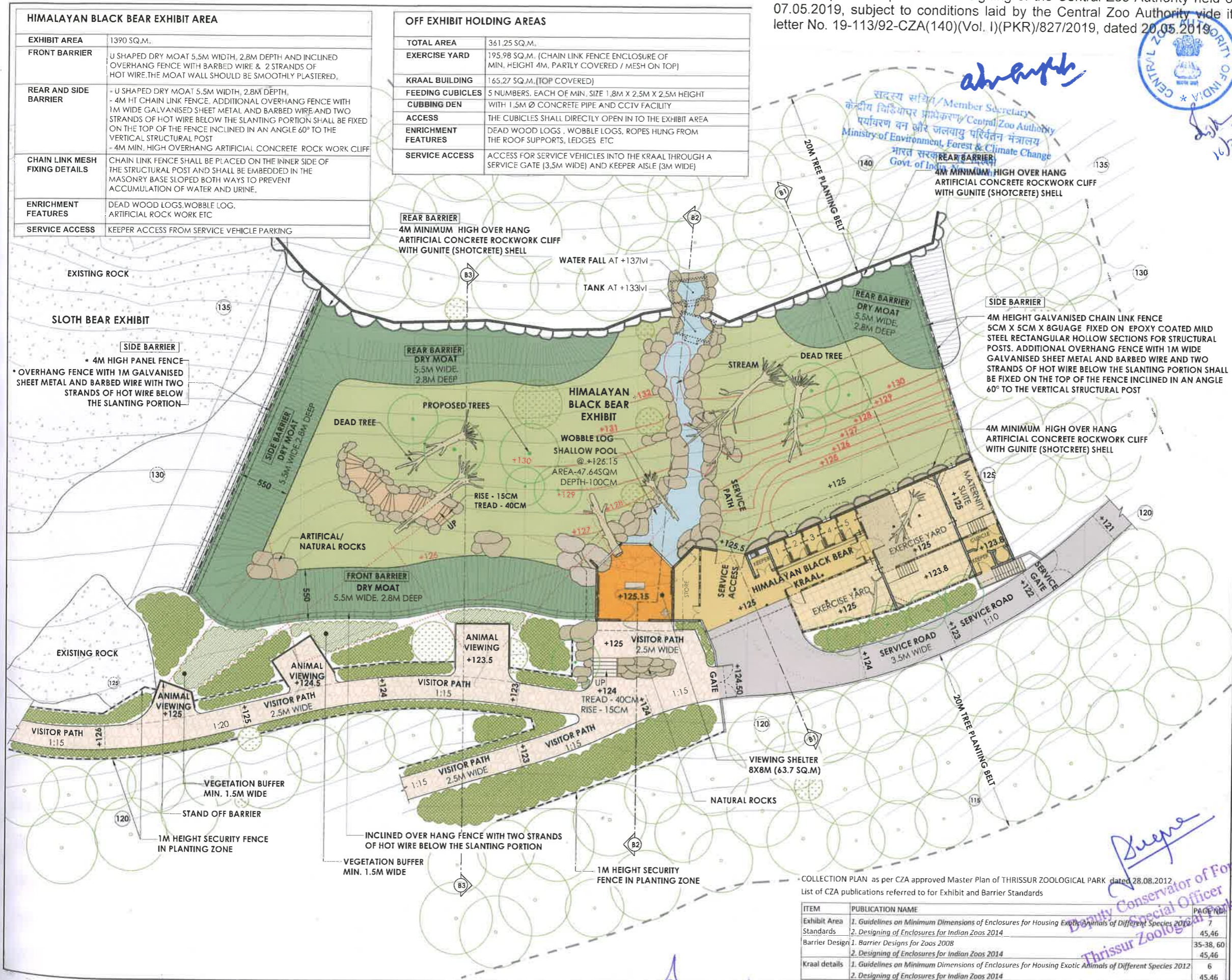


The drawings of the Himalayan black bear enclosure to be constructed at the Thirissur Zoological Park, Puthur, Kerala were approved by the 84th Meeting of the Expert Group on Zoo Designing of the Central Zoo Authority held on 07.05.2019, subject to conditions laid by the Central Zoo Authority vide its letter No. 19-113/92-CZA(140)(Vol. I)(PKR)/827/2019, dated 20.05.2019.



