-pits, the floor level of the substation/switchroom shall be at least 300 mm above the highest flood water level that may be anticipated in the locality. Also, facility shall be provided for automatic removal of water.
- 6) Substation shall not be located immediately above or below plumbing water tanks or sewage treatment plant (STP) water tanks at the same location.
- 7) All door openings from substation, electrical rooms, etc, should open outwards. Vertical shutters (like fire rated rolling shutters) may also be acceptable provided they are combined with a single leaf door opening outwards for exit in case of emergency. For large substation room/electrical room having multiple equipment, two or more doors shall be provided which shall be remotely located from each other.
- 8) If substation is located at a height 1 000 m above MSL, then adequate derating of equipment shall be considered.
- 9) In case of HV panel and transformers located at different floors or at a distance more than 20 m, HV isolator shall be provided at transformer end.
- 10) In case transformer and main MV/LV panel room are located at different floors or are at a distance more than 20 m, MV/LV isolator shall be provided at transformer end. In case transformer and main MV/LV panel room are located at different floors, the designer should also take care of the safety requirements caused by lack of direct visibility of the status of the controlling switch. To cater to the safety requirements under different conditions of operation as well as maintenance, it may be necessary to provide additional isolator or an emergency push button in the vicinity to trip the supply. Decision has to be taken based on the possible risks.
- 11) No services or ventilation shafts shall open into substation or switch room unless specific to substation or switch room.
- 12) *Oil-filled installation* — Substations with oil-filled equipment require great consideration for the fire detection, protection and suppression. Oil-filled transformers require a suitable soak pit with gravity flow to contain the oil in the event of the possibility of oil spillage from the transformer on its failure. Installation of oil-filled equipment shall meet the following requirements:

Chapter 9

Provisions for Structural Safety, Natural Disaster, Fire and Building Services

9.1 Structural Safety

The structural design of foundation, masonry, timber, plain concrete, reinforced concrete, pre-stressed concrete and structural steel shall be carried out in accordance with Part-VI structural design, section-1 loads, section-2 foundation, section-3 wood, section-4 masonry, section-5 concrete and section-6 steel of National Building Code of India taking into consideration all relevant standards prescribed by Bureau of Indian Standards including the standard given in IS-Code 13920-2016, 4326-1993, 13828-1993, 13827-1993, 13935-1993, 456:2000, 800-1984, 801-1975, 875 (Part 2):1987, 875 (Part 3):1987, 875 (Part 4):1987, 875 (Part 5):1987, 883:1966, 1904:1987, 1905:1987, 2911 (Part 1): Section 1: 1979, 1893-2002 for general structural safety, cyclone/wind protection, Earthquake protection.

Notes:

- a. *Whenever an Indian Standard including those referred in the National Building Code, the latest revision of the same shall be followed except specific criteria, if any, mentioned above against that code.*
- b. *Structural Requirements of Low Cost Housing: Notwithstanding anything contained herein, for the structural safety and services for development of low cost housing, the relevant provisions of applicable IS Codes shall be enforced.*
- c. *Multi-hazard safety and retrofitting: For design and retrofitting of public buildings such as hospitals, educational, institutional, power stations, infrastructure, heritage which are likely to attract large congregation of people should be located in safe areas. However, while designing such buildings/structures relevant Indian Standards and Bureau of Indian Standards codes mentioned above should be followed.*
- d. *Ensuring compliance of structural, natural disaster, fire safety and building services safety and quality of materials used and construction shall rest with the owner (s) as well as professionals engaged by the owners for design/ construction/ supervision as provided in **Annexure I***

Provisions in clauses 7.9, 7.10, 7.11, 7.15.3, 8.5.3, 8.5.4, 8.5.5, and 8.5.6 are to be read in conjunction with provisions made below for ensuring safety from disaster and fire.

9.1.1 Occupant Load

The population in rooms, area of floors shall be calculated based on the occupant load given in clause 7.9, Table no 7.3.

9.2 Disaster Management

9.2.1 Seismic Strengthening/Retrofitting

Prior to seismic strengthening/ retrofitting of any existing structure, evaluation of the existing structure in regard to structural vulnerability in the specified wind/ seismic hazard zone shall be carried out by a Structural Engineer. If as per the evaluation of the Structural Engineer, the seismic resistance is assessed to be less than the specified minimum seismic resistance as given in the note below, action will be initiated to carry out the upgrading of the seismic resistance of the building as per applicable standard guidelines.

(Reaffirmed 2020)

भारतीय मानक
Indian Standard

IS 16700 : 2017
edn.2.1.1

कंक्रीट की ऊँची इमारतों की
संरचनात्मक सुरक्षा के मानदंड

Criteria for Structural Safety of
Tall Concrete Buildings

ICS 91.080.040

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liquefaction potential analysis, and estimation of soil spring constants and modulus of subgrade reaction.

9.3.1 For geotechnical investigation, boreholes shall,

- a) be spaced at ~30 m within the plan area of the building;
- b) be a minimum of 3 boreholes per tower; and
- c) have a depth of at least 1.5 times of estimated

(Smaller) width of foundation in soil and 15 m in rock.
(min = 20 m in soil)

9.4 Depth of Foundation

The embedded depth of the building shall be at least 1/15 of height of building for raft foundation and 1/20 of the height of building for pile and piled raft foundation (excluding pile length). But, this requirement may be relaxed,

- a) when the foundation rests on hard rock; or
- b) when there is no uplift under any portion of the raft in any service load combination, and provided the minimum competent founding strata requirement is fulfilled.

9.5 Podium/Basement roof slab should be capable of transferring in-plane shear from the tower to the foundation.

9.6 Expansion Joints should preferably be avoided in basements of tall buildings.

9.7 Modelling of Soil

Chapter-4

GENERAL BUILDING REQUIREMENTS

4.1 GENERAL

This part sets out the standard space requirements of various parts of a building and those of light and ventilation. Some of these items depend on the number of persons who would normally occupy the building, for which the occupant load should be worked out from table hereunder:

Table 4.1 Occupant Load

Sl. No.	Type of Occupancy	Occupant Load per 100 sq m. of Plinth or Covered Area
1	Residential	8.0
2	Educational	25.0
3	Institutional	6.60
4	Assembly (a) with fixed or loose seats and dance floor (b) without seating facilities including dining rooms	166.6 66.6
5	Mercantile (a) street floor and sales basement (b) upper sale floor	33.3 16.6
6	Business and industrial	10.0
7	Storage	3.3
8	Hazardous	10.0

* *The occupant load in dormitory portions of homes for the aged, orphanages or mental hospitals etc. where sleeping accommodation is provided shall be calculated at not less than 13.3 persons per 100 sq.m.*

** *The plinth or covered area shall include, in addition to the main assembly room or space, any occupied connecting room or space in the same storey or in the storeys above or below where entrance is common to such rooms and space and the area available for use by the occupants of the assembly place. No deduction shall be made in the plinth/covered area for corridors, closets and other sub-divisions; that area shall include all space serving the particular assembly occupancy.*

4.2 SPACE REQUIREMENT FOR DIFFERENT PARTS OF BUILDING

4.2.1 Main Building

The plinth or any part of a building or outhouse shall be so located with respect to average road level from site so that adequate drainage of the site is assured but at a not height less than 45 cm.

4.2.2 Interior Courtyards, Covered Parking Spaces and Garages

These shall be raised at least 15 cm. above the surrounding ground level and shall satisfactorily drained.

4.2.3 Habitable Rooms Size and Width

The minimum size and width shall be as given in Table 4.2

Table 4.2 Minimum Size and Width of Different Components of Residential Premises

Sl. No.	Component of Building	Min. requirement for plots upto 50 sq m.	Min. requirement for plots above 50 sq m.
1	Habitable Room	Area 7.50 sq m. Width 2.10 m. Height 2.75 m.	Area 9.50 sq m. Width 2.40 m. Height 2.75 m.
2	Kitchen	Area 3.30 sq m. Width 1.50 m. Height 2.75 m.	Area 4.50 sq m. Width 1.50 m. Height 2.75 m.
3	Pantry	Area Not applicable Width Not applicable Height Not applicable	Area 3.00 sq m. Width 1.40 m. Height 2.75 m.
4	Bathroom	Area 1.20 sq m. Width 1.00 m. Height 2.20 m.	Area 1.80 sq m. Width 1.20 m. Height 2.20 m.
5	W.C.	Area 1.00 sq m. Width 0.90 m. Height 2.20 m.	Area 1.10 sq m. Height 0.90 m. Height 2.20 m.
6	Combined Bath & W.C. (Toilet)	Area 1.80 sq m. Width 1.00 m. Height 2.20 m.	Area 2.80 sq m. Width 1.20 m. Height 2.20 m.
7	Store	Area No restriction Width No restriction Height 2.20 m.	Area No restriction Width No restriction Height 2.2 m.
8	Projections	Permitted within the setbacks upto 0.75 m. width	Permitted within the setbacks upto 0.75 m. width
9	Canopy	See clause 4.9.6	See clause 4.9.6

Sl. No.	Component of Building	Min. requirement for plots upto 50 sq m.	Min. requirement for plots above 50 sq m.
10	Garage	--	Area 14.85 sq m. Width 2.75 m. Length 5.40 m. Height 2.40 m.
11	Passage	--	Width 1.00 m.
12	Doorways Habitable rooms	Width 0.80 m. Height 2.00 m.	Width 0.90 m Height 2.20 m.
	For kitchen bath, W.C. etc.	Width 0.75 m. Height 2.00 m.	Width 0.75 m. Height 2.00 m
14	Staircase	Width 0.75 m. No restriction for internal ladder	Width 0.90 m.

Notes

1. Provided that the minimum clear head way under any beam shall be not less than 2.4 m.
2. Maximum height permissible for all the components of the building mentioned above is 4 m.

4.3 GROUP HOUSING

- a) Building requirement in respect of dwelling units upto 45 sq.mt. in size will correspond to Table 4.2 and as applicable to plots upto 50 sq m.
- b) Building requirement in respect of dwelling units above 45 sq m. may be referred from the Table 4.2 applicable to above 50 sq m. plot size.
- c) Projection into Open Spaces without counting towards FAR.
 - i) All open spaces provided either in interior or exterior shall be kept free from any erections thereon and shall open to the sky. Nothing except cornice, chhajja or weather shade (not more than 0.75 m. wide) shall overhang or project over the said open space so as to reduce the width to less than minimum required.

Note: Such projections shall not be allowed at height less than 2.2 m. from the corresponding finished floor level:

- ii) One canopy per block on the ground floor not exceeding 4.5 m. in length and 2.4 m. in width
- iii) Balcony at roof slab level of 1.2 m. width and area not exceeding 3.5 sq m. per bedroom but not exceeding 3 in number per flat.

