



Ministry of Culture
Government of India



Tender No.: NSCD/18011/E-Tender – 34 / 2024 – 25

**E-TENDER DOCUMENT
FOR**

Fabrication, Supply and Installation of exhibit cabinets, AV equipment, FRP models, infographics, creative illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML

**NATIONAL SCIENCE CENTRE
(NATIONAL COUNCIL OF SCIENCE MUSEUMS)
(MINISTRY OF CULTURE, GOVT OF INDIA)
NEAR GATE NO. 4, PRAGATI MAIDAN,
BHAIRON ROAD, NEW DELHI - 110001**

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Disclaimer & Disclosures

Bidders shall be deemed to have full knowledge of the requirements of the work. National Science Centre, Delhi (NSCD) will not accept any responsibility or liability for any errors, omissions, inaccuracies or errors of judgment with respect to information or materials provided by NSCD in this tender document or otherwise, with respect to this Project. Although such information and materials are to the best of NSCD's belief, however, their verification is the sole responsibility of Bidder.

NSC, Delhi has prepared this document to give background information on the captioned project to the interested bidders/agencies/contractors. While NSCD has taken due care in the preparation of the information contained herein and believe it to be accurate, neither NSCD nor any of its authorities or agencies nor any of their respective officers, employees, agents or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested agencies/contractors are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely only on the information provided by NSCD in submitting the Request for Proposal. The information is provided on the basis that it is non-binding on NSCD or any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

NSCD reserves the right not to proceed with the project or to change the configuration of the Project, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the matter further with any bidder submitting the RFPs.

No contractual obligation on behalf of NSCD, whatsoever, shall arise from this RFP unless & until a formal contract is signed and executed by duly authorized officers of NSCD and the bidder in due course after the invitation of tenders.

NSCD may modify any / all of the terms of this RFP process giving due notification through the NSCD's website (www.nscd.gov.in).

NSCD will not be liable for any costs incurred by the Bidders in the preparation of the RFP & its presentation.

The preparation of Bidder's proposal will be made without obligation by NSCD to acquire any of the items included in the Bidder's product, or to select any Bidder's proposal, or to discuss the reasons why a particular Bidder's proposal is accepted or rejected. All information included by the bidders in their proposal will be treated in strict confidence.

NATIONAL SCIENCE CENTRE, DELHI

Tender Schedule

Tender No.: NSCD/18011/E-Tender – 34 / 2024 – 25

Name of the work:.. Modify as given in title in entire document.

All bids must conform to the guidelines set out in the **General Terms & Conditions of RFP document**.

On-line Digitally signed e-tenders (RFP) are invited in Two Bid System from competent Company/Firm/Agency/Consortium, who satisfies the eligibility criteria enumerated in the Tender Document (RFP), and having experience in the field of fabrication / setting-up of permanent exhibitions involving various components of work such as exhibit cabinets/structures, AV equipment installations, artistic models, creative illumination, infographics etc. .. Interested Agencies may download the tender documents from the Central Public Procurement Portal (CPPP): <http://eprocure.gov.in/eprocure/app> or from the Centre's website www.nscd.gov.in as per the following schedule:-

SCHEDULE

Sl. No.	Description	Date	Time
1.	Bid Document Publishing Date	17/03/2025	(11:30)
2.	Bid Document Download / Sale Start Date	17/03/2025	(11:45)
3.	Seek Clarification Start Date	17/03/2025	(12:05)
4.	Seek Clarification End Date	21/03/2025	(12:00)
5.	Pre-Bid meeting Date (offline attending pre-bid meeting is mandatory)	19/03/2025	(11:30)
6.	Bid Submission Start Date	21/03/2025	(16:00)
7.	Bid Submission Closing Date	04/04/2025	(18:00)
8.	Technical (Techno-Commercial) Bid Opening	07/04/2025	(10:30)
9.	Technical Presentation by the bidders for evaluation by TEC.	<i>To be notified later</i>	To be informed
10.	Financial Bid Opening Date (Technically Qualified Vendors only)	<i>To be notified later</i>	

Estimated cost of work – Rs. 1.38 Cr. (inclusive of GST)

Period of completion of work – 75 days

Tender document can be downloaded from the Central Public Procurement Portal (CPPP) website <http://eprocure.gov.in>.

Important Information:

1. The work site is Nehru Planetarium, New Delhi.
2. Bidders may visit Nehru Planetarium Delhi (work site) & NSCD to ascertain the nature and quantum of work before tendering. Lack of knowledge of site conditions cannot be considered as an excuse for mistake/misrepresentation in the bid.
3. **Submission of the Bid:** This Tender is an e-Tender and bids are to be submitted through CPP Portal (<http://eprocure.gov.in>) only. Bids submitted in physical forms will be summarily rejected.
4. The online bid, both Technical (Techno-Commercial) Bid and Financial bid, duly furnished in Cover –I and Cover-II respectively, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure the same lies with the bidders.
5. NSCD reserves the right to amend/withdraw any of the terms and conditions in the RFP Documents or to reject any or all RFPs without giving any notice or assigning any reason. NSCD also reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NSCD shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the concept/ technology interface/system etc. shall be of prime consideration for selection of the appropriate set of concept/ technology interface /system collectively considered as a complete solution.

Section Officer (Stores & Purchase)
National Science Centre,
New Delhi

General Information and Instructions

1. The instructions given herein will be strictly binding on the bidders and deviation if any will make the tender or tenders liable to be considered invalid. Tenders incorporating additional conditions by the bidder are liable for rejection.
2. Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app> **Manual bids** shall not be accepted.
3. The instructions given in “**Instruction for Online Bid Submission**” should be strictly followed during submission of the Bid.
4. Bid documents may be scanned at 100 dpi with a black and white option which helps in reducing the size of the scanned document.
5. **The validity of Bids: The Bids should remain valid for 120 days from the date of opening of the financial bid.**
6. **Rejection of Bids:** Canvassing by the Bidder(s) in any form, unsolicited letter and post-tender correction may invoke summarily rejection of their bid(s). Conditional tenders will also be rejected. Noncompliance of applicable General Information and Instructions will disqualify the Bid.
7. The Bidders should have a Digital Signature Certificate (DSC) for filling up the Bids. The person signing the tender documents should be authorized for submitting the online e-tender.
8. The Bidders shall fill up the Prescribed Format for submission of **Technical (Techno-commercial) Bid as per “Annexure-B”** format duly signed by the authorized signatory. The person signing the tender document should be authorized for submitting the online e-tender.
9. The Financial Bid shall be filled in and signed by the authorized signatory online as per Format “**Annexure-C**” available at **Central Public Procurement Portal** e-tender system website <http://eprocure.gov.in/eprocure/app>. **Offline Financial Bid shall not be accepted.**
10. Tender must be uploaded in two separate covers marked **Cover-1** (Technical Bid/ (Techno-commercial bid) and **Cover-2** (Financial Bid/BOQ and Cost breakup). The contents of Cover-1 and Cover-2 shall be as follows:-

Cover-1: It shall contain

- i. Check List as detailed in **Annexure-B** duly filled in and digitally signed with an official stamp.
- ii. All relevant supporting documents as mentioned in the Check List as per “**Annexure-B**”.
- iii. The scanned copy of Bill of Quantities (**Annexure-A**), General Terms & Conditions etc. duly signed by the Authorized Signatory with the official stamp as a token of acceptance of the same by the bidders.
- iv. Proof of submission of EMD/Bid Security (or) Bid Security Declaration & MSME registration certificate copy (in case of exemption claimed by the bidder under MSME).
- v. Other relevant and mandatory undertakings etc. as detailed in the document.
- vi. The document proof for attending Pre Bid Meeting failing which the bid may be rejected.

Cover-2: It shall contains

- i. The “Financial Bid (BOQ)” i.e. Schedule of Price Bid in the item-wise tabular format (.xls file) duly filled in and digitally signed.
- ii. Cost Breakup Sheet (as per format in **Annexure – H**).

The **Cover-1**, i.e. Technical (Techno-commercial) Bid shall be opened by NSCD at the first instance and evaluated by the duly constituted Technical Evaluation Committee (TEC). At the second stage, the **Cover -2** containing Financial Bid (of only techno-commercially acceptable) offers shall be opened for further evaluation.

INSTRUCTIONS FOR ONLINE BID SUBMISSION

1. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submit their bids online on the CPP Portal.
2. More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>

A. REGISTRATION

- i. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/> app) by clicking on the link “Online Bidders Enrolment” on the CPP Portal which is free of charge.
- ii. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- iii. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- iv. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.) with their profile.
- v. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
- vi. Bidders may then log-in to the site through the secured log-in by entering their user ID/password and the password of the DSC / e-Token.

B. SEARCHING FOR TENDER DOCUMENTS

- i. There are various search options built-in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- ii. Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii. The bidders should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

C. PREPARATION OF BIDS

- i. Bidders should take into account the original e-NIT/RFP and any subsequent corrigendum published on the tender document before submitting their bids.
- ii. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the documents that need to be submitted. Any deviations from these may lead to rejection of the bid.
Bidders, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with a black and white option which helps in reducing the size of the scanned document.
- iii. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use the “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for the bid submission process.

D. SUBMISSION OF BIDS

- i. Bidders should log-into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidders will be responsible for any delay due to other issues.
- ii. The bidders have to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii. A standard Price Schedule format (BOQ) has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file (rate quote sheet for Façade Lighting), open it and complete the blue colored (unprotected) cells with their respective financial quotes and other details (such as the name of the bidders). No other cells should be changed. In case no rate value is required to be quoted in any particular cell, that cell may be kept blank, figure ‘0’ (zero) shall not be entered in such cell(s). Once the details have been completed, the bidders should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidders, the bid will be rejected. In addition to the above, the Cost Break-up shall be submitted in tabular format duly digitally signed with an official stamp.
- iv. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

- v. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of the bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system-generated symmetric key. Further, this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- vi. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- vii. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid number and the date & time of submission of the bid with all other relevant details.
- viii. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

E. ASSISTANCE TO BIDDERS

- i. Any enquiries related to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority.
- ii. Any queries relating to the process of online bid submission or queries relating to CPP Portal, in general, may be directed to the 24x7 CPP Portal helpdesk. The contact number for the helpdesk is 1800 233 7315.
- iii. All communications related to tender including the submission of Proposal should be addressed to:

Section Officer (Stores and Purchase)

National Science Centre

(A unit of National Council of Science Museums)

Near Gate No. 4, Pragati Maidan,

Bhairon Road, New Delhi- 110001

NATIONAL SCIENCE CENTRE

TENDER NO.: NSCD/18011/E-Tender – 34 / 2024 – 25

GENERAL TERMS AND CONDITIONS (GTC) FOR SUBMISSION OF E-TENDER

Name of the work: Fabrication, Supply and Installation of exhibit cabinets, AV Equipment, FRP models, Infographics, Creative Illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML.

1. INTRODUCTION

National Science Centre Delhi, the northern zone head office of the National Council of Science Museums, Ministry of Culture, Government of India invites offers/ bids from reputed and experienced agencies for undertaking the subject work **at Nehru Planetarium, Delhi, PMML** as per the laid down specifications and terms of the tender.

2. BACKGROUND

The primary objective of the project is to serve as an enlightening space, where visitors can delve into the wonders of the universe. It aims to present the comprehensive narrative of Astronomy in a simple and accessible manner, offering scientific viewpoints that are easy to grasp.

The Estimated Project Cost (EPC) shall be about **Rs. 1,38,00,000/-** including GST. This cost includes the cabinet fabrication, wall paneling, FRP models, procurement and installation of AV equipment, integration of the core exhibits (provided by NSCD) with the fabricated cabinets/structures, electrical wiring and creative illumination of exhibits and installation of various other components along with their interiors of the Project Facilities within the specified timelines. The EPC is inclusive of 1 year of defect liability period (DLP).

Note: Cost estimate is indicative in nature, and the Bidders are required to carry out independent evaluation, verification, and assessment prior to quoting the Financial Bid.

3. BIDDING & SELECTION PROCESS

1. The complete bidding documents (the “Bidding Documents”) and any addenda/corrigenda issued subsequent to this RFP will be deemed to form part of the Bidding Documents.
2. The Authority has adopted an online Single-Stage two envelop system (collectively the “Selection Process”) for evaluating the Bids/Proposals comprising technical and financial proposals to be submitted online through e-tendering as mentioned CPP portal . In the first step, the Technical Bids of all Bidders shall be evaluated whether they meet the Minimum Eligibility Criteria set forth in **Clause 4** of this GTC for undertaking the Project and their responsiveness. Once it is determined that the Bid is responsive and Bidder fulfils the Minimum Eligibility Criteria, these eligible bidders will be required to make presentation

before the Technical Evaluation Committee (TEC). Marks shall be allocated based on the eligibility criteria and presentation. Only those Bidders who score a minimum 75 marks out of 100 in Technical evaluation shall be entitled to opening of their Financial Bid subject to and in accordance with provisions set out under this RFP. The successful bidder will be selected on the least cost system based on their financial bids.

Note: Technical Bids will be evaluated on the basis of documents as detailed above & Presentations to be made by the eligible agencies before the TEC. The date and time of the presentations will be conveyed to the eligible agencies.

The first ranked Bidder (the “Selected Bidder”) shall be called for negotiation/clarifications, if necessary, while the second ranked Bidder will be kept in reserve.

4. ELIGIBILITY CRITERIA:

- i. Individuals, Limited Company /Corporation, Proprietary/ Partnership firms, Consortium/ Joint Venture (Maximum 2 members) are allowed to bid for the work. Submit company registration certificate and/or JV agreement etc.
- ii. Bidder shall not have a conflict of interest (the “Conflict of Interest”) that affects the Bidding Process and submit a declaration in this regard. Any Bidder found to have a Conflict of Interest (at a later date) shall be disqualified. In the event of disqualification, the Authority shall be entitled to forfeit and appropriate the Bid Security and cancel the order (if placed).

Without prejudice to any other right or remedy that may be available to the Authority under the Bidding Documents and/or the Agreement or otherwise. A Bidder shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:

- a) A constituent of such Bidder is also a constituent of another Bidder; However, this clause shall not apply in case of Original Equipment Manufacturer (OEM) is supplying the equipment’s through various authorized/dealer/distributors or
 - b) Such Bidder receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, its member; or
 - c) Such Bidder has the same legal representative for purposes of this Application as any other Bidder; or
 - d) Such Bidder has participated as a Bidder to the Authority in the preparation of any documents, design or technical specifications of the Project.
- iv) No agency or current employees of the Authority shall work as the Bidders under their own ministries, departments, or agencies. A declaration to be submitted to this effect in **Annexure – K**.

- v) A Bidder should have, during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or agreement nor have had any agreement terminated for breach by such Bidder. The bidder must not have been blacklisted/debarred by any Government/Semi Government Organization or Corporation in India at any stage in last five years. **The bidder is required to submit declaration in this respect on an Affidavit of Rs. 100/- Stamp paper.**
- vi) The Bidder should submit a Power of Attorney as per the format at **Annexure-G.1.**
- vii) **General Eligibility – the agency should have** valid registrations such as PAN, GST, EPF and ESI Registration of the participating firm/lead firm. Submit copies of these documents.
- viii) The bidder (the lead partner in case of consortium/JV) should be in existence for at least 5 years in similar business as on the date of publication of this RFP. Submit a copy of registration certificate and work order to confirm the existence for 5 years.
- ix) **Financial Capacity :**
 - a. Turnover: The Bidder shall have minimum Average Annual Turnover of Rs.2 crores (Rupees Two Crore only) during any 3 (three) financial years in the past 5 financial years issued duly **certified by the Chartered Accountant** (FY 2019-20, 2020-2021, 2021-22, 2022-23 & 2023-24).
 - b. Net worth: Bidder shall have net worth of Rs. 1.5 crore (Rupees 1.5 Crore only) as on 31st March 2024.
 - c. Income Tax Return Certificate: Bidder has to upload last 3 financial years ITR Certificate.

Note: The Bidder must submit, with its Technical Proposal, the documentary evidence regarding fulfilment of all the above criteria.

- x) **Similar Work Experience:** The Bidder should have completed (Ref format **Annexure – D** and ensure to submit work order copies as well as completion certificates) similar works during the past 3 years:
 - a. **1 (One)** similar work (in Central Government/ Central Autonomous Bodies/ State PWD/ Central Public Sector Undertakings) of value not less than 80% of the estimated cost.
 - OR**
 - b. **2 (Two)** similar works (at least one of them should be in Central Government / Central Autonomous Bodies/ State PWD / Central Public Sector Undertakings) each value not less than 50% of the estimated cost.
 - OR**
 - c. **3 (Three)** similar works (at least one of them should be in Central Government / Central Autonomous Bodies/ State PWD/ Central Public Sector Undertakings) each value not less than 40% of estimated cost.

Note: 1. Similar Works means Fabrication, Supply and Installation of Permanent Exhibitions / Interpretation Centre works/ Museum /Museums of permanent nature with the nature of work involved like cabinet fabrication and FRP artistic model Works or AV supply & integration, creative lighting & printing etc.

- xi. The agency should have technical expertise in the field of artists for developing desired quality of FRP models, illumination experts and AV experts either in their rolls or collaborations. Details of all these technical experts (either on their rolls or have collaborations with professionals/agencies of this specialization) need to be submitted along with the details of the works done by them. Ref: **Annexure – E.**
- xii. Agency should have sufficient physical infrastructure of the agency, their workshop, manpower, machinery, printing facilities (either in-house or collaborators) to execute works of this nature in short durations. Provide details on letterhead with supporting documents/tie-ups with agencies etc.

The bidder should submit supporting documents in support of their eligibility criteria and other details as per the formats provided in the annexures.

Notes:

- i. In the case of Consortium/JV participating in this RFP, the works of all the individual members of the Consortium/JV done independently (not in JV/consortium with other agency) will be considered as valid work experience.
- ii. *If any bidder has executed the similar work as a part of a consortium/JV in the past then the work experience of the bidder shall be considered as valid only if all the consortium/JV partners are participating together in the present RFP also.*
- iii. The details of qualifying works/projects shall be furnished as per the proforma in **Annexure – D** and if required, the bidder shall also facilitate inspection of the above qualifying project(s) by NSCD's officials to ascertain the performance of the system.
- iv. The bidder should submit copy/copies of the work order(s) issued in the name of the agency as well as copies of work completion certificate of the same work, clearly indicating the value of the work of similar nature. If the work order contains several works, only the value of the works of a similar nature shall be considered for work experience. If the value of the works of similar nature is not specifically mentioned in the cost breakup, the work experience against that work order will not be considered as valid.
- v. NSCD may inspect any of those works at its discretion to verify the credentials of the bidder for the qualifying works/ projects indicated above for which the Bidder shall provide references (including Referee names and contact details) in respect of the projects implemented.

- vi. The bidder should provide documentary proof to clearly substantiate each eligibility criteria, failing which the bid will be summarily rejected.
- vii. Even though the bidders meet the above qualifying criteria, they likely to be disqualified or orders to be (if placed) cancelled if they have:
 - Made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history etc.

5. EARNEST MONEY DEPOSIT/ BID SECURITY

Earnest Money Deposit for the tender is Rs. **3,45,000/-** (Rupees Three Lakh Forty Five Thousand only). The EMD should be deposited in the form of Demand Draft or Pay Order or Banker's Cheque of any Nationalized /Scheduled Bank or Bank Guarantee (valid for 6 months from the last date of submission of tender) drawn in favour of National Science Centre, Delhi payable at Delhi. Alternatively the EMD may also be paid through RTGS/NEFT to the bank account of National Science Centre, Delhi before the last date of submission of tenders. In case of payment of EMD through physical instrument, the physical instrument should be physically submitted at the office of National Science Centre Delhi on any working day between 10.00 AM and 5.00 PM before and up to the last date of submission of the filled-in tender documents and attach a copy of the receipt/physical instrument submitted as proof of submission in the technical documents in Part – 1. In case of online transfer, the transfer should be affected by or before the last date of submission and the proof of submission of the same should be uploaded in .pdf format in the technical bid in Part-1.

Agencies claiming eligibility for EMD exemption should submit declaration on registration as MSME (Submit a copy of MSME Registration certificate in Technical documents) and Bid Securing Declaration Form (**Annexure-J**). In absence of these documents and EMD, the bid will be summarily rejected.

The details of bank account for transferring the EMD/Bid Security is as given below:

Name of the Account Holder	NATIONAL SCIENCE CENTRE, DELHI
Account No.	2417101004100
Bank Name	CANARA BANK
Bank Address	6, Bhagwan Das Road, New Delhi
IFSC Code	CNRB0002417
MICR Code	110015045
Type of Account	Saving Account
Branch Code	2417
GST No.	07AAAAN2541C1Z5

The EMD, in case received, shall be refunded to the unsuccessful bidders within 4 weeks of finalization of the tender. In case of the successful tenderer, this will become part of the Security Deposit / Performance Guarantee and the same will be refunded after successful completion and lapse of Defect Liability Period.

6. SCOPE OF CONTRACT

The successful bidder shall be responsible for thoroughly studying the drawings, rendered images and walkthrough (https://drive.google.com/drive/folders/116AcBTngUJG21gKtpdY31jB65CXKD6UM?usp=drive_1ink), site conditions etc. and submit their quotes/rates. It shall be the responsibility of the agency to engage skilled manpower to deliver the required quality of interiors, equipment, finishes etc. The agency shall seek any clarifications on the drawings / processes/finishes/makes etc. in advance and arrange all the required materials, men, tools & tackles to ensure timely completion of the project.

As and when required, the agency shall arrange for inspection of the artworks, FRP models, lighting effects etc. before finalization. The agency shall be responsible for getting the digital prints of best quality on different media and proper installation of the same at site. The agency shall engage professional lighting experts to ensure best lighting effects in the exhibition.

As the work being executed is for a permanent exhibition, utmost care to be taken regarding the strength of structures to ensure their durability owing to interactive usage by the visitors. It is to be noted that the flooring and ceiling works are completed at site and hence, utmost care to be taken at site while executing the fabrication works not to cause any damage to the existing facilities/finishes. In case of any damage caused, the same needs to be rectified to original finish by the agency at their own risk and cost.

The successful bidder shall carry out and complete the works in every respect in accordance with this contract with the directions of the designated officers and to the satisfaction of the NSCD. The designated officers may from time to time issue further drawings and/or written instructions, detailed directions and explanations with regard to:

- a. The variation or modification of the design, quality or quantity of works for the addition or omissions or substitution of any work.
- b. Any discrepancy in the drawings or between the schedule of quantities and/or drawing and/or specifications.
- c. The removal from the site of any material brought therein by the successful e-tenderer and the substitution of any other materials therefrom.
- d. The removal and/or re-execution of any works executed by the successful bidder not conforming to the specs.
- e. The dismissal of any persons employed from the works.
- f. The opening up for the inspection of any work covered up.
- g. The amending and making good of any defects.

- h. The successful bidder shall comply with and duly execute any work comprising such instructions, detailed directions and explanations, provided always that if the Engineer's instructions involved variations from the priced Schedule of Quantities, such instructions shall be issued by the Centre and the successful e-tenderer shall take appropriate action.
- i. Even if not specifically mentioned in the schedule of quantities, the successful bidder shall be deemed to have allowed necessary material, labour, tools etc. required for satisfactory completion of the items of work as indicated in drawings and description given in the specifications, which are attached herewith unless the item specifies labour only or otherwise.
- j. **Successful bidder to provide everything necessary**
The successful bidder shall provide everything necessary for the proper execution of the works according to the true intent and meaning of the design, drawings and specifications and bill of quantities taken together, whether the same may or may not be particularly shown on the drawings or described in the specifications or included in the bill of quantities, provided that the same is to be reasonably inferred therefrom and if the bidder finds any discrepancy in the drawings, or between the drawings and specifications and bill of quantities, they shall immediately refer the same to the designated officer who shall decide which shall be followed. Figured dimensions shall be followed in reference to scale.
- k. **Rates:** The rates quoted by the Successful bidder shall be paid at net rates inclusive of GST and any other taxes. They should include in their rates allowance for increase or decrease in the prices due to market fluctuation. Bidder shall not be entitled to any separate amount on account of GST, other taxes, Labour Cess, duties etc. which are in force or will be enforced or enhanced by Government or local bodies during the contract period or after e-tendering. Accepted e-tender rates shall not be changed due to changes in wages of labour either.
- l. **Quantities**
All the quantities given in the schedule of quantities are provisional and indicative. Bidders may prior to submitting their proposals, study the CAD drawings, FRP models, Technical specifications and obtain necessary clarifications regarding information for preparation of their proposal.
The bidder shall be deemed to have given balanced rates and quantities for each item with make, model and specification. Also irrespective of variation in quantities to any extent, the bidder shall be paid at accepted contract rates only. NSCD reserves the right to increase or decrease quantities to any extent.

7. PERFORMANCE GUARANTEE (PG)/ RETENTION MONEY/ SECURITY DEPOSIT:

- i. This shall mean and be 10% of the total cost of work awarded.
- ii. PG amount, in excess of already deposited EMD, shall be submitted by the successful bidder before commencement of work upon placement of work order.

