



# **KERALAM MUSEUM OF HISTORY & HERITAGE**

## **Park View, Thiruvananthapuram-33**

(Nodal agency of all museums under Cultural Affairs Dept. Govt. of Kerala)

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**KIM- 64 /2013/ DHM**

**Date - 02/03/2020**

### **REQUEST FOR PROPOSAL**

**Selection of Museum Consultancy Firm for Setting up of galleries at District Heritage Museum, Ernakulam, Bastion Bungalow, Fort Kochi.**

Request For Proposal is invited by Interactive Museum of Cultural History of Kerala (Keralam Museum of History and Heritage) from the Empanelled/Non Empanelled, reputed, experienced, and competent museum Consultancy Firms for Setting up of galleries at District Heritage Museum Ernakulam, Bastion Bungalow, Fort Kochi. The Non-Empanelled firms should furnish company details and other required data with in the prescribed date and should get pre-qualification before fixing the bid. The details relating to the nature and scope of the project, eligibility criteria, terms and conditions and other information relating to the Request For Proposal as detailed below.

**Executive Director**

Interactive Museum of Cultural History of Kerala  
(Keralam Museum of History and Heritage)

**Name of Work - Setting up of galleries at District Heritage Museum,  
Ernakulam, Bastion Bungalow, Fort Kochi.**

**CONTENTS**

**Introduction**

The museum at Bastion Bungalow has been envisioned as a space within Fort Kochi that provides the people of Kerala a sense of pride and ownership over their rich and diverse cultural heritage. The RFP is invited for setting up of galleries in District Heritage Museum Ernakulam including Interior works, display cases, Curation ,labeling, Documentation, lighting, digitalization etc as per the design and estimate already prepared.

**Narrative for the Museum**

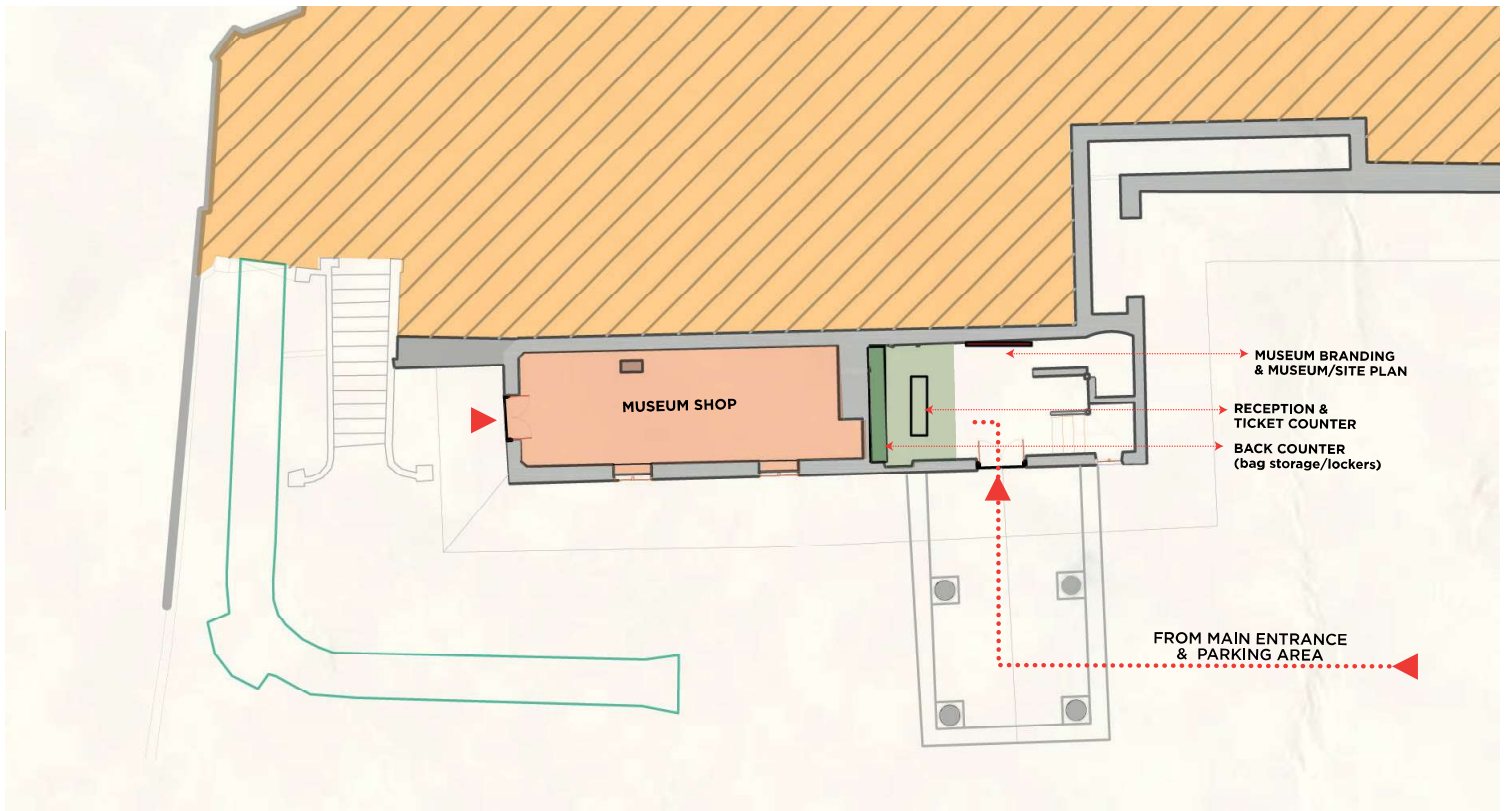
The curatorial narrative for this museum focuses on Kerala and by extension the region of Malabar and its place in world history from the ancient to the modern period. The tentative title for the Exhibition is '***Bastion Bungalow: Kochi's Sentinel***'.

