



जहाँ है हरियाली।
वहाँ है खुशहाली।।



GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
Central Zoo Authority

165/276



THROUGH FAX

F. No. 19-58/93-CZA(190)(Vol. III)(M)/1780

DATE: 17.10.2012

To

The Additional Principal Chief Conservator of Forests (WL)
Government of Manipur,
Imphal.

BY FAX
21/10/12

Sub:- Designs for the construction of Leopard and Bear enclosure at Manipur Zoological Garden, Imphal and Master (layout) Plan of the Zoo.

Ref:- Your office letter No. 5/4/2006-WL(pt.) dated 12.09.2012.

Sir,

Reference is invited to the above cited correspondence.

The designs for the construction of Leopard and Bear enclosure at Manipur Zoological Garden, Imphal and Master (layout) Plan of the Zoo were placed before the Expert Group of Zoo Designing Meeting held on 20th September 2012. The members scrutinized the designs and Master (layout) Plan and following observations were made:-

Enclosures

(i) **Construction of Leopard enclosure**

The design was scrutinized and approved subject to the following conditions:-

- There should be four feeding and retiring cells.
- The kraal should be shifted away from the visitor's area.
- The total height of the vertical fence should be kept 5 mt. and overhang should be at 60 degree angle of 1.5 meter wide.
- The overhang should use the MS sheet only instead of chain-link fence.
- No iron plate should be used on vertical fence.
- The chain-link fence should be fixed on the inner side of the fence.
- The chain-link fence should be of 5cm x 5cm x 10 gauge.

....2/-

[Handwritten signature]

(ii) Construction of Himalayan Black Bear enclosure

The design was scrutinized and approved subject to the following conditions:-

- (a) There should be four feeding and retiring cells.
- (b) The size of the kraal should be of 10meterx5.5 meter.
- (c) The viewer side should only have moat as prescribed by the Central Zoo Authority rest of the area should have a naturalistic wall of 3 meter high instead of chain-link fence.
- (d) The wall should be screened with small shrubs and climbers.

Master (layout) Plan

The layout plan was scrutinized and not approved as the zoo authorities has not complied with the observations communicated previously. However following observations were made in addition:-

- (a) The size of the animal enclosures proposed should be in conformity of the size as prescribed by the Central Zoo Authority.
- (b) The enclosure number 13 & 14 to be combined to house Hornbill.
- (c) The enclosure number 15 should be left as a green area.
- (d) The enclosure number 16 & 17 should be used for keeping Hume's pheasant.
- (e) The enclosure number 18 should be used green belt.
- (f) The enclosure number 19 & 20 to be modified to house Kalij pheasant.
- (g) The enclosure number 21 should house Peafowl only.
- (h) The enclosure number 27 should house Burmese pheasant.
- (i) The enclosure number 29 should house Emu.
- (j) The enclosure number 31 & 32 to be combined to house Wild boar.
- (k) The enclosure number 35 & 37 to be combined to provide suitable area for housing Hawks.
- (l) Old primate enclosure to be re done and its area should be increased to accommodate any three primate species.
- (m) If there are any excess Rhesus macaques in the zoo these should be shifted to the rescue centre area.
- (n) The area earmarked at S. No. 49 & 50 for gifts and interpretation centre should be converted into inpatient house. It should be kept as off-display so that the whole area of the hospital shall become operational.
- (o) The enclosure number 46 at present have 12 numbers of cells, the area should be redone and efforts should be made to increase its area and width to house Slow loris, Hog badger, Toddy cat and Civet cat.

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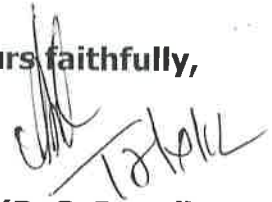
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Breeding enclosure for Sangai

The design was approved subject to the following conditions:-

- (a) The detailed conservation breeding programme for Sangai should be submitted in the prescribed proforma of the Central Zoo Authority. The proposal should include provision of transferring of animals to the other zoos.
- (b) The feeding cells should be kept along with periphery of the enclosure so that the keeper does not have to enter through the paddock.