- iii. The Retention Money or Security Deposit so retained shall not carry any interest thereon.
- iv. The Retention Money or Security Deposit shall be refundable to the successful bidder after satisfactory completion of the Defects Liability Period post actual successful completion of the work in all respects & handing over as detailed under TERMS OF PAYMENT.
- v. A penalty in the form of deduction, as deemed fit by NSCD authority, shall be applied and be deductible from the Payment payable/ Retention Money/ Security Deposit of the bidder for any lapse in providing services, rectifying defects or in case of an inordinate delay in attending the faults/defects.
- vi. If the successful bidder fails to rectify the defects within a reasonable time, such defects will be rectified by NSCD by engaging departmental staff or outside Agencies at their discretion, and the cost thereof, as decided by NSCD will be deducted from the Retention Money / Security Deposit of the successful bidder retained by NSCD.
- vii. In case of termination of the contract due to reasons arising out of non-performance / improper performance of the contract by the successful bidder, this retention money shall be forfeited and the amount necessary to make up this amount shall be recovered from any money due to the successful bidder under this or any other contract with NSCD.
- viii. In case, the successful bidder causes any damage to the property of the Client, the NSCD shall have discretionary rights to execute the repair of damages and recover the amount from the successful bidder or to adjust the equivalent amount from the successful bidder's Security Deposit.
- ix. In case of death of successful bidder, Security Deposit shall be returned /refunded to the legal heir of the successful bidder after adjustment of dues, if any, post the actual completion of the work & upon expiry of the specified guarantee/defects liability period.

8. PROPOSAL EVALUATION / SELECTION CRITERIA

The online bid (both Technical Bid and Financial Bid) should be uploaded by due date and time. The responsibility to ensure the same lies with the bidders. Off-line tenders shall not be accepted and no request in this regard will be entertained whatsoever. Online Technical Bids will be opened at the first instance in National Science Centre, Delhi as detailed in the Schedule for Technical Evaluation. In the second stage, the Financial Bids of only the qualified techno-commercial acceptable offers will be opened. Decision of the Centre, regarding selection of eligible and qualified vendors / firms for opening the Financial Bid shall be final and binding on the bidders. Bidders may be present during opening of tenders.

Order shall be placed in favour of the bidder whose technical bid is acceptable and offered OVERALL LOWEST RATE in as per Price Quoted in format given in ANNEXURE – C.

The Authority reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution, or withdrawal shall be entertained by the Authority in respect of such Proposals.

Notes:

1. Technical bids of the agencies that fulfil the above pre-qualification criteria shall be opened.
2. The bidder has to upload the compliance letter on its letterhead duly signed by the authorized signature & other supporting documents as asked for in the bid in scanned format. Failing to submit the same or non-compliance/deviation from any bid terms and conditions, eligibility criteria or technical specifications may result in rejection of the bid.

A. Technical Evaluation

The Technical Evaluation Committee (TEC) appointed by the competent authority shall carry out its evaluation applying the eligibility evaluation criteria specified in the bid document. Evaluation of the application would be done as per the documents submitted by bidders/agencies. The agencies who fulfil the eligibility criteria will be communicated by email to make a presentation before the TEC on the aspects of their understanding of the project, execution methodology, expertise in creative illumination, artistic works & FRP models, project planning and execution methodology for timely completion etc. The Technical Bids will be evaluated on these parameters which are as given in the table below:

Sl. No.		Criteria	Max. Marks 100	Marks Obtained
1.	Past Experience & Quality of Work (Max Marks-20)	No. of years of relevant experience (5 years- 3 marks, more than 5 years to 8 years-4 marks, above 8 years – 5 marks) Minimum adherence – 3 marks	5	
2		Accomplished and completed such /similar project of repute successfully as under during the last 3 financial years ending March 2024: i. Minimum one project of 80% value or ii. Two projects of 50% value or iii. Three projects of 40% value Minimum compliance-10 marks; Additional similar completed projects: a) Each project of 80% value or more = 2 marks b) Each project of 50% & up to 80% value = 1.5 marks c) Each project of 40% & up to 50% value = 1 mark subject to a maximum of 15 marks.	15	
3	Technical Expertise (Max Marks: 10)	Technical expertise/manpower as per GTC Clause – 3(xi) Quality of Artist, AV expert, Lighting expert, Interior executors etc. each up to 2.5 marks for 4 specializations Detailed should be provided with Profile details of persons as mentioned in Annexure E	10	

4	Financial Soundness (Max marks:5)	Average Annual Turnover of 1.5 Cr – 3 marks; more than 1.5 Cr. – 5 cr.- 4 marks; more than 5Cr. -10 Cr. – 5 marks	5	
5	Infrastructure availability (max. marks-5)	Physical infrastructure available for workshop and printing facilities (as per the judgement of the TEC based on the documents submitted by the agency regarding their own or collaborative infrastructure)	5	
6	Presentation (Max. marks – 60)	Understanding of the project and Execution methodology: 15 marks	60	
		Project Approach & Quality of Resources : 15		
		Fabrication materials, Electrical and Illumination items of previous projects: 15marks		
		FRP Models and Art design approach Printing and modeling of previous works: 15 marks		
		Total Marks	100	

N.B - All the criteria are to be substantiated with necessary valid documents wherever required.

Note: Bidders who are awarded zero marks in any of the items from S. No. 1 to 4 will not be qualified for technical presentation (considering eligibility criteria). Bidders must get 75% in the technical for getting eligible for opening the financial bid.

NOTE: NSC Delhi reserves the right to accept or reject any or all tenders in full or part without assigning any reason whatsoever. NSCD shall also not be bound to accept merely the lowest tender but the technical suitability, capability and superiority of the equipment / system as well as after sales service including infrastructure to render such service, etc. shall be of prime consideration for selection of the equipment /system.

B. Financial Evaluation

- The Financial Bids of only the technically qualified bidders will be opened.
- Details of the taxes and duties applicable on the basic cost of development of items mentioned in BOQ must be indicated clearly in the financial bid.
- Order shall be placed in favour of the bidder whose technical bid is acceptable and offered overall lowest rate in as per Price Quoted in format given in **Annexure – C**.
- Errors & Rectification: Arithmetical errors will be rectified on the following basis: “If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail”.

9. JOINT VENTURES / CONSORTIUM

In the event that the successful bidder is a consortium/joint venture formed, lead partner/ prime contractor in whose name LOI is issued shall be fully and solely responsible for the performance of contract and all works designed and executed under the contract.

Bids submitted by a consortium or joint venture **of maximum two firms including lead partner, all partners shall comply with the following requirements:**

- The consortium as a whole must be a sound entity technically and the lead partner must be a sound entity financially.

- ii. The Consortium as a whole must satisfy the qualification criteria set forth herein. The turnover of the lead partner must satisfy the eligibility criteria of the tender. The bid shall contain a statement of the members of the consortium and shall provide all information necessary to satisfy Client/Employer that the Consortium fulfils the qualifying criteria.
- iii. The Bids shall contain original copy of the Memorandum of Understanding (MOU) on Rs.100. Non-Judicial Stamp paper (or as applicable) between the consortium members clearly identifying the lead partner, scope and responsibility and financial part of each member in the performance of the contract.
- iv. The consortium members will obtain approval of the Client for any change in the shareholding, structure and scope of work or any other terms of MOU.
- v. The lead partner of the consortium shall be nominated as being in-charge to represent the Consortium in all dealings with the Client/Employer and for providing any information or clarification sought from the Consortium.
- vi. The Bid shall be signed by all the consortium firms by their authorized person. The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of any and all member(s) of the Consortium and all dealings including billing and payments, shall be done exclusively with the leader of the consortium.
- vii. Only firms or joint ventures that have been qualified under this procedure will be eligible to bid for this project.
- viii. All members of the Consortium shall be liable for the execution of the project in accordance with the terms of the MOA and Contract agreement.
- ix. Any individual bidder or member of a consortium cannot be a member in another consortium and participate in this tender.
- x. All correspondence or communications will be done by the Lead partner (or authorized representative of Lead Partner) of the consortium.
- xi. Net worth as on the last day of the preceding financial year should be positive during the preceding three consecutive financial years.
- xii. Bidder submitting their bid shall not be under liquidation, court receivership or similar proceeding

10. COMPLETION TIME

The project / work is to be completed within **75 days** from the date of issuance of the work order/LOI.

11. AMENDMENT OF RFP

- a. At any time prior to the deadline for submission Bids/ Proposal, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP document by the issuance of Addendum/ Amendment.
- b. All such amendments will be uploaded on e-tendering website CPP Portal and will be binding on all Bidders.
- c. In order to afford the Bidders a reasonable time for taking an amendment into account, or for any other reason, the Authority may, in its sole discretion, extend the Proposal Due Date (PDD).

12. DEFECT LIABILITY PERIOD.

Defect Liability Period (DLP) shall be of **ONE YEAR** from the date of actual satisfactory completion & handing over of the entire job as certified by the authorities of NSCD.

13. TERMS OF PAYMENT:

No advance payment shall be made by National Science Centre, Delhi under any circumstances. One interim payment shall be released at the discretion of the Centre. Final payment for the actual quantities of work done will be released within 30 (thirty) days from the date of receipt of Tax Invoice/Bill duly supported by receipted challan and satisfactory inspection and completion report/certification.

Note:

- i. In case the work is carried out in phases, total payment admissible will be computed on a pro-rata basis based on completed percent of work vis-à-vis total work under consideration.
- ii. All payments, as above, shall become payable within thirty days of submission of the respective invoices. The payment shall be transferred to the bank account of the successful bidder through electronic transfer only, for which the bank details of the bidder has to be provided with each invoice.
- iii. Statutory deductions/recoveries viz. TDS, GST, Labour cess, etc. shall be made as per the relevant provisions from the payment due to the bidder from time to time.
- iv. NSCD reserves the right to foreclose the agreement at any stage by giving one-month notice, in case the performance is not upto required level or reminders not yielding results in specified time frame. In that case no further payment shall be paid to the Agency for the remaining stages of the work and no claim of this account will be entertained.

14. OTHER TERMS AND CONDITIONS

- a. The successful tenderer shall submit the following documents within **03 (Three)** working days from the date of placement of Letter of Intent.
 - Duplicate copy of the Purchase Order / LOI duly signed and stamped as a token of acceptance of the order.
 - Non-judicial stamp paper of appropriate value for preparing the Agreement governing the terms and conditions of the Contract.
 - Performance Guarantee / Security Deposit as above.
- b. In case the successful bidder refuses to accept the offer after finalization or does not comply with sending of acceptance of the order within 03 (Three) days from the date of placement of the order as per the finalized and accepted terms & conditions, the order shall be cancelled forthwith and action will be initiated.
- c. Successful bidder shall liaison with the authorities of PMML to get necessary entry passes etc. for their men and materials working at site. Necessary supporting communication shall be provided by the Centre to the successful bidder in this regard.
- d. The RFP and all its terms will be part of agreement between Museum / Centre and the successful tenderer.
- e. The contractor may visit the site & thoroughly understand the drawings and scope of work before quoting his rates in the tender and acquaint himself with site conditions

thoroughly. No claims for additional payments would be entertained arising out of contractor's ignorance of site conditions.

- f. The rate quoted by the contractor shall include all labour, materials, tools & tackles, fixtures, etc. for executing and completing the work. He should also include in his rate all taxes including taxes on works contract, GST, freight, etc., and also should allow for fluctuations of market prices.
- g. The contractor shall arrange for water and electricity required at their own cost.
- h. The contractor should quote balanced rate. Quantities given in the schedule are tentative and may vary up to any extent. The Museum/Centre reserves the right to execute or to delete any item or increase or decrease any quantity or quantities of the bill of quantities. Rates quoted in the tender shall be binding for all such variation in quantities.
- i. The contractor shall be responsible for the true and perfect setting out of works and also correctness of positions, levels, dimensions and alignment of all parts thereof. If any time any error arises the contractor shall rectify it at his own cost.
- j. All waste material, filth or other matters of offensive nature or which are of no use shall have to be removed from the premises by the contractor at his own cost on weekly basis and keep the work environment clean at all times.
- k. Materials to be used in the work shall conform to the prescribed norms. In absence of specifications, if any, I.S. specification should be followed and alternate should be got approved before using.
- l. National Science Centre will not be liable for any injury or death of an employee who is deployed by the successful bidder within/outside the work site during the time of execution of the work order.
- m. **Penalty Clause:** In case of non-completion of the entire work within the stipulated time, and the delay is not attributable to site requirements, Liquidated Damage (L.D.) @1% per week of the total cost of work awarded subject to a maximum of 10% of the gross value of work done or cost of work awarded, whichever is greater, shall be recovered from the bill of the successful bidder.
- n. The authorities of NSCD do not bind themselves to accept the lowest tender and reserves the right to accept or reject any or all tenders wholly or partially without assigning any reason whatsoever.
- o. The quoted rate shall remain unchanged during the entire contract period.
- p. The successful bidder shall be liable for depositing all taxes, levies, cess, etc. on account of service rendered by them to concerned tax collection authorities from time to time as per extant rules and regulations on the matter.
- q. The successful bidder shall maintain all statutory registers under the applicable laws. They shall produce the same, on demand, to the concerned authority of this Office or any other authority under Law.
- r. The Tax Deduction at Source (TDS) shall be affected, as and when applicable, as per the provisions of Income Tax Act, as amended from time to time and a certificate to this effect shall be provided to the bidder/contractor/supplier by this Office.
- s. In case, the successful bidder fails to comply with any statutory/ taxation liability under appropriate law and as a result thereof this Office is put to any loss/ obligation, monetary or otherwise, this office (National Science Centre, Delhi) will be entitled to

- get itself reimbursed out of the outstanding bills or the Security Deposit of the Agency, to the extent of the loss or obligation in monetary terms.
- t. Bidders should provide complete details of their local and other offices in Delhi/NCR.
 - u. The successful bidder shall be required to depute a team of qualified and experienced personnel to coordinate, execute and supervise all the activities from commencement till completion and handing over the project. This team of personnel will also be required to monitor the progress and review in consultation with NSCD officials on a regular basis.
 - v. **Bidders should provide an escalation matrix of their company for this project. Names of all the persons, contact details along with their designation should be submitted.**
 - w. Notwithstanding anything contained herein above, in case of any dispute, claim and/or legal action arising out of this contract, the same shall be subject to the jurisdiction of courts at Delhi only.
 - x. **Arbitration Clause:** All disputes and differences between the successful tenderer and the Council of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on the carrying out of the work (whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the terms and conditions of the order) shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard will be final and binding on both the successful Tenderer and the Council.
 - y. The provisions of the Arbitration and Conciliation Act 1996 or any statutory modification of the rules made there under for the time being in force shall apply to arbitration's proceedings under this Clause.
 - z. **Force Majeure:** Neither party shall bear responsibility for the complete or partial non-performance of any of its obligations (except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the present contract), if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operation, blockade, Acts or Actions of State Authorities or any other circumstances beyond the parties control that have arisen after signing of the present contract. In such circumstances the time stipulated for the performance of an obligation under the present contract is extended correspondingly for the period of time of action of these circumstances and their consequences.

TECHNICAL SPECIFICATIONS FOR THE WORK

1. Introduction

An Astronomy Gallery spread across an area measuring approximately 375 sq. m. is to be set up at Nehru Planetarium, Delhi, PMML. At present, the site is earmarked, completed with vitrified flooring, air-conditioning and false-ceiling. Bulk electricity is also available at site. The design for the exhibition cabinets and structures & interiors and finishes is ready for execution. The present tender / RFP is to engage a capable agency to execute the designs at site which include supply, fabrication and installation of exhibit cabinets and structures, audio-visual equipment like displays, touchscreen systems, projectors, etc. along with fabrication and installation of FRP models of different shapes, types & sizes along with creative illumination of the entire exhibition. The fabrication work is to be done with quality finish and workmanship. This document contains the technical specification for this work. Bidders are required to execute the work conforming to these technical specifications. In case of any unavoidable deviation, the same should be brought to the knowledge of the authorities of the Centre and the decision of the Centre shall be final in this regard.

2. Fabrication of the Cabinets

All the paneling and fabrication work will be done using heavy gauge metallic tubular frames as the skeletal structures covered with WPC as per specified dimensions and drawing in consultation with NSCD officials. Vinyl sheets, as per the colour scheme and printing, are to be pasted onto the WPC sheets. Supply of materials viz. heavy gauge metallic frames, WPC boards, vinyl, plywood for curvatures etc. and various consumables required for fabrication are in the scope of work of the tenderer strictly as per the technical specification. Fabrication of the cabinets has to be executed in accordance with the following:

- a) The Floor Layout Plan of the gallery.
- b) Detailed Fabrication Drawings of the exhibits
- c) Computer aided 3D artistic model of the gallery.
- d) As per direction provided by site in-charge of National Science Centre, Delhi

While the drawings mentioned in (a) and (b) above are enclosed along with the technical specification. Bidders may access the rendered views of exhibits and 3D walkthrough the link https://drive.google.com/file/d/1hACDlt-ieM7QXMBS021kcFLjTXqJurHG/view?usp=drive_link to get an idea of the work and quality to be delivered before submitting their offers/tenders on the due date. However, it may be noted that the exhibit sizes, location could be altered at the time of execution due to site conditions and requirements as per directions of site in-charge.

3. Materials used in fabrication

- a) **Structure of Cabinets:** The cabinet structure shall be constructed using heavy-gauge more than 2mm MS tube metal frames (600x600mm) with a suitable section of 25x50mm (1"x2"), as per the technical specifications. These sections must be fully welded. After frame fabrication, a primer coat followed by a single coat of enamel paint should be applied.
- b) **Panels & Cabinet Walls:** Panels & Cabinet Walls shall be made of WPC (Wood Plastic Composites) boards of 18 or 19 mm thickness of density 0.6 to 0.75 g/cm³ as per technical specification. For curved surfaces, plywood can be used of make Century/Greenlam, BWR, E0 emissions (conforming to IS: 2046-1995), however the exterior surface should

be WPC finish. All surfaces must be properly smoothed by filling the gaps between the boards and ensuring a level finish without any undulations. The boards shall be fixed to the metal frames using self-tapping SS screws.

- c) **Vinyl Film:** Digital Print Signage (Sticker) 3M(Vinyl-IJ180C, Lamination8519/8520) / Avery Dennison (Vinyl-MPI 1105, Lamination DOL1106) or equivalent approved brand of required colour with printing of 1200 DPI 8 pass Eco Solvent on 100 GSM vinyl as per the drawings and graphics should be pasted over the duly smooth finished WPC boards.
- d) **Toughened Glass:** All the Glasses used are toughened clear glass. Thickness of the glasses will be 6 mm up to a height of 1200 mm / span of 600 mm. For heights between 1200-1800 mm & span from 600-900 mm use 8 mm thick. Beyond these, use 12 mm thick glass OR as approved by the competent authority. Use only clear, transparent, wrinkle and scratch free Modi Guard or Saint Gobain make toughened float glass with properly ground and polished edges.
- e) **Acrylic-**Use Gujpol or imported acrylic sheets of minimum 3 mm thickness for shorter spans (up to 600 mm) and 6 mm and above for longer spans of approved colour / transparent. Samples and thickness to be got approved.
- f) **Corian finish** – All computer kiosks, switch boxes etc. are to have Corian finish using appropriate thickness of materials.
- g) **Central low-height exhibit cabinets:** These are to be made using plywood on wooden framework with laminate / Corian finish. Service doors should be provided as per requirement /directions of site in-charge.
- h) **Vinyl Printing specs.**

Material: Digital Inkjet Frontlit/Backlit Vinyl with adhesive backing

Brand: 3M / Century / Technova

Thickness: 125 microns

Size: Up to 60 inches in width, with customizable length

Sample Requirement: A sample of the vinyl to be printed must got approved for the quality of material, print and saturation of colours etc. before printing.

File Resolution: 50 to 200 ppi

Printing Resolution: 1440 dpi

Printing Process: Utilizes an HP 5500 machine with HP ink exclusively

Color Options: 6 to 8 pigment-based colors

Lamination Finish: Available in Matte, Semi-Matte, or Glossy

Additional Services: Cutting, pasting, and installation of the printed material in any size or shape at the designated site, carried out by skilled personnel provided by the agency.

- i) The LED Strip Lighting and cool white (5000K) or warm white (3000K) as per requirement. The edge lightening should have dimmable function for adjustable brightness, high CRI (>90) for accurate color rendering, diffusion & anti-glare Treatment, acrylic diffusers to eliminate harsh glare or hotspots, frosted glass panels for smooth light dispersion. The Energy-efficient LED drivers with low power consumption and Proper heat dissipation design should be there to ensure longevity for the gallery.

- j) **Adhesive and other hardware materials:** Adhesive and other hardware materials should be used as per technical specification or as approved by competent authority of NSCD.

4. General Instruction:

- a. Dimensions in the detailed drawings are to be followed during fabrication of the cabinets. However, the contractor should, in addition to consulting the fabrication drawings, layout drawing and the CAD model, check the actual dimensions at site before fabricating the cabinets. Any variation found thereof should be brought to the notice of the authority and got approved by the concerned authority before finally fabricating and installing the cabinets at site.
- b. All the dimensions in the drawings are in millimeter unless otherwise specified.
- c. Please do not scale the drawings, as some parts of drawing may not be to the scale.
- d. All maintenance doors shall have proper teak wood framework, suitable size and number of hinges & handle and lock & key arrangements.
- e. No part of the screws/nails should project out of the cabinet surface, outside or inside. They shall be flushed completely to the surface.
- f. All the tools & tackles, instruments or any other devices/contrivances that are/may be required for proper and efficient execution of the fabrication job, shall be arranged by the contractor only.
- g. Agency will be responsible for repainting all the areas of the wall where the exhibits are grouted or made dirty during the execution of work.
- h. In cases where the electrical sockets are mounted on concrete wall and wooden paneling is to be done on that wall, the electrical sockets will have to be moved out such that they make flush with the paneling.
- i. All the visible surfaces should have vinyl pasted / painted finish/polish finish/ laminate finish. Refer to specifications for vinyl film finish and paint finish as per details given.
- j. Use minimum 1.00 mm thick matt /SF finish laminates of approved colour of Marino, Greenlam, Century or approved equivalent.
- k. Use only Fevicol (SH) adhesive for ply fixing on frames, laminate pasting works etc wherever applicable.
- l. All the structures to be firmly supported from walls etc. as per direction at site.
- m. Proper eco-friendly anti termite chemical shall be applied on all wooden/plywood surfaces wherever applicable.
- n. All wooden beadings used for fixing of Glass / acrylic / polycarbonate sheets shall be Teak Beading polished to melamine finish.
- o. All hinges and other hardware items like Telescopic sliders should be of Hettich make.
- p. All maintenance doors should flush with the existing structure.
- q. Use only Godrej make locks wherever doors are to be provided. The lock in a particular section should have a common key.
- r. For areas requiring edge lighting and wherever the edges are visible, an edge band must be applied to all visible edges of WPC.
- s. Painting shall be done by applying wood primer with putty finish and finally 2 to 3 coats of 1st quality Synthetic Enamel / NC paint of approved brand & shades.

Date:

Signature of Tenderer with Office Seal

INTEGRATION OF CORE EXHIBITS

Summary of relevant Work

The bidder is required to integrate 12 (twelve) core exhibits and 2 (two) artifacts provided by the National Science Centre, Delhi (NSCD) into the exhibition fabrication framework. The integration should ensure a seamless fit, aesthetic coherence, and functional compatibility within the overall exhibition.