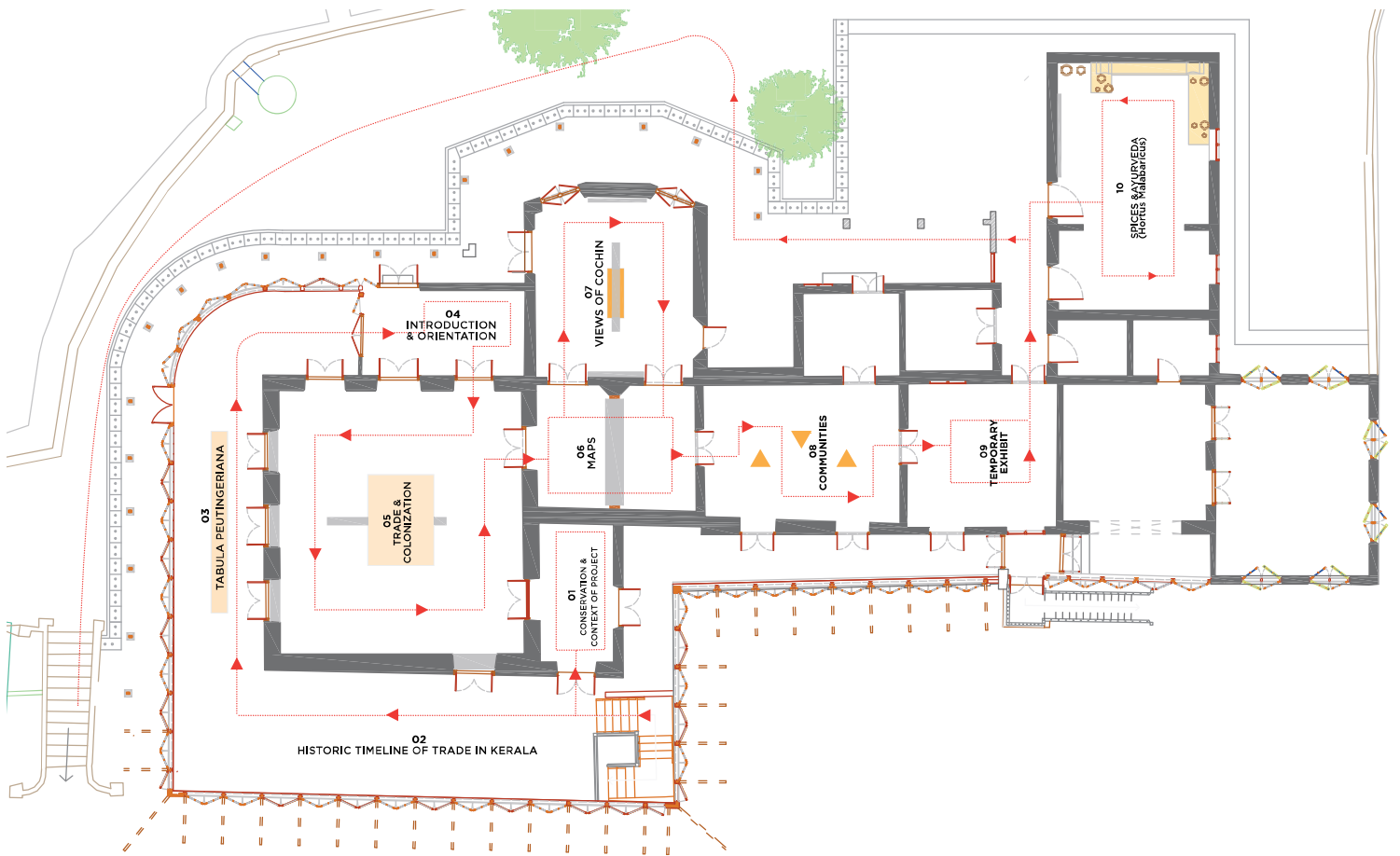
The first section of the museum, (the Wraparound Deck) will give a brief introduction to the visitors about Kerala's ancient history through its vast and complex mercantile trading network. This will be followed by focusing on Kerala's colonial history beginning in the medieval period, with an emphasis on Kochi as the history of Bastion Bungalow itself is essential rooted to this period in history.

The intervention of emerging European colonial powers, mainly the Portuguese, the Dutch East India Company and the English East India Company, into the political domain of the indigenous kingdoms of Kerala will be visually explained to the visitors. This will be achieved with the display of a unique collection of maps, portraits, works of art, photographs and letters that have not been viewed by the public before.

Interesting aspects of the colonial period will be highlighted in subsequent portions of the museums. Space has also been dedicated in the museum towards the evolution of Bastion Bungalow and Fort Kochi over the years. This section will be followed by an area devoted to the diversity of the people of Kochi and the whole of Kerala.