- iv) Balcony having entrance from the toilet/bathroom and width as 1.2 m. for drying clothes.

4.4 NON-RESIDENTIAL BUILDINGS

The minimum area for office room/shop or any other space to be used as workspace shall not be less than 6.0 sq m. with a minimum width of 2.1 m.

4.5 OTHER GENERAL REQUIREMENTS:

4.5.1 Kitchen

Every room to be used as a kitchen shall have

- a) Unless separately provided in a pantry, means for washing of kitchen utensils, which shall lead directly or through a sink to a grated and trapped connection to the waste pipe.
- b) An impermeable floor;
- c) At least a window not less than 1 sq m. in area open directly to an interior or exterior open space, but not into a shaft and;
- d) In residential building 15 m. or more in height, refuse chutes.

4.5.2 Bathroom and W. C

Every bathroom or water closet shall

- a) Be so situated that atleast one of its walls shall open to external air and shall have a minimum opening in the form of window or ventilation to the extent of 0.37 sq m.
- b) Not be directly over any room other than another latrine, washing place, bath or terrace unless it has a watertight floor.
- c) Have the platform or seat made of watertight non-absorbent material.
- d) Be enclosed by walls or partitions and the surface of every such wall partition shall be finished with a smooth impervious material to a height of not less than 1.0 m. above the floor of such a room.
- e) Be provided with an impervious floor covering, sloping towards the drain with a suitable grade and not towards verandah or any other room.

- f) No room containing water closets shall be used for any purpose except as a lavatory.
- g) Every water closet and/or a set of urinals shall have flushing cistern of adequate capacity attached to it
- h) A toilet on terrace having a maximum of 2.2 mt. height shall be permitted subject to condition that the area of toilet be counted in FAR.
- i) All the sewage outlets shall be connected to the Municipal Sewerage system. Where no such system exists, a septic tank shall be provided within the plot conforming to the requirements.

4.5.3 Loft

Lofts shall be permitted in residential building and shops only. Area of such loft shall be restricted to 25% of the covered area or respective floor. Minimum height between loft and ceiling shall be 1.75 m. and the clear height below the loft shall be as stipulated in the Building Bye-Laws for the space below it.

4.5.4 Mezzanine Floor

Mezzanine floor may be permitted with the minimum height of 2.75 m. between any two floors above ground in all types of building provided the same is counted as part of total permissible floor area ratio and height of the building.

4.5.5 Basement

The construction of the basement shall be allowed by Authority in accordance with the land use and other provisions specified under the Master Plan/Zonal Plan. The basement shall have the following requirement:

- i) Every basement shall be in every part at least 2.5 m. in height from the floor to underside of the roof slab or ceiling and with maximum height not more than 4.5 m.
- ii) Adequate ventilation shall be provided for the basement. The standard of ventilation shall be the same as required by the particular occupancy according to Building Bye-Laws. Any deficiency may be met by providing adequate mechanical ventilation in the form blowers, exhaust fans (one exhaust fan for 50 sq m. basement area), air-conditioning system, etc.

- iii) The minimum height of the ceiling of any basement shall be 0.9 m. and maximum of 1.2 mt. above the average road level on the front side of the building.
- iv) Adequate arrangement shall be made such that surface drainage does not enter the basement.
- v) The walls and floors of the basement shall be watertight and be so designed that the effect of the surrounding soil and moisture, if any, are taken into account in design and adequate damp proofing treatment is given.
- vi) The access to the basement shall be either from the main or alternate staircase providing access to the building. No direct entry from the road shall be permitted to the basement.
- vii) Basement in an individual plot touching the adjacent property shall be allowed subject to following:
 - a) In all cases the owners shall have to indemnify the local body against any damage caused by her/him/them to the adjacent property (Appendix-B-1).
 - b) In case the portion of the basement projecting out of the building line that shall flush with the ground.
- viii) In case partition in the basements are allowed by the Authority, no compartment shall be less than 50.0 sq m. in area and each compartment shall have ventilation standards as laid down in sub-clause (ii), above separately and independently. The basement partition shall however, confirm to the norms laid down by Fire Services.

4.5.6 Garage

- i) The plinth of garage located at ground level shall not be less than 15 cm. above the surrounding ground level.
- ii) The garages shall be setback behind the building line of the street/road on to which the plot abuts and shall not be located affecting the access ways to the building. If the garage is not setback as aforesaid, the Authority may require the owner or occupier of the garage to discontinue its use as such or to carry out such structural alterations to the premises or to take such other measures

as the Authority may consider necessary in order to prevent danger or obstruction to traffic along the street.

4.5.7 Corner Site

When the site front on two streets, the frontage would be on the street having the larger width. In cases, where the two streets are of same width, then the larger depth of the site will decide the frontage and open spaces. In such case the location of a garage (on a corner plot) if provided within the open spaces shall be located diagonally opposite the point of intersection.

4.6 REQUIREMENT IN RESPECT OF BUILDING SITES

4.6.1 Damp Sites

Wherever the dampness of a site or the nature of the soil renders such precautions necessary, the ground surface of the site between the walls of any building erected thereon shall be rendered damp-proof to the satisfaction of the Authority.

4.6.2 Distance from Electric Line

The distance in accordance with the current electricity rules and its amendments from time to time is to be provided between the building and overhead electric supply line.

	Vertically	Horizontally
a) Low and medium voltage lines and service lines	2.50 m.	1.20 m.
b) High voltage lines upto and including 11,000 volts	3.70 m.	1.20 m.
c) High voltage lines above 11,000 volts and upto and including 33,000 volts	3.70 m.	2.00 m.
d) Extra high voltage lines additional 33,000 volts	Plus 0.3 mt. for every additional 33,000 V or part thereof.	Plus 0.3 m. for every additional 33,000 V or part thereof.

4.6.3 Minimum Size of Site

The minimum size of sites for the construction of different types of building or different use groups, shall be in accordance with provisions of the Master Plan and any land development Rules and Regulations of the Authority.

4.7 MEANS OF ACCESS

4.7.1 No Building shall be erected as to deprive any other building of its means of access.

4.7.2 Every person who erects a building shall not at any time erect or cause or permit to erect or re- erect any building, which in any way encroaches upon or diminishes the area set apart as means of access.

4.7.3 For buildings identified in Building Bye-Laws 7.1 the following provisions of means of access shall be applicable.

- a) The width of the main street on which the building abuts shall not be less than 12.0 m.
- b) If there are any bends or curves in the approach road, sufficient width shall be permitted at the curve to enable the fire tenders to turn, the turning circle shall be at least of 9.0 m. radius.
- c) The approach to the building and open spaces on its all sides (see Building Bye-Laws 4.8 and 4.9) upto 6.0 m. width and the layout for the same shall be done in consultation with the Chief Fire Officer and the same shall be of hard surface capable of taking the weight of fire tender, weighing upto 22 tones for low rise building and 45 tones for building 15 m., and above in height. The said open space shall be kept free of obstructions and shall be motorable.
- d) Main entrance to the premises shall be of adequate width to allow easy access to the fire tender and in no case it shall measure less than 5 m. The entrance gate shall fold back against the compound wall of the premises, thus leaving the exterior access way within the plot free for movement of the fire service vehicles. If archway is provided over the main entrance, the height of the archway shall not be of height less than 5.0 m.
- e) For multi-storeyed group housing schemes on one plot, the approach road shall be 20.0 m. or as per Master Plan/Development Plan provisions and between individual buildings, there shall be 6.0 m. space around.
- f) In case of basement extending beyond the building line, it shall be capable of taking load of 45 tones for a building of height 15.0 m. and above and 22 tones for building height less than 15.0 m.

- g) The external window shall not be blocked by louvres etc. In such case provisions shall be made so that one can enter the building to be rescued through the window by using hydraulic platform etc.

4.8 EXIT REQUIREMENTS

General

The following general requirement shall apply to exits:

- a) Every building meant for human occupancy shall be provided with exits sufficient to permit safe escape of occupants in case of fire or other emergency.
- b) In every building exit shall comply with the minimum requirement of this part, except those not accessible for general public use.
- c) All exits shall be free of obstructions.
- d) No buildings shall be altered so as to reduce the number, width or portion of exits to less than required.
- e) Exits shall be clearly visible and the routes to reach exits shall be clearly marked and signs posted to guide the occupants of floor concerned.
- f) All exit ways shall be properly illuminated.
- g) Fire fighting equipment where provided along exits shall be suitably located and clearly marked but must not obstruct the exit way and there should be clear indication about its location from either side of the exit way.
- h) Alarm devices shall be installed to ensure prompt evacuation of the occupants concerned through the exits, wherever required.
- i) All exits shall provide continuous means of egress to the exterior of a building or to an exterior open space leading to a street.
- j) Exits shall be so arranged that they may be reached without passing through another occupied unit, except in the case of residential buildings.

4.8.1 Types of Exits

- a) Exits shall be either horizontal or vertical type. An exit may be doorway, corridor and passage to an internal staircase or external staircase, ramp or to a

verandah and/or terraces that have access to the street or to roof of a building. An exit may also include horizontal exit leading to an adjoining building at the same level.

- b) Lifts escalators and revolving doors shall not be considered as exits.

4.8.2 Number and size of Exits

The requisite number and size of various exits shall be provided, based on the occupants in each room and floor based on the occupant load, capacity of exits, travel distance and height of buildings as per provisions of Building Bye-Laws 4.8. I.

4.8.3 Arrangement of Exits

- a) Exits shall be so located so that the travel distance on the floor shall not exceed 22.50 m. for residential, educational, institutional and hazardous occupancies and 30.0 m. for assembly, business, mercantile, industrial and storage occupancies. Whenever more than one exit is required for a floor of a building they shall be placed as remote from each other as possible. All the exits shall be accessible from the entire floor area at all floor levels.
- b) The travel distance to an exit from the remote point shall not exceed half the distance as stated above except in the case of institutional occupancy in which case it shall not exceed 6.0 m.

4.8.4 Capacity of Exits

The capacity of exits (staircase, ramps and doorways) indicating the number of which persons could be safety evacuated through a unit exit width of 50 cm shall be as given below:

Table 4.3 Occupants per unit Exit width

Sl. No.	Group of Occupancy	Number of Occupants		
		Stairways	Ramps	Doors
1	Residential	25	50	75
2	Educational	25	50	75
3	Institutional	25	50	75
4	Assembly	40	50	60
5	Business	50	60	75
6	Mercantile	50	60	75
7	Industrial	50	60	75
8	Storage	50	60	75
9	Hazardous	25	30	40

4.8.5 Staircase Requirement

For buildings identified in Bye-Laws No. 1.13 VI (a) to (m), there shall be minimum of two staircases and one of them shall be enclosed stairway and the other shall be on the external walls of building and shall open directly to the exterior, interior open space or to any open place of safety. Single staircase may be accepted for educational, business or group housing society where floor area does not exceed 300 sq m. and height of the building does not exceed 24 m. and other requirements of occupant load travel distance and width of staircase shall meet the requirement. The single staircase in such case shall be on the outer wall of the building.