CHECK LIST

Sl.No.	Details	Details	Page Nos.
1	Name and Full Address of the bidder with Tel. No, E-mail & Fax Number (s) and Contact person on letter head		
2	Status of the bidder: - Company / Partnership Firm/ Proprietorship firm/Consortium – Please specify		
3	Name and Address of the lead partner of the consortium to whom the order will be placed. (Applicable only for the Consortium)		
4	In case of Company – please enclose Memorandum and Articles of Association along with certificates of incorporation, if company is a public limited then the certificate for commencement of business also to be enclosed.	Submitted/ Not Submitted	
5	In case of Partnership Firm – please enclose Certificate of Registration under the Partnership Act, 1932, along with valid partnership deed.	Submitted/ Not Submitted	
6	In case of Proprietorship or Individual – please enclose a declaration on the letterhead	Submitted/ Not Submitted	
7	In case of Consortium – please enclose a Memorandum of Understanding (MOU) on Rs.100. Non-Judicial Stamp paper	Submitted/ Not Submitted	
8	Compliance of statutory laws i) Copy of PAN card ii) Copy of Registration Certificate under GST	Submitted/ Not Submitted	
9	i) Copy of ESI registration certificate, if applicable ii) Copy of EPF registration certificate, if applicable In case of non- applicability of EPF and / or ESI, the applicant shall submit a declaration to this effect. In case self-declaration is found to be false at any stage then the contract will be terminated and the firm will be debarred from future tenders for three years.	Submitted/ Not Submitted	
10	State the Name of the Banker including IFSC Code and Account Number of the Bidder to follow digital mode of payment.	Submitted/ Not Submitted	
11	The bidding agency (the lead partner in case of consortium/JV) should be in existence for at least 5 years as on the date of publication of this RFP. Documents required: For establishing the existence of the agency which is participating in the bid, the bidder should submit a copy/copies of the work order(s) issued on the name of the agency (of the lead partner in case of consortium/ JV) as well as copies of work completion certificate of the same work. (Annexure – D)	Submitted/ Not Submitted	
12	Submitted the signed and filled copy of ANNEXURE – D : Work Experience	Submitted/ Not Submitted	

13	Submitted the signed and filled copy of ANNEXURE – E : Format for details of technical team members	Submitted/ Not Submitted	
14	Submitted the signed and filled copy of ANNEXURE – E1 : Format of consent letter for technical / subject expert	Submitted/ Not Submitted	
15	Submitted the signed and filled copy of ANNEXURE – F: Acceptance of Scope of contract	Submitted/ Not Submitted	
16	Submitted the signed and filled copy of ANNEXURE – G : Format For Articles Of Agreement	Submitted/ Not Submitted	
17	Submitted the signed and filled copy of ANNEXURE – G.1: Power of Attorney for signing the proposal	Submitted/ Not Submitted	
18	Submitted the signed and filled copy of ANNEXURE – H : Sample Cost Breakup sheet	Submitted/ Not Submitted	
19	Submitted the signed and filled copy of ANNEXURE – I : Details of Artworks and FRP models	Submitted/ Not Submitted	
20	Submitted the signed and filled copy of ANNEXURE – J : Bid Security declaration form	Submitted/ Not Submitted	
21	Submitted the signed and filled copy of ANNEXURE – K : Declaration	Submitted/ Not Submitted	
22	Submitted the signed and filled copy of ANNEXURE – L : Drawings	Submitted/ Not Submitted	
23	Submitted the signed and filled copy of ANNEXURE – M : Specification of Electronics Hardware (M1-M10)	Submitted/ Not Submitted	
24	Submitted the signed and filled copy of ANNEXURE – N: Illuminations modules, UPS and Electrical wiring	Submitted/ Not Submitted	
25	Submitted the signed and filled copy of ANNEXURE – A: Integration of the core exhibits	Submitted/ Not Submitted	

FINANCIAL BID FORMAT**Rate NOT to be quoted here. To be quoted ONLY in excel sheet at CPP Portal**

Tender Inviting Authority: Director, National Science Centre, Delhi						
Name of the Work: Fabrication, Supply and Installation of exhibit cabinets, AV equipment, FRP models, infographics, creative illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML						
Tender Details:						
Name of the Bidder:						
<u>PRICE SCHEDULE</u>						
(This is just a format for submitting Financial Bids ONLY and must not be filled here.)						
The actual BOQ is available in Excel Sheet on CPP portal. Only the relevant columns of the BOQ available at CPP portal should be filled. No other format is accepted.)						
Sl. No.	Drawing Number/ Item Description	Quantity	Units	Rate (in Rs.)	GST	Total Amount including GST (in Rs.)
1	Fabrication, Supply and Installation of exhibit cabinets, AV equipment, FRP models, infographics, creative illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML	1	job			

Note:

- Bidders are required to quote for all the items mentioned in the Bill of quantities failing which their bids will not be considered and out rightly rejected.
- Besides this, the bidders must upload the **cost break up sheet** as per format given in **Annexure - H** and upload the same in the CPP Portal **in Cover II of the Financial Bid** in .pdf format.
- The total amount with GST of the BoQ and the total amount with GST of cost break up sheet should match.
- Offline Financial Bid shall not be accepted under any circumstances.

EXPERIENCE IN EXECUTING SIMILAR WORKS EXECUTED DURING THE LAST 3 YEARS

Agency Experience (Private/ PPP/ Joint Venture/ Consortium Projects)

Sl. No.	Name of the Project	Value of Work executed in INR	Name of the Client	Client Phone Number	Starting Date of Project	Completion Date of Project	Details/ Scope of Work

Note: Submit the copies of work orders and completion certificates without which the work will not be considered valid.

(Signature of Authorized Signatory)

FORMAT FOR DETAILS OF TECHNICAL TEAM MEMBERS

The bidder needs to provide the details of key personnel / support staff as proposed by him/her for the project and deployment on site for successful completion of the project.

Sl. No.	Key Personnel/ Support Staff	Name of the person	Educational Qualification	Work Experience	Present Employment and responsibilities
(a)	Lighting Expert				
(b)	AV Professional				
(c)	Expert Artist/FRP and Mix media model makers				
(d)	Interior expert				
	Others				

Please Note:

1. Details of works of each person to be provided along with the consent letter as given in **Annexure – E1**
2. The bidder may co-opt experts in any other field deemed necessary. During the project, if substitution is necessary (for example, because of ill health or because a staff member proves to be unsuitable, or the member is no longer working with the Agency), the bidder shall propose other staff of at least the same level of qualifications, for approval by the Authority. Approval for any such substitution shall be the sole discretion of Authority. In any case, no escalation in cost shall be considered which may arise due to such substitution of staff/s.

(Signature of Authorized Signatory)

FORMAT FOR THE CONSENT LETTER FROM TECHNICAL/ SUBJECT EXPERT

(Following declaration to be provided by the Bidder on the Company letterhead)

I/ We _____, agree to participate in the project if

_____ (Name of the Bidder) _____ is awarded the work of Fabrication, Supply and Installation of exhibit cabinets, AV equipment, FRP models, infographics, creative illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML .

I understand that if I agree to participate now, I cannot withdraw from the project or refuse to work without any consequences of any kind, except under exceptional circumstances.

I understand that I can withdraw from the project, under the justifiable exceptional circumstances, with a minimum of three weeks' notice, only with the approval of the authority of the National Science Centre, Delhi.

I understand that my participation involves (outline briefly in simple terms what will be your specific work for this project) _____.

I understand that no financial or other benefit, directly or indirectly, will be given to me by the National Science Centre, Delhi for participating in this project.

I understand that in any report on the results of this project, my identity will remain anonymous and no credit for this project will be directly attributed to me.

I understand that I will have no claim on the content / expertise that I will provide for this project as an expert.

I understand that I am free to contact any of the people involved in the project to seek further clarification and information.

Signature & Seal of the Expert
Bidder (Name and Designation of Expert)

Signature & Seal of the

NATIONAL SCIENCE CENTRE

TENDER NO. NSCD/18011/E-Tender – 34 / 2024 – 25

ACCEPTANCE OF SCOPE OF CONTRACT

We do hereby accept the “Scope of contract, Bill of Quantities, General Terms & Conditions, NITs etc. as provided by the National Science Centre along with the Tender documents for **Fabrication, Supply and Installation of exhibit cabinets, AV equipment, FRP models, infographics, creative illumination and other related works for setting up an Astronomy Gallery at Nehru Planetarium, Delhi, PMML** within the stipulated time strictly as per the Scope of contract, BOQ and Technical Specifications of National Science Centre, Delhi as provided along with the tender documents, in the event of placement of any order on us. I/We agree and undertake to abide by all the terms and conditions of the RFP Document.

We undertake that the gallery designs, render views and other design elements of the gallery, prototype or technical information and proprietary information provided in the tender are confidential in nature and we shall not share these details by any means to anybody and we shall not use the same in any of our future projects without written consent from NSCD.

I/We also acknowledge the right of the Authority to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever. The NSCD shall be at liberty to cancel the order in full or part, in the event of failure of the above declaration made by us at our cost.

Signature of the Bidder / Constituted Attorney

FORMAT FOR ARTICLES OF AGREEMENT**INSTRUCTIONS (not to be typed in Agreement)**

(Articles of Agreement have to be typed on non-judicial stamp paper of value Rs. 100. The stamp paper will be purchased by the successful e-tenderer and the agreement may be typed by the Museum/Centre according to the format.)

ARTICLES OF AGREEMENT made at (Place) this day of (Date) (Month & Year) Between the

.....

(Name of the parent Museum/Centre, National Council of Science Museums, a Society registered under the Societies Registration Act of West Bengal, 1961), hereinafter referred to as the Museum/ Centre which expression shall include its successors and assigns on the one part and

.....
.....

(Name of the successful e-tenderer and address)

trading in the name and style of

.....

(Name and complete address of the successful e-tenderer) hereinafter referred to as the successful bidder which expression shall include his/their respective heirs, executors, administrators and assigns on the other part.

WHEREAS the Museum/Centre is desirous of getting the work of therein done and has caused (Name of the work)

Notice Inviting E-tender, drawings, schedule of quantities and specifications describing the work and conditions of contract, and the tender is awarded to

.....

(Name and address of the Bidder).

AND WHEREAS the said NIT including appendix, drawings, specifications and the priced schedule of quantities and conditions contract have been signed by and/or on behalf of the parties hereto which are integral part of this agreement.

AND whereas the Successful e-tenderer has deposited in Bank Draft/Pay Order/ NEFT/RTGS

.....

(Exact amount in Rs. In numbers & words) the amount being 5% of the ordered value of the e-tender) with the Museum /Centre as Performance Guarantee / Security Deposit for the due performance of this Agreement as provided in the said conditions.

NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. In consideration of the payments to be made, successful bidder shall upon and subject to the conditions herein contained execute and complete the work within 75 Days from the date of issue of letter of intent / Work Order (as defined in the scope of work of the NIT) and as per the said drawings and such further detailed drawings as may be provided to the successful bidder him from time to time and described in the said specifications and the said priced schedule of quantities along with the progress of the building work.

2. The Museum/Centre shall pay to the successful bidder such sum as shall become payable hereunder at the time and in the manner specified in the said conditions.
3. Time is the essence of this agreement and the successful e-tenderer shall proceed with the work with due diligence throughout the stipulated period of this contract. At any stage during execution, if any work lags behind the target for reasons directly attributable to the successful bidder, they shall pay or allow the Museum/Centre to deduct liquidated damage (LD) from any money due to them as per the conditions of contract.
4. This agreement comprises the work above and all subsidiary works connected therewith, even though such works may not be shown on the drawings, or described in the said specifications or the priced Schedule of Quantities.
5. The Museum/Centre through the Engineer reserves to itself the right of altering the drawings and of adding to or omitting any item of work or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall not vitiate this agreement.
6. All disputes and differences of any kind whatever, arising out of or in connection with the contract on the carrying out of works (Whether during the progress of the work or after their completion and whether before or after the determination, abandonment or breach of the contract) shall be referred to arbitration. In case of any legal dispute, other than the arbitration, the court of jurisdiction shall be at the place written in the first line of this agreement.

The provisions of the Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof and of the rules made there under for the time being in force shall apply to arbitration proceedings under this clause.

In witness whereof the parties have set their respective hands the day and the year and the place herein above written.

Signed by for and on behalf of the Museum/Centre

.....
(Dy. Controller of Administration)

In the presence of

1.

Seal

(Dy. Controller, Finance & Accounts)

2.

(Project Co-coordinator / Engineer)

Signed by the said Successful bidder with seal

In the presence of

1.

2.

POWER OF ATTORNEY FOR SIGNING THE PROPOSAL
(On Rs. 100/- Stamp paper)

Know all men by these presents, We, (name of Firm and address of the registered office) do hereby constitute, nominate, appoint and authorize Mr / Ms _____ son/daughter/wife and presently residing at _____, who is presently employed with/ retained by us and holding the position of _____ as our true and lawful attorney (hereinafter referred to as the “Authorized Representative”) to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposal for and selection as the Bidder for **Tender No.: NSCD/18011/E-Tender – 34 / 2024 – 25** including but not limited to signing and submission of all applications, proposals and other documents and writings, participating in pre-bid and other conferences and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the Authority in all matters in connection with or relating to or arising out of our Proposal for the said Project and/or upon award thereof to us till the entering into of the Agreement with the Authority.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Authorized Representative pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Authorized Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us. IN WITNESS WHEREOF WE, _ THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS

POWER OF ATTORNEY ON THIS ____ DAY OF, 2025

For

(Signature, name, designation and address)

Witnesses:

- 1.
- 2.

Notes:

- a. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- b. Wherever required, the Bidder should submit for verification the extract of the charter documents and other documents such as a resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

SAMPLE FORMAT FOR COST BREAKUP SHEET

IMPORTANT: Cost breakup sheet as per the details given below **to be provided separately and uploaded ONLY in Cover II of Financial Bid.**

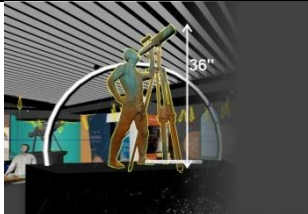
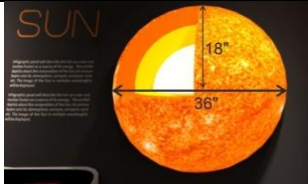

Sl. No.	Description of item as per BoQ	Qty.	Unit	Basic Rate in INR	GST %	Total amount in INR without GST	Total amount in INR with GST
1.	NSCD/PMML/Cluster01	1	Nos.				
2.	NSCD/ PMML/Cluster02	1	Nos.				
3.	NSCD/ PMML/Cluster03	1	Nos.				
4.	NSCD/ PMML/Cluster04	1	Nos.				
5.	NSCD/ PMML/Cluster05	1	Nos.				
6.	NSCD/ PMML/Cluster06	1	Nos.				
7.	NSCD/ PMML/Cluster07	1	Nos.				
8.	NSCD/ PMML/Cluster08	1	Nos.				
9.	NSCD/ PMML/Cluster09	1	Nos.				
10.	NSCD/ PMML/Cluster10	1	Nos.				
11.	NSCD/ PMML/Cluster11	1	Nos.				
12.	NSCD/ PMML/Cluster12	1	Nos.				
13.	NSCD/ PMML/Cluster13	1	Nos.				
14.	NSCD/ PMML/Cluster14	1	Nos.				
15.	NSCD/ PMML/Cluster15	1	Nos.				
16.	NSCD/ PMML/Cluster16	1	Nos.				
17.	NSCD/ PMML/Cluster17	1	Nos.				
18.	Layout drawings of floor with all clusters	1	Nos.				
19.	Emulsion painting in 2 or more coats with minor touch-up on surfaces	500	Sq. ft.				
20.	MS fabrication work	100	Kg.				
21.	Additional wall panelling	400	sq. ft.				
22.	Additional Texture paint work	500	sq. ft.				
23.	SITC of 21" /22" Touch Panel PC /All in one as per Annexure M1	2	Nos.				

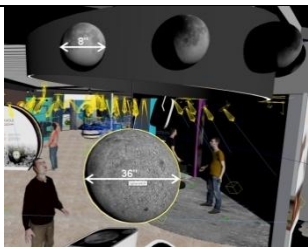

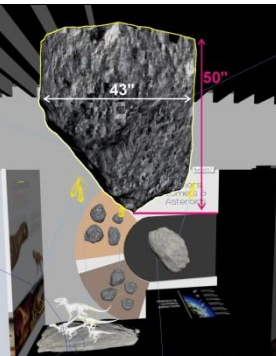
24.	SITC of 27" Touch Panel PC /All in one as per Annexure M2	5	Nos.				
25.	SITC of 32" Touch Panel PC /All in one as per Annexure M3	2	Nos.				
26.	SITC of 41"/42"/43" LED Display as per Annexure M4	4	Nos.				
27.	SITC of 41"/42"/43" Touch Panel PC /All in one as per Annexure M5	4	Nos.				
28.	SITC of 55" Touch Panel PC /All in one as per Annexure M6	1	Nos.				
29.	SITC of 55" LED Display as per Annexure M7	2	Nos.				
30.	SITC of 65" LED Display as per Annexure M8	2	Nos.				
31.	NUC/ SFF system as per Annexure M9	3	Nos.				
32.	Workstation (Quad core) as per Annexure M10	2	Nos.				
33.	Webcam Logitech C920 or equivalent	1	Nos.				
34.	Connectors of HDMI and 3 pin power cable Power Cable (Range varies from 3 m. to 5 m.) as per site requirements	1	lot				
35.	FRP/Art works as per annexure I.1	1	set				
36.	FRP/Art works as per annexure I.2	1	set				
37.	FRP/Art works as per annexure I.3	1	set				
38.	FRP/Art works as per annexure I.4	1	set				
39.	FRP/Art works as per annexure I.5	1	set				
40.	FRP/Art works as per annexure I.6	1	set				
41.	FRP/Art works as per annexure I.7	1	set				
42.	FRP/Art works as per annexure I.8	1	set				
43.	FRP/Art works as per annexure I.9	1	set				
44.	FRP/Art works as per annexure I.10	1	set				
45.	Miscellaneous Materials as per annexure I.11	1	Lot				
46.	Vinyl printing and pasting at site - Annexure I	2500	Sq. feet				
47.	Creative lighting designing	1	Lumps um				
48.	Wiring from power source to the light fixtures in the entire gallery	1	Lumps um				
49.	COB Nano Spot Light as per annexure N	4	Nos				

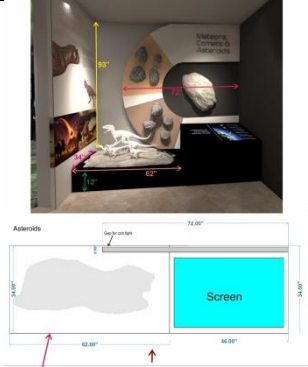


50.	COB Cylindrical Light , LED with phase-cut dimmable driver as per Annexure - N	30	Nos				
51.	COB Cylindrical Light, A LED light fixture that can be mounted/suspended from ceiling as per Annexure - N	100	Nos				
52.	4 ft. long LED Tubes with necessary mounting in baffle false ceiling	10	Nos.				
53.	Lump sum cost for the integration of the 12 core exhibits and 2 artefacts	1	Lot				
54.	FRP works of the gallery	50	Sq. Feet				
	Total Amount						

Signature of Bidder/ Constituted Attorney

Details of Art Work and FRP models

Annexure no	Name of Item	Sl. No	Quantity	Material	Measurements	Image Reference	Reference Link
I.1	Sky watching sculpture	1	1	(II).Fiber Glass material (II).Brush metal finish (III).Patina effect Colour- Color and texture should be according to the reference images.	(I).Total sculpture height 36" including human figure, width will be proportionate. (II).human figure should be proportionate according to the telescope.		https://drive.google.com/file/d/1OwRGn14CMLiu8uvNJILojZhQ4gki0JT/view?usp=drive_link
I.2	Sun (cross section)-	2	1	(II).Fiber glass (Good quality GP resin) (II).Led light Colour- Warm colour/ sun/fireball colour	(I).36" diameter Fiber glass sun 18" cross section (II).Inside LED light arrangement, *It should be maintenance friendly		https://drive.google.com/file/d/1zfHfMEbUsIsGjVFi4dXbmaZuWNEzrg/view?usp=drive_link
I.3	Moon Surface (on floor)	3	1	(II).Fiber glass (Good quality GP resin) (II).Proper armature structure inside Colour- Grey colour	(I).150" X 108" textured Moon surface (II).Maximum height 3" minimum thickness of fiber layer 10mm <i>It should be maintenance friendly for wire passing pipe across the surface for connect computer kiosk & wall. Corner ages should be flash on floor surface.</i>		https://drive.google.com/file/d/1-IOgFsErdS2FuAlij_D2XqELOYrKb3hO/view?usp=drive_link

Annexure no	Name of Item	Sl. No	Quantity	Material	Measurements	Image Reference	Reference Link
I.4	Full Moon (Hanging)-	4	1	(II).Fiber glass (Good quality GP resin) (II).Proper armature structure inside Colour- Grey colour- Moon textured Colour, <i>Creating a proper moon texture, including craters, regolith, etc., with accurate color and temperature.</i>	(I).36" diameter Moon (II).Maximum height 3" (III).Hanging arrangement from ceiling		https://drive.google.com/file/d/1g2ua9gkNce_cF6GZzkfVgtnYXtsjeUK-P/view?usp=drive_link
I.5	Small Half Moon (hemisphere on 6.5' out side ring)-	5	9	(II).Fiber glass (Good quality GP resin) (II).Proper armature structure inside Colour- Grey colour- Moon textured Colour/ with day night directional colour	(I).8" diameter Moon 9nos (II).Those hemisphere models are fixed on a 6.5' diameter ring on the ceiling		https://drive.google.com/file/d/1g2ua9gkNce_cF6GZzkfVgtnYXtsjeUK-P/view?usp=drive_link
I.6	Asteroid (piece of rock)-	6	1	(II).Fiber glass (II).Proper armature structure inside for hanging/fixing from the ceiling Colour- Grey colour, rocky texture	The textured rock size will be within L43" X W43"XH50" size textured rock It should be properly hang from ceiling. realistic texture making look of an asteroid - rocky texture.		https://drive.google.com/file/d/1GATvkcEm4plaiE42YosSLwS1QGerl0hI/view?usp=drive_link

I.7	Diorama of Meteors	6	1 unit	<p>(II).Fiber glass (II).Proper armature structure inside for hanging/fixing from the ceiling</p> <p>Colour- Grey, rocky texture</p>	<p>(I).62" X 34" approx platform area, diorama will be proportional to the area. (II).8no's of rocks 8"X11" to 10"X7",5"X6" etc approx (Various type & size) & 1no is 19"X28" approx (in center). (A)6nos (vary from 20" to 10" in sizes)of dinosaurs, (B)realistic meteors with proper texture, look and colour - rocky texture-</p>		https://drive.google.com/file/d/1A3M71UL_a4KPhJ0aJFqWIV3PAY3GJg56/view?usp=drive_link
I.8	Ancient Observatories model-	8	4	<p>(II).Fiber glass (II).Mixedmedia</p> <p>Colour- Multicolour, rocky texture, brick texture, grass texture, with colour</p>	<p>(I).12" X 12" X 12" size With proportionate each model, 4 no- 1.Stonehenge 2.Machu Picchu 3.Tycho Brahe 4.Uraniborg Observatory</p> <p><i>It should be properly hang finishing.</i></p> <p><i>Realistic texture making look of existing place/architecture rocky texture & all materials.</i></p>		https://drive.google.com/file/d/16PoLfNb170xEp-YXEyZ3_kKdCCumVbSE/view?usp=drive_link
I.9	Radio Telescope-	9	1	<p>(II).Metal sheet (II).Mixed media</p> <p>Colour- Metallic finished (Silver)</p>	<p>(I).12" X 13" X 17" size With proportionate (II).13"Disk size</p> <p><i>It should be properly finishing.</i></p> <p><i>Realistic texture making & metallic finish.</i></p>		https://drive.google.com/file/d/10501NOab-D9KBoiV5kq3NtLLvreEf0AU/view?usp=drive_link
I.10	planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune-	10	8 planet	<p>(II).Fiber Glass (II).Smooth finish (III).RFID holding arrangement inside planets</p> <p>Colour- According to planets colour with lacquer finish</p>	<p>(I).12" to 4" diameter total 8 numbers of planet sequins wise size. those model should be light weight *It should be properly Finish with PU coating/Lacker</p>		https://drive.google.com/file/d/1wjXfcigT3oWftSEJZ0BFUyQKlc4Eo0oj/view?usp=drive_link

I.11	Miscellaneous Materials	1	Lot		Translite media and other component	Refer to link	https://drive.google.com/file/d/1dLndUz_gOp9ajiuqqWDzs_yn6VD514xX/view?usp=drive_link
<p>All the items mentioned above are major items and indicative in nature. The dimension may be varied slightly as per site condition.</p> <p>An indicative list of Translit media and other materials are accessed from the following link https://drive.google.com/file/d/1dLndUz_gOp9ajiuqqWDzs_yn6VD514xX/view?usp=drive_link</p>							

Important Note for Annexures I (From I -1 to I- 11):

- a. The bidder should ensure to provide the items mentioned in the **Annexure I** and its subsections.
- b. The bidder should ensure to achieve the quality and aesthetics of the gallery as referenced in the rendered images.
- c. Fiberglass (FRP - Fiberglass Reinforced Plastic) should have sufficient thickness to ensure durability.
- d. The bidder should ensure smooth finish with appropriate, support Structure with MS framework for strength and stability for the model /structure. While installation, proper anchoring to be ensured for structural integrity in an interactive museum environment.
- e. The bidder should ensure proper surface finishing & painting using appropriate paint as per site instructions to get matt finish.
- f. The bidder should ensure the quality of Sculptural Models, Life-size or miniature scientific models, Thematic human figurines and sculptures.
- g. The artist or the modeler of the bidder should work in coordination with the designated officials from NSCD to maintain the quality and get the samples/modelling approved before casting.

BID SECURITY DECLARATION FORM

Date: _____

Tender No. NSCD/18011/E-Tender – 34 / 2024 – 25

To

**National Science Centre
Near gate no.4, Pragati Maidan,
Bhairon Road, New Delhi - 110001**

I/We, The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Security Declaration in absence of EMD.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of three years from the date of notification if I am /We are in a breach of any obligation under the bid conditions and/or initiate blacklisting procedure for disqualification in any tender in the Govt. of India departments, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 - i. fail or refuse to execute the contract, if required, or
 - ii. fail or refuse to furnish the Performance Security, in accordance with the RFP terms.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Date:

Signature of Authorized Person with Company Seal

Note:

In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid

NATIONAL SCIENCE CENTRE
NEW DELHI - 110001

TENDER NO. NSCD/18011/E-Tender – 34 / 2024 – 25

DECLARATIONS

1. We do hereby declare that we have quoted the rate for all the items in the cost break up sheet of **Annexure – H** and the total rate including GST quoted in the cost break up sheet is same as the rate quoted in item Rate BoQ of excel sheet (**Annexure – C**).
2. This is to certify that neither I/we/any of us is in anyway related to any employee in the National Council of Science Museums, Kolkata, or any of its constituent units.
3. I/ We hereby declare that I/ we have not quoted any extra condition along with the **Part-II (FINANCIAL ENVELOPE)** of the e-tender.

