

H-86936/C-5/O.A.No-654/2022/2023 Dt-06/01/23

From,  
Chief Environmental Officer,  
Uttar Pradesh Pollution Control Board,  
Lucknow.

To,  
**The Registrar General,  
Principal Bench,  
Hon'ble National Green Tribunal,  
Copernicus Marg, New Delhi.**

**Sub:-Regarding Joint Inspection report in compliance of Order dated 16.09.2022 in O.A. No. 654/2022 Priyadarshini Colony D, residence Welfare Society Versus State of Uttar Pradesh & Ors.**

Sir,

In compliance of the direction passed by Hon'ble National Green Tribunal dated 16.09.2022 on matter mentioned above, the joint Inspection report is hereby attached with a request to put up before Hon'ble National Green Tribunal for kind perusal.

**Enclosure : As Above.**

Yours Sincerely,



(Dr. Ram Karan)

**Chief Environmental Officer, Circle-5**

**Copy to :**

1. Shri Pradeep Mishra, Advocate for UPPCB.
2. Law Officer (First), UPPCB, Lucknow.
3. Regional Officer, UPPCB, Lucknow.

**Chief Environmental Officer, Circle-5**

# Joint Inspection Report

(12-12-2022)

Of

Garbage lying on the dumping site i.e. Bandha Road, Faizzullaganj, Priyadarshini Colony, Sector- D,Lucknow.

Priyadarshini Colony D, residence Welfare Society V/s State of Uttar Pradesh  
&Ors.Pradesh

(O.A. no 654/2022)

Prepared by

The joint committee of Nagar Nigam, Lucknow

And

Regional Office U.P. Pollution Control Board Lucknow

Constituted by

Hon'ble National Green Tribunal

(Order dated 16<sup>th</sup> September, 2022)

**Joint Inspection Report of garbage lying on the dumping site i.e. Bandha Road, Faizzullaganj, Priyadarshini Colony, Sector- D, Lucknow, compliance of direction issued by Hon'ble National Green Tribunal in case of O.A. No. 654/2022 Priyadarshini Colony D, residence Welfare Society V/s State of Uttar Pradesh &Ors.-**

Hon'ble NGT, New Delhi vide order dated 16-09-2022 in the matter of O.A. No. 654/2022 Priyadarshini Colony D, residence Welfare Society V/s State of Uttar Pradesh &Ors. had directed following-

Hon'ble NGT, New Delhi in O.A. No. 654/2022 Priyadarshini Colony D, residence Welfare Society V/s State of Uttar Pradesh &Ors. has passed wide order dated 16-09-2022. The main content of the order are as follows:-

“.....1. Grievance in this application is against violation of environmental norms in shifting the dumping zone and garbage lying on the dumping site i.e. Bandha Road, Faizzullaganj, Priyadarshini Colony, Sector-D, Lucknow. It is stated that such unscientific dumping of solid waste is resulting in foul and obnoxious smell in violation of Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986. The applicant has annexed certificate dated 15.05.2022 issued by the Vardhaman Hospital, Lucknow that garbage site at Priyadarshini Colony was resulting in diseases. There is also a letter of Dr. Neeraj Bhora, MLA, UP Assembly dated 16.05.2022 addressed to Commissioner, Municipal Corporation, Lucknow forwarding the representation of the Welfare Association on the subject.

2. Having regard to above, since unscientific dumping of waste results in damage to the environment and public health, let the facts be verified and report furnished by joint Committee of Municipal Corporation, Lucknow and UP State PCB within two months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. The UP State PCB will be the nodal agency for compliance. The report may mention the status of waste processing and remediation of legacy waste. ... ..”

In compliance to the aforesaid direction of Hon'ble NGT, a joint committee comprising:-

1- Environmental Engineer (EE), Nagar Nigam, Lucknow.

2- Assistant Environmental Engineer (AEE), Regional Office, Uttar Pradesh Pollution Control Board (UPPCB), Lucknow.

The joint Committee has inspected of dumping site i.e. Bandha Road, Faizzullaganj, Priyadarshini Colony, Sector- D, Lucknow, dated- 12-12-2022, The details of finding at the time of inspection are as follows-



### **Observation found during Joint Inspection on dated 12-12-2022**

1. The Municipal solid Waste Transfer Station, Puraniya is spread over an area of approx. 5485.7059 Sq.mt. where municipal solid waste collected at transfer station Puraniya is sent to Sivari main plant for MSW processing.
2. The center is operated by M/s Eco green Energy Pvt. Ltd, Lucknow.
3. The primary waste collection from door to door is carried out by operator of the center (M/ Eco green energy Pvt. Ltd.) in 19 wards of Nagar Nigam Zone-III. The Nagar Nigam Zone- III wards covers Mahanagar, Aliganj, MahaKavi Jai Shanker Prasad, Ayodhyadās-1, Ayodhyadas-2, Jankipuram-1&2, Faizullaganj 2&3, Nirala Nagar, Daliganj Mnkameswar, Begam Hazarat Mahal, Lala Lajpat rai, Kadam Rasool, Vivekanandpuri Triveninagar
4. As informed by the operator of station Nagar Nigam also collect the waste from nearby area of Zone-1 & 7 and Zone-3 from open dump side and send to transfer station Puraniya.
5. The facility at transfer centre comprises of 70 E -rickshaw, Plazio-05, Tatazip-05, Bolero 05, containers-07, JCB-03, tractor & trolley-05.
6. As informed by operator of the centre approx. 150 Tonn/day Municipal Solid waste received from Nagar Nigam Zone III Wards from one lacks four thousand house hold (1,04,000 houses) through 70, e-Riksha, Mannual riksha-50, Pzio-05, Tatazip-05 etc
7. During inspection, approx.100 Tonn of waste was observed collected at transfer center, due to accumulation of huge quantity of waste at centre unpleasant odour felt at and transfer station.
8. The Puraniya transfer station is located adjacent to Pridarshini Nagar colony sector C&D, Sitapur Road, Lucknow.
9. During inspection, it was observed that boundary wall of the station has low height from all sides. Main gate of the station is often open which causes entry of animals around the waste collected.
10. Drainage system of the center was chocked due to MSW, which need to clean regularly.
11. The waste transfer station has not obtained NOC from UPPCB for operation of centre.
12. The height of boundary wall and fencing around station sufficient but operator has not develop green belt around boundary wall.



13. During inspection, due to continuous movement of waste loading vehicles dust emission was also observed.

**Recommendations:-**

1. The facility may be directed for immediate disposal of waste accumulated at transfer station to main processing plant at Shivari.
2. Regular monitoring should be carried.
3. The operator should develop green belt around boundary wall.
4. The Nagar Nigam, sanitary inspector may ensure regular supervision of transfer station for regular lifting of waste collected at transfer centre to avoid the accumulation of waste. He shall also submit its report to The UPPCB on daily basis.
5. The operator of station may prohibit the entry of animals inside transfer station and maintain the drainage system of station.

**Action taken proposed-**

- 1- It is proposed to improve the functioning of Lucknow Municipal Corporation Transfer Station.
- 2- Detail project report for MRF cum Transfer Station prepared by Nagar Nigam, Lucknow, Tender process of required Improvement work is under process.

**As annexure-1**

  
AEE

  
E.E.

Photo gallery:

Photographs taken during inspection of garbage lying on the dumping site i.e. Bandha Road, Faizzullaganj, Priyadarshini Colony, Sector- D, Lucknow on dated 12-12-2022.