4.8.6 Minimum Width Provisions for Stairways

The following minimum width provisions shall be made for each stairway

- | | | |
|----|---|---------|
| a) | i) Residential low rise building | 0.9 m. |
| | ii) Other residential building e.g. flats,
hostels, group housing, guest houses, etc | 1.25 m. |
| b) | Assembly buildings like Auditorium, theatres and cinemas | 2.0 m. |
| c) | All other buildings including hotels | 1.5 m. |
| d) | Institutional building like hospitals | 2.0 m. |
| e) | Educational building like School, Colleges. | 1.5 m. |

4.8.7 Minimum Width Provisions for Passageway/Corridors

The following minimum width provisions shall be made for each passage way/corridor.

- | | | |
|----|---|---------|
| a) | Residential buildings, dwelling unit type | 1.0 m. |
| b) | Residential buildings, e.g., hostels, etc. | 1.25 m. |
| c) | Assembly buildings like auditorium theatres and cinemas | 2.0 m. |
| d) | All other buildings including hotels | 1.5 m. |
| e) | Hospital, Nursing Homes, etc. | 2.4 m. |

4.8.8 Doorways

- a) Every doorway shall open into an enclosed stairway, a horizontal exit, on a corridor or passageway providing continuous and protected means of egress.
- b) No exit doorways shall be less than 100 cm in width and 150 cm in case of hospital and ward block. Doorways shall not be less than 200 cm in height.

- c) Exit doorways shall open outwards, that is away front the room but shall not obstruct the travel along any exit. No door when opened shall reduce the required width of stairway or landing to less than 100 cm. Overhead or sliding door shall not be installed.
- d) Exit door shall not open immediately upon a flight or stairs. A landing equal to at least, the width of the door shall be provided in the stairway at each doorway. Level of landings shall be the same as that of the floor, which it serves.
- e) Exit doorways shall be openable from the side, which they serve without the use of a key.
- f) Revolving doors shall not be allowed.

4.8.9 Stairways

- a) Interior stairs shall be constructed of non-combustible material throughout.
- b) Interior stairs shall be constructed as a self-contained unit with atleast one side adjacent to an external wall and shall be completely enclosed.
- c) A staircase shall not be arranged round a lift shaft for buildings 15.0 m. and above height. The staircase location shall be to the satisfaction of Chief Fire Officer.
- d) Hollow combustible construction shall not be permitted.
- e) The minimum width of internal staircase shall be as given in bye-law 4.8.6.
- f) The minimum width of treads without nosing shall be 25 cm. for an internal staircase for residential high-rise buildings. In the case of other buildings, the minimum tread shall be 30 cm. The treads shall be constructed and maintained in a manner to prevent slipping. Winders shall be allowed in residential buildings provided they are not at the head of a downward flight.
- g) The maximum height of riser shall be 19 cm. in the case of residential high rise buildings and 15 cm in the case of other buildings They shall be limited to 12 per flight.
- h) Handrails shall be provided with a minimum height of 100 cm. from the center of the tread.

- i) The minimum headroom in a passage under the landing of a staircase and under the staircase shall be 2.2 m.
- j) For building more than 24 m. in height, access to main staircase shall be through a lobby created by double door of one hour fire rating. One of the doors will be fixed in the wall of the staircase and other after the lobby.
- k) No living space, store or other fire risk shall open directly into the staircase or staircases.
- l) External exit door of staircase enclosure at ground level shall open directly to the open spaces or can be reached without passing through any door other than a door provided to form a draught lobby.
- m) The main staircase and fire escape staircase shall be continuous from ground floor to the terrace level.
- n) No electrical shafts/AC ducts or gas pipe etc. shall pass through the staircase. Lift shall not open in staircase landing.
- o) No combustible material shall be used for decoration/wall paneling in the staircase.
- p) Beams/columns and other building features shall not reduce the head room/width of the staircase.
- q) The exit sign with arrow indicating the way to the escape route shall be provided at a suitable height from the floor level on the wall and shall be illuminated by electric light connected to corridor circuits. All exit way marking sign should be flush with the wall and so designed that no mechanical damage shall occur to them due to moving of furniture or other heavy equipments. Further all landings of floor shall have floor-indicating boards indicating the number of floor as per bye-law.
The floor indication board shall be placed on the wall immediately facing the flight of stairs and nearest to the landing. It shall be of size not less than 0.2 m. x 0.5 m.
- r) Individual floors shall be prominently indicated on the wall facing the staircase.

- s) In case of single staircase it shall terminate at the ground floor level and the access to the basement shall be by a separate staircase. However, the second staircase may lead to basement levels provided the same is separated at ground level either by ventilated lobby with discharge points at two different ends through enclosures.

4.9 OPEN SPACE AREA AND HEIGHT LIMITATION

4.9.1 Every room that is intended for human habitation shall abut on an interior or exterior open space or on to a verandah open to such interior or exterior open space.

4.9.2 The open spaces to be left around the building including set backs, covered area, total built up area, limitations through FAR shall be as per Master Plan/Zonal Plan requirements. The relevant provisions related to open spaces, areas and height limitations of the Master Plan are given in Chapter-3.

4.9.3 Interior Open Space for Light and Ventilation

The whole or part of one side of one or more rooms intended for human habitation and not abutting on either the front, rear or side open spaces shall abut on an interior open space whose minimum width in all directions shall be 3.0 m. in case of buildings not more than 12.50 m. in height and subject to the provision of increasing the same with increasing height @ of 0.3 m. per every meter height or part thereof beyond 12.50 m. However, in case of buildings already constructed with 3.0 m. the open space for new construction on upper floor, the open space on this basis should be ensured and would remain as mandatory open space.

Note: Where only a kitchen is abutting an interior open space, the minimum width as specified can be reduced by 0.55 m. correspondingly.

4.9.4 Provision of exterior Open Spaces around the Building

- a) The set backs of the respective building shall be as per Master Plan, detailed Layout Plan, general Development Plan.
- b) For buildings identified in Building Bye-Laws no. 2.10.5 and 7.1 the provision of exterior open spaces around the buildings shall be as given in Table 4.4.

Table 4.4 Provision of Exterior Open Spaces Around the Buildings

Sl. No.	Height of the Building Upto (m.)	Exterior open spaces to be left out on all sides in m. (front rear and sides in each plot)
1	10	As per prescribed set backs
2	15	5
3	18	6
4	21	7
5	24	8
6	27	9
7	30	10
8	35	11
9	40	12
10	45	13
11	50	14
12	55 and above	16

Note: On sides where no habitable rooms face, a minimum space of 9.0 m. shall be left for heights above 27.0 m.

- c) In case of multi storeyed buildings the exterior open space around a building shall be of hard surface capable to taking load of fire engine weighting upto 45 tonnes.

4.9.5 Joint Open Air Space

Every interior or exterior or air space, unless the latter is a street, shall be maintained for the benefit of such building exclusively and shall be entirely within the owner's own premises.

4.9.5.1 If such interior or exterior open air space is intended to be used for the benefit of more than one building belonging to the same owner; then the width of such open air space shall be the one specified for the tallest building as specified in building bye-law 4.9.3 and 4.9.4 abutting on such open air space.

4.9.6 Exemption to Open Spaces/Covered area

The following exemption to open space shall be permitted.

4.9.6.1 Projections into Open Spaces

- a) Every interior or exterior open space shall be kept, free from any erection thereon and shall be open to the sky. Nothing except cornice, chajja or weather shade (not more than 0.75 m. wide) shall overhang or project over the said open spaces so as to reduce the width to less than the minimum required.

Note: Such projections shall not be allowed at a height less than 2.20 m. from the corresponding finished floor level

- b) A canopy or canopies each not exceeding 4.50 m. in length and 2.40 m. in width in the form of cantilever or cantilevers, over the main entrance/entrances, providing a minimum clear height of 2.2 m. below the canopy.

In single storeyed residential building, only one such canopy shall be permitted for each individual detached block. In more than one storeyed residential building, two canopies shall be permitted over ground floor/higher floor entrances.

In buildings of other occupancies, the permissibility of canopy, canopies shall be as decided by the Authority on its merits.

- c) In case of residential building only, a balcony or balconies at roof level of a width of 1.20 m. overhanging in set backs within one's own land and courtyards provided the minimum area required shall not be reduced by more than 30% of such open spaces.
- d) The projections (cantilever) of cupboards and shelves shall be permitted and are exempted from covered area calculations in case of residential buildings only. Such projection shall be upto 0.75 m. depth provided.
- i) That no cupboard shall project in the side set back on the ground floor.
 - ii) That outer length of cupboard overhanging in the set backs shall not exceed 2.0 m. per habitable room. In addition to this, cupboard under the above and windows can be provided.

Note: Cupboard means a space used for storage of household goods/clothes, having shelves/partitions not more than 1.5 m. apart.

- iii) Only one pergola on each floor shall be permitted in a residential building if constructed in the exterior open spaces or terrace.

Such pergola shall not exceed 3.50 sq m. in area on which 40% shall be void and shall have a clear height 2.20 m.

4.9.6.2 In addition to above, the following shall not be included in covered area for FAR calculations.

- a) Machine room for lift on top floor as required for the lift machine installation (see Appendix L1 and L2).

Note: The shaft provided for lift shall be taken for covered area calculations only on one floor.

- b) Rockery, well and well structures, plant nursery, water pool, swimming pool (if uncovered), platform round a tree, tank, fountain, bench, chabutara with open top and / or unenclosed sides by walls, open ramps, compound wall, gate, slide swing door, uncovered staircase (uncovered and unclosed on three sides except for a 0.90 m. high railing/wall, overhead water tank on top of building/open shafts.
- c) A mumty over staircase on top floor.
- d) Culvert on Municipal drains.

4.9.7 Height Limit

The Height and number of storeys shall be related to provisions of FAR as given in Chapter-3 and the provisions of open spaces given in Building Bye-Laws and the following:

- a) The maximum height of building shall not exceed 1.5 times the width of road abutting plus the front open spaces.
- b) If a building abuts on two or more streets of different width, the building shall be deemed to face upon the street that has the greater width and the height of the building shall be regulated by the width of that street. Height shall however, not exceed the maximum height as provided in the Master Plan.
- c) For buildings in the vicinity of the aerodromes the maximum height of such buildings shall be subject to clearance from the Civil Aviation Authorities from time to time and to this effect a no objection certificate issued by that Authority shall be submitted by the applicant along with plans to the sanctioning Authority.

Note: The location of slaughter house/butcher house and other areas for activities like depositing of garbage dumps which would attract high flying birds like eagles/hawks etc. shall not be permitted within a radius of 10 km. from aerodrome reference point.