(Signature of the tenderer)
with company seal/rubber stamp

UNDERTAKING

This is to certify that I/ we have carefully gone through the drawings/ specifications, etc. given in the e-tender document & have clearly understood the site working conditions, time schedule given and have accordingly quoted my balanced rates after going through all details.

I/ we hereby give an undertaking that I/ we shall carryout the work strictly as per the given specifications, and shall complete the same within the stipulated time frame.

Signature of the Bidder / Constituted Attorney

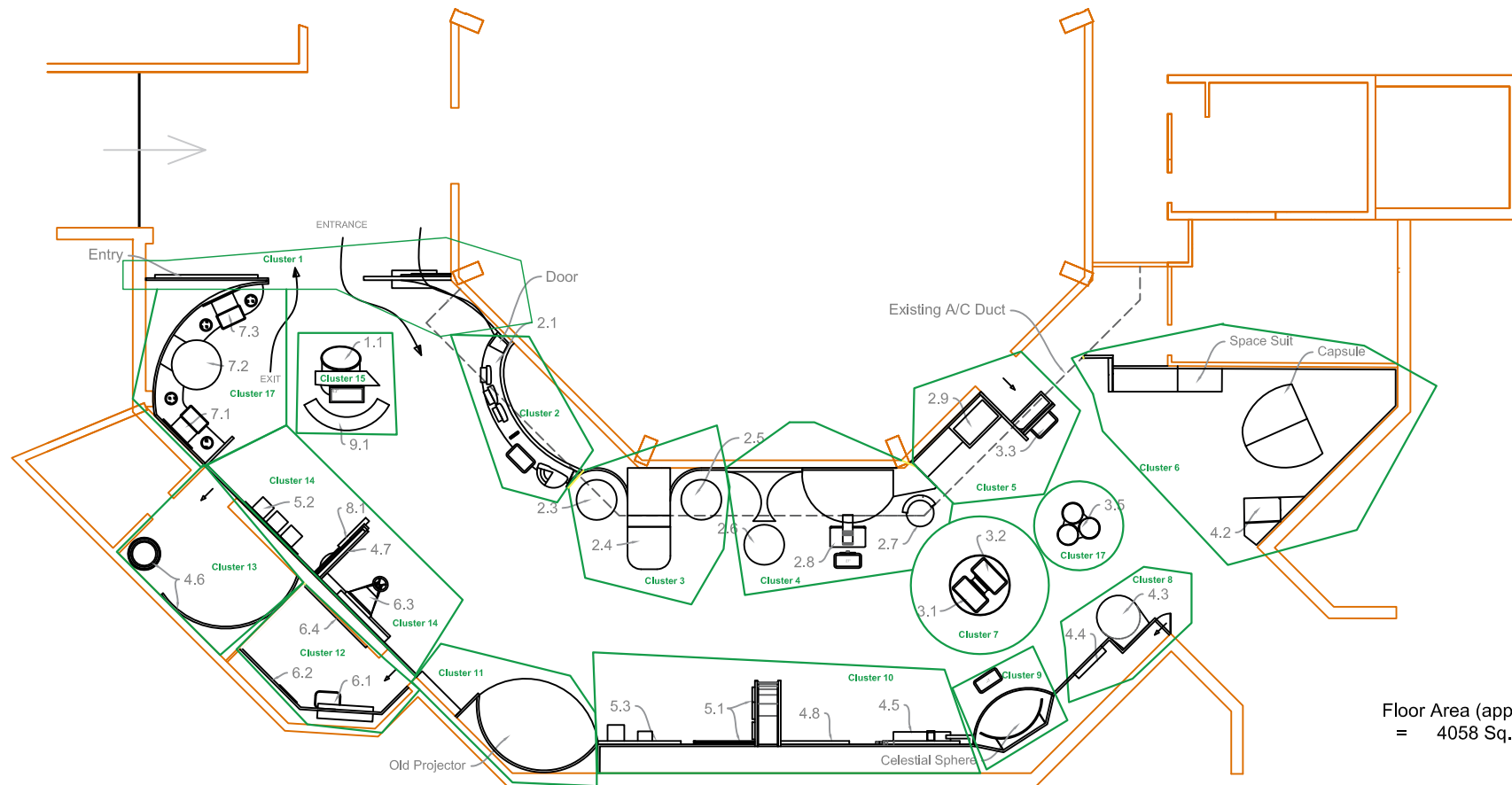
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Place:

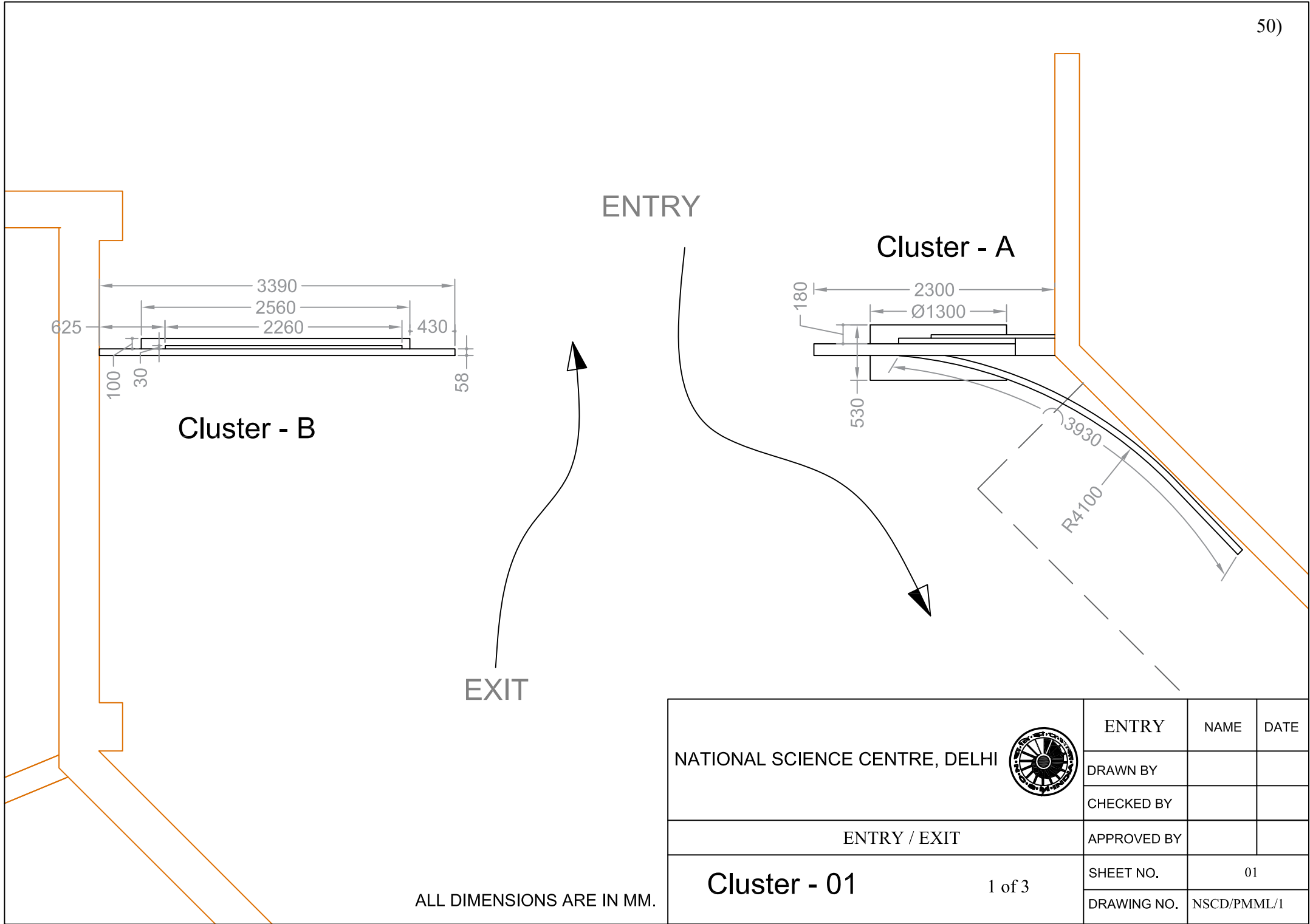
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ANNEXURE – L

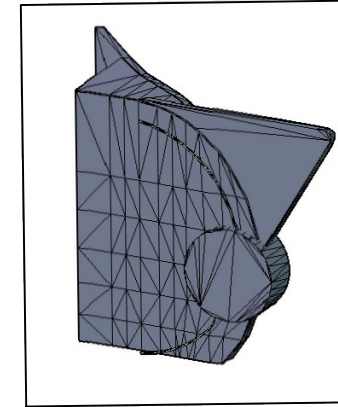
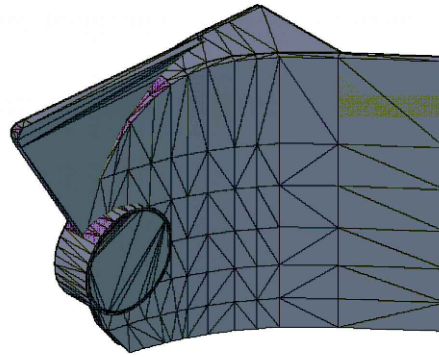
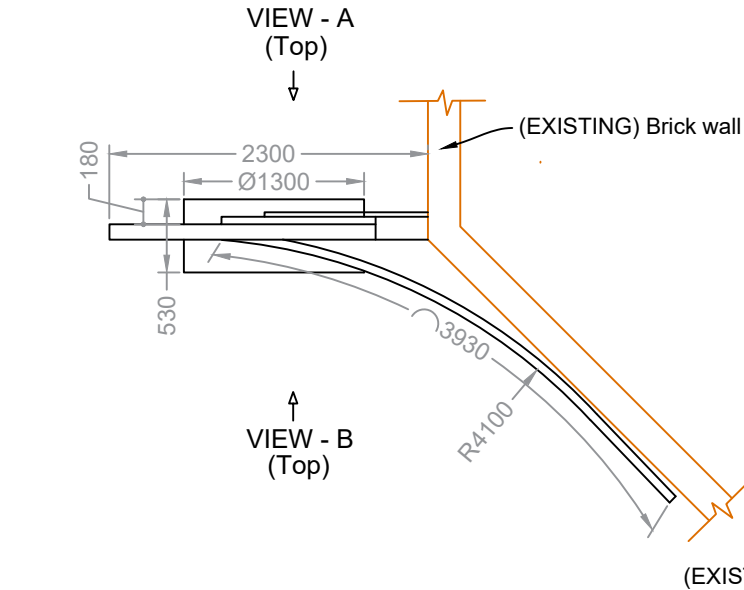
DRAWINGS (Layout drawings of the exhibition area with all clusters)



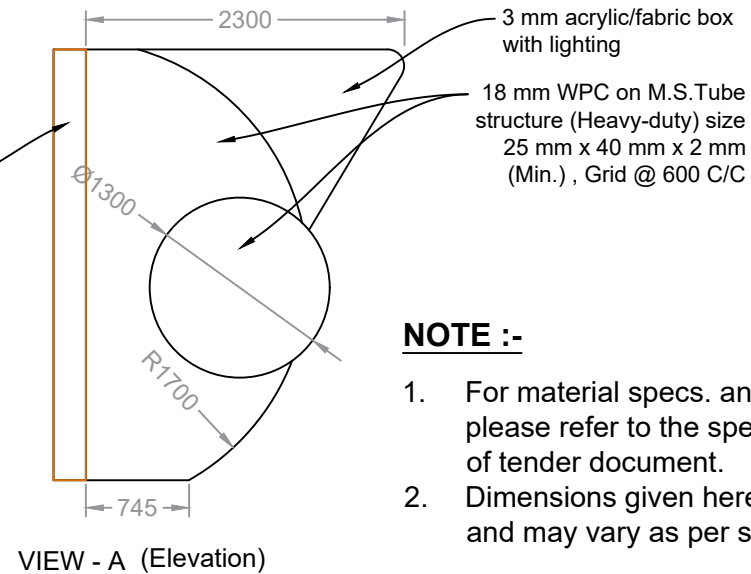
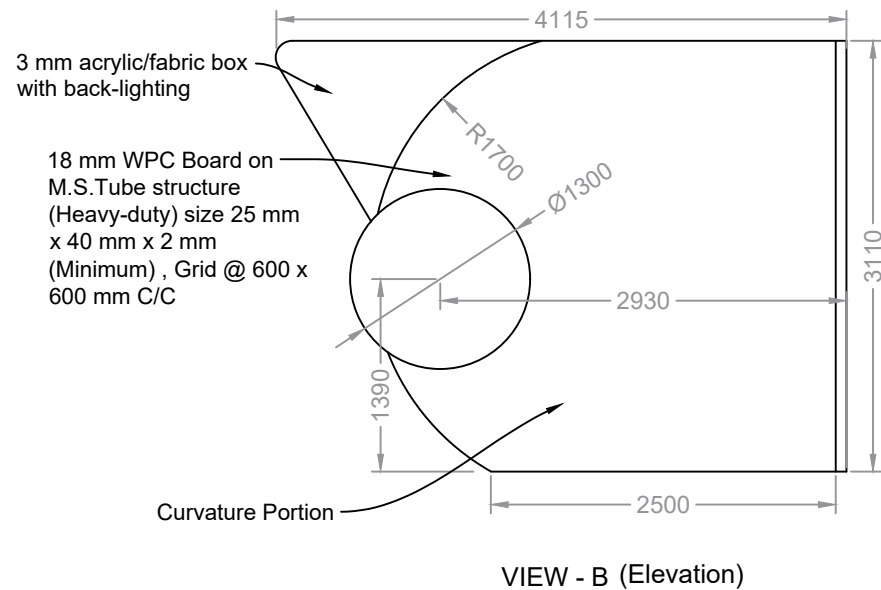
Floor Area (approx.) = 377 Sqm.
= 4058 Sq.ft.



NATIONAL SCIENCE CENTRE, DELHI 	ENTRY	NAME	DATE
	DRAWN BY		
	CHECKED BY		
ENTRY / EXIT	APPROVED BY		
Cluster - 01	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/1	



Indicative Images

**NOTE :-**

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.

NATIONAL SCIENCE CENTRE, DELHI



NAME DATE

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APPROVED BY

Cluster - 01(A) 2 of 3

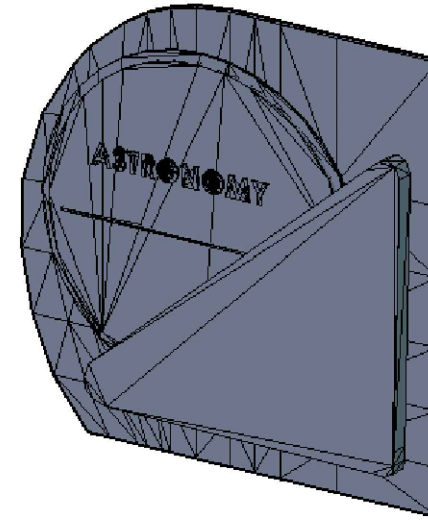
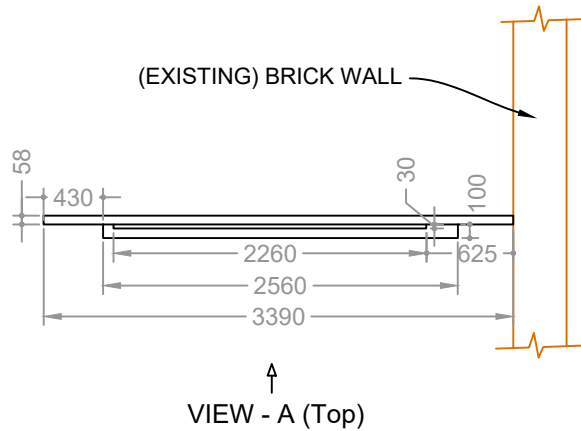
SHEET NO.

01

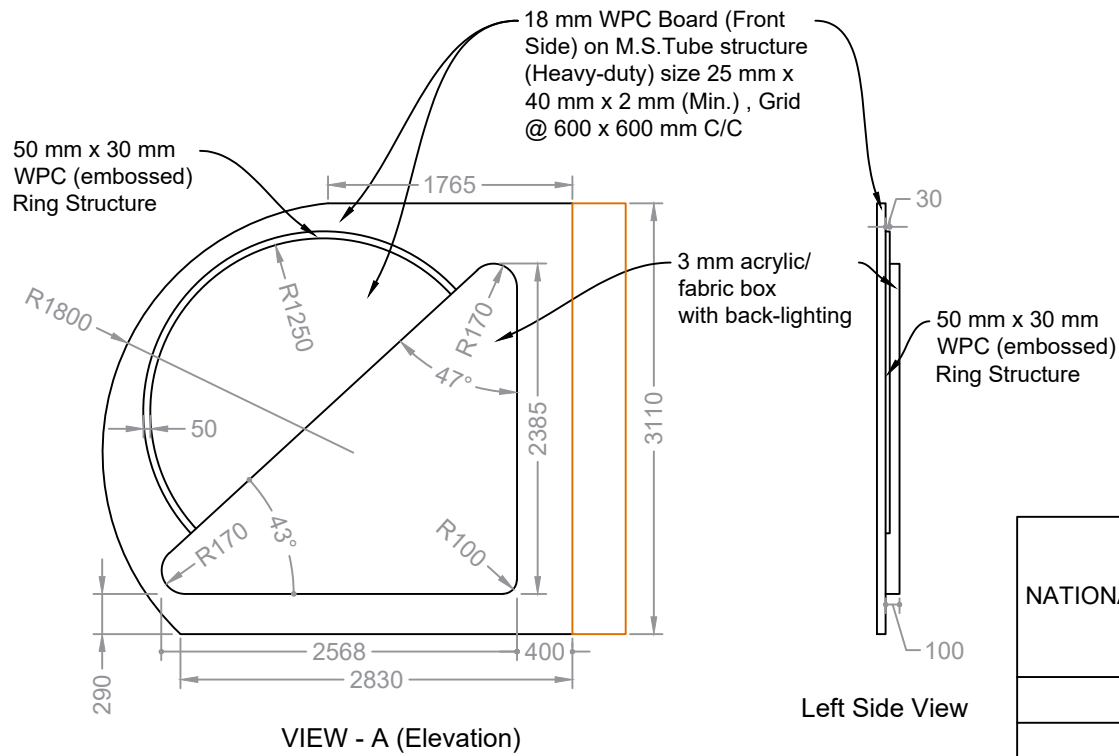
DRAWING NO.

NSCD / PMML / 1


ALL DIMENSIONS ARE IN MM.



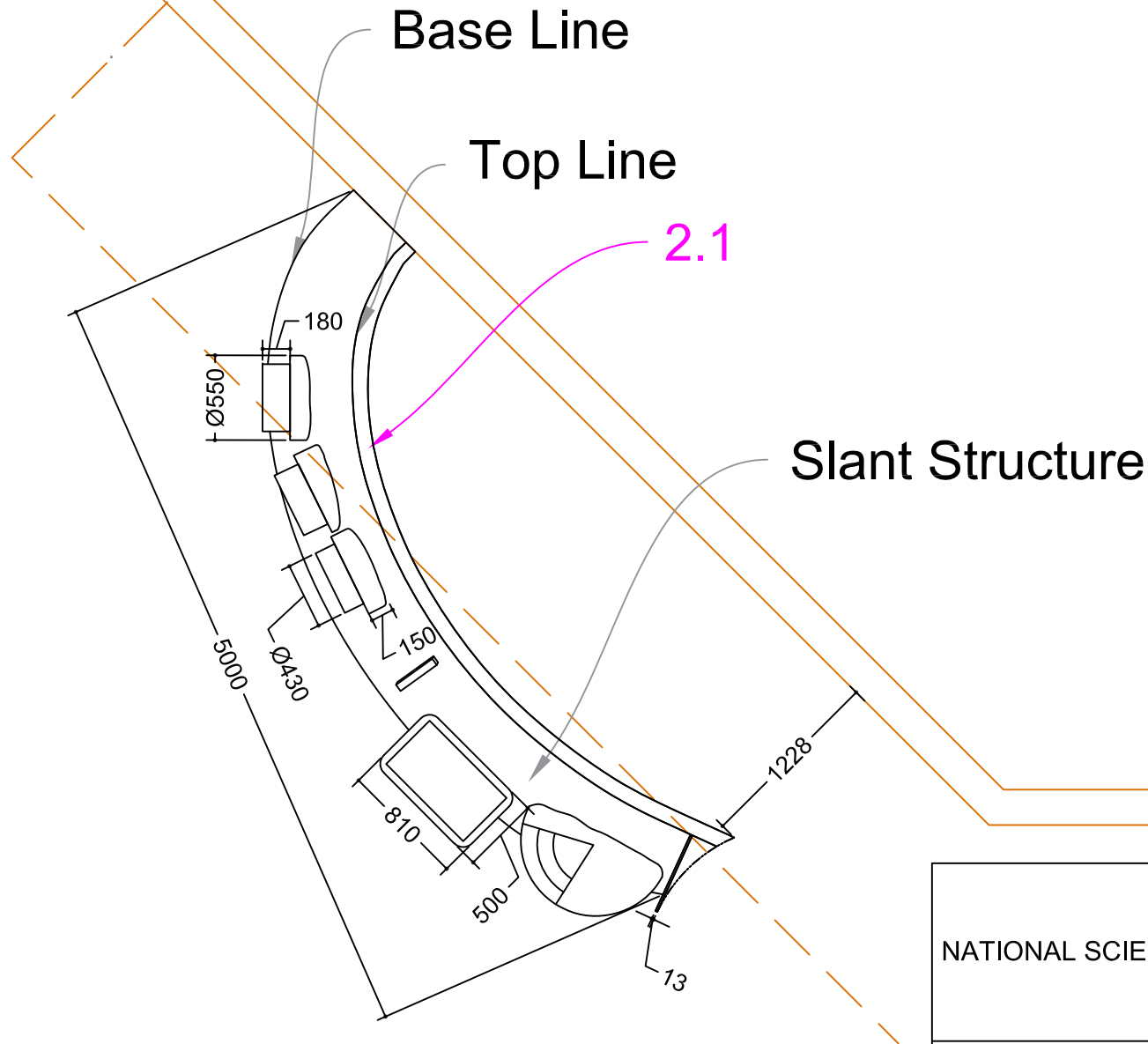
Indicative Image

**NOTE :-**

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.


NATIONAL SCIENCE CENTRE, DELHI		NAME	DATE
		DRAWN BY	
ENTRY / EXIT		CHECKED BY	
		APPROVED BY	
Cluster - 01(B) 3 of 3		SHEET NO.	01
		DRAWING NO.	NSCD/PMML/1

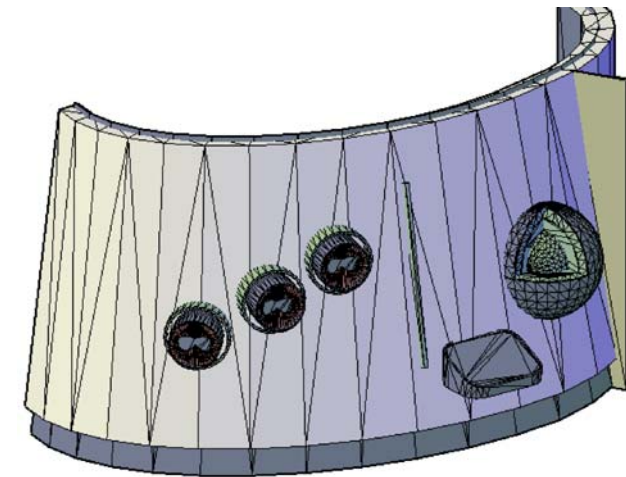
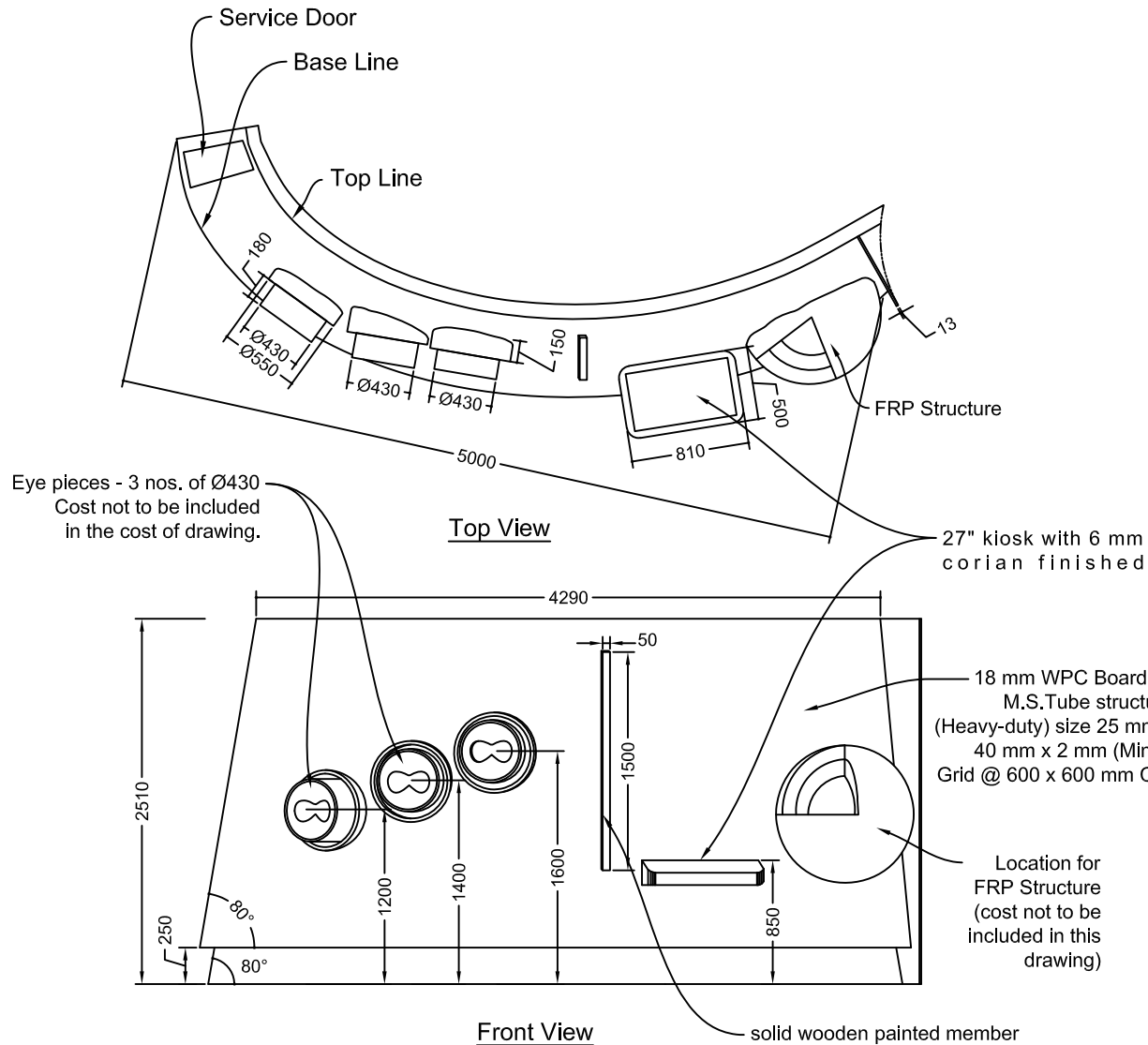
ALL DIMENSIONS ARE IN MM.

