राष्ट्रीय आदिवासी छात्र शिक्षा समिति
(जनजातीय कार्य मंत्रालय के अंतर्गत
एक स्वायत्त संस्थान, भारत सरकार)
भू-तल, गेट नंबर-3ए, जीवन तारा बिल्डिंग,
संसद मार्ग, नई दिल्ली-110001
दूर. 011-23340280

National Education Society for Tribal Students
(An Autonomous Organization under
Ministry of Tribal Affairs, Govt. of India)
Ground Floor, Gate No.3 A, Jeevan Tara Building,
Parliament Street, New Delhi-110001
Telephone No. 011-23340280
वेबसाइट/Website: www.tribal.nic.in
Email: nests-tribal@tribal.gov.in

File No: NESTS/Civil/EMRS Order/140/2021-22 **Date:30.03.2022**

To,

CMD/MD/CEO
B & R/EPIL/HSCL/NPCC/MTDC/MANIDCO/TCIL/WAPCOS

Sub: EMRS Guidelines for submission of Preliminary Estimates EMRS Phase-II Construction and Single- Phase Construction Reg.

Dear Sir,

The PSUs has been allotted constructions Ekalavya Model Residential School (EMRS)/ EMDBS in the designated blocks in the State of Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Dadra and Nagar Haveli, Gujarat, Jharkhand, Ladakh , Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Odisha, Tamilnadu, Tripura, and, Uttarakhand & West Bengal. The Phase-I construction of EMRSs is in progress in many locations. The competent authority has now approved the Phase-II construction work based on the receipt of revised Estimate from Government of India. In this regard PSUs are requested to take up construction activities Phase-II as per the NESTS Phasing Order No.18015/11/2019-EMRS(Pt) dated 08.09.2020. Wherever, Phase-I construction has not approved and A/A & E/S not issued so far, the EMRS Construction work shall be taken up in Single Phase only covering construction activities of both the Phases. The EMRS guidelines dated 18.10.2021 has been updated to cover both Phase-II construction and Single-Phase Construction as the case may be.

Further, wherever A/A & E/S are issued, but DPRs are not approved, the Work shall also be taken up in Single-Phase w.e.f. 01.04.2022, accordingly PSUs are requested to take up pre-construction activities for one go for both phases of construction.

The PSUs are requested to submit the Preliminary Estimate for Phase-II Construction and Single Phase Construction, as the case may be, for which The EMRS guidelines dated 18.10.2021 has been updated to cover both Phase-II construction and Single-Phase Construction as detailed below: -

1. **Preliminary Estimate-** Preliminary Estimates including detailed provision of cutting, filling and retaining structures, Stone pitching shall be submitted for issue of A/A & E/S for Phase-II construction for a total Plinth Area of 4390 Sq mt. and for Single-Phase Construction for a total Plinth Area of 10040 Sq. Mt. The PE shall be submitted on standard PE format shared by NESTS based on DPAR 2012 with applicable CPWD Cost Index for issue of A/A & E/S. The standard PE format is enclosed at **Annexure-I** and **Annexure-II** for Phase-II and Single-Phase Construction respectively.
2. **Phase I Project Cost:** - The PSU shall provide the likely expenditure for completion of Phase-I construction based on tendered amount and upto date expenditure: -

EMRS	Tendered Cost	Project Cost including other provisions like ESI/EPF/Contingencies etc based on tendered amount.	Upto date Expenditure	Likely project Cost including ESI/EPF/ Contingencies, deviation, etc based on tendered amount, if any, etc on completion of Phase-I

3. **MLP (Master Layout Plan):-** The copy of the already approved MLP in Phase -I including remarks/revision/changes, if any, may be submitted. The MLP shall include the complete development plan including services as per enclosed Checklist in **Annexure-III.**

(i) The actual demarcated boundary indicating length of compound wall and entrance gate Location.

(ii) The actual demarcated position of all buildings being taken up in Phase-I indicating the actual plinth level, road levels, protection works, etc.

(iii) The placement of buildings of Phase-II construction - Hostels, Principal Quarter, Type III Qts (G+1) - 2 Blocks, Type II (G + 2) -1 Block.

(iv) The one Type-III Quarter at GF shall be converted into Guest House. No separate block for Guest House.

(v) Sports infrastructure as per approved MLP indicating ground level, dimensions of playground, volleyball & basketball court, Archery. The dimension of playground shall be kept in such a way to have 200 or 400 metre tracks only.

(vi) The final layout diagram of roads, Storm Water Drains, Sewerage, Water Distribution Diagrams, UG cables, Street lights and other services, Septic Tank, Sump, ESS, etc shall be indicated in MLP.

4. **Specifications: -** The Specifications of building including floor height, internal & external finishes, cladding, internal partition details, doors & windows, flooring, ramp, etc is enclosed at **Annexure 'A'.** This specification shall be followed in ongoing Phase-I construction also.

5. **Architectural Drawings: -**
With reference to the earlier approved drawings based on CPWD and NESTS Drawings dated 18.10.2021, an updated drawings for School Building, Hostels, Kitchen & Dinning, Principal Quarter, Type III Quarters, Type II Quarters, Security Cabin and Entrance Gate are enclosed at **Annexure 'B'.** The discrepancies, if any, in architectural drawings and specification shall be brought to the notice of NESTS

6. **Structural Drawings and TPQA: -**

(i) NESTS order dated 27.01.2022 for vetting of structural drawings and TPQA shall be followed. The vetting of the structural drawings shall be done through IITs only in respect of all the works of Northeast Region due to high seismic zone and NITs/IIT/CBRI, Roorkee in respect of other locations.

(ii) The vetted copy of structural drawings shall be submitted along with the final submission of DPR. The vetted copy of structural drawings should be signed by structural consultant, vetting authority, PSU Engineer/Zonal Head and shall be submitted with certificate from vetting authority and soil report.

7. **Submission of MLP & DPR: -**
The duly signed Final MLP, DPR, Drawings shall be considered for approval. The MLP & DPR must be signed by the competent authority of PSUs (Zonal Head), their engaged consultant (Architect & Structural Consultant) vetting authority, etc.

The timeframe for pre-construction activities as indicated below shall strictly be adhered to as provided in MoU.

Single -Phase Construction

(i) Submission of MLP and approval by NESTS: -45 Days (Draft MLP is to be shared within 30 days of issue of formal sanction)

(ii) Submission of DPR and approval by NESTS: - 45 Days (Draft DPR including Structural Drawings along with Soil Report, Detailed Estimate, etc to be shared with NESTS within 15 days of approval of MLP.

(iii) Calling of Tender and Awarding of Work by PSU –60 Days

(iv) Vetting of structural Drawings - 15 to 30 days depending upon IIT/NIT requirement.

Phase-II Construction

(i) Submission of Final MLP & PE for Phase-II construction and approval by NESTS: -30 Days

(ii) Submission of supplementary DPR for Phase-II and approval by NESTS: - 30 Days (Draft supplementary DPR including Structural Drawings along with Soil Report, Detailed Estimate, etc to be shared with NESTS within 15 days of issue of A/A &E/S).

(iii) Calling of Tender and Awarding of Work by PSU –60 Days

(iv) Vetting of structural Drawings - 15 to 30 days depending upon IIT/NIT requirement

8. Work Commencement

a. Monitoring and Quality Control: -

(i) NESTS shall be informed regarding final position of buildings at site including site development plan, contour level, etc. before commencement of building works.

(ii) The CA shall ensure the proper demarcation of the land before start of the execution related activities. In case, any deviation in the approved area/boundary line, the revised MLP with reference to actual available land area/boundary shall be shared for revised approval by NESTS.

(iii) Working Drawings- A complete set of architectural/ working drawing incorporating all features of MLP and Plinth level of buildings, architectural drawings finished road level, septic tank level shall be shared to NESTS before executions.

(iv) Other Layout- The layout diagram of Storm Water Drains, Sewerage, Water Distribution Diagrams, UG cables, Street lights, etc shall be shared with NESTS after the layout marking at site is finalized.

(v) Vetting of Structural Drawings -. The vetted copy of structural drawings shall be available at the time of physical commencement of work. No building work shall be permitted without vetted drawings.

(vi) TPQA- The Construction Agency shall in consultation with NESTS finalize Third Party Quality Assurance (TPQA) Agency before commencement of work.

(vii) The Quality plan and Design Mix Shall be available before the time of commencement.

(viii) Joint visit of architect, structural engineer, TPQAA and engineering team of PSU is essentially required before commencement of building work to ensure quality work with approved drawings. This would help to finalize the site development works like road, drainage, building levels, etc. The report of joint site visit shall be shared with NESTS

(ix) The regular monitoring and frequent site visit by engineering team including zonal head is absolutely necessary to ensure quality and reinforcement, structure is being done as per approved architectural and vetted structural drawings. NPCC must ensure that the site engineer must be stationed at site.

b. Deviation: -

(i) The PSU shall share and discuss the final demarcated position of building vis-à-vis approved MLP particularly where there is a hilly terrain and difficult topography involving cutting and filling. This would help avoid deviation in quantities and expenditure.

(ii) The Finalization of Structural Drawings at DPR stage to arrive at correct estimation of RCC quantity will avoid future deviation.

(iii) The PSU shall take adequate measures to avoid deviation in every stage of construction. In this regard the proper technical scrutiny of site condition, layout, foundation, structural drawings, etc, involving competent technical manpower, Zonal Manager is essentially

required. **No expenditure beyond A/A & E/S provisions shall be permitted considering budget constraint.**

9. **Documentation and Photograph of ongoing construction**: - PSU shall continuously share the GPS enabled dated photographs of ongoing construction to the EMRS Civil PSU Coordination WhatsApp group. The photographs need to be shared in every stage of construction for important items and milestones like foundation reinforcement, RCC casting of foundations, columns, beams & Slab, masonry work, etc as well along with each running bill.

10. **Manpower Deployment: -**
    (i) The PSU shall inform the details of dedicated cell in HQ with name, experience, designation, etc of nodal engineer from PSU coordinating with NESTS along with name, qualification (CA number of architect) and experience of appointed architect and structural engineer for EMRS work.

    (ii) PSU shall share the details of Site Engineers, project engineer for each location with name designation, experience before the commenced of work.

11. **North East/Hilly Area: -**
    The construction in the North Eastern region and hilly areas requires adopting construction & special design as per the available hilly terrain. The EMRS building may be planned along contour with special design to reduce the cost of construction. Every structure in hilly area is required to be designed as per availability of terrain of the land. Regarding roofing in high rainfall areas, the roof truss with pre-coated profile sheet roofing shall be considered in place of flat RCC slab roof for school buildings. The special planning and design in respect of North East Region and Hilly region are detailed below: -
    i. The school building shall be G +2 with pre-coated roof/flat roof depending upon rainfall intensity.
    ii. The Hostels' buildings shall be G +2 including kitchen & Dinning, no separate Kitchen and Dining Building.
    iii. The architectural drawings for North East/ Hilly region are enclosed at **Annexure 'C'**

The above guidelines, specifications, updated architectural drawings and procedures shall be followed henceforth unless otherwise mentioned. However, any deviation from standard norms of educational buildings, anomalies, etc in drawings shall be brought to the notice of NESTS. Further, Phase-II approval shall be conveyed only after compliance of all pending issues related to drawings, quality, vetting, etc of Phase-I Construction.

In view of the revised Cost norms, time frame, other construction issues, PSU needs to sign supplementary agreement before the approval of Phase-II/Single-Phase construction.

The PSU is requested to take up pre-construction activities like submission of Final MLP/MLP and Preliminary Estimates for issue of A/A & E/S for Phase -II and Single-phase construction as per the guidelines mentioned above so that for further construction activities like approval of DPR/Supplementary DPR, etc may be processed. The Likely Project Cost on completion of Phase-I may be shared along with Preliminary Estimate in prescribed table indicated at S. N. 2. The PSU shall exercise due care to submit the total Project Cost of Phase-I considering deviation if any.

This order is issued with the approval of competent authority.

(K C Meena)
Additional Commissioner

Copy to:
1. Nodal Officer/ Zonal Head of **B & R/EPIL/HSCL/NPCC/MTDC/MANIDCO/TCIL/WAPCOS** of concerned State for information and necessary action please
2. PS to Commissioner, NESTS, New Delhi
3. Guard File

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ANNEXURE-I (STANDARD FORMAT) : PRELIMINARY ESTIMATE for EMRS PHASE-II Construction (General)

(PE for reference purpose only)

S. No.	ITEMS	Quantity		Rate	Amount (in Rs.)	BASE	Remarks
(A)	**Non-Residential Buildings**						
1	School Building	0	Sqm		0	DPAR 12	
	Sub Total	**0**	Sqm		**0**	**(A)**	
(B)	**Residential Buildings**						
1	Girl's Hostel	1140	Sqm		2,50,92,445	DPAR 12	Annexure-b
2	Boy's Hostel	1140	Sqm		2,50,92,445	DPAR 12	Annexure-d
3	Principal Qtr	130	Sqm		28,57,476	DPAR 12	Annexure-f
4	Type III qtrs - 15 No + I Guest House of Plinth Area 80 Sqm	1280	Sqm		2,77,65,659	DPAR 12	Annexure-g
5	Type II Qtrs - 10 No.	700	Sqm		1,51,73,860	DPAR 12	Annexure-h
6	Kitchen & Dining	0	Sqm		0	DPAR 12	
7	Structure for Sub Station, Pump Room, Security Cabin	0	Sqm		0	DPAR 12	
	Sub Total	**4390**	Sqm		**9,59,81,885**	**(B)**	
	Total Plinth Area	**4390**	Sqm				
(C)	**Development of Site**						
1	Internal roads & paths with cement concrete pavement with vaccum dewatered concrete. [(20%* of Total Plot Area of the site i.e. 15 Acre x 4047 = 60705 Sqm) = 24282 sqm] With WBM Base Course)	12141	Sqm	145	17,60,445	DPAR 12	
2	Sewerage System [(10%* of Total Plot Area of the site i.e. 15 Acre x 4047 =60705 Sqm) = 18212 sqm]	9106	Sqm	110	10,01,660	DPAR 12	
3	Filter Water Supply :-Distribution lines 100 mm dia and below (Plinth Area of Phase-1)	4390	Sqm	80	3,51,200	DPAR 12	
4	Unfiltered water supply distribution lines (Plinth Area of Phase-1)	4390	Sqm	45	1,97,550	DPAR 12	
5	Storm water drains [(20%* of Total Plot Area of the site i.e. 15 Acre x 4047 = 60705 Sqm) = 24282 sqm]	12141	Sqm	85	10,31,985	DPAR 12	
	Sub Total				**43,42,840**	**(C)**	
(D)	**Water Tank**						
1	RCC OH Tank	25000	Litre	15	3,75,000	DPAR 12	
2	UG Sump	50000	Litre	15	7,50,000	DPAR 12	
	Sub Total				**11,25,000**	**(D)**	
	Total	**A + B + C + D**			**10,14,49,725**		
	Add enhancement @120 % (aveagre) due increase in CI of a particular location over **DPAR 2012**	20.00%			**2,02,89,945**		
	TOTAL Estimated Cost on DPAR 2012				**12,17,39,670**	**(H)**	
(E)	**MISCELLANEOUS SERVICES**						
1	**Civil**						
1.1	Rain Water Harvesting (RWH)	4390	Sqm	90	3,95,100	DPAR 19	
1.2	Compound/Boundary wall with 1.5 metre normal height from GL & 0.60 meter high MS grill, and required no. of steel gates/wicket gates etc.	0	Metre	9000	0	DPAR 19	
1.3	Extra for 0.30 metre additional height of compound wall beyond 1.50 metre (actual length = 1056.7)	0	Metre	800	0	Derived from DAR 19	
	Sub Total				**3,95,100**	**(E1)**	
2	**Electrical**						
2.1	SUB Station (HT Panel, Transformer, HT Cable etc.)	0	KVA	9000	0	DPAR 19	
2.5	Supplying, installation, testing and commissioning of Silent Type DG Sets(25 KVA)	25	KVA	11000	2,75,000	DPAR 19	S. No. 2/page2
2.3	LED Street Light	4390	Sqm	150	6,58,500	DPAR 19	S. No. 20/page
2.4	CCTV system (for external surveillance of plot area)	0	Sqm	200	0	DPAR 19	
	Sub Total				**9,33,500**	**(E2)**	
	TOTAL Estimated cost on DPAR 2019 as on 01.04.2019	**E1 + E2**			**13,28,600**	**(E3)**	
	Add enhancement @ 1.70% due to increase in Cost Index from 118 to 120 (average) over **DPAR 2019**	**1.70%**			**22,586**		
	Total				**13,51,186**	**(I)**	

29.3.22

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(F)	**Site Specific Requirment if any like Retaining Wall/ Cutting/Filling Lump Sump , to be worked out as per actual based on MLP**						
1	Site Levelling	0	Job	**0**	**0**		
2	Protection Works/ RR/Stone pitching	0	Job	**0**	**0**		
					0		
	Add enhancement @ 1.70% due to increase in Cost Index from 118 to 120 (average) over **DPAR 2019**	1.70%			**0**		
					0		
(G)	**OTHER SERVICES**						
1	**Civil**						
1.1	Deep Bore Well 8" dia with 7.5 Hp Submerssible Motor i/c wiring accessories, GI suction & delivery Pipe 300 metre 80m mm , control panel, starter, etc.	1	Job	650000	6,50,000	MR	
1.2	Septic tank	1	Job	1000000	10,00,000	MR	
2	**Fire Fighting work**						
2.1	Fire Extingushers ABC Dry Chemical	20	Nos.	2500	50,000	MR	
2.2	Extending Fire safety Measure avaible to 2nd Hostel block	2	Nos.	250000	5,00,000	MR	
2.3	Pump including wiring accessories, control panel etc. for Supply to OH Tank	1	Job	75000	75,000	MR	
2.4	5 Hp Sewarge Pumps including delivery & suction lines	1	Job	125000	1,25,000	MR	
					24,00,000		
3	**Sports Facilities (Lump Sum Provision)**						
3.1	Play Ground with 400 Metre running track	1	Job	3500000	35,00,000	MR	
3.2	Basket Ball Court - 2 Nos. i/c Special Lighting for Basket Volley Ball	2	Job	1250000	25,00,000	MR	
3.3	Volley Ball Court - 2 Nos i/c 2 Nos. i/c Special Lighting for Basket	2	Job	100000	2,00,000	MR	
3.4	Archery including target board,equipment ,etc	1	Job	750000	7,50,000	MR	
	Sub Total				**69,50,000**	**(J)**	
	Total Amount of DPAR 2012 =				**12,17,39,670**	**(H)**	
	Total Amount of DPAR 2019 Items =				**13,51,186**	**(I)**	
	Total Amount of MR Items (F) =				**93,50,000**	**(J)**	
	Total (H + I + J) =				**13,24,40,856**	**(K)**	
	Add 3% Contengencies on (K) =				**39,73,226**	**(L)**	
	Add 4% for ESI & EPF on (K) =				**52,97,634**	**(M)**	
	Add 3.5% PSU Charge (I)				**46,35,430**	**(N)**	
	Add 18% GST on PSU Charge (N))				**8,34,377**	**(O)**	
	Project Cost including Contingencies,PSU Charge and ESI & EPF = (K)+(L)+(M)+(N)+(O)				**14,71,81,523**		
	The Preliminary Estimate cost worked out for Phase-II				**14,71,81,500**		

pk Approved 29-3-22

29/3/22

ANNEXURE-II(STANDARD FORMAT) : PRELIMINARY ESTIMATE for Single-Phase EMRS Construction (Plot Area Area 15 Acre) (for plain area)

(PE for reference purpose only)

S. No.	ITEMS	Quantity		Rate	Amount (in Rs.)	BASE	Remarks
(A)	**Non-Residential Buildings**						
1	School Building	2580	Sqm		5,59,12,438	DPAR 12	Annexure-a
	Sub Total	**2580**	Sqm		**5,59,12,438**	**(A)**	
(B)	**Residential Buildings**						
1	Girl's Hostel	2280	Sqm		5,01,84,890	DPAR 12	Annexure-b
2	Girls' Hostel Warden	80	Sqm		1764858	DPAR 12	Annexure-c
3	Boy's Hostel	2280	Sqm		5,01,84,890	DPAR 12	Annexure-d
4	Boys' Hostel Warden	80	Sqm		17,64,858	DPAR 12	Annexure-e
5	Principal Qtr	130	Sqm		28,57,476	DPAR 12	Annexure-f
6	Type III qtrs - 15 No + 1 Guest Hose of 80 Sq Mt.	1280	Sqm		2,77,65,659	DPAR 12	Annexure-g
7	Type II Qtrs - 10 No.	700	Sqm		1,51,73,860	DPAR 12	Annexure-h
8	Kitchen & Dining	550	Sqm		1,21,18,321	DPAR 12	Annexure-i
9	Structure for Sub Station, Pump Room, Security Cabin	80	Sqm		14,92,630	DPAR 12	Annexure-j
	Sub Total	**7460**	Sqm		**16,33,07,442**	**(B)**	
	Total Plinth Area	**10040**	Sqm				
(C)	**Development of Site**						
1	Internal roads & paths with cement concrete pavement with vaccum dewatered concrete. [(60%* of Total Plot Area of the site i.e. 15 Acre x 4047 = 60705 Sqm) = 36423 sqm] with WBM Base Course)	36423	Sqm	145	52,81,335	DPAR 12	
2	Sewerage System [(45%* of Total Plot Area of the site i.e. 15 Acre x 4047 =60705 Sqm) = 27317 sqm]	27317	Sqm	110	30,04,870	DPAR 12	
3	Filter Water Supply :-Distribution lines 100 mm dia and below (Plinth Area of Phase-1)	10040	Sqm	80	8,03,200	DPAR 12	
4	Unfiltered water supply distribution lines (Plinth Area of Phase-1)	10040	Sqm	45	4,51,800	DPAR 12	
5	Storm water drains [(60%* of Total Plot Area of the site i.e. 15 Acre x 4047 = 60705 Sqm) =36423 sqm]	36423	Sqm	85	30,95,955	DPAR 12	
	Sub Total				**1,26,37,160**	**(C)**	
(D)	**Water Tank**						
1	RCC OH Tank	50000	Litre	15	7,50,000	DPAR 12	
2	UG Sump	100000	Litre	15	15,00,000	DPAR 12	
	Sub Total				**22,50,000**	**(D)**	
	Total	**(A) + (B) + (C) + (D)**			**23,41,07,040**		
	Add enhancement @120 % (aveagre) due increase in CI of a particular location over **DPAR 2012**	**20.00%**			**4,68,21,408**		
	TOTAL Estimated Cost on DPAR 2012				**28,09,28,448**	**(X1)**	
(E)	**MISCELLANEOUS SERVICES**						
1	**Civil**						
1.1	Rain Water Harvesting (RWH)	10040	Sqm	90	9,03,600	DPAR 19	
1.2	Compound/Boundary wall with 1.5 metre normal height from GL & 0.60 meter high MS grill, and required no. of steel gates/wicket gates etc.	1000	Metre	9000	90,00,000	DPAR 19	
1.3	Extra for 0.30 metre additional height of compound wall beyond 1.50 metre (actual length = 1056.7)	1000	Metre	800	8,00,000	Derived from DAR 19	Annexure-k
	Sub Total				**1,07,03,600**	**(E1)**	
2	**Electrical**						
2.1	SUB Station (HT Panel, Transformer, HT Cable etc.)	250	KVA	9000	22,50,000	DPAR 19	S. No. 1/page 22
2.2	Supplying & commissioning of online 3 phase UPS System with 30 minutes back up	5	KVA	20000	1,00,000	DPAR 19	S. No. 4/page 22
2.3	Supplying, installation, testing and commissioning of Silent Type DG Sets(25 KVA)	25	KVA	11000	2,75,000	DPAR 19	S. No. 2/page 22
2.4	LED Street Light	10040	Sqm	150	15,06,000	DPAR 19	S. No. 20/page 24
2.5	CCTV system (for external surveillance of plot area)	2580	Sqm	200	5,16,000	DPAR 19	S. No. 10/page 23
	Sub Total				**46,47,000**	**(E2)**	
	TOTAL Estimated cost on DPAR 2019 as on 01.04.2019	**(E1) + (E2)**			**1,53,50,600**	**(E3)**	
	Add enhancement @ 1.70% due to increase in Cost Index from 118 to 120 (average) over **DPAR 2019**	**1.70%**			**2,60,960**		
	Total				**1,56,11,560**	**(X2)**	
(F)	**Site Specific Requirment if any like Retaining Wall/ Cutting/Filling Lump Sump , to be worked out as per actual based on MLP**						
1	Site Levelling	0	Job	0	**0**		
2	Protection Works/ RR/Stone pitching	0	Job	0	**0**		
	Sub Total				**0**		
	Add enhancement @ 1.70% due to increase in Cost Index from 118 to 120 (average) over **DPAR 2019**	1.70%			**0**		
	Total				**0**	**(X3)**	

pl approved 29.3.22

29/3/22

(G)	OTHER SERVICES						
1	**Civil**						
1.1	Deep Bore Well 8" dia with 7.5 Hp Submerssible Motor i/c wiring accessories, GI suction & delivery Pipe 300 metre 80m mm , control panel, starter, etc.	2	Job	650000	13,00,000	MR	
1.2	Septic tank	4	Job	1000000	40,00,000	MR	
2	**Fire Fighting work**						
2.1	Fire Extingushers ABC Dry Chemical	40	Nos.	2500	1,00,000	MR	
2.2	First Aid Hose Reel and down comer fire fighting system (for school building, Girls & Boys hostel)	3	Nos.	400000	12,00,000	MR	
2.3	Pump including wiring accessories, control panel etc. for Supply to OH Tank	2	Job	75000	1,50,000	MR	
2.4	5 Hp Sewarge Pumps including delivery & suction lines	1	Job	125000	1,25,000	MR	
	Sub Total				**68,75,000**	**(X4)**	
3	**Sports Facilities (Lump Sum Provision)**						
3.1	Play Ground with 400 Metre running track	1	Job	3500000	35,00,000	MR	
3.2	Basket Ball Court - 2 Nos. i/c Special Lighting for Basket Volley Ball	2	Job	1250000	25,00,000	MR	
3.3	Volley Ball Court - 2 Nos i/c 2 Nos. i/c Special Lighting for Basket	2	Job	100000	2,00,000	MR	
3.4	Archery including target board,equipment ,etc	1	Job	750000	7,50,000	MR	
	Sub Total				**69,50,000**	**(X5)**	
	Total Amount of DPAR 2012 = (X1)				**28,09,28,448**	**(F)**	
	Total Amount of DPAR 2019 Items = (X2) + (X3)				**1,56,11,560**	**(G)**	
	Total Amount of MR Items = ((X4) + (X5)				**1,38,25,000**	**(H)**	
	Total = (F) + (G) + (H)				**31,03,65,008**	**(I)**	
	Add 3% Contengencies on (I) =				**93,10,950**	**(J)**	
	Add 4% for ESI & EPF on (I) =				**1,24,14,600**	**(K)**	
	Add 3.5% PSU Charge (I)				**1,08,62,775**	**(L)**	
	Add 18% GST on PSU Charge (L)				**19,55,300**	**(M)**	
	Project Cost including Contingencies,PSU Charge and ESI & EPF = (I) + (J) + (K)+(L)+(M)				**34,49,08,633**		
	The estimate cost worked out on basis of standard estimate by NESTS for building including services & campus development				**34,49,08,600**		

29.3.22

29/3/22

ANNEXURE - B

Construction of 01 No. School Building (G+1) with Plinth Area = 2580 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.45 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 3.35 m	2580	15200	Sqm	39216000	1.1.1(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 3.35m. ((3.75 - 3.35) / 0.3) x 270 = 405	2580	360.00	Sqm	928800	1.2.3 Floor ht. has been considered as 3.80m. As per NBC guidelines ceiling height is 3.60m. Hence floor to floor ht. has been considered as 3.80m, which includes thickness of slab & floor finish. (copy of NBC guidelines enclosed as Annexure - 1A)
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m) (Area taken as per CPWD DRG.No. CA(PRD)/23(14)/0139/01/R2)	1399	270.00	Sqm	377730	1.2.5 Depth of foundation assumed as 1.50m.
2.3	Resisting Earthquake forces.	2580	1140.00	Sqm	2941200	1.2.8
3	**Add for:**					
3.1	Applying acrylic smooth exterior smooth exterior paint in place of water proofing cement paint	1837	22.55	Sqm	41424	Difference of items rate in DSR 2012 at 13.44.1 & 13.46.1
3.2	Using Kota stone flooring in classrooms (649 sqm), common circulation area (1033 sqm) instead of c.c. flooring. (Total area = 1682 sqm)	1682	665.65	Sqm	1119623	Difference of items rate in DSR 2012 at 11.26.1 & 11.3.1
3.3	Using Kota stone flooring instead of mosaic cast-in-situ in main entrance hall (5.00m x 6.58m = 33 sqm), staircase (1033 sqm) and Lavatory block (182 sqm) (Total area = 1248 sqm)	1248	465.05	Sqm	580382	Difference of items rate in DSR 2012 at 11.26.1 & 11.9.3
3.4	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (182 sqm)	182	292.25	Sqm	53190	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
3.5	Using ceramic glazed tile in walls (full height) instead of mosaic cast-in-situ dado in toilet blocks (Wall area = Toilet floor area x 3.5)	638	102.35	Sqm	65299	Difference of items rate in DSR 2012 at 11.36 & 11.12.1.3
3.6	Using vitrified tiles in Staff room, Medical room, Principal, Vice Principal, Office instead of cc Flooring (Total area = 157 sqm)	157	1057.05	Sqm	165957	Difference of items rate in DSR 2012 at 11.41.2 & 11.3.1
3.7	Using marble strip in kota stone flooring in main entrance hall (33 sqm), common circulation area (1033 sqm) and classrooms (649 sqm). Total area 1715 sqm, net area of strip = 15% of 1715 = 257 sqm)	257	1047.60	Sqm	269233	Difference of items rate in DSR 2012 at 11.23.3 & 11.26.1
				SubTotal	**45758838**	**(A)**
4	**Building Cost** (to be used for Services items on % basis)				3,92,16,000	same as 1.2
5	**Services**					
5.1	Internal water supply and sanitary installations	39216000	5%	100	1960800	3.1
5.2	External service connections	39216000	5%	100	1960800	3.2
5.3	Internal Electrical Installations	39216000	12.5%	100	4902000	3.3
6	**Extras for:**					
6.1	Extra for power wiring and plugs for computer room, Science Labs, Principal, VP, Staff, Library, RC, Office, Medical Room 575 Sqm (575 x 15200 = 912000)	8740000	4%	100	349600	3.6.1
6.2	Extra for computer conduiting	39216000	0.50%	100	196080	3.6.1
6.2	Extra for Central Call bell System	39216000	1%	100	392160	3.6.2
6.3	Lightning conductors, Upto 4 storeyed building	39216000	0.5%	100	196080	3.6.3.1
6.4	Telephone Conduits	39216000	0.5%	100	196080	3.6.4
				SubTotal	**10153600**	**(B)**
	Building portion Cost			**Total**	**55912438**	**(A)+(B)**

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29.3.22

ANNEXURE - 6

Construction of Girls Hostel (G+1) = 1140 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	1140	15000.00	Sqm	17100000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	1140	360.00	Sqm	4,10,400	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	578	270.00	Sqm	156060	2.5.3
2.3	Resisting Earthquake forces.	1140	1140.00	Sqm	12,99,600	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in dormitories (Total area = 1058 sqm)	1058	465.05	Sqm	492023	Difference of items rate in DS 2012 at 11.26.1 11.9.3
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (263 sqm)	263	292.25	Sqm	76862	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**1,95,34,945**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,71,00,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	17100000	10%	100	17,10,000	3.1
4.2	External service connections	17100000	5%	100	8,55,000	3.2
4.3	Internal Electrical Installations	17100000	12.5%	100	21,37,500	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	17100000	4%	100	6,84,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	17100000	0.5%	100	85,500	3.6.3.1
5.3	Computer conduiting	17100000	0.5%	100	85,500	3.6.4
				Total	**55,57,500**	**(B)**
				Total cost (A) + (B)	**25092445**	

29.3.22

ANNEXURE - C

Construction of Warden Residence = 80 Sqm (for Girls)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	80	14500.00	Sqm	1160000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	80	225.00	Sqm	18,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270.00	Sqm	21600	2.5.3
2.3	Resisting Earthquake forces.	80	1140.00	Sqm	91,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	80	894.00	Sqm	71520	Difference of items rate in DSR 2012 at 11.41.2 & 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	8	292.25	Sqm	2338	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**13,64,658.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				11,60,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	1160000	12%	100	1,39,200	3.1
4.2	External service connections	1160000	5%	100	58,000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	1,45,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1160000	4%	100	46,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1160000	0.5%	100	5,800	3.6.3.1
5.3	Computer conduiting	1160000	0.5%	100	5,800	3.6.4
				Total	**4,00,200**	**(B)**
				Total cost (A) + (B)	**1764858**	

29.3.22

ANNEXURE - J

Construction of Boys Hostel = 1140 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	1140	15000	Sqm	17100000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	1140	360	Sqm	4,10,400	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	578	270	Sqm	1,56,060	2.5.3
2.3	Resisting Earthquake forces.	1140	1140	Sqm	12,99,600	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in dormitories (Total area = 1058 sqm)	1058	465.05	Sqm	492023	Difference of items rate in DSR 2012 at 11.26.1 & 11.9.3
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (263 sqm)	263	292.25	Sqm	76862	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**1,95,34,945**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,71,00,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	17100000	10%	100	17,10,000	3.1
4.2	External service connections	17100000	5%	100	8,55,000	3.2
4.3	Internal Electrical Installations	17100000	12.5%	100	21,37,500	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	17100000	4%	100	6,84,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	17100000	0.5%	100	85,500	3.6.3.1
5.3	Computer conduiting	17100000	0.5%	100	85,500	3.6.4
				Total	**55,57,500**	**(B)**
				Total cost (A) + (B)	**25092445**	

ANNEXURE - C

Construction of Warden Residence = 80 Sqm (for Boys)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	80	14500.00	Sqm	1160000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	80	225.00	Sqm	18,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270.00	Sqm	21600	2.5.3
2.3	Resisting Earthquake forces.	80	1140.00	Sqm	91,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	80	894.00	Sqm	71520	Difference of items rate in DSR 2012 at 11.41.2 & 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	8	292.25	Sqm	2338	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**13,64,658.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				11,60,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	1160000	12%	100	1,39,200	3.1
4.2	External service connections	1160000	5%	100	58,000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	1,45,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1160000	4%	100	46,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1160000	0.5%	100	5,800	3.6.3.1
5.3	Computer conduiting	1160000	0.5%	100	5,800	3.6.4
				Total	**4,00,200**	**(B)**
				Total cost (A) + (B)	**1764858**	

ANNEXURE - P

Construction of Principal Qtr = 130 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to P/ 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	130	14500.00	Sqm	1885000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	130	225.00	Sqm	29,250	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	130	270.00	Sqm	35100	2.5.3
2.3	Resisting Earthquake forces.	130	1140.00	Sqm	1,48,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	119	894.00	Sqm	106386	Difference of items rate in D: 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	11	292.25	Sqm	3215	Difference of items rate in D: 2012 at 11.38 11.9.3
				Total	**22,07,151.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				18,85,000	same as at 1.7
4	**Services**					
4.1	Internal water supply and sanitary installations	1885000	12%	100	2,26,200	3.1
4.2	External service connections	1885000	5%	100	94,250	3.2
4.3	Internal Electrical Installations	1885000	12.5%	100	2,35,625	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1885000	4%	100	75,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1885000	0.5%	100	9,425	3.6.3.1
5.3	Computer conduiting	1885000	0.5%	100	9,425	3.6.4
				Total	**6,50,325**	**(B)**
				Total cost (A) + (B)	**28,57,476.00**	

29.3.22

ANNEXURE - VI

Construction of Type III Qtrs. (G+1) 2Block - 15 No. + 1 (Guset House) = 1200 Sqm + 80 Sqm = 1280 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	1280	14500	Sqm	18560000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	1280	225	Sqm	2,88,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	640	270	Sqm	1,72,800	2.5.3
2.3	Resisting Earthquake forces.	1280	1140	Sqm	14,59,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	907	894.00	Sqm	810858	Difference of items rate in DS 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	245	292.25	Sqm	71601	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**2,13,62,459**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,85,60,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	18560000	12%	100	22,27,200	3.1
4.2	External service connections	18560000	5%	100	9,28,000	3.2
4.3	Internal Electrical Installations	18560000	12.5%	100	23,20,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	18560000	4%	100	7,42,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	18560000	0.5%	100	92,800	3.6.3.1
5.3	Telephone Conduits	18560000	0.5%	100	92,800	3.6.4
				Total	**64,03,200**	**(B)**
				Total cost (A) + (B)	**2,77,65,659**	

29.3.22

ANNEXURE - h

Construction of Type II Qtrs (G+2) 1 Block- 10 No. = 700 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	700	14500	Sqm	10150000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	700	225	Sqm	1,57,500	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	280	270	Sqm	75,600	2.5.3
2.3	Resisting Earthquake forces.	700	1140	Sqm	7,98,000	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	510	894.00	Sqm	455940	Difference of items rate in DS 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	120	292.25	Sqm	35070	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**1,16,72,110**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,01,50,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	10150000	12%	100	12,18,000	3.1
4.2	External service connections	10150000	5%	100	5,07,500	3.2
4.3	Internal Electrical Installations	10150000	12.5%	100	12,68,750	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	10150000	4%	100	4,06,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	10150000	0.5%	100	50,750	3.6.3.1
5.3	Telephone Conduits	10150000	0.5%	100	50,750	3.6.4
				Total	**35,01,750**	**(B)**
				Total cost (A) + (B)	**1,51,73,860**	

29.3.22

ANNEXURE -

Construction of 1 No. Kitchen & Dining with Plinth Area = 550 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 20
1	**Building Portion : R.C.C. Framed structure with floor height of 3.45 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	550	15000	Sqm	8250000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	550	360	Sqm	198000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	550	270	Sqm	148500	2.5.3
2.3	Resisting Earthquake forces.	550	1140	Sqm	6,27,000	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in Dining room (300 sqm)and internal circulation area (40 sqm) (Total area = 340 sqm)	340	465.05	Sqm	158117	Difference of items ra in DSR 2012 at 11.26. & 11.9.3
3.2	Mirror polishing on kota stone flooring in Dining room (300 sqm)and internal circulation area (40 sqm) (Total area = 340 sqm)	340	163.10	Sqm	55454	Rate as per DSR 2012 item no. 8.6
				Total	**94,37,071**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				82,50,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	8250000	10%	100	8,25,000	3.1
4.2	External service connections	8250000	5%	100	4,12,500	3.2
4.3	Internal Electrical Installations	8250000	12.5%	100	10,31,250	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	8250000	4%	100	3,30,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	8250000	0.5%	100	41,250	3.6.3.1
5.3	Telephone Conduits	8250000	0.5%	100	41,250	3.6.4
				Total	**26,81,250**	**(B)**
				Total cost (A) + (B)	**12118321**	

ANNEXURE - I

Construction of Substation (53 sqm), Pump room (22 sqm) and Sentry Post (5 sqm)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V) with floor height of 4.25m (for Substation) and 3.15m (for Pump Room & Sentry Post)**					
1.1	RCC framed structure upto six storeys with floor height 2.90 mtr.	80	14500	Sqm	11,60,000	1.1.2(B)
2	**Extras for**					
2.1	Every 0.30m additional height of floor above normal floor height of 2.90m. {(4.25-2.90) / 0.3} x 270 = 1215 (Sub Station	53	1215	Sqm	64,395	1.2.3
2.2	Every 0.3m additional height of floor above normal floor height of 2.90m. {(3.15-2.90) / 0.3} x 270 = 405 (Pump Room & Sentry Room)	27	225	Sqm	6,075	1.2.3
2.3	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270	Sqm	21600	2.5.3
				Total	**12,30,470.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1160000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations for Pump Room	319000	4%	100	12760	3.1
4.2	External service connections	1160000	5%	100	58000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	145000	3.3
4.4	Power wiring and plugs for Pump Rooom Only	1160000	4%	100	46400	3.6.1
				Total	**262160**	**(B)**
				Total cost (A) + (B)	**1492630**	

ANNEXURE - K

Compound Wall

S. No.	Description of Item	Qty	Rate	Unit	Amount (in Rs.)	Reference
3	**Compound Wall**					
3.1	Compound Wall	1200	9802	Job	11762400	MR/DPAR
				Total	**11762400**	
	Analysis of Rate for Compound wall					
1	Boundary Wall with 1.5 metre. Normal height from GL & 0.60 meter high MS grill and/or concertina coil with Y shaped M.S, angle, and required no. of steel gates /wicket gates etc.					
1.1	With load bearing brick wall and plastering on either side and with / without intermediate columns and plinth beams.	1200	9000	Mtr	1,08,00,000	MR
1.1.1	Add extra for 0.30 m extra height of compound wall over normal height of 1.50 m.	83	7590.45	Cum	6,30,007	DAR 2019 item 6.4.2/ MR
1.1.2	Add extra for 12mm thick cement plaster 1:4 (1 cement: 4 coarse sand)	360	276.15	Sqm	99,414	DAR 2019 item 13.4.1/ MR
1.1.3	Add extra for 15mm thick cement plaster 1:4 (1 cement: 4 coarse sand)	360	318.95	Sqm	1,14,822	DAR 2019 item 13.5.1/ MR
1.1.4	Add extra for finishing walls with Acrylic Smooth exterior paint.	720	164.70	Sqm	1,18,584	DAR 2019 item 13.46.1/ MR
		1200 Mt Compound Wall			1,17,62,827	
		Cost of 1mt length of compound			9,802	

Hence rate for 0.30 m extra height of compound wall over normal height of 1.50 m 802

say 800

ANNEXURE-II(STANDARD FORMAT) : PRELIMINARY ESTIMATE for Single-Phase EMRS Construction (Plot Area Area 15 Acre)
(*PE for reference purpose only*) for North East/Hilly/LWE Affected Areas