HIMALAYAN BLACK BEAR EXHIBIT AREA	
EXHIBIT AREA	1390 SQ.M.
FRONT BARRIER	U SHAPED DRY MOAT 5.5M WIDTH, 2.8M DEPTH AND INCLINED OVERHANG FENCE WITH BARBED WIRE & 2 STRANDS OF HOT WIRE. THE MOAT WALL SHOULD BE SMOOTHLY PLASTERED.
REAR AND SIDE BARRIER	- U SHAPED DRY MOAT 5.5M WIDTH, 2.8M DEPTH, - 4M HI CHAIN LINK FENCE. ADDITIONAL OVERHANG FENCE WITH 1M WIDE GALVANISED SHEET METAL AND BARBED WIRE AND TWO STRANDS OF HOT WIRE BELOW THE SLANTING PORTION SHALL BE FIXED ON THE TOP OF THE FENCE INCLINED IN AN ANGLE 60° TO THE VERTICAL STRUCTURAL POST - 4M MIN. HIGH OVERHANG ARTIFICIAL CONCRETE ROCK WORK CLIFF
CHAIN LINK MESH FIXING DETAILS	CHAIN LINK FENCE SHALL BE PLACED ON THE INNER SIDE OF THE STRUCTURAL POST AND SHALL BE EMBEDDED IN THE MASONRY BASE SLOPED BOTH WAYS TO PREVENT ACCUMULATION OF WATER AND URINE.
ENRICHMENT FEATURES	DEAD WOOD LOGS, WOBBLE LOG, ARTIFICIAL ROCK WORK ETC
SERVICE ACCESS	KEEPER ACCESS FROM SERVICE VEHICLE PARKING

OFF EXHIBIT HOLDING AREAS	
TOTAL AREA	361.25 SQ.M.
EXERCISE YARD	195.98 SQ.M. (CHAIN LINK FENCE ENCLOSURE OF MIN. HEIGHT 4M, PARTLY COVERED / MESH ON TOP)
KRAAL BUILDING	165.27 SQ.M. (TOP COVERED)
FEEDING CUBICLES	5 NUMBERS, EACH OF MIN. SIZE 1.8M X 2.5M X 2.5M HEIGHT
CUBBING DEN	WITH 1.5M Ø CONCRETE PIPE AND CCTV FACILITY
ACCESS	THE CUBICLES SHALL DIRECTLY OPEN IN TO THE EXHIBIT AREA
ENRICHMENT FEATURES	DEAD WOOD LOGS, WOBBLE LOGS, ROPES HUNG FROM THE ROOF SUPPORTS, LEDGES ETC
SERVICE ACCESS	ACCESS FOR SERVICE VEHICLES INTO THE KRAAL THROUGH A SERVICE GATE (3.5M WIDE) AND KEEPER AISLE (3M WIDE)

THIRISSUR ZOOLOGICAL PARK
Wildlife Conservation & Research Centre, Puthur

DPR - STAGE 3:
DRAWINGS FOR STATUTORY APPROVAL

EXHIBIT NAME:
HIMALAYAN BLACK BEAR

DRAWING TITLE:
EXHIBIT PLAN

DRAWING NO:	DATE:	REVISION:
DPR/S3/HB/02	20.12.2018	

SCALE:
1:400 (A3)

- LEGEND:
- (120) EXISTING CONTOUR LEVEL
 - +125 PROPOSED LEVEL
 - OVERHEAD MESH
 - B2 SECTION NAME
 - PROPOSED LOW PLANTING
 - PROPOSED PLANTING
 - PROPOSED ROCK
 - EXISTING ROCK
 - EXISTING BAMBOO
 - FENCE

COLLECTION PLAN:

MALE	FEMALE	TOTAL
1	2	3

AREA STATEMENT:

HIMALAYAN BLACK BEAR EXHIBIT	1390 Sq.m
KRAAL (OFF EXHIBIT HOLDING AREAS)	361.25 Sq.m

CONSULTANTS:
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PROJECT BY:

COLLECTION PLAN as per CZA approved Master Plan of THIRISSUR ZOOLOGICAL PARK dated 28.08.2012

List of CZA publications referred to for Exhibit and Barrier Standards

ITEM	PUBLICATION NAME	PAGE NO.
Exhibit Area Standards	1. Guidelines on Minimum Dimensions of Enclosures for Housing Exotic Animals of Different Species 2012	7
	2. Designing of Enclosures for Indian Zoos 2014	45, 46
Barrier Design	1. Barrier Designs for Zoos 2008	35-38, 60
	2. Designing of Enclosures for Indian Zoos 2014	45, 46
Kraal details	1. Guidelines on Minimum Dimensions of Enclosures for Housing Exotic Animals of Different Species 2012	6
	2. Designing of Enclosures for Indian Zoos 2014	45, 46

Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Kerala

Deputy Conservator of Forests & Special Officer
Thirissur Zoological Park, Puthur
Kerala Forest Department
GOVERNMENT OF KERALA
FOREST HEADQUARTERS, VAZHUTHACAUD,
THIRUVANANTHAPURAM - 695014
Chief Conservator of Forests
Central Circle & Special Officer
Thirissur Zoological Park



THRISSUR ZOOLOGICAL PARK
Wildlife Conservation & Research Centre, Puthur

DPR -STAGE 3:

DRAWINGS FOR STATUTORY APPROVAL

EXHIBIT NAME:

HIMALAYAN BLACK BEAR

DRAWING TITLE:

EXHIBIT SECTIONS

DRAWING NO: DATE: REVISION:

DPR/S3/HB/04 20.12.2018

SCALE:



1:400 (A3)

CONSULTANTS:

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Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Kerala