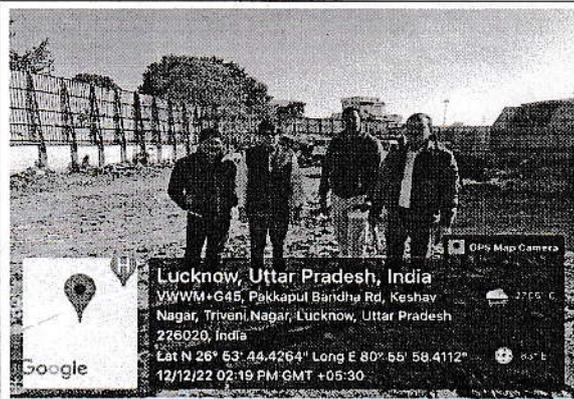


Photo 1:

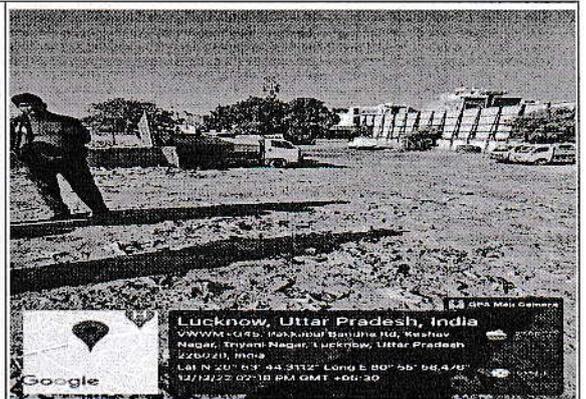


Photo 2 :



Photo 3:

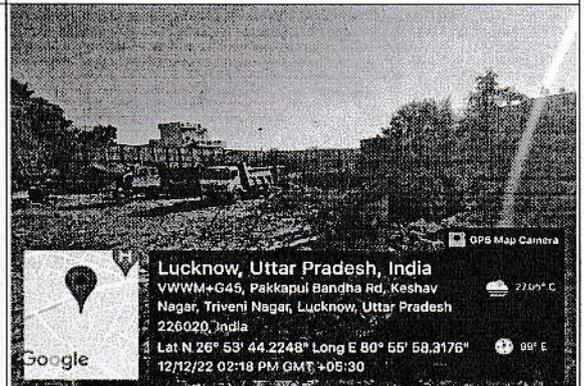


Photo 4:

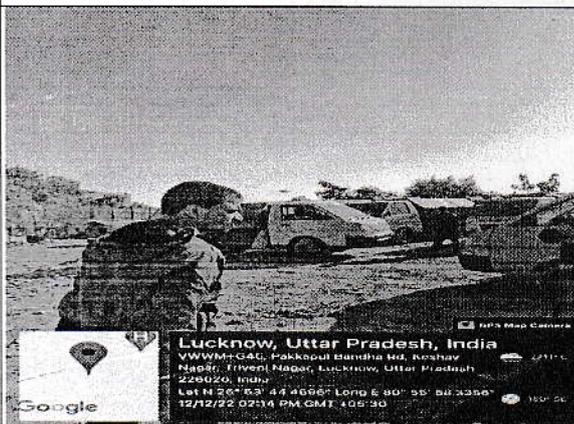


Photo 5:



Photo 6:

*Handwritten signature and initials: BG*



Photo 7:

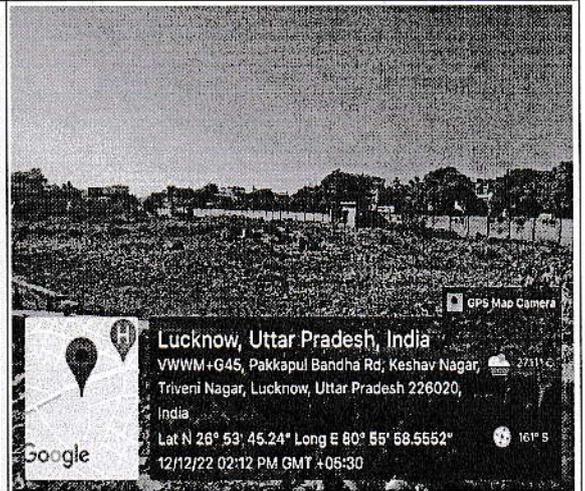


Photo 8:

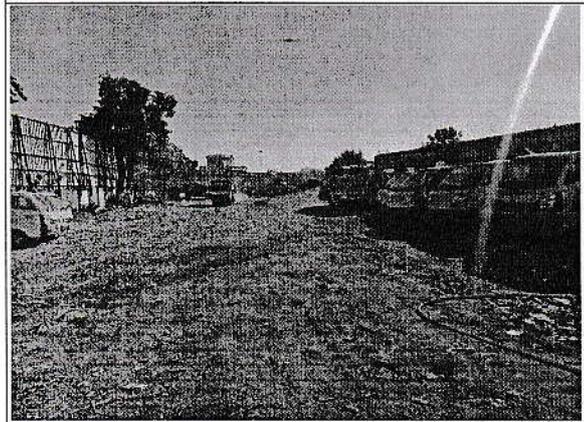


Photo 9:

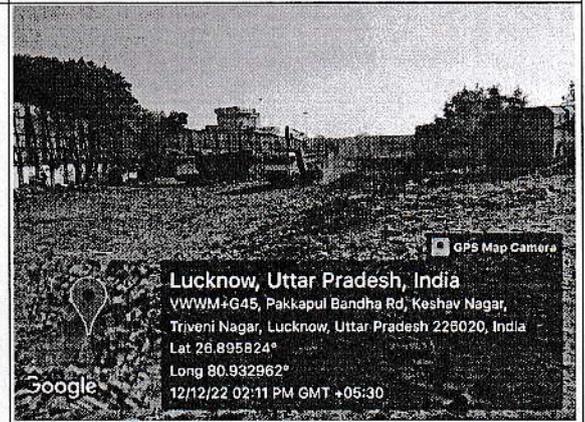


Photo 10:

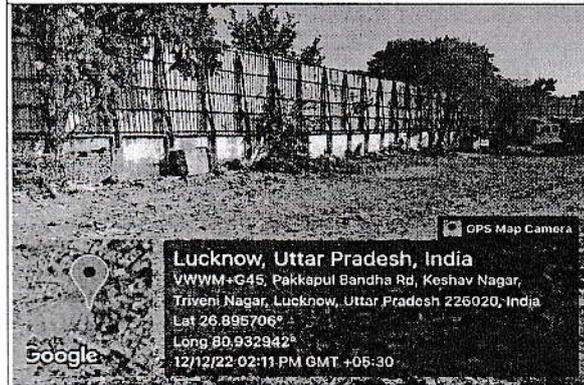


Photo 11:

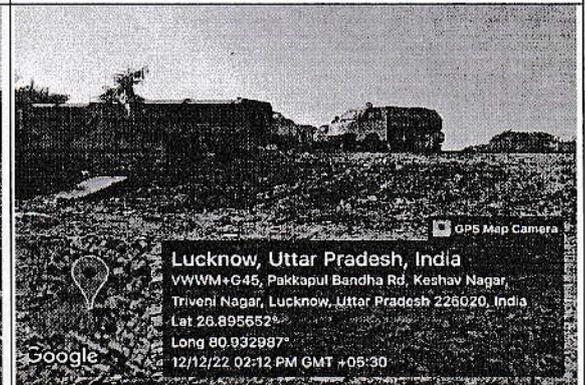


Photo 12:

*Handwritten signature in blue ink.*

**Inspection team:**

<b>Sr. No.</b>	<b>Name of Inspecting Officers</b>	<b>Designation</b>	<b>Signature</b>
1	Sanjeev Pradhan	Environmental Engineer(EE), Nagar Nigam, Lucknow	
2	Vinod Kumar	AEE, Regional Office, UPPCB, Lucknow.	