## GROUND FLOOR | **DETAIL PLAN**





## **Proposed gallery details described below**

### **WRAP-AROUND DECK - Kerala and the World from the Ancient to the Early Medieval period**

In this section of the museum we will introduce the visitors to the significance of the Malabar coast and the role of its enterprising inhabitants in establishing global maritime trading networks beginning from the ancient to the early medieval period. The importance of the spice trade and ancient ports of Kerala to the global economy of the ancient world will also be highlighted in this section.

### **Introduction and Orientation**

This part of the museum will serve as an introduction to the visitors about the state of Kerala's kingdoms during the medieval period. The text will primarily focus on the prominent roles played by the Raja of Kochi and the Zamorin of Kozhikode in their quest to establish their respective authority over vast domains in medieval Kerala. This introductory section is important for the narrative as it contextualises the increasing intervention and influence of the European colonial powers over the local political and mercantile systems.

A brief timeline will also be featured here to allow visitors a quick overview of the key events that shaped the history of Kerala from the early medieval to the modern period

### **Ballroom – Trade and Colonisation**

This is the core section of the curatorial narrative for the museum. Colonial expansion during the medieval period is important in understanding the history of Fort Kochi and it also relates to the history of Bastion Bungalow itself. The main Ballroom will explore the establishment in Kerala of successive European powers beginning with the Portuguese followed by the Dutch and finally the British. Every segment will highlight their rise to power, impact of their rule over Kerala and the ultimate decline of the ruling European authority at the time.

### **Maps of Malabar Coast and Fort Kochi**

With the conclusion of the colonial history of Kerala, we take visitors through elements of this period that are visual signifiers of the cultural heritage of Kochi and by extension the whole of Kerala. In Room 4 we begin with the Maps that for the first time in human history accurately depicted not only the sea route to the Malabar Coast but also the closest shape of the Indian sub-continent. The maps of the coastline of India played an important role during the colonial expansion of European powers throughout the region. In the second part of this room visitors will also witness the evolution of Fort Kochi. Through these maps we will illustrate how the changing structure of Fort Kochi was intrinsically linked to the conquest for territories between European powers. The maps of Fort Kochi in this section will feature those made by the Portuguese, who initially built Fort Manuel in 1503 CE, named after the Portuguese King, Manuel I, to the Dutch maps. The Dutch maps will show the Fort had changed after the Portuguese had been defeated by Dutch forces which later demolished large parts of the fort.

### **Changing Views of Fort Kochi**

In this room we take the visitors on a visual journey that show how the views of Kochi became a central and unique theme for several European travellers from the medieval to modern period. Dutch and British depiction of the environs of Fort Kochi feature prominently in this section.

This room will also feature photographs of Fort Kochi and of Bastion Bungalow that have not been viewed by the public before.

### **People and Communities of the Malabar Region**

This unique section will be the main highlight of the museum. This section is dedicated to the people of Kochi, of Kerala and the whole of the Malabar coast and their rich and diverse cultural heritage. This room is a culmination of the narrative for the museum beginning with the first room that highlights the far-reaching contacts that the Malabar coast had established through its mercantile trading network through to the medieval period and the increasing presence of European powers.

The section will begin with the depiction by European settlers of the varied communities settled along the Malabar Coast. This was an attempt by Europeans to understand and classify the diverse people co-existing in this region for thousands of years. We begin with the Portuguese illustrations followed by those of Dutch travellers and in conclusion the Company paintings from the British period.

A unique addition to this room is the audio-visual content developed by Sahapedia in Mapping Fort Kochi which will be displayed on 2 tablets in this room. These tablets will feature videos from eminent individuals discussing about the rich and complex cultural heritage of Fort Kochi. As part of the Mapping of Fort Kochi by Sahapedia, an interactive map will also be displayed for visitors.

### **Dutch Kitchen- Hortus Malabaricus**

This space is dedicated to the monumental work of Hortus Malabaricus. Exquisite drawings from this seminal work will be displayed for the visitors, where they will also be informed about the historical significance of this work. The contribution of Hendrik Adriaan van Reede and Itty Achuden towards its compilation will also be highlighted.

Visitors will also be informed about the modern-day application and accessibility of Hortus Malabaricus which was made possible by the efforts of Professor K.S. Manilal. Professor Manilal undertook the mammoth task of translating the Hortus Malabaricus from Latin to English and Malayalam.

### **Architectural heritage**

This room will focus on the architectural heritage of Bastion Bungalow. The history of the building itself reflects the history of Kerala during the colonial period. The architectural elements at Bastion Bungalow are an interesting blend of Dutch, British and local Kerala influences. This room will feature images that visually explain to the visitors the evolution of the building itself.

**One space** will be used as a space for a temporary gallery.

## **Eligibility Criteria For Application**

Those who are including Empanelled/Non Empanelled firms should attend the **Pre-bid meeting**.

**Pre-bid meeting date - 13.03.2020 11 am**

**Venue- Keralam Museum of History & Heritage, Parkview, Trivandrum**

Non Empanelled persons who are willing to participate in the Request Of Proposal shall submit their Firm details as described below on before **11.03.2020**. They will be informed the eligibility before the Pre-bid meeting.

1. The details of minimum 3 years experience in the Museum related works.
2. The details of minimum turnover of 3 crore in last 2 years.
3. The details of completed work with Project cost in last 3 years – Minimum value of project 5 crores.
4. The firm should have a consortium containing the following Technical persons.
  - a. Curator
  - b. Museum designer
  - c. Historian with sufficient experience in said subject
  - d. Implementation team with minimum 5 years experience
  - e. Graphic Designer
  - f. MEP consultant
  - g. Other experts

Kindly submit the testimonials proving qualifications of the above persons.