4.9.8 Height Exemptions

The following apartment structures shall not be included in the height of building covered under Building Bye-Laws 4.9.7.

Roof tanks and their supports not exceeding 1.0 m. in height, ventilating, air conditioning and lift rooms and similar service equipments, stair covered with Mumty not exceeding 3.00 m. in height. Chimneys and parapet wall and architectural features not exceeding 1.50 m. in

height unless the aggregate area of such structures exceeds 1/3 of the roof area of the building on which they are erected.

4.10 LIGHTING AND VENTILATION OF ROOMS

4.10.1 All habitable rooms shall have for the admission of light and air, one or more apertures, such as window, glazed door and fan lights, opening directly to the external air or into a open verandah not more than 2.40 mt. in width. In case light and ventilation to habitable space area are through an internal courtyard, the minimum dimensions of such courtyard shall not be less than 3.0 m. x 3.0 m. for buildings upto 12.50 m. in height. For buildings with higher heights, the minimum dimensions of the internal courtyard shall be as given in Building Bye-Laws 4.9.

4.10.2 Where the lighting and ventilation requirements are not met through day lighting and natural ventilation, the same shall be ensured through artificial lighting and mechanical ventilation as given in part-VII building services Section-1 lighting and Ventilation of National Building Code of India published by the Bureau of Indian Standards. The latest version of the National Building Code of India shall be taken into account at the time of enforcement of the Building Bye-Laws.

Notwithstanding the above, the minimum aggregate area of openings of habitable rooms and kitchens excluding doors shall be not less than 1/10 of the floor area.

No portion of a room shall be assumed to be lighted if it is more than 7.50 m. from the opening assumed for lighting that portion.

4.10.3 Ventilation Shaft

For ventilating the spaces for water closets and bathrooms, if not opening on the front side, rear and interior open spaces, shall open on the ventilation shaft, the size, of which shall not be less than the values given below:

Table 4.5 Size of Ventilation Shaft

Height of Building in m.	Size of ventilation shaft in sq m.	Minimum size of shaft in m.
9.0	1.5	1.0
12.5	3.0	1.2
15 and above	4.0	1.5

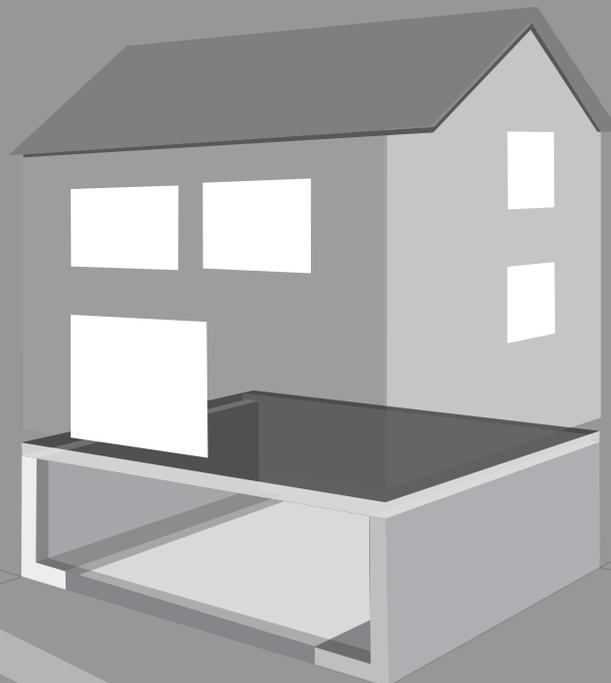
* For buildings above 15.0 m. height, mechanical ventilation system shall be installed besides the provision of minimum ventilation shaft.

4.11 PARAPET

Parapet walls and handrails provided on the edges of roof terrace, balcony etc. should not be less than 1.0 m. and more than 1.5 m. in height.

Note: The above shall not apply where roof terrace is not accessible by a staircase.

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SAFE AND EFFICIENT BASEMENT
CONSTRUCTION DIRECTLY BELOW
OR NEAR TO EXISTING STRUCTURES



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GUIDELINES ON SAFE AND EFFICIENT BASEMENT CONSTRUCTION DIRECTLY BELOW OR NEAR TO EXISTING STRUCTURES

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HEALTH AND SAFETY EXECUTIVE (HSE) FORWARD TO ASUC BASEMENT GUIDELINES 2ND EDITION

Building a basement directly below or next to an existing building has become a popular means to extend a house. However, compared to a conventional above ground extension, basement construction is more complicated both in the design and preparation work needed, and in how the work needs to be carried out. This creates significant safety risks for workers and the public.

Any failure to correctly plan or conduct the work can lead to ground movement in excavations and the collapse of existing buildings onto workers and people nearby. Costly repair work or demolition of the original building, and sometimes adjacent properties, may also result.

I welcome that the industry has recognised that management and control of the risks involved in basement construction has frequently been poor and has put significant effort into producing this advice to assist all of those involved.

The Health and Safety Executive was consulted in the production of the sensible and proportionate guidance covering health and safety issues that form a large part of this publication. I would like to thank everyone from industry who has contributed and ask that the advice it contains is now turned into action.

Peter Baker

Chief Inspector of Construction

1 EXECUTIVE SUMMARY

- 1.1 There has been a marked increase in the number of domestic basement construction projects undertaken below or near to existing structures. There has also been a significant rise in the number of health and safety incidents linked to basement construction including fatalities, injuries, and damage to buildings, as well as negative impact on people not involved in the works, notably local residents.
- 1.2 The Association of Specialist Underpinning Contractors (ASUC) is publishing these guidelines to improve the safety and efficiency of basement construction below or near to existing structures and to reduce negative impact on others, especially people living or working near to basement construction projects.
- 1.3 This document will consider basements which are built either directly below the footprint of an existing structure or where the basement will structurally undermine the foundations of an existing structure.
- 1.4 The objective of these guidelines is to enable clients, designers, engineers and others involved in basement construction projects below or near to existing structures to instruct safe and efficient work.
- 1.5 Basement construction is a complex form of building involving geotechnical, hydrological, structural and civil engineering, health and safety and waterproofing expertise that even those with significant construction experience may not have encountered previously.
- 1.6 The single leading principle throughout these guidelines is the absolute priority that health and safety has over all other aspects of a project.
- 1.7 Temporary works (support to existing buildings and to the ground around excavations) is critical and is often overlooked or addressed superficially.
- 1.8 Basement works can be classified as cellar extensions, single level basements or multi-level basements.
- 1.9 The main construction techniques used to build the supporting and retaining walls of basement structures are underpinning and piling.
 - 1.9.1 There are two main types of underpinning: mass concrete underpinning and reinforced concrete (RC) underpinning.
 - a. Mass concrete underpins provide vertical support underneath existing walls but usually require an inner RC retaining wall to provide additional horizontal strength as on their own they are usually unable to retain the ground outside the basement.
 - b. RC underpins can usually provide vertical support underneath existing walls and retain the ground outside the basement without an additional inner retaining wall.
 - 1.9.2 In basement construction two main types of piles are used to build retaining walls; reinforced concrete (RC) bored piles and steel sheet piles.
 - a. RC bored pile walls are constructed of either a series of side by side columns formed vertically in the ground (called contiguous piles)

with a small gap between each pile or by a series of overlapping soft and hard piles (called secant piles). For secant piles the soft piles are constructed first followed by the hard piles. The bores for the hard pile should penetrate the edges of the initial soft piles resulting in the piled structure being a continuous wall with no gaps between any of the piles.

- b. Steel sheet piles are constructed using thin interlocking sheets of steel which are driven into the ground. The edges of the steel sheets can be welded to limit water ingress.
- 1.10 Building below the groundwater level adds complication and cost to any basement construction project. There are several methods for building below the groundwater level. Careful consideration of the most appropriate method will be needed for each project where groundwater is encountered.
 - 1.11 Temporary works in basement construction are used to support excavations, existing structures, partially built new structures, equipment and plant, and site facilities. Support for excavations and existing structures are critical. Temporary works for excavations covers support for individual underpin excavations and for the whole site during the main bulk excavation after the basement walls have been built.
 - 1.12 Temporary works should be designed by a suitably qualified and experienced engineer called the Temporary Works Engineer (TWE). In addition to the TWE a named person must be appointed to coordinate temporary works. The person responsible for this function is often known as the Temporary Works Coordinator (TWC) and may be a dedicated person on larger sites or, on smaller sites, be the site manager or another manager. The TWC must be suitably qualified and experienced for that project.
 - 1.13 Basements are generally constructed from the ground level down (the existing floor at the lowest level is removed and the basement is built from the ground level downwards) or by tunnelling underneath the existing floor which remains in place.
 - 1.14 Ground level down construction can be completed from the bottom up (the ground is excavated and the ground slab is constructed before the upper level slabs) or from the top down (the upper level slab is constructed before the main excavation and construction of the ground slab).
 - 1.15 The most appropriate construction method must be assessed on a case by case basis.
 - 1.16 Basement construction can have a significant negative impact on people not involved with the work, especially local residents. The main negative impacts come from:
 - Damage to surrounding buildings and structures
 - Noise, vibration and dust
 - Traffic
 - 1.17 There will always be some negative impact but this should be minimised through early engagement, imaginative planning and considerate execution.
-

1.18 In addition to health and safety, which is the single most important priority, the other main factors to consider when choosing the construction technique and sequence are:

- Architectural design
- Occupier's desire to live in the existing building during the works
- Structure and condition of the existing building
- Party wall matters
- Soils and geology
- Hydrogeology especially groundwater which, if present, has a significant impact
- Surrounding structures
- Site access
- Impact on others

1.19 Basement construction under or near existing structures has a high level of construction hazard. Collapse of excavations, collapse of existing buildings and falls from height, including into excavations, are the three safety hazards most likely to lead to death or serious injury. Exposure to asbestos and to dust containing silica are the two health hazards most likely to cause death or serious injury.

1.20 Business clients, designers and contractors all have extensive duties under the Construction (Design and Management) Regulations 2015 (CDM 2015). Domestic clients also have duties under CDM 2015 but these are usually automatically transferred to the principal contractor or contractor or by arrangement to the principal designer.