Annexure-I

# DETAIL PROJECT REPORT ON MRF CUM TRANSFER STATION AT LUCKNOW NAGAR NIGAM, LUCKNOW, UTTAR PRADESH



**McMRF System Overview**

**YEAR 2022**

**Submitted by: Aditya Construction**



MRF CUM TRANSFER STATION SWM LUCKNOW

GENERAL ABSTRACT OF COST

Sl. No.	Particulars	Total Cost in RS.
<b>A</b>	<b>Site Development Works</b>	
1	Road Work	9,10,681.00
2	Drainage Work	6,54,075.00
3	Entry Gate(2Nos.)	1,93,722.00
4	Toilet Block	6,45,854.00
5	MRF cum TS Facility	3,71,44,015.00
6	Water Supply Facility	12,31,200.00
7	Electrification	24,64,408.00
8	Parking and working floor	9,19,050.86
9	Horticulture	2,73,570.00
<b>B</b>	<b>Machine &amp; Vehicles</b>	
1	Machine	1,81,34,500.00
2	Static Compactor Assembly	3,54,25,960.00
	<b>Total (a)</b>	<b>97997036.00</b>
	Add Contingencies 2% on Total (a)	19,59,941.00
	<b>Total (b)</b>	<b>9,99,56,977.00</b>
	Add GST 18% on Total B(excluding item B-1 & B-2)	79,98,584.00
	Add Labour cess 1% on Total (b)	9,99,570.00
	<b>Sub total</b>	<b>10,89,55,131.00</b>
	<b>Say In Lacs</b>	<b>1089.55</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**List of Machinerires & Equipment required at MRF centre of 300 TPD Capacity**

A	List of MRF Equipments	Req. Qty	Unit	Unit Price	Total
1	Hopper (Receiving Chamber)	1	Each	1,25,000.00	1,25,000.00
2	Feeding Conveyor to VADS (FC - 1)	1	Each	9,77,500.00	9,77,500.00
3	Volumetric Air Density Seperator (40 TPH)	1	Each	42,50,000.00	42,50,000.00
4	Discharge and Manual Sorting Conveyor (+) Size	1	Each	15,67,500.00	15,67,500.00
5	Discharge Conveyor to Manual Sorting Conveyor (-) Size	1	Each	5,32,000.00	5,32,000.00
6	Manual Sorting Conveyor (-) Size	1	Each	15,67,500.00	15,67,500.00
7	Hopper (Receiving Chamber)	2	Each	1,50,000.00	3,00,000.00
8	Collection Chutes/Hopper	2	Each	3,10,000.00	6,20,000.00
9	Discharge Conveyors from Collection Chutes	18	Each	2,10,000.00	37,80,000.00
10	Discharge Conveyors to Storage	2	Each	9,15,000.00	18,30,000.00
14	Bailing Press	1		10,50,000.00	10,50,000.00
15	Weigh Bridge	1		6,50,000.00	6,50,000.00
16	Sets of CCTV Camera with Scada	1		1,85,000.00	1,85,000.00
17	Vehicle Washing Equipments	1		2,00,000.00	2,00,000.00
18	Leachete Treatment Plant & Accessories	1		5,00,000.00	5,00,000.00
				<b>Total</b>	<b>1,81,34,500.00</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**List of Machinerires & Equipment required at Transfer Station**

ITEM NO.	DESCRIPTION	QTY	UOM	UNIT PRICE	AMOUNT (RS.)
				TOTAL UNIT PRICE (FOR)	
<b>1.0</b>	<b>Static Compactor with Top Loading Receiving Hopper (Model: TPS-SCTS-3000) comprising of:-</b>				
1.1	Stationary Compactor				
1.2	Garbage Storage Hopper (20 Cum)				
1.3	Hydraulic Compaction Container Coupling				
1.4	Hydraulic Vertical Locking Mechanism				
1.5	Hydraulic Push-Pull Cylinder	2	Nos.	<b>70,09,200.00</b>	<b>1,40,18,400.00</b>
<b>2.0</b>	<b>Truck Mounted Hook Loader suitable for handling 20 Cu.M skips suitable to be mounted on 28 T GVW BS-VI (6X2) Truck Chasis with driver's cabin and PTO (Model: TPS-HL-28(6X2).</b>				
		2	Nos.	<b>65,37,200.00</b>	<b>1,30,74,400.00</b>
<b>3.0</b>	<b>20 Cu.M Capacity Roll-On Roll-Off Containers compatible for Handling with above Hook Loaders Model: TPS-RORO-20)</b>				
		6	Nos.	<b>13,88,860.00</b>	<b>83,33,160.00</b>
<b>GRAND TOTAL</b>					<b>3,54,25,960.00</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Abstract of cost of Road**

Sl. No.	DSR 2021	Description of work	QTY.	UNIT	RATE IN Rs.	AMOUNT IN Rs.
1	2	3	4	5	6	7
1	2.3.1	Banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m				
		All kinds of soil	72.00	Cum	470.96	33909.12
2	16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.				
			540.00	Sqm	156.44	84477.60
3	16.2	Extra for compaction of earth work in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density).				
			4416.00		17.81	78648.96
4	16.3	Supplying and stacking at site.				
	16.3.1	90 mm to 45 mm	112.50	Cum	1679.32	188923.50
	16.3.2	63 mm to 45 mm	67.50	Cum	1407.95	95036.63
	16.3.3	53 mm to 22.4 mm	45.00	Cum	1592.34	71655.30

Sl. No.	DSR 2021	Description of work	QTY.	UNIT	RATE IN Rs.	AMOUNT IN Rs.
1	2	3	4	5	6	7
5	16.4	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road/vibratory roller 8-10 tonne capacity in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density .				
	(i)	Subbase with stone aggregate 90 mm to 45 mm including stone screening 13.2 mm size.	112.50	Cum	750.39	84418.88
	(ii)	Base course with 63 mm to 45 mm size including stone screening 13.2 mm size.	67.50	Cum	750.39	50651.33
	(iii)	Base course with 53 mm to 22.4 mm size including stone screening 11.2 mm size.	45.00	Cum	750.39	33767.55
6	16.7.1	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	180.00	M	155.57	28002.60
7	16.9	Scarifying metalled (water-bound) road surface including disposal of rubbish, lead upto 50 m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonne capacity	450.00	Sqm	23.88	10746.00
8	16.25	Surface dressing on new surface with paving bitumen of grade VG - 10 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface, including consolidation with road roller of 6 to 8 tonne capacity etc. complete:	450.00	Sqm	154.40	69480.00

Sl. No.	DSR 2021	Description of work	QTY.	UNIT	RATE IN Rs.	AMOUNT IN Rs.
1	2	3	4	5	6	7
9	16.31.1	Providing and applying tack coat using bitumen emulsion conforming to IS:8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom. With rapid setting bitumen emulsion On W.B.M / W.M.M. @ 0.4kg/sqm	450.00	Sqm	10.05	4522.50
10	16.32.3	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively, including a tack coat with hot straight run bitumen, including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately). With Refinery Modified Bitumen CRMB 55 conforming to IRC: SP: 53	450.00	Sqm	169.87	76441.50
					<b>Total Rs.</b>	<b><u>910681.46</u></b>
					<b>Say Rs.(in lacs)</b>	<b>9.11</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Detailed Measurement of Road**

Sl. No.	DSR 2021	Description Of Work	No	L	B	H	Qty.	Unit
1	2	3	4	5	6	7	8	9
1	2.3	Banking excavated earth in layers not exceeding 20 cm. In depth, breaking clods, watering, rolling each layer with 1/2 tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, floods banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m.						
		Earth available from excavation of SLF.	90	8.00	0.1		72.00	Cum
2	16.1	Preparation of subgrade by excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and disposal of surplus earth lead upto 50 meteres.	90.00	6.00			540.00	Sqm
3	16.2	Extra for compaction of earth work in in embankment under optimum moisture conditions to give at least 95% of the maximum dry density (proctor density)					4416.00	Cum
4	N.S	Supplying and stacking of graded stone aggregate at site of size range.						
	a)	90 mm to 45 mm	90.00	5.00	0.25		112.50	Cum
	b)	63 mm to 45 mm	90.00	5.00	0.15		67.50	Cum
	c)	53 mm to 22.4 mm	90.00	5.00	0.10		45.00	Cum
5	16.4	Laying water bound macadam with specified stone aggregate stone screening and blinding material including screening screening, sorting, spreading to template and consolidation with power road roller of 8 to 10 tonne capacity etc. complete ( payment for stone aggregate, screenings, kankar, moorum and red bajri etc. to be made separately).						
	(i)	Subbase with stone aggregate 90 mm to 45 mm including stone screening 13.2 mm size.	90.00	5.00	0.25		112.50	Cum