5. The Details shall be furnished on International/National/State/District or any other awards related to winning design competitions/ Museum exhibition works. (Enclose copy of documentary proof of winning design competitions/awards).

**Eligibility criteria for application – Subjective Evaluation**

**1. Company incorporation & and their presence**

10 marks - Up to 3 years

15 marks - More than 3 years and less than 5 years

20 marks - Above 5 years

**2. Average annual turn over**

10 marks - Up to 3 crores for the last two years

15 marks - More than 3 crores and less than 4 crores for the last two crores

20 marks - Above 4 crores for the last two years

**3. Project cost in last 3 years**

10 marks - Up to 5 crores

15 marks - More than 5 crores and less than 7 crores

20 marks - Above 7 crores

**4. Number of employees in the consortium**

10 marks - Up to consortium of 5 members

15 marks - More than 5 members and less than 7 members

20 marks - More than 7 members

## **5. Winning awards**

10 marks - For State/District level awards

15 marks - For National level awards

20 marks - For International level awards

The bidder who secure at least 50 % of score in the evaluation will be treated as qualified for submitting final bid.

Consultants/Firms attending the Pre-bid meeting will get more details about nature and scope of the project, eligibility criteria, terms and conditions and other information relating to the Request For Proposal. Those who are participated in the bid shall pay Cost RFP documents Rs 5000/- by way of DD Drawn in the name of Executive Director, Interactive Museum of Cultural history of Kerala before attending the pre-bid meeting for getting Detailed Project documents. RFP documents is includes with detailed drawing, designs and gallery wise details

## **Technical presentation and Financial bid**

Eligible candidates can participate in Technical presentation and Financial bid. Details of Technical presentation and Financial bid are given below.

### **1. Technical Presentation** (Subjective evaluation)

The technical presentation should be entirely based on the design already prepared.

**20 marks** - Understanding the brief

**20 marks** - Respecting the historicity of the building and demonstrative adaptive reuse

**20 marks** – Understanding the Design flow/strength

**20 marks** - Economics of design

**20 marks** - Confidence in executing

**Total marks = 100 marks**

### **2. Financial Bid**

The Financial bid should be based on the design and estimate already prepared

Estimate amount of museum setting work is 1,34,05,800.60/- + GST



- a) The bidder who secure at least 70% of score in the technical presentation will be treated as technically qualified.
- b) The Financial Bids of the technically qualified bidders will be opened on the prescribed date in the presence of the bidder or their representatives who are authorized by bidder.
- c). The lowest financial bidder (L1) will be awarded 100% score.
- d) Financial Scores for other than L1 bidders will be evaluated using the following formula:  

$$\text{Financial Score of a Bidder} = \left\{ \frac{\text{Financial Bid of L1}}{\text{Financial Bid of the Bidder}} \times 100 \right\} \% \text{ (Adjusted to two decimal places)}$$
- e) Only fixed price financial bids indicating total price for all the services specified in this bid document will be considered.
- f) The bid price will include all taxes and levies and shall be in Indian Rupees.
- g) 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”.

### **Combined Evaluation of Technical presentation & Financial Bids**

- a) The technical and financial scores secured by each bidder will be added using weightage of 70% and 30% respectively to compute a Composite Bid Score.
- b) The bidder securing the highest Composite Bid Score will be declared as the Best Value Bidder for award of the Project.
- c) In the event the bid composite bid scores are ‘tied’, the bidder securing the highest technical score will be declared as the Best Value Bidder for award of the Project.
- d). The successful bidder has to provide a letter of acceptance to Interactive Museum of Cultural History of Kerala (Keralam Museum of History and Heritage, Trivandrum) within seven days of receiving communication about his/her selection from the Department.
- e). The successful bidder shall to sign an agreement with payment schedule at the time of award of the work.

f). Keralam Museum of History and Heritage reserves all the rights to accept or reject any/all Request For Proposal applications, without assigning any reason. The Department takes no responsibility for the delay, loss or non-receipt of any submission or letter sent by post, within the prescribed time period.

## **Conditions and Notes**

\*Completion of museum setting work is 4 months

\*Estimate amount of museum setting work is 1,34,05,800.60/- + GST

\* Those who are participated in the bid shall pay Cost RFP documents Rs 5000/- by way of DD drawn in the name of Executive Director, Interactive Museum of Cultural history of Kerala before attending the pre-bid meeting for getting Detailed Project documents. RFP document includes detailed drawing, designs and gallery wise details.

\*Excess over estimate/ below estimate rate shall be allowed by the committees constituted for Museum setting works if necessary.

\*Estimate is separately attached along with this documents.

\*Primary gallery drawing is separately attached along with this documents

\*DPR details will be available in the Keralam Museum at the Office time. You can contact directly for getting details of the project.

\*The technical presentation should be entirely based on the design already prepared.

\*The Financial bid should be based on the design,drawing and estimate already prepared

\*If the mentioned brand and model equipments is not available in the market, other brands with the equivalent specification can be used at their present market rate

Application / Request For Proposal in sealed cover with complete details in all respects and superscribed as Selection of Museum Consultancy Firm for Setting up of galleries at District Heritage Museum, Ernakulam shall be submitted at the following address. A soft copy of Request For Proposal shall be sent along with this application. Interested consultants/ consortia of consultants can download the Request For Proposal documents from the website [www.museumkeralam.org](http://www.museumkeralam.org). The last date for receipt of application is 5 pm on March 25 , 2020 and the presentation followed with opening of the bid will be done on march 30<sup>th</sup> 2020.