**NOTE :-**

1. For material specs. and finishes, please refer to specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. FRP structure, Model etc must be quoted in annexure H.
4. Equipment must be quoted in annexure H.

ALL DIMENSIONS ARE IN MM.


NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
Our Star – the Sun (A cluster of 3 components)	APPROVED BY		
Cluster - 02 1 of 2	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/2	

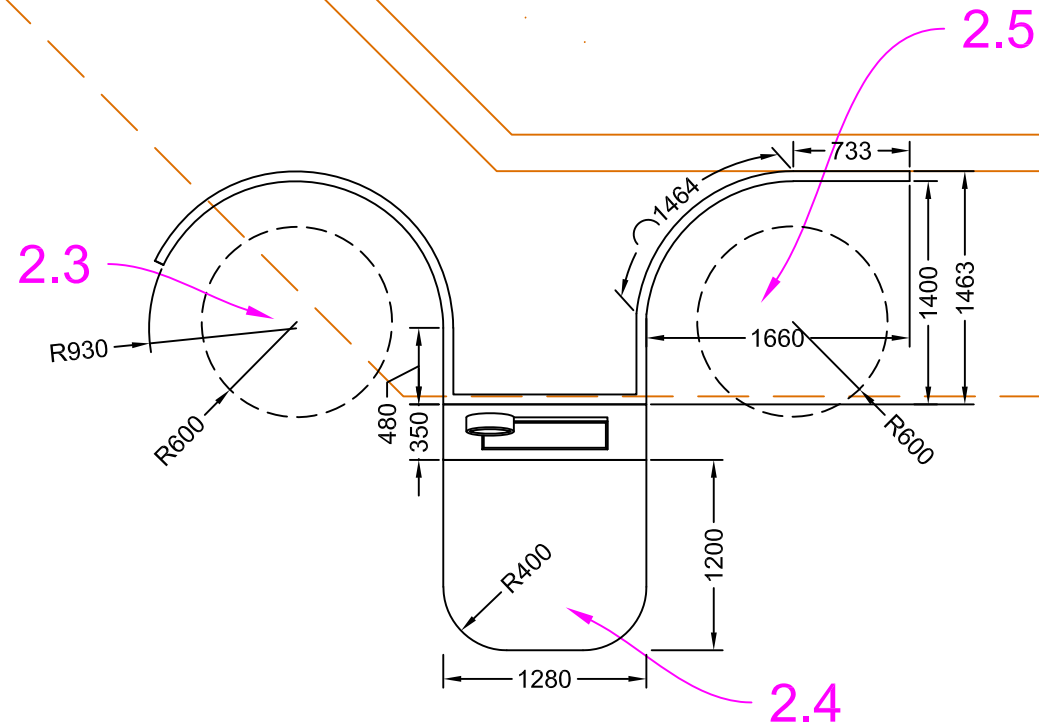


NOTE :-


1. For material specs. and finishes, please refer to specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. FRP structure, Model etc must be quoted in annexure H.
4. Equipment must be quoted in annexure H.

ALL DIMENSIONS ARE IN MM.

NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
Our Star – the Sun (A cluster of 3 components)	APPROVED BY		
Cluster - 02 2 of 2	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/2	

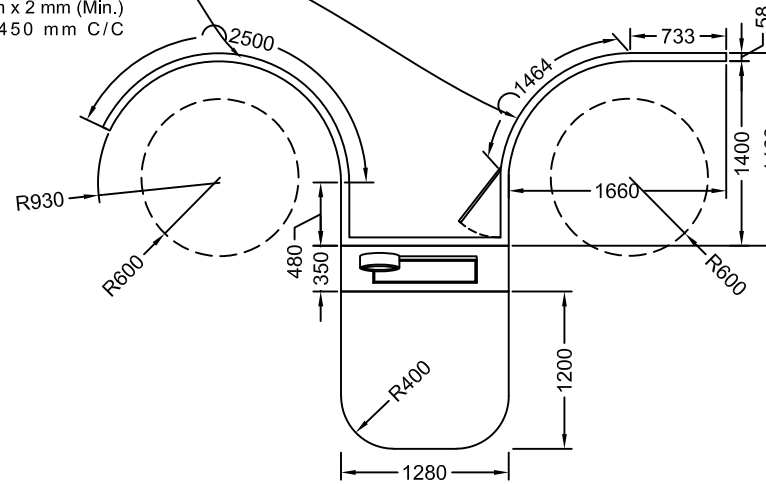
**NOTE:-**

1. For material specs and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.

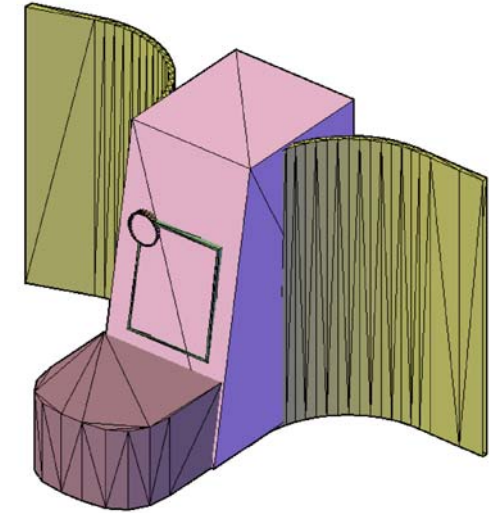
NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
	APPROVED BY		
ALL DIMENSIONS ARE IN MM.	SHEET NO.	01	
Cluster - 03 (1 of 2)	DRAWING NO.	NSCD/DIG/3	

(Exhibit no. - 2.3,
2.4 & 2.5)

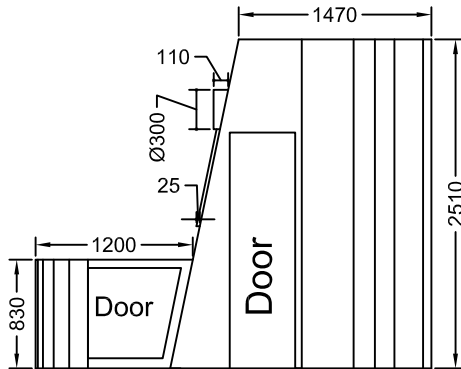
12 mm flexi. plywood with 6mm
WPC Board (top finished) on
M.S.Tube structure (Heavy-duty)
size 25 mm x 40 mm x 2 mm (Min.)
, Grid @ 450 x 450 mm C/C



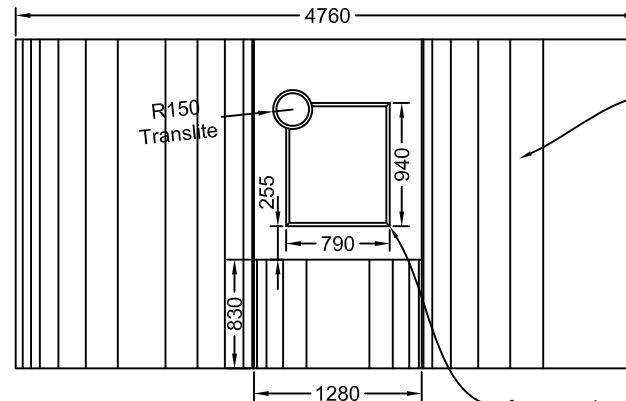
Plan View



Indicative Image



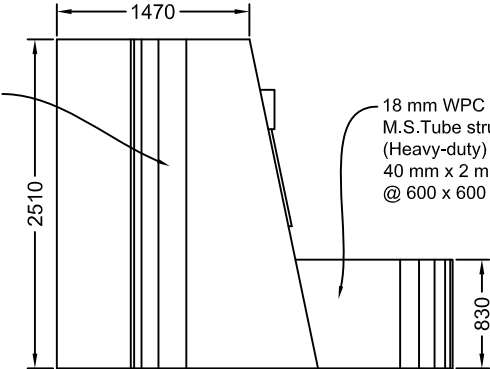
Right Side View



Elevation View

frame made of WPC, 25
mm x 25 mm embossed

12 mm flexi. plywood with
6mm WPC Board (top
finished) on M.S.Tube
structure (Heavy-duty)
size 25 mm x 40 mm x 2
mm (Min.) , Grid @ 450 x
4 5 0 m m C / C



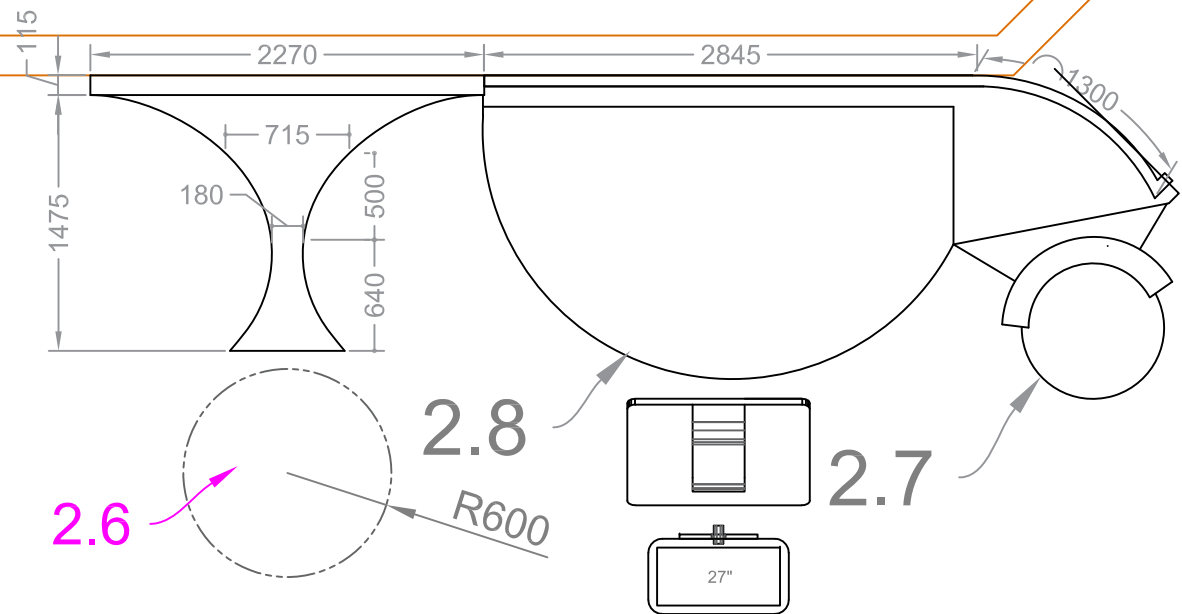
Left Side View

18 mm WPC Board on
M.S.Tube structure
(Heavy-duty) size 25 mm x
40 mm x 2 mm (Min.) , Grid
@ 600 x 600 mm C/C

NOTE:-


1. For material specs and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.

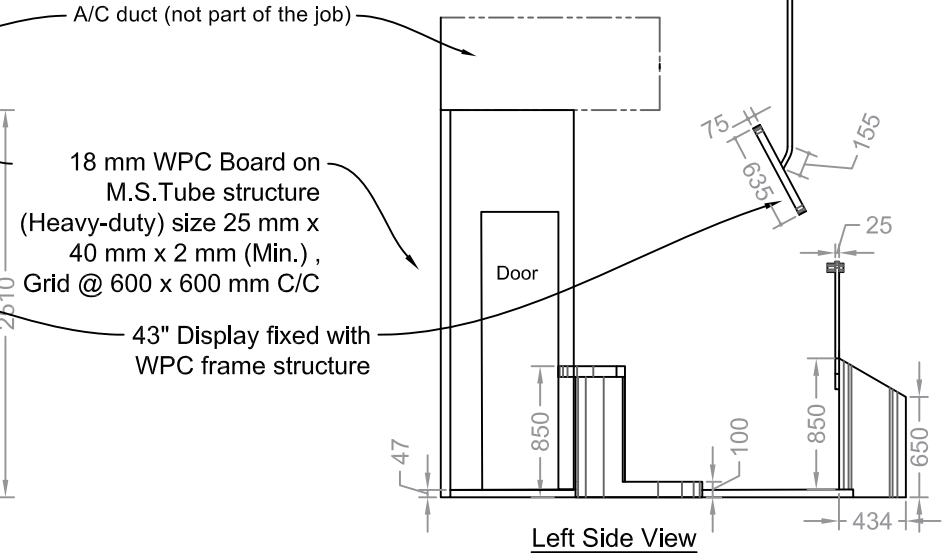
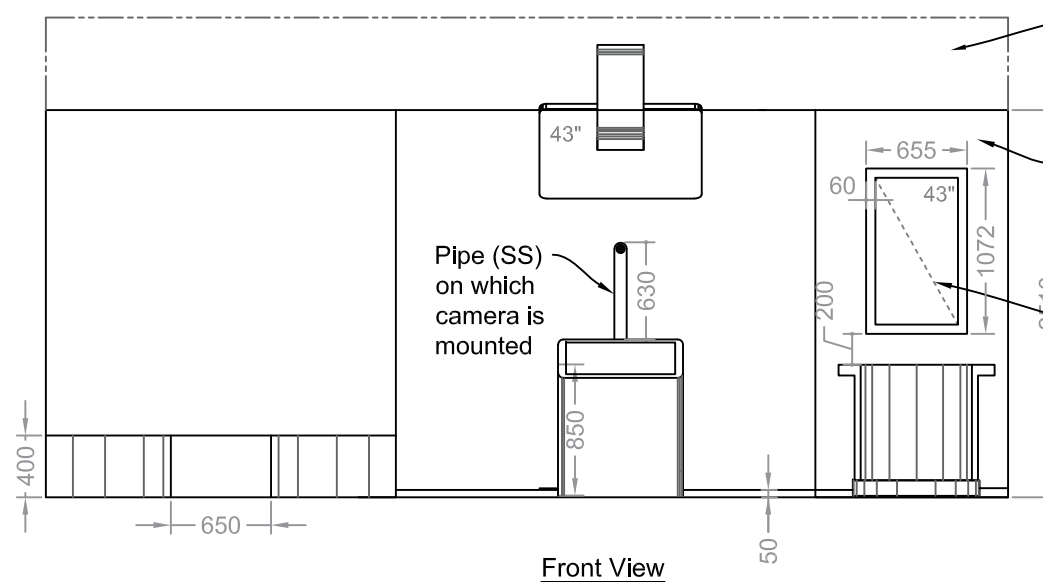
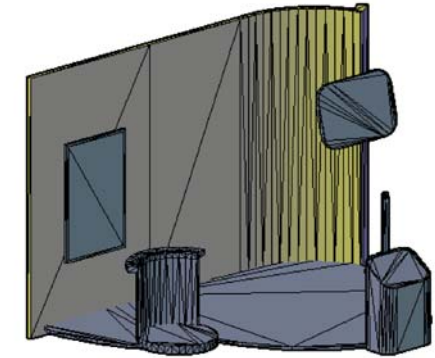
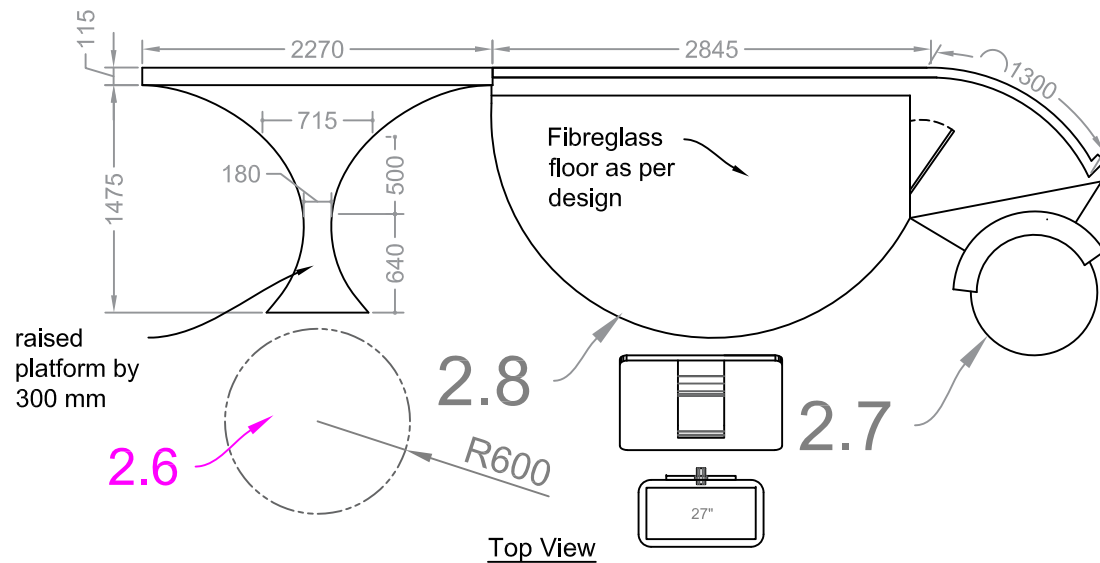
NATIONAL SCIENCE CENTRE, DELHI		NAME	DATE
		DRAWN BY	
ALL DIMENSIONS ARE IN MM.		CHECKED BY	
		APPROVED BY	
Cluster - 03 (2 of 2)		SHEET NO.	01
		DRAWING NO.	NSCD/DIG/3



NOTE :-

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.
3. FRP structure, Model must be quoted in Annexure H
4. Equipment must be quoted in Annexure H

NATIONAL SCIENCE CENTRE, DELHI			NAME	DATE
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ALL DIMENSIONS ARE IN MM.		CHECKED BY		
		APPROVED BY		
		SHEET NO.	01	
		DRAWING NO.	NSCD/PMML/4	

**NOTE :-**

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.
3. FRP structure, Model must be quoted in Annexure H
4. Equipment must be quoted in Annexure H

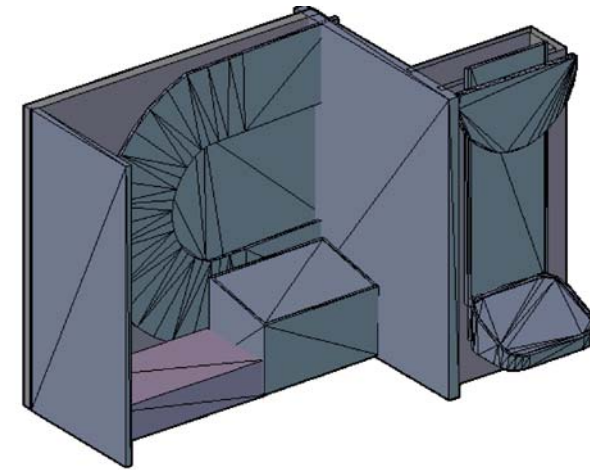
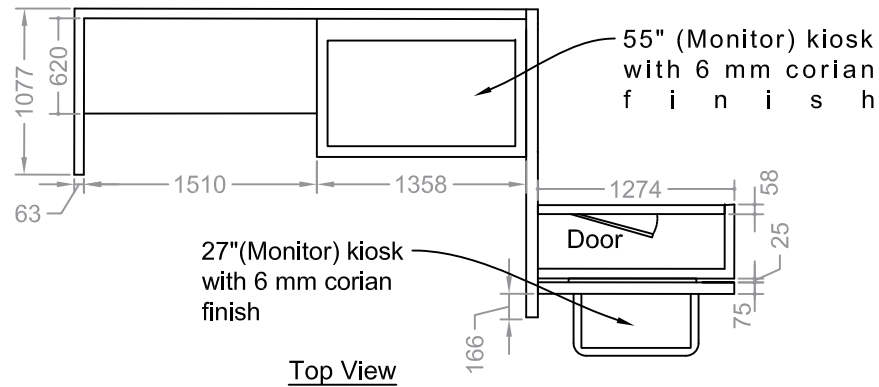
NATIONAL SCIENCE CENTRE, DELHI



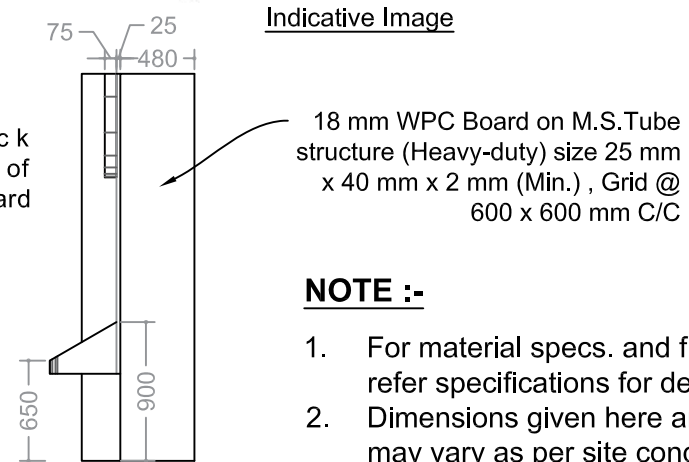
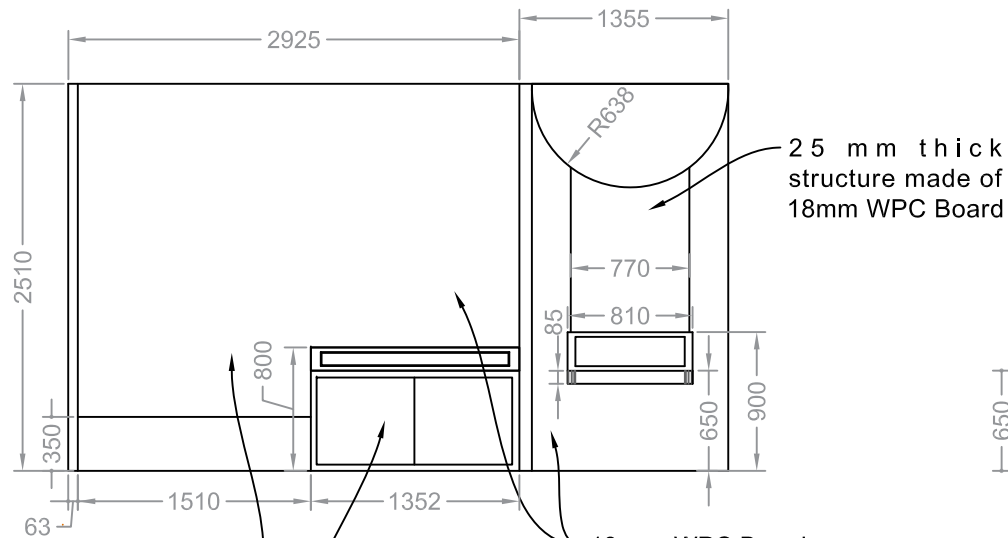
	NAME	DATE
DRAWN BY		
CHECKED BY		
APPROVED BY		
SHEET NO.	01	
DRAWING NO.	NSCD/PMML/4	

ALL DIMENSIONS ARE IN MM.