Sl. No.	DSR 2021	Description Of Work	No	L	B	H	Qty.	Unit
1	2	3	4	5	6	7	8	9
	(ii)	Base course with 63 mm to 45 mm size including stone screening 13.2 mm size.		90.00	5.00	0.15	67.50	Cum
	(iii)	Base course with 53 mm to 22.4 mm size including stone screening 11.2 mm size.		90.00	5.00	0.10	45.00	Cum
6	16.7.1	Brick edging in full brick width and half brick depth including excavation, refilling and disposal of surplus earth lead upto 50 metres.	2	90.00			180.00	M
7	16.9	Scarifying metalled (water-bound) road surface including disposal of rubbish lead upto 50 m and consolidation of the aggregate received from scarifying with power road roller of 8 to 10 tonne capacity.		90.00	5.00		450.00	Sqm
8	16.25	Surface dressing on new surface with paving of grade A-90/S-90 of approved quality using 2.25 kg of bitumen per sqm with 1.65 cum of stone chippings 13.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 ton capacity etc. complete.		90.00	5.00		450.00	Sqm
9	16.31.1	Providing and applying tack coat using bitumen emulsion (Rapid setting) complying with IS 8887-1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications on W.B.M @ 0.40 kg/sqm.		90.00	5.00		450.00	Sqm
10	16.32.3	2 cm premix carpet surfacing with 1.8 cum and 0.90 cum of stone chippings of 13.2 mm size and 11.2 mm size respectively per 100 sqm and 52 kg and 56 kg of hot bitumen per cum of stone chippings of 13.2 mm and 11.2 mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 ton capacity etc. complete with refinery modified bitumen CRMB 55 conforming to IRC : SP : 53-1999.		90.00	5.00		450.00	Sqm

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Estimate of Drains**

Sl. No.	UP PWD /DSR	Description Of Work	No	L	B	H	Qty.	Unit	Rate In Rs.	Amount In Rs.
1	2	3	4	5	6	7	8	9	10	11
1	251	Excavation in foundation in ordinary soil (loamclay or sand) including lift up to 1.5m and lead up to 30m. and including filling watering and ramming of excavated earth into the space between the building and the sides of foundation trenches or into the plinth and removal and disposal of surplus earth as directed by the Engineer in charge up to a distance of 30m. from the foundation trenches including all T&P phowarah and basket etc. complete. 250 x 300mm size		180.00	0.75	0.62	83.70			
				180.00			83.70	Cum	160.00	13392.00
2	255	Sand filling in plinth including supply of necessary quantity of sand from a distance not exceeding 8 Kms. From the site of work and including watering, dressing etc. Rate to include cost of all materials labour T&P etc. required for proper completion of work  250 x 300mm size		536.00	0.75	0.10	40.20			
							40.20	Sqm	760.00	30552.00
3	619	Same as item no. 615 above but bricks laid flat  250 x 300mm size		180.00	0.75		135.00			
							135.00	Sqm	440.00	59400.00
4	281	As in item 279 above but in proportions of 8:4:1 250 x 300mm size		180.00	0.75	0.10	13.50			
							13.50	Cum	7060.00	95310.00
5	305	Same as above item 303 but in 1:4 (one cement and four coarse sand)	2	180.00	0.25	0.30	27.00			
							27.00	Cum	5070.00	136890.00

Sl. No.	UP PWD /DSR	Description Of Work	No	L	B	H	Qty.	Unit	Rate In Rs.	Amount In Rs.
1	2	3	4	5	6	7	8	9	10	11
6	279	Concrete with 4 cm(1.5") gauge approved stone, ballast, approved coarse sand and cement in the proportion of 4:2:1 including supply of all materials , labours and T&P etc. required for proper completion of work.								
		over brick work	2	180.00	0.25	0.05	4.50	Cum	7600.00	34200.00
7	283A	As in item no 283 above but in prportion of 1:1.5:3								
			0.6	180.00	0.75	0.08	6.08			
							6.08	Cum	8150.00	49552.00
8	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in binding all complete upto plinth level.								
			1%			of item no 7	4.77	Per / Qtl	8757.22	41798.00
9	586	As in item 579 above but with cement and fine sand of 1.25 F.M. Mortar in 1:6								
			2	180.00	0.85		306.00			
							306.00	Sqm	155.00	47430.00
10	DSR 13.18	Neat cement punning.								
			2	180.00	0.85		306.00			
							306.00	Sqm	58.76	17981.00

Sl. No.	UP PWD /DSR	Description Of Work	No	L	B	H	Qty.	Unit	Rate In Rs.	Amount In Rs.
1	2	3	4	5	6	7	8	9	10	11
11	DSR 18.33.1	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm top diameter, 160 mm bottom diameter and 180 mm deep ( inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size ) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :	12				12.00	Nos.	8755.84	105070.00
12	615	First class brick on edge floor laid dry joints sand filled including preparation of base to proper slope and its ramming and including supply of all materials labours & T & P etc. required for proper completion of work.	180		0.25		45.00	sqm	500.00	22500.00
									<b>Total Rs.</b>	<b>6,54,075.00</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Estimate of Entry Gate**

Sl.No	UP PWD / DSR	Description of work	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
1	251	Excavation in foundation in ordinary soil (loamclay or sand) including lift up to 1.5m and lead up to 30m. and including filling watering and ramming of excavated earth into the space between the building and the sides of foundation trenches or into the plinth and removal and disposal of surplus earth ad directed by the Engineer in charge up to a distance of 30m. from the foundation trenches including all T&P phowarah and basket etc. complete.	2	2.00	1.00	1.200	4.80			
			1	0.88	0.88	0.875	0.67			
							5.47	M <sup>3</sup>	160.00	875.00
2	303	First class brick work in 1:6 cement and coarse sand mortar in foundation and plinth including supply of all materails, labour and T&P etc. requiered for proper complection of the work.	2	2.00	1.00		4.00			
			1	0.875	0.875		0.77			
							4.77	M <sup>2</sup>	4890.00	23325.00
3	255	Sand filling in plinth including supply of necessary quantity of sand from a distance not exceeding 8 km. from the site of work & including watering dressing etc. Rate including cost of all materials, labour and T& P etc. required for proper complection of the work (including royalty)	2	2.00	1.00	0.10	0.40			
			1	0.88	0.88	0.10	0.08			
							0.48	M <sup>3</sup>	760.00	365.00
4	281	As in item 279 above but in proportions of 8: 4: 1	2	2.00	1.00	0.15	0.60			
			1	0.88	0.88	0.10	0.08			
							0.68	M <sup>3</sup>	7060.00	4801.00
5	283 A	Same as above item No. 283 but in propertion of 1:1.5:3	2	0.20	0.20	2.375	0.19	M <sup>3</sup>	8535.00	1622.00
6	303	First class brick work in 1:6 cement and coarse sand mortar in foundation & Plinth including supply of all materials , labour and T&P etc. required for proper completion of work.								