**The Executive Director**  
**Interactive Museum of Cultural History of Kerala**  
**(Keralam Museum of History and Heritage), Park View**  
**Vikas Bhavan P.O, Trivandrum – 695033.**

SUMMARY OF MUSEUM SETTING WORKS		
S.No.	DESCRIPTION	AMOUNT
1.00	MUSEUM SETTING WORKS INCLUDING DISPLAY ARRANGEMENTS, LABELS, TEXT PANELS ETC	<b>94,18,075.60</b>
2.00	LIGHTING AND RELATED WORKS	<b>39,87,725.00</b>
<b>AMOUNT</b>		<b>1,34,05,800.60</b>

I agree to execute the work at  
 Estimate rate / \_\_\_\_% below / \_\_\_\_% above

Consultant

BILL OF QUANTITY FOR BASTION BUNGALOW, KOCHI					
SR.NO.	DESCRIPTION	QTY.	UNIT	RATE (Rs.)	AMOUNT (Rs.)
<b>1-</b>	<b>CARPENTRY WORK</b>				
<b>(A)</b>	<b>TYPICAL PARTITION DETAIL ( AGAINST WALLS)</b>				
	REFER DWG-VINC/18/BAST/KOCH/GEN/PRTWALL-007				
	FREE STANDING PARTITION				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE WITH COVE LIGHT DETAIL ON TOP . AS SHOWN IN THE DWG.NO-007 WITH ELECTRICAL CONNECTIONS, LIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE.				
<b>(i)</b>	<b>IN INTRODUCTION AREA- ROOM-2</b>				
	SIZE- 12'-0" X 7'-0" X 0'-8"	84	SQ.FT	660	55440
	SIZE- 9'-9" X 7'-0" X 0'-8"	68.25	SQ.FT	660	45045
<b>(ii)</b>	<b>IN ROOM-5</b>				
	SIZE- 6'-9" X 7'-0" X 0'-8"	47.25	SQ.FT	660	31185
	SIZE-19'-9" X 7'-0" X 0'-8"	138.25	SQ.FT	660	91245
	SIZE-19'-10" X 7'-0" X 0'-8"	138.81	SQ.FT	660	91614.6
	SIZE-7'-2" X 7'-0" X 0'-8"	50.12	SQ.FT	660	33079.2
<b>(iii)</b>	<b>IN HORTUS - ROOM-12</b>				
	SIZE- 18'-4" X 7'-0" X 0'-8"	128.31	SQ.FT	660	84684.6
	SIZE- 9'-0" X 7'-0" X 0'-8"	63	SQ.FT	660	41580
	SIZE- 9'-0" X 7'-0" X 0'-8"	63	SQ.FT	660	41580
	SIZE- 10'-2" X 7'-0" X 0'-8"	71.12	SQ.FT	660	46939.2
<b>(B)</b>	<b>GLASS DISPLAY CASE FOR AMPHORAE -IN WRAP AROUND CORRIDOR</b>				
	REFER DWG-VINC/18/BAST/KOCH/GLS/DISP-006				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 19MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE AND 10MM EXTRA CLEAR TOUGHENED GLASS BOX ON TOP WITH 2 OPENABLE GLASS SHUTTER INCLUDING ALL HARWARE, PATCH FITTINGS, LOCKS ETC, EDGE GRINDING WITH ELECTRICAL CONNECTIONS, LIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE . AS SHOWN IN THE DWG-006				
	SIZE- 6'-0" X 2'-6" X 5'-0"	30	SQ.FT	3400	102000
<b>(C)</b>	<b>LONG TABLE -IN WRAP AROUND CORRIDOR</b>				
	REFER DWG-VINC/18/BAST/KOCH/GLS/DISP-010				
	PROVIDING AND FIXING 1 1/4" X 1 1/4" SEASONED WOOD FRAMING AND 19MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE WITH ELECTRICAL CONNECTIONS, LIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE . AS SHOWN IN THE DWG-010				
	SIZE- 22'-0" X 2'-0" X 3'-0"	44	SQ.FT	1850	81400
<b>(D)</b>	<b>DISPLAY BOXING -IN BALL ROOM &amp; WRAP AROUND CORRIDOR</b>				
	REFER DWG-VINC/18/BAST/KOCH/FURN/DSC-002				

	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE. AS SHOWN IN THE DWG-002 WITH ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC				
(i)	SIZE -5'-0" X 1'-6" & HT- 3'-6"	6	NOS	32000	192000
(E)	<b>PARTITION WITH PLATFORM -IN BALL ROOM</b>				
	<b>REFER DWG-VINC/18/BAST/KOCH/FURN/BOX-004</b>				
(i)	PARTITION				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE. AS SHOWN IN THE DWG-004 WITH ELECTRICAL CONNECTIONS, LIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC				
	PARTITION SIZE -5'-0" X 9'-0" X 1'-0" + 8'-0" X 1'-6" X 1'-0" + 1'-6" X 9'-0" X 1'-0"	70.5	SQ.FT	1650	116325
(ii)	PLATFORM WITH BACKLIT DETAIL				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) WITH DUCO PAINT AS PER APPROVED SHADE.& INSIDE FRAMEWORK OF 6 INCH WIDE 12MM MARINE PLY STRIPS GRID WEDGED FOR SUPPORT & 6MM ACRYLIC SHEET FIEXED ON TOP TO RECEIVE VINYL GRAPHICS ON ITS TOP SURFACE WITH BACKLIT DETAIL AS SHOWN IN THE DWG.004, WITH ELECTRICAL CONNECTIONS, TUBELIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE.				
	PLATFORM SIZE- 8'-0" X 11'-0" X 1'-0"	88	SQ.FT	1650	145200