S. No.	ITEMS	Quantity		Rate	Amount (in Rs.)	BASE	Remarks
(A)	**Non-Residential Buildings**						
1	School Building	2580	Sqm		5,58,22,798	DPAR 12	Annexure-a
	Sub Total	**2580**	Sqm		**5,58,22,798**	**(A)**	
(B)	**Residential Buildings**						
1	Girl's Hostel	2140	Sqm		4,68,94,524	DPAR 12	Annexure-b
2	Girls' Hostel Warden	80	Sqm		1757706	DPAR 12	Annexure-c
3	Boy's Hostel	2140	Sqm		4,68,94,524	DPAR 12	Annexure-d
4	Boys' Hostel Warden	80	Sqm		17,57,706	DPAR 12	Annexure-e
5	Principal Qtr	130	Sqm		28,57,476	DPAR 12	Annexure-f
6	Type III qtrs - 15 No + 1 Guest Hose of 80 Sq Mt.	1280	Sqm		2,78,80,091	DPAR 12	Annexure-g
7	Type II Qtrs - 10 No.	700	Sqm		1,52,36,440	DPAR 12	Annexure-h
8	Kitchen & Dining	0	Sqm		0	DPAR 12	Annexure-i
9	Structure for Sub Station, Pump Room, Security Cabin	80	Sqm		14,92,630	DPAR 12	Annexure-j
	Sub Total	**6630**	Sqm		**14,47,71,097**	**(B)**	
	Total Plinth Area	**9210**	Sqm				
(C)	**Development of Site**						
1	Internal roads & paths with cement concrete pavement with vaccum dewatered concrete. [(60%* of Total Plot Area of the site i.e. 15 Acre x 4047 = 60705 Sqm) = 36423 sqm] with WBM Base Course)	36423	Sqm	145	52,81,335	DPAR 12	
2	Sewerage System [(45%* of Total Plot Area of the site i.e. 15 Acre x 4047 =60705 Sqm) = 27317 sqm]	27317	Sqm	110	30,04,870	DPAR 12	
3	Filter Water Supply :-Distribution lines 100 mm dia and below (Plinth Area of Phase-1)	9210	Sqm	80	7,36,800	DPAR 12	
4	Unfiltered water supply distribution lines (Plinth Area of Phase 1)	9210	Sqm	45	4,14,450	DPAR 12	
5	Storm water drains [(60%* of Total Plot Area of the site i.e. 15Acre x 4047 = 60705 Sqm) =36423 sqm]	36423	Sqm	85	30,95,955	DPAR 12	
	Sub Total				**1,25,33,410**	**(C)**	
(D)	**Water Tank**						
1	RCC OH Tank	50000	Litre	15	7,50,000	DPAR 12	
2	UG Sump	100000	Litre	15	15,00,000	DPAR 12	
	Sub Total				**22,50,000**	**(D)**	
	Total	**(A) + (B) + (C) + (D)**			**21,53,77,305**		
	Add enhancement @160.00 % due to CI of .....over CI of 2012 (CI at ..... over DPAR 2012 is 160)	60.00%			**12,92,26,383**		Enhancement shall be taken as per the Location Cost Index
	TOTAL Estimated Cost on DPAR 2012				**34,46,03,688**	**(X1)**	
(E)	**MISCELLANEOUS SERVICES**						
1	**Civil**						
1.1	Rain Water Harvesting (RWH)	9210	Sqm	90	8,28,900	DPAR 19	
1.2	Compound/Boundary wall with 1.5 metre normal height from GL & 0.60 meter high MS grill, and required no. of steel gates/wicket gates etc.	1000	Metre	9000	90,00,000	DPAR 19	
1.3	Extra for 0.30 metre additional height of compound wall beyond 1.50 metre (actual length = 1056.7)	1000	Metre	800	8,00,000	Derived from DAR 19	Annexure-k
	Sub Total				**1,06,28,900**	**(E1)**	
2	**Electrical**						
2.1	SUB Station (HT Panel, Transformer, HT Cable etc.)	250	KVA	9000	22,50,000	DPAR 19	S. No. 1/page 22
2.2	Supplying & commissioning of online 3 phase UPS System with 30 minutes back up	5	KVA	20000	1,00,000	DPAR 19	S. No. 4/page 22
2.3	Supplying, installation, testing and commissioning of Silent Type DG Sets(25 KVA)	25	KVA	11000	2,75,000	DPAR 19	S. No. 2/page 22
2.4	LED Street Light	9210	Sqm	150	13,81,500	DPAR 19	S. No. 20/page 24
2.5	CCTV system (for external surveillance of plot area)	2580	Sqm	200	5,16,000	DPAR 19	S. No. 10/page 23
	Sub Total				**45,22,500**	**(E2)**	
	TOTAL Estimated cost on DPAR 2019 as on 01.04.2019	**(E1) + (E2)**			**1,51,51,400**	**(E3)**	
	Add enhancement @135.59 % due to calculated CI over DSR 2019 (CI at ..... over DPAR 2012 is 160)	**35.59%**			**53,92,383**		Enhancement shall be taken as per the Location Cost Index
	Total				**2,05,43,783**	**(X2)**	
(F)	**Site Specific Requirment if any like Retaining Wall/ Cutting/Filling Lump Sump , to be worked out as per actual based on MLP , Site Condition)**						
1	Site Levelling	1	Job	5000000	**50,00,000**		

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2	Protection Works/ RR/Stone pitching	1	Job	12000000	**1,20,00,000**		
	Sub Total				**1,70,00,000**		
	Add enhancement @135.59 % due to calculated CI over DSR 2019 (CI at ..... over DPAR 2012 is 160)	**35.59%**			**60,50,300**		Enhancement shall be taken as per the Location Cost Index
	Total				**2,30,50,300**	**(X3)**	
(G)	**OTHER SERVICES**						
1	**Civil**						
1.1	Deep Bore Well 8" dia with 7.5 Hp Submerssible Motor i/c wiring accessories, GI suction & delivery Pipe 300 metre 80m mm , control panel, starter, etc.	2	Job	650000	13,00,000	MR	
1.2	Septic tank	4	Job	1000000	40,00,000	MR	
2	**Fire Fighting work**						
2.1	Fire Extingushers ABC Dry Chemical	40	Nos.	2500	1,00,000	MR	
2.2	First Aid Hose Reel and down comer fire fighting system (for school building, Girls & Boys hostel)	3	Nos.	400000	12,00,000	MR	
2.3	Pump including wiring accessories, control panel etc. for Supply to OH Tank	2	Job	75000	1,50,000	MR	
2.4	5 Hp Sewarge Pumps including delivery & suction lines	1	Job	125000	1,25,000	MR	
	Sub Total				**68,75,000**		
	Add 20% extra cost provision due to Hilly/NE/difficult area. PSU to submit market rate ananlysis				**13,75,000**		
					82,50,000	**(X4)**	
3	**Sports Facilities (Lump Sum Provision)**						
3.1	Play Ground with 400 Metre running track	1	Job	3500000	35,00,000	MR	
3.2	Basket Ball Court - 2 Nos. i/c Special Lighting for Basket Volley Ball	2	Job	1250000	25,00,000	MR	
3.3	Volley Ball Court - 2 Nos i/c 2 Nos. i/c Special Lighting for Basket	2	Job	100000	2,00,000	MR	
3.4	Archery including target board,equipment ,etc	1	Job	750000	7,50,000	MR	
	Sub Total				**69,50,000**		
	Add 20% extra cost provision due to Hilly/NE/difficult area				**13,90,000**		
					83,40,000	**(X5)**	
	Add 20% extra for MR items in respect of North East area						
	Total Amount of DPAR 2012 = (X1)				**34,46,03,688**	**(F)**	
	Total Amount of DPAR 2019 Items = (X2) + (X3)				**4,35,94,083**	**(G)**	
	Total Amount of MR Items = ((X4) + (X5)				**1,65,90,000**	**(H)**	
	Total = (F) + (G) + (H)				**40,47,87,771**	**(I)**	
	Add 3% Contengencies on (I) =				**1,21,43,633**	**(J)**	
	Add 4% for ESI & EPF on (I) =				**1,61,91,511**	**(K)**	
	Add 3.5% PSU Charge (I)				**1,41,67,572**	**(L)**	
	Add 18% GST on PSU Charge (L)				**25,50,163**	**(M)**	
	Project Cost including Contingencies,PSU Charge and ESI & EPF = (I) + (J) + (K)+(L)+(M)				**44,98,40,650**		
	The estimate cost worked out on basis of standard estimate by NESTS for building including services & campus development				**44,98,40,700**		

ANNEXURE

Construction of 01 No. School Building (G+2) with Plinth Area = 2580 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.45 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 3.35 m	2580	15200	Sqm	39216000	1.1.1(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 3.35m. ((3.75 - 3.35) / 0.3) x 270 = 405	2580	360.00	Sqm	928800	1.2.3 Floor ht. has been considered as 3.80m. As per NBC guidelines ceiling height is 3.60m. Hence floor to floor ht. has been considered as 3.80m, which includes thickness of slab & floor finish. (copy of NBC guidelines enclosed as Annexure - 1A)
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m) (Area taken as per CPWD DRG.No. CA(PRD)/23(14)/0139/01/R2)	1067	270.00	Sqm	288090	1.2.5 Depth of foundation assumed as 1.50m.
2.3	Resisting Earthquake forces.	2580	1140.00	Sqm	2941200	1.2.8
3	**Add for:**					
3.1	Applying acrylic smooth exterior smooth exterior paint in place of water proofing cement paint	1837	22.55	Sqm	41424	Difference of items rate in DSR 2012 at 13.44.1 & 13.46.1
3.2	Using Kota stone flooring in classrooms (649 sqm), common circulation area (1033 sqm) instead of c.c. flooring. (Total area = 1682 sqm)	1682	665.65	Sqm	1119623	Difference of items rate in DSR 2012 at 11.26.1 & 11.3.1
3.3	Using Kota stone flooring instead of mosaic cast-in-situ in main entrance hall (5.00m x 6.58m = 33 sqm), staircase (1033 sqm) and Lavatory block (182 sqm) (Total area = 1248 sqm)	1248	465.05	Sqm	580382	Difference of items rate in DSR 2012 at 11.26.1 & 11.9.3
3.4	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (182 sqm)	182	292.25	Sqm	53190	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
3.5	Using ceramic glazed tile in walls (full height) instead of mosaic cast-in-situ dado in toilet blocks (Wall area = Toilet floor area x 3.5)	638	102.35	Sqm	65299	Difference of items rate in DSR 2012 at 11.36 & 11.12.1.3
3.6	Using vitrified tiles in Staff room, Medical room, Principal, Vice Principal, Office instead of cc Flooring (Total area = 157 sqm)	157	1057.05	Sqm	165957	Difference of items rate in DSR 2012 at 11.41.2 & 11.3.1
3.7	Using marble strip in kota stone flooring in main entrance hall (33 sqm), common circulation area (1033 sqm) and classrooms (649 sqm). Total area 1715 sqm, net area of strip = 15% of 1715 = 257 sqm)	257	1047.60	Sqm	269233	Difference of items rate in DSR 2012 at 11.23.3 & 11.26.1
				SubTotal	**45669198**	**(A)**
4	**Building Cost** (to be used for Services items on % basis)				3,92,16,000	same as 1.2
5	**Services**					
5.1	Internal water supply and sanitary installations	39216000	5%	100	1960800	3.1
5.2	External service connections	39216000	5%	100	1960800	3.2
5.3	Internal Electrical Installations	39216000	12.5%	100	4902000	3.3
6	**Extras for:**					
6.1	Extra for power wiring and plugs for computer room, Science Labs, Principal, VP, Staff, Library, RC, Office, Medical Room 575 Sqm (575 x 15200 = 912000)	8740000	4%	100	349600	3.6.1
6.2	Extra for computer conduiting	39216000	0.50%	100	196080	3.6.1
6.2	Extra for Central Call bell System	39216000	1%	100	392160	3.6.2
6.3	Lightning conductors, Upto 4 storeyed building	39216000	0.5%	100	196080	3.6.3.1
6.4	Telephone Conduits	39216000	0.5%	100	196080	3.6.4
				SubTotal	**10153600**	**(B)**
	Building portion Cost			**Total**	**55822798**	**(A)+(B)**

plApproved 29.3.22

ANNEXURE - 'b'

Construction of Girls Hostel (G+2) = 2140 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	2140	15000.00	Sqm	32100000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	2140	360.00	Sqm	7,70,400	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	792	270.00	Sqm	213840	2.5.3
2.3	Resisting Earthquake forces.	2140	1140.00	Sqm	24,39,600	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in dormitories (Total area = 1058 sqm)	1810	465.05	Sqm	841741	Difference of items rate in DS 2012 at 11.26.1 11.9.3
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (263 sqm)	330	292.25	Sqm	96443	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**3,64,62,024**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				3,21,00,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	32100000	10%	100	32,10,000	3.1
4.2	External service connections	32100000	5%	100	16,05,000	3.2
4.3	Internal Electrical Installations	32100000	12.5%	100	40,12,500	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	32100000	4%	100	12,84,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	32100000	0.5%	100	1,60,500	3.6.3.1
5.3	Computer conduiting	32100000	0.5%	100	1,60,500	3.6.4
				Total	**1,04,32,500**	**(B)**
				Total cost (A) + (B)	**46894524**	

ANNEXURE - C

Construction of Warden Residence = 80 Sqm (for girls)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	80	14500.00	Sqm	1160000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	80	225.00	Sqm	18,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270.00	Sqm	21600	2.5.3
2.3	Resisting Earthquake forces.	80	1140.00	Sqm	91,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	72	894.00	Sqm	64368	Difference of items rate in DSR 2012 at 11.41.2 & 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	8	292.25	Sqm	2338	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**13,57,506.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				11,60,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	1160000	12%	100	1,39,200	3.1
4.2	External service connections	1160000	5%	100	58,000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	1,45,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1160000	4%	100	46,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1160000	0.5%	100	5,800	3.6.3.1
5.3	Computer conduiting	1160000	0.5%	100	5,800	3.6.4
				Total	**4,00,200**	**(B)**
				Total cost (A) + (B)	**1757706**	

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ANNEXURE -

Construction of Boys Hostel (G+2)= 2140 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	2140	15000	Sqm	32100000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	2140	360	Sqm	7,70,400	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	792	270	Sqm	2,13,840	2.5.3
2.3	Resisting Earthquake forces.	2140	1140	Sqm	24,39,600	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in dormitories (Total area = 1058 sqm)	1810	465.05	Sqm	841741	Difference of items rate in DSR 2012 at 11.26.1 & 11.9.3
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (263 sqm)	330	292.25	Sqm	96443	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**3,64,62,024**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				3,21,00,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	32100000	10%	100	32,10,000	3.1
4.2	External service connections	32100000	5%	100	16,05,000	3.2
4.3	Internal Electrical Installations	32100000	12.5%	100	40,12,500	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	32100000	4%	100	12,84,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	32100000	0.5%	100	1,60,500	3.6.3.1
5.3	Computer conduiting	32100000	0.5%	100	1,60,500	3.6.4
				Total	**1,04,32,500**	**(B)**
				Total cost (A) + (B)	**46894524**	

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ANNEXURE - 9C

Construction of Warden Residence = 80 Sqm (for boys)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	80	14500.00	Sqm	1160000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	80	225.00	Sqm	18,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270.00	Sqm	21600	2.5.3
2.3	Resisting Earthquake forces.	80	1140.00	Sqm	91,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	72	894.00	Sqm	64368	Difference of items rate in DSR 2012 at 11.41.2 & 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	8	292.25	Sqm	2338	Difference of items rate in DSR 2012 at 11.38 & 11.9.3
				Total	**13,57,506.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				11,60,000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	1160000	12%	100	1,39,200	3.1
4.2	External service connections	1160000	5%	100	58,000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	1,45,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1160000	4%	100	46,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1160000	0.5%	100	5,800	3.6.3.1
5.3	Computer conduiting	1160000	0.5%	100	5,800	3.6.4
				Total	**4,00,200**	**(B)**
				Total cost (A) + (B)	**1757706**	

ANNEXURE -

Construction of Principal Qtr = 130 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to P/ 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m (1140 + 80 = 1220Sqm)	130	14500.00	Sqm	1885000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	130	225.00	Sqm	29,250	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	130	270.00	Sqm	35100	2.5.3
2.3	Resisting Earthquake forces.	130	1140.00	Sqm	1,48,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	119	894.00	Sqm	106386	Difference of items rate in D 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	11	292.25	Sqm	3215	Difference of items rate in D 2012 at 11.38 11.9.3
				Total	**22,07,151.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				18,85,000	same as at 1.7
4	**Services**					
4.1	Internal water supply and sanitary installations	1885000	12%	100	2,26,200	3.1
4.2	External service connections	1885000	5%	100	94,250	3.2
4.3	Internal Electrical Installations	1885000	12.5%	100	2,35,625	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	1885000	4%	100	75,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	1885000	0.5%	100	9,425	3.6.3.1
5.3	Computer conduiting	1885000	0.5%	100	9,425	3.6.4
				Total	**6,50,325**	**(B)**
				Total cost (A) + (B)	**28,57,476.00**	

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ANNEXURE - 8

Construction of Type III Qtrs. (G+1) 2Block - 15 No. + 1 (Guset House) = 1200 Sqm + 80 Sqm = 1280 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	1280	14500	Sqm	18560000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	1280	225	Sqm	2,88,000	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	640	270	Sqm	1,72,800	2.5.3
2.3	Resisting Earthquake forces.	1280	1140	Sqm	14,59,200	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	1035	894.00	Sqm	925290	Difference of items rate in DS 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	245	292.25	Sqm	71601	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**2,14,76,891**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,85,60,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	18560000	12%	100	22,27,200	3.1
4.2	External service connections	18560000	5%	100	9,28,000	3.2
4.3	Internal Electrical Installations	18560000	12.5%	100	23,20,000	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	18560000	4%	100	7,42,400	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	18560000	0.5%	100	92,800	3.6.3.1
5.3	Telephone Conduits	18560000	0.5%	100	92,800	3.6.4
				Total	**64,03,200**	**(B)**
				Total cost (A) + (B)	**2,78,80,091**	

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ANNEXURE - IV

Construction of Type II Qtrs (G+2) 1 Block- 10 No. = 700 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PA 2012
1	**Building Portion : R.C.C. Framed structure with floor height of 3.15 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	700	14500	Sqm	10150000	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.15 - 2.90) / 0.3} * 270 = 225	700	225	Sqm	1,57,500	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	280	270	Sqm	75,600	2.5.3
2.3	Resisting Earthquake forces.	700	1140	Sqm	7,98,000	1.2.8
3	**Add for:**					
3.1	Using vitrified tiles instead of mosaic flooring (Total area = 80 sqm)	580	894.00	Sqm	518520	Difference of items rate in DS 2012 at 11.41.2 11.9.6
3.2	Using ceramic glazed tile flooring instead of mosaic cast-in-situ in Lavatory block (8 sqm)	120	292.25	Sqm	35070	Difference of items rate in DS 2012 at 11.38 & 11.9.3
				Total	**1,17,34,690**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1,01,50,000	same as at 1.2
4	**Services:**					
4.1	Internal water supply and sanitary installations	10150000	12%	100	12,18,000	3.1
4.2	External service connections	10150000	5%	100	5,07,500	3.2
4.3	Internal Electrical Installations	10150000	12.5%	100	12,68,750	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	10150000	4%	100	4,06,000	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	10150000	0.5%	100	50,750	3.6.3.1
5.3	Telephone Conduits	10150000	0.5%	100	50,750	3.6.4
				Total	**35,01,750**	**(B)**
				Total cost (A) + (B)	**1,52,36,440**	

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ANNEXURE - I

Construction of 1 No. Kitchen & Dining with Plinth Area = 0 Sqm

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 20
1	**Building Portion : R.C.C. Framed structure with floor height of 3.45 metre**					
1.1	R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V)					1.0(B)
1.2	R.C.C. Framed Structure upto six storeys with floor height 2.90 m	0	15000	Sqm	0	1.1.2(B)
2	**Extras for:**					
2.1	Every 0.30 m additional height of floor above normal floor height of 2.90 m. {(3.30 - 2.90) / 0.3} * 270 = 360	0	360	Sqm	0	1.2.3
2.2	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	0	270	Sqm	0	2.5.3
2.3	Resisting Earthquake forces.	0	1140	Sqm	0	1.2.8
3	**Add for:**					
3.1	Using Kota stone flooring instead of mosaic cast-in-situ in Dining room (300 sqm)and internal circulation area (40 sqm) (Total area = 340 sqm)	0	465.05	Sqm	0	Difference of items ra in DSR 2012 at 11.26. & 11.9.3
3.2	Mirror polishing on kota stone flooring in Dining room (300 sqm)and internal circulation area (40 sqm) (Total area = 340 sqm)	0	163.10	Sqm	0	Rate as per DSR 2012 item no. 8.6
				Total	**0**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				0	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations	0	10%	100	0	3.1
4.2	External service connections	0	5%	100	0	3.2
4.3	Internal Electrical Installations	0	12.5%	100	0	3.3
5	**Extras for:**					
5.1	Power wiring and plugs	0	4%	100	0	3.6.1
5.2	Lightning conductors Upto 4 storeyed building	0	0.5%	100	0	3.6.3.1
5.3	Telephone Conduits	0	0.5%	100	0	3.6.4
				Total	**0**	**(B)**
				Total cost (A) + (B)	**0**	

ANNEXURE - 3

Construction of Substation (53 sqm), Pump room (22 sqm) and Sentry Post (5 sqm)

S. No.	Description of Item	Quantity	Rate	Unit	Amount	Reference to PAR 2012
1	**Building Portion : R.C.C. Framed Structure (Normal Buildings) (Specifications as per Annexure-V) with floor height of 4.25m (for Substation) and 3.15m (for Pump Room & Sentry Post)**					
1.1	RCC framed structure upto six storeys with floor height 2.90 mtr.	80	14500	Sqm	11,60,000	1.1.2(B)
2	**Extras for**					
2.1	Every 0.30m additional height of floor above normal floor height of 2.90m. {(4.25-2.90) / 0.3} x 270 = 1215 (Sub Station	53	1215	Sqm	64,395	1.2.3
2.2	Every 0.3m additional height of floor above normal floor height of 2.90m. {(3.15-2.90) / 0.3} x 270 = 405 (Pump Room & Sentry Room)	27	225	Sqm	6,075	1.2.3
2.3	Every 0.30 m deeper foundations over nornal depth of 1.20 m. (On G. F. area only) (1.50 m - 1.20 m = 0.30 m)	80	270	Sqm	21600	2.5.3
				Total	**12,30,470.00**	**(A)**
3	**Building Cost:** (to be used for Services items on % basis)				1160000	same as at 1.2
4	**Services**					
4.1	Internal water supply and sanitary installations for Pump Room	319000	4%	100	12760	3.1
4.2	External service connections	1160000	5%	100	58000	3.2
4.3	Internal Electrical Installations	1160000	12.5%	100	145000	3.3
4.4	Power wiring and plugs for Pump Rooom Only	1160000	4%	100	46400	3.6.1
				Total	**262160**	**(B)**
				Total cost (A) + (B)	**1492630**	

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ANNEXURE - K

Compound Wall

S. No.	Description of Item	Qty	Rate	Unit	Amount (in Rs.)	Reference
3	**Compound Wall**					
3.1	Compound Wall	1200	9802	Job	11762400	MR/DPAR
				Total	**11762400**	
	Analysis of Rate for Compound wall					
1	Boundary Wall with 1.5 metre. Normal height from GL & 0.60 meter high MS grill and/or concertina coil with Y shaped M.S, angle, and required no. of steel gates /wicket gates etc.					
1.1	With load bearing brick wall and plastering on either side and with / without intermediate columns and plinth beams.	1200	9000	Mtr	1,08,00,000	MR
1.1.1	Add extra for 0.30 m extra height of compound wall over normal height of 1.50 m.	83	7590.45	Cum	6,30,007	DAR 2019 item 6.4.2/ MR
1.1.2	Add extra for 12mm thick cement plaster 1:4 (1 cement: 4 coarse sand)	360	276.15	Sqm	99,414	DAR 2019 item 13.4.1/ MR
1.1.3	Add extra for 15mm thick cement plaster 1:4 (1 cement: 4 coarse sand)	360	318.95	Sqm	1,14,822	DAR 2019 item 13.5.1/ MR
1.1.4	Add extra for finishing walls with Acrylic Smooth exterior paint.	720	164.70	Sqm	1,18,584	DAR 2019 item 13.46.1/ MR
		1200 Mt Compound Wall			1,17,62,827	
		Cost of 1mt length of compound			9,802	

Hence rate for 0.30 m extra height of compound wall over normal height of 1.50 m 802

say 800

ANNEXURE-XII

PROJECT :- Construction of Eklavya Model Residential School at Bloock- ...., District-....., State .....

SUMMARY - CIVIL WORKS CUTTING FILLING

		unit	RATE			QUANTITY	AMOUNT			
2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.									
2.6.1	All kinds of soil	Cum	181.85			0.00	0.00			
2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	219.65			0.00	0.00			
						Total	**0.00**			

CUTTING QUANTITY

Sl. No.	BUILDING	AREA (SQM)	Highest Level below Building componenet	Formation Level	Cutting Area (considerring the Formation level)	Average Height	Total qty (cum)			
1.0	School Building	0	101.50	101.50	5%	-	-			
2.0	Boy's Hostel	0	99.40	98.50	100%	0.90	-			full height
3.0	Warden Residence-Girls	0	98.10	98.50	0%	(0.20)	-			
4.0	Girl's Hostel	0	98.10	98.50	0%	(0.20)	-			
5.0	Warden Residence-Boys	0	99.40	98.50	100%	0.45	-			
6.0	Kitchen & Dining i/c front road area	0	98.56	98.50	0%	0.03	-			
7.0	ASSEMBLY	0	-	-	70%	-	-			
8.0	Road(LS)						-			
	Grand total						-			

FILLING QUANTITY

Sl. No.	BUILDING	AREA (SQM)	Lowest Level below Building componenet	Plinth level	Cutting Area (considerring the Formation level)	Average Height	Total qty (cum)			
1.0	School Building	0	100.00	101.50	95%	0.75	-			
2.0	Boy's Hostel	0	98.60	98.50	0%	(0.05)	-			
3.0	Warden Residence-Girls	0	97.15	98.50	100%	0.67	-			
4.0	Girl's Hostel	0	97.15	98.50	100%	0.67	-			
5.0	Warden Residence-Boys	0	98.60	98.50	0%	(0.05)	-			
6.0	Kitchen & Dining	0	97.10	98.50	100%	0.70	-			
7.0	ASSEMBLY	0	-	-	30%	-	-			
8.0	Road(LS)						-			
	Grand total						-			
	Less 25% filling for RCC/BW/EW						-			

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ANNEXURE-XIII

(A Govt. of India Enterprise)

#REF!
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BOQ for Stone Pitching/ surface dressing in Site Specific works at EMRS Badampahar, Phase - 1

S.NO.	DSR-2018 Item Ref. No.	DESCRIPTION OF ITEM	Unit	Total Qty.	Rate, Rs.	Amount, Rs.
Stone Pitching/ surface dressing at Site						
1	16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete.	SQM	-	730.20	-

Measurement Details								
S.NO.	DSR-2018 Item Ref. No.	DESCRIPTION OF ITEM	Unit	Nos.	Length m	Width m	Depth m	Total Qty. m3
Stone Pitching/ surface dressing at Site								
1	16.11	Dry stone pitching 22.5 cm thick including supply of stones and preparing surface complete						
		FRONT SIDE (1.8M WIDE)						
		Stone pitching-I						
		SCHOOL BUILDING						
		vetical portion		1	0.00	0.00		0.00
							Total	**0.00**
							Say	**0.00**

ANNEXURE-A

GENERAL SPECIFICATIONS OF EMRS BUILDINGS

General on MLP: -

- **Layout of Building**: All the building units shall be planned judiciously according to contours to minimise excess cutting and filling. The location of buildings shall be placed in such a way that internal road lengths shall be minimum.
- **Facing of Building**: Building shall be planned preferably facing North or East.
- **Kitchen and Dining** shall be planned preferably in between the Boys and Girls Hostels.
- **Archery Ground** shall preferably be aligned with face sighting towards North.
- **Pump Room** shall be centrally located in the campus. In case of hilly region, contours of the site should also be paid attention to take the benefit of flow of water under gravity & to minimise the pumping head.
- **Septic tank** shall be in the lower contour area near the building. The top level of septic tank shall preferably be 1.5 metre below the plinth level of the respective building, so that, due gradient can be maintained in laying the sewer pipe. Septic tank shall be of RCC with size designed as per IS 2470.1.1985 taking users as 200 nos & retention period as 2 years. Tentative size may be taken as 9.0 (L) x 2.70 (B) x 2.10 m (av.) (H) for the 1st Chamber & 4.50 (L) x 2.70 (B) x 1.70 m (H) for the 2nd Chamber both excluding free board.
- **Rain Water Harvesting** (RWH) System shall be near the Sump Well. Sump Well and RWH System shall not be in the vicinity of Septic tank and sewer chamber.
- **Internal Roads**: Level of CC Road at entry shall be raised by 150 mm w.r.t. the NGL at **the** entry gate and thereafter it will run in the campus 150 mm moderately or (av.) above the existing contour. Width of CC Road in front of School shall be 5.5 m and thereafter it will be 3.5 m.
- **Protection Work**: In case of construction in hilly region, due consideration should be given for safety of structures. If depth of cutting or filling is considerable then required protection measures in the form of retaining walls or stone pitching deemed necessary to be provided to maintain earth at its natural slope and avoid landslides during rains. If depth of cutting is moderate, stone pitching or random rubble masonry retaining wall may be provided as per site condition. When depth of cutting is more than 1.5 m suitable RCC retaining wall may be considered as per the site condition. Location and details of the same to be shown in the MLP.
- MLP shall be aligned as per contour indicating retaining walls, stone pitching, if any.
- **Sump & Pump**: Sump shall be provided for 50,000 litres capacity in Phase-I with a future provision of 50,000 Litres to be built in Phase-II. The Pump house shall

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be single and will be planned over the sump in Phase I only. Rectangular size Sump should be considered. Pump room with 12.0 Sqm floor area shall be single and will be planned over the sump in Phase I only. The top slab of UG sump shall be minimum 150mm above the NGL/FGL.

- The MLP Checklist is enclosed for reference at **Annexure-III**

General on Detailed Project Report (DPR)

The draft detailed estimate shall be shared first and once it is scrutinized, then only the same may be finally submitted after incorporating corrections/suggestions for approval.

- **The draft DPR shall be accompanied with**
  - Approved Master Layout Plan duly signed with compliance of pending observation, if any.
  - Complete Architectural Drawings i.e. Floor plans, Elevations & Sections of the building units.
  - Detailed Soil Investigation Report along with remarks of the construction agency along with feasibility of the structure corresponding to the soil investigation report. At least, one bore hole should be done near the tentative location of each building unit i.e., School building, Boys' Hostel, Girls' Hostel, Kitchen & Dining, Qtrs area. The location of bore pit shall be clearly marked in MLP and Soil Investigation Report.
  - The DPR must include Structural Drawings of all the buildings including foundation proposal w.r.t. to bearing capacity of soil. The structural drawings of foundation, all structural members (Columns, beams, slabs, etc) of all EMRS buildings including sump, pump room, ESS, Septic Tank shall be shared with NESTS before sending the same for vetting. However, Only Vetted structural drawings shall be enclosed with the DPR only.
  - Details of measurement and its proper linking to the respective heads in BOQ and then to the main Detailed Estimate sheet (DE).
  - BOQ of EMRS Phase-II and Single-Phase shall be prepared on DSR 2019 with Item Sub-Head Wise (Vertically) and Heads Building & Service Wise (Horizontally). The applicable CPWD Cost Index shall be added as per relevant CPWD Cost Index order. A sample BOQ may be shared to PSUs for uniformity. The BOQ shall be divided into the approved Building & Service components such as School Building, Boys' Hostel, Girls' Hostel, Warden Residences (Boys'), Warden Residences (Girls'), Kitchen & Dinning, Principal Quarter, Type III Quarter, Type II Quarter, Security Cabin & Entrance Gate, Electrical Sub Station (ESS), Sump & Pump Room, Septic Tank & Soak Pit, Site Development Cutting & Filling, retaining wall/Stone Pitching, Compound Wall and Roads and other Services such as Plumbing, Fire Fighting Electrical Internal and, Electrical External, etc.

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- Cost Index in the estimate shall be supported by Documents from CPWD. In case the CPWD Cost index is not available for the particular location, the Detailed Estimate shall be submitted at par with DSR 2019 without considering Cost Index.
- The correctness in the quantities, rates and items are the responsibility of the concerned PSU. The quantities in the estimate are to be supported by details of measurements, MLP, designs, site conditions, approved drawings, inventories etc.
- The construction agency must ensure that the site is free from encroachment, HT Transmission lines/ HT Poles, forest cover/land etc. while submitting DPR.
- The DPR Checklist cum scrutiny sheet is enclosed at **Annexure-IV**

➢ **Soil Investigation**

- The soil investigation shall be conducted at the major building locations i.e., School Building, Boy's Hostel, Girls' Hostel, Type II/III Quarters etc.
- The location of building shall be clearly written in the report against each test pit.
- The N value in the Standard Penetration Test shall be obtained at every 0.5metre interval upto 3.0 metre, thereafter at the interval of 1.0 metre upto 10 metre depth or till it is required as per soil conditions.
- The soil strata (Type of Soil) shall be clearly marked in the report.
- The depth of water table shall be clearly indicated in the report.
- The safe bearing capacity of soil shall be calculated based on soil parameter applying proper correction factors & safety factor for settlement & shear.
- Recommendation of Type and Depth of foundation shall be provided by the Geo-Technical Consultant with name & designation in the summary of the soil report.
- The Construction Agency shall ensure that site engineer shall be available while taking reading & sample of soil.
- The Soil Laboratory testing shall be done in NABL accredited laboratory/Engineering College only.
- **The copy of the soil report shall be certified by Zonal Head of the PMC.**

➢ **Structure of Buildings**

- All structural drawings shall be prepared as per the approved plans, elevations and section of buildings considering the overall functionality of buildings. No deviation in approved plan areas/ facility areas shall be permitted in any case.

- **Structural Members**: Size of structural member shall be taken as per the Architectural/structural requirement of the structure ensuring soundness and stability of RCC members.

➢ **Layout Planning & Foundation**

- Plinth of the Building shall be 600 mm to 750 mm above the ground level of the road (Finished Road Level) in its front which will be decided depending upon the terrain. Level of the Septic tank shall also be paid attention to while deciding the plinth.
- Foundation of each building unit shall be as per structural requirement based on the soil investigation report. Soil investigation shall be based on at least one bore hole located at the tentative location of each building i.e., School building, Boys Hostel Building, Girls Hostel Building, Staff Qtrs area, etc.
- Toe Wall: For toe wall purpose in external walls there will be Brick Work/ RR Masonry below the plinth beam if depth of foundation is shallow. If depth is greater than 1.50 m, RCC notch will be provided below the plinth beam. The brickwork will start on a base course of 100 mm thick PCC 1:5:10 mix, laid generally at 0.90 meter below the plinth level of the building. For internal walls the provision shall be restricted to 50% only. In case of Hilly areas, preference to be given to use locally available hard stones/RR Masonry for foundation works and protection works. In case the depth of foundation is more than 1.5 metre, RCC notch may be more appropriate instead of brickwork/RR.
- Waterproof bitumen painting above plinth beam: The Brick work above the plinth beam shall be started only after laying a coat of bitumen painting over the plinth beam.
- The locations where rock cutting etc. is unavoidable, the available stone recovered shall be utilized judiciously viz in foundations etc.

➢ **Ceiling Height of Buildings:** Clear Ceiling height of Buildings shall be as follows;

- School building - 3.60 metre
- Kitchen & Dinning - 3.45 metre
- Hostel - 3.15 metre
- Warden residence - 3.0 metre
- Ramp Mumty height- 2.4 metre
- Principal Quarter -3.00 metre
- Type III & Type -II Quarter -3.00 metre

➢ **External Cladding of Buildings from Ground Level**

- School Building: - Upto bottom of FF Level Beam Soffit (as per Drawings).
- Hostels' Building – Upto Window Sill Level.
- Dinning & Kitchen - Upto Window Sill Level.
- Principal Quarter – Upto Plinth Level

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- Type III & Type II Quarter – Upto Plinth Level.

➢ **Terrace parapet** of School Building and Hostel shall have height of 1200 mm i/c 50 mm CC coping. For Kitchen & Dining & Warden Residence being inaccessible, it will be 600 mm.

➢ **Locally available Materials**: The climatic conditions and locally available building materials may be considered for design purpose of buildings.

➢ **Water Tank on Terrace:** Domestic water tank shall be provided over the toilet block on a slab at least 750 mm above the toilet block roof slab for school and hostel building and it will be supported on columns. Water tank for fire purpose shall be provided over one of the toilet blocks with arrangement similar to that of the domestic water tank. Placing of water tank shall be such that the overflow water of fire tank shall fed the domestic water supply tank. In kitchen, only domestic tanks shall be provided over the toilet.

In kitchen, one number domestic water tank shall be provided over the toilet blocks located near the utensil washing area at least 750 mm above the toilet block roof slab and shall be supported on brick columns.

School Building:

1. **Facility area:**
   - Facility area of rooms, corridor and stairs shall be maintained same as per the standard drawing. Width of stair, corridor, ramp etc shall be maintained in full width without any restriction.
   - Facility for Person with disabilities: The entire requirement like ramp, hand-rails, tactile flooring, toilets, signage etc. shall be provided to the infrastructure being constructed. They shall comply to the provisions as per guidelines issued for the person with disabilities.
   - All the ramp floors will be provided with suitable anti-skid tiles with the provision of tactile tiles & handrails for person with disabilities.
   - Width of Ramp shall be 1800 mm. Head Room anywhere shall not be less than 2.40 metre.
   - Corridor Protection Railing of 1350 MM height with MS grill/railing in between the column as per approved drawings. The MS grill should be fixed 0ver 300 mm brick height wall throughout the corridor.
   - Railing to front Ramp and internal stair case shall be outer 40 mm dia in SS 304 grade. The finished top height of the handrail shall be 950 mm.
   - Rear Stair cases shall have no approach to terrace.

2. **Doors and Windows**:
   - Entrance door of the building shall be provided with powder coated anodised aluminium glazed door with Floor Spring. Steel Collapsible Shutter will be provided additionally for safety purpose.
   - All doors shall have T Iron frame 40 x 40 x 6mm.
   - Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges
   - Doors of Principal, Vice Principal and Staff Rooms, Toilet Main Doors shall be provided with hydraulic door closer. All the doors shall have rubber floor door stoppers. No floor door stopper to WC doors.
   - Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
   - Class Room, Labs and Library shall have MS Glazed window and ventilator with plain glass panes and MS grills 12 mm square bars. The weight of window grill and MS window sections shall be considered @ 12 Kg/ Sqm of window area for estimate purpose. The Central 40% area of the windows shall be fixed and rest open able shutters on either side. There shall be fixed glazing above the window from lux-point of view. Bath room windows/ventilators shall be with frosted glass panes.
   - External Windows in general will be of size 1950 (L) x 1500 (H) mm having top 300 mm portion fixed. The bottom portion shall be divided horizontally in three parts middle portion fixed and sides openable. However, the overall dimension and design as per approved drawings.

- The corridor portion will have no windows except in administrative block Administrative Block Rooms like Principal Room, Vice Principal Room, Office, Staff Rooms; Recreation Room shall have windows of size 1950x1200 mm in the corridor. Other Rooms shall have ventilators in corridor of size equal to width of the external windows (1950 mm) and depth 600 mm. It will be placed opposite to external windows just below the floor beams (No separate lintels are required for ventilators). The top shall be divided in the same pattern provided in bottom

3. **Flooring**:
   - Full body (homogeneous) Vitrified floor tile flooring with size not less than 600x600 mm shall be provided in Principal Room, Vice Principal Room and Staff Rooms.
   - All other floors except WC area and ramp shall be with Kota Stone flooring as per the respective DSR item with marble strips (approximate @5% area) and skirting upto 100 mm height.
   - Treads and risers of stair shall have Kota in single length.
   - All the ramp floors will be provided with matt finish anti-skid vitrified tiles of size 300 x 300 mm with provision of tactile tiles.
   - Toilet block shall be also be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for remaining area of toilet block upto 2100 mm height as per respective DSR items.
   - Working platforms in labs shall be provided with Granite top with nosing and dado upto 100 mm height. The detailed drawings for Lab table shall be provided shortly.
   - In toilet, oval shaped wash basin shall be provided on RCC platform finished with granite stone.

4. **Finishing**
   - The external wall (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR item and finished with 1 mm thick external white cement-based putty.
   - The external surface including corridor walls shall be provided with Premium acrylic water proof exterior grade with silicon additive paint.
   - Inside Walls shall have 12/15 mm plaster and 6 mm in ceiling as applicable.
   - Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
   - All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Hostels:

1. **Facility area:**
   - Facility area of rooms, corridor, stairs etc shall be maintained same as per the standard drawing. Width of stair & corridor etc shall be maintained in full without any restriction.
   - Handicapped toilet shall be provided at ground floor only.
   - Electrical shaft and FHP shafts shall be provided as applicable.

2. **Doors & Windows**:
   - Entrance door shall be provided with powder coated anodised aluminium glazed door with hydraulic door closures. Steel Collapsible door will be provided additionally for safety purpose.
   - Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
   - Hostel will have 35 mm thick non decorative flush doors in single leaf including teak wood edge lipping (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides. The door closer will be provided in the warden office.
   - Wash Area and Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
   - Steel glazed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section; etc with MS grills with 12 mm square bars 100-120 mm c/c. Window & ventilators except toilet portion shall be in plain glass panes. The Central 40% area of the windows shall be fixed and the rest with openable shutters on either side. Glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes.
   - The windows shall be fitted with the required fixtures like stays and fasteners.
   - Railing to front Ramp and internal stair case stair shall be 40 mm outer dia in SS 304 grade. Finished railing height shall be 950 mm.

3. **Flooring**:
   - Warden Room in Hostel shall be provided with Full body (homogeneous) Vitrified floor tile flooring with size 600x600 mm.
   - Treads and risers of stair shall have Kota stone slab in single length.
   - All other floors except WC area shall be in Kota Stone flooring with marble strips (approx. @ 5% area) and skirting upto 100 mm height. Treads and risers of stair shall have Kota in single length.
   - Toilet block shall be also be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have Ist quality glazed ceramic tiles dado, inside WC area upto 900mm height and for remaining area of toilet block upto 2100 mm height as per respective DSR items.
   - Flat back wall mounted Wash basins shall be provided.

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4. **Finishing**
   - External Finishing: The external wall (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR Item and to be finished with premium acrylic smooth paints with silicon additives.
   - Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
   - All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Kitchen & Dining:

1. **Facility areas:**
   - Facility area of dining hall, kitchen, washing area, etc shall be maintained same as per the standard drawing.
   - All the floors except WC area and ramp shall be in Polished Kota Stone flooring in the respective DSR items with marble strips (approx. @5% area) and skirting upto 100 mm height.
   - Dining Hall shall be provided with 1200 mm height ceramic glazed wall tiles. In Kitchen Hall, wash area and utensil area shall have glazed wall tiles upto 2100 mm height.
   - WC area shall be provided with anti-skid rectified ceramic floor tiles of size 300x300 mm or more and wall with glazed ceramic tiles upto 1200 mm as per respective DSR items.
   - Kitchen platform, pantry shall be provided with pre-polished Kota stone topping with proper nosing.
   - For hand washing, oval shaped wash basin shall be provided on RCC platform finished with granite stone.
   - Floor of utensil washing area shall have anti-skid vitrified tiles of size not less than 300x300 mm. For washing of utensils, granite stone trough in full length along the counter of width 450 and depth 450 mm will be provided.
   - Kitchen courtyard: Kota Stone flooring shall be provided as per the respective DSR item.
   - Railing to Ramp at the entrance shall be of 950 mm height having 40 mm outer dia SS pipe handrail.
   - Peripheral wall of the Kitchen Courtyard shall be of 1200 mm height with wicket gate.