Cluster - 04 - (2 of 2)




(Exhibit no. - 2.9 & 3.3)

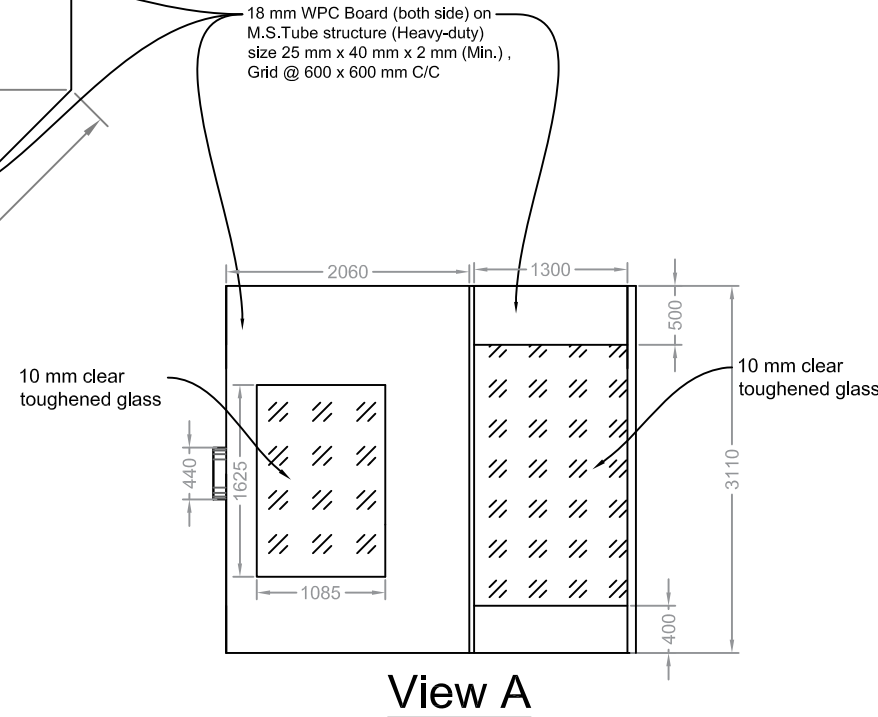
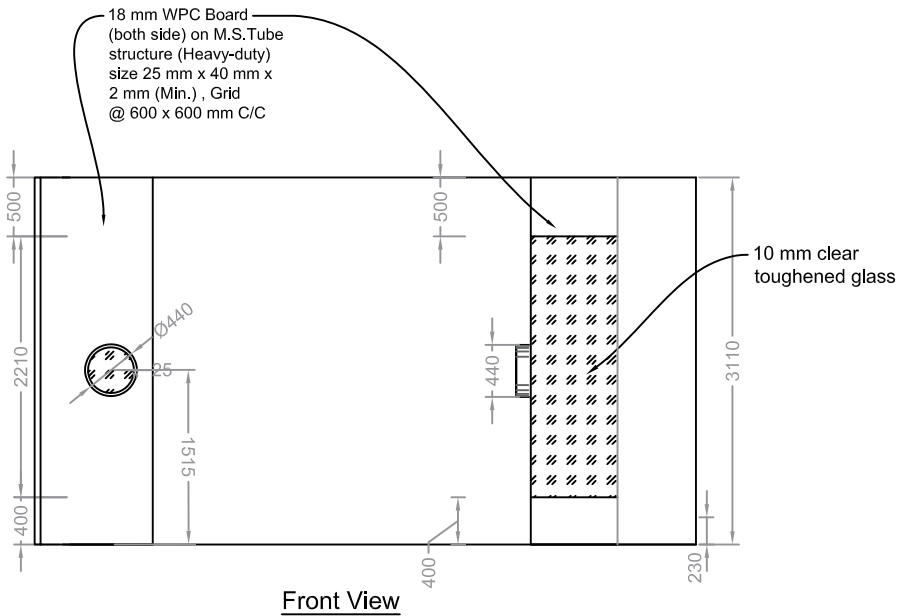
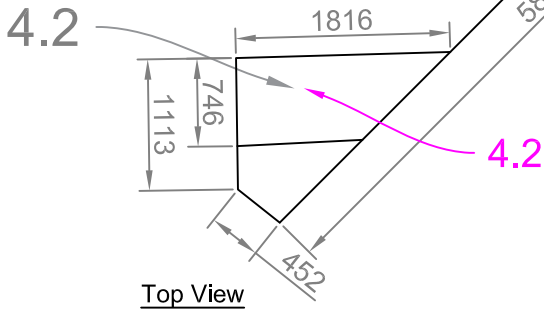
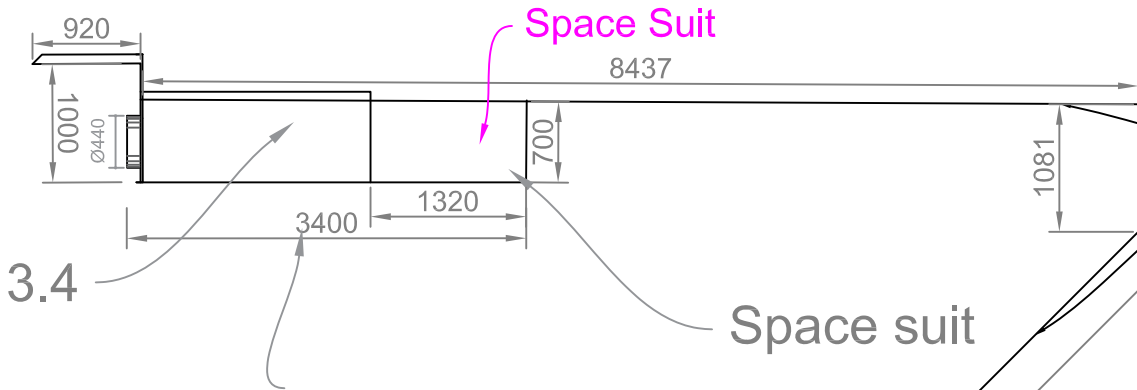


Indicative Image

NOTE :-


1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. Equipment must be quoted in Annexure H.

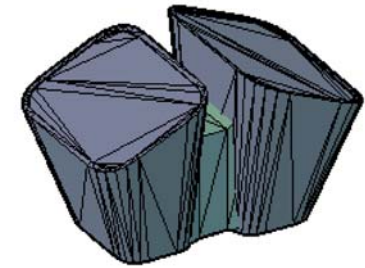
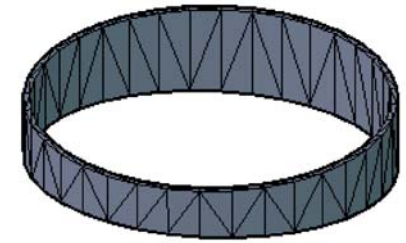
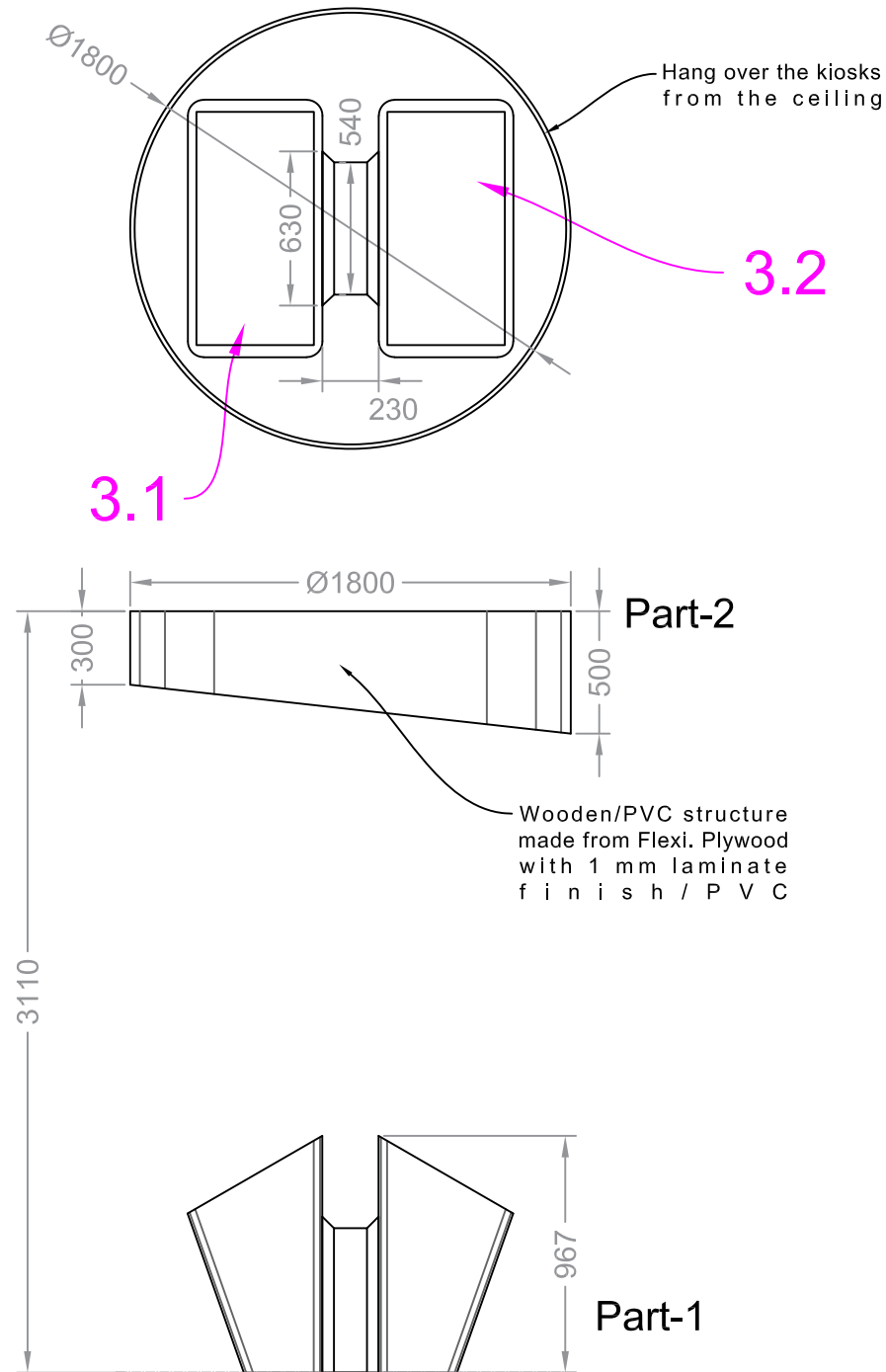
NATIONAL SCIENCE CENTRE, DELHI			NAME	DATE
		DRAWN BY		
		CHECKED BY		
ALL DIMENSIONS ARE IN MM.		APPROVED BY		
Cluster - 05		SHEET NO.	01	
		DRAWING NO.	NSCD/PMML/5	



NOTE :-


1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.

NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
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ALL DIMENSIONS ARE IN MM.	CHECKED BY		
	APPROVED BY		
Cluster - 06	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/6	



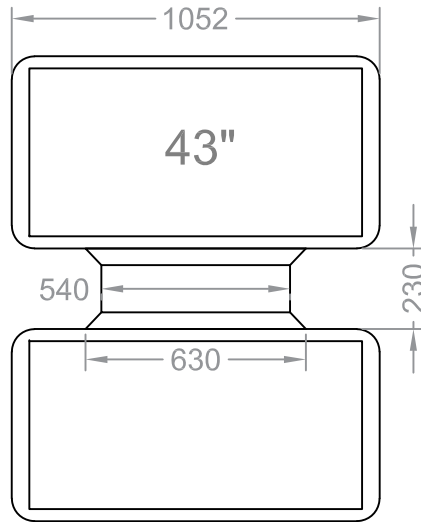
NOTE :-

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.
3. Equipment must be quoted in Annexure H.

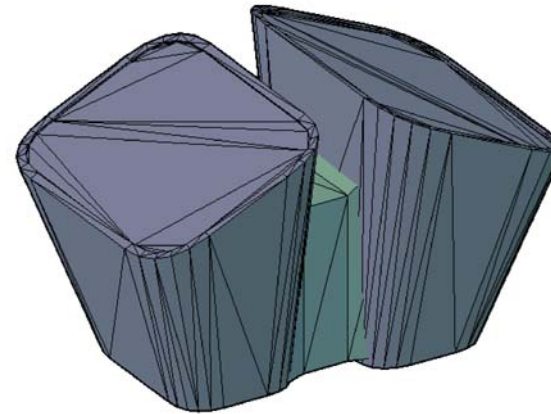
NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
ALL DIMENSIONS ARE IN MM.	APPROVED BY		
Cluster - 07 - (1 of 2)	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/7	

Cluster - 07

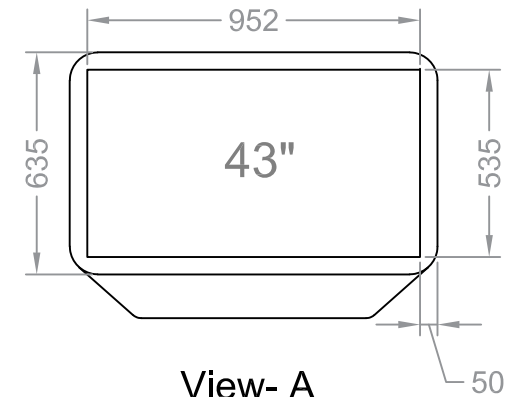
(Exhibit no. - 3.1 & 3.2)



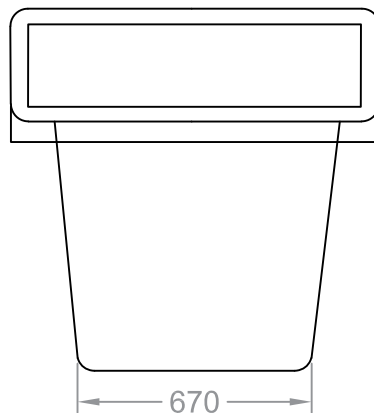
Top View



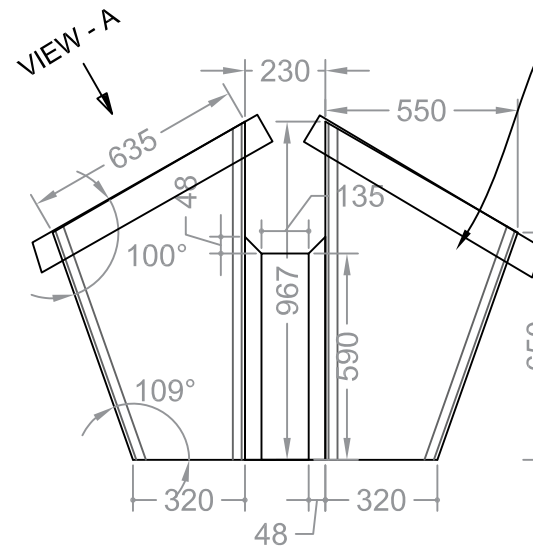
Indicative Image



View- A



Front View




Right Side View

12 mm Flexi. Plywood with
1 mm laminate finished on
teakwood batten (25 mm x
50 mm) structure.

NOTE :-

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.
3. Equipment must be quoted in Annexure H.

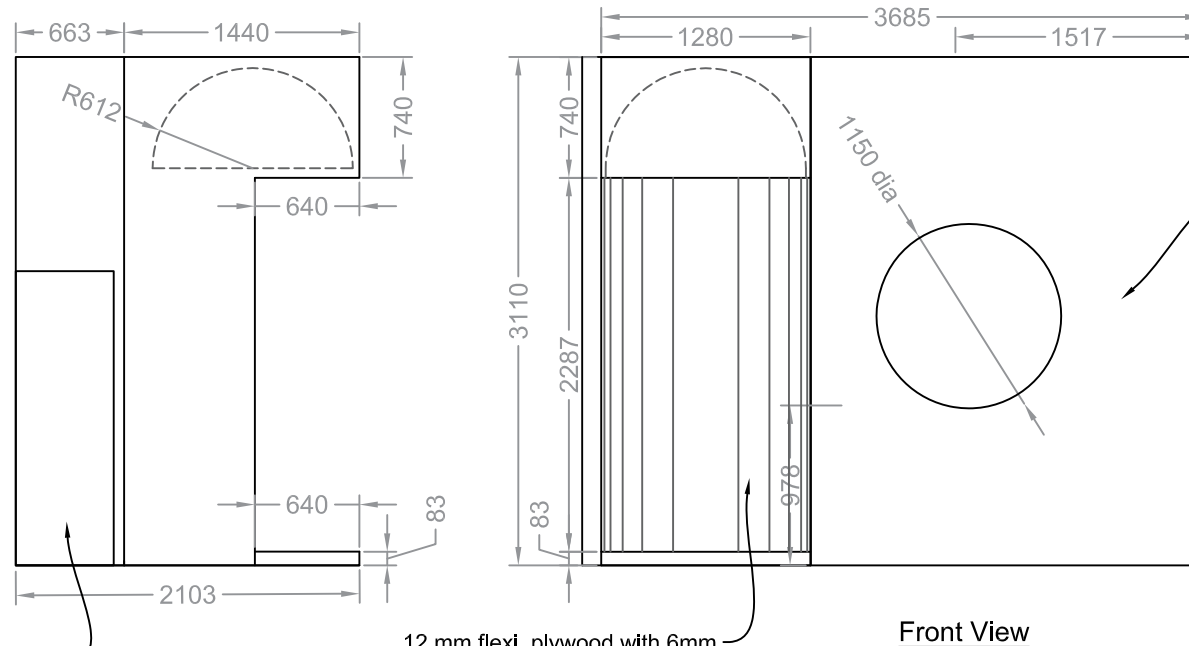
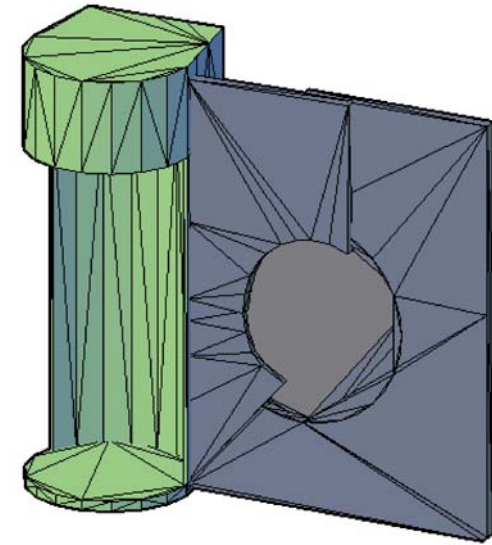
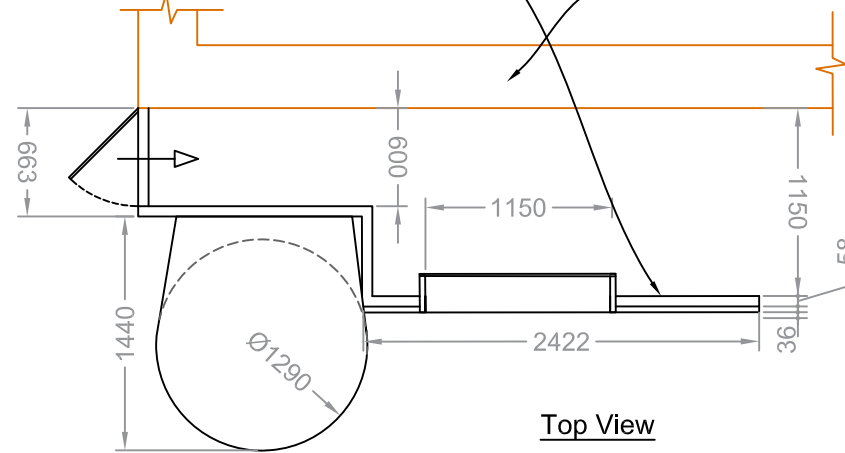
Details of Part-1

NATIONAL SCIENCE CENTRE, DELHI		NAME	DATE
		DRAWN BY	Muktada
ALL DIMENSIONS ARE IN MM.		CHECKED BY	Rafi (CR)
		APPROVED BY	
Cluster - 07 - (2 of 2)		SHEET NO.	01
		DRAWING NO.	NSCD/PMML/7

18 mm WPC Board on M.S.Tube structure
(Heavy-duty) size 25 mm x 40 mm x 2 mm (Min.) ,
Grid @ 600 x 600 mm C/C

(EXISTING) BRICK WALL

(Exhibit no. - 4.3 & 4.4)



36 mm WPC Board on
M.S.Tube structure
(Heavy-duty) size 25 mm
x 40 mm x 2 mm (Min.) ,
Grid @ 600 x 600 mm C/C

NOTE :-

1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.

Door for
Maintenance

Left Side View

12 mm flexi. plywood with 6mm
WPC Board (top finished) on
M.S.Tube structure
(Heavy-duty) size 25 mm x 40
mm x 2 mm (Min.) , Grid @ 450
x 450 mm C/C

Front View

NATIONAL SCIENCE CENTRE, DELHI



NAME DATE

DRAWN BY

CHECKED BY

ALL DIMENSIONS ARE IN MM.

APPROVED BY

Cluster - 08

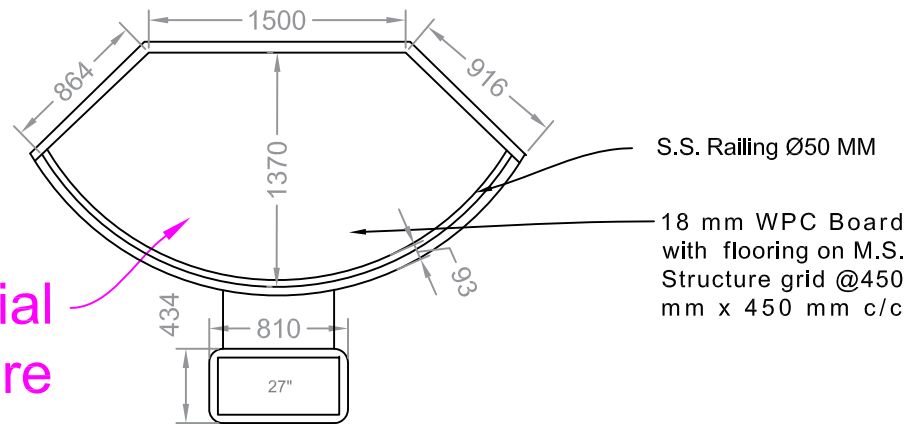
SHEET NO.

01

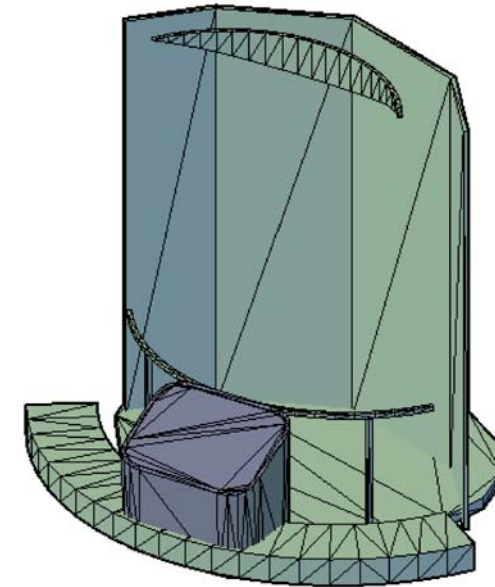
DRAWING NO.