(F)	<b>WOODEN FRAME WITH TABLE -IN ROOM-4</b>				
	<b>REFER DWG-VINC/18/BAST/KOCH/FURN/TABLE-005</b>				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISH WITH DUCO PAINT AS PER APPROVED SHADE. AS SHOWN THE DWG.NO-005 WITH ELECTRICAL CONNECTIONS, LIGHT FIXING, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE.				
(i)	FRAMING SIZE -0'-6" X 1'-3" X 8'-0" X 2NOS + 0'-6" X 1'-3" X 12'-9" X 2NOS	51.87	SQ.FT	1450	75211.5
(ii)	TABLE TOP SIZE - 12'-9" X 2'-0" X 0'-3"	25.5	SQ.FT	1900	48450
(iii)	TABLE BOTTOM SIZE - 12'-9" X 1'-9" X 0'-8"	22.31	SQ.FT	1900	42389
(G)	<b>PARTITION WITH TABLE -IN ROOM-5</b>				
	<b>REFER DWG-VINC/18/BAST/KOCH/FURN/TABLE-003</b>				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE. AS SHOWN IN THE DWG-003 WITH ELECTRICAL CONNECTIONS AND LIGHT FIXING IF ANY, ANTI TERMITE COAT ON ALL WOOD AND PLYWOOD ETC COMPLETE.				
(i)	PARTITION SIZE -3'-0" X 7'-0" X 1'-0" + 6'-6" X 1'-6" X 1'-0" + 1'-6" X 7'-0" X 1'-0"	41.75	SQ.FT	1650	68887.5
(ii)	TABLE SIZE - 6'-0" X 2'-0" X 2'-6"	15	SQ.FT	2200	33000
(H)	<b>TOTEM -IN ROOM-6</b>				
	<b>REFER DWG-VINC/18/BAST/KOCH/FURN/TOT-001</b>				
	PROVIDING AND FIXING 1½" X 1½" SEASONED WOOD TRIANGULAR FRAMING AND 12MM MARINE PLY + 4MM TEAK VENEER (FOR PAINT FINISHING) FROM SINGLE SIDE, FINISH WITH DUCO PAINT AS PER APPROVED SHADE. AS SHOWN IN THE DWG-001 WITH ELECTRICAL/DATA CONNECTIONS, SURFACE MOUNTED IPAD FIXING, ANTI TERMITE COAT ON ALL PLYWOOD ETC COMPLETE.				
(i)	SIZE -2'-6" X 2'-6" X 2'-6" & HT- 7'-0"	3	NOS	27500	82500
(J)	<b>CHANNEL FOR HANGING PAINTINGS IN ROOM-8</b>	50	RFT	365	18250
	<b>REFER DWG-VINC/18/BAST/KOCH/ENT/P/HNG/CNL-008</b>				
2-	<b>FABRICATION WORK</b>				
A	<b>VERTICAL PANELS IN WRAP AROUND CORRIDOR</b>				
	<b>REFER DWG-VINC/18/BAST/KOCH/ENT/PANELS-009</b>				
(i)	PROVIDING & FIXING 16 GAUGE MS PIPE SQUARE SECTION 2" X 3" JAMMED IN THE CEILING WITH FASTENERS, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE AS SHOWN IN THE DWG NO-009 WITH PRIMER AND/OR RED OXIDE COAT ETC COMPLETE.	22	RFT	1380	30360
(ii)	PROVIDING & FIXING MS CIRCULAR PIPE SECTION 1½" TO BE WELDED ON HORIZONTAL MS PIPE ON CEILING (ITEM 2A-i)& AT BOTTOM TO A 6MM MS PLATE TO BE FIXED ON THE FLOOR, FINISHED WITH DUCO PAINT AS PER APPROVED SHADE AS SHOWN IN THE DWG NO-009 WITH PRIMER AND/OR RED OXIDE COAT ETC COMPLETE.				
	SIZE OF MS CIRCULAR PIPE- 1½" DIA & 16'-7" LENGTH X 10 NOS	166	RFT	1850	307100
(iii)	PROVIDING & FIXING 6MM THICK 1" X 1" MS ANGLE FRAME TO BE WELDED ON VERTICAL MS CIRCULAR PIPE & INSIDE 6MM ACRYLIC SHEET FIXED FOR FINAL VINYL GRAPHICS FINISH WITH DUCO PAINT AS PER APPROVED SHADE AS SHOWN IN THE DWG NO-009 WITH PRIMER AND/OR RED OXIDE COAT ETC COMPLETE.				
	SIZE OF 1- MS ANGLE FRAME - 1'- 7" X 7'-0"	15	NOS	8500	127500
	SIZE OF 1 -6MM ACRYLIC SHEET - 1'- 7" X 7'-0"	15	NOS	9000	135000
3-	<b>FURNITURE</b>				
	GROUND FLOOR RECEPTION DESK	1	NOS	350000	350000