2. **Doors & Windows**
   - Powder coated aluminium door shutters at entry of the Dining Hall shall be in two leaves.
   - Other doors of Kitchen and Dining will have 35 mm thick non decorative flush doors in single leaf with teak wood edge lipping all-round (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.

- Wash Area & toilets shall have 35 mm thick factory pressed Laminated flush doors shutter in exterior grade.
- Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section, etc with MS grills with 12 mm square bars. Height of window shall generally be 1800 mm (Sill level being 750 mm) except Kitchen window on Courtyard side which will be 1650 mm. Top 600 mm height will be fixed and bottom horizontally divided into three parts middle one fixed and sides openable. Window & ventilators except toilet portion shall be in plain glass panes. The Central 40% area of the windows shall be fixed and the rest with openable shutters on either side. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
- Railing to Ramp at the entrance shall be of 950 mm height provided with 40 mm outer dia SS 304 grade.

3. Finishing

- External Finishing: The external facia (excluding Brick Tile Cladding area) shall be plastered with 18 mm plaster as per respective DSR item.
- The external surface shall be provided with premier acrylic water proof exterior grade paint. The external surface including courtyard walls shall be provided with premium acrylic water proof exterior grade with silicon additive paint.
- Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
- All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Principal Quarter

1. **Doors & Windows**:
   - Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
   - Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges with rubber floor door stoppers and synthetic enamel paints on both sides.
   - Entrance door shall be 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf along with MS safety grill door opening outside.
   - Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
   - Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section and MS grills 12 mm square bars. The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the steel frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
   - Balcony shall have MS Railing of 1050 metre height over 150 mm height brick wall finished with kota stone

2. **Flooring**:
   - All Room except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
   - Treads and risers of stair shall have Kota stone slab in single length.
   - Kitchen including utility shall be provided with rectified glazed ceramic anti-skid floor tiles of size not less than 300 x 300 mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600mm height whereas in utility area shall be 2100mm height.
   - Toilet/Bath shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for bath upto 2100 mm height as per respective DSR items.
   - The Kitchen platform shall be with Granite Stone fixed over RCC slab.
   - Flat back wall mounted Wash basins shall be provided.

3. **Finishing**
   - External Finishing: The external face with 18 mm plaster as per respective DSR item and to be finished with premium acrylic water proof exterior grade with silicon additive paint.
   - Internal Finishing: First quality acrylic distemper (ready-mix).

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- All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

Warden – Residences, Type III Quarter & Type II Quarter

1. **Doors & Windows**:
   - Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm as per respective DSR item.
   - Single shutters with 35 mm thick factory-made exterior grade non-Decorative type flush door shutter with teak wood lipping on edges (except Wash area) with rubber floor door stoppers and synthetic enamel paints on both sides.
   - Toilets shall have 35 mm factory made machine pressed laminated flush door of exterior grade in single leaf.
   - Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section and MS grills 12 mm square bars. The rooms shall also be provided with stainless steel wire (for mosquito) mesh steel shutters fixed in the steel frame. The glazed window shutters shall open outside and the wire mesh shutters shall open inside. Toilet portion windows/ventilators shall be with frosted glass panes. The windows shall be fitted with the required fixtures like stays and fasteners.
   - Balcony shall have MS Railing of 1050 metre height over 150 mm height brick wall finished with kota stone
   - Railing of internal stair case shall of MS of finished height 950 mm.

2. **Flooring**:
   - All Rooms except kitchen shall be provided with Vitrified Tiles of size 600x600 mm.
   - Treads and risers of stair shall have Kota stone slab in single length.
   - Kitchen including utility shall be provided with rectified glazed ceramic anti-skid floor tiles of size not less than 300mm x 300mm and 1st quality ceramic glazed wall tiles dado over kitchen platform upto 600mm height whereas utility area shall be 2100mm height.
   - Toilet block shall be provided with anti-skid rectified ceramic floor tiles with size of 300mm x 300mm or more. The walls shall have glazed ceramic tiles dado, inside WC area upto 900mm height and for bath upto 2100 mm height as per respective DSR items.
   - The Kitchen platform shall be with Polished Kota Stone Slab fixed over RCC slab.
   - Flat back wall mounted Wash basins shall be provided.

3. **Finishing**
   - External Finishing: The external face excluding Brick Tile Cladding shall be plastered with 18 mm and to be finished with premier acrylic water proof exterior grade with silicon additive paint.
   - Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper (ready-mix).
   - All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

(Narendra Kumar)	(P K Garg)	(P. K. Agrawal)	(A D P Keshri)

SPECIFICATION : HOSTEL DORMITORY & RESIDENTIAL QUARTERS- Annexure-A-1

SN	Item	Hostel Dormitory	Warden Residence/ Type III & Type II Quarters	Principlal Quarters & Guest House.
1	Foundation & Structure	As per structural requirements based on soil investigation report. The design shall vary as per soil conditions.		
2	Superstructure			
	(a) Structure	RCC framed & Filler walls of Aerated Cement Concrete (ACC) / Cellular Concrete Block(CLC)/ Clay Brick work/Fly-ash brick		
	(b) Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks		
	(c) Clear Ceiling height	3.15 Mt	3.00 Mts	
	(d) Plinth Height	Plinth height of buildings shall be kept as 60cm from the adjoining ground level/plinth protection level . Where plinth height becomes more then 60 cm special care shall be taken. If plinth height more than 1.20 mtrs., approval of the competent authority may be sought.		
3	DOORS & WINDOWS			
	(a) FRAME			
	(i) Door Frame	Providing and fixing T-iron frames of 40×40×6 mm with 15×3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2019 item no. 10.13.1)		
	(ii) Window Frame & Ventilators	Providing and fixing factory made ISI marked steel glazed window (partly fixed and/or partly side hung/top hung) and side hung wire gauzed windows shutters with Z- section, window grills fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2019 item no. 10.11.1)		
	(b) Shutters			
	(i) Main Doors	i) Powder coated Aluminium Glazed Doors with fixed glazing on either side. ii) M.S. collapsible steel shutters (for safety measure) to main entrance lounge at GF.	(i) Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T Iron frame with SS Hinges. (ii) Safety door MS tubular box section styles and rails frame i/c stainless steel Mosquito Proof Jali.	
	(ii)Other Doors	Single shutters with 35 mm thick factory made exterior grade Non- Decorative type flush door shutter with teak wood lipping on edges & finished with one coat of wood primer followed by two or more coat of synthetic enamel paints. (As per D.S.R.- item no. 9.21.1 & 9.23 for flush door)		
	(iii) Bath, WC, Toilets Doors	Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T Iron frame with SS Hinges.		
	(iv) Windows & Ventilators	Z- Section Double shutter one with frosted glass panes and other with stainless steel wire mesh shutter. All windows and ventilator shall be provided with 12 mm square guard bars at 10 to 12 cms. C/C spacing		
	(c) Hardware & Fittings	Powder coated/anodized Aluminum/ SS fittings		
4	FLOORING			
	(i) Living/Drawing Room, Bed Rooms, Dining & Family Lounge with matching grouting of joints	All flooring Kota stone combination with marble strip except WC/toilets area with matching grouting of joints	600 mm x 600 mm Vitirifed Tile Flooring laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.	600 mm x 600 mm Vitirifed Tile Flooring laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc., complete.

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	(ii) Kitchen		Anti skid Ceramic/ vitrified tiles of size not less than 300 mm × 300 mm with water absorption less than 0.08% laid with 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete	Anti skid vitrified tiles of size not less than 300 mm × 300 mm with water absorption less than 0.08% laid with 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) jointing with grey cement slurry @ 3.3kg/sqm including grouting the joints with white cement and matching pigments etc., complete.
	(iii) Common circulation area	Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete		
	(iv)Staircase	Kota stone in single length up to 1.05 metre of treads & risers.		
	(v)Toilets / Bathroom	Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of joints.		
	Dado & Skirting			
	(i) Skirting in rooms and other areas.	100 to 150 mm height skirting matching with floor materials		
	(ii)Kitchen Platform/ Dado	NA	(i)Platform- Kota Stone (ii) Dado over kitchen platform-Ist Quality Ceramic Glazed wall tiles of approved sizes from 600 height from platform	(i)Platform- Granite (ii) Dado over kitchen platform-Ist Quality Ceramic Glazed wall tiles of approved sizes from 600 height from platform
	(iii)Toilets/bathrooms/ WC Dado	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.	1st quality ceramic glazed wall tiles of size not less than 200mm × 300mm inside WC area upto 900mm height & for remaining area of toilet block shall be upto 2100mm height.
5	FINISHES			
a)	Internal Walls	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works.	(i) All walls to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works
b)	External Walls	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent		
6	Hand Rail	Stair Case Railing -SS	Stair Case Railing -MS	NA
7	Roof	RCC Slab brick with Koba treatment (Item No. 22.7.1 of DSR-19).		
8	Toilets for Physically disabled person	One each for boys and girls (specification as per NBC)	NA	NA
9	Overhead Water Tank(OHT)	8000 Litres on over each toilet block	500 Litres per Quarter	1000 Litre

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SPECIFICATION : SCHOOL BUILDING & KITCHEN & DINING - Annexure- A-2

SN	Item	School Building	Kitchen & Dining
1	Foundation & Structure	As per structural requirements based on soil investigation report. The design shall vary as per soil conditions.	
2	Superstructure		
	(a) Structure	RCC framed & Filler walls of Aerated Cement Concrete (ACC) / Cellular Concrete Block(CLC)/ Clay work/Fly-ash brick	
	(b) Internal Partition	Half brick thick masonry in ACC/CLC/Fly-ash Bricks	
	(c) Ceiling height (Clear)	3.60 Mts.	3.45 Mts
	(d) Plinth Height	Plinth height of all the buildings shall be kept as 75 cm from the adjoining ground level/plinth protection level for other building it should be kept as 60 CmWhere plinth height becomes more then 60 cm special care shall be taken. In case plinth height more than 1.20 mtrs, approval of the competent authority may be sought.	
3	DOORS & WINDOWS		
	(a)FRAME		
	(i)Door Frame	Providing and fixing T-iron frames of 40×40×6 mm with 15×3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2016 item no. 10.13.1)	
	(ii) Window Frame & Ventilators	Providing and fixing factory made ISI marked steel glazed windows (partly fixed and/or partly side hung/top hung) with z- section, window grills fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2019 item no. 10.11.1)	Providing and fixing factory made ISI marked steel glazed windows (partly fixed and/or partly side hung/top hung) and side hung wire gauzed windows shutter with z- section, window grills fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15×10×10 cm of C.C. 1:3:6 (As per D.S.R.-2019 item no. 10.11.1)
	(b) Shutters		
	(i) Main Doors	(i) Powder coated Aluminium Glazed Doors with fixed glazing on either side and on the top below floor beam (ii) M.S. collapsible steel shutters at main entrance (for safet measure) only	(i) Powder coated Aluminium Glazed Doors with fixed glazing on either side and on the top below floor beam (ii) M.S. collapsible steel shutters at main entrance (for safet measure) only
	(ii)Other Doors	Single shutters with 35 mm thick factory made exterior grade Non- Decorative type flush door shutter with teak wood lipping on edges & finished with one coat of wood primer followed by two or more coat of synthetic enamel paints. (As per D.S.R.- item no. 9.21.1 & 9.23 for flush door)	
	(iii) Bath, WC, Toilets Doors	Factory made Machine pressed pre-laminated flush door exterior grade with teak wood lipping on edges. The lamination sheet used shall be decorative high pressure of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S. The door shall be fixed to T-Iron frame with SS Hinges.	
	(iv) All Window/ ventilator Shutter (except WC, Toilets, Baths)	Z-section single shutter with plain glass panes. windows and ventilator shall be provided with 12 mm square guard bars at 10 to 12 cms. C/C spacing.	Z- Section Double shutter one with frosted glass panes and other with stainless steel wire mesh shutter. All windows and ventilator shall be provided with 12 mm square guard bars at 10 to 12 cms. C/C spacing
	(v) Windows/ ventilators	Z-section single shutter with Frosted Glass	
	(c) Hardware & Fittings	Powder coated/anodized Aluminum/ SS fittings	
4	Flooring , Skirting, Dado, Counter/pantry, court yard		
	a) Flooring		
	(i) Main entrance hall, common circulation area.	Mirror polished Kota stone with marble strip	
	(ii)Other	Classroom - (Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete)	Dining Hall & Kitchen Area - (Kota stone slab flooring with marble strips (upto 50mm width) in required pattern including rubbing and polishing complete)
	(iii)Toilet/WC/Bath (including common circulation area of toilet block)	Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of joints.	Glazed ceramic anti-skid of size not less than 300×300 mm with matching grouting of joints.
	(iv) Staircase/steps	Kota stone in single length up to 1.05 metre of treads & risers.	Kota stone in single length up to 1.05 metre of treads & risers.
	(b) Skirting : In rooms and other area	100 to 150 mm height skirting matching with floor materials	100 to 150 mm height skirting matching with floor materials
	(c) Dado		
	(i) In toilets/WCs /Baths (including common circulation area of toilet block)	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 900 mm height in toilet inside and remaing area of toilet block upto 2100 mm height.	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 2.1 metre height except in WC,, which shall be 900 mm dado.
	d) Counter/ pantry/Diining	At Laboratory platform: Granite stone with nosing	Kota stone for kitcen and pantry platform.

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	d) Kitchen/Pantry	NA	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 2.1 metre height	
	e)Diining Area	NA	Ist Quality Ceramic Glazed wall tiles of approved sizes from floor up to 1.20 metre height	
	f) Open Court Yard	Flag Hoisiting /Central court yard of School Building:	Kitchen back courtyard with Kota Stone Slab flooring and front Dinning courtyard with anti skid virtified tile 300 x 300 mm flooring	
		(i)Top Course: 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thick compacted bed of course sand etc.... (as per item no. 16.68, DSR-19) (ii) Based course: 7.50 cm thick CC (1:5:10). iii) The top level of Court yard shall be 15 cm from formation level of School Building.		
5	ROOFING		Kitchen back side courtyard and Dinning Front Courtyard : Precoated GI profile sheet roofing	
6	FINISHING			
	(a) External	(i) Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent (ii) Synthetic enamel paint on all wood work & steel work. (iii) 1 mm thick cement based putty on external face leaving CC tile cladding area.	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent	Synthetic enamel paint on all wood work & steel work. Premium Acrylic Smooth exterior paint with Silicone additives or its equivalent
	(b) Internal	(i) All walls & ceiling to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works.	(i) All walls & ceiling to be painted with low VOC Acrylic washable distemper. (ii) Synthetic enamel paint on all wood works and steel works	
8	Railing	(i) Stair Case & Ramp- SS 304 Grade (ii) Corridoor in between Columns - 1350 mm height MS grill/railing as per approved drawings	(i) Stair Case & Ramp- SS 304 Grade	
9	Roof Water Treatment	Brick Coba Treatment as per DSR-19, item No. 22.7.1.		Brick Coba Treatment as per DSR-19, item No. 22.7.1.
10	Roof Water Tank	10,000 Litres over each toilet block for general use and 10,000 Litres for files in one toilet block only	10,000 Litres	
11	Cooking platform	-	RCC as per design and drawings.	
12	Pantry	-	RCC as per design and drawings.	
13	Laboratories Counter/ platform	RCC as per design and drawings.	NA	
14	Ramp for Physically disable person	One no. (specification as per NBC)	One no. (specification as per NBC) on each entrance	
15	Toilets for Physically disable person	One each for boys and girls (specification as per NBC)	NA	
16	Stair Case	Only Two Front Stair Case shall run upto mumty, The back Stair Case shall stop to FF Level	MS Ladder shall be provided to reach the roof for maintenance purpose	

Details scope & specification of Development works and Campus Boundary wall:Annexure- A-3		
Development/external services work for EMRS/EMDBS Campus:-		
Sl. No.	**Name of work**	**Details**
1	Preparation of play fields:	
	(i) Playfield of Size 190mx110m for foot ball, cricket, hockey etc. including 400mtrs/200mtrs.- running track: 1 no. (Size may vary as per availability of land)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 15 higher than theadjoining ground level so that water logging can be avoided.
	(ii)Basket Ball fields – 2 nos.	(a) Size-40mx30m: Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 15 cm. higher than the adjoining ground level, so that, water logging can be avoided. (b) Size 30mx18m CC court with pole, board, basket etc. (i) Base concreting CC (1:5:10) of 7.50 cm thick (ii) Top course Concreting (M-20 grade designed mix) of 10 cm thick. (iii) Pole, board, Basket: As per SAI standard.
	(iii) Khokho/ Volley Ball court: 2 nos. (Size-40mx30m for each)	Leveling with good earth after filling/cutting of earth. The quantities of earth filling/cutting shall be worked out in detailed calculation basis as per initial level, contour plan. Finished level shall be 30 cm. higher than the adjoining ground level, so that, water logging can be avoided.
2	Internal roads, paths and culverts:	
	(i) Internal roads (Cement Concrete roads) :	(i) Width: Shall be 3.50 mtrs. + 1 mtrs. Shoulder/side berm of each side. (ii) Road shall be constructed up to the all building units. (iii) Base Course CC (1:5:10) of 10 cm thick. (iv) Top Course (M-20 grade designed mix) of 15 cm thick. (v) Finished/top level of the edge of the roads i.e. shoulder level shall be 15 cm. higher than the adjoining ground level.
	(ii) Pathways :	(i) 2.00 mtrs. width + 1 mtrs. shoulder/side berm each side of the pathways. (ii) Pathways shall be provided to connect the buildings/ permanent infrastructure to nearby internal roads. (iii) No pathways shall be provided on side of the roads. (iv) Top Course: 60 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction etc. in required colour, pattern, 50 mm thick compacted bed of course sand etc.... (as per item no. 16.68, DSR-16) (v) Base course: 7.50 cm thick CC (1:5:10). (vi) Kerb stone on edge (50 mm thick, 250 mm height (for which shall be embedded underground): Factory Made kerb stone of M-25 grade cement concrete (as per item no. 16.69, DSR-16). (vii) Finished/top level of the edge of the paths shall be 15 cm. higher than the adjoining ground level.
	(iii) Culverts:	As per actual requirement.
3	External water supply:	
	(i) Tube/open well i/c 2 Nos. submersible pump 7.5 HP(preferably Solar Powered)& cabling etc. complete.	Shall be executed as per availability of underground water after examination by the local PHED or any other related Govt. agencies i.e. Central Ground Water Board, Local PHED etc. The yield of water source shall be 15000 LPH or more.
	(ii) Overhead Tank	Required in all building
	(iii)Under Ground Sump:	100000 ltr. capacity with 2 nos. centrifugal pumps including one standby.
	(iv) Pump house	(i) Maximum size-3.0mx3.00m, (ii) Plinth area-11.97 sqm. (iii) Floor height 2.90 mtrs. (iv) Building shall be RCC framed structure with slop roof and shall be executed over Under Ground Water Tank. (v) Flooring -CC (vI Internal Painting- White Wash (vii) Door- Laminated Machine Pressed Flush Door (viii) Windwow - Steel Glazed Door
	(v) Water filtration plant (if required)	Shall be executed if required, after conducting necessary water test through local PHED or any other related Govt. agencies.
	(vi)GI/CI water supply distribution line	GI Pipes for intake from bore well and supply to OH Tanks,maximum dai -100/80 mm nominal size . Distribution line shall be designed as per the intake of the buildings. All pipes shall be CPVC only.
4	External Electrification:	

pl Approved 29.3.22

	(i) Substation building	(i) Plinth area-52.80 sqm. (ii) Floor height 4.25m (iii) Building shall RCC framed structure with slop roof. (iv) Flooring -CC (vl Internal Painting- White Wash (vii) Door- Laminated Machine Pressed Flush Door (viii) Windwow - Steel Glazed Door
	(ii) LT Panel	Fabricated from CPRI approved workshop.
	(ii) External wiring/cable connection using U.G. cables from sub-station to feederpillar, building & pump house and necessary connection from DG set to infrastructures.	200 KVA/ 250KVA sub-station depending on the location of the School. However capacity of sub-station may be confirmed after consultation with concern state electricity board.
5	External sewerage System:	
	(i) Septic Tank & Soak pit	(i) Proper planning shall be made before preparation of Preliminary estimate. (ii) Septic tank shall be designed as per the user and as per CPWD specification. (iii) Septic tank shall be RCC including walls as per IS dimension for 200v users for school, Girls Hostel and Boys' Hostel each (iv) Sufficient soak pit or dispersion channels shall be provided as per the soil condition.
	(ii) External sewerage line (RCC NP2 pipe)	Proper planning shall be made before preparation of Preliminary estimate.
6	5.0 H.P. Sewerage Pump	Air Cool, mounted on trolley with 10m. suction & 10m. del. Flexible pipe
7	25 KVA DG Set	(i) Including erection, installation, testing, commissioning etc. (ii)Essential connection to various building shall be provided as per latest NVS guideline/ order.
8	Retaining wall / Breast wall (if required)	Proper planning shall be made before preparation of Preliminary estimate.
9	Strom Water Drain	(i) Proper planning shall be made after examining the levels of the campus very carefully before preparation of Preliminary estimate. Rain water pipe collect from the buildings shall be connected with the campus storm water drain. (ii) Road side drain shall be avoided. (iii) Level of out fall drains of EMRS is always kept higher than the highest water level of Nallah/Natural drainage where water will be disposed off finally.
10	Rain water harvesting	Proper planning shall be made before preparation of Preliminary estimate.
(B) Campus Boundary Wall including Main Gate and Chowkider Hut:		
Sl. No.	**Name of work**	**Details**
1	Campus Boundary wall	(i) Boundary wall shall be 1.80 mtrs. height masonry wall + 0.8 mtrs. fencing with 600 mm dia. concertina coil over masonry wall. (ii) The total height of Boundary wall shall be 2.60 mtrs. (iii) The campus boundary wall shall be of RCC column, plinth beam, top band and filler wall in brick work.
2	Chowkider Hut/Sentry Booth	(i) Plinth area-5.11 sqm. (ii) Floor height 2.90m. (iii) Building shall RCC framed structure with slope roof. (iv) Other specification as per Annexure-V of PAR-19 for Type-I qtrs.
3	Main Gate - Depending upon layout two gates, one for school and other for residential area may be provided.	(i) Width & Height of Main Gate: As per NBC (ii)Wicket Gate: As per NBC

29.3.22

Annexure-III_SITE: EMRS - Location, Block/ Mandal, District & State					
Sl. No	Features	Dimension approved per EMRS	Provided in MLP (Y/N)	Remarks /Deviation if any from Standard of EMRS	Remarks of NESTS for compliance
1	Whether EMRS sanctioned by NESTS			Sanction Order No -- --	
2	Land Area, Survey No/Khata No/Plot No , Village/Block/Dist,	15 Acres			
3	Location Details indicating nearst public road, bus station, Hospitals, Transmission lines ,other prominent landmarks,etc	Location Map of EMRS & nearest distance from bus stop etc.			
4	Contour Map provided				
5	School Buildings (G+1)	2580 Sqmt			
6	Boys' Hostel (G+1)	2280 Sqmt			
7	Girls' Hostels (G+1)	2280 Sqmt			
8	Warden Residence (Boys' Hostel)	80 Sqmt			
9	Warden Residence (Girls' Hostel)	80 Sqmt			
10	Kitchen & Dinning	550 Sqmt			
11	Principal Quarter	130 Sqmt			
12	Type III Quarters(G+1), 2 Blocks- 15 Nos Qtrs	1200 Sqmt			
13	Type II Quarters (G+2), 1 Block- 10 Nos Qtrs	700 Sqmt			
14	Guest House- 1 No. (to be accommodated at GF in one of the block of Type-III Qtrs.)	80 Sqmt			
	SPORTS FACILTITIES				
15	Play Ground	190 x 110 mts x mts (having 400 / 200 mt track)			
16	Kho Kho 2 Nos	40 x 30(mts x mts) Separate or may be played at Volley Ball Court			
17	Basketball Court -Sepearte for B & G	40 x 30 (mt x mt)			
18	Volley Ball Court -Sepearte for B & G	40 x 30 (mt x mt)			
19	Archery Ground - 1 Nos	2500 Sqmt			
	DRINKING WATER				
20	Sump - 1 Lakh Ltrs Capacity	80 Sqmt			
21	Deep Boring	2 Nos			
22	Overhead Tank	To be provided on the terrace of each buildings, water can be pumped from sump directly.			
23	Pump Room	Over UG tank or sump			
	GREEN FEATURES				
24	Surface Drain including culvert & Storm Water Drain	Length as per actuals		Length to be indicated	
25	External Sewrage system	Length as per actuals		Length to be indicated	
26	Septic Tank/ Composite pits	As per Site Condition			
27	Rain Water Harvesting	As per Site Topography			
	Horticulture/Landscaping				
28	Plantation	As per Site Topography & availability of land			
29	Landscapping	Same as above			
	Others				
30	Boundary Wall 2.6 mt Height, 1.8 Machinary work and 0.8 fencing	Length as per actuals. Indicative length should be mentioned		Length to be indicated	
31	Entry Gate with Security Room (Preferrably 2 gates -one near to school building and other to residential areas	1 No.			
32	Flag Hoisting Stage With Assemply ground	1 No.			
33	Electric substation	1 No.			

29.3.22

29/3

34	Internal Roads	1. CC Road 5.5 metre in front of school buildings and other area CC Roads of 3.5 metre with one metre shoulder on either side in other area. 2. Length as per actuals and shall be economically planned.		Length to be indicated	
35	Internal pathways	1.5 mt/ 2.00 mt wide precast CC interlocking paver blocks with one metre shoulder either side.		Length to be indicated	
36	Levelling if any (Approximate Cost involved to be indicated)	As per site Requirement			
37	Retailing Wall if any ((Approximate Cost involved to be indicated)				
38	Whether Sutitable approach road to school available				
39	**Note:- NESTS approved architectural plan, Elevation & section of School , Hostels with Warden Residence, Principal Quarter, Type III & Type II Quarters, Guest House to be followed.** **2.In case of special plan for buildings due to site constraint, the architectural plans of the buildings are also to be submitted**				

pk Approved
29.3.22

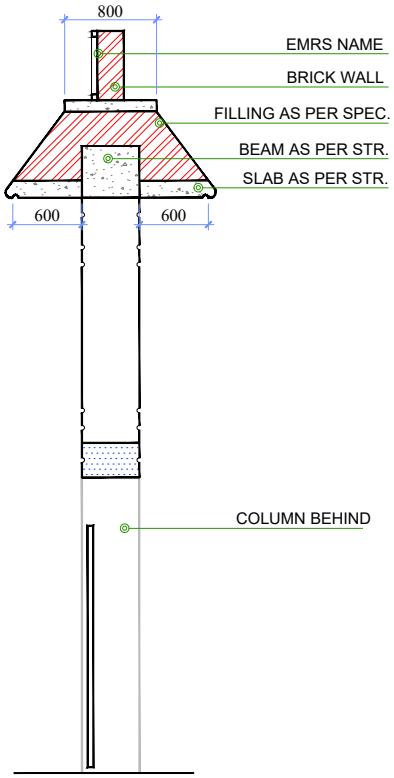
29/3/22

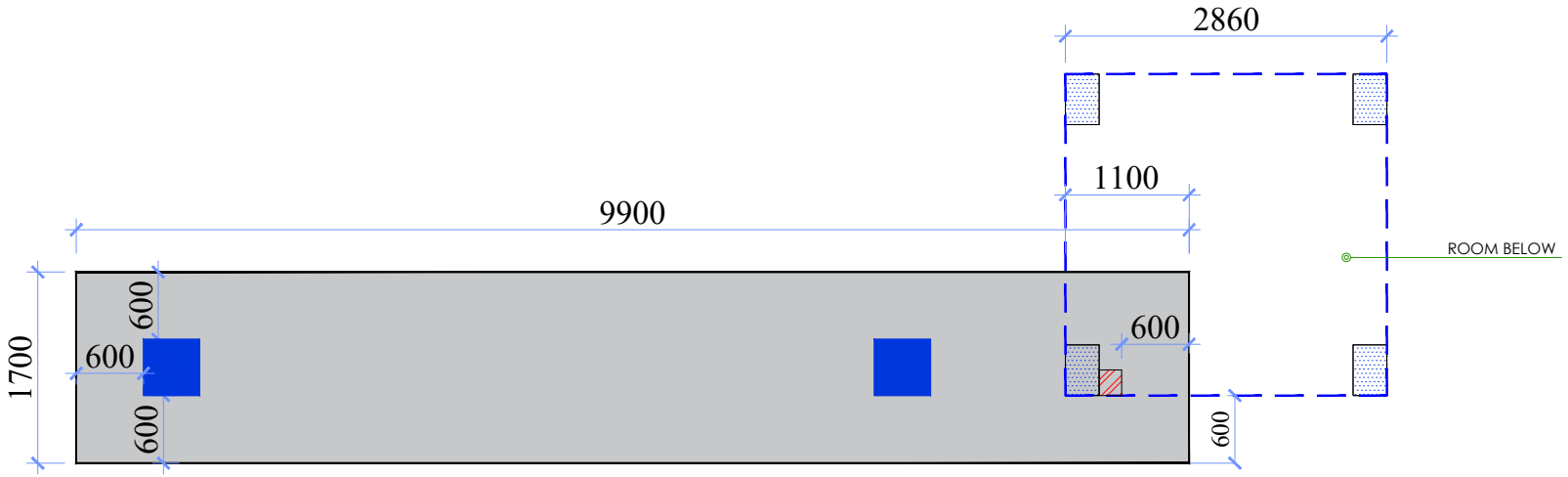
Annexure-IV

DPR CHECKLIST FOR SUBMISSION OF DPR BY CONSTRUCTION AGENCY

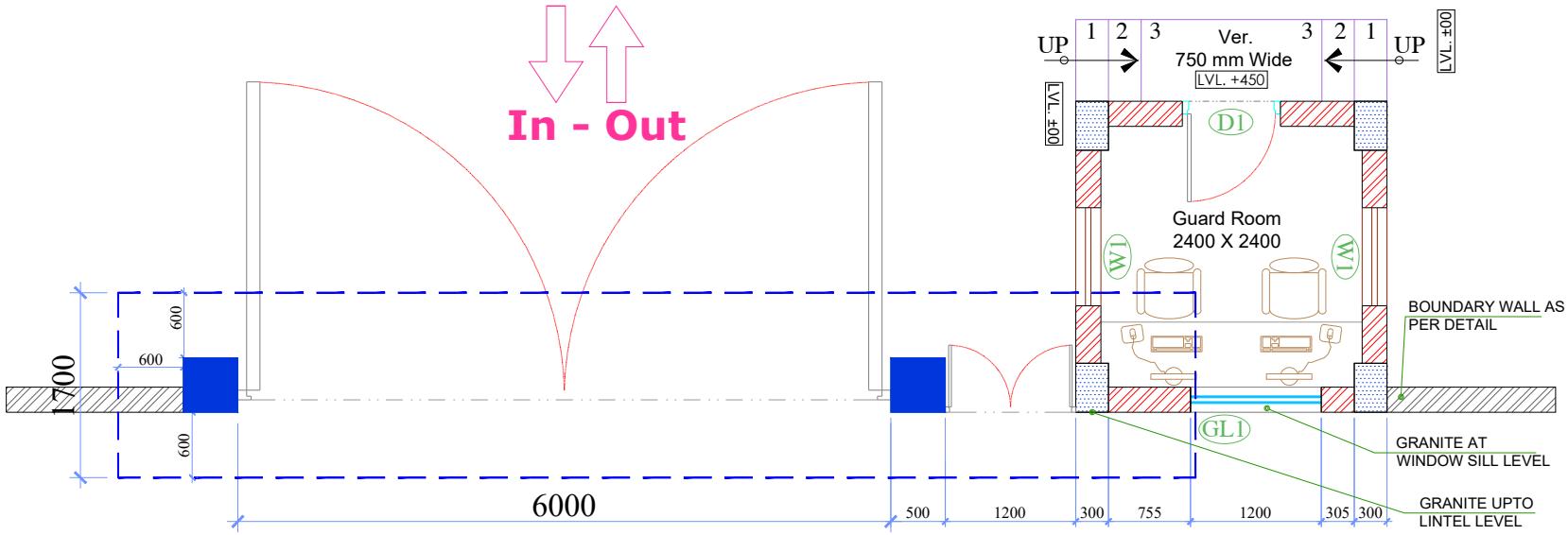
S. No.	Item	Available YES/NO	Remarks
1	Project Overview		
2	Structure Details		
3	Location		
4	Land Particulars		
5	Details of Formal Sanction of EMRS		
	a. Approval Order		
	b. LSR and Sketch/Key Plan		
	c. Deviation, if any, in Land area mentioned in LSR and Surveyed site plan/approved MLP, details thereof.		
6	Details of AA & ES		
	a. Approval Order		
	b. Cost of PE		
	c. Cost of Revised PE, if any		
7	Details of Detailed Estimate		
	a. Cost of DE Based on DSR 2019		
	b. Detailed Analysis of Rates with supporting documents for:		
	i. DSR 2019 Modified Items derived from DSR 2019		
	ii. Non DSR 2019 Civil items based on local market rates		
	iii. Non DSR Electrical items i/c firefighting items based on local market rates		
	iv. Applicable Cost Index with supporting document		
8	Essential Features of ERMS, Phase I & Phase II		
9	Documents to be enclosed in r/o		
	a. MLP Sanction Order		
	b. Handing Over & Taking Over of the Land		
	c. Alienation of Land initiated		
	d. Compliance to EMRS & CPWD Standards		
	e. Compliance to remarks (if any) of NESTS in MLP and checklist of Phase I & II		
	f. Soil Investigation Report duly signed		
	g. Water Level, Availability of water		
	h. Availability of nearest sewer-line and disposal system		
	i. Proposal for site development Including compound wall, leveling of site, drainage system, sewerage system, RWH, etc.		
	j. Other site requirements e. g. Retaining wall, cutting, filling and likely expenditure		
	k. Landscaping		
10	a. Design parameters e. g. DL, LL, WL, Design life, Design Method,		

	Foundation Design, Earthquake zone, Design code		
	b. Design Philosophy Report of Structural Designer		
11	Framing details and grid lines for locations and sizes of column & footings		
12	Copy of vetted structural drawings		
13	Construction Materials; Source & Lead		
14	Drawings to be enclosed		
	a. MLP with contour (Revised, if any)		
	b. MLP with contour (Originally approved)		
	c. Approved Architectural Drawings		
	d. Plumbing & water supply distribution lines		
	e. Sewerage System		
	f. Storm Water Drainage		
	g. Electrical Services schedules e. g. Sub-station, LED street Lights, Distribution UG cable layout		
	h. Details of electrical inventories		
	i. Local body approval details		
15	Deployment plan of Engineers (Designation, Experience of Engineer to be deployed at respective EMRS location for supervision and quality control.)		
16	Quality control measures i. e. mandatory tests, Checklists.		
17	Undertaking for environmental risk/legal/contractual risk		
18	Site specific issue, if any, requiring attention of EMRS to commence the work **(supporting photographs etc. to be furnished)**		
19	Preferred Make List issued by NESTS dated 04.03.2021(R-1)		





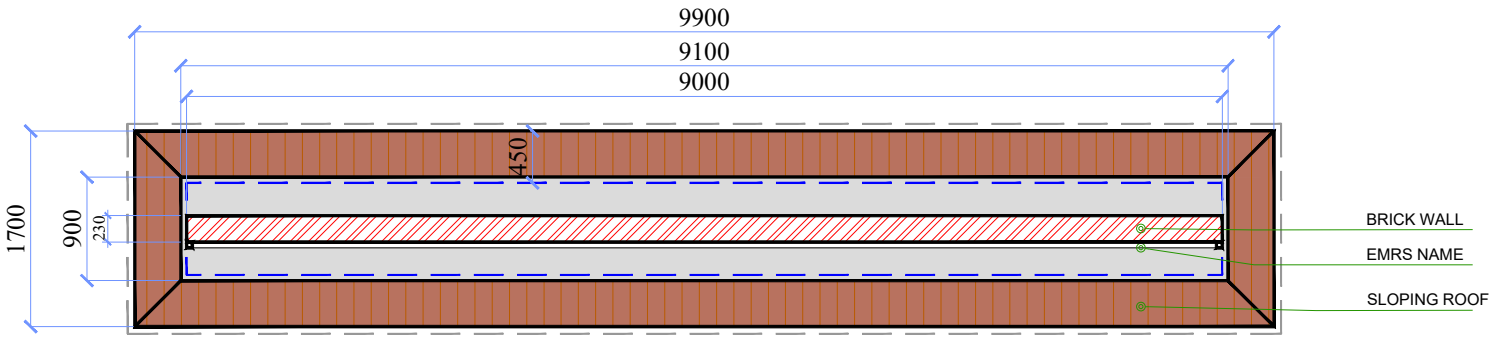
PLAN AT 5000MM LEVEL



Plan At ±00 LVL.