KERALA FOREST DEPARTMENT

GOVERNMENT OF KERALA

FOREST HEADQUARTERS, VATHUTHACAUD,

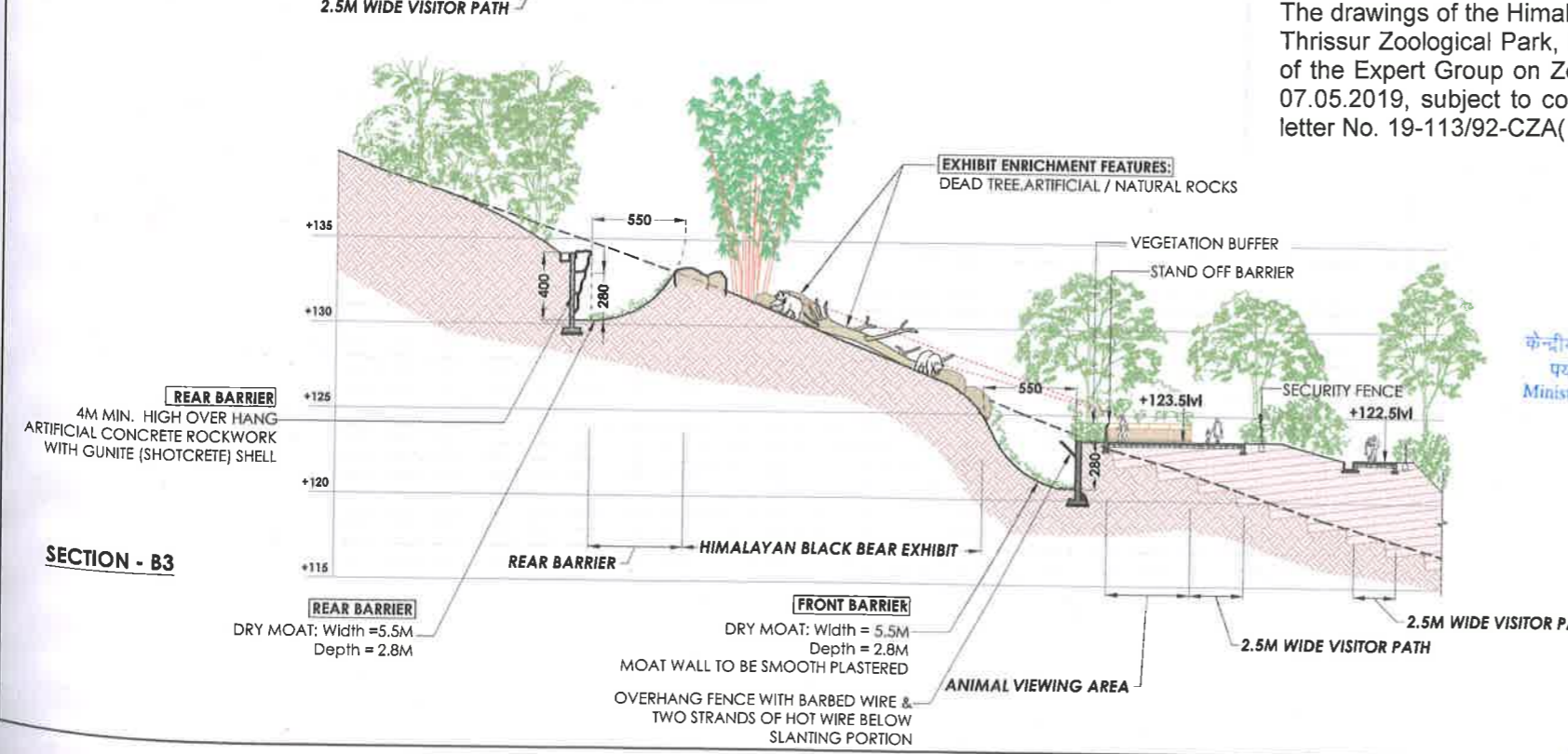
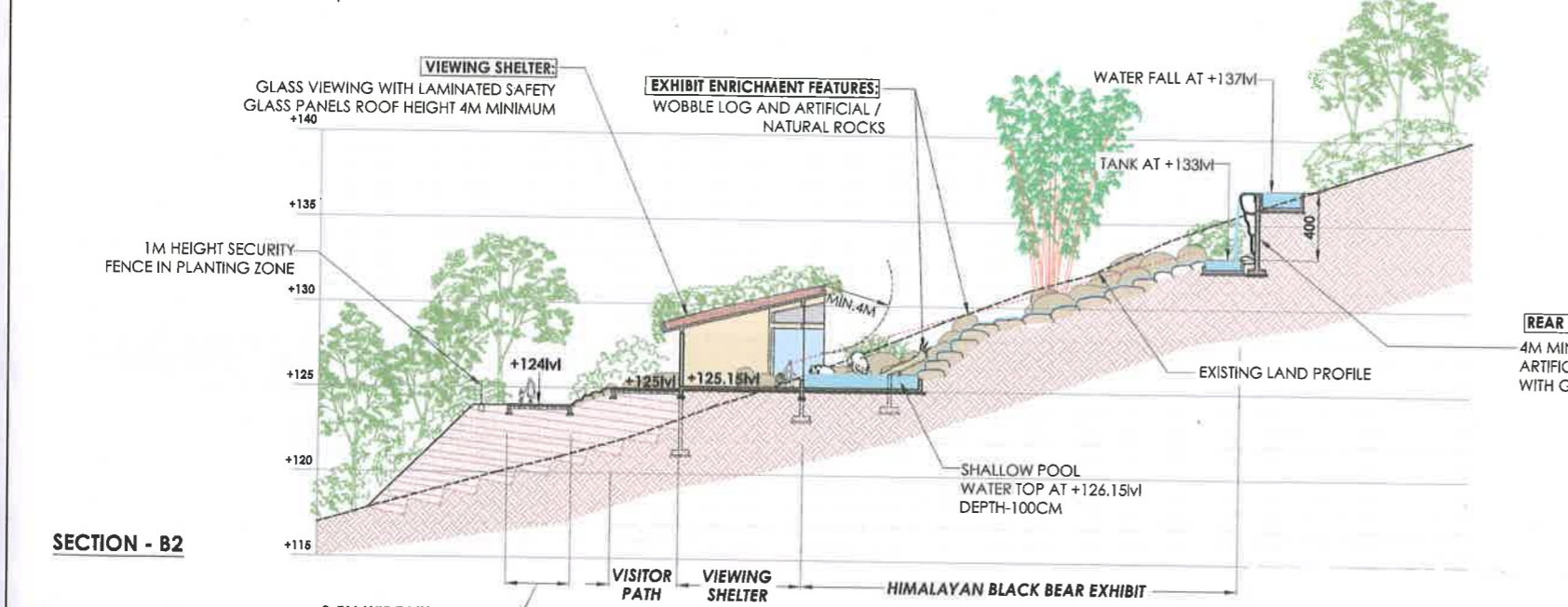
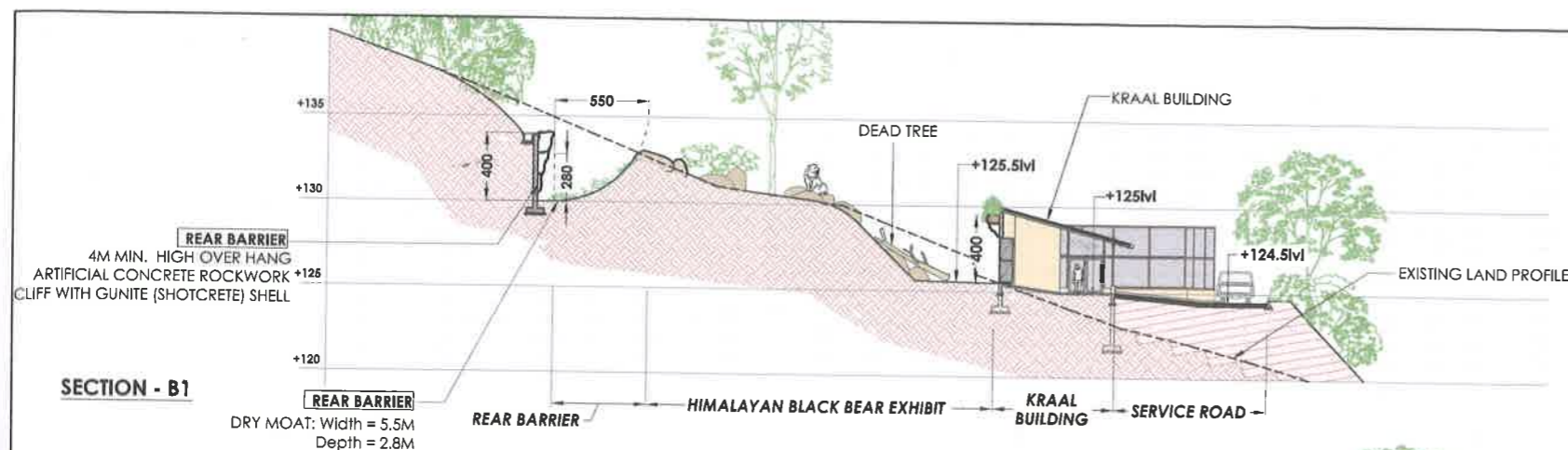
THIRUVANANTHAPURAM - 695014

KERALA, INDIA

Chief Conservator of Forests

Central Circle & Special Officer

Thrissur Zoological Park



The drawings of the Himalayan black bear enclosure to be constructed at the Thrissur Zoological Park, Puthur, Kerala were approved by the 84th Meeting of the Expert Group on Zoo Designing of the Central Zoo Authority held on 07.05.2019, subject to conditions laid by the Central Zoo Authority vide its letter No. 19-113/92-CZA(140)(Vol. I)(PKR)/827/2019, dated 20.05.2019.

Signature
सदस्य/Member Secretary
केन्द्रीय विज्ञानाचार प्राधिकरण/Central Zoo Authority
पर्यावरण वन और जलवायु परिवर्तन मंत्रालय
Ministry of Environment, Forest & Climate Change
भारत सरकार, नई दिल्ली
Govt. of India, New Delhi



Signature
Deputy Conservator of Forests & Special Officer
Thrissur Zoological Park, Puthur

Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Kerala

Signature
Deputy Conservator of Forests & Special Officer
Thrissur Zoological Park