	GROUND FLOOR BAGGAGE COUNTER	1	NOS	425000	425000
	RECEPTION CHAIR	2	NOS	6500	13000
	SEATING BENCH	2	NOS	30000	60000
	WORKSTATION (5'-6"X2'-6")	4	NOS	15000	60000
	WORKSTATION CHAIRS	12	NOS	7500	90000
	FILE STORAGE(16'-0"X7'-0")	2	NOS	175000	350000
	CONFERENCE TABLE (8'-0"X4'-0")	1	NOS	100000	100000
	CONFERENCE CHAIRS	8	NOS	6500	52000
4-	<b>EXIBITION PROPS</b>				
	SHIP MODELS	6	NOS	100000	600000
	KITCHEN PROPS	LS			300000
5-	<b>PRINTING</b>				
	Archival quality printing on Museum quality paper	486	SFT	885	430110
6-	<b>FRAMING</b>				
	50 FRAMES WITH 2" ACID FREE MOUNT AND 1" BEADING (WITH UV ANTI GLARE MUSEUM GLASS )	600	SFT	2450	1470000
7-	<b>VINYL PRINTING</b>				
	LATEX PRINTIING ON VINYL WITH MATT LAMINATION & MOUNTING ON BLACK SUNBOARD	460	SFT	190	87400
	LATEX PRINTIING ON 3M 1110 VINYL WITH LAMINATION	950	SFT	140	133000
	CAPTIONS- LATEX PRINTIING ON VINYL WITH MATT LAMINATION & MOUNTING ON BLACK SUNBOARD WITH CUTTING	25	SFT	260	6500
	APPLICATION	1435	SFT	260	373100
8-	<b>SIGNAGE</b>				
	MAIN SIGNAGE	LS		150000	150000
	FIRE AND OTHER NAVIGATION SIGNAGE	LS		300000	300000
	EXTERIOR NAVIGATION SINAGE	LS		250000	250000
9-	<b>TECHNOLOGY</b>				
	TABLET + SOFTWARE	LS		700000	700000
10-	<b>MISCELLANEOUS</b>				
	LABOUR & TRANSPORT	LS		450000	450000
	LIGHTS & ELECTRICAL	LS		400000	400000
	MISC	LS		100000	100000
	<b>TOTAL</b>				9418075.6

SUMMARY OF LIGHTING AND RELATED WORKS ESTIMATE FOR BASTION BUNGALOW, FORT KOCHI		
S.No.	DESCRIPTION	AMOUNT
1.00	FITTING SUMMARY ESTIMATION	33,43,000.00
2.00	CABLES, MAINS AND SUB-MAINS:	1,84,725.00
3.00	DIMMER SYSTEM (LS)	4,60,000.00
AMOUNT		39,87,725.00



**ESTIMATION FOR LIGHT FITTING FOR BASTION BUNGALOW**

Fixture Ref.	Fixture Image	Qty	Rate	Amount
CST-1 3-Circuit ceiling suspended Eutrac 16Amp track system in White finish, with all accessories as described		160	3000	4,80,000.00
CSL-2 Ceiling suspended, continous linear row light, with single sided Asymmetrical optic LED Wall Washer with 0 deg cut-off, Fixture need to be supplied as per lengths as per site.Complete with suspension intigrated drivers, inter connecting wiring ,cover plate and all accessories as required.		32	7500	2,40,000.00
TSL-1 Adjustable 3-circuit track-mounted projectors for LED lamp with built-in dimmable power supply. The fixture must be able to fitted with interchangeable reflectors / lenses to enable different beam angles. Additional accessories must be possible, viz, elliptical lens, honeycomb or antiglare louver, and color filters.		136	6500	8,84,000.00
TSL-2 Adjustable 3-circuit track-mounted projectors for LED lamp with built-in dimmable power supply. The fixture must be able to fitted with interchangeable reflectors / lenses to enable different beam angles. with accessories must be possible, viz, elliptical lens, honeycomb or antiglare louver, and color filters		24	8500	2,04,000.00
WRL-1 Wall recessed mounted luminaire for glare free floor lighting application, housing with integral driver		7	1500	10,500.00

Fixture Ref.	Fixture Image	Qty	Rate	Amount
LCL-1 Back Led L Plus (Code BA03LA-W4F-840)		190	3500	6,65,000.00
LCL-2 Bracket mounted, linear LED profile made with Aluminium extruded housing and polycarbonate clear diffuser.		305	2500	7,62,500.00
CSL-1 Ceiling surface mounted low depth adjaustable LED downlight with deep recessed LED, Dia-cast aluminium body. Fixture suitable for 10W LED Lamp		29	2500	72,500.00
CSL-3 Wall surface mounted exit light, sheet steel housing with self-contained battery supply. Suitable for 3W LED lamp		7	3500	24,500.00
<b>AMOUNT</b>				<b>33,43,000.00</b>