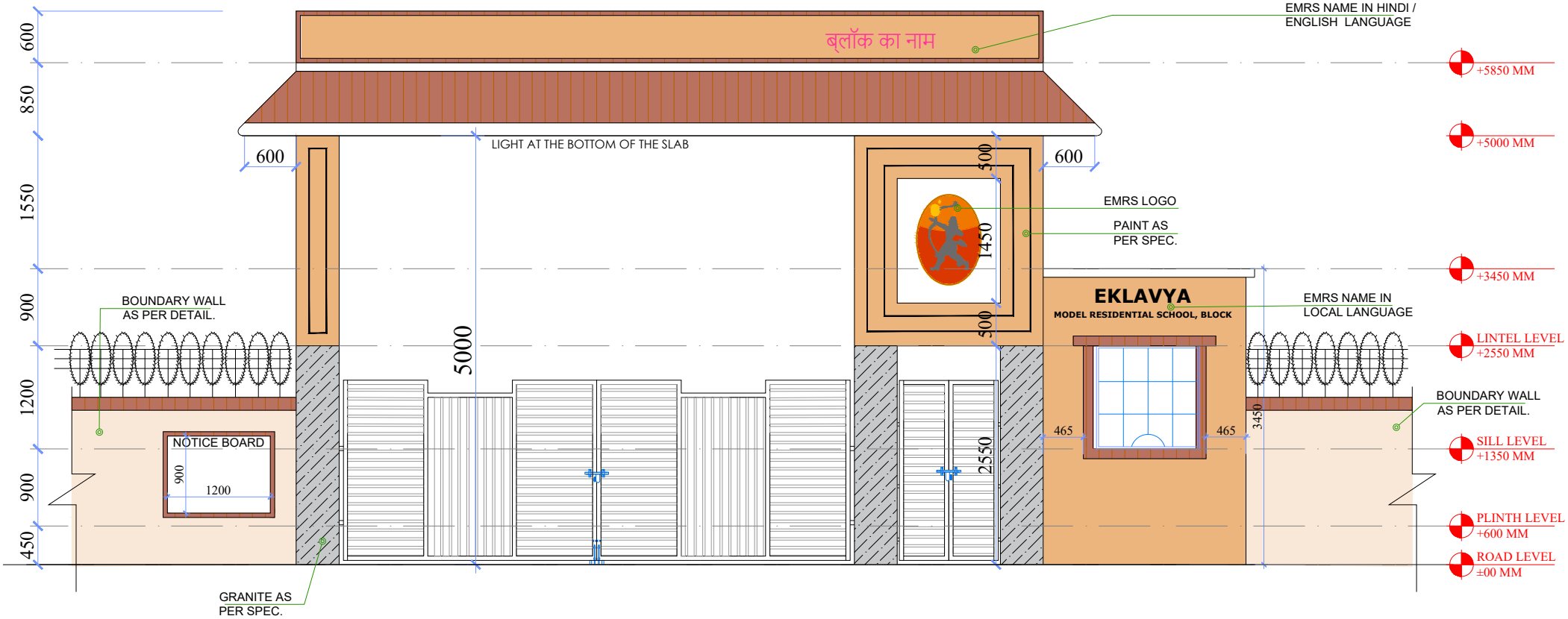
A D P Keshri
Chief Engineer & Consultant

DWG. NO.- EMRS NAME/EG/AR_01 ENTRANCE GATE FLOOR PLAN, SECTION	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

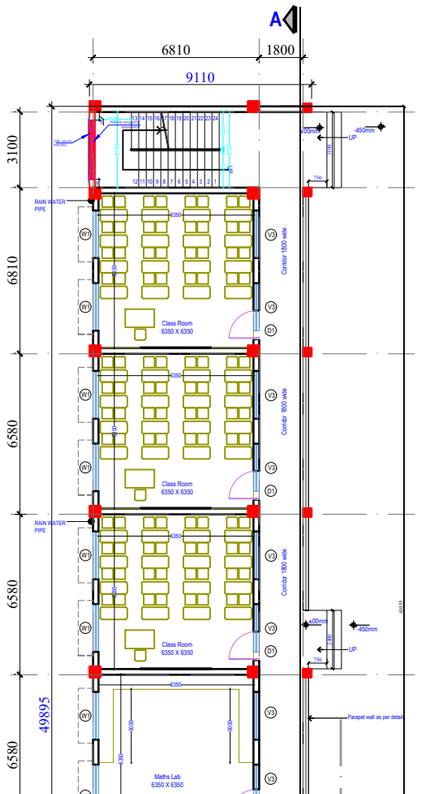


A D P Keshri
Chief Engineer & Consultant

PLAN AT 6400MM LEVEL



	DWG. NO.- EMRS NAME/EG/AR_02 ENTRANCE GATE ELEVATION, TERRACE PLAN	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

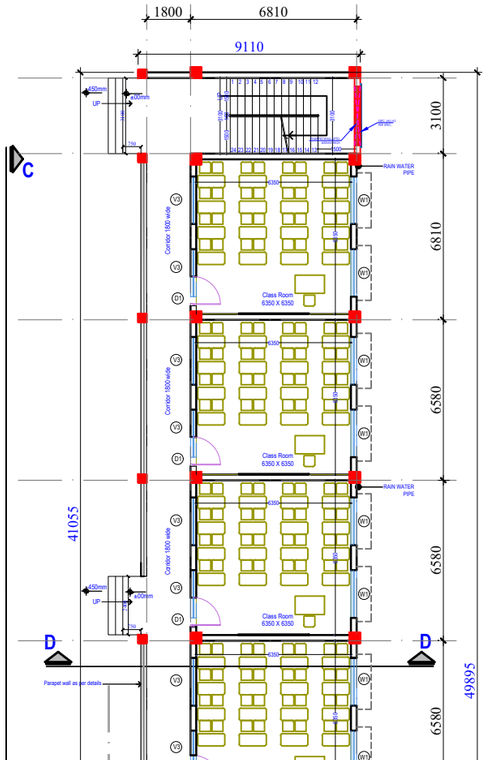


SCHEDULE OF WINDOW

S.NO.	TYPE	OPENING SIZE	LINTEL	SILL	GF	FF		SHUTTER	FRAME	WINDOW GRILL	HARDWARE
01	W1	1950 X 1500	2400	900	33	38		Single shutter with plane glass panes.	Z section frame with 15x3 mm lugs 10 cm long embeded in cement conc. blocks..	All frames are provided with 12mm square bars at 120 mm c/c	powder coated / anodized aluminium / ss fittings
02	W2	1950 X 1200	2100	900	7	1					
03	W3	1500 X 1200	2100	900		1					
04	V1	600 X 1200	2400	1200	4	4		Z - section frame with glass.			
05	V2	600 X 900	2400	1500	8	4					
06	V3	1950 X 600	beam bottom	as per site	24	36					
07	V3'	1950 X 600	2100	1500	6						
08	V4	1500 X 600	2100	1500	1						
09	V5	1000 X 600	beam bottom	as per site	2	2					
10	V6	2400 X 300	2400	2100	1						
11	FGL	1050 X 2100	2400	300	2			powder coated aluminum frame with fixed glazing			

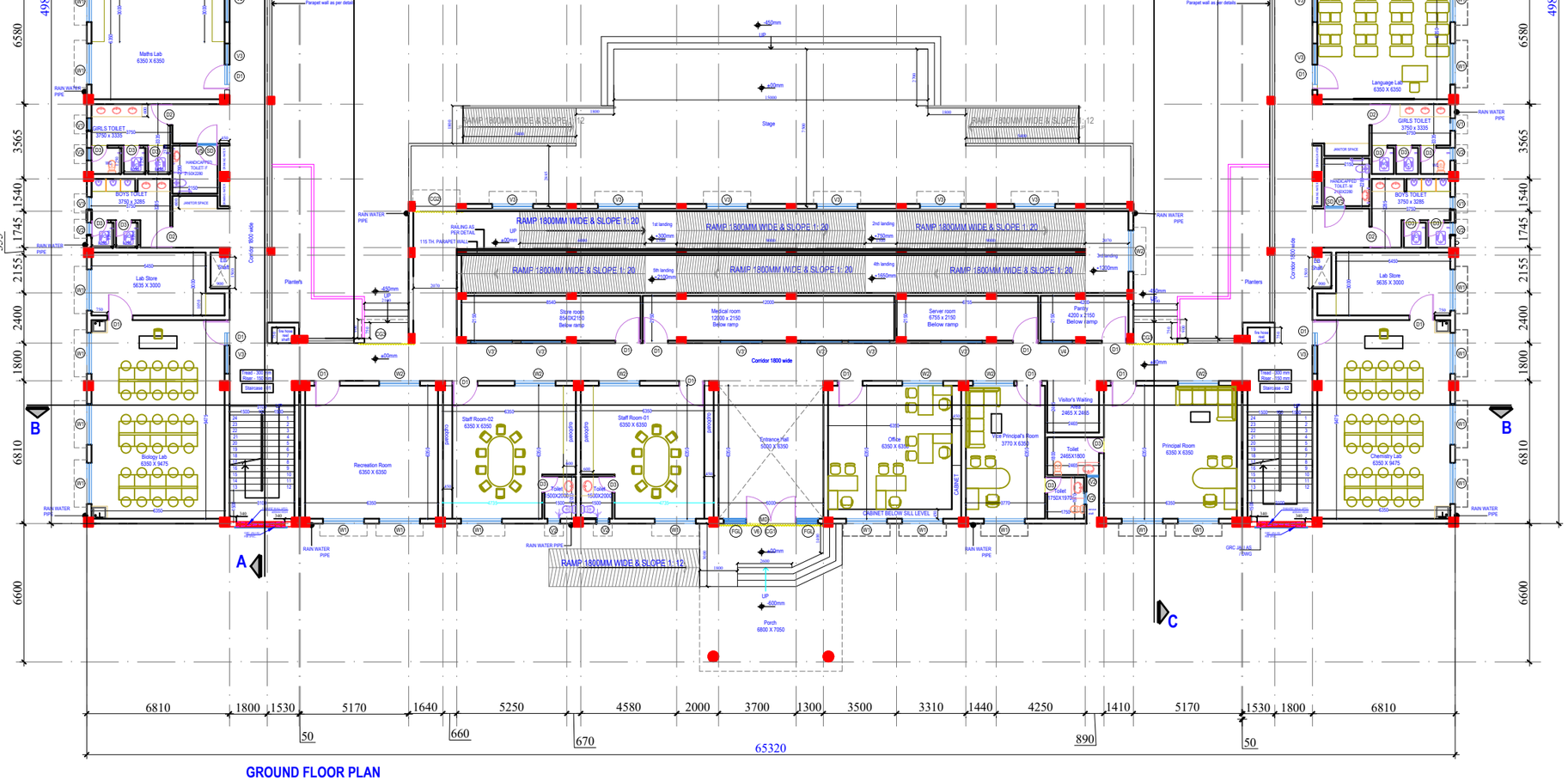
SCHEDULE OF DOOR

S.NO.	TYPE	OPENING SIZE	LINTEL	SILL	GF	FF	T.F.	SHUTTER	FRAME	HARDWARE
01	MD	2400 X 2400	2400	--	1			Powder coated glazed aluminium door with hydrolic door clouser	T-iron Frame of 40x40x6 mm with 15x3 mm lugs 10 cm long embeded in cement conc. blocks.	powder coated / anodized aluminium / ss fittings
02	D1	1200 X 2100	2100	--	22	18		Single shutter with 35mm thick factory made exterior grade non-decorative type flush door shutter with teakwood lipping		
03	D2	1000 X 2100	2100	--	4	4	2			
04	D3	750 X 2100	2100	--	14	10		Single shutter factory made machine pressed pre-laminated flush door		
05	CG1	5000 X 2400	2400	--	1			Collapsible shutter		
06	CG2	2400 X 2100	2100	--	1			Collapsible shutter		
07	CG3	2700 X 2100	2100	--	2			Collapsible shutter		
07	SD	1000 X 2100	2100	--	2	2		SWING DOOR		



AREA STATEMENT
SCHOOL BUILDING

DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	1305.70
FIRST FLOOR PLINTH AREA	1272.17
TOTAL AREA (EXCLUDING PORCH AND RAMP AREA)	2577.87



GROUND FLOOR PLAN

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

Notes-

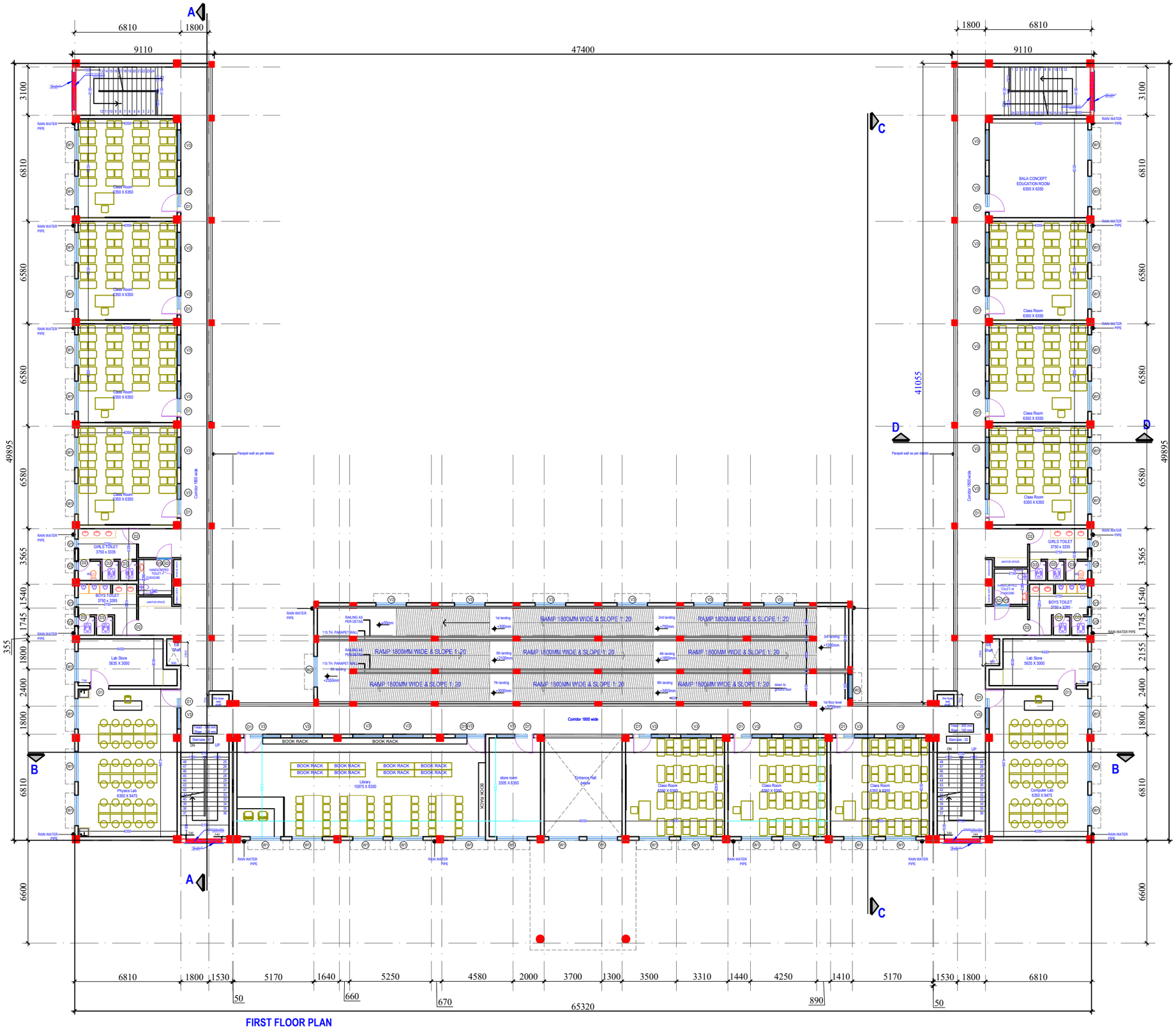
Furniture in all the rooms except class rooms will be decided at later stage.

A D P Keshri
Chief Engineer & Consultant

CATEGORY : SCHOOL BUILDING

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/SCH/AR_01



PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

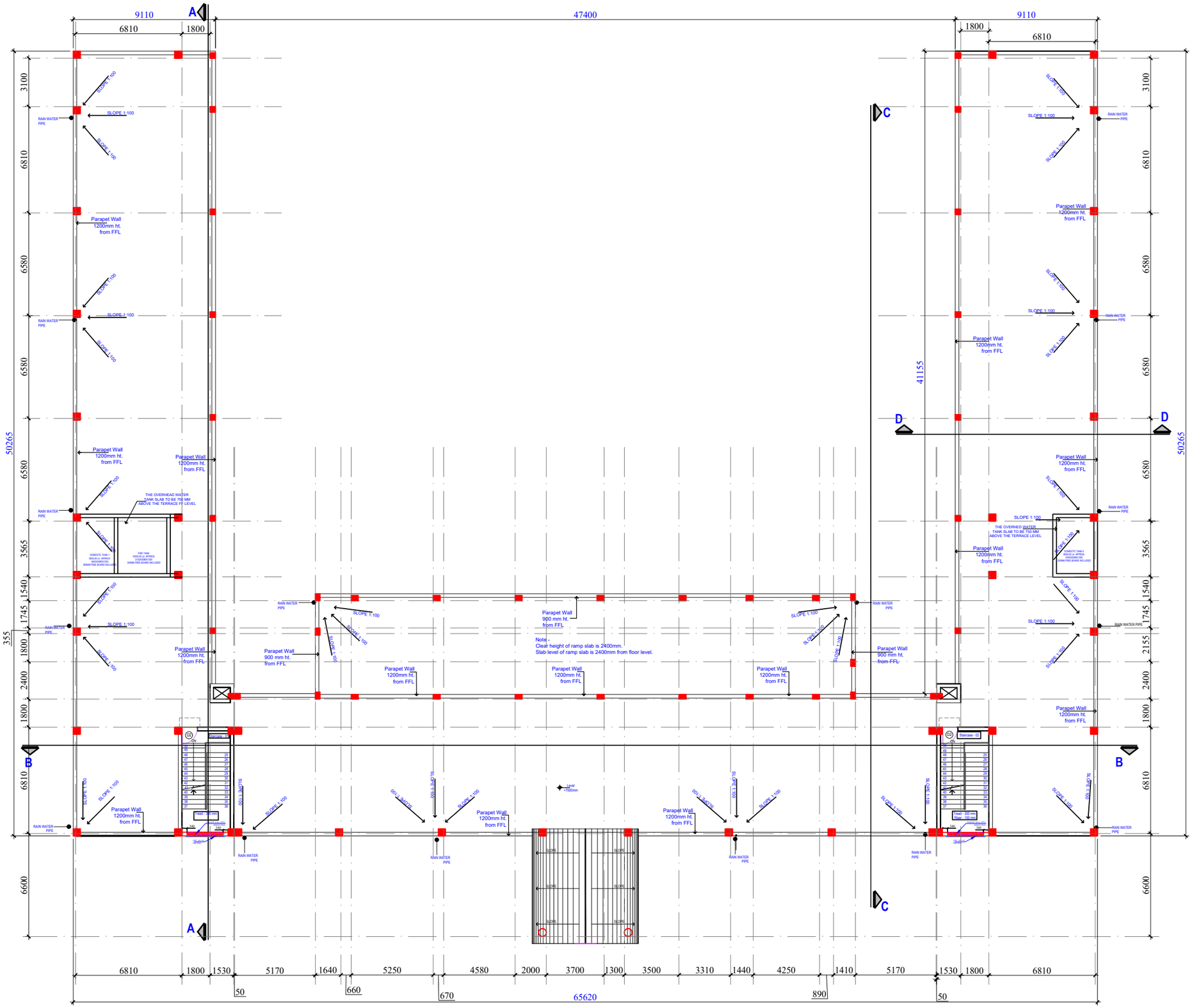
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
SCHOOL BUILDING

DRAWING TITLE :
FIRST FLOOR PLAN

DWG. NO.-
EMRS NAME/SCH/AR_02



TERRACE FLOOR PLAN

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

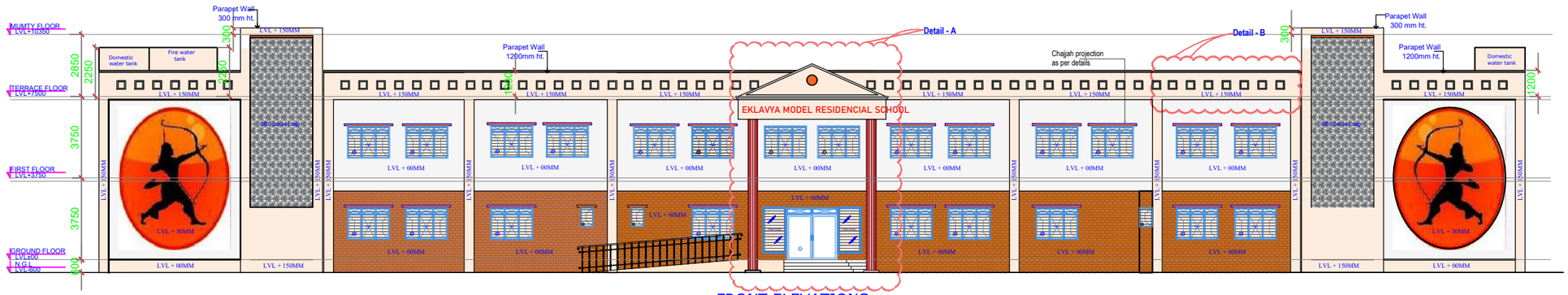
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

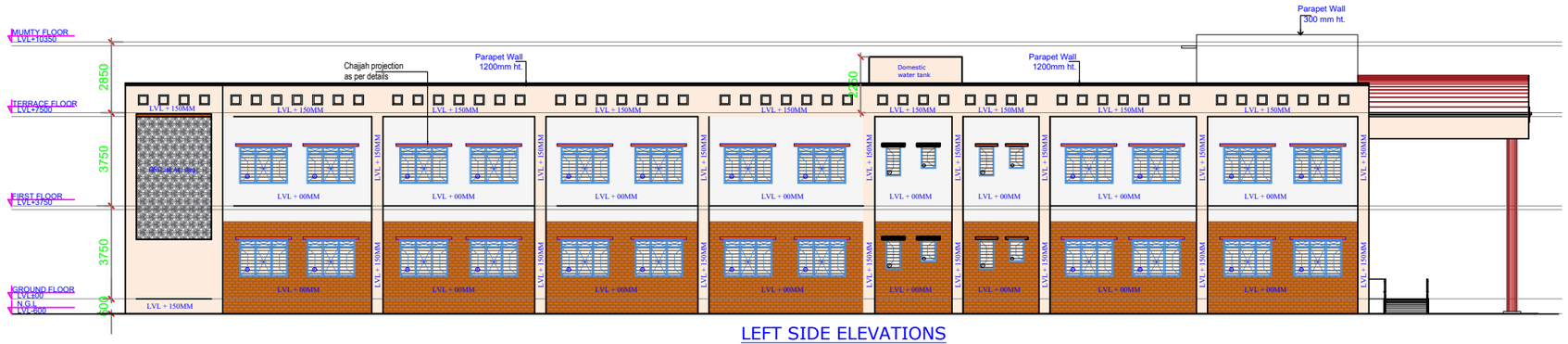
CATEGORY :
SCHOOL BUILDING

DRAWING TITLE :
TERRACE FLOOR PLAN

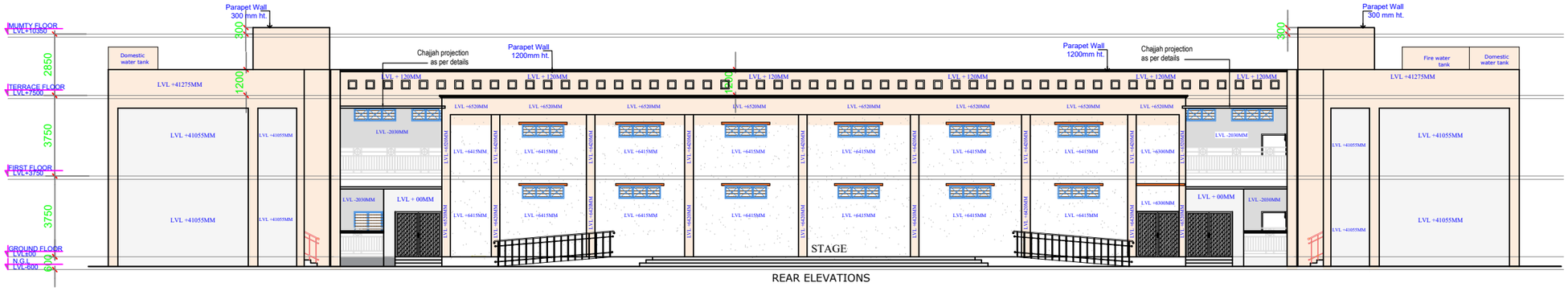
DWG. NO.-
EMRS NAME/SCH/AR_03



FRONT ELEVATIONS



LEFT SIDE ELEVATIONS



REAR ELEVATIONS

RIGHT SIDE ELEVATIONS

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

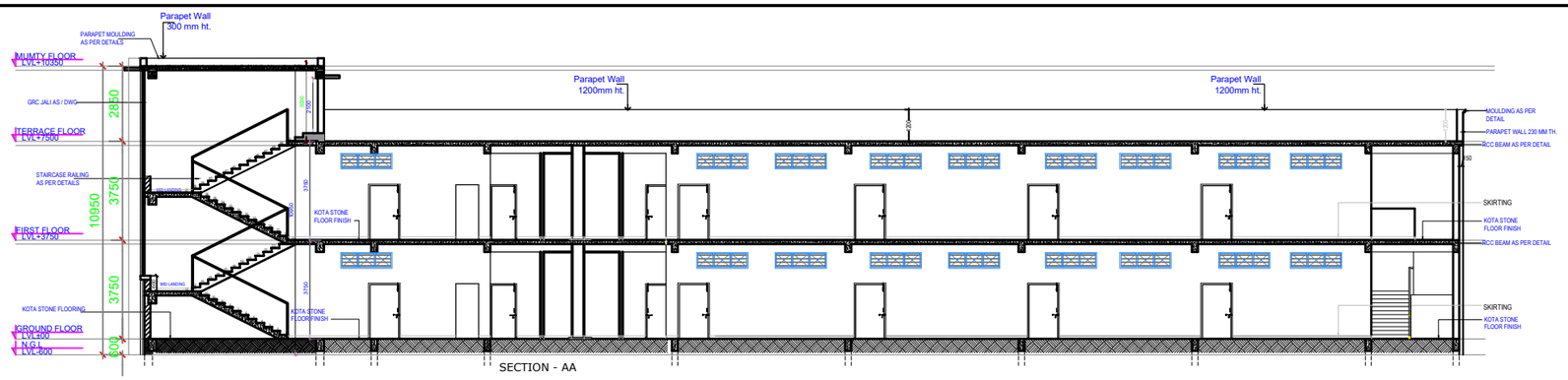
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

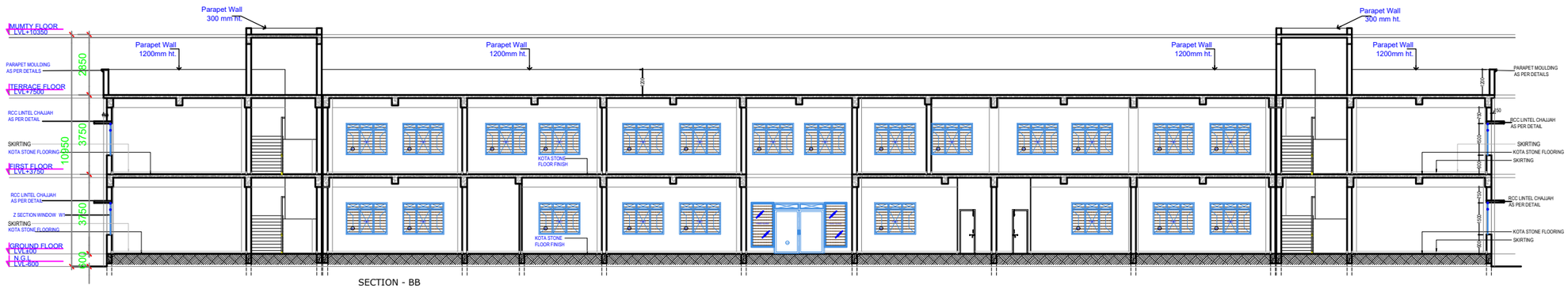
CATEGORY :
SCHOOL BUILDING

DRAWING TITLE :
FRONT ELEVATION &LEFT ELEVATION
REAR ELEVATION & RIGHT ELEVATION

DWG. NO.-
EMRS NAME/SCH/AR_04



SECTION - AA



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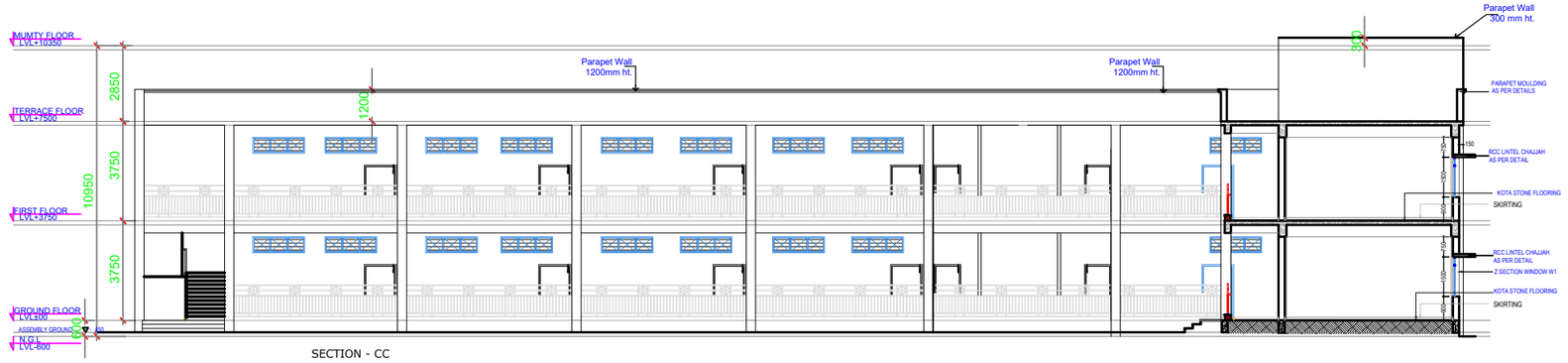

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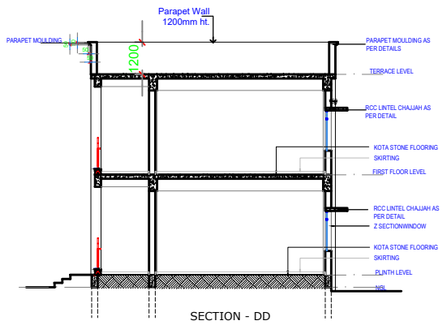
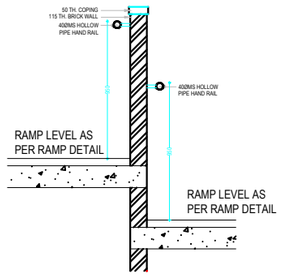
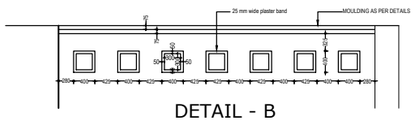


SECTION - DD



RAMP RAILING DETAIL



DETAIL - B

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

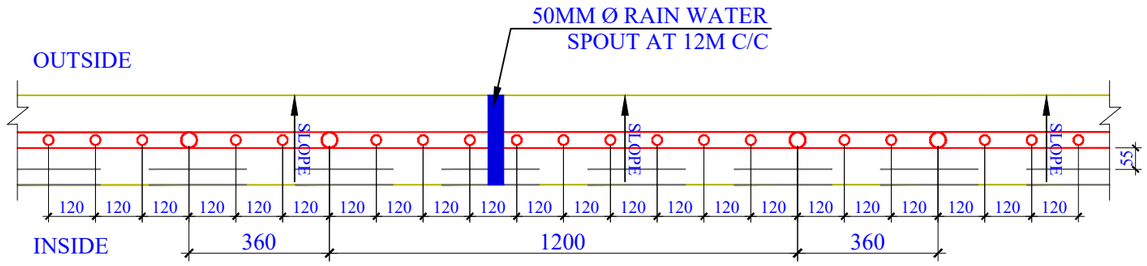
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

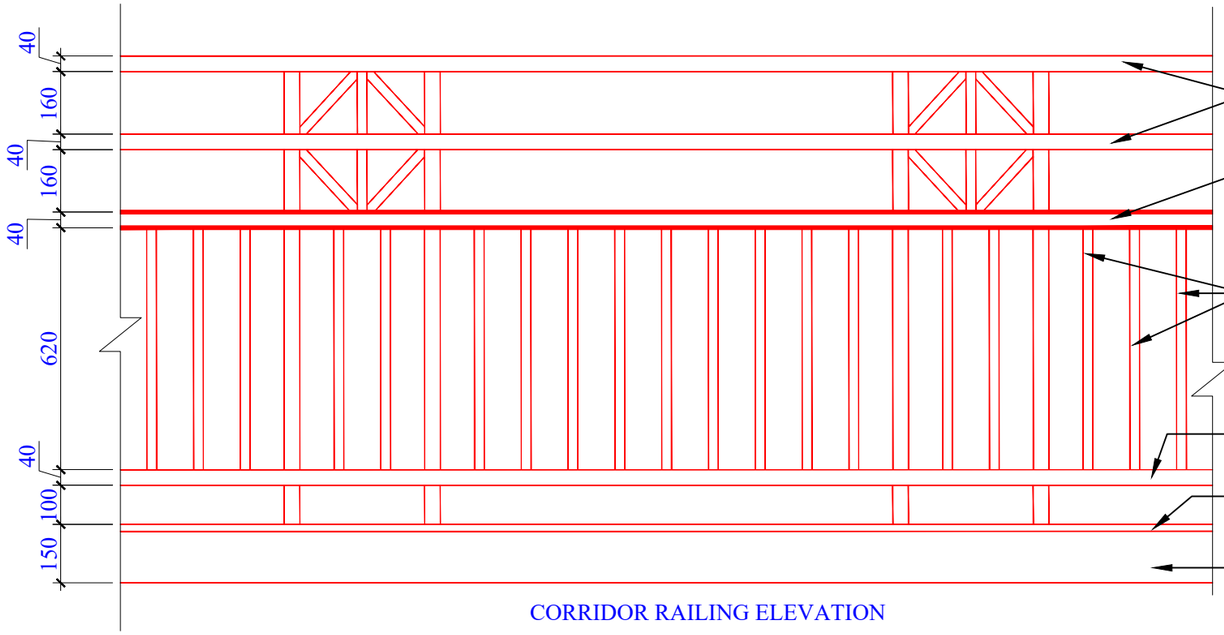
CATEGORY :
SCHOOL BUILDING

DRAWING TITLE :
SECTION AA/BB/CCC

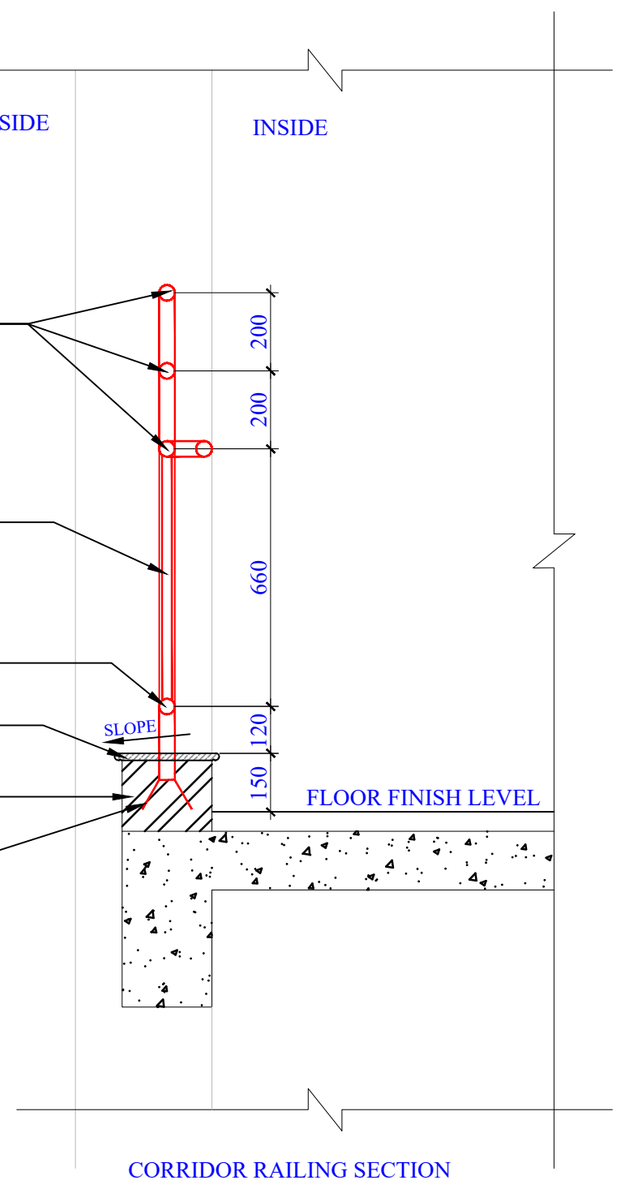
DWG. NO.-
EMRS NAME/SCH/AR_05



CORRIDOR RAILING PLAN



CORRIDOR RAILING ELEVATION



CORRIDOR RAILING SECTION

PROJECT -EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

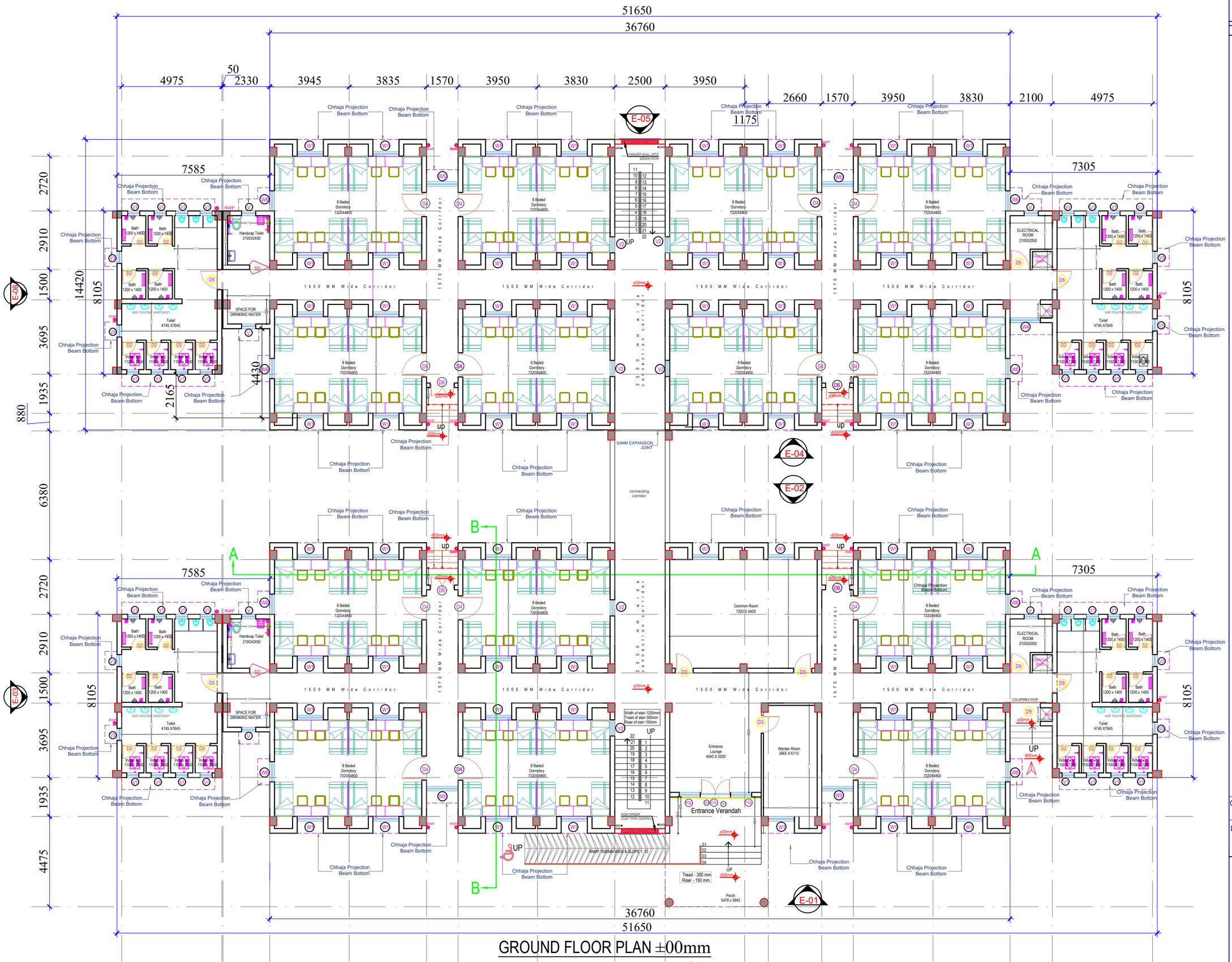
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
SCHOOL BUILDING ARCHITECTURAL DETAIL

DRAWING TITLE :
COORIDOR RAILING DETAIL

DWG. NO.-
EMRS NAME/SCH/AD_01



GROUND FLOOR PLAN ±00mm

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

CATEGORY : BOYS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

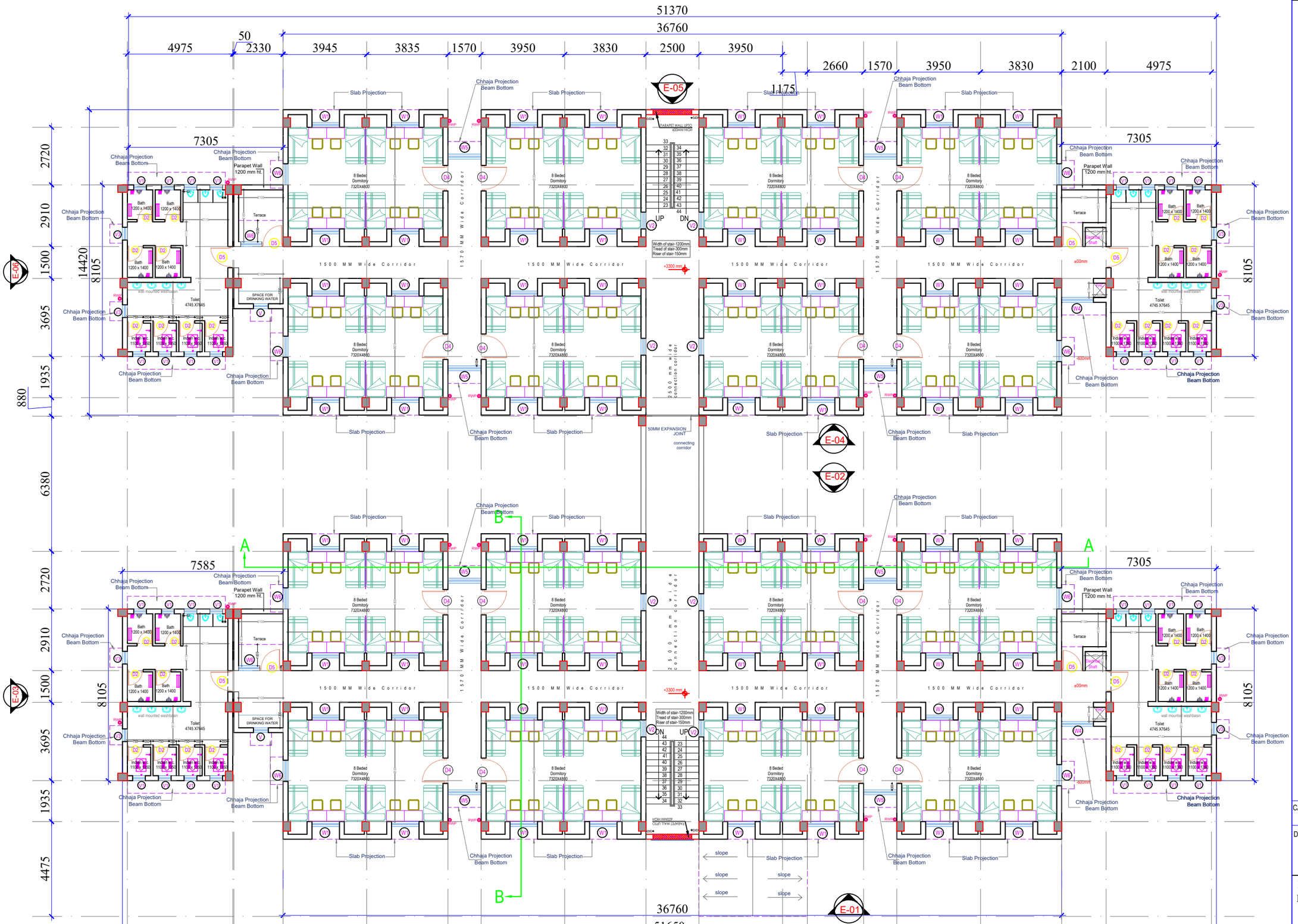
DWG. NO.-
EMRS NAME/BH/AR_01

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

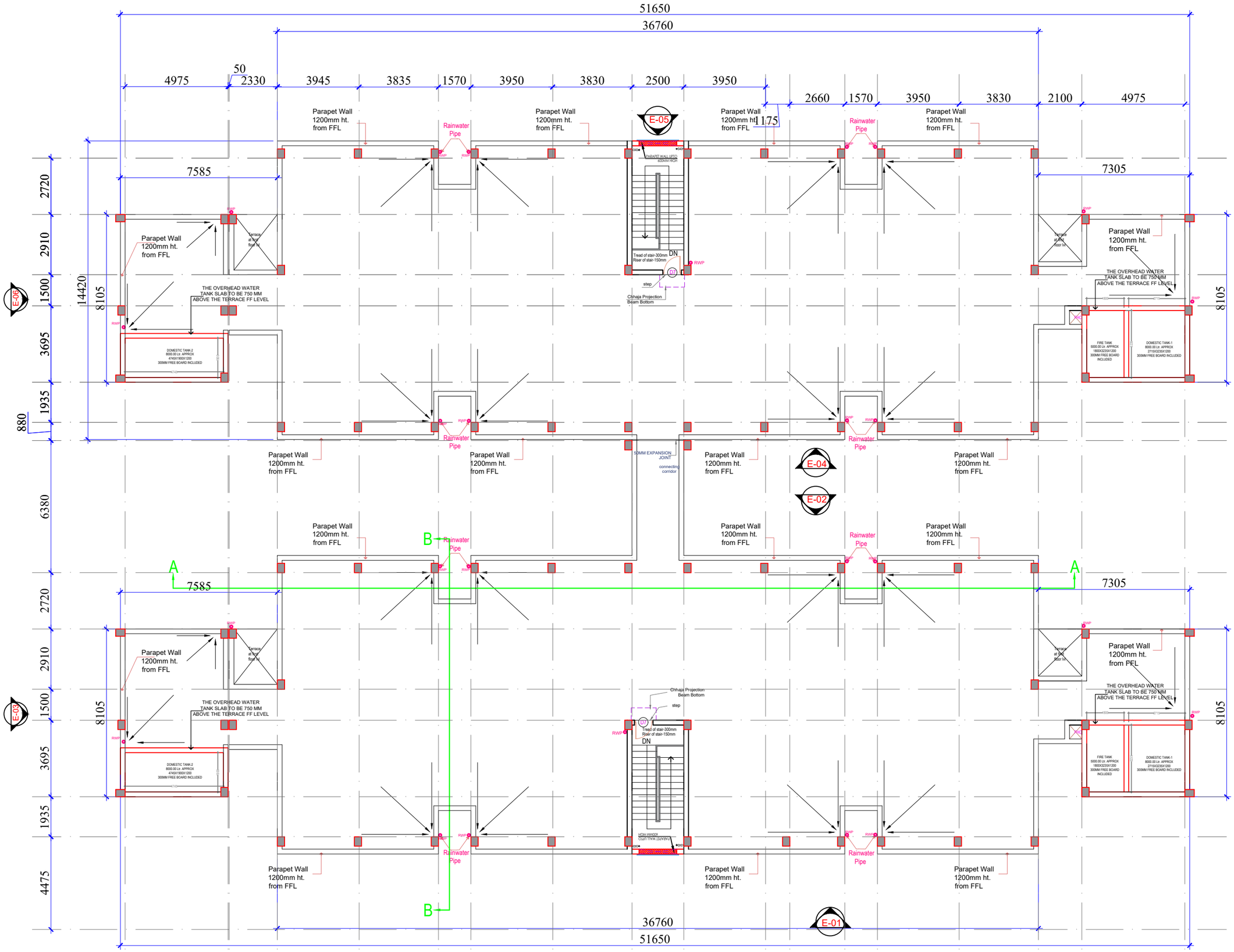


FIRST FLOOR PLAN +3300mm

CATEGORY : BOYS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/BH/AR_02



TERRACE FLOOR PLAN +6600 mm

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

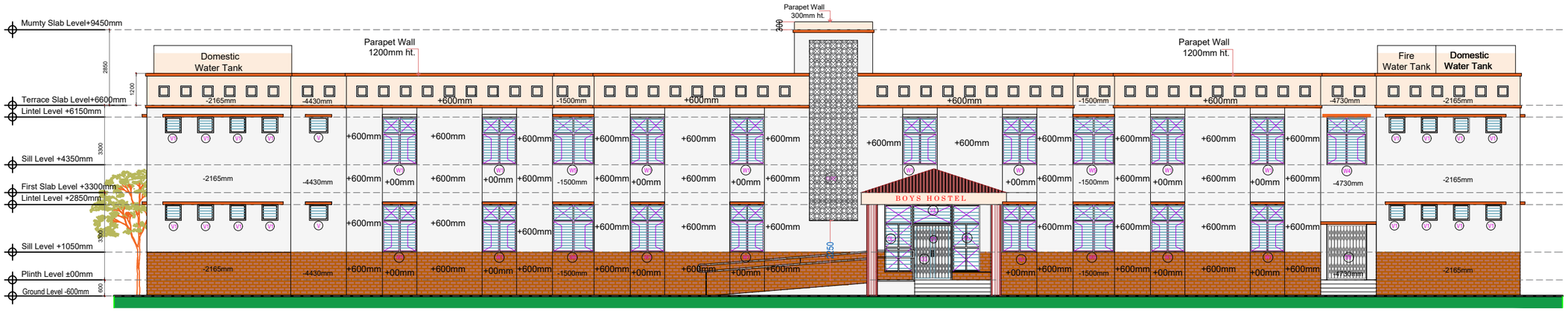
CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