**Main Gate**

Sl.No	UP PWD / DSR	Description of work	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
		Ist offset	2	1.75	0.875	0.25	0.77			
		IIst offset	2	1.63	0.750	0.25	0.61			
		IIIst offset	2	1.50	0.625	0.375	0.70			
		<b>Wicket Gate</b>								
		Ist offset	1	0.63	0.625	0.300	0.12			
		IIst offset	1	0.50	0.500	0.375	0.09			
						Total	2.29	M <sup>3</sup>	4890.00	11198.00
7	305	Same as above item no. 303 but with coarse sand mortar in proportion of 1:4	2	1.50	0.625	1.50	2.81			
			1	0.375	0.375	1.500	0.21			
							3.02	M <sup>3</sup>	5070.00	15311.00
8	586	As in item 579 above but with cement and fine sand of 1.25 F.M. Mortar in 1:6	2 x 2	1.50	1.65		9.90			
			2 x 2	0.375	1.65		2.48			
			2 x 2	0.625	1.65		4.13			
							16.51	M <sup>2</sup>	155.00	2559.00
9	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in binding all complete upto plinth level.					0.149	per/ctl	8757.22	1305.00
10	502	Same as item no 502 above but in m.s grill ----do-----								
		Entry gate 4M wide and 1.5M height and wicket gate 1 M wide and 1.5 M height.	1				5.00	per/ctl	7100.00	35500.00
									<b>Total Rs. 96861.00</b>	
									<b>For 2 nos 193722.00</b>	

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**Estimate of Toilet Block**

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
1 (a)	251	Excavation in foundation in ordinary soil (loamclay or sand) including lift up to 1.5m and lead up to 30m. and including filling watering and ramming of excavated earth into the space between the building and the sides of foundation trenches or into the plinth and removal and disposal of surplus earth as directed by the Engineer in charge up to a distance of 30m. from the foundation trenches including all T&P phowarah and basket etc. complete.				
		For Walls	Cum	29.36	160.00	4698.00
1(b)	DSR 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	9.79	220.10	2154.00
2	255	Sand filling in plinth including supply of necessary quantity of sand from a distance not exceeding 8 km. from the site of work & including watering, dressing etc. rates includes cost of all materials labour & T&P etc. required for proper completion of work.(including royalty)	Cum	7.31	760.00	5556.00
3	615	First class brick on edge floor laid dry joints sand filled including preparation of base to proper slope and its ramming and including supply of all materials labours & T & P etc. required for proper completion of work.				
	619	As in item (615) above but brick flat.	Sqm	28.67	440.00	12615.00
4	279	Concrete with 4 cm(1.5") gauge approved stone, ballast, approved coarse sand and cement in the proportion of 4:2:1 including supply of all materials , labours and T&P etc. required for proper completion of work.				
	281	As in item no 279 above but in proortion 8: 4: 1	Cum	4.63	7060.00	32688.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
5	303	First class brick work in 1:6 cement and coarse sand mortar in foundation & Plinth including supply of all materials , labour and T&P etc. required for proper completion of work.	Cum	14.83	4890.00	72519.00
6	DSR 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	Sqm	7.60	321.42	2443.00
	309	As in item no 303 to 307 above but in superstructure including necessary cutting and moulding of bricks as required and including honey comb brickwork thickness of wall not be less than 1.5 brick thick add for extra labour of above items				
7	305	Same as item 303 above but 1:4 cement & Coarse sand	Cum	16.09	5070.00	81576.00
7 (b)	310(a)	as in item no. 309 above but wall of half brick (4.5") thick. Add for Extra labour over item 305	Cum	0.22	5600.00	1232.00
8	283	RCC work with cement approved coarse sand and 2 cm (3/4") gauge approved stone ballast in proportion of 1:2:4 in lintel of doors & windows excluding cost of reinforcement & its bending but including its fixing and binding the same with 24 B.W.G.G.I. binding wire and including necessary shuttering etc. and also including supply of all other materials ,labour and tools plants etc. required for proper completion of the work . Binding wire cost included in items.				
	283 A	As in item no 283 but in proportion of 1:1.5:3	sqm	0.50	7250.00	3625.00
8 (a)	282	Cast cement concrete door sills chaukhat boundary post ,shelves and similar small work with cement approved coarse sand and 2 cm gauge stone grit proportion of 1:2:4 excluding cost of reinforcement & its bending but including its fixing and binding wire moulds all other materials ,labour and tools plants etc. required for proper completion of the work .	sqm	0.24	8615.00	2068.00
9	284 A	As in item 283 but for slab in proportion of 1:1.5:3	Cum	2.69	8535.00	22959.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
10	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in binding all complete upto plinth level.	Qtls.	3.15	8757.22	27585.00
11	586	As in item 579 above but with cement and fine sand of 1.25 F.M. Mortar in 1:6	Sqm	168.24	155.00	26077.00
	582	As in item 579 above but with cement & fine sand of 1.25 F.M. Mortar in 1:3				
12	587	Add for extra labour to in items 581 & 582 of plaster if done in ceiling. <b>(for Maintenance Purpose)</b>	Sqm	9.59	199.00	1908.00
13	New Item 1	Laying of 25 mm thick Kota stone of size 45cmX45cm and above flooring over previously prepared base with 2cm thick 1:3 cement and sand mortar including filling of joints with cement mixed with pigment required for matching of shade of floor as per direction of E/I including cutting polishing with Wax polish including supply of all materials T&P etc. required for proper completion of work.				
		In Lobby	Sqm	7.98	1110.00	8858.00
14	DSR 11.39	Providing and laying rectified Glazed Ceramic floor tiles 300 x 300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete.				
			Sqm	9.59	990.46	9499.00
15	628	Supply & fixing 6 mm (1/4") china white glazed tiles in flooring or in skirting or dado laid with 1:3 bcement and approved coarse sand mortar finished with white cement slurry of all materials labour and tools & plants etc required for proper completion of the work.				
			Sqm	39.45	1090.00	43001.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
16	New item 2	Laying of 25 mm thick Kota stone of size 45cmX45cm and in skirting & Dado over previously prepared base with 2cm thick 1:3 cement and sand mortar including filling of joints with cement mixed with pigment required for matching of shade of floor as per direction of E/I including cutting polishing with Wax polish including supply of all materials T&P etc. required for proper completion of work.	Sqm	2.25	1015.00	2284.00
17	660	Finishing wall with water proof cement paint of approved make and quality on new work with two coats to give an even shade including supply of all materials, labour tools and plant etc. required for proper completion of the work.	Sqm	66.28	65.00	4308.00
18	671	White washing three coat including supply off all materials, labour and T&P etc. required for proper completion of the work.				
	673	As in item 671 above but 3 coats white washing 2 coats as per item 672	Sqm	9.59	19.00	182.00
19	DSR 13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	75.45	107.34	8099.00
20	D.S.R 4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cemnt: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) over 75 mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	Sqm	17.71	590.79	10463.00
21	DSR 12.41.2	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A. 110 mm dia	No.	3.30	277.13	915.00
22	DSR 12.42.6.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A. 110 mm shoe.	No.	1.00	100.49	100.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
23	DSR 12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter.	No.	1.00	41.51	42.00
24	DSR 9.59.3	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete : 100 mm	Nos	4.00	170.48	682.00
25	470	Supply & fixing of flush doors commercial quality confirming to I.S. 2202 Part I (1983)including fixing of wooden cleats & stoppers, hinges, bolt locks, handles, springs fitting with necessary screws to be supplied departmentally. <b>B) 35 mm Thick</b>	Sqm	6.30	1420.00	8946.00
26	DSR 10.10	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.				
	10.10.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	Sqm	129.23	60.11	7768.00
28	DSR 9.1	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
	9.1.2	Sal Wood Door Frame	cum	0.15	92494.96	13874.00
29	518	Providing & Fixing in position collapsible steel shutters with vertical channels 20x1.0 mm (1.5"x1.5"x1/4") with 38 mm dia steel pulley with bolts, nuts locking arrangement, stoppers handles complete including applying a priming coat of approved lead paint.				
		At Entrance Gate	Sqm	3.15	4500.00	14175.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
30	DSR 5.18.3	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size ), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits. <b>5.18.3</b> 25 mm thick	Sqm	2.10	1119.30	2351.00
31	DSR 13.53 13.53.1	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade : New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution For Door & Window Frame	Sqm	1.50	130.18	195.00
32	DSR 13.68.1	French spirit polishing : Two or more coats on new works including a coat of wood filler	Sqm	6.30	319.21	2011.00
33	DSR 22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	Sqm	27.55	507.50	13982.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
34	DSR 17.1	Providing and fixing water closet squatting pan (Indian type W.C. pan ) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
	DSR 17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Nos	2.00	5010.70	10021.00
35	DSR 17.4	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350 mm and 340x410x265 mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :				
	DSR 17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern (a) flat back or standing corner	Nos	2.00	4566.51	9133.00
36	DSR 17.7.4	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	Nos	1.00	2367.35	2367.00
37	DSR 17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Nos.	1.00	1223.04	1223.00
38	DSR 17.37.1	Providing and fixing M.S holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone sggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc.				
		100 mm dia Pipe	Nos	4.00	267.33	1069.00