ADDITIONAL ITEMS REQUIRED FOR LIGHTING WORKS FOR BASTION BUNGALOW IN FORT KOCHI					
S. No.	ITEM DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
<b>1.00</b>	<b>WIRING &amp; CONTROLS:</b>				
	Supplying, installing, testing and commissioning the following devices:				
a)	Providing and installation of surface mounted 8 pin outlet boxes and wiring with 8 x 1.5 sq mm wire in rigid PVC conduit in corridor .	5	nos	3,500.00	17,500.00
	Recommended makes: LAPP Kabel connect well / Legrand				-
					-
b)	DIN-rail mounted Latching Relays with 2 N/O and 2 N/C contacts, and 220V coil		nos	2,500.00	-
	Recommended makes: Hager / Schneider / Legrand				-
					-
c)	Single gang 6 ampere bell push switch, but without bell marking.		nos	150.00	-
					-
d)	20 A DP DIN mounted contactors (suitable for mounting in prefabricated	2	nos	1,500.00	3,000.00
					-
e)	24-hour dual channel digital Timers, with 1-second pulse-count switching.	1	nos	8,500.00	8,500.00
					-
f)	Electronic on / off delay (0-300 sec)	R/O	nos	9,500.00	
	<b>TOTAL CARRIED OVER TO SUMMARY</b>				<b>29,000.00</b>
<b>2.00</b>	<b>CABLES, MAINS AND SUB-MAINS:</b>				-
					-
2.01	Providing and laying the following types of cables in existing conduits:				-
					-
a)	Cat 6 UTP data cable for lighting keypad	200	mtrs	32.00	6,400.00
					-

S. No.	ITEM DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
2.02	Supplying and laying the following sizes of PVC insulated multi-stranded copper conductor wire of the following sizes in conduit or existing wire ways (internal), or laid on existing existing wire ways (internal)				-
					-
a	3 x 1.5 sq mm wire in conduit	120	mtrs	65.00	7,800.00
					-
b	5 x 1.5 sq mm wire in conduit	80	mtrs	145.00	11,600.00
	<b>TOTAL CARRIED OVER TO SUMMARY</b>				<b>25,800.00</b>
<b>3.00</b>	<b>ENCLOSURES AND MARSHALLING</b>				
	Supplying and installing the following types of steel enclosures complete with internal accessories as specified:				
	IP classification: 42				
	Type of enclosure: Form 1, but with separate cable alleys for LV and MV cables.				
	Material of Construction: Mild CRCA sheet steel, 1.6 mm thickness				
	The panel shall be provided with facility to mount plastic laminated drawings on the inside cover, and a slot for storage of relevant technical manuals.				
	If and where the panel is to be mounted partially or completely flushed with masonry, the incoming and outgoing cables shall be installed in recessed sleeves, and the panel shall be provided with additional space and facility for glanding. Where the panel is mounted within a shaft, care shall be taken to ensure that LV and MV cable and wiring drops are made in the correct cable alley locations				
	Colour: Siemens Grey Powder Coated, or as per Architect's instructions				

S. No.	ITEM DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
	Shop drawing to be prepared and submitted for approval prior to fabrication, based on actual site dimensions.				
3.01	<b>PDB LDB EDB &amp; Lighting Control Processor Enclosure</b> Supply, erecting, testing & commissioning of TPN cubicle type, dead-front, indoor duty, wall mounted enclosure as specified in item 3.00 above but with the following dimensions:				-
	Nominal 2400 H x 1500 W x 200 D	4	nos	4,500.00	18,000.00
					-
3.02	Supplying and installing the following factory-manufactured sheet steel enclosures for device installation complete with hinged door and frame suitable for recessed wall mounting				-
	Receommended Makes: Hager / Legrand / ABB / Havell's				-
					-
a)	Nominal dimensions 300 x 250 x 100 (D),	24	nos	1,200.00	28,800.00
	<b>TOTAL CARRIED OVER TO SUMMARY</b>				<b>46,800.00</b>
<b>4.00</b>	<b>LIGHTING FIXTURES AND FITTINGS:</b>				-
					-
					-
4.01	Receiving at site, handling, minor assembling, fixing, connecting, lamping, focussing and testing the following types of lighting fixtures: (The fittings may be fitted with static or dimmable control gear, supplied by the manufacturer)				-
					-
a)	Installattion of 3 circuits suspended tracks with all accessories as required	166	m	150.00	24,900.00
					-
b)	Indoor type, ceiling/wall surface mounted fixtures with GLS / LED lamp	29	nos	100.00	2,900.00
					-
c)	Step light installation	7	nos	100.00	700.00
					-
d)	Exit lights fixtures and indicating signage	28	nos	100.00	2,800.00
					-

S. No.	ITEM DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
e)	Linear LED light, complete with interconnecting wiring and accessories as	190	m	75.00	14,250.00
					-
f)	Indoor type, continuous, linear, track suspended lighting system, with linear lighting elements, complete with internal connections and fixing arrangement	32	m	100.00	3,200.00
					-
g)	Linear LED light, complete with interconnecting wiring and accessories as required for (Pelmet lighting )	305	m	75.00	22,875.00
					-
4.02	Installing of various DIN-mounted modules (relay controller, TRIAC module, 1-10V control module, DSI module, DALI, DMX) of Schneider / Lutron / Dynalite / Rako or equivalent multi channel dimming system in existing steel enclosure or on surface, including the cost of DIN channel where required. (Cost of steel enclosure taken elsewhere)	36	nos	250.00	9,000.00
4.03	Installing of control keypads, including providing of standard 3-module GI switchbox, suitable for flush mounting in masonry.	10	nos	250.00	2,500.00
	<b>TOTAL CARRIED OVER TO SUMMARY</b>				<b>83,125.00</b>
				<b>TOTAL</b>	<b>1,84,725.00</b>