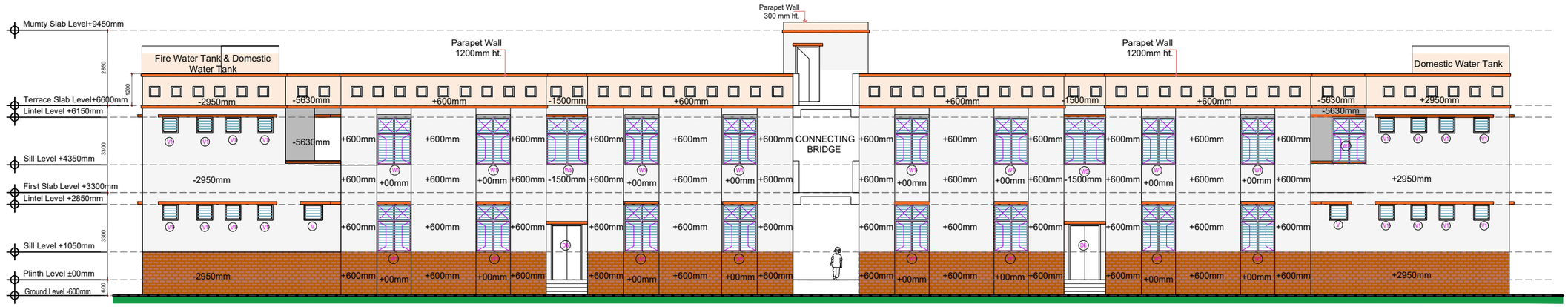
CATEGORY : BOYS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

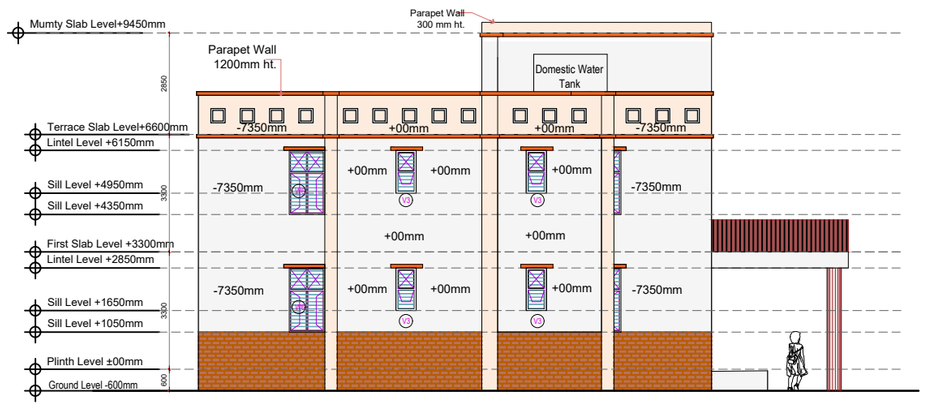
DWG. NO.- EMRS NAME/BH/AR_03



FRONT ELEVATION E-01



REAR SIDE ELEVATION E-02



SIDE ELEVATION E-03

- Cladding Work
- premier acrylic smooth paints
- premier acrylic smooth paints
- premier acrylic smooth paints
- GRC Jali as per Approved design

SPECIFICATIONS		
• External Finishing: External Surface shall be provided with cladding upto Sill level in front and side & Rear Side elevation and rest portion shall be provided with 18 mm thick plaster. The external surface shall be provided with premier acrylic smooth paints with silicon additives.	Internal Finishing: Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper(ready-mix)	All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

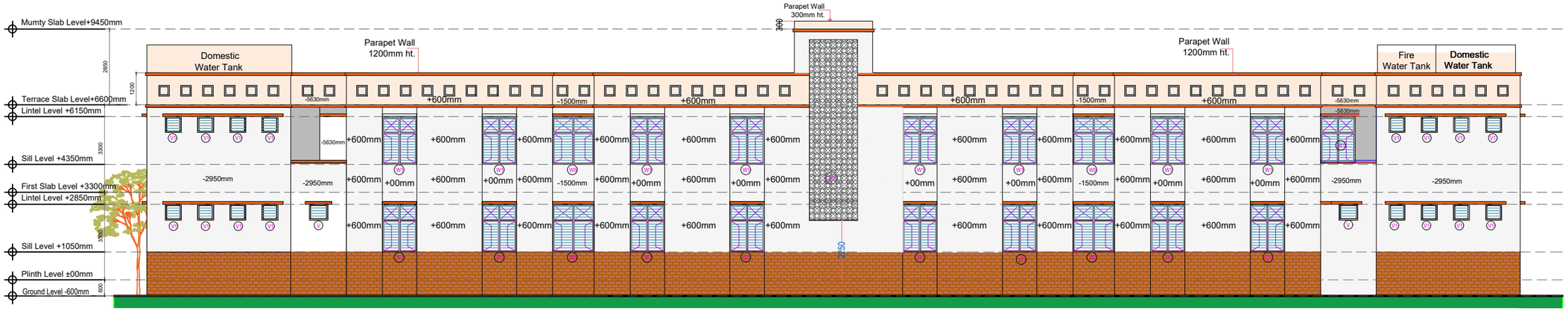
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

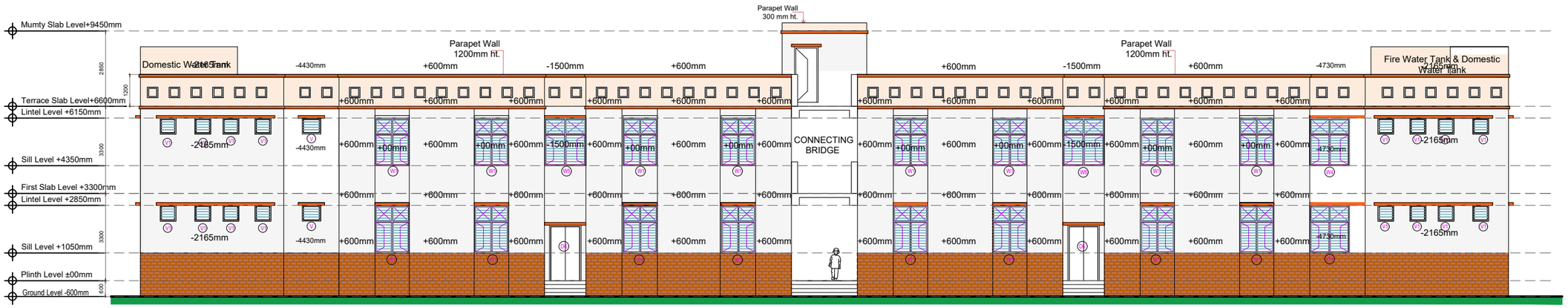
CATEGORY : BOYS HOSTEL

DRAWING TITLE : ELEVATION

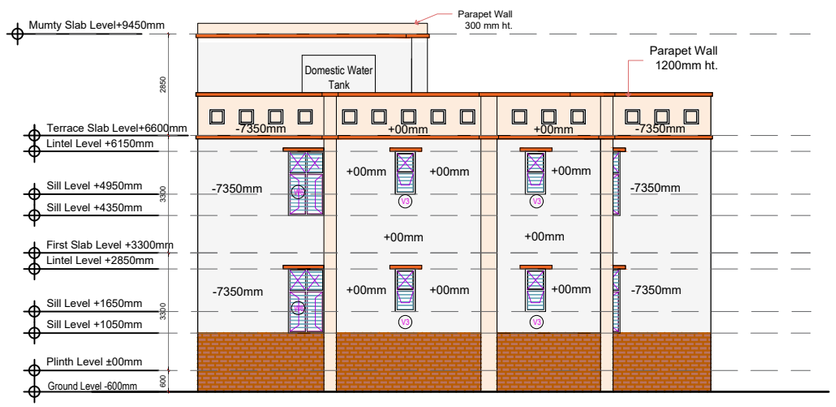
DWG. NO.-
EMRS NAME/BH/AR_04



REAR ELEVATION E-04



FRONT SIDE ELEVATION E-05



SIDE ELEVATION E-06

Cladding Work

GRC Jali as per Approved design

premier acrylic smooth paints

premier acrylic smooth paints

premier acrylic smooth paints

SPECIFICATIONS		
• External Finishing: External Surface shall be provided with cladding upto Sill level in front and side & Rear Side elevation and rest portion shall be provided with 18 mm thick plaster. The external surface shall be provided with premier acrylic smooth paints with silicon additives.	Internal Finishing: Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper(ready-mix)	All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

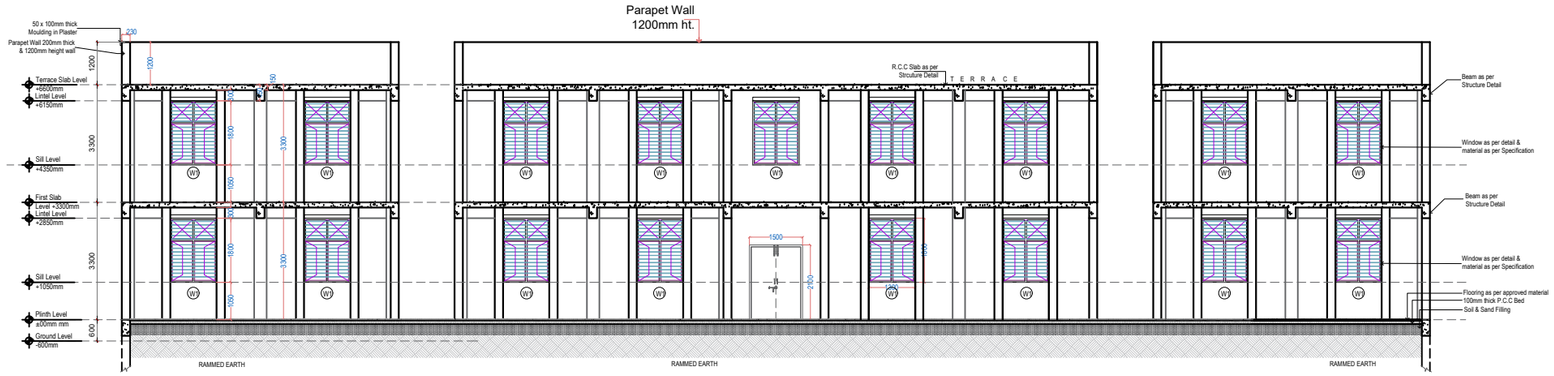
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

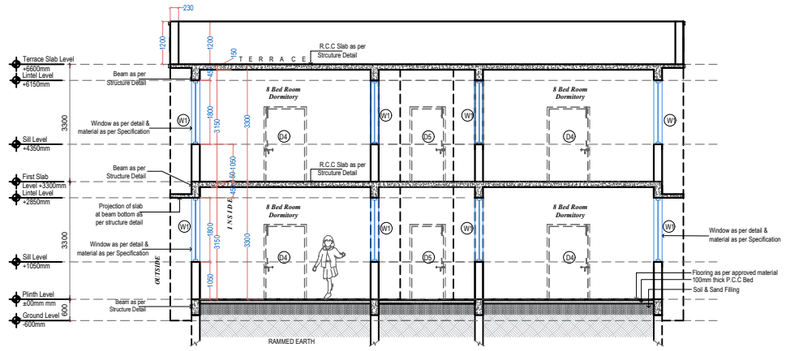
CATEGORY : BOYS HOSTEL

DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/BH/AR_05



SECTION A-A



SECTION B-B

AREA STATEMENT

BOYS HOSTEL BUILDING		
X	(PHASE - I) AREA (in Sqm)	(PHASE - II) AREA (in Sqm)
MAIN BUILDING		
GROUND FLOOR PLINTH AREA	579.11	586.45
FIRST FLOOR PLINTH AREA	574.44	574.44
TOTAL AREA	**1153.55**	**1160.89**
ENTRANCE PORCH AREA		
AREA OF PORCH / 2	**12.36**	

DOOR SCHEDULE

S N	TYPE	SIZE (MM)	SILL HT (MM)	LIN. HT (MM)	GF (N0.)	FF (N0.)	TF (N0.)	Total (N0.)	SPECIFICATION OF WINDOW	
									FRAME	SHUTTER
1	D1	1500 X 2100	0	2100					Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm with 15 x 3 mm lugs 100 mm long embedded in wall with the help of CC block of mix 1:3:6	Entrance door shall be provided with powder coated Aluminium Glazed Door with Collapsible Door .
2	D2	750 X 2100	0	2100						Wash Area & Toilet shall have 35mm thick & shall be Factory made machine pressed pre -laminated Flush Door Shutter of exterior grade in single leaf.
3	D3	900 X 2100	0	2100						
4	D4	1200 X 2100	0	2100						Hostel will have 35mm thick Non decorative Flush Door in single leaf including teak wood edge liping except wash area with rubber floor door stoppers and synthetic enamel paints on both sides>The door closer in Warden office.
5	D5	1000 X 2100	0	2100						
6	D6	1200 X 2100	0	2100						
7	D7	900 X 2100	0	2100						
9	SD	1000 X 2100	0	2100						
10	D9	2100 X 2100	0	2100					COLLAPSIBLE DOOR AS PER DETAIL	
11	CG	4540 X 2100		2100					COLLAPSIBLE DOOR AS PER DETAIL	

WINDOW SCHEDULE

S N	TYPE	SIZE (MM)	SILL HT (MM)	LIN. HT (MM)	GF (N0.)	FF (N0.)	TF (N0.)	Total (N0.)	SPECIFICATION OF WINDOW	
									FRAME	SHUTTER
1	W1	1300 X 1800	1050	2850					Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section with MS grills with 12 mm square bars @ 100mm c/c	Window & Ventilator except toilet portion shall be plain glass panels .The Window shall be fixed and rest part openable Shutters.
2	FGL	1050 X2550	300	2850						
3	W4	1500 X1800	1050	2850						The glazed window Shutter shall be open outside and the mesh Shutter shall be open inside .Toilet portion window & Ventilator shall be with frosted glass panels.The window shall be fitted with the required fixtures like stays and fasteners.
4	W5	1570 X1800	1050	2850						
5	W6	1000 X 1800	1050	2850						
6	V	700 X600	2250	2850						
7	V1	600 X600	2250	2850						
8	V2	800 X600	2250	2850						
9	V3	600 X 1200	1650	2850						
10	V4	1500 X 750	2100	2850						

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

CATEGORY : BOYS HOSTEL

DRAWING TITLE : SECTION AA/BB

DWG. NO.- EMRS NAME/BH/AR_06

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/GH/AR_01

GROUND FLOOR PLAN ±00mm

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

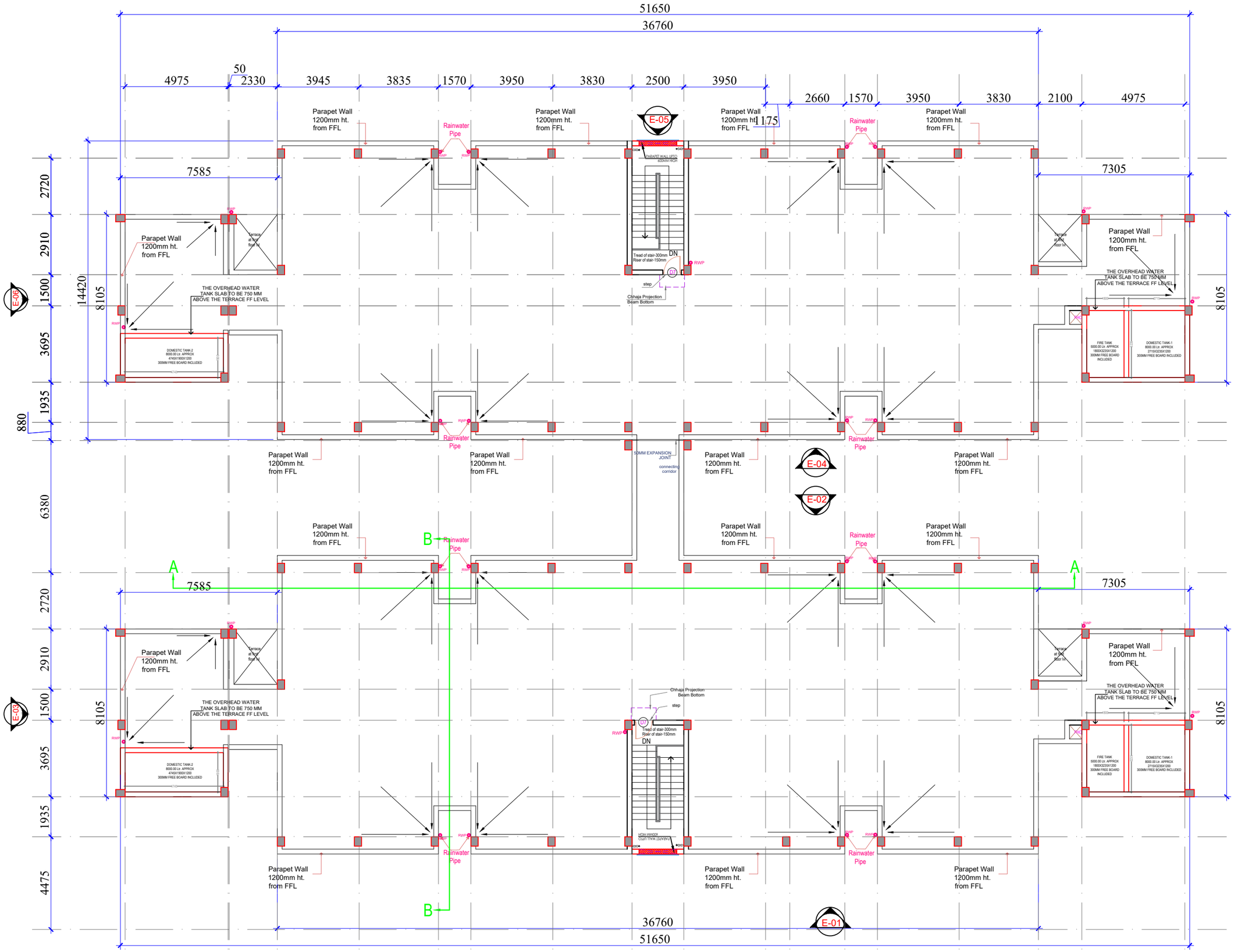
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : FIRST FLOOR PLAN

DWG. NO.- EMRS NAME/GH/AR_02

FIRST FLOOR PLAN +3300mm



TERRACE FLOOR PLAN +6600 mm

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

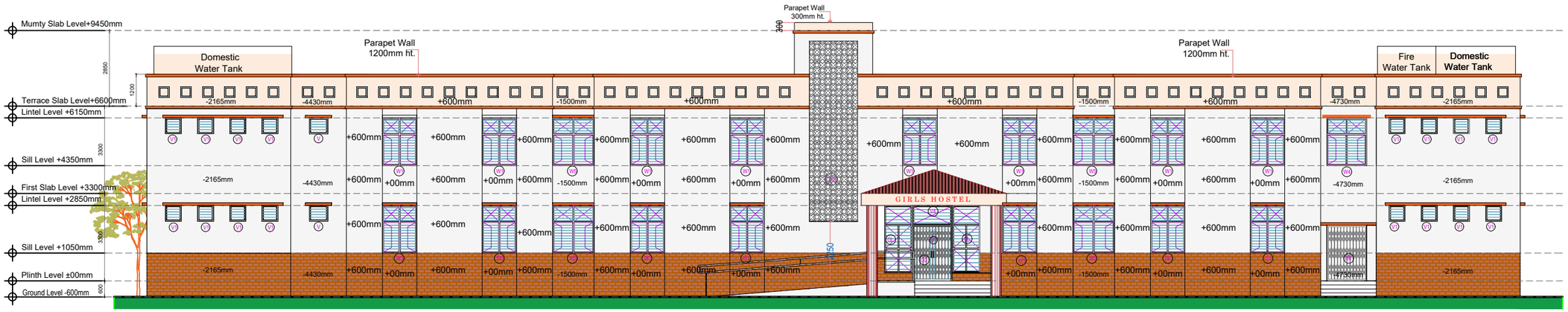
CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

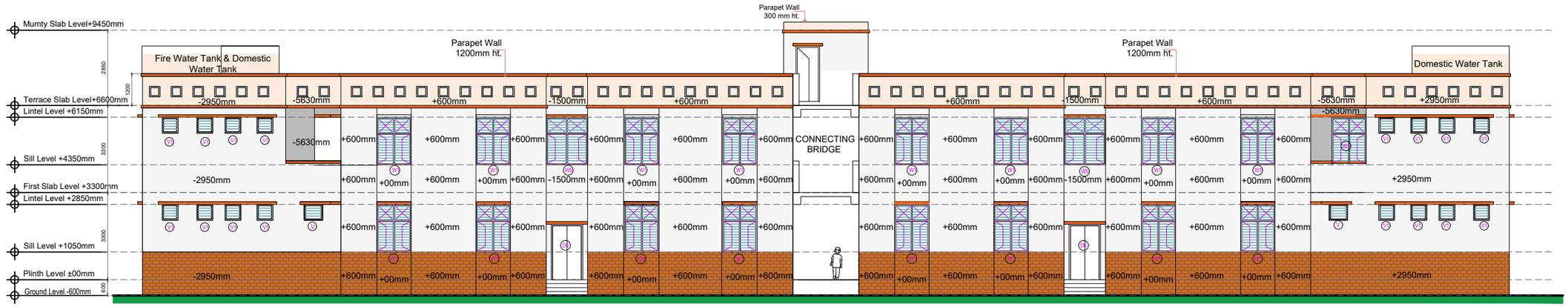
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : TERRACE FLOOR PLAN

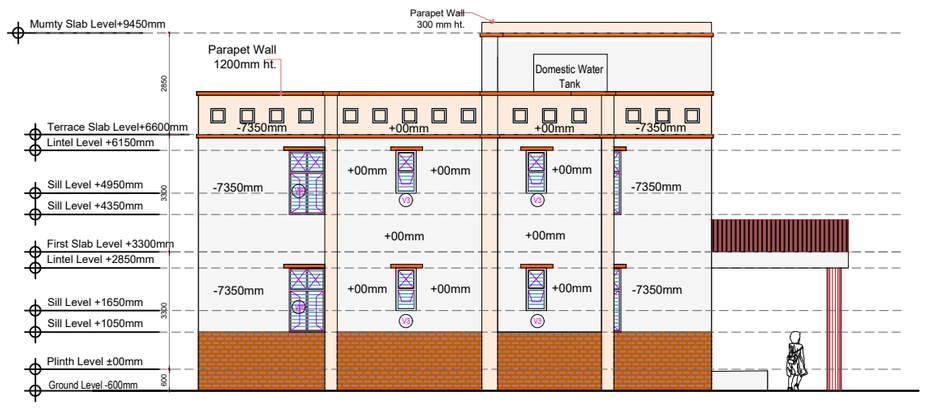
DWG. NO.- EMRS NAME/GH/AR_03



FRONT ELEVATION E-01



REAR SIDE ELEVATION E-02



SIDE ELEVATION E-03

Cladding Work

premier acrylic smooth paints

premier acrylic smooth paints

premier acrylic smooth paints

GRC Jali as per Approved design

SPECIFICATIONS		
• External Finishing: External Surface shall be provided with cladding upto Sill level in front and side & Rear Side elevation and rest portion shall be provided with 18 mm thick plaster. The external surface shall be provided with premier acrylic smooth paints with silicon additives.	Internal Finishing: Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper(ready-mix)	All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

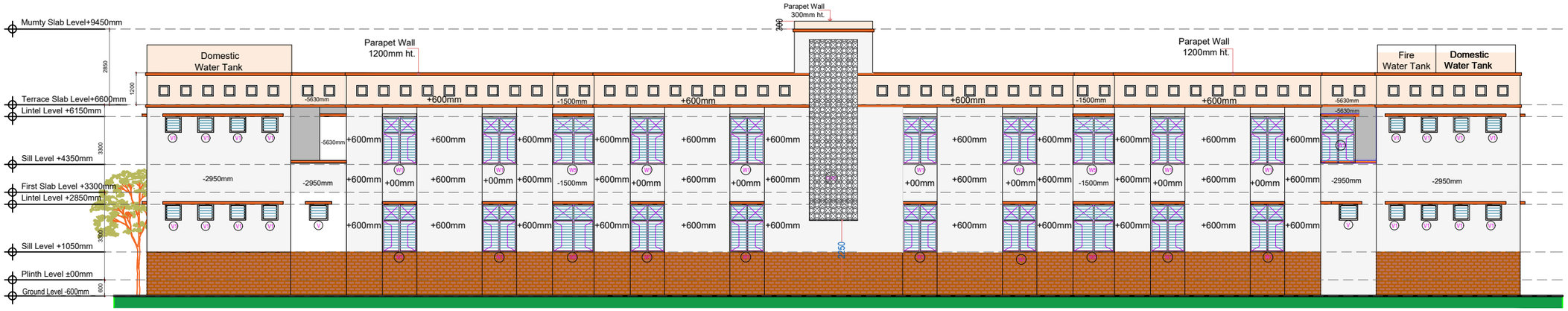
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

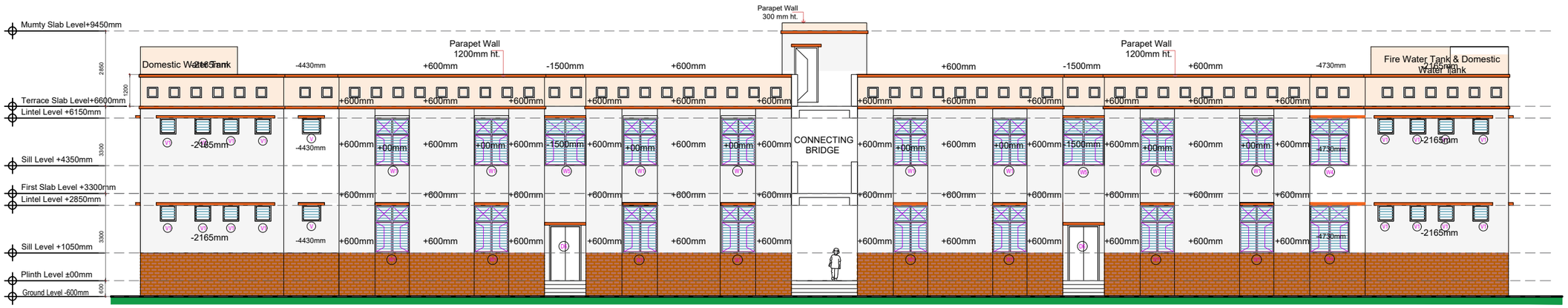
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : ELEVATION

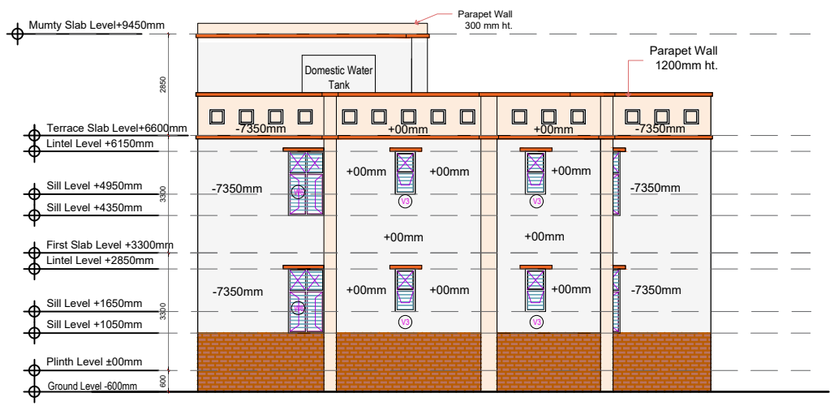
DWG. NO.-
EMRS NAME/GH/AR_04



REAR ELEVATION E-04



FRONT SIDE ELEVATION E-05



SIDE ELEVATION E-06

Cladding Work

GRC Jali as per Approved design

premier acrylic smooth paints

premier acrylic smooth paints

premier acrylic smooth paints

SPECIFICATIONS		
• External Finishing: External Surface shall be provided with cladding upto Sill level in front and side & Rear Side elevation and rest portion shall be provided with 18 mm thick plaster. The external surface shall be provided with premier acrylic smooth paints with silicon additives.	Internal Finishing: Internal Finishing: Walls and ceiling shall be provided with first quality acrylic distemper(ready-mix)	All wood work & steel work shall be provided with synthetic enamel paint of the approved brand.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

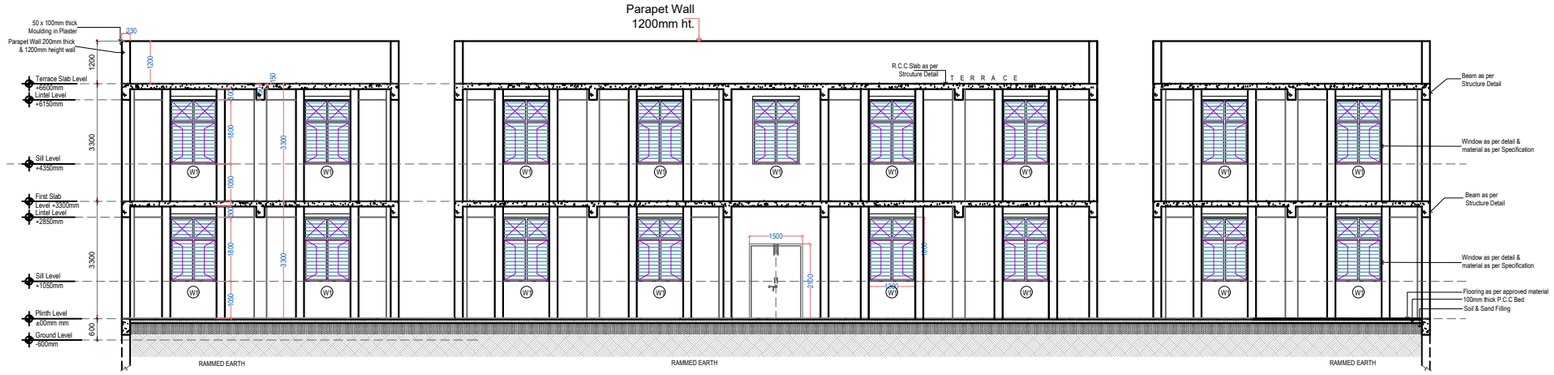
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

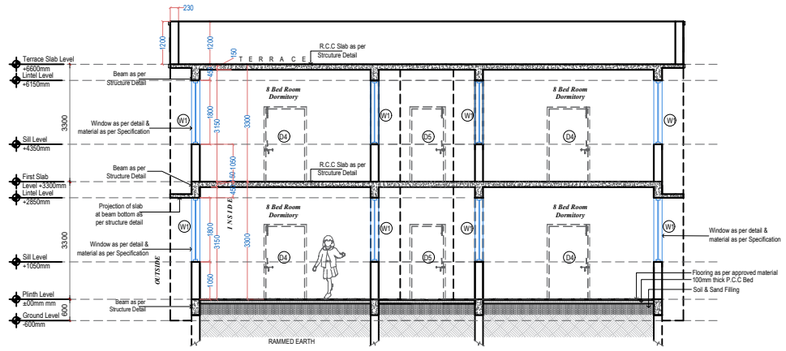
CATEGORY : GIRLS HOSTEL

DRAWING TITLE : ELEVATION

DWG. NO.-
EMRS NAME/GH/AR_05



SECTION A-A



SECTION B-B

AREA STATEMENT

GIRLS HOSTEL BUILDING		
X	(PHASE - I) AREA (in Sqm)	(PHASE - II) AREA (in Sqm)
MAIN BUILDING		
GROUND FLOOR PLINTH AREA	579.11	586.45
FIRST FLOOR PLINTH AREA	574.44	574.44
TOTAL AREA	**1153.55**	**1160.89**
ENTRANCE PORCH AREA		
AREA OF PORCH / 2	**12.36**	

DOOR SCHEDULE

S N	TYPE	SIZE (MM)	SILL HT (MM)	LIN. HT (MM)	GF (N0.)	FF (N0.)	TF (N0.)	Total (N0.)	SPECIFICATION OF WINDOW	
									FRAME	SHUTTER
1	D1	1500 X 2100	0	2100					Frame of doors shall consist of T-iron frames 40 x 40 x 6 mm with 15 x 3 mm lugs 100 mm long embedded in wall with the help of CC block of mix 1:3:6	Entrance door shall be provided with powder coated Aluminium Glazed Door with Collapsible Door .
2	D2	750 X 2100	0	2100						Wash Area & Toilet shall have 35mm thick & shall be Factory made machine pressed pre -laminated Flush Door Shutter of exterior grade in single leaf.
3	D3	900 X 2100	0	2100						
4	D4	1200 X 2100	0	2100						Hostel will have 35mm thick Non decorative Flush Door in single leaf including teak wood edge liping except wash area with rubber floor door stoppers and synthetic enamel paints on both sides>The door closer in Warden office.
5	D5	1000 X 2100	0	2100						
6	D6	1200 X 2100	0	2100						
7	D7	900 X 2100	0	2100						
9	SD	1000 X 2100	0	2100						
10	D9	2100 X 2100	0	2100					COLLAPSIBLE DOOR AS PER DETAIL	
11	CG	4540 X 2100		2100					COLLAPSIBLE DOOR AS PER DETAIL	

WINDOW SCHEDULE

S N	TYPE	SIZE (MM)	SILL HT (MM)	LIN. HT (MM)	GF (N0.)	FF (N0.)	TF (N0.)	Total (N0.)	SPECIFICATION OF WINDOW	
									FRAME	SHUTTER
1	W1	1300 X 1800	1050	2850					Steel glazed/gauzed windows and ventilator frame & shutters shall be factory made ISI marked with Z-section with MS grills with 12 mm square bars @ 100mm c/c	Window & Ventilator except toilet portion shall be plain glass panels .The Window shall be fixed and rest part openable Shutters.
2	FGL	1050 X2550	300	2850						
3	W4	1500 X1800	1050	2850						The glazed window Shutter shall be open outside and the mesh Shutter shall be open inside .Toilet portion window & Ventilator shall be with frosted glass panels.The window shall be fitted with the required fixtures like stays and fasteners.
4	W5	1570 X1800	1050	2850						
5	W6	1000 X 1800	1050	2850						
6	V	700 X600	2250	2850						
7	V1	600 X600	2250	2850						
8	V2	800 X600	2250	2850						
9	V3	600 X 1200	1650	2850						
10	V4	1500 X 750	2100	2850						

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

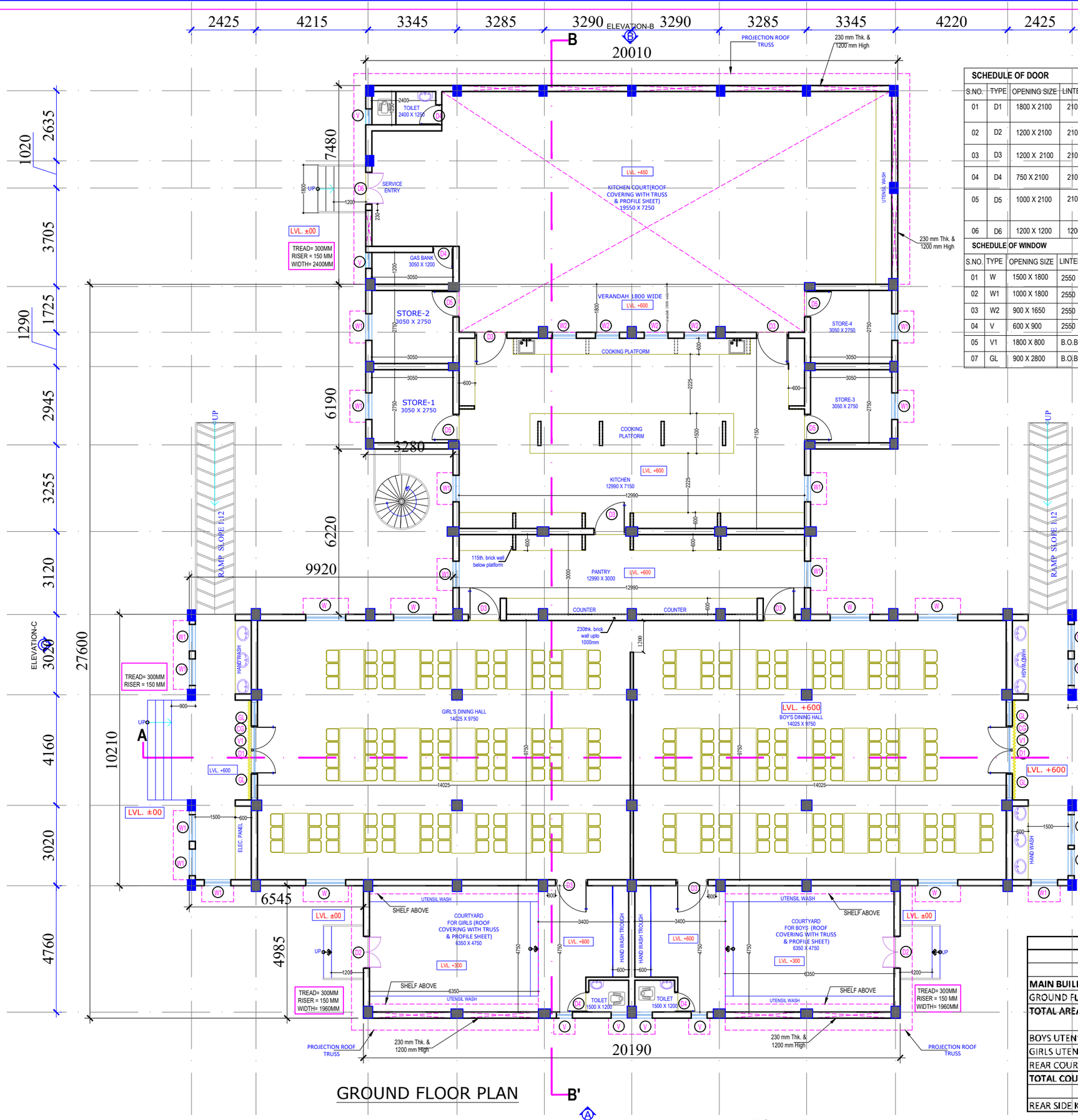
CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

CATEGORY : GIRLS HOSTEL

DRAWING TITLE : SECTION AA/BB

DWG. NO.- EMRS NAME/GH/AR_06



GROUND FLOOR PLAN

ELEVATION-A

SCHEDULE OF DOOR

S.NO.	TYPE	OPENING SIZE	LINTEL	SILL	NO.	SHUTTER	FRAME	HARDWARE
01	D1	1800 X 2100	2100	--	02	Powder coated glazed aluminium door with hydrolic door clouser	T-iron Frame of 40x40x6 mm with 15x3 mm lugs 10 cm long embeded in cement conc. blocks.	powder coated / anodized aluminium / ss fittings
02	D2	1200 X 2100	2100	--	02	Single shutter with 35mm thick factory made exterior grade non-decorative type flush door shutter with teakwood lipping		
03	D3	1200 X 2100	2100	--	07			
04	D4	750 X 2100	2100	--	04			
05	D5	1000 X 2100	2100	--	04	Single shutter factory made machine pressed pre-laminated flush door		
06	D6	1200 X 1200	1200	--	01	wicket gate as per spec.		

SCHEDULE OF WINDOW

S.NO.	TYPE	OPENING SIZE	LINTEL	SILL	NO.	SHUTTER	FRAME	WINDOW GRILL	HARDWARE
01	W	1500 X 1800	2550	750	06	Single shutter with plane glass pahes.	Z section frame with15x3 mm lugs 10 cm long embeded in cement conc. blocks.	All frames are provided with 12mm square bars at 120 mm c/c	powder coated / anodized aluminium / ss fittings
02	W1	1000 X 1800	2550	750	18				
03	W2	900 X 1650	2550	900	04				
04	V	600 X 900	2550	1650	06				
05	V1	1800 X 800	B.O.B.	2300	02				
07	GL	900 X 2800	B.O.B.	300	04	as per spec.			