Sl. No.	UP PWD / DSR	Description of Work	Unit	Qty.	Rate	Amount
1	2	3	4	5	6	7
39	DSR 18.11	Providing and fixing G.I.pipes complete with G.I.fittings and clamps,including cutting and making good the walls etc. (Internal work): Concealed pipe including painting with anti corrosive bitumastic paint,cutting chases and making good the wall.				
	18.11.1	15 mm dia nominal bore	M	7.50	420.52	3154.00
	18.11.2	20 mm dia nominal bore	M	10.00	468.97	4690.00
40	DSR 18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
	18.13.2	50 to 80 mm nominal bore	No.	1.00	1311.92	1312.00
41	DSR 18.16.1	Providing and fixing brass stop cock of approved quality : 15 mm nominal bore				
			No	2.00	263.35	527.00
42	DSR 18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.				
			ltr.	1000.00	8.41	8410.00
44	DSR 18.49.1	Providing and fixing C.P. brass bib cock of approved quality conforming to IS : 8931. 15 mm nominal bore				
			No.	6.00	376.32	2258.00
45	DSR 18.65	Providing and fixing PTMT soap Dish Holder having length of 138 mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.				
			Nos.	3.00	83.85	252.00
46	NS	R.O. Water Cooler	Nos	1.00	150000.00	150000.00
					<b>Total Rs.</b>	<b>6,45,854.00</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**Detailed measurement of Toilet Block**

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
1	251	Excavation in foundation in ordinary soil (loamclay or sand) including lift up to 1.5m and lead up to 30m. and including filling watering and ramming of excavated earth into the space between the building and the sides of foundation trenches or into the plinth and removal and disposal of surplus earth ad directed by the Engineer in charge up to a distance of 30m. from the foundation trenches including all T&P phowarah and basket etc. complete.						
		For Walls	1.00	30.41	0.88	1.08	28.60	
			1.00	1.75	0.38	0.58	0.38	
		step	1.00	2.00	0.40	0.48	0.38	
						<b>Total</b>	29.36	Cum
2	DSR 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.					9.79	cum
3	255	Sand filling in plinth including supply of necessary quantity of sand from a distance not exceeding 8 km. from the site of work & including watering, dressing etc. rates includes cost of all materials labour & T&P etc. required for proper completion of work.(including royalty)						
		i) Below lean concrete.	1.00	30.41	0.88	0.15	3.99	
		ii) Below flooring	1.00	1.75	0.38	0.10	0.07	
		In Bath Room	2.00	1.50	1.50	0.19	0.84	
		In W.C	1.00	2.58	1.50	0.19	0.72	
		In Lobby Area 7.98 Sq M	1.00		7.98	0.19	1.48	
		iii) In Steps	1.00	2.00	0.70	0.15	0.21	
						<b>Total</b>	7.31	Cum

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
	615	First class brick on edge floor laid dry joints sand filled including preparation of base to proper slope and its ramming and including supply of all materials labours & T & P etc. required for proper completion of work.						
4	619	As in item (615) above but brick flat.						
		Below wall foundation	1.00	30.41	0.88		26.61	
			1.00	1.75	0.38		0.66	
		In Steps foundation	1.00	2.00	0.70		1.40	
							28.67	Sqm
	273	Concrete with 4 cm(1.5") gauge approved stone, ballast, approved coarse sand and cement in the proportion of 4:2:1 including supply of all materials , labours and T&P etc. required for proper completion of work.						
5	281	As in item no 279 above but in proortion 8: 4: 1						
	i)	In lean concrete	1.00	30.41	0.88	0.10	2.66	
			1.00	1.75	0.38	0.10	0.07	
	ii)	Below flooring						
		In Bath Room	2.00	1.50	1.50	0.10	0.45	
		In W.C	1.00	2.58	1.50	0.10	0.39	
		In Urinal	1.00	1.40	0.85	0.10	0.12	
		In Lobby	1.00		7.98	0.10	0.80	
	iii)	In Steps	1.00	2.00	0.70	0.10	0.14	
						<b>Total</b>	4.63	Cum
6	303	First class brick work in 1:6 cement and coarse sand mortar in foundation & Plinth including supply of all materials , labour and T&P etc. required for proper completion of work.						
		In Walls	1.00	30.41	0.75	0.15	3.42	
		In Walls	1.00	30.41	0.63	0.15	2.85	
		In Walls	1.00	30.41	0.50	0.15	2.28	
		In Walls	1.00	30.41	0.38	0.30	3.42	
		In Walls	1.00	30.41	0.25	0.30	2.28	
		In Walls	1.00	1.75	0.25	0.30	0.13	
		In Steps	1.00	2.00	0.60	0.30	0.36	
		In Steps	1.00	2.00	0.30	0.15	0.09	
						<b>Total</b>	14.83	Cum

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
7	DSR 4.10	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 12.5mm nominal size derived from natural sources)	1.00 1.00	30.41 1.75	0.25 0.25		7.60 0.44	
						<b>Total</b>	8.04	Sqm
8	305	Same as item 303 above but 1:4 cement & Coarse sand						
		In Walls	1.00	30.41	0.25	2.50	19.01	
		In parapet wall in C.M. (1:6)	1.00	17.86	0.25	0.15	0.67	
						<b>Total</b>	19.68	Cum
		Deduct for						
		Door	4.00	0.75	0.25	2.10	1.58	
		RCC Jali	1.00	1.00	0.25	2.10	0.53	
		Entrance Gate	1.00	1.50	0.25	2.10	0.79	
		Window 'W'	1.00	1.03	0.25	1.20	0.31	
		Ventilator 'V'	4.00	0.75	0.25	0.50	0.38	
						<b>Total</b>	3.59	Cum
		Net Brick Work					16.09	Cum
9	310(a)	as in item no. 309 above but wall of half brick (4.5") thick. Add for Extra labour over item 305	1.00	1.75	0.125	2.50	0.22	Cum
	283	RCC work with cemente approved coarse sand and 2 cm (3/4") gauge approved stone ballast in proportion of 1:2:4 in lintel of doors & windows excluding cost of reinforcemnet & its bending but including its fixing and binding the same with 24 B.W.G.G.I. binding wire and including necessary shuttering etc. and also including supply of all other materials ,labour and tools plants etc. required for proper completion of the work . Binding wire cost included in items.						
10	283 A	As in item no 283 but in proportion of 1:1.5:3						
		In lintel Beam at entrance	1.00	1.80	0.25	0.15	0.07	
		In lintel Beam for window opening W	1.00	1.54	0.25	0.15	0.06	
		For Door D	4.00	1.05	0.25	0.15	0.16	
		For Jali	1.00	1.30	0.25	0.15	0.05	
		In Ventilation V	4.00	1.05	0.25	0.15	0.16	
							0.50	cum