Yours faithfully,



(B. S. Bonal)
Member Secretary

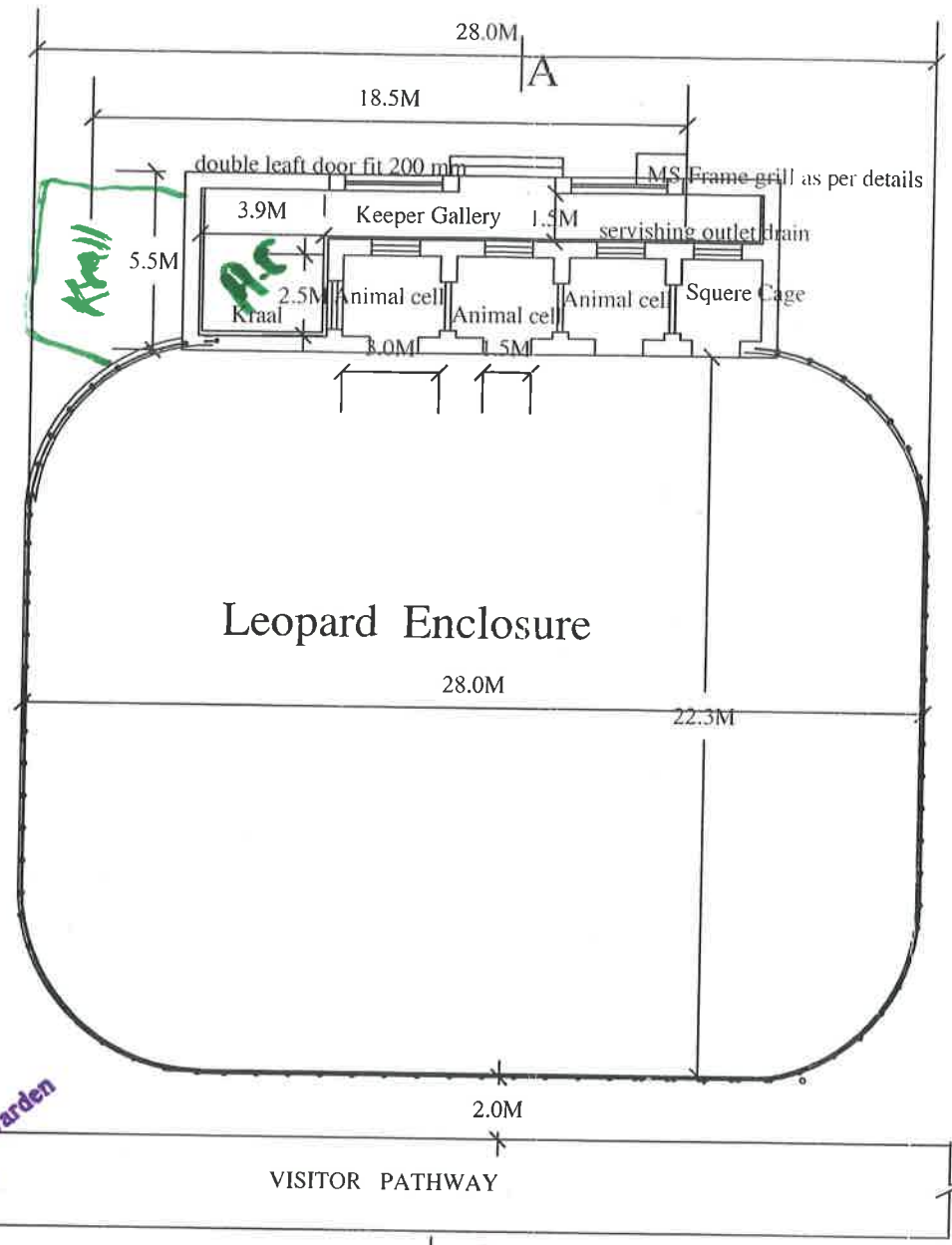
Copy to the Chief Wildlife Warden, Government of Manipur, Imphal for favour of information & necessary action.



(B. S. Bonal)
Member Secretary

Design of proposed construction of Leopard Enclosure at Manipur Zoological Garden.

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Leopard Enclosure

PLAN Scale 1:100

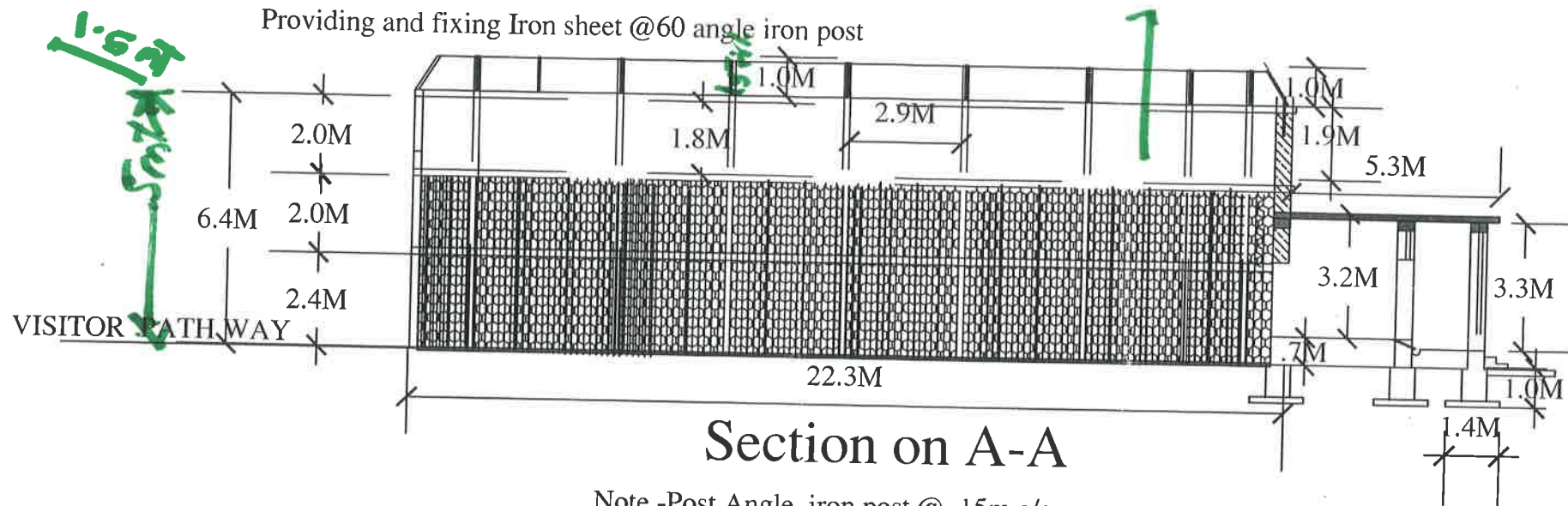
H. SHANTI KUMAR SINGH
 Director
 Manipur Zoological Garden
 Govt. of Manipur