AREA STATEMENT

BOYS HOSTEL BUILDING

DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	558.98
TOTAL AREA	**558.98**
BOYS UTENSILS WASH AREA	32.76
GIRLS UTENSILS WASH AREA	32.76
REAR COURTYARD	149.67
TOTAL COURTYARD AREA	**215.19**
REAR SIDE KITCHEN VARANDAH	23.38

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

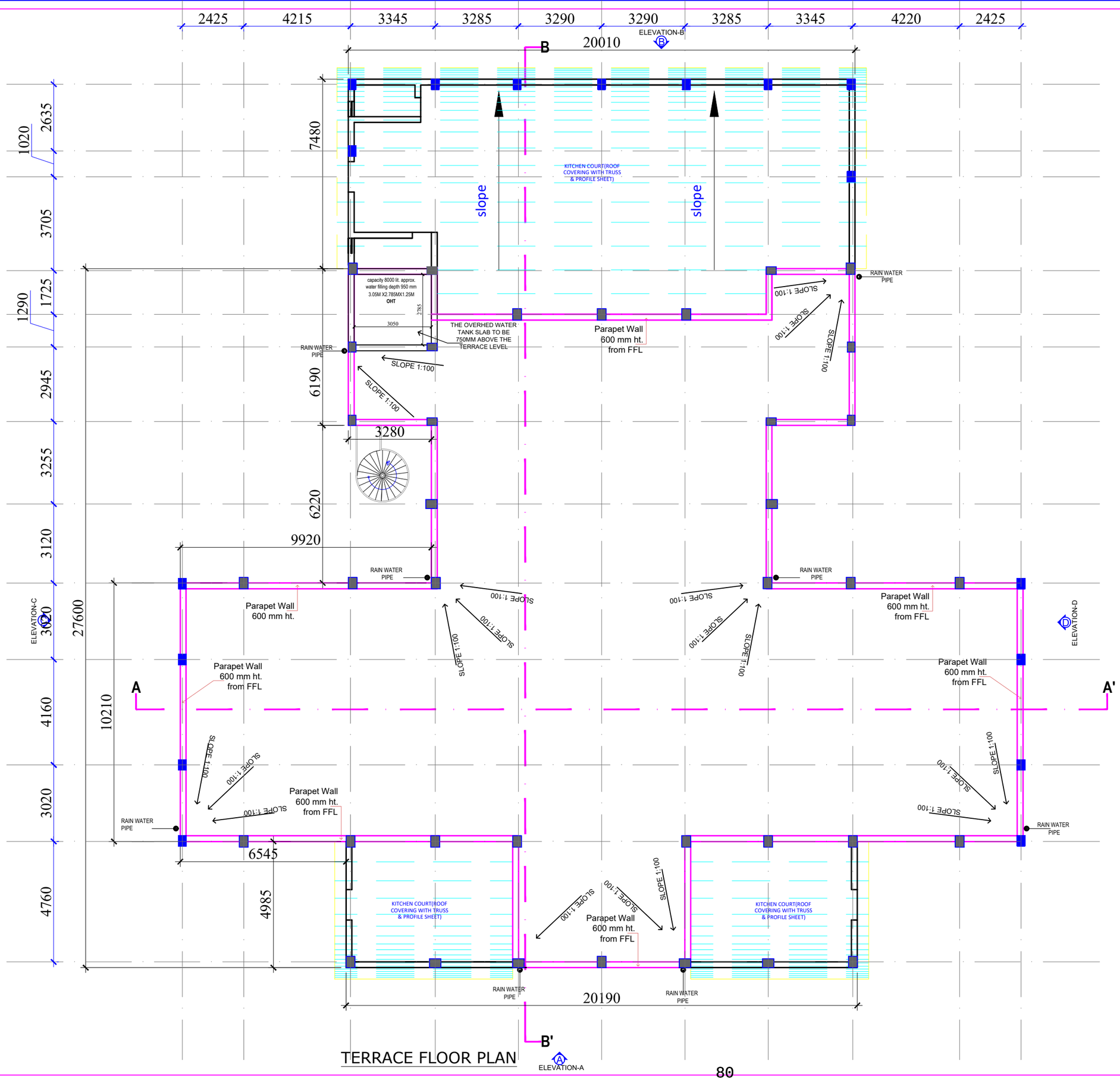
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY : KITCHEN & DINING BLOCK

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/K&D/AR_01



TERRACE FLOOR PLAN

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

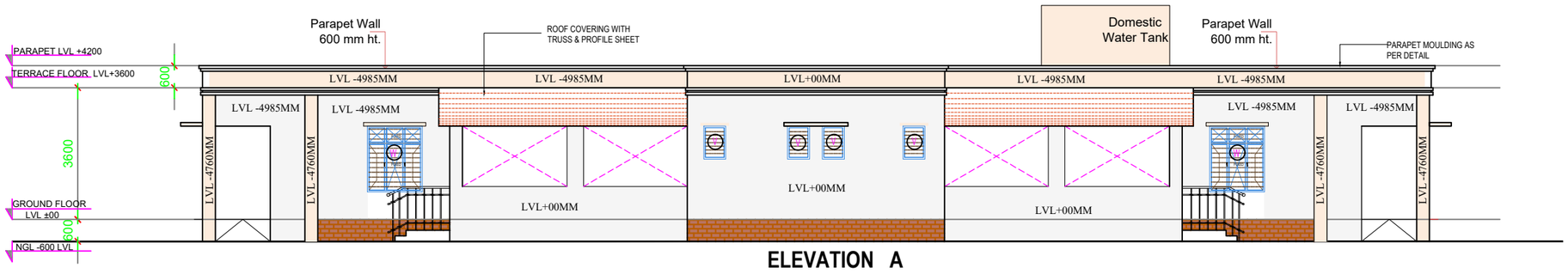
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

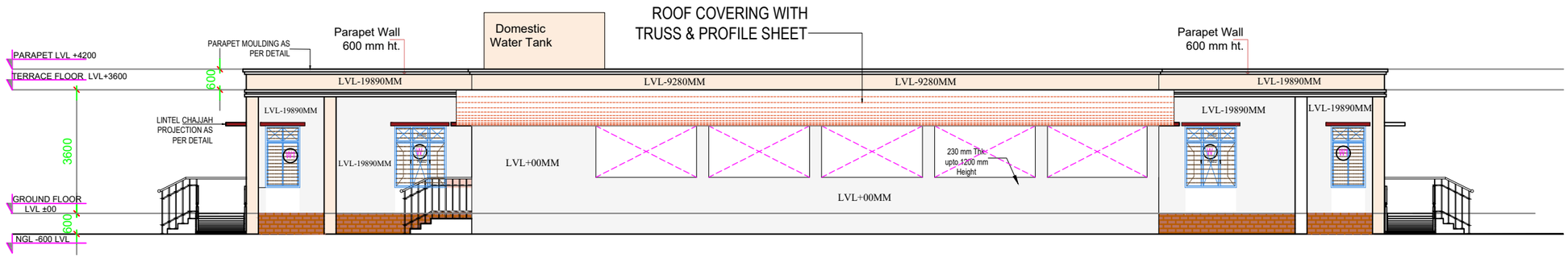
CATEGORY :
KITCHEN & DINING BLOCK

DRAWING TITLE :
TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/K&D/AR_02



ELEVATION A



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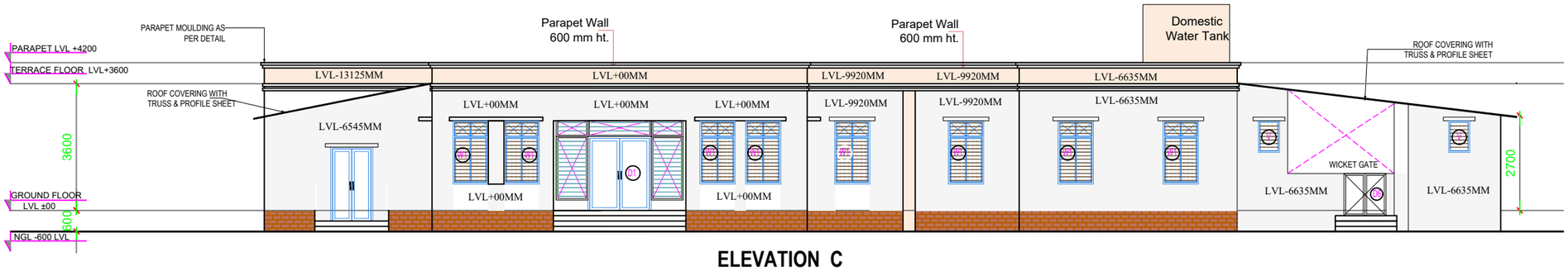
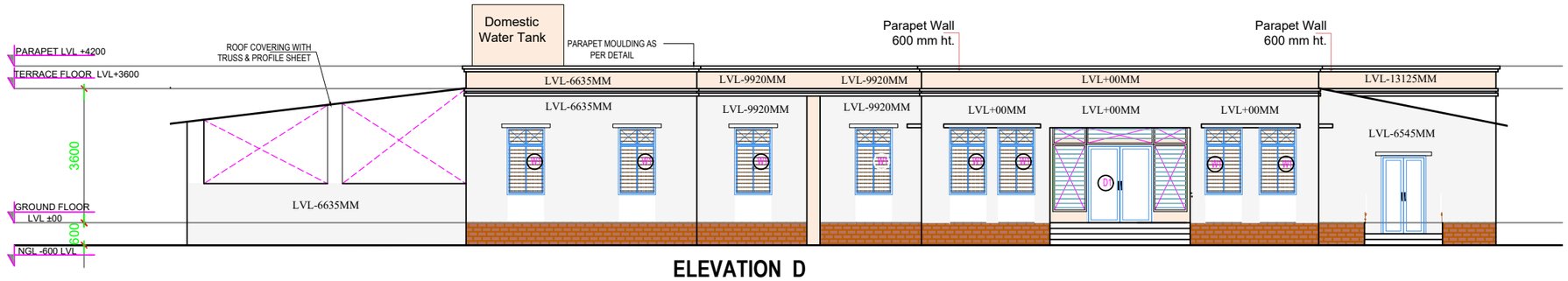


ELEVATION C



ELEVATION D

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

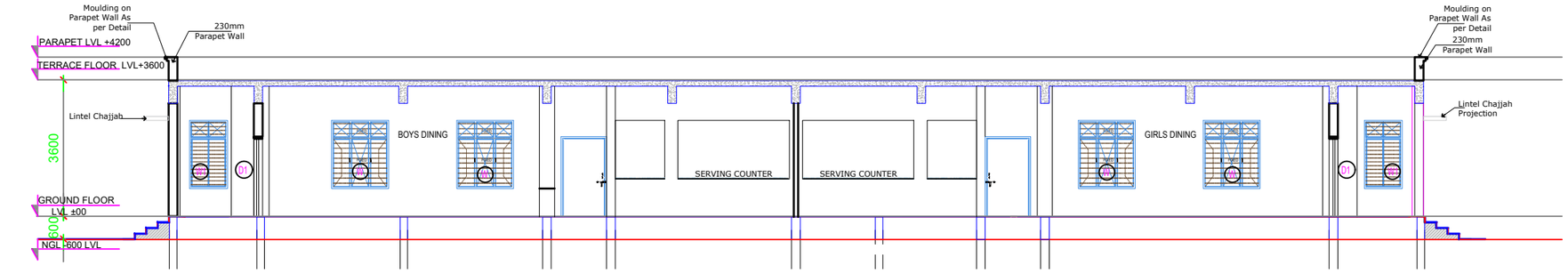
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

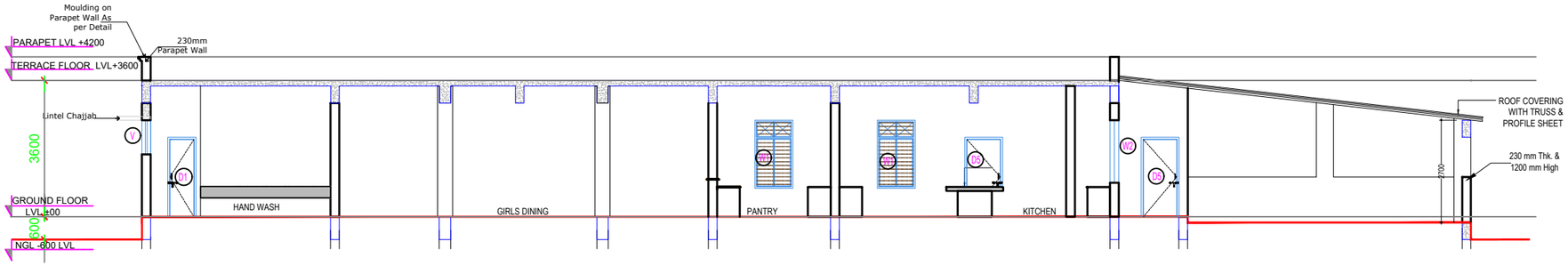
CATEGORY :
KITCHEN & DINING BLOCK

DRAWING TITLE :
ELEVATION AA/BB/CC/DD

DWG. NO.-
EMRS NAME/K&D/AR_03



SECTION - AA



SECTION - BB

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

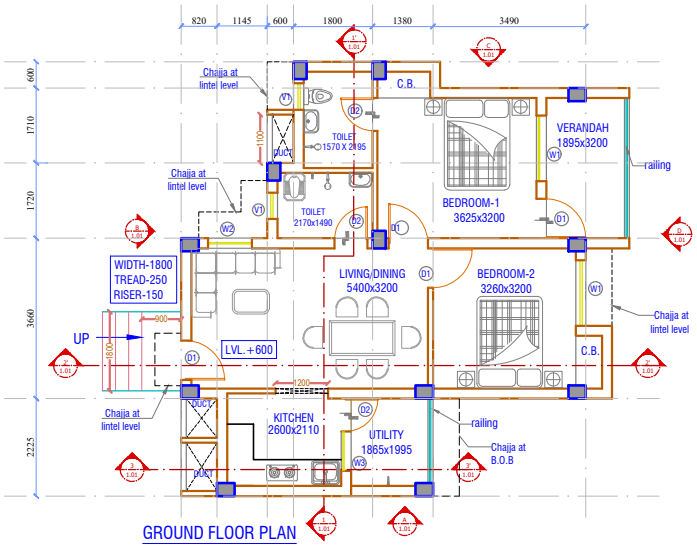
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

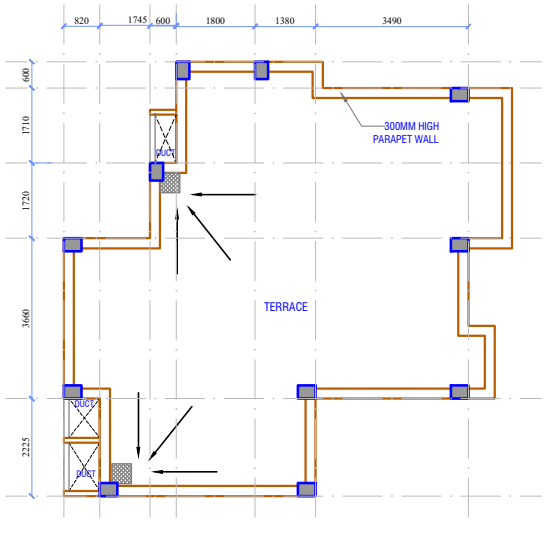
CATEGORY :
KITCHEN & DINING BLOCK

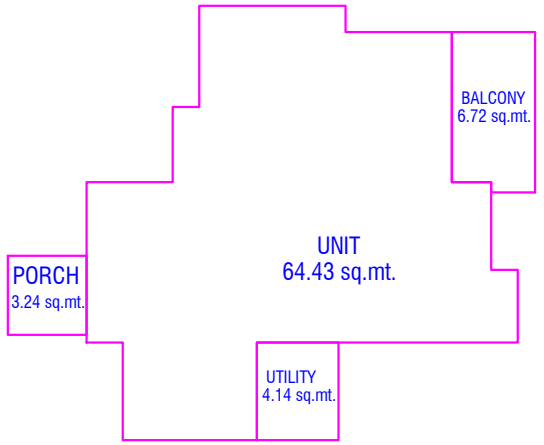
DRAWING TITLE :
SECTION AA/BB

DWG. NO.-
EMRS NAME/K&D/AR_04

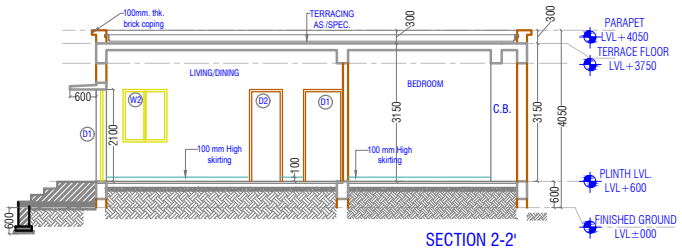


GROUND FLOOR PLAN

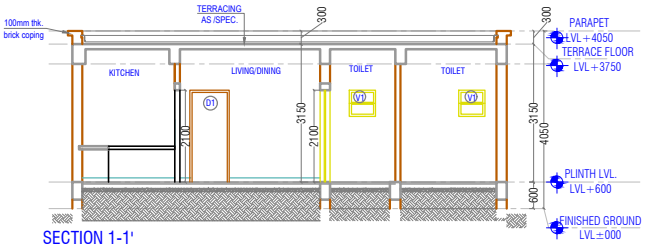




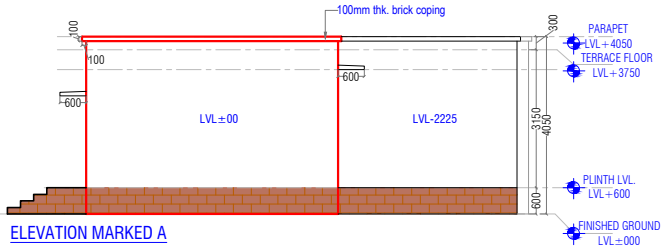
SCHEDULE OF DOORS & WINDOWS					
S.NO	TYPE	OPENING SIZE	SILL FROM F.F.L	LINTEL FROM F.F.L	SPECIFICATION
DOORS					
1.	D1	900 X 2100	00	+2100	SINGLE SHUTTER FLUSH DOOR
2.	D2	750 X 2100	00	+2100	SINGLE SHUTTER FLUSH DOOR
WINDOWS					
3.	W1	1500 X 1200	900	+2100	MS STEEL GLAZED WINDOW
4.	W2	1000 X 1200	900	+2100	MS STEEL GLAZED WINDOW
5.	W3	900 X 1050	1050	+2100	MS STEEL GLAZED WINDOW
4.	V1	600 X 600	1500	+2100	MS STEEL GLAZED VENTILATOR



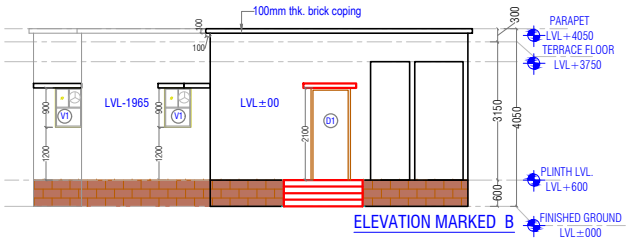
SECTION 2-2'



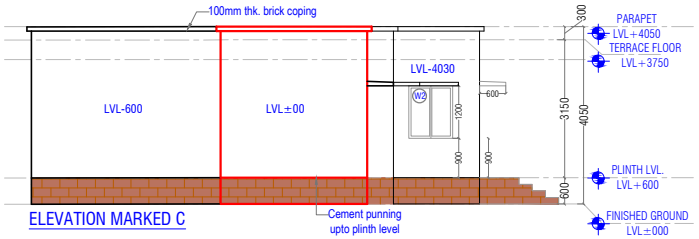
SECTION 1-1'



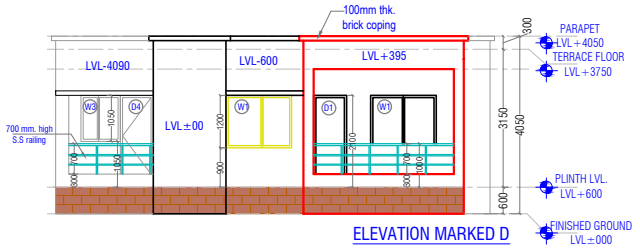
ELEVATION MARKED A



ELEVATION MARKED B



ELEVATION MARKED C



ELEVATION MARKED D

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

AREA STATEMENT
WARDEN RESIDENCE

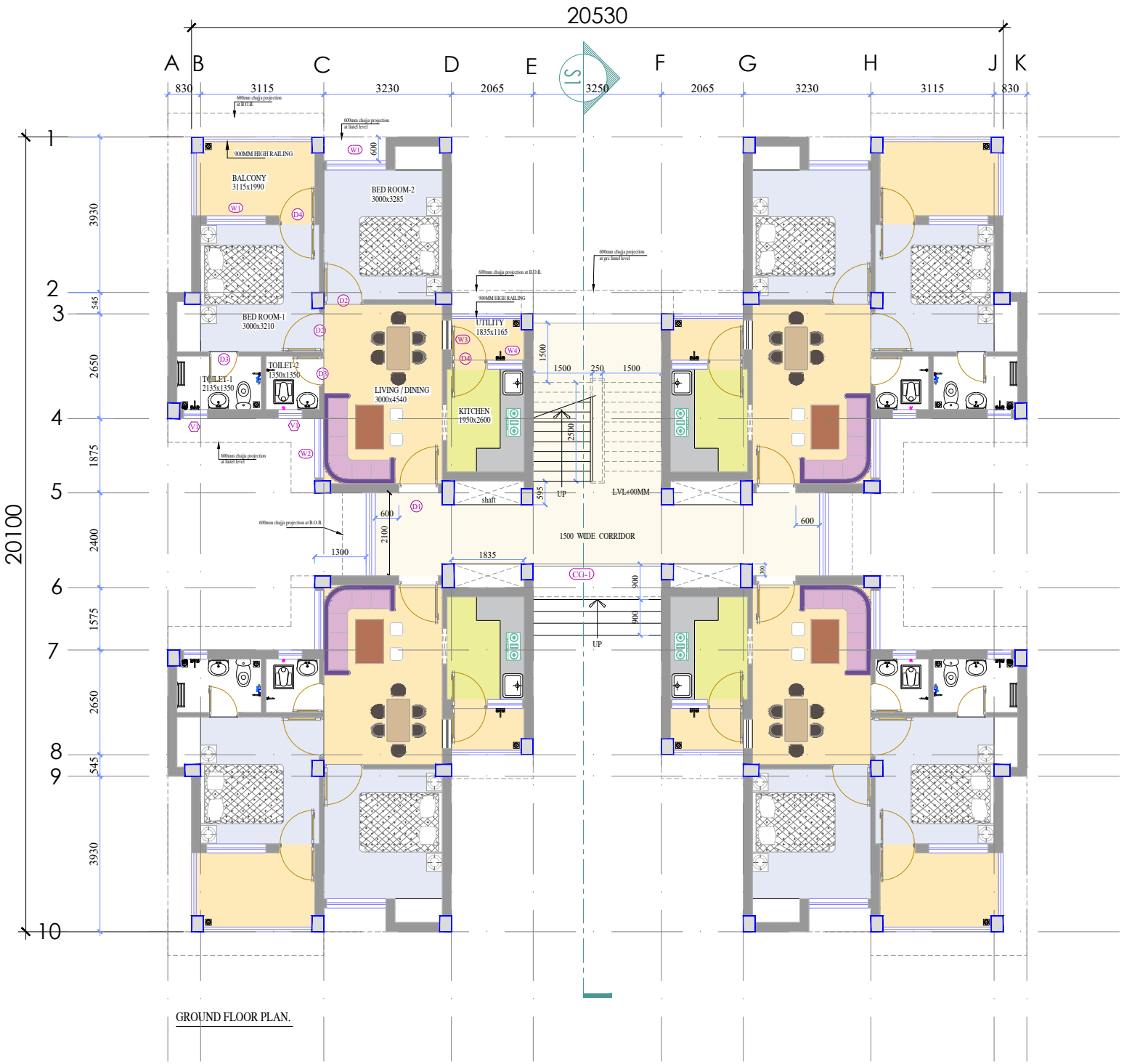
Main Unit	
AREA OF PORCH	3.24
TOTAL COVERED AREA	26.1

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
WARDEN RESIDENCE

DRAWING TITLE :
FLOOR PLAN, ELEVATION, SECTION

DWG. NO.-
EMRS NAME/WR/AR_01



GROUND FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

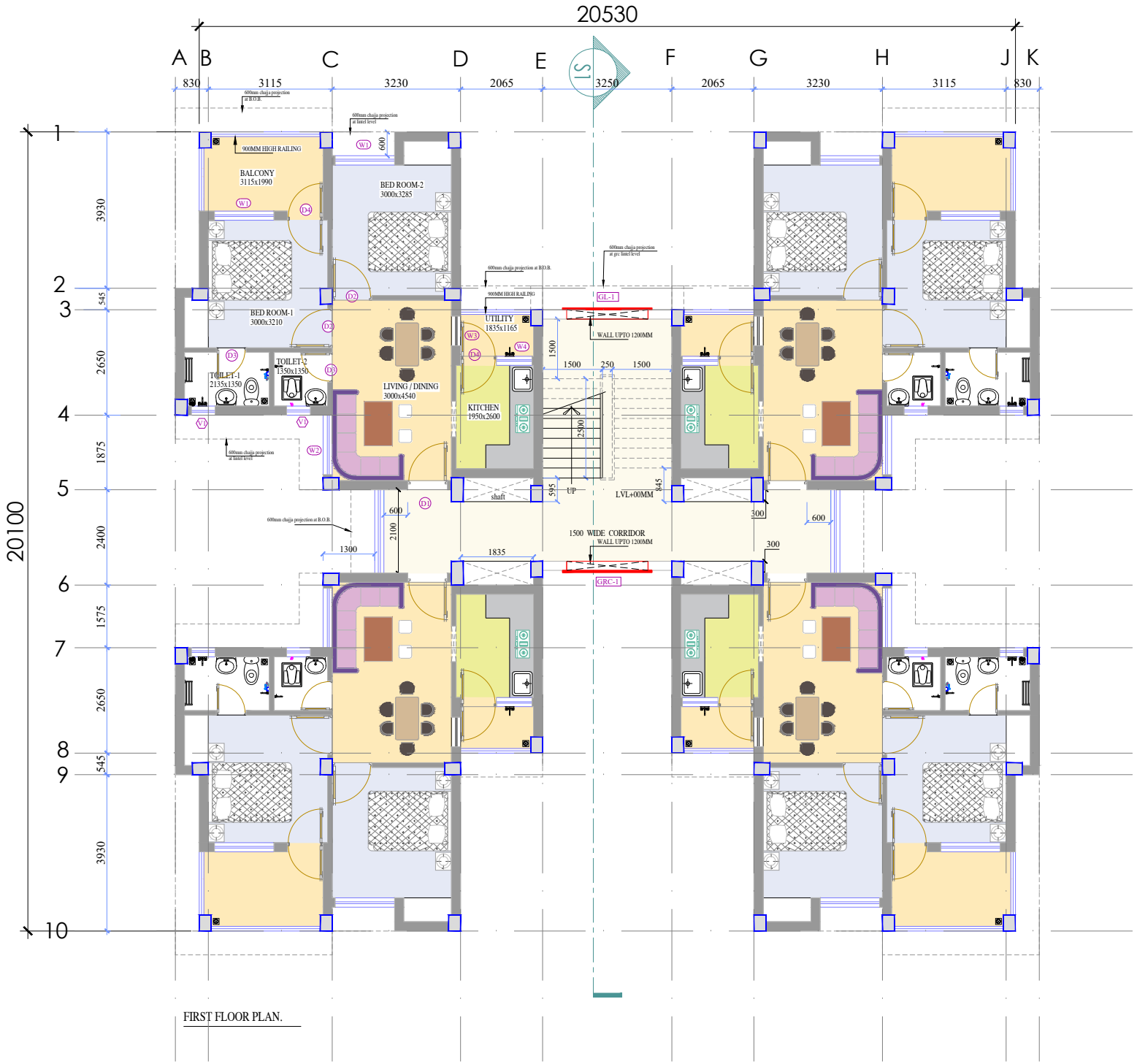
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_01



FIRST FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

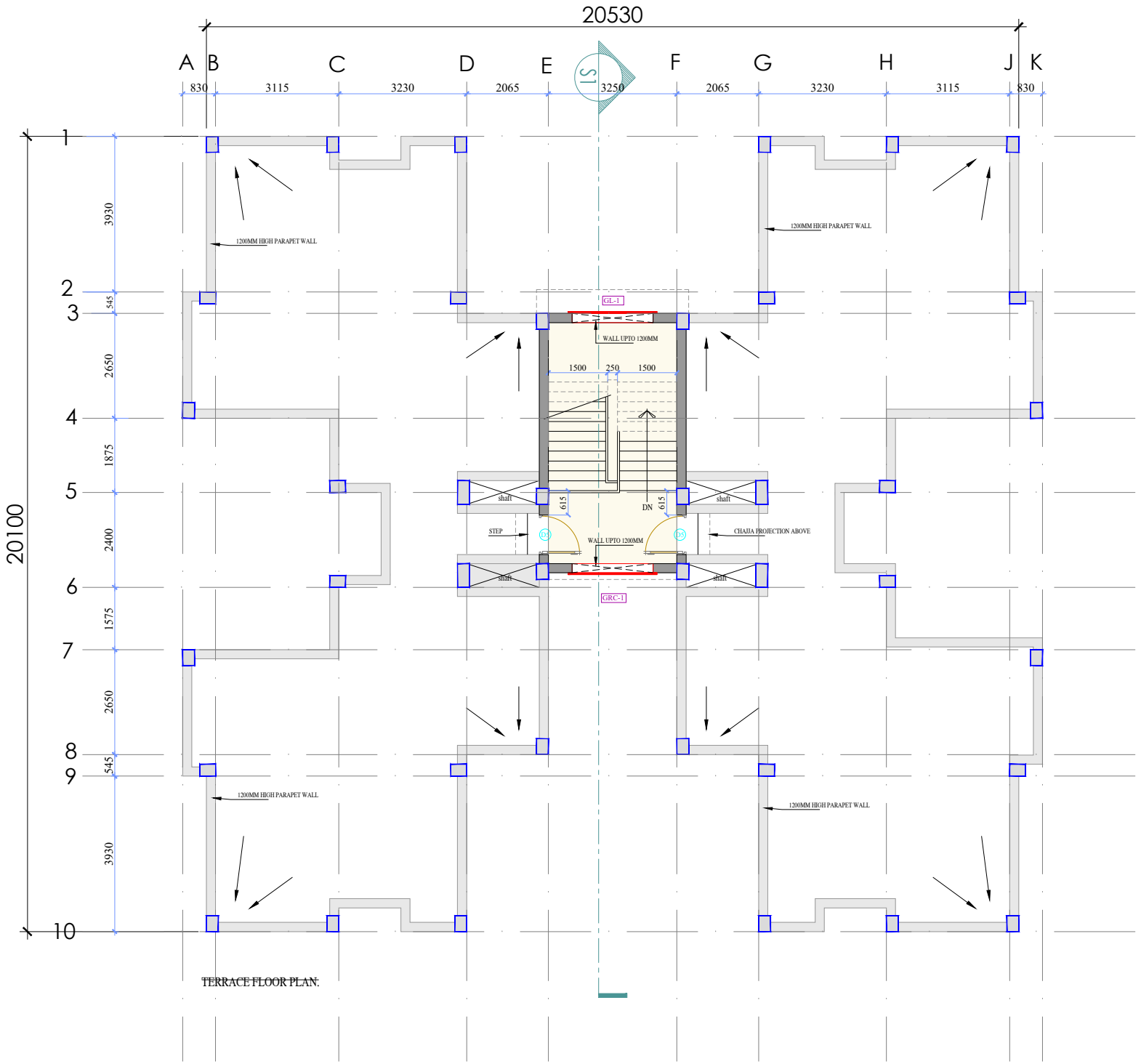
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
TYPICAL FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_02



TERRACE FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

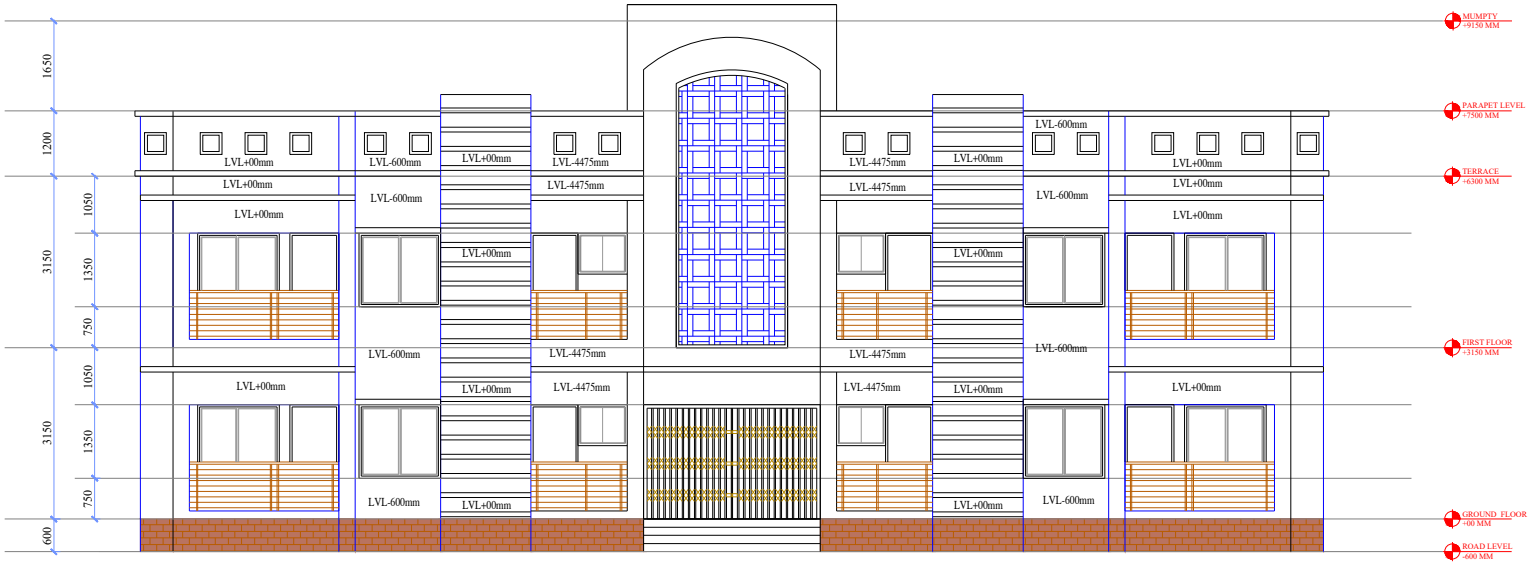
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

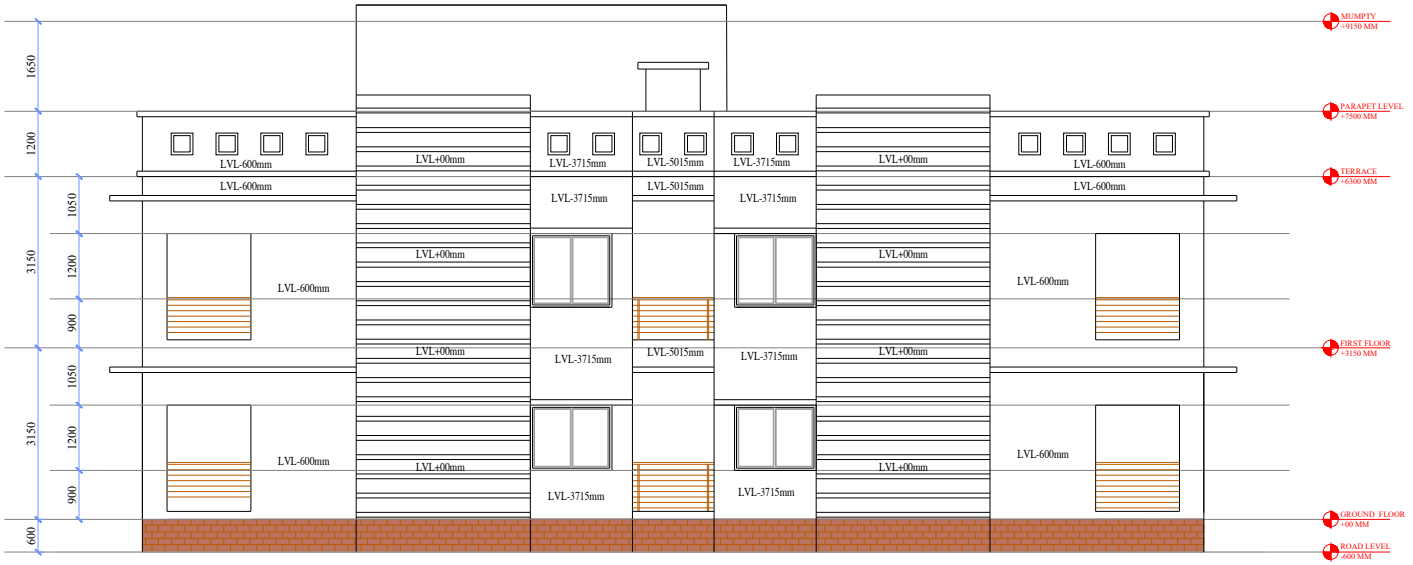
CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_03



FRONT ELVATION



SIDE ELVATION

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

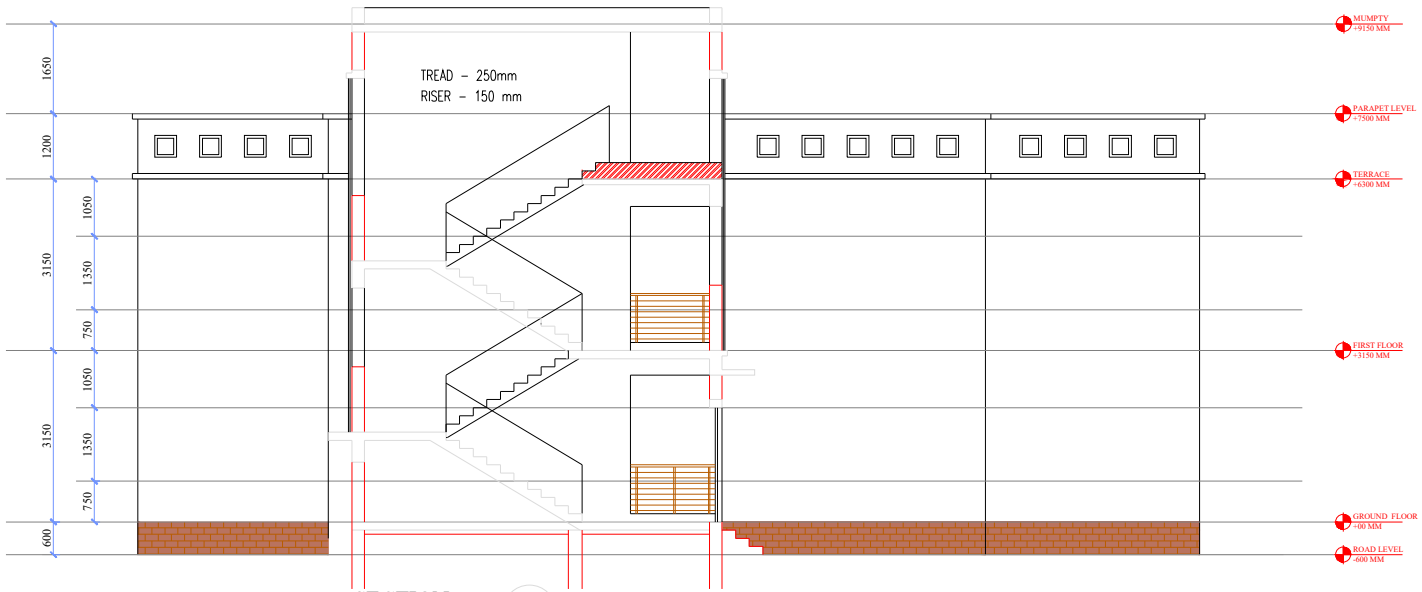
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
ELEVATION

DWG. NO.-
EMRS NAME/TYPE-III/AR_04



SECTION : S1

DOOR, WINDOW, VENTILATOR, FIXED GLAZING, GRILL SCHEDULE FOR 4 UNIT								
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF FF MUMTY	TOTAL	LOCATION	MATERIAL	COMMENTS
D1	1000 X 2100	0	2100	4 4	8	MAIN ENTRANCE DOOR	FLUSH DOOR	
D2	1000 X 2100	0	2100	8 8	16	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	8 8	16	TOILET DOOR	PRELAMINATED DOOR	SINGLE LEAF
D4	900 X 2100	0	2100	8 8	16	UTILITY, BALCOONY	PRELAMINATED DOOR WITH WIRE MESH	SINGLE LEAF
D5	1000 X 2100	0	2100	2	2	TERRACE DOOR	MS DOOR	SINGLE LEAF
CG-1	3250 X 2100	0	2100	1	1	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE
W1	1500 X 1350	750	2100	8 8	16	BEDROOM-1, BEDROOM-2	STANDARD STEEL SECTION	
W2	1500 X 1200	900	2100	4 4	8	LIVING / DINING HALL	STANDARD STEEL SECTION	
W3	900 X 1200	900	2100	4 4	8	LIVING / DINING HALL	STANDARD STEEL SECTION	
W4	900 X 1050	1050	2100	4 4	8	KITCHEN	STANDARD STEEL SECTION	
V1	600 X 1200	1200	2400	8 8	16	TOILET	STANDARD STEEL SECTION	

AREA STATEMENT	
UNIT TYPE-2 (G+1)	
TOTAL NOS OF UNIT-8	
DETAILS	AREA (in Sqm)
MAIN UNIT	
ONE UNIT AREA	54.29
BALCONY AREA (AREA / 2)	3.17
UTILITY AREA	2.40
TOTAL UNIT AREA	**59.86**
CIRCULATION & STAIRCASE ONE UNIT ONE FLOOR	9.02
CIRCULATION & STAIRCASE ONE FLOOR	36.09
ONE FLOOR 4 UNIT	275.51
TOTAL COVERED AREA G.F.	278.435
TOTAL COVERED AREA F.F.	275.51
TOTAL COVERED AREA	**553.945**