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
11	282	Cast cement concrete door sills chaukhat boundary post ,shelves and similar small work with cement approved coarse sand and 2 cm gauge stone grit proportion of 1:2:4 excluding cost of reinforcement & its bending but including its fixing and binding wire moulds all other materials ,labour and tools plants etc. required for proper completion of the work .	4.00	1.05	0.50	0.06	0.13	
		W	1.00	1.54	0.50	0.06	0.05	
		Sun Shade at entrance	1.00	2.00	0.50	0.06	0.06	
							0.24	Sqm
12	284 A	As in item 283 but for slab in proportion of 1:1.5:3 In Roof Slab area 26.93 Sqm	1.00		26.93	0.10	2.69	Cum
13	5.22	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in binding all complete upto plinth level.	1.25%		of 12		3.15	Qtls.
14	586	As in item 579 above but with cement and fine sand of 1.25 F.M. Mortar in 1:6						
		In Walls outersurface	1.00	20.96		3.20	67.07	
		In Parepet Walls	1.00	20.96		0.40	8.38	
		In Walls innerface	1.00	42.29		2.50	105.73	
		In Steps	1.00	2.00		0.45	0.90	
		In Steps	2.00	0.60		0.30	0.36	
		In Steps	2.00	0.30		0.15	0.09	
						Total	182.53	Sqm
		Deduction for						
		Door	4.00	0.75		2.10	6.30	
		RCC Jali	1.00	1.00		2.10	2.10	
		Entrance Gate	1.00	1.50		2.10	3.15	
		Window 'W'	1.00	1.03		1.20	1.24	
		Ventilator 'V'	4.00	0.75		0.50	1.50	
						Total	14.29	Sqm
		Net Plaster					168.24	Sqm
15	587	Add for extra labour to in items 581 & 582 of plaster if done in ceiling.(for Maintenance Purpose)						
		In Bath Room	2.00	1.50	1.50		4.50	
		In Toilet	2.00	1.50	1.30		3.90	
		In Lobby	1.00		7.98		0.00	
		In Urinal	1.00	1.40	0.85		1.19	

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit	
1	2	3	4	5	6	7	8	9	
							Total	9.59	Sqm

16	New Item	Laying of 25 mm thick Kota stone of size 45cmX45cm and above flooring over previously prepared base with 2cm thick 1:3 cement and sand mortar including filling of joints with cement mixed with pigment required for matching of shade of floor as per direction of E/I including cutting polishing with Wax polish including supply of all materials T&P etc. required for proper completion of work.						
	1							
		In Lobby					7.98	Sqm
17	DSR 11.39	Providing and laying rectified Glazed Ceramic floor tiles 300 x 300 mm or more (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand) including grouting the joints with white cement and matching pigment etc., complete.						
		In Bath Room	2.00	1.50	1.50		4.50	
		In Toilet	2.00	1.50	1.30		3.90	
		In Urinal	1.00	1.40	0.85		1.19	
							9.59	Sqm
18	628	Supply & fixing 6 mm (1/4") china white glazed tiles in flooring or in skirting or dado laid with 1:3 bcement and approved coarse sand mortar finished with white cement slurry of all materials labour and tools & plants etc required for proper completion of the work.						
		With commercial grade colour 15x15 cms tiles						
		In Bath Room	2 x4	1.50		1.50	18.00	
		In Toilet	4.00	1.50		1.50	9.00	
			4.00	1.30		1.50	7.80	
		In Urinal	1.00	1.40		1.50	2.10	
			2.00	0.85		1.50	2.55	
						Total	39.45	Sqm

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
19	New item	Laying of 25 mm thick Kota stone of size 45cmX45cm and in skirting & Dado over previously prepared base with 2cm thick 1:3 cement and sand mortar including filling of joints with cement mixed with pigment required for matching of shade of floor as per direction of E/I including cutting polishing with Wax polish including supply of all materials T&P etc. required for proper completion of work.						
	2							
		In Steps	2.00	2.00		0.45	1.80	
		In Steps	2.00	0.60		0.30	0.36	
		In Steps	2.00	0.30		0.15	0.09	
							2.25	Sqm
20	660	Finishing wall with water proof cement paint of approved make and quality on new work with two coats to give an even shade including supply of all materials, labour tools and plant etc. required for proper completion of the work.						
		Inner Walls	1.00	42.29		2.50	105.73	
		Deduct for tiles				-	39.45	
						Total	66.28	Sqm
21	673	As in item 671 above but 3 coats white washing 2 coats as per item 672 Qty. Same as plaster in ceiling.					9.59	Sqm
22	DSR 13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. Outer Walls Qty.Same as plaster in outer surface Parepet Walls					67.07 8.38	
						Total	75.45	Sqm
23	D.S.R 4.17	Making plinth protection 50 mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) over 75 mm bed of dry brick ballast 40 mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	2.00 2.00	7.70 4.11	0.75 0.75		11.55 6.16	
						Total	17.71	Sqm

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
24	DSR 12.41.2	Providing and fixing on wall face unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A. 110 mm dia	1.00				3.30	m
25	DSR 12.42.6.2	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A. 110 mm shoe.	1.00				1.00	No.
26	DSR 12.44	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter.	1.00				1.00	No.
27	DSR 9.59.3	Providing and fixing ISI marked oxidised M.S. single acting spring hinges with necessary screws etc. complete : 100 mm	4.00				4.00	Nos
28	470	Supply & fixing of flush doors commercial quality conforming to I.S. 2202 Part I (1983) including fixing of wooden cleats & stoppers, hinges, bolt locks, handles, springs fitting with necessary screws to be supplied departmentally. B) 35 mm Thick	4.00		0.75	2.10	6.30	Sqm
	DSR 10.10	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metal sash putty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.						
29	10.10.1	Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	4.00 1.00		0.75 1.03	0.50 1.20	1.50 1.24 Total 2.74	Sqm 129.23

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
	DSR	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).						
30	9.1.2	Sal Wood Door Frame	4.00	5.10	0.10	0.08	0.15	
						=	0.15	cum
31	518	Providing & Fixing in position collapsible steel shutters with vertical channels 20x1.0 mm (1.5"x1.5"x1/4") with 38 mm dia steel pulley with bolts, nuts locking arrangement, stoppers handles complete including applying a priming coat of approved lead paint.						
		At Entrance Gate	1.00	1.50		2.10	3.15	Sqm
32	DSR 5.18.3	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand(zone-III) : 4 graded stone aggregate 6mm nominal size ), reinforced with 1.6 mm dia mild steel wire, including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete, excluding plastering of the jambs, sills and soffits. 5.18.3 25 mm thick	1.00	1.00		2.10	2.10	Sqm
33	13.53.1	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution For Door & Window Frame					1.50	Sqm
34	DSR 13.68.1	French spirit polishing : Two or more coats on new works including a coat of wood filler	4.00		0.75	2.10	6.30	Sqm

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
33	DSR 22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately. For the purpose of measurement the entire treated surface will be measured.	1.00 1.00	6.40 1.75	4.31 0.36		27.55 0.62 26.93	Sqm
35	DSR 17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests A- 510mm long with 12.5 ltr. Low level PVC cistem	2.00				2.00	Nos
36	DSR 17.4.1	One urinal basin with 5 litre white P.V.C. automatic flushing cistern Flat back or standing corner (600mm x 350mm)	2.00				2.00	Nos
37	DSR 17.7.4	White Vitreous China Flat back wash basin size 550x 400 mm with single 15 mm C.P. brass pillar tap	1.00				1.00	Nos
38	DSR 17.31	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	1.00				1.00	Nos.

Sl. No.	UP PWD / DSR	Description of Work	No	L (m)	B (m)	H (m)	Qty.	Unit
1	2	3	4	5	6	7	8	9
39	DSR 17.37.1	Providing and fixing M.S holder-bat clamps of approved design to Sand Cast iron/cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 x 10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone sggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc.						
		100 mm dia Pipe	4.00				4.00	Nos
40	DSR 18.11	Providing and fixing G.I.pipes complete with G.I.fittings and clamps,including cutting and making good the walls etc. (Internal work): Concealed pipe including painting with anti corrosive bitumastic paint,cutting chases and making good the wall.						
	18.11.1	15 mm dia piles					7.50	
	18.11.2	20 mm dia piles					10.00	
							Total	17.50 M
	DSR 18.13	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :						
41	18.13.2	50 to 80 mm nominal bore 50mm dia.	1.00				1.00	No.
42	DSR 18.16	Providing and fixing brass stop cock of approved quality :						
	18.16.1	15 mm nominal bore	2.00				2.00	No
43	DSR 18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISi : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.						
			2.00	500.00			1000.00	ltr.
44	DSR 18.49.1	Providing and fixing C.P. brass bib cock of approved quality conforming to IS : 8931. 15 mm nominal bore	6.00				6.00	No.
45	DSR 18.65	Providing and fixing PTMT soap Dish Holder having length of 138 mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.	3.00				3.00	Nos.