1.21 Designers and contractors must manage risk by:

- Assessing hazards
- Avoiding risk where possible preferably by design
- Reducing risk throughout by selection of suitable control measures
- Developing safe methods and systems of work
- Managing and monitoring risk throughout
- Using only suitably trained and experienced personnel
- Having effective emergency plans and procedures

1.22 Only responsible, competent and experienced designers and contractors should be appointed.

- 1.23 Waterproofing ensures the usefulness of a basement and preserves the integrity of the structure. Waterproofing risk is assessed from low to high where a basement with any part below the permanent groundwater level is classified as high risk. All basements should be constructed to cope with groundwater levels up to the full retained height of the basement.
- 1.24 There are three types of basement waterproofing:
- Barrier protection using watertight membranes installed during or after construction
 - Structurally integral protection where the material that forms the structure is waterproof
 - Drained cavity protection where most of the water is held out by the structure but any water that penetrates is drained away and usually removed by pumps in a collection sump below the basement floor or, less commonly, flows away from the site by gravity
- 1.25 In high risk situations protection using more than one type of waterproofing can be considered. This is known as combined protection.
- 1.26 The basement structure and waterproofing should be considered as a whole rather than being considered separately.
- 1.27 Most problems with basement waterproofing are due to poor design or installation rather than with the failure of a waterproofing product. Manufacturers' warranties and guarantees for waterproofing are usually limited and will generally only cover a fault with the product and will not cover design or installation. In addition manufacturer's warranties and guarantees will usually only cover repair of the faulty product and will usually not cover the work needed to identify or uncover the repair or pay for any consequential losses such as the cost of repair of any damage caused by the water ingress.
- 1.28 Comprehensive first party indemnity latent defects insurance provides the best form of waterproofing guarantee cover. The waterproofing cover for the ASUC Basement Insurance Guarantee (BIG) is this type of guarantee.
- 1.29 The composition of the project team will vary by project. Apart from the Client the project team can include a Principal Designer (a health and safety requirement under CDM 2015), Architect, Structural or Design Engineer, Temporary Works Engineer, Temporary Works Coordinator, Principal Contractor, Party Wall Surveyor, Quantity Surveyor and others. A Structural or Design Engineer will always be needed in the design team. The Structural or Design Engineer can be an independent consultant or can be retained by a design and build contractor.
- 1.30 Basement construction work can be procured by any of the four main procurement methods: traditional design then tender, design and build, management or integrated. There is no single best method and they each have advantages and disadvantages. It is important to choose a form of procurement that incentivises safe and efficient construction.
-

- 1.31 The right insurances should be in place to protect all parties. The main insurances are: Professional Indemnity (PI), Employer's Liability (EL), Public Liability (PL), Contractors All Risks (CAR), non-negligent for third party property (JCT 21.2.1 / 6.2.4 / 6.5.1 insurance), existing buildings, and non-negligent damage to the client's property. Insurance cover for basement construction projects is complex and advice from experienced parties should usually be sought.
- 1.32 Guarantees for building work, like many guarantees, often promise much but deliver little. The detailed wording for each guarantee must be understood in order to know the true level of protection. The main types of guarantees are: company, product, insurance backed, latent defects insurance and indemnity latent defects insurance. The best protection is provided by a comprehensive indemnity latent defects insurance underwritten by a financially strong insurance company. The ASUC Basement Insurance Guarantee (BIG) is this type of indemnity latent defects insurance guarantee.
- 1.33 Basement developments will probably be the most complex structural work that a domestic property owner will undertake. The main areas for a domestic owner to consider at the outset are:
- Property rights and rights of access
 - Planning permission
 - Existing trees and their protection
 - Listed building consent if relevant
 - Building regulations particularly for fire safety and ventilation
 - Health and safety
 - Impact on neighbours
 - The economics of the project
 - The option of living in the building during the construction work
 - Party wall matters
 - Legal responsibilities and liabilities
 - Choosing whether to instruct an architect or other designers, or to move forward with a design and build contractor
- 1.34 Basement construction is complex and should only be undertaken by suitably qualified and experienced teams.
- 1.35 Instructing an ASUC member to undertake a project should increase confidence that the work will be completed safely and efficiently.

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2 INTRODUCTION

2.1 Outline

In the last decade there has been a significant increase in the number of domestic basement construction projects undertaken below or near to existing structures. This has been driven by increasing property prices especially in London and advances in waterproofing technology.

Alongside this increase in domestic basement construction activity there have been several health and safety problems including fatalities, injuries, building collapses, partial building collapses and other damage to structures. There has also been significant negative impact on people not involved in the works notably residents living near basement construction projects. The Association of Specialist Underpinning Contractors (ASUC) is publishing these guidelines in order to support efforts to:

- Improve the safety and efficiency of basement construction below or near to existing structures
- Reduce negative impact on others, especially people living or working near to basement construction projects

2.2 Scope

Basements vary greatly in size, construction, complexity and end use. This document will consider basements which are built either:

- Directly below the footprint of an existing structure, or
- Where the construction will structurally undermine the foundations of an existing structure

In general the document is written with domestic basements in mind but the techniques and issues considered are largely the same for commercial basements.

Standard construction methods can generally be used on open sites where the ground can be excavated back at a shallow angle without affecting the foundations of surrounding buildings. This type of open site basement will not be considered further.

2.3 Objective

The objective of these guidelines is to enable clients, designers, engineers and others involved in basement construction projects below or near to existing structures to instruct or oversee safe and efficient work.

2.4 Overview

Basement construction is a complex form of building and involves a combination of geotechnical, hydrological, structural and civil engineering, health and safety and waterproofing expertise. Even those with many years of above ground construction experience may not have faced the issues that are met when building a basement underneath or near to the foundations of existing structures.

This document is intended to be used as an outline guide by property owners, developers, architects, engineers, contractors, quantity surveyors, building surveyors and anyone else involved in basement construction. It should provide a basis of understanding of the techniques used in basement construction and assist the informed consideration of the many factors and issues faced when considering a basement construction project. A summary of these factors is given below.

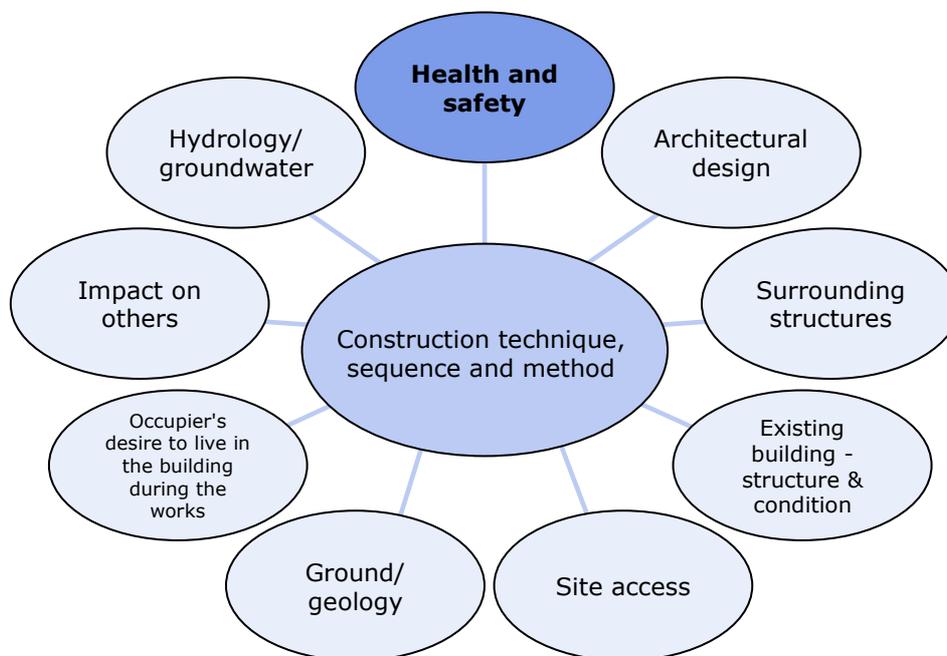


Fig 1. Main factors for consideration

The guide has been set out in a logical order however all of the areas covered are heavily interrelated so, to some extent, they cannot be viewed in isolation and need to be considered collectively.

This guideline is not intended as a code of practice, set of design rules, engineering specification or building code and does not provide a single answer for the complex question of what design or method is best for any individual project.

2.5 Health and safety

The single leading principle throughout these guidelines is the absolute priority that health and safety has over all other aspects of a project. Health and safety is covered in a dedicated section later in the document but at all times it is a fundamental consideration.

2.6 Key points

The key points in the guideline are:

- Health and Safety is paramount
- Temporary works (support to existing buildings and to the ground around excavations) are critical and is often overlooked or addressed superficially
- Environmental consequences and any negative impact on others should be minimised
- A well-managed safe project will be an efficient project - this applies both to the design and to the implementation of the works
- Basement design and construction is complex - all of the interdependent factors need to be considered at the design stage. Involving an experienced contractor as early as possible reduces the risk that early design choices will have subsequent negative safety and cost consequences
- The property owner will always bear some risk from third parties - involving an experienced team early will help to minimise these risks
- Proper risk management is not the same as wholesale risk transfer to the contractor - risks, both physical and commercial, should be considered early and each risk addressed appropriately
- Designers and contractors involved in the complicated business of basement construction should have relevant competence, qualifications and experience
- All parties involved in basement construction need to understand their own responsibilities and the responsibilities of the other parties
- Appointing suitably qualified and experienced parties early in the process is critical - once an inexperienced designer and/or an inexperienced contractor has started work it can be very difficult to bring a project back on track:
 - Once extensive structural work has started it is often too late to adopt a more durable design and usually too late to change to a more experienced contractor without considerable rectification cost
 - There have been several instances where the only way of stabilising the building has been to fill the new basement with foam concrete and either abandon the project or start again. In some instances demolition of the house has been the only safe solution to a poorly planned and executed basement project
- Members of the Association of Specialist Underpinning Contractors (ASUC) are committed to working in accordance with these guidelines

2.7 The Association of Specialist Underpinning Contractors (ASUC)

ASUC *plus* (The Association of Specialist Underpinning Contractors) is a trade association founded in 1992 by a group of specialist contractors whose main business was foundation repair by underpinning and piling. The association's intention was to raise standards of health, safety and quality across the sector. Domestic basement construction now faces similar challenges.

Standards in the foundation repair industry were improved by ASUC members being audited on health and safety, technical competence, financial strength and the completeness of their insurance cover. The increase in standards achieved by ASUC members enabled the association to introduce an insurance-backed latent defects guarantee scheme in 2002. This cover is provided by a major insurance company directly to the homeowner and covers any problem with the foundation repair work. An ASUC guarantee is now frequently demanded by insurers as a prerequisite for foundation repair work.

Basement construction uses underpinning, piling and other structural techniques that are similar to those used in traditional foundation repair. This has led to several ASUC members being at the forefront of the growing basement construction industry.

In 2013 ASUC introduced a new class of membership for basement contractors. This class of membership is open to existing ASUC members and to contractors who have not been involved in the foundation repair sector.

The new basement category of membership has more stringent levels of audit across all areas with only those showing excellent health and safety, technical ability, financial strength and appropriate insurances being admitted. In addition a new tailored insurance-backed defective works guarantee scheme has been introduced. The new guarantee scheme is called the Basement Insurance Guarantee (BIG).