NSCD/PMML/8

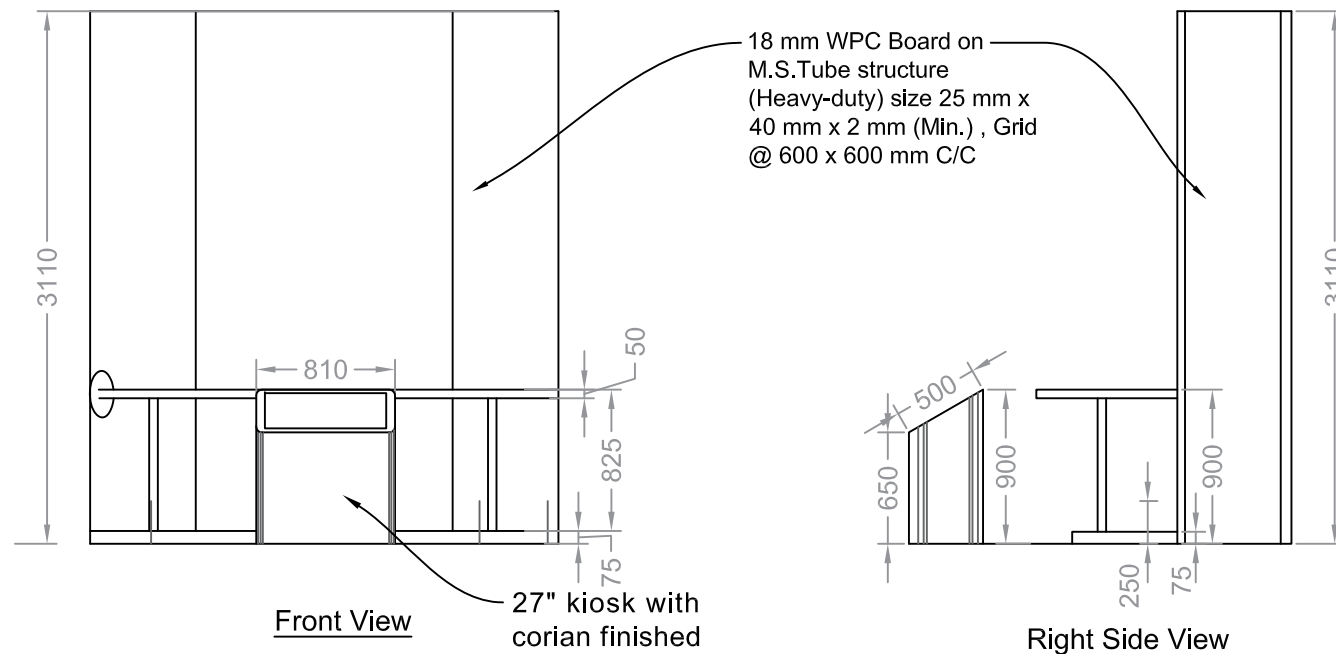
Celestial
Sphere



Top View



Indicative Image




Front View

Right Side View

NOTE :-

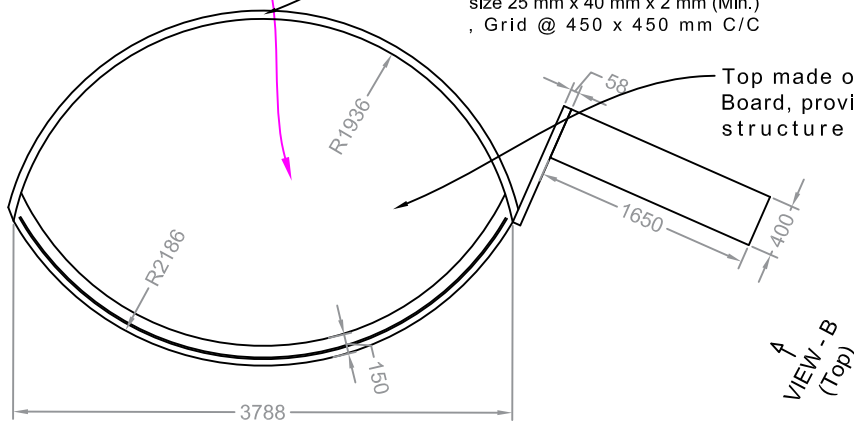
1. For material specs. and finishes, please refer to the specification sheet of tender document.
2. Dimensions given here are tentative and may vary as per site condition.
3. All visible edges to be covered with edge band.
4. Equipment must be quoted in Annexure H

NATIONAL SCIENCE CENTRE, DELHI 	NAME		DATE
	DRAWN BY		
	CHECKED BY		
	APPROVED BY		
ALL DIMENSIONS ARE IN MM.			
Cluster - 09		SHEET NO.	01
		DRAWING NO.	NSCD/PMML/9

Old Projector

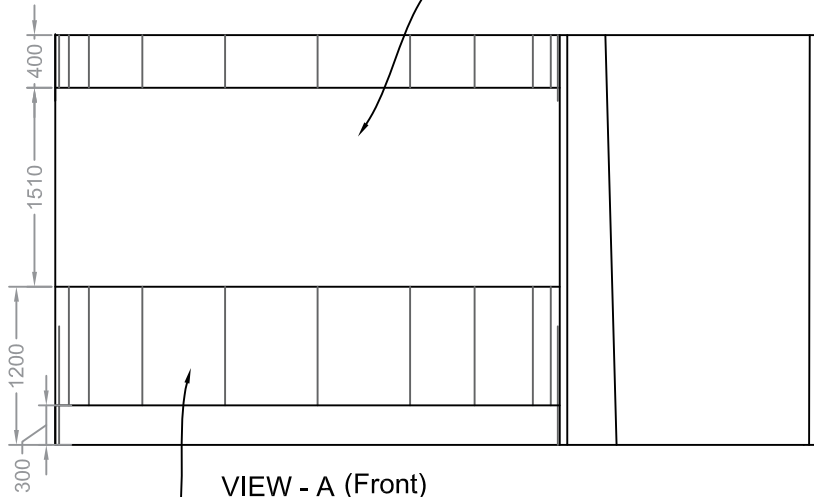
12 mm flexi. plywood with 6mm WPC Board (top finished) on M.S.Tube structure (Heavy-duty) size 25 mm x 40 mm x 2 mm (Min.) , Grid @ 450 x 450 mm C/C

Top made of 18mm WPC Board, provide M.S. Tube structure if required



VIEW - A (Top)

Open Cabinet

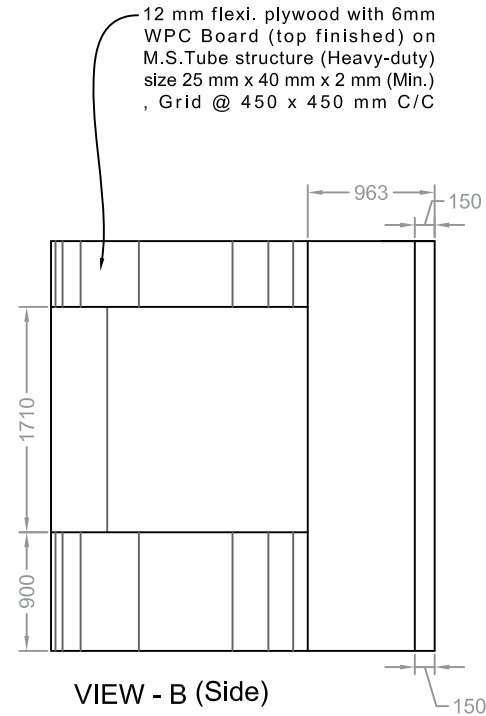


VIEW - A (Front)

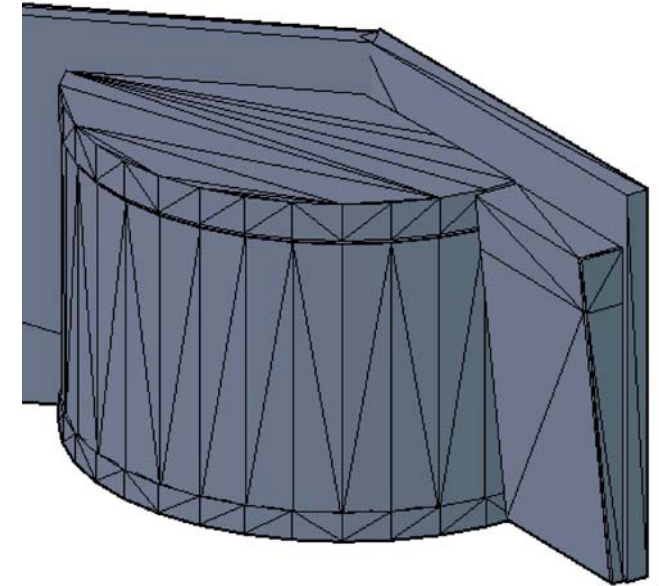
Frameless glass railing in segments

NOTE :-

1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.



VIEW - B (Side)



Indicative Image

NATIONAL SCIENCE CENTRE, DELHI



NAME DATE

DRAWN BY

CHECKED BY

ALL DIMENSIONS ARE IN MM.

APPROVED BY

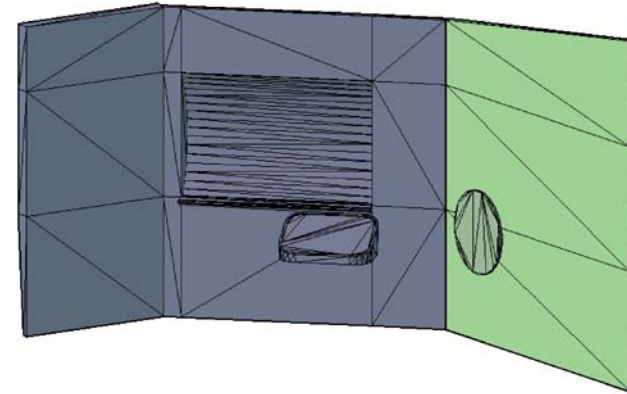
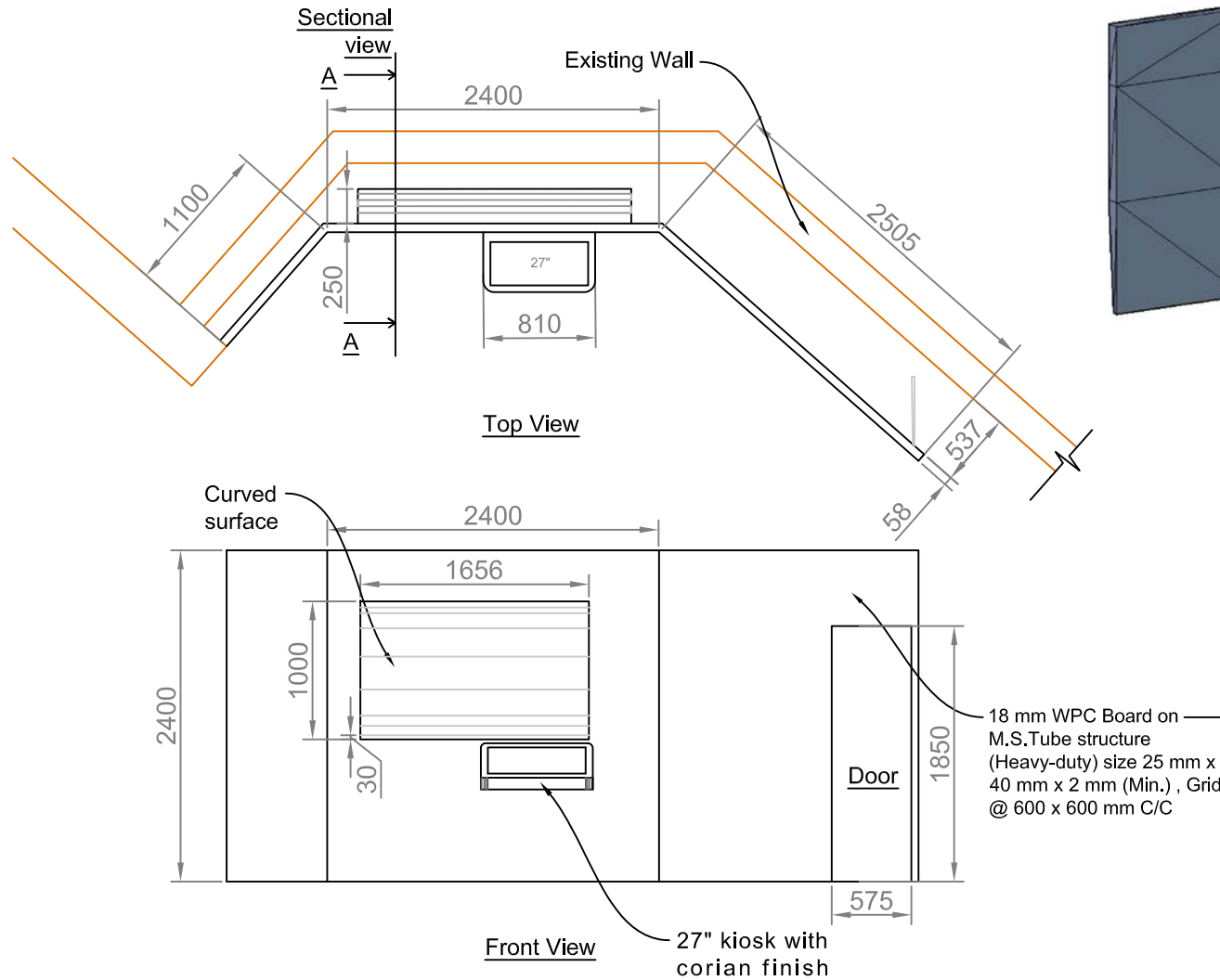
Cluster - 11

SHEET NO.

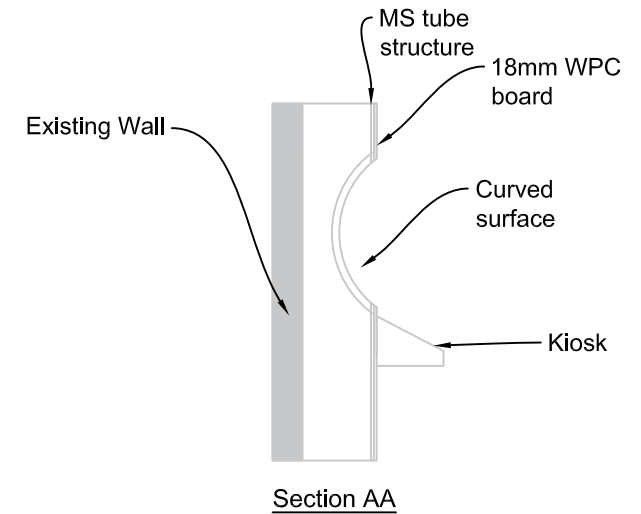
01

DRAWING NO.


NSCD/PMML/11



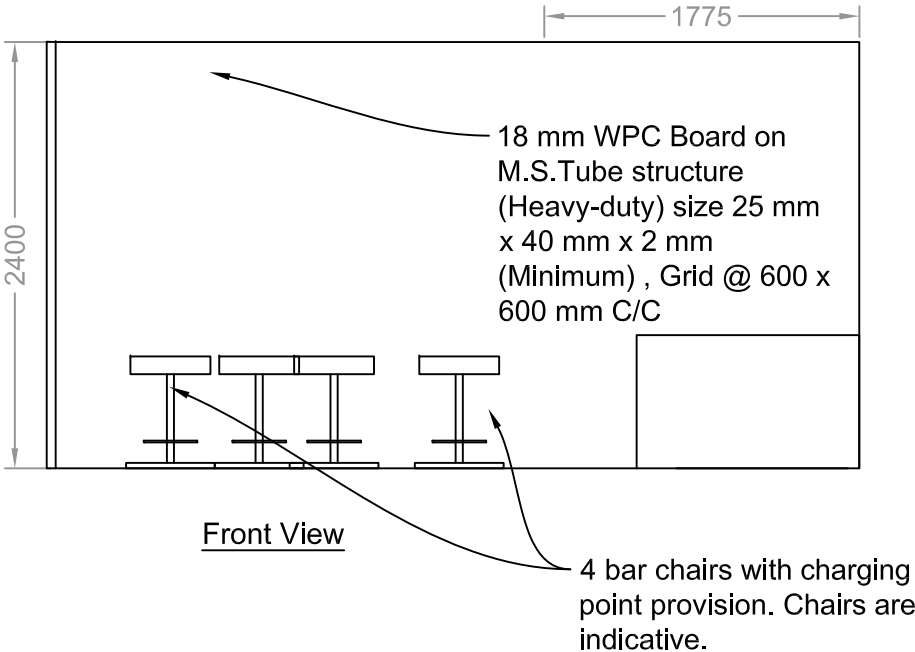
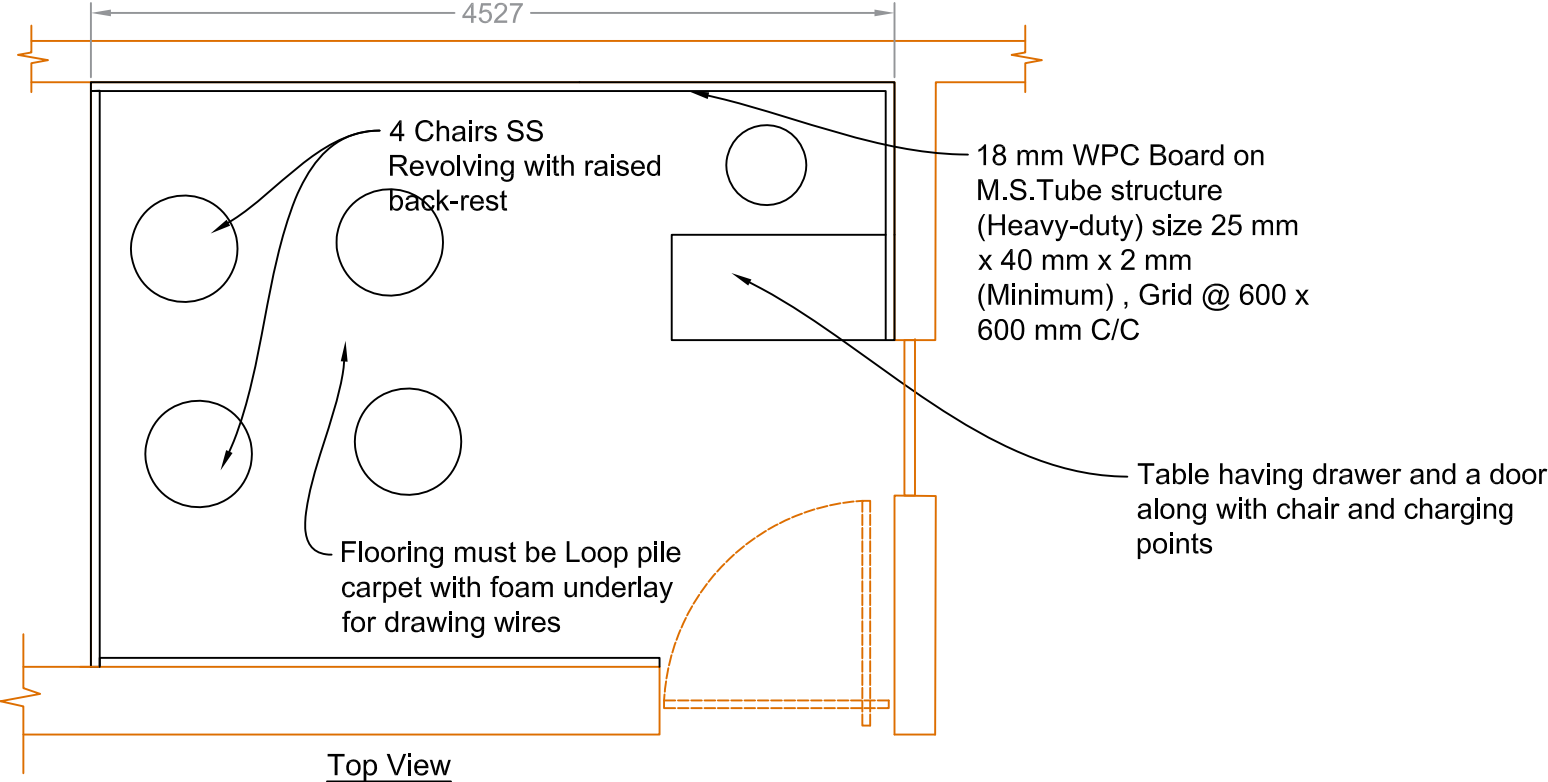
Indicative Image

**NOTE :-**

1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.
4. Equipment must be quoted in Annexure H.
5. Sound proofing is required.

NATIONAL SCIENCE CENTRE, DELHI			NAME	DATE
		DRAWN BY		
		CHECKED BY		
ALL DIMENSIONS ARE IN MM.		APPROVED BY		
Cluster - 12		SHEET NO.	01	
		DRAWING NO.	NSCD/PMML/12	


(Exhibit no. - 4.6)



Indicative Image

NOTE :-

- 1. For material specs. and finishes, please refer specifications for details.
- 2. Dimensions given here are tentative and may vary as per site condition.
- 3. All the visible edges must be covered with edge band.
- 4. Sample of chairs is must and approval prior to purchase is required.

NATIONAL SCIENCE CENTRE, DELHI			NAME	DATE
		DRAWN BY	Muktada	
		CHECKED BY	Rafi (CR)	
ALL DIMENSIONS ARE IN MM.		APPROVED BY		
Cluster - 13		SHEET NO.	01	
		DRAWING NO.	NSCD/PMML/13	

[illegible]

Left Side View

- 65" display with 50 mm Bezel and fitting margin (*may vary), fix with hinge open for maintenance

36 mm WPC structure overlapped

Technical drawing of a cabinet with dimensions and annotations. The drawing shows a side view of the cabinet with a door open. Key dimensions include:

- Overall width: 2762
- Overall height: 3110
- Door width: 1779
- Door height: 2574
- Door thickness: 650
- Door handle: Ø830
- Door hinge: R1431
- Door latch: R517
- Door latch height: 85
- Door latch width: 1379
- Door latch height: 182
- Door latch width: 435
- Door latch height: 827
- Door latch width: 1035
- Door latch height: 800
- Door latch width: 2262
- Door latch height: 1540
- Door latch width: 722
- Door latch height: 910
- Door latch width: 60
- Door latch height: 65"

Annotations include:

- "hinge open for maintenance"
- "65"
- "722"
- "1540"
- "2262"
- "910"
- "60"
- "Ø830"
- "R1431"
- "R517"
- "85"
- "1379"
- "182"
- "435"
- "827"
- "1035"
- "800"
- "2574"
- "650"
- "100"
- "3110"
- "2762"
- "1779"

Front View

300x500 pedestal for keeping models

Technical drawing of a rectangular panel with dimensions and labels. The overall width is 2482 and the overall height is 2400. The panel has a base of 1137 and a top section of 1500. The top section contains three circular cutouts with a radius of R531 and a diameter of 1062. The distance between the centers of the cutouts is 1578. The distance from the left edge to the center of the first cutout is 743. The distance from the center of the first cutout to the center of the second cutout is 743. The distance from the center of the second cutout to the center of the third cutout is 743. The distance from the center of the third cutout to the right edge is 63. The panel has a thickness of 38. The bottom section contains three rectangular cutouts with a width of 1062 and a height of 1062. The distance between the centers of the cutouts is 1578. The distance from the left edge to the center of the first cutout is 743. The distance from the center of the first cutout to the center of the second cutout is 743. The distance from the center of the second cutout to the center of the third cutout is 743. The distance from the center of the third cutout to the right edge is 63. The panel has a thickness of 38.

Right Side View

Top View

300x500 pedestal for keeping models

6380

500

2640

150

150

830

1036

155

36

3272

470

130

75

6.3

4.7


8.1

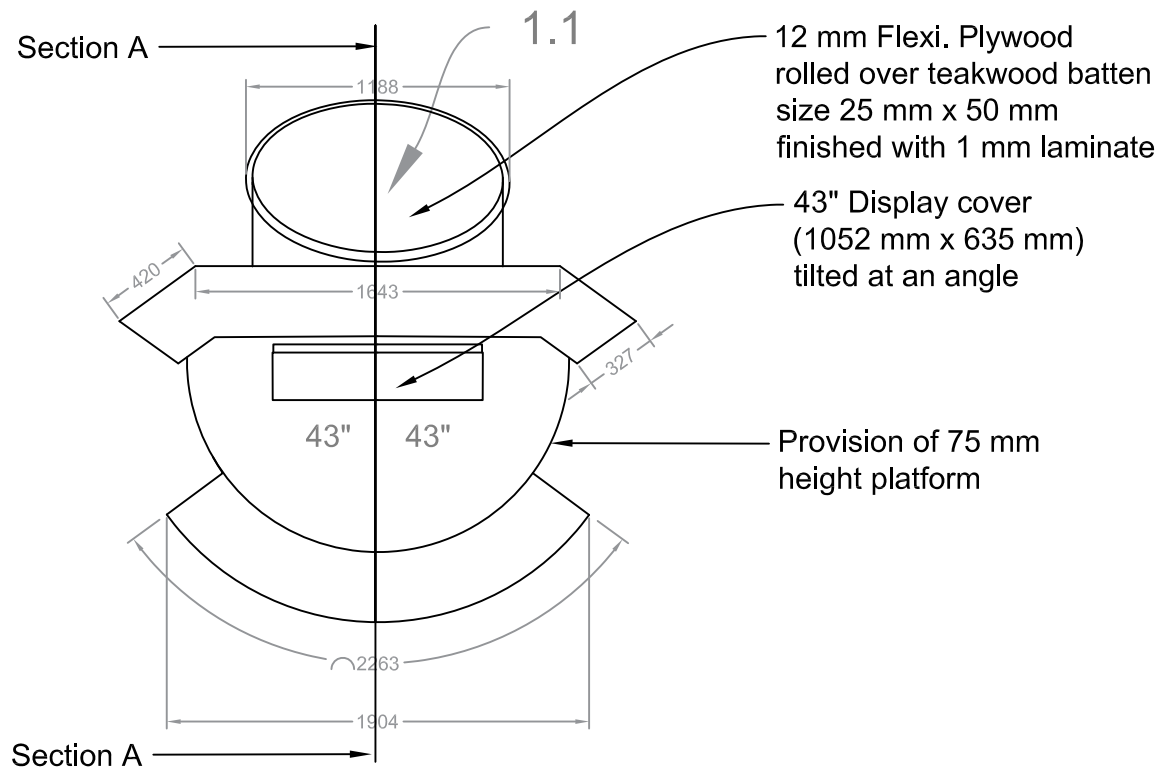
5.2

Top View

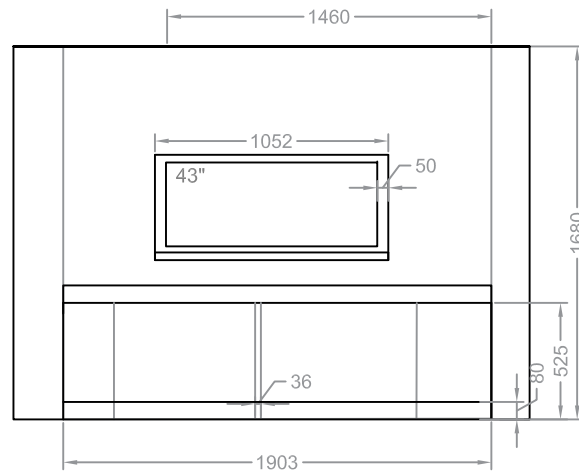
NOTE :-

1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.
4. Equipment must be quoted in Annexure H.