(OR) ANIL KUMAR
 Addl. PCCF (WL) & Chief Wildlife Warden
 Government of Manipur

Registered Architect
 Mr. Arfbam Joychandia Sharma
 B. Arch. Bon bay
 Regd. No. C/A 85/9407 New Delhi

Design of proposed construction of Leopard Enclosure at Manipur Zoological Garden.

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Note -Post Angle iron post @ .15m c/c

Providing and fixing Iron sheet @60 angle iron post

Providing horizontal belt @2m c/c 4 nos

Providing plain iron sheet at 60 degree angle toward enclosure

Providing plain iron sheet 2m downward from the top of angle iron post,

Providing chain link wire mesh outside the iron horizontal bars.

-Post Angle iron post @ .15m c/c

6.4M

Ground Level

(H. SHANTI KUMAR SINGH)
Director
Manipur Zoological Garden
Govt. of Manipur

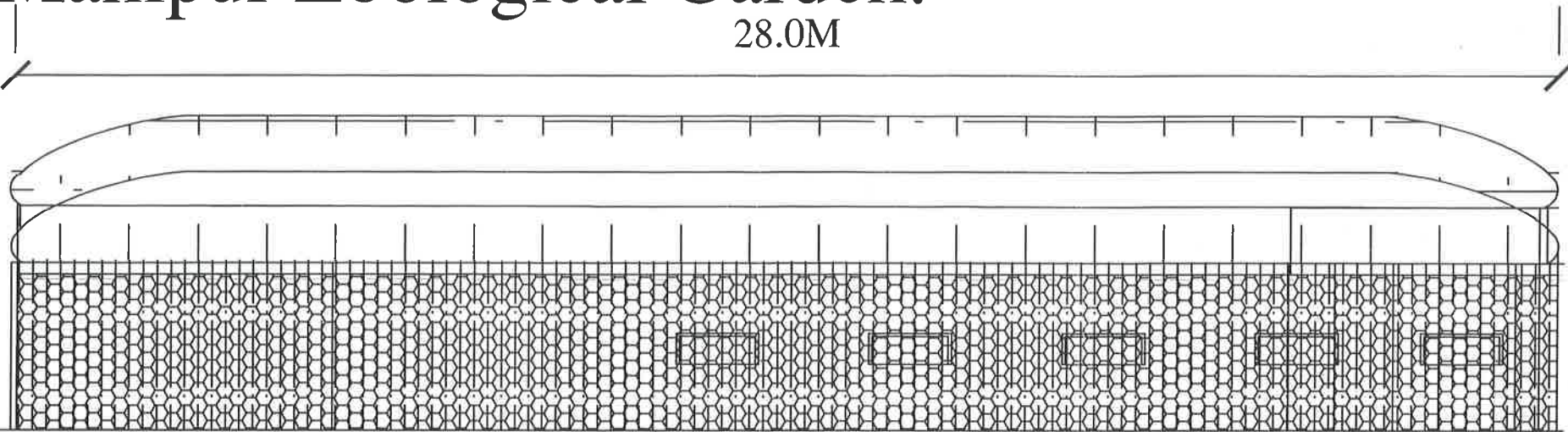
(DR. ANIL KUMAR)
Addl. PCCF (WL) & Chief
Government of Manipur

V. Seikan
Registered Architect
Mr. Arlbam Jochandria Sharma
B. Arch. B. N. Day
Regd. No. C/A 45,540/ New Delhi

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Design of proposed construction of Leopard Enclosure at Manipur Zoological Garden.

28.0M



Front Elevation

(A. SHANTI KUMAR SINGH)
Director,
Manipur Zoo, Imphal,
Govt. of Manipur

(DR ANIL KUMAR)
Addl. PCCF (WL) & Chief Wildlife Warden
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