2.8 Summary

It is hoped that these guidelines will assist those involved in basement construction to achieve the best possible outcome for their project with the work completed safely, efficiently and with the minimum negative impact on others.

In conclusion it is suggested that a property owner will increase the likelihood of achieving a safe and successful project by inviting an ASUC member, who will operate in line with the spirit of these guidelines, to be involved at the earliest opportunity.

	<u>Radius of horizontal offset at differing pile depths</u>		
Depth:	<u>3 metres</u>	<u>6 metres</u>	<u>9 metres</u>
Cast in situ pile:	115mm	155mm	195mm

4.4 Building below the groundwater level

4.4.1 Outline

Building below ground water level adds considerable complication to the construction process.

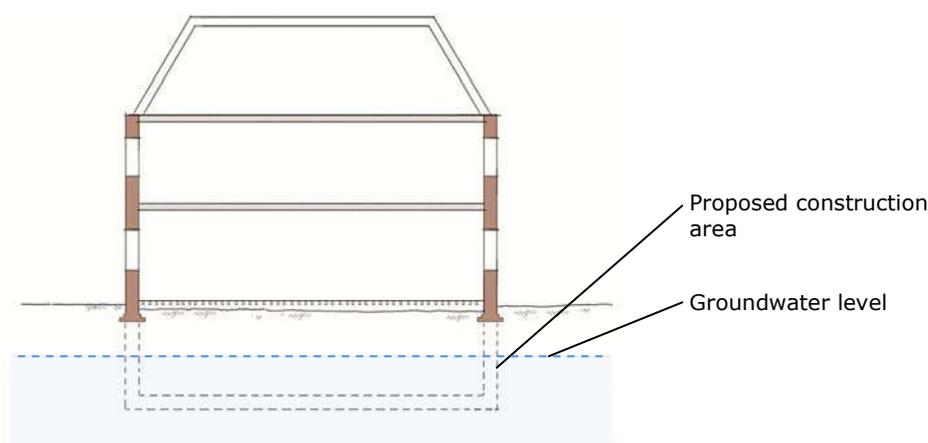


Figure 24. Proposed basement extending below groundwater level

The risk of ground movement and settlement is increased when working below the groundwater level. This is largely due to:

- A reduced bearing capacity of the ground at depth
- Cohesive soils' characteristics of shrinking when they dry and heaving (expanding) when wet
- Removal or migration of fine material from the ground during any dewatering process

The stability of the surrounding ground and existing structures must always be considered.

It is often not appropriate for water to be controlled by standard pumping methods when building below the groundwater level as these do not take account of the stability of the ground.

There are several techniques that have been developed specifically for construction of basements below the ground water level. Broadly these are:

- a. Local lowering of the groundwater level.
- b. Construction of a perimeter barrier to control water ingress.
- c. Soil stabilisation.

Ground freezing is also a recognised technique to enable construction below the water table. It has the disadvantages of causing ground heave due to the expansion of the water and of the frozen ground being difficult to dig through. It is usually limited to large scale commercial projects due to cost and size of plant required. This technique will not be considered further.

4.4.2 Local lowering of the groundwater level

Lowering the water table below the formation level of the basement allows construction within the dewatered area to be completed using standard construction methods. The principal technique for achieving safe local dewatering is to use a specialist well point dewatering system usually installed and operated by a specialist contractor.

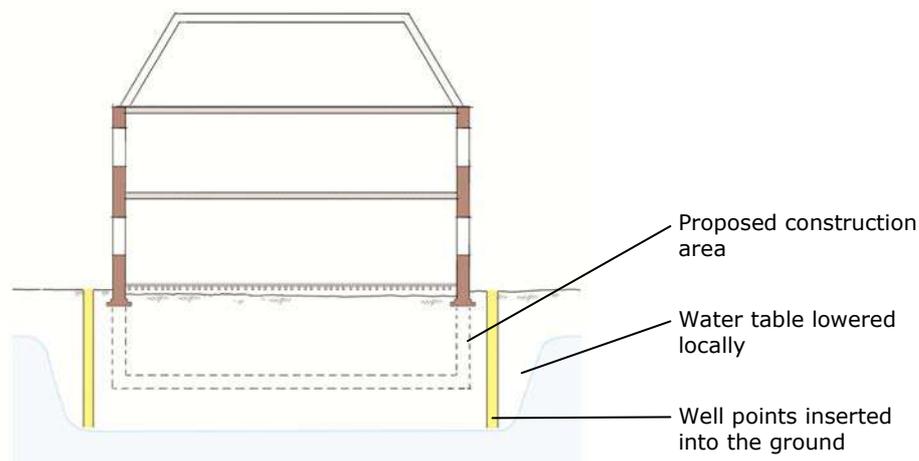


Figure 25. Dewatering for building below groundwater level

In these systems a series of submersible pumps is installed at below basement formation level down drilled well points around the perimeter of the site. The submersible pumps are each installed with a slotted pipe, wrapped in geotextile material and surrounded by a free draining material.

The geotextile material allows water to pass but blocks movement of any ground including fine material suspended in the groundwater. The pumps are usually left running continuously to keep the water table lowered during the work.

The water removed by the pumps should usually be passed through a settlement tank in order to monitor for removed ground and also to ensure that no material is discharged into the drains. A license is usually needed from the water utility company for discharge of groundwater into the drainage system.

Once the water table has been lowered construction work can continue in the now dry ground within the well points. After completion of the basement the dewatering system is removed and the water table will return to its original level.

These systems need to be correctly designed taking account of the specific ground conditions, water levels and proposed construction level. Detailed site investigation including information on the particle size of the ground and specialist geotechnical input will always be needed.

Local lowering of the water table is usually the least expensive of the three main methods though it is sometimes not the most appropriate geotechnical method.

4.4.3 Construction of a perimeter barrier to control water ingress

In this method a physical barrier is constructed into the ground around the perimeter and the water inside the perimeter is removed. The barrier walls block the horizontal flow of new water back into the site.

This method requires that there is a layer of impermeable ground under the site to prevent water flowing up inside the perimeter. This is largely the case in central and west London where a thick layer, in the order of seventy metres, of effectively impermeable London Clay underlies the upper layers of permeable sands and gravels.

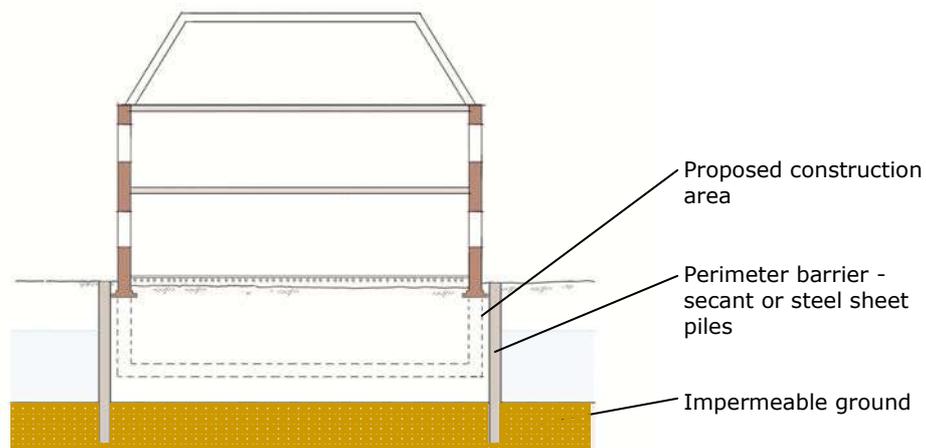


Figure 26. Perimeter barrier to control water ingress during construction

The perimeter barrier is constructed from the ground level and is usually constructed from either:

- a. Secant piles, or
- b. Steel sheet piles

Achieving a good seal in the barrier wall can be challenging. Misaligned or piles that are not sufficiently vertical will leave gaps in a secant piled wall that will need additional measures to create an effective barrier to water flow. Steel sheet piles will need to be welded at the joints and any leaks will need further post construction sealing.

The barrier walls must be embedded sufficiently into the underlying impermeable ground in order to prevent water flowing into the site.

Constructing a physical barrier to prevent water ingress is usually more expensive than dewatering but less expensive than soil stabilisation. Construction of a perimeter

barrier is not always the most appropriate method technically as it requires favourable geological conditions and, as it involves piling, has other construction factors that need to be considered.

4.4.4 Soil Stabilisation

Soil stabilisation involves changing the soil's natural properties by introducing material which mixes or binds the soil. The intention is both to block the flow of water and increase soil stability.

Soil stabilisation can be achieved in a number of ways from large scale compensation grouting to targeted lance injection.

Some soil stabilisation techniques that are widely used in conventional civil engineering can cause ground movement due to the pressure under which the stabilising material is introduced and can also require relatively large associated plant. Therefore these techniques are not usually suitable for basement construction projects directly below or near to existing structures or on restricted sites.

The main technique used in basement construction below or adjacent to existing structures is chemical grouting. Chemical grouting usually requires only small scale plant and low pump injection pressures.

The chemical grout is injected into the ground using lances driven into the ground at specified positions and depths. Each lance injection stabilises a section of ground local to the lance. These bulbs of stabilised ground overlap to form a homogenous zone of improved ground. Once all the chemical grout is placed the basement work can continue with the ground water retained and the soil sufficiently stable to resist hydrostatic collapse.

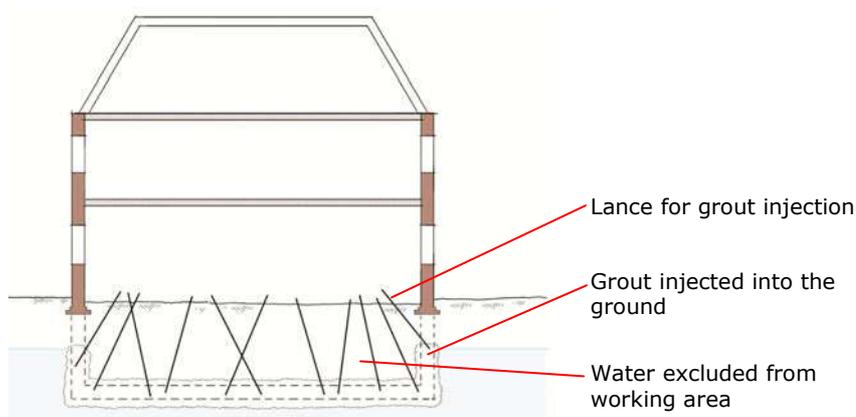


Figure 27. Grout injection for ground stabilisation

Chemical grouting needs to be correctly designed, usually by the specialist contractor, to ensure correct overlap of the bulbs of material. The designer will specify the type of grout to be used, usually a type of resin or acrylic, to give the right flow in the ground and to control any effect the material might have on the ground below adjacent structures.