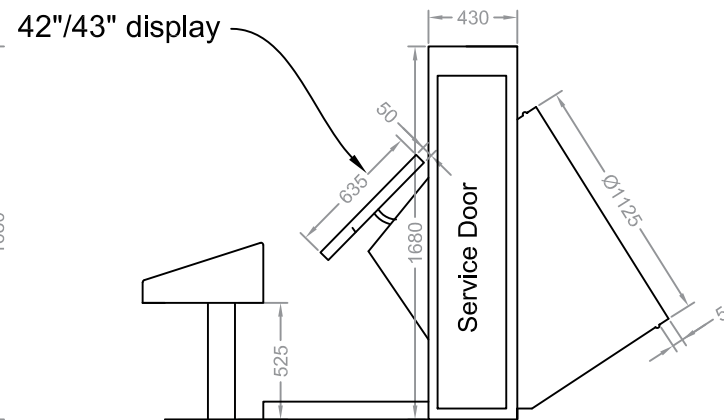
NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
ALL DIMENSIONS ARE IN MM.	APPROVED BY		
Cluster - 14	SHEET NO.	01	
	DRAWING NO.	NSCD/PMML/14	



Top View




Front View



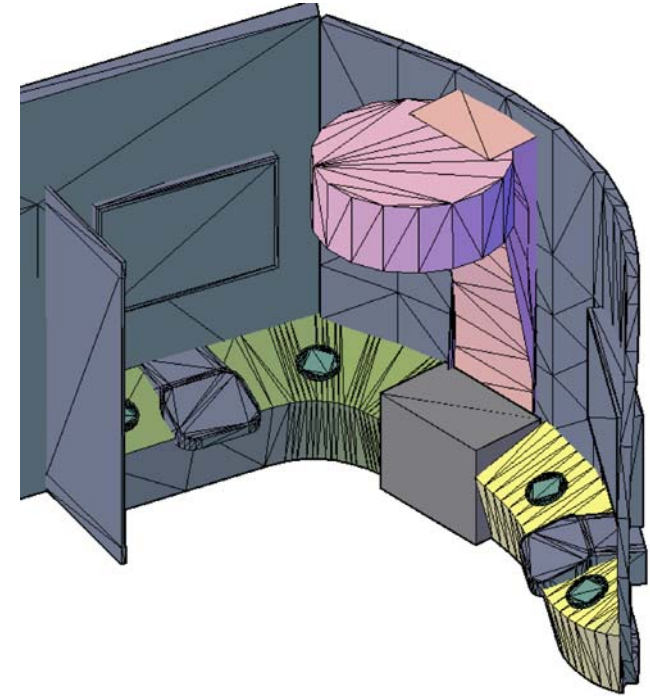
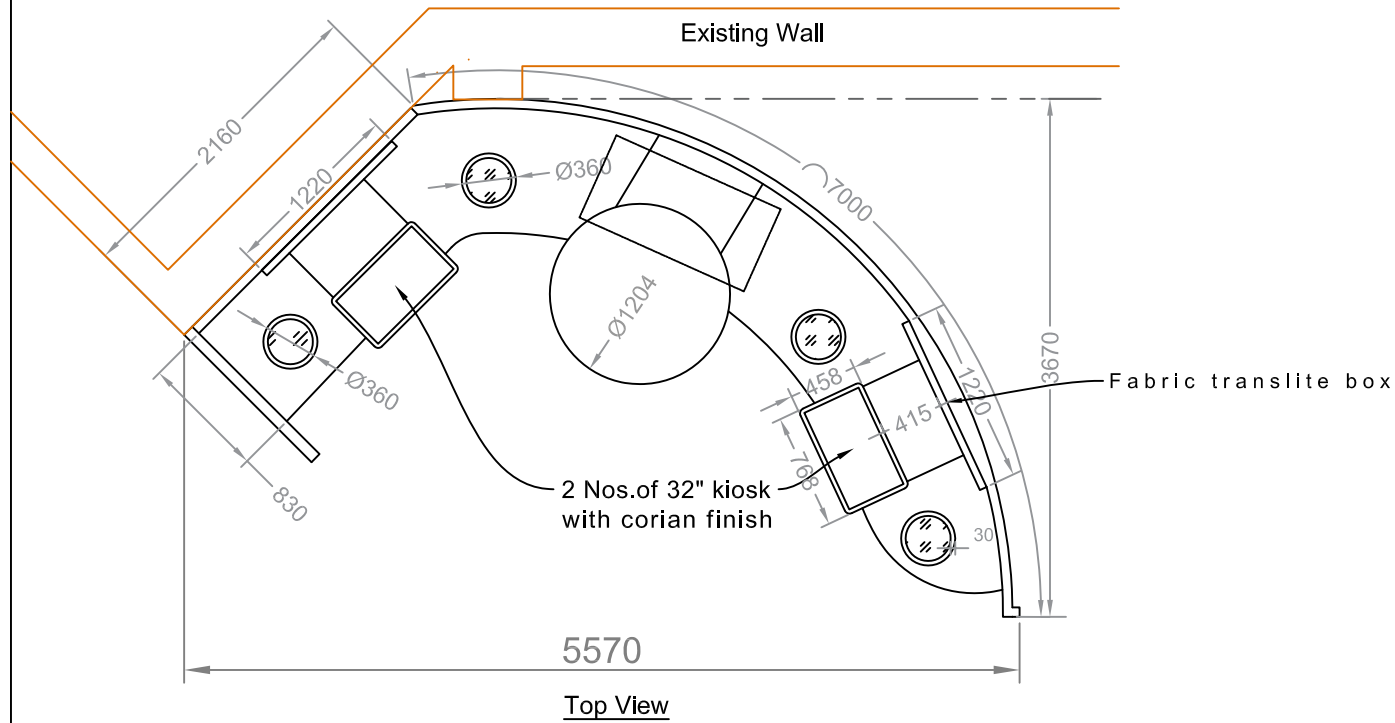
Sectional View

NOTE :-

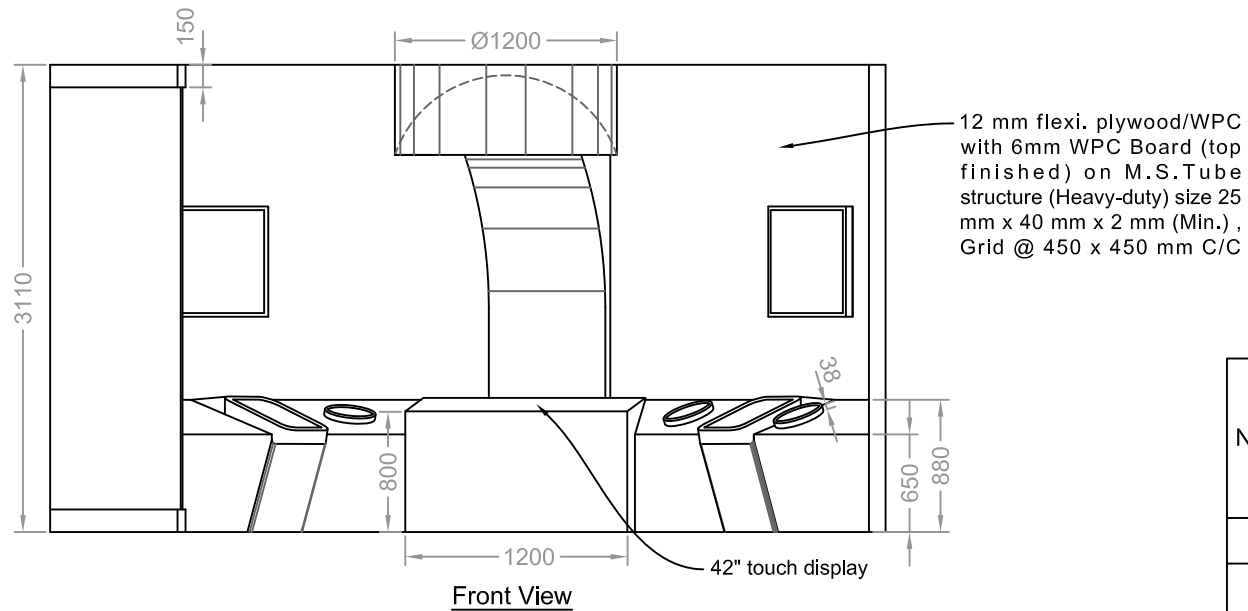
1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.
4. Equipment must be quoted in Annexure H.

NATIONAL SCIENCE CENTRE, DELHI			
		DRAWN BY	
		CHECKED BY	
ALL DIMENSIONS ARE IN MM.		APPROVED BY	
Cluster - 15		SHEET NO.	
		DRAWING NO.	NSCD/PMML/15


(Exhibit no. - 1.1 & 9.1)



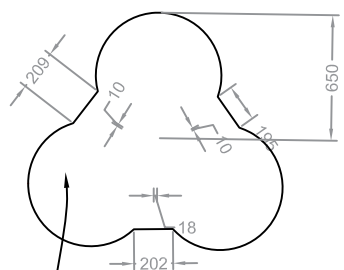
Indicative Image

**NOTE :-**

1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.
4. Equipment must be quoted in Annexure H.

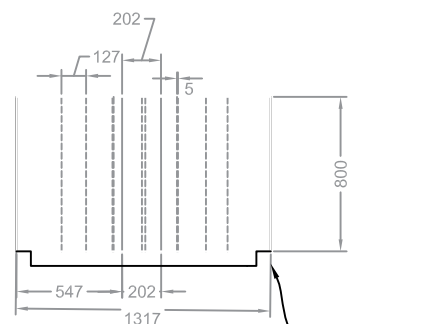
NATIONAL SCIENCE CENTRE, DELHI			
		DRAWN BY	
		CHECKED BY	
ALL DIMENSIONS ARE IN MM.		APPROVED BY	
Cluster - 16		SHEET NO.	
		DRAWING NO.	NSCD/PMML/16

Cluster- 17 (Cabinets)



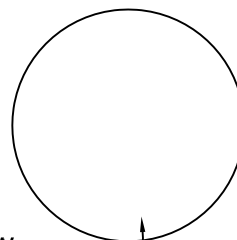
Top View

12 mm Flexi. Plywood
rolled over teakwood batten
size 25 mm x 50 mm with 1
mm laminate finished



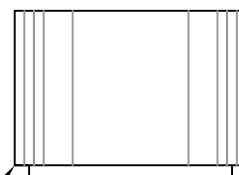
Front View

Cabinet A: 1 no



Top View

12 mm Flexi. Plywood
rolled over teakwood batten
size 25 mm x 50 mm with 1
mm laminate finished




Edge lighting

Front View

Cabinet B: 4 nos

NOTE :-

1. For material specs. and finishes, please refer specifications for details.
2. Dimensions given here are tentative and may vary as per site condition.
3. All the visible edges must be covered with edge band.

NATIONAL SCIENCE CENTRE, DELHI 		NAME	DATE
	DRAWN BY		
	CHECKED BY		
	APPROVED BY		
ALL DIMENSIONS ARE IN MM.		SHEET NO.	01
Cluster - 17		DRAWING NO.	NSCD/PMML/17

**TECHNICAL SPECIFICATION WITH COMPILATION SHEET FOR ELECTRONICS
HARDWARE**

(Compulsory to fill-up in the given format)

Sl. No.	Item	Quantity
1.	21"/22" Touch Panel PC /All in one	2
2.	27" Touch Panel PC /All in one	5
3.	32" Touch Panel PC /All in one	2
4.	41"/42"/43" Display	5
5.	43" Touch Panel PC /All in one	4
6.	55" Display	2
7.	55" Touch Panel PC /All in one	1
8.	65" Display	2
9.	NUC/ SFF system	3
10.	Workstation (Quad core)	2
11.	Webcam (Logitech C920 or equivalent)	1

Important Note for Annexures M-1 to M-10:

- These are minimum required specifications. Vendors may offer higher or similar specifications that include MII product also.
- Equipment must carry ONSITE WARRANTY at New Delhi.
- The vendor may specify the Make and Model of the offered products.

Item: 21’’/22’’ Touch Panel PC /All in one

Quantity: 2 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	21.5’’ Diagonal		
Front Bezel	Metal Bezel		
Resolution	1920 x 1080		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 250 nit		
Contrast	4000:1 or higher		
Viewing Angle	170 x 170		
Operation Hours	24 x 7		
Touch Interface	Capacitive		
Input Method	Finger, Thin Gloves, Smart Pen		
Touch Response Time	Less than 12 ms		
Toughened Glass	Yes for safe touch operations		
Processor	Standard i3 processor		
Operating System	Windows 10 Pro or above 64 Bit		
RAM	8 GB DDR4/DDR5		
Hard Disk	240 GB SSD/ NVMe		
Ports	USB-4, LAN-1, WiFi, Bluetooth		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Operating Temperature	0°C~ 50°C		
Relative Humidity	85% No-Condensing		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Palas or approved equivalent		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • Energy Star Qualified • BIS and IEC 		

Make and Model

Bidder Signature with seal

Item: 27" Touch Panel PC /All in one
Quantity: 5 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	27" Diagonal		
Front Bezel	Metal Bezel		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Viewing Angle	170 x 170		
Operation Hours	24 x 7		
Touch Interface	Capacitive		
Input Method	Finger, Thin Gloves, Smart Pen		
Touch Response Time	Less than 12 ms		
Toughened Glass	Yes for safe touch operations		
Processor	Standard i3 processor		
Operating System	Windows 10 Pro or above 64 Bit		
RAM	8 GB DDR4/DDR5		
Hard Disk	240 GB SSD/ NVMe		
Ports	USB-4, LAN-1, WiFi, Bluetooth		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Operating Temperature	0°C~ 50°C		
Relative Humidity	85% No-Condensing		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Palas or approved equivalent		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • Energy Star Qualified • BIS and IEC 		

Make and Model

Bidder Signature with seal

Item: 32" Touch Panel PC /All in one
Quantity: 2 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	31.5" Diagonal		
Front Bezel	Metal Bezel		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Viewing Angle	170 x 170		
Operation Hours	24 x 7		
Touch Interface	Capacitive More than 10 points touch		
Input Method	Finger, Thin Gloves, Smart Pen		
Touch Response Time	Less than 12 ms		
Toughened Glass	Yes for safe touch operations		
Processor	Standard i3 processor		
Operating System	Windows 10 Pro or above 64 Bit		
RAM	8 GB DDR4/DDR5		
Hard Disk	240 GB SSD/ NVMe		
Ports	USB-4, LAN-1, WiFi, Bluetooth		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Operating Temperature	0°C~ 50°C		
Relative Humidity	85% No-Condensing		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Palas or approved equivalent		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • Energy Star Qualified • BIS and IEC 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: 41"/42"/43" Display

Quantity: 5 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	43" Diagonal		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Response time	7-8 ms		
Viewing Angle	178 x 178		
Operation Hours	24 x 7		
Ports	HDMI, USB, RS232C (in/out), RJ45, Wi-Fi, Bluetooth		
Media Player	Inbuilt Media Player		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Processor with Inbuilt Memory	Cortex processor, 8GB Inbuilt Memory		
Operating Temperature	0°C~ 40°C		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Samsung / LG or equivalent approved		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • CE, FCC, BIS, ISO 45001 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: 41"/42"/43" Multi Touch Panel PC /All in one

Quantity: 4 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	43" Diagonal		
Front Bezel	Metal Bezel		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Viewing Angle	170 x 170		
Operation Hours	24 x 7		
Touch Interface	Capacitive More than 10 points touch		
Input Method	Finger, Thin Gloves, Smart Pen		
Touch Response Time	Less than 12 ms		
Toughened Glass	Yes for safe touch operations		
Processor	Standard i3 processor		
Operating System	Windows 10 Pro or above 64 Bit		
RAM	8 GB DDR4/DDR5		
Hard Disk	240 GB SSD/ NVMe		
Ports	USB-4, LAN-1, WiFi, Bluetooth		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Operating Temperature	0°C~ 50°C		
Relative Humidity	85% No-Condensing		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Palas or approved equivalent		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • Energy Star Qualified • BIS and IEC 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: 55" Multi Touch Panel PC /All in one

Quantity: 1 No.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	55" Diagonal		
Front Bezel	Metal Bezel		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Viewing Angle	178 x 178		
Operation Hours	24 x 7		
Touch Interface	Capacitive (finger touch) More than 10 points touch		
Input Method	Finger, Thin Gloves, Smart Pen		
Touch Response Time	Less than 12 ms		
Toughened Glass	Yes for safe touch operations		
Processor	Standard i3 processor		
Operating System	Windows 10 Pro or above 64 Bit		
RAM	8 GB DDR4/DDR5		
Hard Disk	240 GB SSD/ NVMe		
Ports	USB-4, LAN-1, WiFi, Bluetooth		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Operating Temperature	0°C~ 50°C		
Relative Humidity	85% No-Condensing		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Palas or approved equivalent		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • Energy Star Qualified • BIS and IEC 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: 55" Display

Quantity: 2 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	55" Diagonal		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Response time	7-8 ms		
Viewing Angle	178 x 178		
Operation Hours	24 x 7		
Ports	HDMI, USB, RS232C (in/out), RJ45, Wi-Fi, Bluetooth		
Media Player	Inbuilt Media Player		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Processor with Inbuilt Memory	Cortex processor, 8GB Inbuilt Memory		
Operating Temperature	0°C~ 40°C		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Samsung / LG or equivalent approved		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • CE, FCC, BIS, ISO 45001 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: 65" Display

Quantity: 2 Nos.

Technical Specifications

Material	Req. Technical Specifications	Offered Specifications	Remarks
Display Size	65" Diagonal		
Resolution	3840 x 2160		
Number of Colour	16.7 million color		
Aspect Ratio	16:9		
Brightness	Minimum 350 nit		
Contrast	4000:1 or higher		
Response time	7-8 ms		
Viewing Angle	178 x 178		
Operation Hours	24 x 7		
Ports	HDMI, USB, RS232C (in/out), RJ45, Wi-Fi, Bluetooth		
Media Player	Inbuilt Media Player		
Built-in Speaker	Yes (10W x 2 channel speaker)		
Orientation	Both Landscape and Portrait		
Processor with Inbuilt Memory	Cortex processor, 8GB Inbuilt Memory		
Operating Temperature	0°C~ 40°C		
Warranty	3 yrs. Onsite OEM warranty or more		
Make	Samsung / LG or equivalent approved		
Product Certification & other parameters for the bidder	<ul style="list-style-type: none"> • OEM should have a service centre in Delhi/NCR with centralized service support. • Quoted model should be available on OEMs website. • BIS, ISO 45001 		
Wall Mount	Yes, required		

Make and Model

Bidder Signature with seal

Item: NUC
Quantity: 3 Nos.

	Req. Technical Specifications	Offered Specifications	Remarks
Make & Model	Intel, Asus, HP, Dell, Lenovo OR equivalent approved		
Chassis Dimension	Slim Chassis: 117mm x 112mm x 37mm (including feet)		
Warranty	3 yrs. Onsite OEM warranty or more		
Processor	11 th Generation Intel Core i7 processor		
Operating System	Genuine Windows(R) 10/11 Pro 64 Bit (English) Professional		
RAM	8 GB, DDR4 or more		
Solid State Drive	500 GB Gen4 NVMe SSD		
Graphics (Dual Display support)	Supports up to Quad 4K @ 60Hz. Display (2 x DP/Type C + 2 x HDMI) or (2 x DP/Type C + 2 x DP/Type C Port)		
I/O Ports (Front & Rear)	2 Universal audio out port (For Speaker or Headphone)		
	USB 2.0 Gen 1 Port		
	USB 3.2 Gen 2 Ports		
	Audio Line-In port (for Mic)		
	1 x Serial Port		
Power	AC Adapter Core i7 with 120W 19V Adapter		
Network and Communication	1x RJ45 Gigabit Ethernet port Wi-Fi 6 (802.11ax) + Bluetooth 5.2 or more		
Keyboard & Mouse	Wireless Keyboard & Mouse		
Product Certifications	Microsoft Windows Hardware Compatibility Program, Qualified for 24x7 sustained operation, BIS, CE/FCC Class 'B', Energy Star 5.0 or more, Fire Protection Certificate, Environment Friendly		
Cable Locking Arm	NUC Mini PC cable locking arm on back panel of the chassis		
VESA Mount for NUC	NUC Mini PCs VESA mount and screws for attaching the system to compatible screens and monitors		
Additional Parameter	1. OEM should have service center in Delhi/NCR 2. Bidder must have authorized distribution/ reseller/ dealership certificate valid for current year.		

Make and Model

Bidder Signature with seal

Item: Workstation
Quantity: 02 Nos.

	Req. Technical Specifications	Offered Specifications	Remarks
Make & Model	Asus, HP, Dell, Lenovo OR equivalent approved		
Form Factor	SFF Desktop Workstation		
Warranty	3 yrs. Onsite OEM warranty or more		
Processor	14 th Generation Intel Core i5 Processor (4.20 GHz to 5.30 GHz)		
Graphic Card	NVIDIA Quadro T1000 8GB DDR6 or equivalent		
Operating System	Genuine Windows(R) 11 64 Bit (English) Professional		
RAM	16 GB, DDR5 or more		
Solid State Drive	1TB SSD M.2 PCI / NVMe		
I/O Ports (Front & Rear)	2 Universal audio out port (For Speaker or Headphone)		
	2 x USB 2.0 Gen 1 Type-C		
	2 x USB 3.2 Gen 1 Type-A		
	1x HDMI out		
	1x Audio Line-In port (for Mic)		
Slots	1 PCIe x 16		
Power Supply	500 Watt 92% Power Supply		
Network and Communication	1x RJ45 Gigabit Ethernet port Wi-Fi 5 (802.11ac) + Bluetooth 5.0 or more		
Keyboard & Mouse	Wired Keyboard & Mouse with Mousepad		
Speaker	2.1 Speaker (Make: JBL/ Creative/Blaupunkt/ Honeywell)		
Product Certifications	Microsoft Windows Hardware Compatibility Program, BIS, CE/FCC Class 'B', Energy Star 5.0 or more, Fire Protection Certificate, Environment Friendly		
Additional Parameter	OEM should have service center in Delhi/NCR Bidder must have authorized distribution/ reseller/ dealership certificate valid for current year.		

Make and Model

Bidder Signature with seal

ILLUMINATION MODULES & ELECTRICAL WIRING

Sl no	Item Description	Quantity(approx..)
1	COB Nano Spot Light	4
2	COB Cylindrical Light Module, LED with phase-cut dimmable driver (both swivel - recess type and pendent type)	30
3	COB Cylindrical Light Module , A LED light fixture that can be mounted/suspended from ceiling. This fixture is equipped with manual dimming system, with MS ROD (Length of Rod according to Site locations)	100
4	4 ft. long LED Tubes with necessary mounting in baffle false ceiling	10

Important Note for annexures N:

- a) Bidder is required to go through the render images and site conditions before quoting the Illuminations. The wattage of the light may vary from 6 Watt to 15 Watt. These light should have the with dimmer driver to 6 W or required value as per render view of gallery and suggested by NSCD in consultation with illumination expert.
- b) The CRI >90 and Temperature (CCT) will be vary as per site condition. The bidder will engage an expert to specify the light as per attached render images in consultation with NSCD officials.
- c) Some of the illumination modules will be hanged in between False Ceiling (waffle type) whose gap will be 100 mm.
- d) The fixing of Light with the site will be in scope with the vendor.
- e) The zoom-in and zoom-out facilities as required for the exhibit s and the gallery are required to be placed in the bidder.
- f) The electrical wiring for the module will be lined from the available nearest provided points by the bidder.
- g) The bidder should offer the Spot lighting: Adjustable directional lights to highlight specific artifacts or key exhibit elements and Ambient Lighting: Provides overall illumination to maintain a comfortable viewing environment.
- h) The bidder should propose Energy-efficient, long-lasting, and customizable color temperatures.
- i) Lighting should be within the range of 3000K – 5000K to balance warmth and clarity or required as per the site locations and as per advised by the NSCD and Lightening expert of the agency.
- j) Lux Levels: Exhibit lighting should be within 200–500 lux for general displays and 500–1000 lux for detailed artifacts or can be modified as per requirements.
- k) Lights will be inside cabinet grove, ceiling recessed and surface mounting.
- l) All Illuminating module and fixtures should be grey or black powdered coated or painted.
- m) It is the minimum required specifications. Vendors may offer higher or similar specifications that include MII product also.
- n) All items should be IP20/P65 rating
- o) The beam angle of the Illumination will be as per required in accordance with rendered images.
- p) All the items will be two years of warranty.
- q) Equipment must carry comprehensive warranty in Delhi.
- r) The illumination module with BIS certifications is preferable.
- s) Makes of light fixtures – K-Lite/Decon/Philips/Havels/Equivalent approved.