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

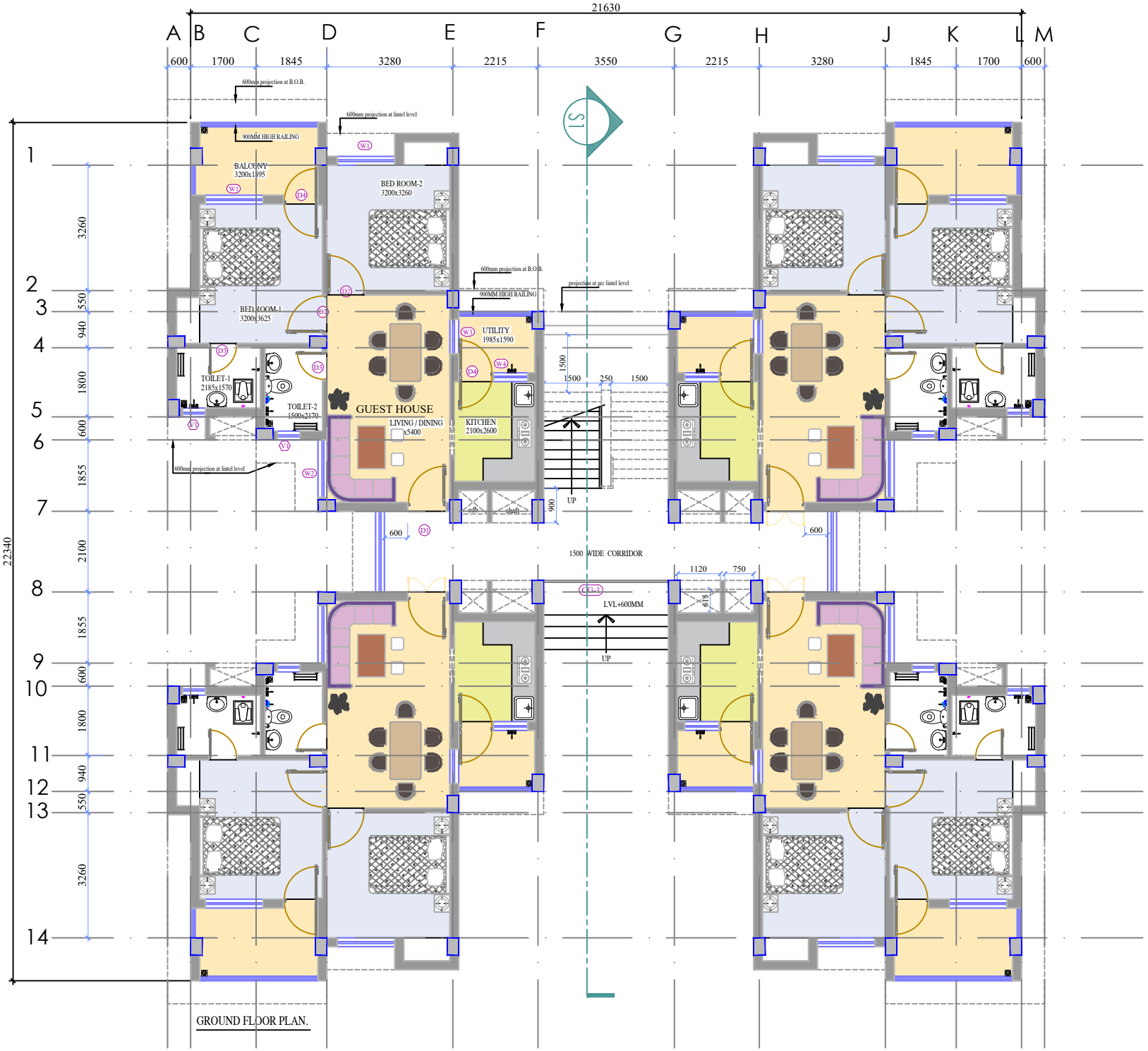
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
SECTION

DWG. NO.-
EMRS NAME/TYPE-III/AR_05



PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

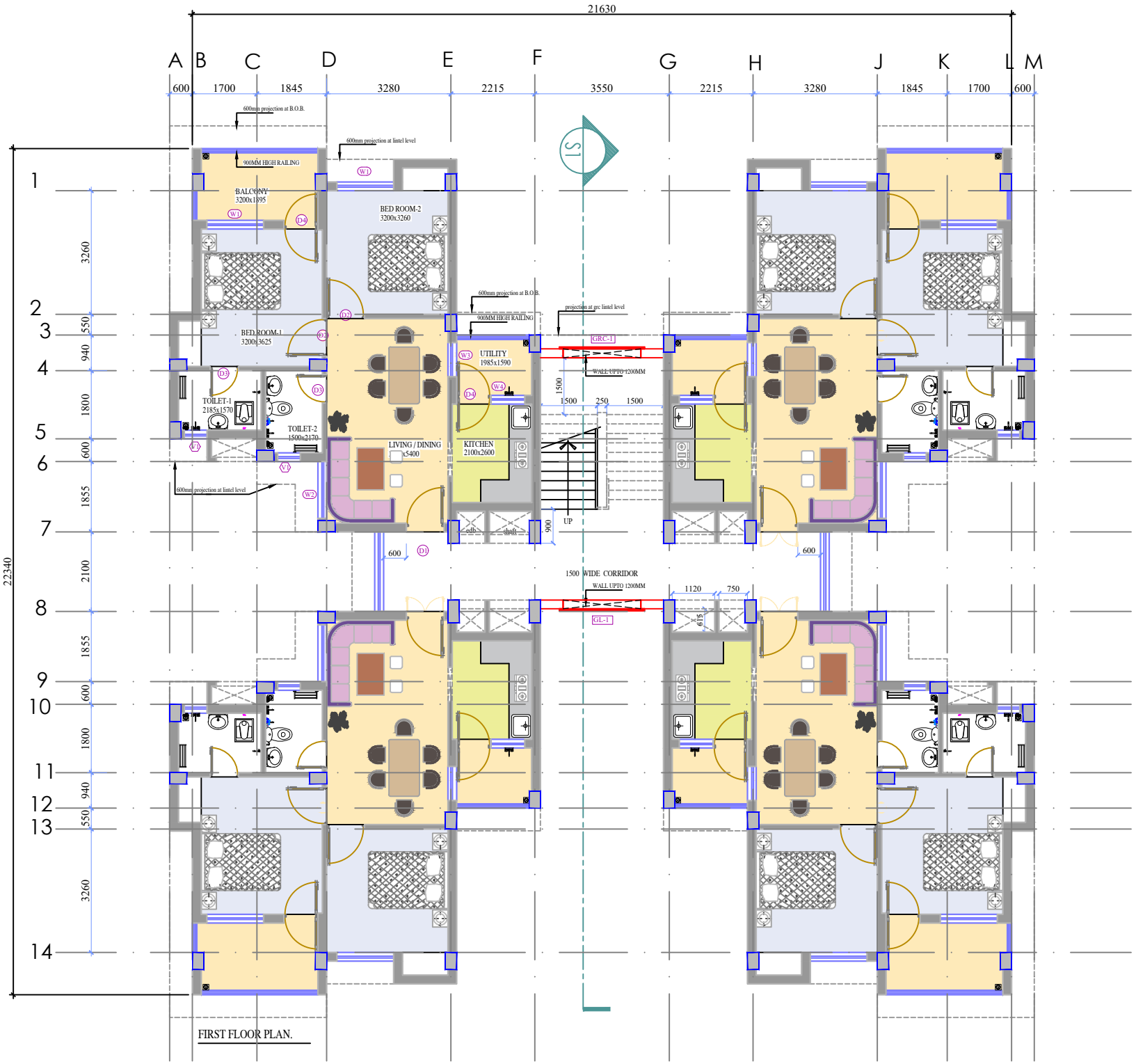
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
GROUND FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_01



PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

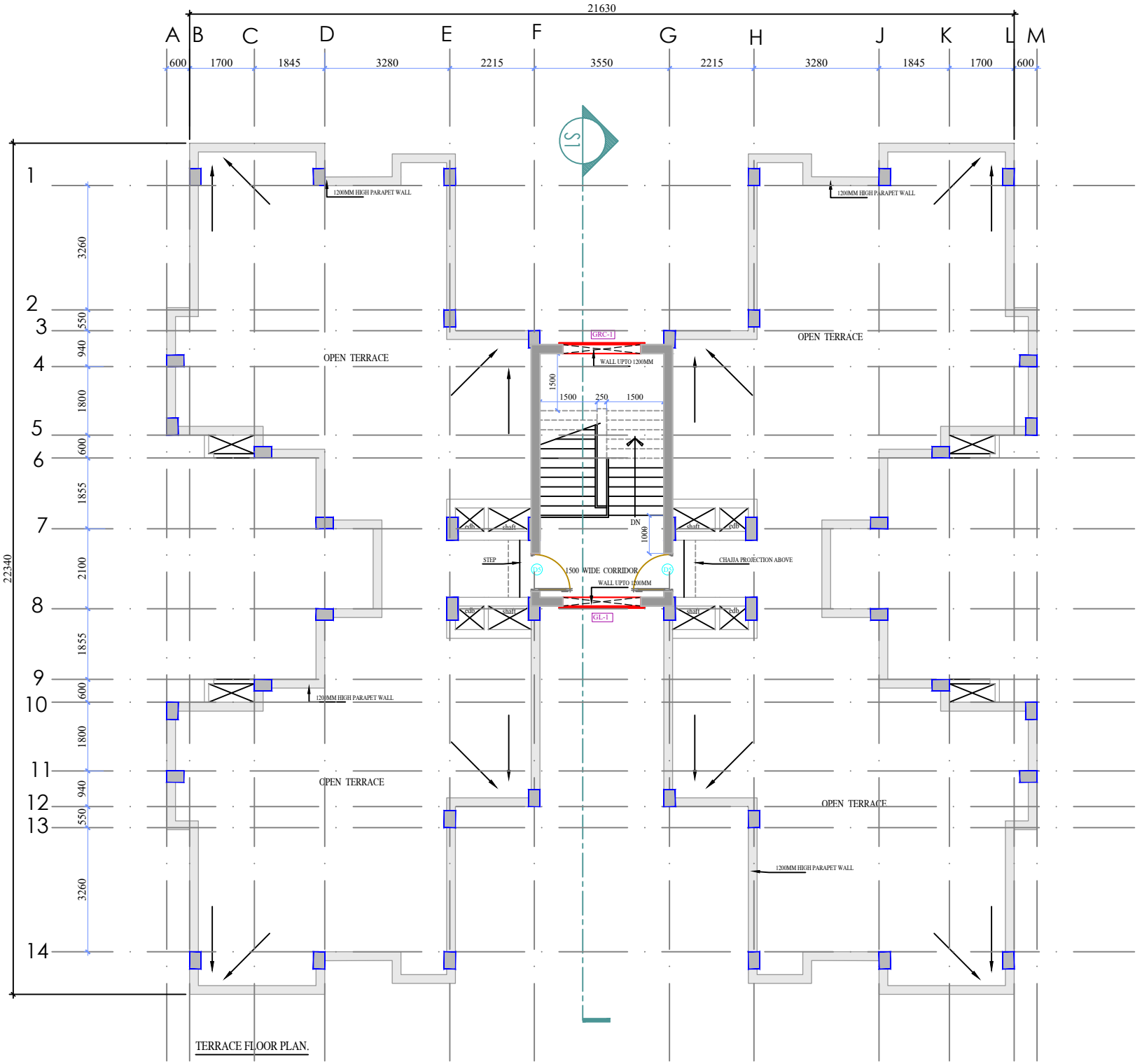
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
TYPICAL FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_02



TERRACE FLOOR PLAN.

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

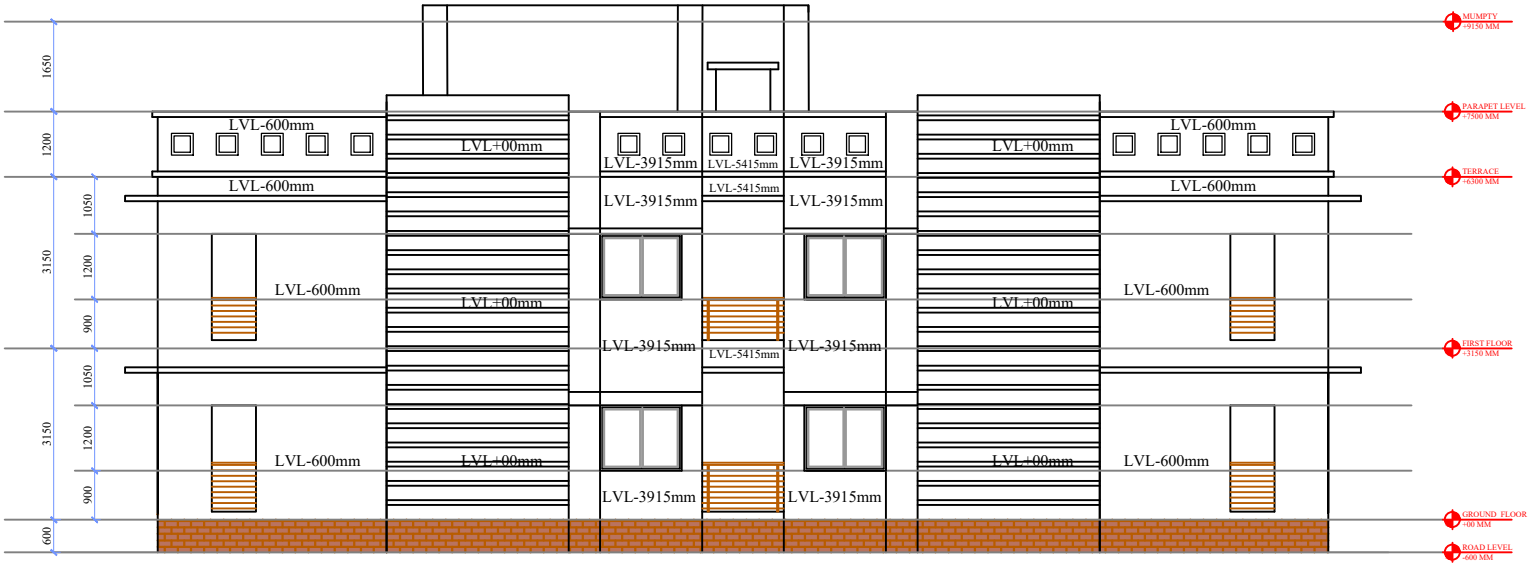
A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/TYPE-III/AR_03

FRONT ELVATION



SIDE ELVATION

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

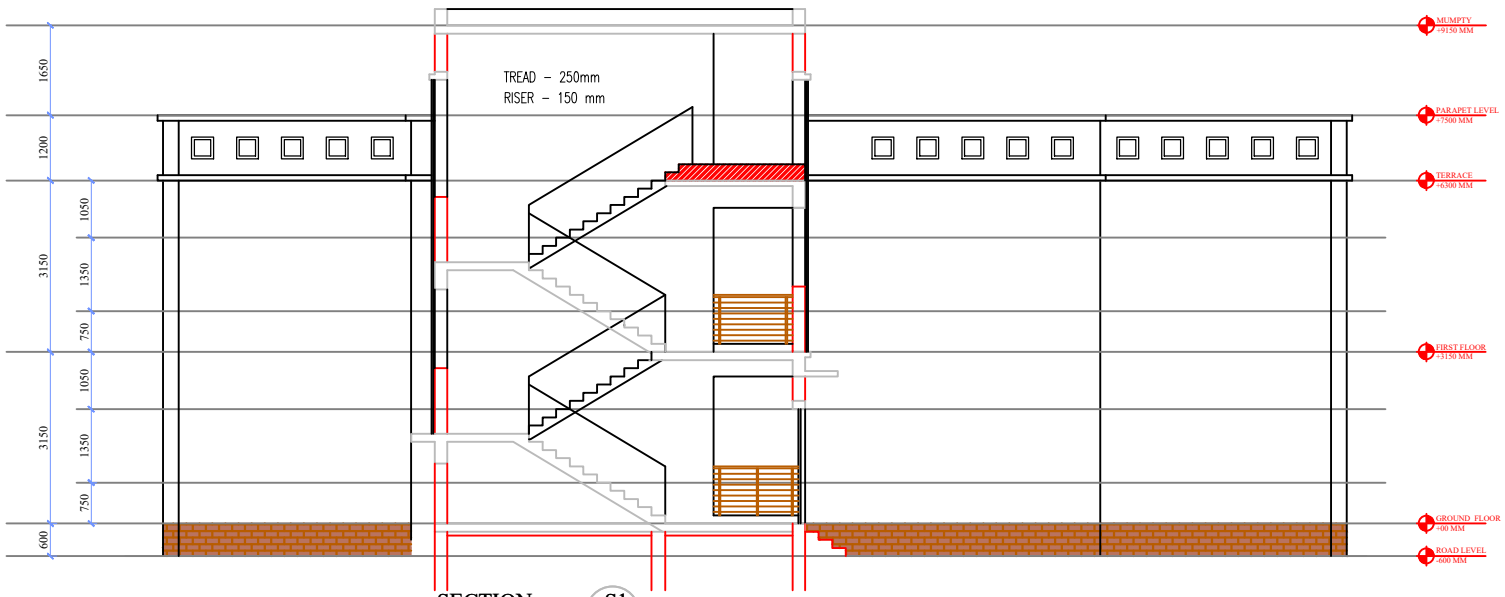
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
ELEVATION

DWG. NO.-
EMRS NAME/TYPE-III/AR_04



SECTION : S1

DOOR, WINDOW, VENTILATOR, FIXED GLAZING, GRILL SCHEDULE FOR **4 UNIT**									
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF FF	MUMTY	TOTAL	LOCATION	MATERIAL	COMMENTS
D1	1000 X 2100	0	2100	4 4		8	MAIN ENTRANCE DOOR	FLUSH DOOR	
D2	1000 X 2100	0	2100	8 8		16	BEDROOM DOOR	FLUSH DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	8 8		16	TOILET DOOR	PRELAMINATED DOOR	SINGLE LEAF
D4	900 X 2100	0	2100	8 8		16	UTILITY, BALCOONY	PRELAMINATED DOOR WITH WIRE MESH	SINGLE LEAF
D5	1000 X 2100	0	2100		2	2	TERRACE DOOR	MS DOOR	SINGLE LEAF
CG-1	3250 X 2100	0	2100	1		1	BLOCK FRONT ENTRY GATE	STANDARD STEEL SECTION	COLLAPSIBLE GATE
W1	1500 X 1350	750	2100	8 8		16	BEDROOM-1, BEDROOM-2	STANDARD STEEL SECTION	
W2	1500 X 1200	900	2100	4 4		8	LIVING / DINING HALL	STANDARD STEEL SECTION	
W3	900 X 1200	900	2100	4 4		8	LIVING / DINING HALL	STANDARD STEEL SECTION	
W4	900 X 1050	1050	2100	4 4		8	KITCHEN	STANDARD STEEL SECTION	
V1	600 X 1200	1200	2400	8 8		16	TOILET	STANDARD STEEL SECTION	

AREA STATEMENT	
UNIT TYPE-3 (G+1)	
TOTAL NOS OF UNIT-8	
DETAILS	AREA (in Sqm)
MAIN UNIT	
ONE UNIT AREA	63.67
BALCONY AREA (AREA / 2)	3.42
UTILITY AREA	3.52
TOTAL UNIT AREA	**70.61**
CIRCULATION & STAIRCASE ONE UNIT ONE FLOOR	9.41
CIRCULATION & STAIRCASE ONE FLOOR	37.65
ONE FLOOR 4 UNIT	320.09
TOTAL COVERED AREA G.F.	323.02
TOTAL COVERED AREA F.F	320.09
TOTAL COVERED AREA	**643.11**

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

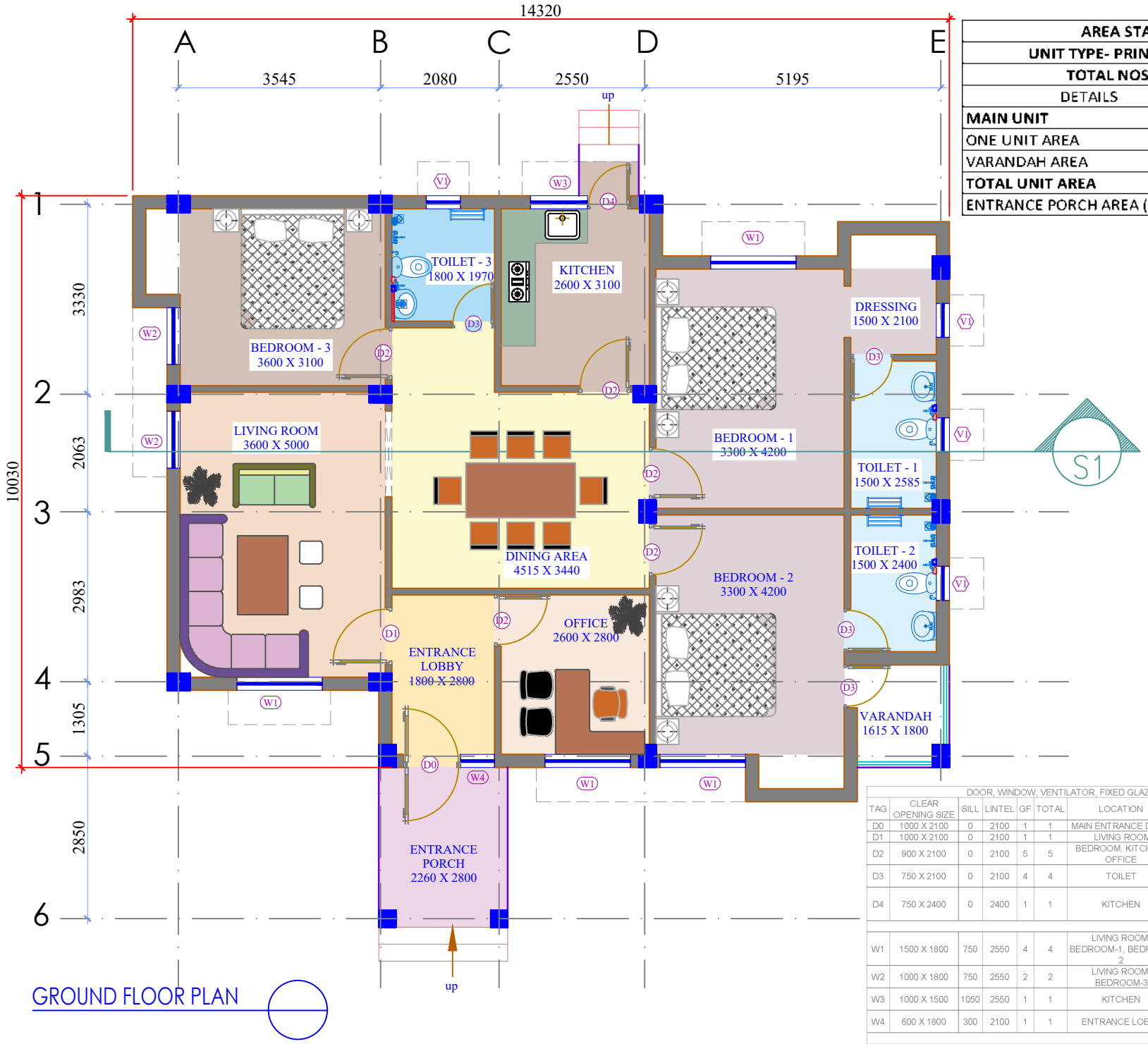
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY :
TYPE III QUARTER

DRAWING TITLE :
SECTION

DWG. NO.-
EMRS NAME/TYPE-III/AR_05



GROUND FLOOR PLAN

AREA STATEMENT	
UNIT TYPE- PRINCIPAL QUARTER	
TOTAL NOS OF UNIT-1	
DETAILS	AREA (in Sqm)
MAIN UNIT	
ONE UNIT AREA	127.89
VARANDAH AREA	2.90
TOTAL UNIT AREA	**130.79**
ENTRANCE PORCH AREA (AREA/2)	3.16

DOOR, WINDOW, VENTILATOR, FIXED GLAZING, GRILL SCHEDULE

TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	TOTAL	LOCATION	MATERIAL	COMMENTS
D0	1000 X 2100	0	2100	1	1	MAIN ENTRANCE DOOR	FLUSH DOOR	DOUBLE LEAF
D1	1000 X 2100	0	2100	1	1	LIVING ROOM	FLUSH DOOR	SINGLE LEAF
D2	900 X 2100	0	2100	5	5	BEDROOM, KITCHEN, OFFICE	FLUSH DOOR	SINGLE LEAF
D3	750 X 2100	0	2100	4	4	TOILET	PRELAMINATED DOOR	SINGLE LEAF
D4	750 X 2400	0	2400	1	1	KITCHEN	PRELAMINATED DOOR	SINGLE LEAF, INCLUDES 300MM VENTILATOR ABOVE
W1	1500 X 1800	750	2550	4	4	LIVING ROOM, BEDROOM-1, BEDROOM-2	STANDARD STEEL SECTION	
W2	1000 X 1800	750	2550	2	2	LIVING ROOM, BEDROOM-3	STANDARD STEEL SECTION	
W3	1000 X 1500	1050	2550	1	1	KITCHEN	STANDARD STEEL SECTION	
W4	600 X 1800	300	2100	1	1	ENTRANCE LOBBY	STANDARD STEEL SECTION	
V1	600 X 900	1650	2550	4	4	TOILET	STANDARD STEEL SECTION	

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

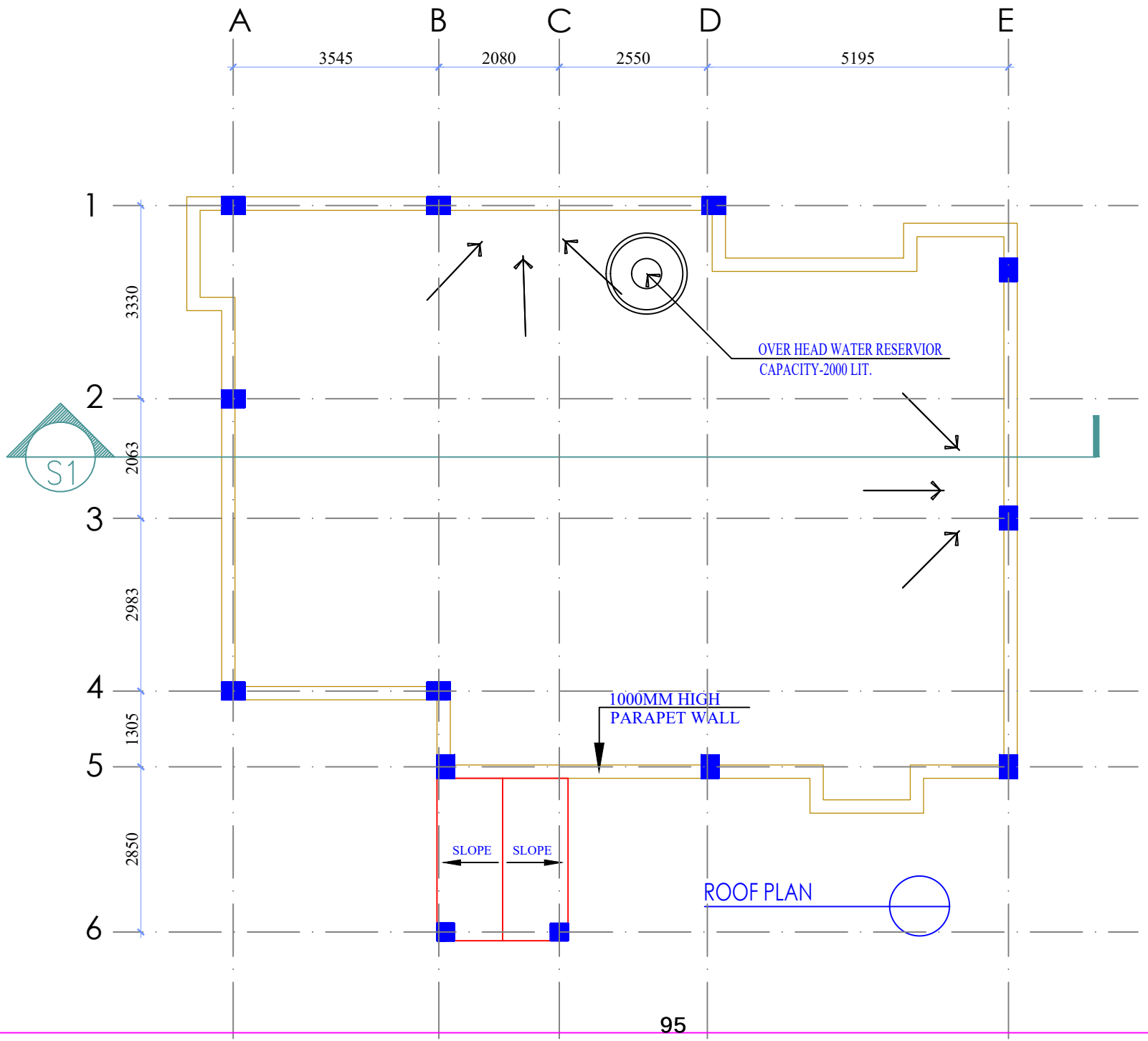
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY : PRINCIPAL QUARTER

DRAWING TITLE : GROUND FLOOR PLAN

DWG. NO.- EMRS NAME/PQ/AR_01



PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

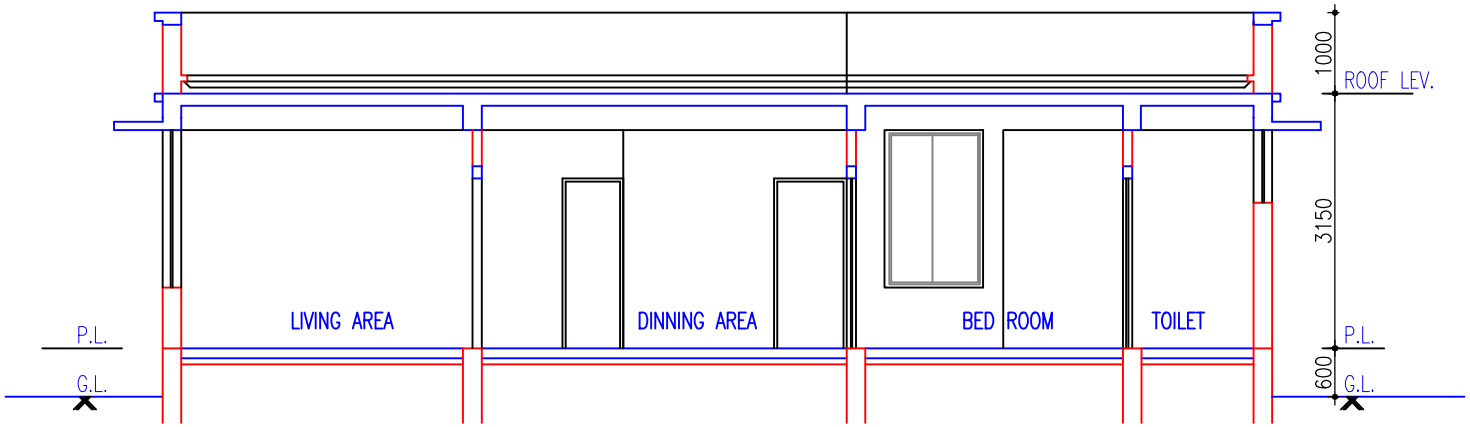
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

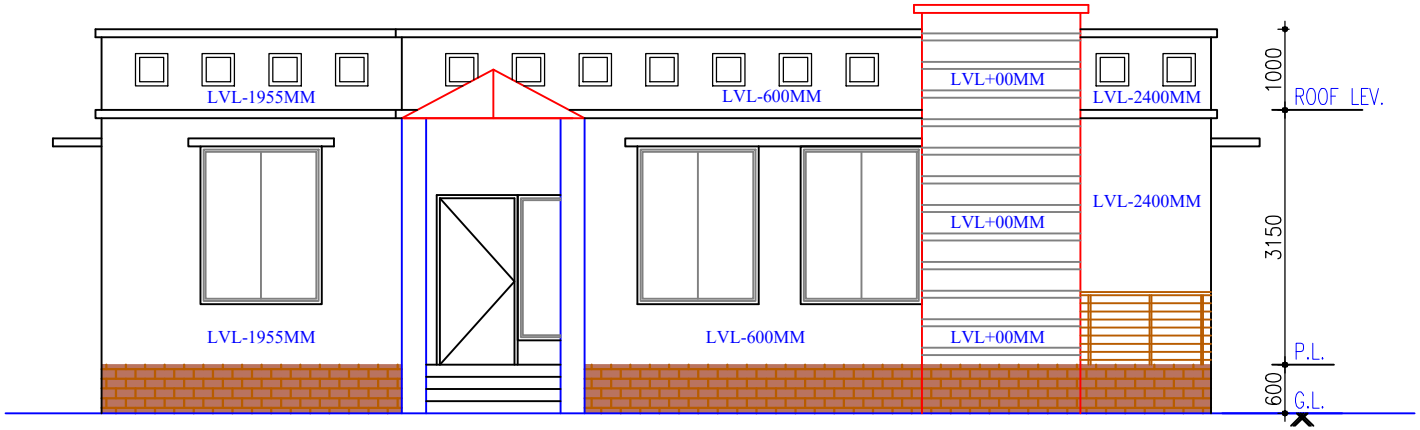
CATEGORY :
PRINCIPAL QUARTER

DRAWING TITLE :
TERRACE FLOOR PLAN

DWG. NO.-
EMRS NAME/PQ/AR_02



SECTION S1 -



FRONT ELEVATION

PROJECT - EMRS

CONSTRUCTION OF SCHOOL BUILDING FOR EKLAVYA MODEL RESIDENTIAL SCHOOL (EMRS)

CLIENT -

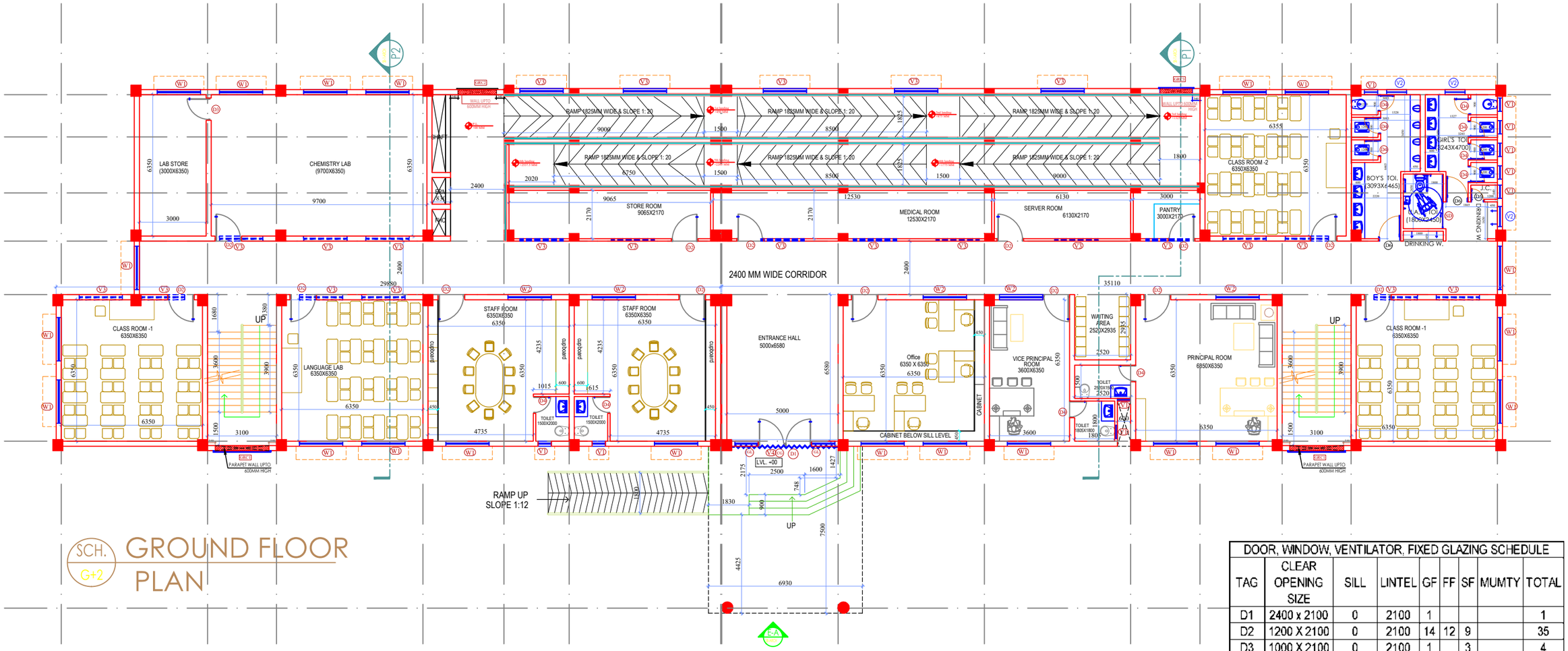
GOVT OF INDIA
MINISRY OF TRIBAL AFFAIRS
NAITIONAL EDUCATIONAL
SOCIETY FOR TRIBAL STUDENTS

A D P Keshri
Chief Engineer & Consultant

CATEGORY : PRINCIPAL QUARTER

DRAWING TITLE : ELEVATION

DWG. NO.- EMRS NAME/PQ/AR_03



GROUND FLOOR PLAN

SCH. G+2

AREA STATEMENT	
SCHOOL BUILDING	
DETAILS	AREA (in Sqm)
MAIN BUILDING	
GROUND FLOOR PLINTH AREA	871.06
FIRST FLOOR PLINTH AREA	803.61
SECOND FLOOR PLINTH AREA	803.61
TOTAL AREA	**2478.28**
ENTRANCE PORCH AREA	
AREA OF PORCH / 2	**25.99**
TOTAL COVERED AREA (RAMP AREA EXCLUDED)	2504.27

DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE

TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL
D1	2400 x 2100	0	2100	1				1
D2	1200 X 2100	0	2100	14	12	9		35
D3	1000 X 2100	0	2100	1		3		4
D4	750 X 2100	0	2100	11	7	8		26
D5	600 X 2100	0	2100	1	1	1		3
D6	1000 X 2100	0	2100	2	2	2	1	7
SD	1200 X 2100	0	2100	1	1	1		3
CG	480 X 2400	0	2400	1				1
W1	1950 X 1500	900	2400	21	26	26		73
W2	1950 X 1200	900	2100	5				5
GL	1050 X 2100	300	2400	2				2
V1	600 X 600	1800	2400	10	6	6		22
V2	900 X 1200	1200	2400	3	3	2		8
V3	1950 X 600	AS PER SITE	B.O.B	21	27	25		73
V4	2400 X 300	2100	2400	1				1

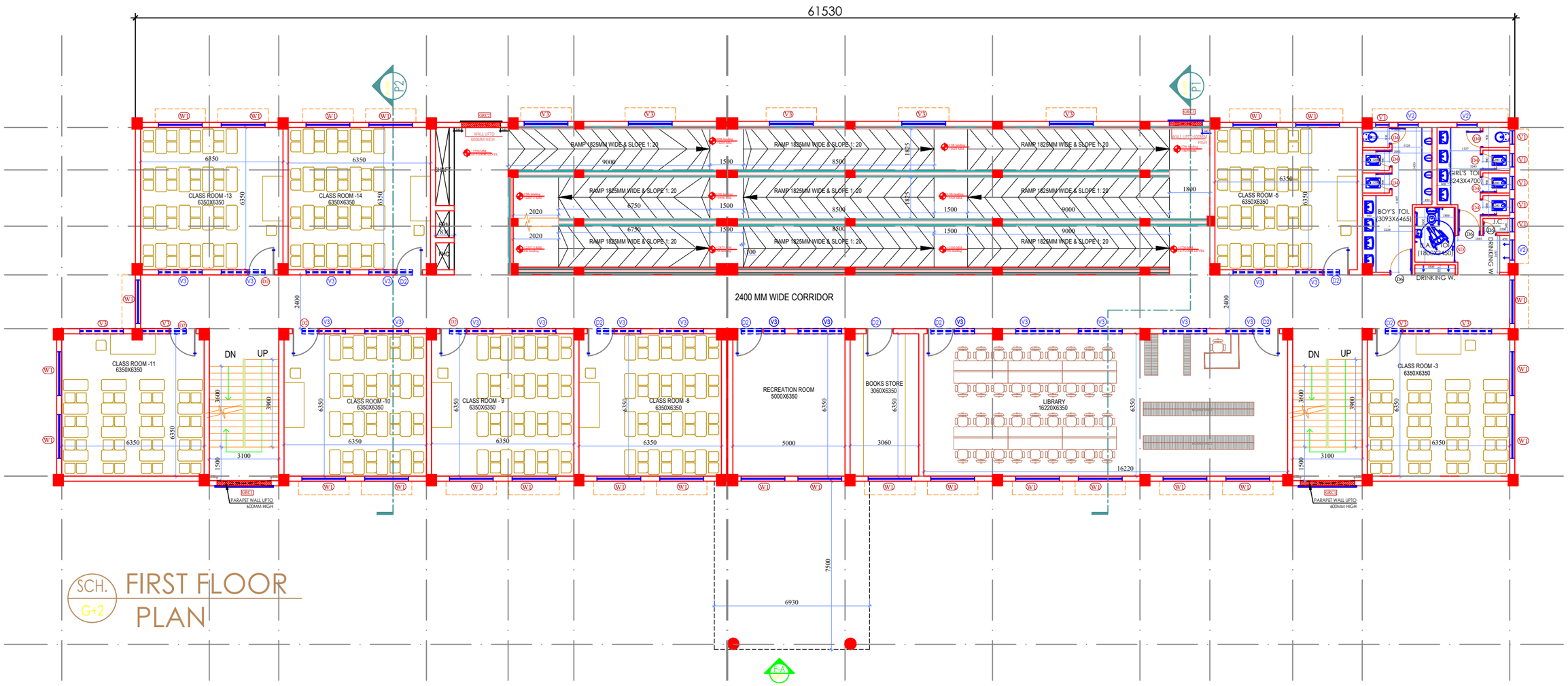
A D P Keshri
Chief Engineer & Consultant