In many instances stabilised soil does not entirely prevent the passage of water. The improved ground does however prevent the entrainment of fines and collapse of the

ground. Although not an impermeable barrier, stabilised soil should allow basement construction to progress.

Soil stabilisation is usually the most expensive of the three main techniques for building below the groundwater level and will only be used when the other main techniques are not appropriate technically. Soil stabilisation can have an added complication with regards to party wall agreements as consent from any adjoining owners will usually be needed if any introduced material is to be placed into the ground belonging to the adjoining owner.

4.4.5 Summary

Building below the groundwater level adds complication and cost to any basement construction project. There is added risk due to the effect of removing ground water and a reduction in ground stability.

There are several practical construction techniques though not all will be technically suitable in every case. The added cost varies by method with ground dewatering generally being the least expensive, followed by construction of a perimeter barrier, and with soil stabilisation being generally the most expensive.

Input from geotechnical, engineering and basement construction specialists should always be sought as early as possible if constructing a basement below or near to existing structures below the groundwater level.

4.5 **Summary**

Underpinning and piling are the main techniques used in basement construction.

16 CONCLUSION

Basements built below or near to existing structures can add valuable accommodation to homes and commercial buildings especially where other forms of development are restricted. There has been a significant increase in the number of domestic basement construction of this type however there has also been a rise in health and safety problems and in negative impact on people not involved in the works, particularly local residents.

Basement construction is a complex form of building and will involve elements that many experienced designers and contractors will not have encountered before. Effective health and safety management of basement construction is especially demanding. Temporary works are critical and are often overlooked or addressed superficially.

There are multiple factors that affect the choice of construction technique and method which all need to be considered. Health and safety is the single most important factor. Building below the groundwater level will add significant complexity and cost.

There will nearly always be some negative impact on local residents. This impact should be minimised through early engagement, imaginative planning and considerate execution.

Waterproofing of all basements is critical. The waterproofing design should be considered together with the structural design rather than separately. A comprehensive waterproofing guarantee is particularly important. Most waterproofing problems are caused by poor design or installation. Product manufacturers' guarantees will generally not cover failure due to design or installation and are usually limited only to replacement of the defective element of the installation. Comprehensive first party indemnity latent defects insurance, like the ASUC Basement Indemnity Guarantee (BIG), provide the best form of waterproofing guarantee and provide cover for all aspects of any waterproofing failure.

Selecting the right project team and method of procurement is critical. A structural or design engineer, either an independent consultant or one working for a design and build contractor, will always be needed. There is no best procurement method and any of the four routes can be successful. It is important to choose a form of procurement that incentivises safe and efficient construction.

Correct insurances should be in place to protect all parties. Insurance cover for basement construction projects is complex, domestic clients probably need expert advice.

Guarantees need to be read in detail as cover is often limited despite initial appearances. Comprehensive indemnity latent defects insurance underwritten by a financially strong insurance company provides the best form of cover. The ASUC Basement Indemnity Guarantee (BIG) is provided by this type of indemnity latent defects insurance.

Domestic owners contemplating a basement construction project should consider multiple factors ranging from property ownership and rights to build, through planning and other permissions, to the economics of the project and choosing whether to instruct a design team or a design and build contractor.

In conclusion it can be seen that basement construction is complex but if undertaken after due consideration and by suitably qualified and experienced teams successful outcomes should be achieved. Instructing an ASUC member to undertake a project should increase confidence that the work will be completed safely and efficiently.

17 LIST OF APPENDICES

Appendix A - Site investigations

Appendix B - Building damage classification

Appendix C - Safety hazards and mitigating actions

Appendix D - Health hazards and mitigating actions

Appendix E - Planning for risk management - detail on information required

Appendix F - ASUC*plus* Basement Indemnity Guarantee (BIG) policy

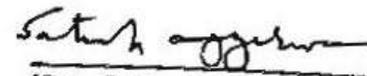
Dated 24th May, 2011

Office Memorandum

**Sub: Consideration of projects in respect of critically polluted areas-
Applicability of General Conditions to Construction Projects-
Clarification- regarding.**

In continuation to Ministry of Environment and Forests Office Memorandum of even no. dated 28th April, 2011, it is to clarify that the building and construction sector projects, item 8(a) and township and area development projects, item 8(b) of the EIA Notification, 2006 as amended on 4th April, 2011 do not attract the general conditions. Hence, Building and Construction projects and Township and Area Development projects would continue to remain as category 'B' irrespective of their location with respect to identified critically polluted areas. Such projects would continue to be appraised by the respective SEIAAs.

This issues with the approval of Competent Authority.


(Dr. S.K. Aggarwal)
Director

To

1. All the officers of IA Division
2. Chairpersons/Member Secretaries of all the SEIAAs/SEACs

Copy to:

1. PS to MEF
2. PPS to Secretary(E&F)
3. PPS to SS(JMM)
4. Website, MoEF
5. Guard File

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 22nd December, 2014

S.O. 3252(E).—Whereas, a draft notification further to amend the notification number S.O 1555(E), dated the 14th September, 2006 (hereinafter referred to as the principal notification), was published, as required under sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 in the Gazette of India ,Extraordinary, Part II, Section 3, Sub-section (ii) *vide* number S.O. 2319, (E) dated the 11th September, 2014 (hereinafter referred to as the said notification), inviting objections and suggestions from all persons likely to be affected thereby within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the public;

And whereas, copies of the said notification were made available to the public on 11th September, 2014;

And whereas, no objections or suggestions have been received in response to the said notification within the specified period of sixty days;

Now, therefore, in exercise of the powers conferred by Sub-section (1) and clause (v) of Sub-section (2) of Section 3 of the said Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the said notification, namely:—

In the principal notification, in the Schedule, under Column (1), for item 8 relating to Building/Construction Projects/Area Development Projects and Townships and sub-items 8 (a) and 8 (b) and the entries relating thereto, specified there under, the following item, sub-items and entries shall be substituted, namely:—

(1)	(2)	(3)	(4)	(5)
“8		Building or Construction projects or Area Development projects and Townships		
8 (a)	Building and Construction projects		>20000 sq.mtrs and < 1,50,000 sq. mtrs. of built up area	<p>The term “built up area” for the purpose of this notification the built up or covered area on all floors put together, including its basement and other service areas, which are proposed in the building or construction projects.</p> <p>Note 1.- The projects or activities shall not include industrial shed, school, college, hostel for educational institution, but such buildings shall ensure sustainable environmental management, solid and liquid waste management, rain water harvesting and may use recycled materials such as fly ash bricks.</p> <p>Note 2.- “General Conditions” shall not apply.</p>
8	Townships and Area Development Projects		Covering an area of > 50 ha and or built up area > 1,50,000 sq. mtrs	<p>A project of Township and Area Development Projects covered under this item shall require an Environment Assessment report and be appraised as Category ‘B1’ Project.</p> <p>Note.- “General Conditions” shall not apply.</p>

[F. No. 19-2/2013-IA-III]

MANOJ KUMAR SINGH, Jt. Secy.

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) *vide* Notification Number S.O. 1533(E), dated the 14th September, 2006 and was subsequently amended as follows:—

1. S.O. 1737 (E), dated the 11th October, 2007;
2. S.O. 3067 (E), dated the 1st December, 2009;
3. S.O. 695 (E), dated the 4th April, 2011;
4. S.O. 2896 (E), dated the 13th December, 2012;
5. S.O.674(E), dated the 13th March, 2013;
6. S.O. 2559 (E), dated the 22nd August, 2013 ;
7. S. O. 2731 (E), dated the 9th September, 2013;
8. S. O. 562(E), dated the 26th February 2014; and
9. S. O. 1599(E), dated the 25th June, 2014.

Block wise Ground Water Resources Assessment -2017				
Sl. No	State	District	Assessment Unit Name	Categorization (OE/Critical/Semicritical /Safe)
1	Andaman & Nicobar Is	N & M Andaman	Porlob island	Safe
2	Andaman & Nicobar Is	N & M Andaman	North Passage island	Safe
3	Andaman & Nicobar Is	N & M Andaman	Interview island	Safe
4	Andaman & Nicobar Is	N & M Andaman	Stewart Island	Safe
5	Andaman & Nicobar Is	N & M Andaman	Narcondam island	Safe
6	Andaman & Nicobar Is	N & M Andaman	Strait island	Safe
7	Andaman & Nicobar Is	N & M Andaman	Aves island	Safe
8	Andaman & Nicobar Is	N & M Andaman	Baratang island	Safe
9	Andaman & Nicobar Is	N & M Andaman	Long island	Safe
10	Andaman & Nicobar Is	N & M Andaman	Smith island	Safe
11	Andaman & Nicobar Is	N & M Andaman	North Andaman	Safe
12	Andaman & Nicobar Is	N & M Andaman	Middle Andaman	Safe
13	Andaman & Nicobar Is	N & M Andaman	East island	Saline
14	Andaman & Nicobar Is	Nicobar	Bampooka island	Safe
15	Andaman & Nicobar Is	Nicobar	Kondul island	Safe
16	Andaman & Nicobar Is	Nicobar	Trinket island	Safe
17	Andaman & Nicobar Is	Nicobar	Tillangchang island	Safe
18	Andaman & Nicobar Is	Nicobar	Little Nicobar island	Safe
19	Andaman & Nicobar Is	Nicobar	Great nicobar island	Safe
20	Andaman & Nicobar Is	Nicobar	Pulo Milo island	Safe
21	Andaman & Nicobar Is	Nicobar	Katchal island	Safe
22	Andaman & Nicobar Is	Nicobar	Car Nicobar island	Safe
23	Andaman & Nicobar Is	Nicobar	Kamorta island	Safe
24	Andaman & Nicobar Is	Nicobar	Nancowrie island	Safe
25	Andaman & Nicobar Is	Nicobar	Chowra island	Safe
26	Andaman & Nicobar Is	Nicobar	Teressa island	Safe
27	Andaman & Nicobar Is	South Andaman	John Lawrence island	Safe
28	Andaman & Nicobar Is	South Andaman	Peel island	Safe
29	Andaman & Nicobar Is	South Andaman	Viper island	Safe
30	Andaman & Nicobar Is	South Andaman	Flatbay island	Safe
31	Andaman & Nicobar Is	South Andaman	North Sentinell island	Safe
32	Andaman & Nicobar Is	South Andaman	Rutland island	Safe
33	Andaman & Nicobar Is	South Andaman	Little Andaman	Safe
34	Andaman & Nicobar Is	South Andaman	Havelock island	Safe
35	Andaman & Nicobar Is	South Andaman	Neil island	Safe
36	Andaman & Nicobar Is	South Andaman	South Andaman	Safe
37	Andhra Pradesh	Anantapur	AGALI	over_exploited
38	Andhra Pradesh	Anantapur	AMADAGUR	over_exploited
39	Andhra Pradesh	Anantapur	AMARAPURAM	over_exploited
40	Andhra Pradesh	Anantapur	ANANTAPUR MANDAL	safe
41	Andhra Pradesh	Anantapur	ATMAKUR	semi-critical
42	Andhra Pradesh	Anantapur	BATHALAPALLE	safe
43	Andhra Pradesh	Anantapur	BELUGUPPA	safe
44	Andhra Pradesh	Anantapur	BOMMANAHAL	safe
45	Andhra Pradesh	Anantapur	BRAHMASAMUDRAM	critical
46	Andhra Pradesh	Anantapur	BUKKAPATNAM	safe
47	Andhra Pradesh	Anantapur	BUKKARAYASAMUDRAM	safe
48	Andhra Pradesh	Anantapur	CHENNE KOTHAPALLE	safe
49	Andhra Pradesh	Anantapur	CHILAMATHUR	over_exploited
50	Andhra Pradesh	Anantapur	D HIRCHAL	safe
51	Andhra Pradesh	Anantapur	DHARMAVARAM	safe
52	Andhra Pradesh	Anantapur	GANDLAPENTA	over_exploited

1387	Chhattisgarh	Narayanpur	Orchha	Safe
1388	Chhattisgarh	Narayanpur	Narayanpur	Safe
1389	Chhattisgarh	Raigarh	Lailunga	Safe
1390	Chhattisgarh	Raigarh	Sarangarh	Safe
1391	Chhattisgarh	Raigarh	Dharamjaigarh	Safe
1392	Chhattisgarh	Raigarh	Gharghota	Safe
1393	Chhattisgarh	Raigarh	Raigarh	Safe
1394	Chhattisgarh	Raigarh	Tamnar	Safe
1395	Chhattisgarh	Raigarh	Kharsia	Safe
1396	Chhattisgarh	Raigarh	Pussore	Semi-critical
1397	Chhattisgarh	Raigarh	Baramkela	Semi-critical
1398	Chhattisgarh	Raipur	Dharsiwa	Critical
1399	Chhattisgarh	Raipur	Abhanpur	Safe
1400	Chhattisgarh	Raipur	Arang	Safe
1401	Chhattisgarh	Raipur	Tilda	Safe
1402	Chhattisgarh	Rajnandgaon	Manpur	Safe
1403	Chhattisgarh	Rajnandgaon	Mohla	Safe
1404	Chhattisgarh	Rajnandgaon	Chhuriya	Safe
1405	Chhattisgarh	Rajnandgaon	Ambagarh Chowki	Safe
1406	Chhattisgarh	Rajnandgaon	Dongargarh	Safe
1407	Chhattisgarh	Rajnandgaon	Khairagarh	Safe
1408	Chhattisgarh	Rajnandgaon	Chhuikhadan	Safe
1409	Chhattisgarh	Rajnandgaon	Dongargaon	Semi-critical
1410	Chhattisgarh	Rajnandgaon	Rajnandgaon	Semi-critical
1411	Chhattisgarh	Sukma	Konta	Safe
1412	Chhattisgarh	Sukma	Sukma	Safe
1413	Chhattisgarh	Sukma	Chhindgarh	Safe
1414	Chhattisgarh	Surajpur	Premnagar	Safe
1415	Chhattisgarh	Surajpur	Odgi	Safe
1416	Chhattisgarh	Surajpur	Ramanujnagar	Safe
1417	Chhattisgarh	Surajpur	Pratappur	Safe
1418	Chhattisgarh	Surajpur	Bhaiyathan	Safe
1419	Chhattisgarh	Surajpur	Surajpur	Safe
1420	Chhattisgarh	Surguja	Udaipur	Safe
1421	Chhattisgarh	Surguja	Mainpot	Safe
1422	Chhattisgarh	Surguja	Sitapur	Safe
1423	Chhattisgarh	Surguja	Lundra	Safe
1424	Chhattisgarh	Surguja	Batauli	Safe
1425	Chhattisgarh	Surguja	Lakhanpur	Safe
1426	Chhattisgarh	Surguja	Ambikapur	Safe
1427	Dadra & Nagar Haveli	Dadra & Nagar Haveli	Dadra & Nagar Haveli	Safe
1428	Daman&Diu	Daman	Daman	Safe
1429	Daman&Diu	Diu	Diu	Critical
1430	Delhi	Central Delhi	Karol Bagh	Over-exploited
1431	Delhi	Central Delhi	Civil Lines	Semi-critical
1432	Delhi	Central Delhi	Kotwali	Semi-critical
1433	Delhi	East Delhi	Preet Vihar	Critical
1434	Delhi	East Delhi	Mayur Vihar	Over-exploited
1435	Delhi	East Delhi	Gandhi Nagar	Semi-critical
1436	Delhi	New Delhi	Delhi Cantonment	Over-exploited
1437	Delhi	New Delhi	Chanakyapuri	Over-exploited
1438	Delhi	New Delhi	Vasant Vihar	Over-exploited
1439	Delhi	Non Revenue Unit	Nazur Land	Safe
1440	Delhi	North Delhi	Model Town	Semi-critical
1441	Delhi	North Delhi	Alipur	Semi-critical
1442	Delhi	North Delhi	Narela	Semi-critical
1443	Delhi	North East Delhi	Karawal Nagar	Over-exploited
1444	Delhi	North East Delhi	Seelampur	Over-exploited

1445	Delhi	North East Delhi	Yamuna Vihar	Over-exploited
1446	Delhi	North West Delhi	Saraswati Vihar	Over-exploited
1447	Delhi	North West Delhi	Rohini	Safe
1448	Delhi	North West Delhi	Kanjhawala	Safe
1449	Delhi	Shahdara	Vivek Vihar	Over-exploited
1450	Delhi	Shahdara	Seemapuri	Over-exploited
1451	Delhi	Shahdara	Shahdara	Over-exploited
1452	Delhi	South Delhi	Saket	Over-exploited
1453	Delhi	South Delhi	Hauz Khas	Over-exploited
1454	Delhi	South Delhi	Mehrauli	Over-exploited
1455	Delhi	South East Delhi	Defence Colony	Over-exploited
1456	Delhi	South East Delhi	Sarita Vihar	Over-exploited
1457	Delhi	South East Delhi	Kalkaji	Over-exploited
1458	Delhi	South West Delhi	Kapashera	Over-exploited
1459	Delhi	South West Delhi	Najafgarh	Over-exploited
1460	Delhi	South West Delhi	Dwarka	Over-exploited
1461	Delhi	West Delhi	Punjabi Bagh	Critical
1462	Delhi	West Delhi	Rajouri Garden	Over-exploited
1463	Delhi	West Delhi	Patel Nagar	Semi-critical
1464	Goa	North Goa	BICHOLIM	Safe
1465	Goa	North Goa	SATARI	Safe
1466	Goa	North Goa	BARDEZ	Safe
1467	Goa	North Goa	PERNEM	Safe
1468	Goa	North Goa	TISWADI	Safe
1469	Goa	North Goa	PONDA	Safe
1470	Goa	South Goa	DHARBONDARA	Safe
1471	Goa	South Goa	SANGUEM	Safe
1472	Goa	South Goa	CANCONA	Safe
1473	Goa	South Goa	MARMUGAO	Safe
1474	Goa	South Goa	QUEPEM	Safe
1475	Goa	South Goa	SALCETE	Safe
1476	Gujarat	Ahmedabad	Bavla	Safe
1477	Gujarat	Ahmedabad	Mandal	Safe
1478	Gujarat	Ahmedabad	Sanand	Safe
1479	Gujarat	Ahmedabad	Dhandhuka	Saline
1480	Gujarat	Ahmedabad	Dholera	Saline
1481	Gujarat	Ahmedabad	Detroj-rampura	Semi-critical
1482	Gujarat	Ahmedabad	Ahmedabad City & Daskroi	Semi-critical
1483	Gujarat	Ahmedabad	Dholka	Semi-critical
1484	Gujarat	Ahmedabad	Viramgam	Semi-critical
1485	Gujarat	Amreli	Lilia	Safe
1486	Gujarat	Amreli	Rajula	Safe
1487	Gujarat	Amreli	Savar kundla	Safe
1488	Gujarat	Amreli	Lathi	Safe
1489	Gujarat	Amreli	Amreli	Safe
1490	Gujarat	Amreli	Dhari	Safe
1491	Gujarat	Amreli	Jafrabad	Safe
1492	Gujarat	Amreli	Khambha	Safe
1493	Gujarat	Amreli	Babra	Safe
1494	Gujarat	Amreli	Bagasara	Safe
1495	Gujarat	Amreli	Kunkavav vadia	Safe
1496	Gujarat	Anand	Tarapur	Safe
1497	Gujarat	Anand	Sojitra	Safe
1498	Gujarat	Anand	Umreth	Safe
1499	Gujarat	Anand	Petlad	Safe
1500	Gujarat	Anand	Khambhat	Safe
1501	Gujarat	Anand	Anand	Safe
1502	Gujarat	Anand	Borsad	Safe



Rajesh Chauhan <chauhanrajes@gmail.com>

Fwd: Service of Written Submissions in University of Delhi v. MoEF & CC & Ors. on behalf of Respondent No.4

1 message

Rohan Talwar <rohan.talwar@aglaw.in>
To: chauhanrajes@gmail.com

Mon, Jan 18, 2021 at 9:39 PM

----- Forwarded message -----

From: **Rohan Talwar** <rohan.talwar@aglaw.in>

Date: Mon, Jan 18, 2021 at 9:38 PM

Subject: Service of Written Submissions in University of Delhi v. MoEF & CC & Ors. on behalf of Respondent No.4

To: <upc1.cpcb@gov.in>, <mscb.cpcb@nic.in>, <anuragdulaw@gmail.com>, <associatesralli@gmail.com>, <prataprahul@gmail.com>, <adnrao@adnrao.com>, <kheharlawassociates@gmail.com>, <kushsharma84@gmail.com>, Ardhendumauli Prasad <mail@ardhendumauli.com>, <sakshipopli@gmail.com>, <pujakalra09@gmail.com>

Sir/Ma'am,

We represent Respondent No.4, Young Builders Pvt. Ltd. in the captioned matter titled as University of Delhi v. MoEF & CC & Ors. (Appeal No. 112 of 2018) before the Hon'ble National Green Tribunal, Principal Bench, New Delhi.

Please find attached a copy of the Written Submissions filed by us on behalf of the Respondent No.4 pursuant to the Order of the Hon'ble Tribunal dt. 13.01.2021.

Please treat this e-mail as advance service upon you.

Marked To:

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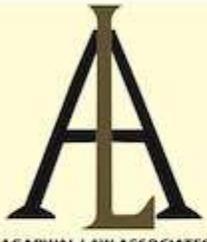
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