DWG. NO.-
EMRS NAME/SCH/AR_01

SCHOOL
GROUND FLOOR PLAN

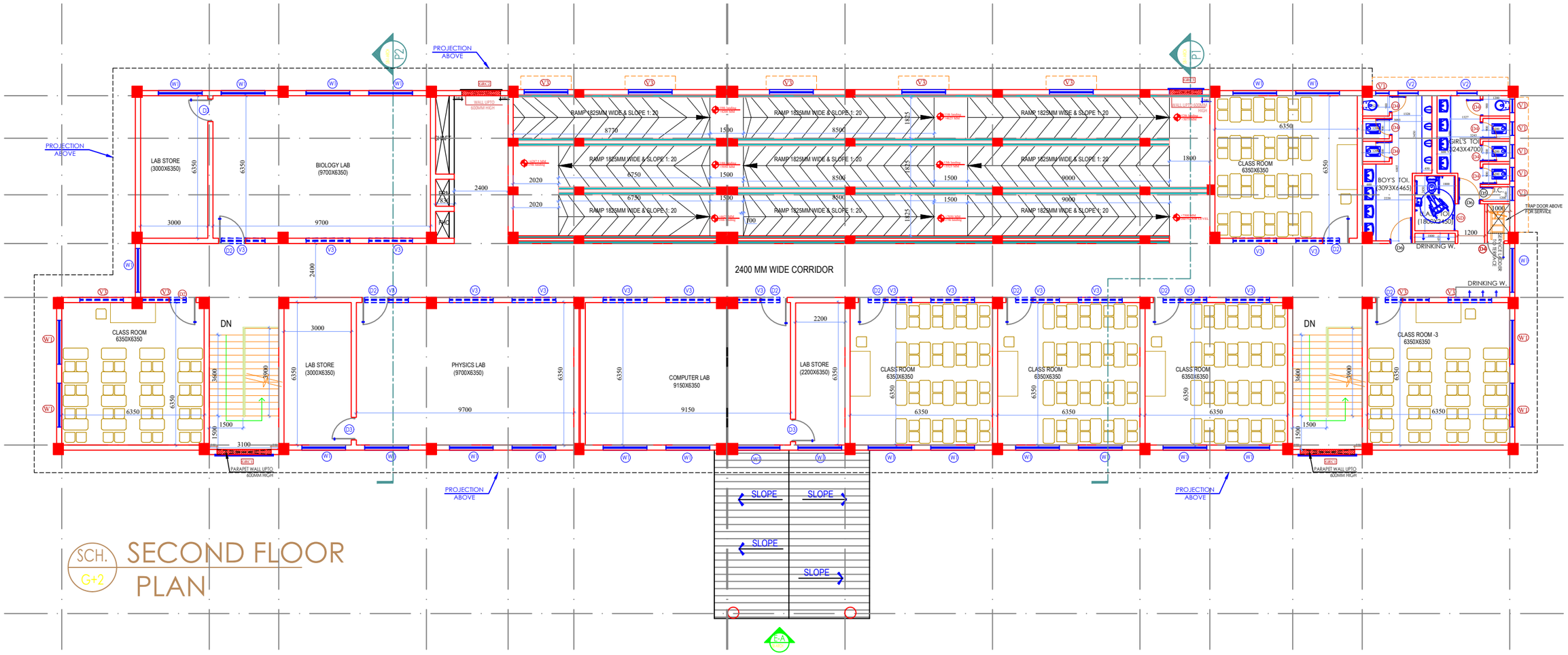
SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



A D P Keshri
Chief Engineer & Consultant

DWG. NO.- EMRS NAME/SCH/AR_02 SCHOOL FIRST FLOOR PLAN	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



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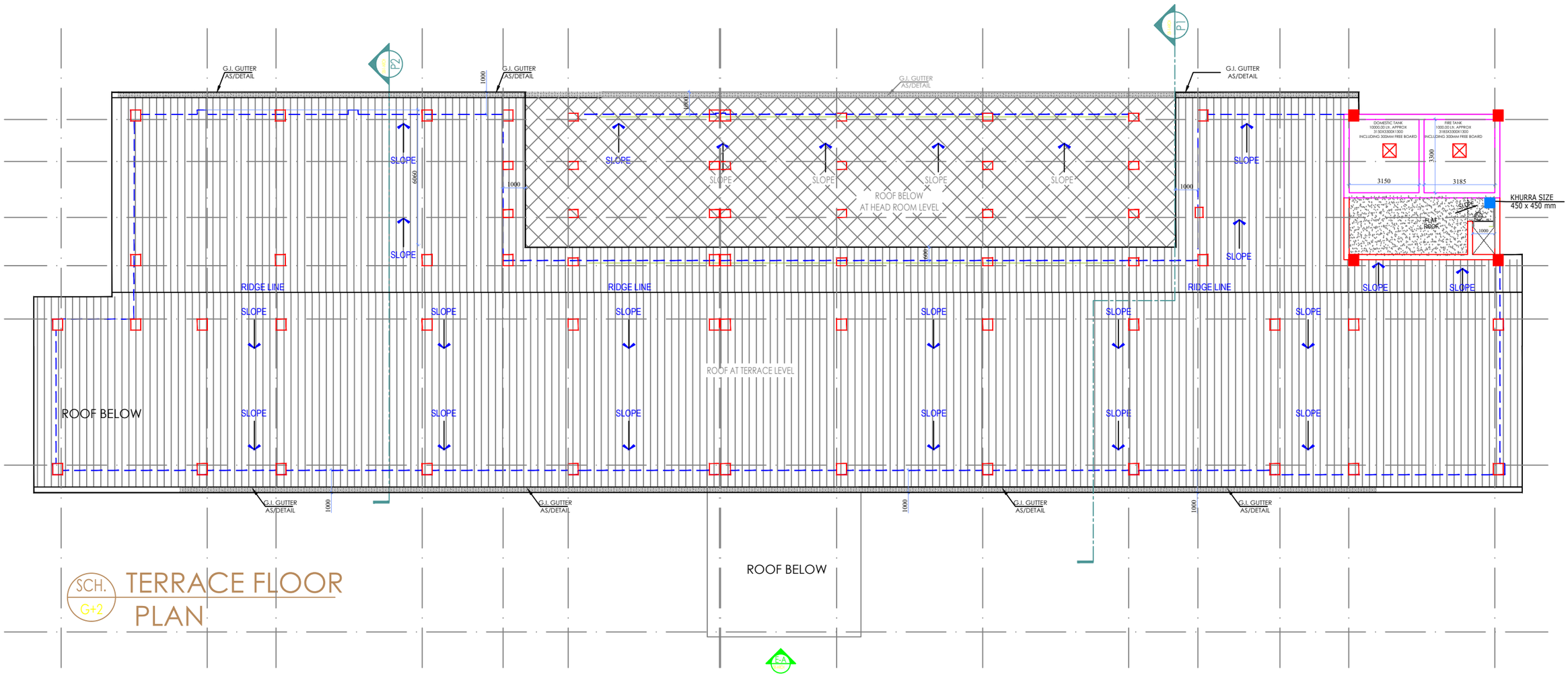
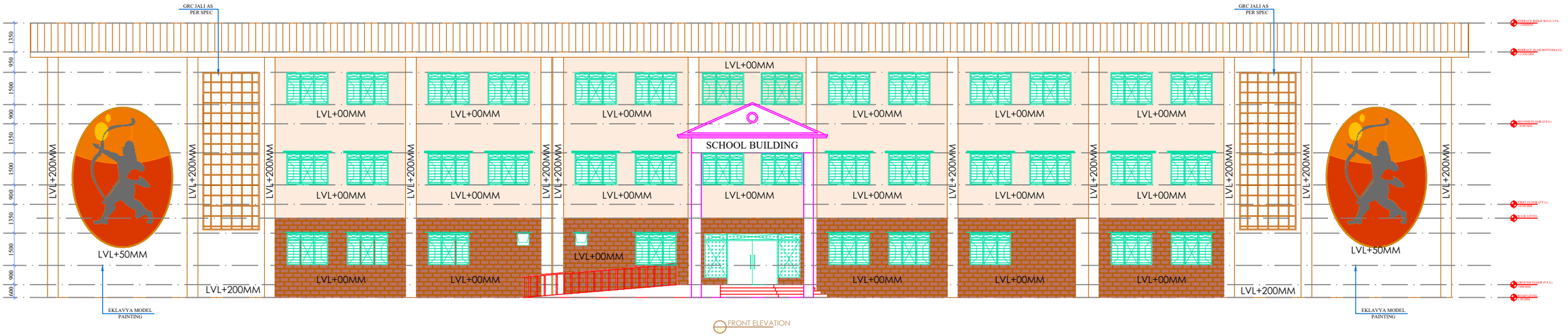
Chief Engineer & Consultant

DWG. NO.- EMRS NAME/SCH/AR_03	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
SCHOOL SECOND FLOOR PLAN		

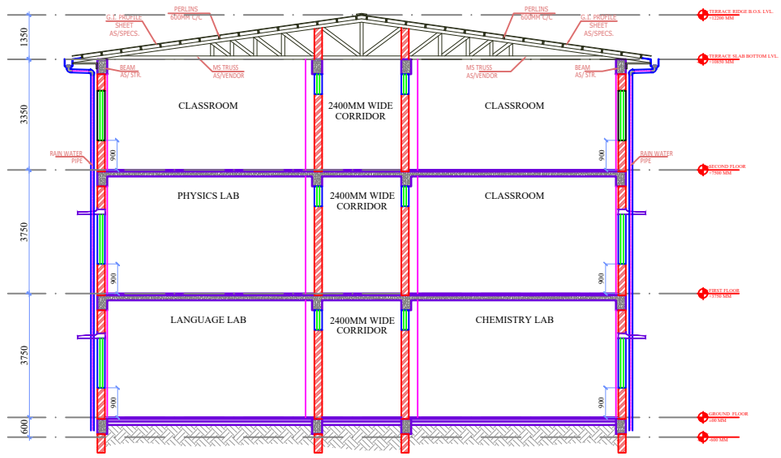


A D P Keshri
Chief Engineer & Consultant

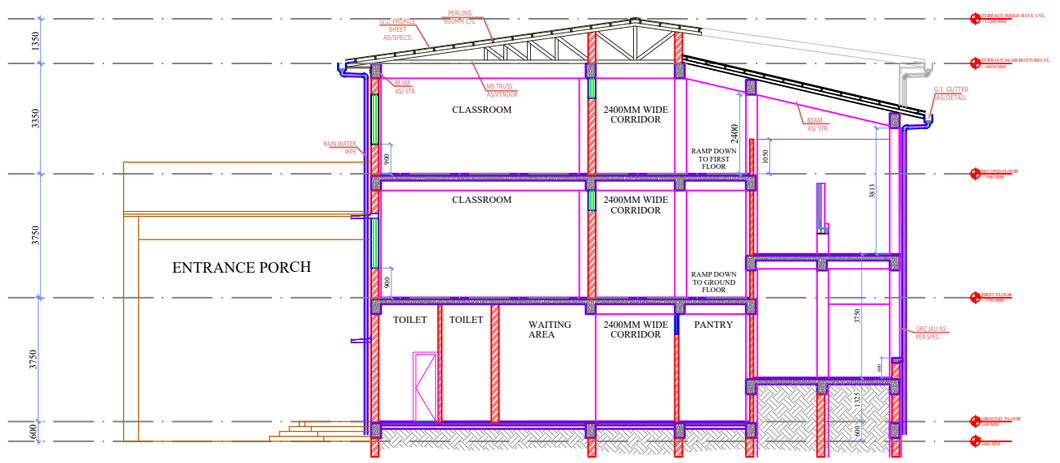
DWG. NO.- EMRS NAME/SCH/AR_04	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
SCHOOL ROOF FLOOR PLAN		



FRONT ELEVATION



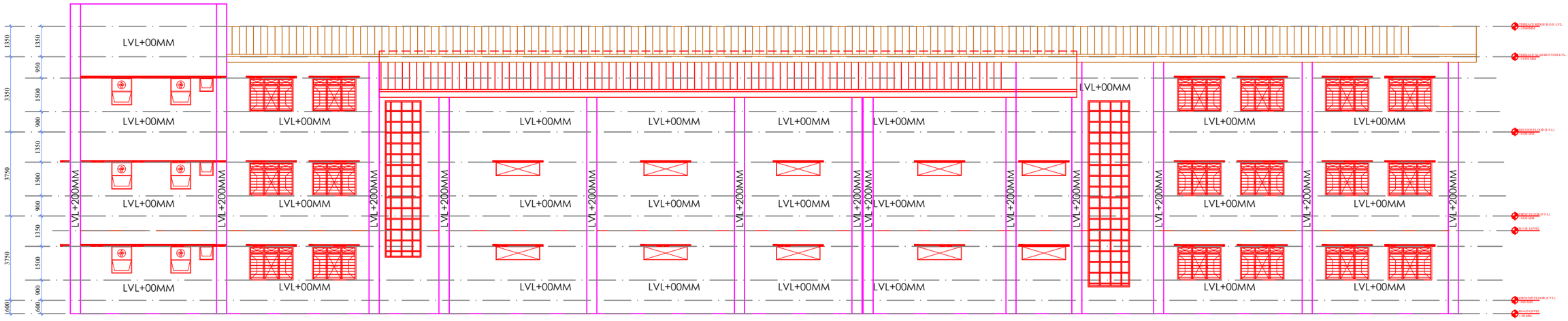
SECTION -P2



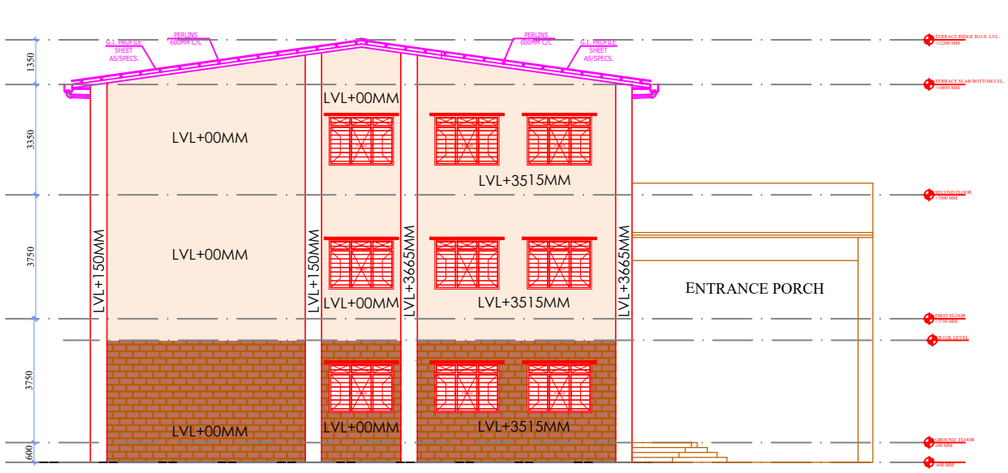
SECTION -P1

A D P Keshri
Chief Engineer & Consultant

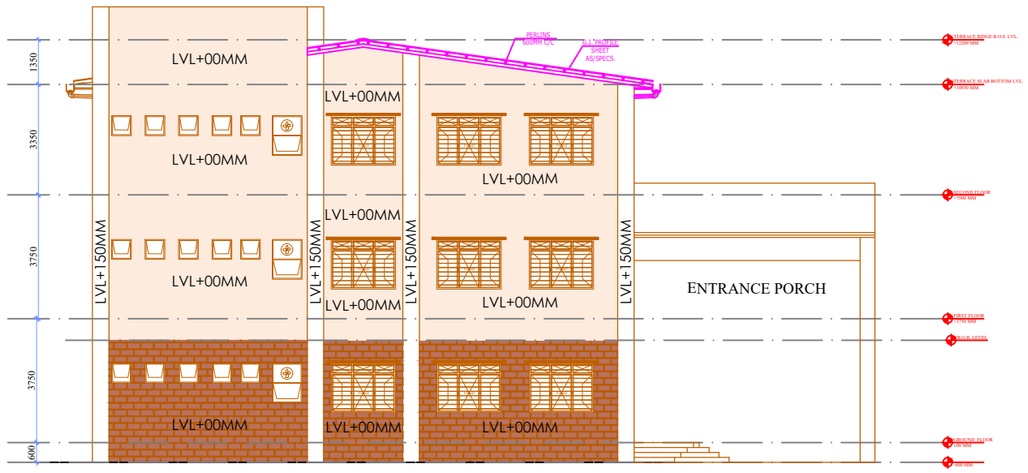
DWG. NO.- EMRS NAME/SCH/AR_05	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
SCHOOL ELEVATION, SECTION		



REAR ELEVATION



SIDE ELEVATION



SIDE ELEVATION

pkAgrawal

(N.KUMAR)

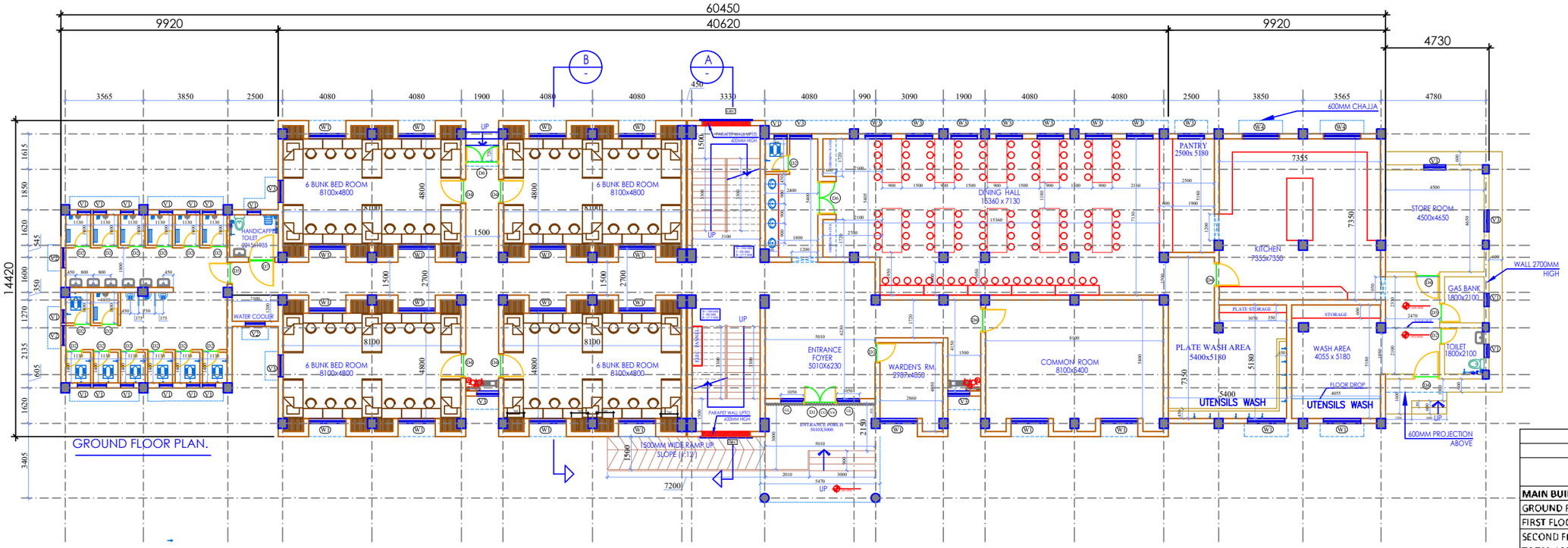
A D P Keshri
Chief Engineer & Consultant

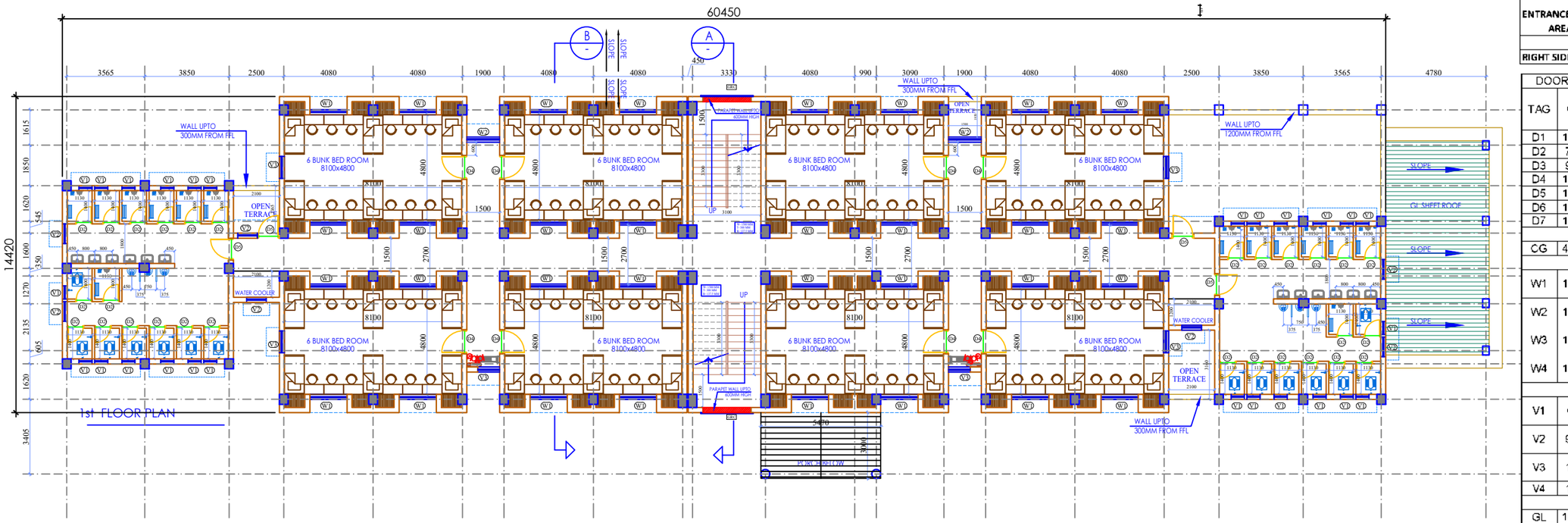
DWG. NO.-
EMRS NAME/SCH/AR_06

SCHOOL
ELEVATION, SECTION

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)





pkAgrawal
(N.KUMAR)

A D P Keshri
Chief Engineer & Consultant

AREA STATEMENT			
HOSTEL BUILDING			
DETAILS	PHASE- I AREA (in Sqm)	PHASE - II AREA (in Sqm)	TOTAL FLOOR AREA
MAIN BUILDING			
GROUND FLOOR PLINTH AREA	419.38	317.16	736.54
FIRST FLOOR PLINTH AREA	359.30	312.61	671.91
SECOND FLOOR PLINTH AREA	359.30	312.61	671.91
TOTAL AREA	**1137.98**	**942.38**	**2080.36**
ENTRANCE PORCH AREA AREA OF PORCH / 2			**9.85**
RIGHT SIDE KITCHEN STORE			**46.21**

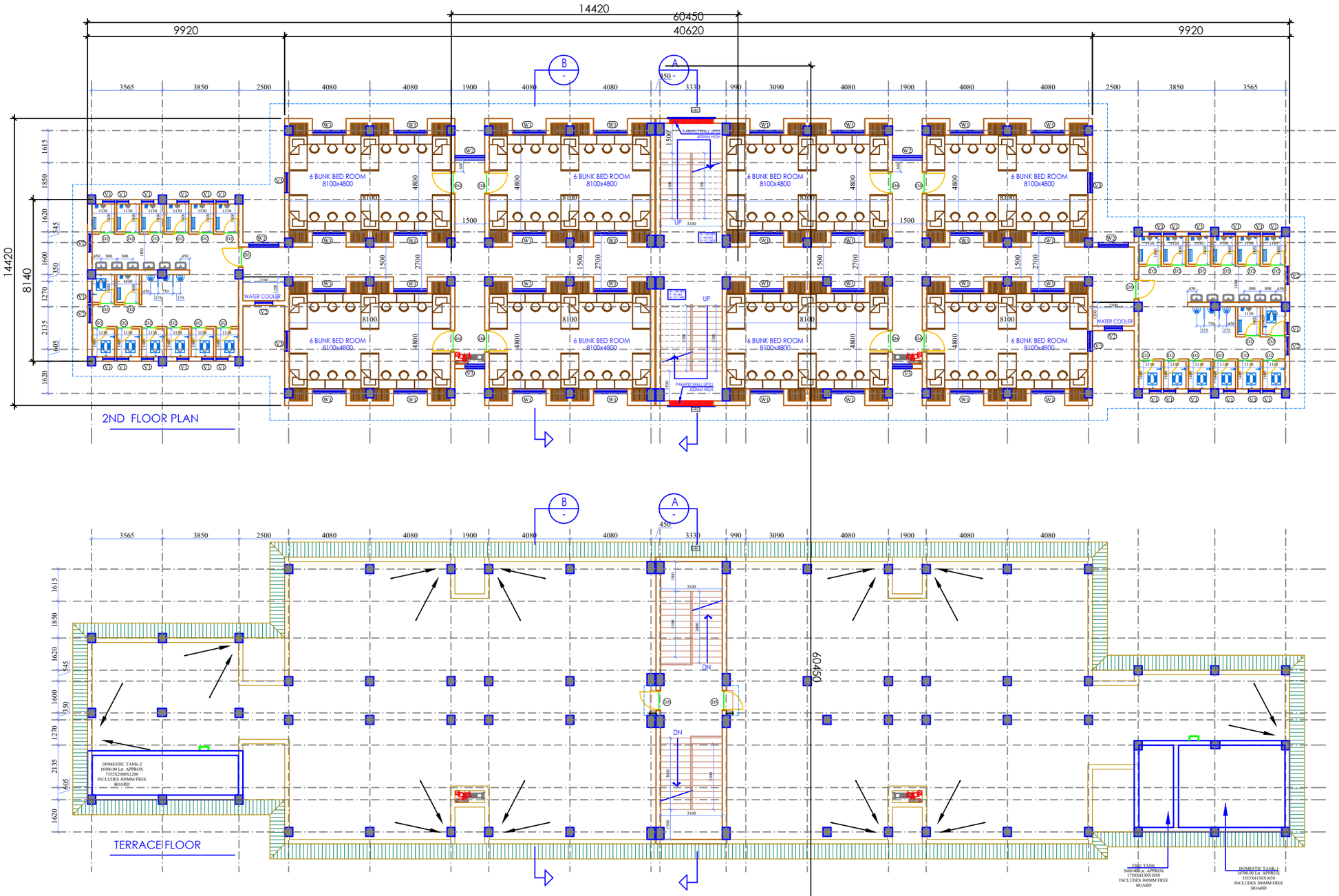
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE					
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF FF SF	MUMTY TOTAL
D1	1500 x 2100	0	2100	1	1
D2	750 x 2100	0	2100	16 28 28	72
D3	900 x 2100	0	2100	2	2
D4	1100 x 2100	0	2100	8 8 8	24
D5	1000 x 2100	0	2100	1 4 2	2 9
D6	1500 x 2100	0	2100	2	2
D7	1200 x 2100	0	2100	1	1
CG	4200 x 2400	0	2400	1	1
W1	1700 x 1800	AS PER SITE	B.O.B	21 31 32	84
W2	1500 x 1800	AS PER SITE	B.O.B	3 4	7
W3	1200 x 1800	AS PER SITE	B.O.B	8	8
W4	1700 x 1500	AS PER SITE	B.O.B	2	2
V1	600 X 600	AS PER SITE	B.O.B	17 26 26	69
V2	900 x 1200	AS PER SITE	B.O.B	3 7 6	16
V3	1000 x 600	AS PER SITE	B.O.B	6 6 6	18
V4	1500 x 600	2100	B.O.B	1	1
GL	1050 X 2100	300	2400	2	2

DWG. NO.-
EMRS NAME/BH/AR_01

TITLE
HOSTEL-BOYS

SCALE:

MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)

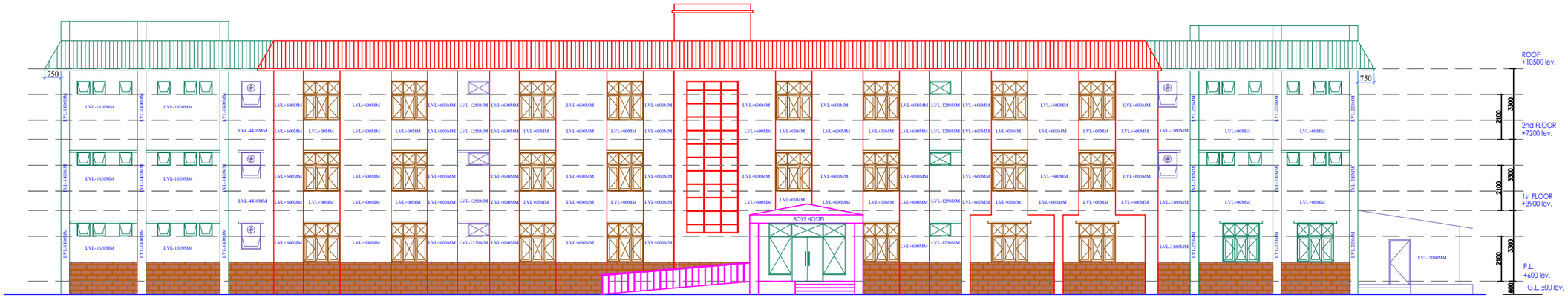


pleAgrawal

(N.KUMAR)

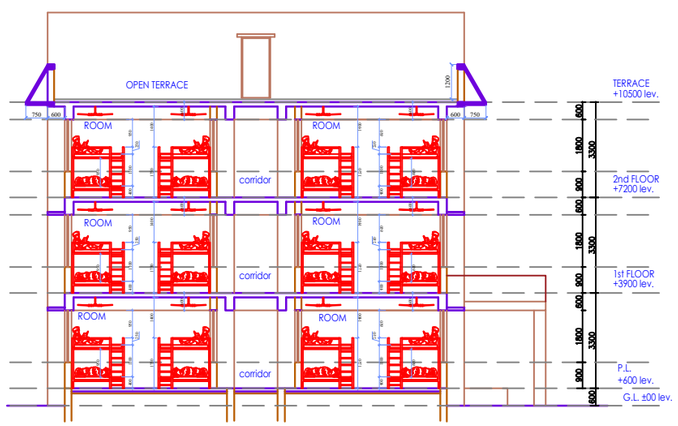
A D P Keshri
Chief Engineer & Consultant

	DWG. NO.- EMRS NAME/BH/AR_02	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
	TITLE: HOSTEL-BOYS		



FRONT ELEVATION

SECTION - A.

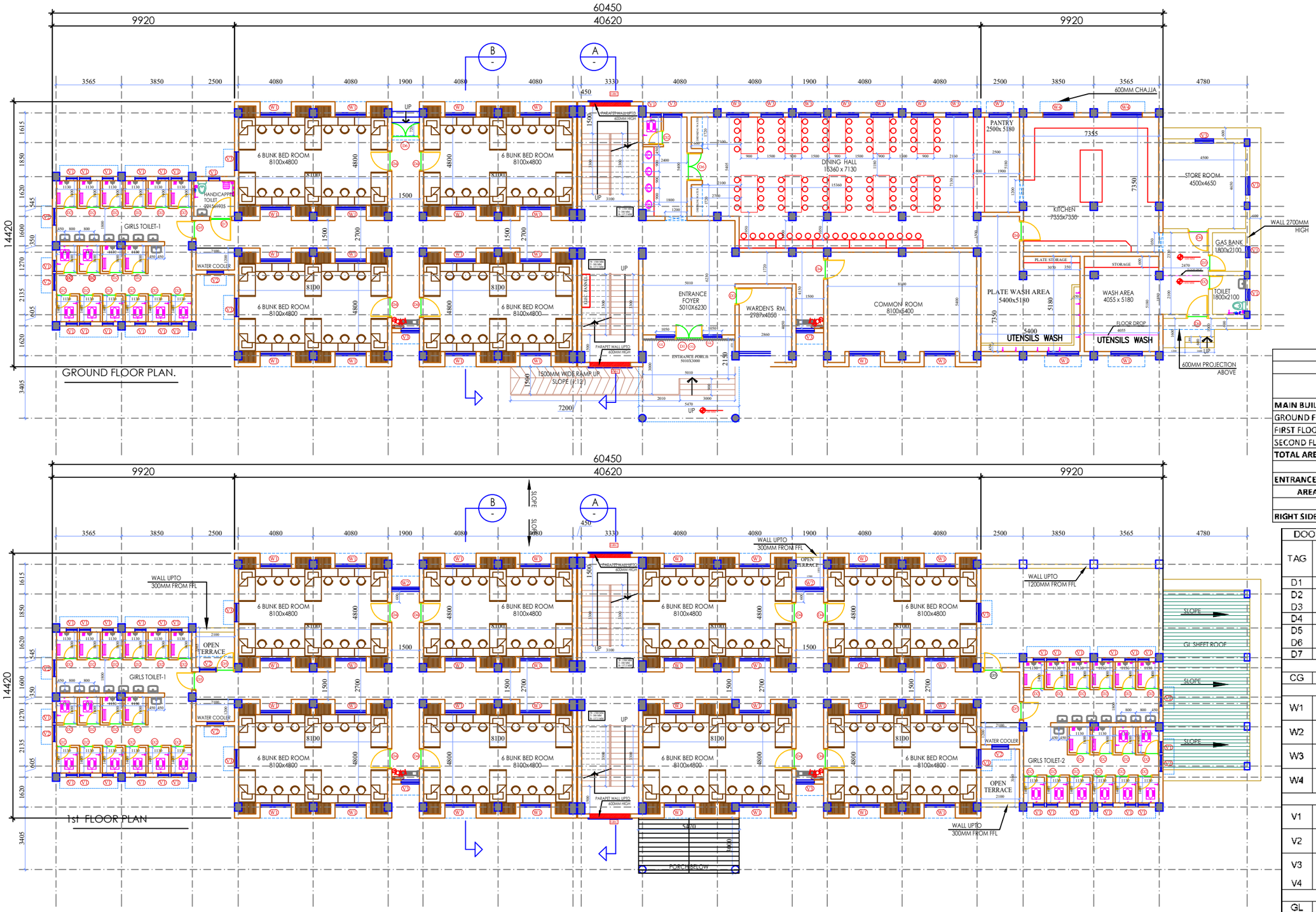


SECTION - B.

pleAgrawal
(N.KUMAR)
(PK Garg)

A D P Keshri
Chief Engineer & Consultant

	DWG. NO.- EMRS NAME/BH/AR_03	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
	TITLE HOSTEL-BOYS SECTION & ELEVATION		



pkAgrawal
(N.KUMAR)
(PK Garg)

A D P Keshri
Chief Engineer & Consultant

AREA STATEMENT			
HOSTEL BUILDING			
DETAILS	PHASE- I AREA (in Sqm)	PHASE - II AREA (in Sqm)	TOTAL FLOOR AREA
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TOTAL AREA	**1137.98**	**942.38**	**2080.35**
ENTRANCE PORCH AREA			
AREA OF PORCH / 2			**9.85**
RIGHT SIDE KITCHEN STORE			**46.21**

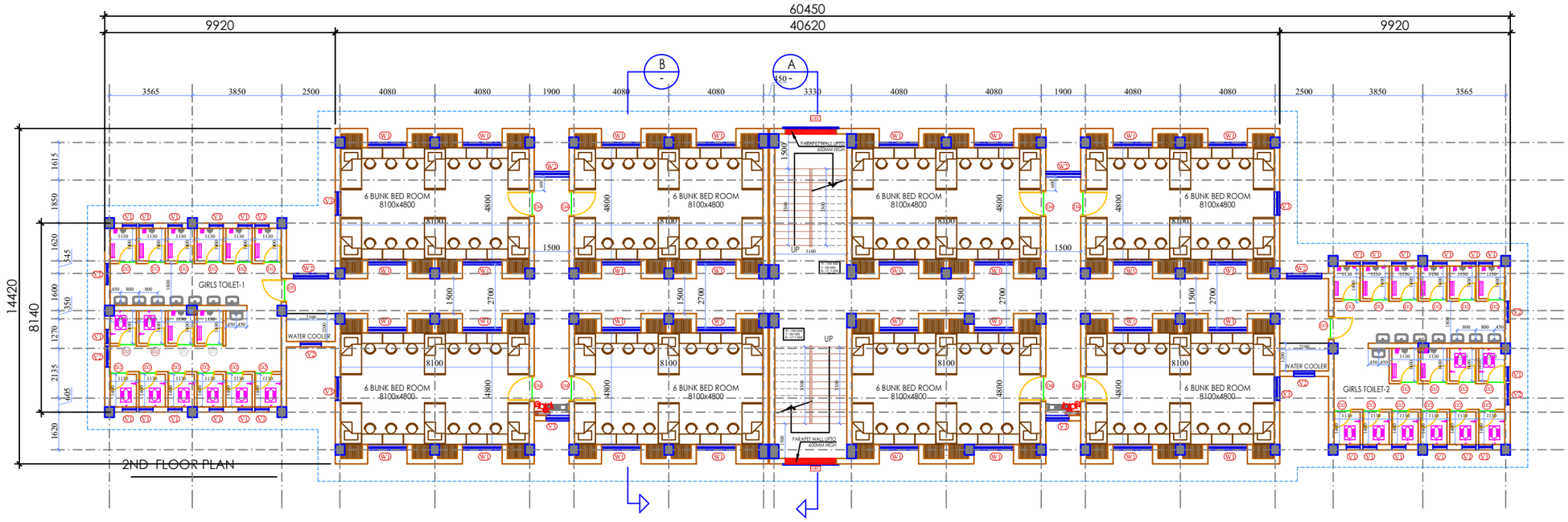
DOOR, WINDOW, VENTILATOR, FIXED GLAZING SCHEDULE								
TAG	CLEAR OPENING SIZE	SILL	LINTEL	GF	FF	SF	MUMTY	TOTAL
D1	1500 x 2100	0	2100	1				1
D2	750 x 2100	0	2100	18	32	32		82
D3	900 x 2100	0	2100	2				2
D4	1100 x 2100	0	2100	8	8	8		24
D5	1000 x 2100	0	2100	1	4	2	2	9
D6	1500 x 2100	0	2100	2				2
D7	1200 x 2100	0	2100	1				1
CG	4200 x 2400	0	2400	1				1
W1	1700 x 1800	AS PER SITE	B.O.B	21	31	32		84
W2	1500 x 1800	AS PER SITE	B.O.B		3	4		7
W3	1200 x 1800	AS PER SITE	B.O.B	8				8
W4	1700 x 1500	AS PER SITE	B.O.B	2				2
V1	600 X 600	AS PER SITE	B.O.B	17	26	26		69
V2	900 x 1200	AS PER SITE	B.O.B	3	7	6		16
V3	1000 x 600	AS PER SITE	B.O.B	6	6	6		18
V4	1500 x 600	2100	B.O.B	1				1
GL	1050 X 2100	300	2400	2				2

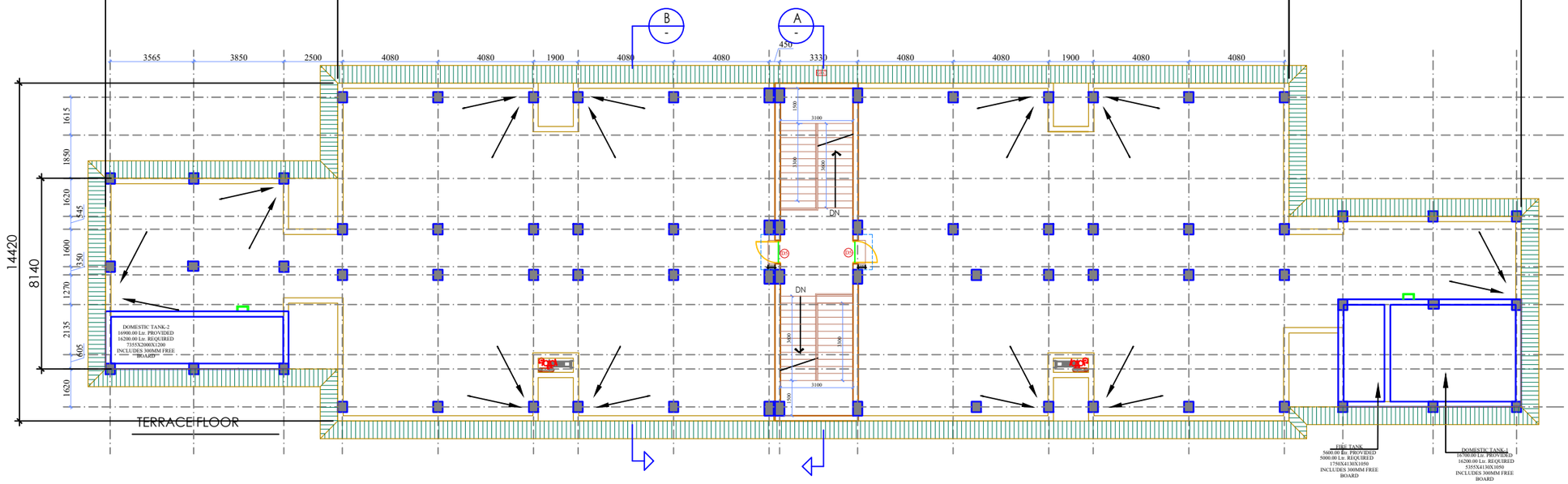
DWG. NO.-
EMRS NAME/GH/AR_01

TITLE
HOSTEL-GIRLS

SCALE:

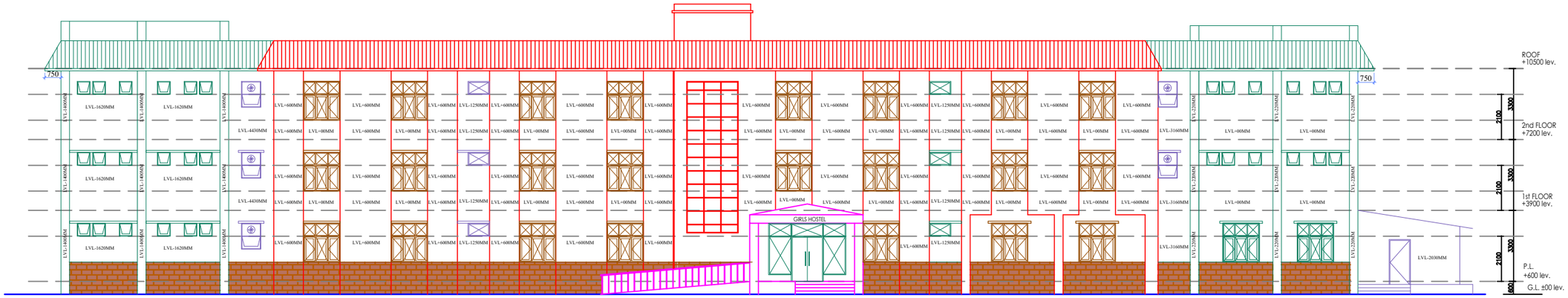
MINISTRY OF TRIBAL AFFAIRS
NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)



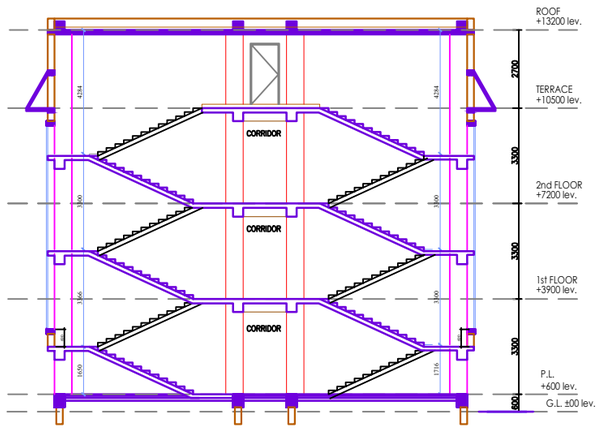


A D P Keshri
Chief Engineer & Consultant

	DWG. NO.- EMRS NAME/GH/AR_02	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)
	TITLE HOSTEL-GIRLS		



FRONT ELEVATION



SECTION - A.

SECTION - B.

pleAgrawal
(N.KUMAR)
(PK Gaur)

A D P Keshri
Chief Engineer & Consultant

	DWG. NO.- EMRS NAME/GH/AR_03 TITLE HOSTEL-GIRLS SECTION & ELEVATION	SCALE:	MINISTRY OF TRIBAL AFFAIRS NATIONAL EDUCATION SOCIETY FOR TRIBAL STUDENTS (NESTS)