**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Detailed Measurement of MRF cum TS**

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
1	2.6.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:								
		<b>0.30 M &amp; Above For Floor</b>	1	34.60	32.35	0.10	111.93			
		<b>In Foundation</b>								
		For Footing F-1	26	2.00	2.00	1.70	176.80			
		For Footing F-2	38	1.50	1.50	1.70	145.35			
		For Footing F-3	2	4.60	2.00	1.70	31.28			
						<b>Total</b>	<b>465.36</b>	M <sup>3</sup>	161.00	74922.96
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. In layers not exceeding 20 cm in depth consolidating each deposited layerby ramming and watering, lead upto 50 m and lift upto 1.5 M.								
		30% of above item no 1					<b>139.61</b>	M <sup>3</sup>	110.00	15357.10
3	2.27	Supply and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing Complete. <b>For Floor</b>								

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
			1	34.60	32.35	0.10	111.93			
		<b>In Foundation</b>								
		For Footing F-1	26	2.00	2.00	0.10	10.40			
		For Footing F-2	38	1.50	1.50	0.10	8.55			
		For Footing F-3	2	4.60	2.00	0.10	1.84			
						Total	<b>132.72</b>	M <sup>3</sup>	843.00	111882.96
4	4.1.8	Providing and laying position cement concrete of specified grade Excluding the cost of centering and shuttering -all work upto plinth level with 1:4:8 (1 cement: 4 coarse sand (Zone-III):8 graded stone aggregate 40 mm nominal size in foundation and plinth.								
		<b>In Foundation</b>								
		For Footing F-1	26	2.00	2.00	0.10	10.40			
		For Footing F-2	38	1.50	1.50	0.10	8.55			
		For Footing F-3	2	4.60	2.00	0.10	1.84			
						Total	<b>20.79</b>	M <sup>3</sup>	6099.00	126798.21
5	5.1.2	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : with 1:1.5:3 (1 cement : 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)								
		<b>In Foundation</b>								
		For Footing F-1	26	1.85	1.85	0.30	26.70			
		For Footing F-1 Pedestal Trapezoidal	26		1.08		28.07			

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
		For Column C-1	26	0.90	0.50	0.90	10.53			
		For Footing F-2	38	1.50	1.50	0.30	25.65			
		For Footing F-2 Pedestal Trapezoidal	38		0.42		15.87			
		For Column C-2	38	0.45	0.45	0.90	6.93			
		For Footing F-3	2	4.45	1.85	0.20	3.29			
		For Column C-3	4	0.90	0.50	0.90	1.62			
						Total	<b>90.34</b>	M <sup>3</sup>	7664.00	692365.76
6	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).								
		For Plinth Beam(PB-1)								
		For (A-1 to A-10)	1	23.50	0.30	0.6	4.23			
		For (B-1 to B-10 to (G-1 to G-10)	6	34.60	0.30	0.60	37.37			
			9	32.35	0.30	0.60	52.41			
		For 1st Floor Beam(FB-1)								
			1	23.50	0.30	0.6	4.23			
			6	34.60	0.30	0.60	37.37			
			9	32.35	0.30	0.60	52.41			
		For Floor Beam(FB-2)								
			1	23.50	0.30	0.6	4.23			
			6	34.60	0.30	0.60	37.37			

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
		For Beam(FB-3)	9	32.35	0.30	0.60	52.41			
			1	23.50	0.30	0.6	4.23			
			6	34.60	0.30	0.60	37.37			
			9	32.35	0.30	0.60	52.41			
		Floor Slab(PB-1, FB-1 & FB-2)	3	34.60	32.35	0.20	671.59			
							<b>1047.63</b>	M <sup>3</sup>	8623.00	9033713.49
7	5.2.2	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement :1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal sized derived from natural sources)								
		RCC Wall for Ramp	4	70.00	0.15	2	84.00			
		Ramp	2	70.00	5.30	0.25	185.50			
		For Column C-1	26	0.90	0.50	11.3	132.21			
		For Column C-2	38	0.45	0.45	11.3	86.95			
		For Column C-3	4	0.90	0.50	11.3	20.34			
							<b>509.00</b>	M <sup>3</sup>	8536.00	4344824.00
							<b>Total RCC</b>			<b>1646.97</b>

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
8	DSR 5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Thermo-Mechanically Treated bars of grade Fe-500D or more.	1.50%			of Total RCC	193.93	MT		
							<b>193931.00</b>	Kg.	77.70	15068438.70
9	5.9	Centering and shuttering including strutting, propping etc. and removal of form for								
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete								
		For Footing F-1	104	1.85		0.30	57.72			
		For Footing F-1 Pedestal Trapezoidal	156	1.53		0.30	71.37			
		For Footing F-2	152	1.50		0.30	68.40			
		For Footing F-2 Pedestal Trapezoidal	38	1.18		0.30	13.40			
		For Footing F-3	4	4.45		0.30	5.34			
			4		1.85	0.30	2.22			
							<b>218.45</b>	Sqm	169.00	36918.05
10	5.9.2	Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc								
		RCC Wall for Ramp	8	70.00		2.00	1120.00			
		Ramp	4	70.00		0.25	70.00			
							<b>1190.00</b>	Sqm	328.00	390320.00

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
11	5.9.3	Suspended floors, roofs, landings, balconies and access platform								
		Floor Slab(PB-1, FB-1 & FB-2)								
			6	34.60		0.20	41.52			
			6		32.35	0.20	38.82			
							<b>80.34</b>	Sqm	368.00	29565.12
12	5.9.5	Lintels, beams, plinth beams, girders, bressumers and cantilevers								
		For Plinth Beam(PB-1)								
		For (A-1 to A-10)	2	23.50		0.6	28.20			
			1	23.50	0.30		7.05			
		For (B-1 to B-10 to (G-1 to G-10)	12	34.60		0.60	249.12			
			6	34.60	0.30		62.28			
			18	32.35		0.60	349.38			
			9	32.35	0.30		87.35			
		For 1st Floor Beam(FB-1)								
			2	23.50		0.6	28.20			
			1	23.50	0.30		7.05			
			12	34.60		0.60	249.12			
			6	34.60	0.30		62.28			
			18	32.35		0.60	349.38			
			9	32.35	0.30		87.35			
		For Floor Beam(FB-2)								
			2	23.50		0.6	28.20			
			1	23.50	0.30		7.05			
			12	34.60		0.60	249.12			
			6	34.60	0.30		62.28			

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
			18	32.35		0.60	349.38			
			9	32.35	0.30		87.35			
		For Beam(FB-3)								
			2	23.50		0.6	28.20			
			1	23.50	0.30		7.05			
			12	34.60		0.60	249.12			
			6	34.60	0.30		62.28			
			18	32.35		0.60	349.38			
			9	32.35	0.30		87.35			
							<b>3133.52</b>	Sqm	301.00	943189.52
13	5.9.6	Columns, Pillars, Piers, Abutments, Posts and Struts								
		For Column C-1	52	0.90		12.2	570.96			
			52		0.50	12.2	317.20			
		For Column C-2	76	0.45		12.2	417.24			
			76		0.45	12.2	417.24			
		For Column C-3	8	0.90		12.2	87.84			
			8		0.50	12.2	48.80			
							<b>1859.28</b>	Sqm	390.00	725119.20
14	6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in								
	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)								
		For Brick Wall	1	34.60	0.25	7.80	67.47			
			1	34.60	0.25	1.70	14.71			

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
			1	58.05	0.25	0.90	13.06			
							<b>95.24</b>	Cum	7273.00	692680.52
15	13.1	12 mm cement plaster of mix :								
	13.1.2	1:6 (1 cement: 6 fine sand)	2	34.60		7.80	539.76			
			2	34.60		1.70	117.64			
			2	58.05		0.90	104.49			
							<b>761.89</b>	Sqm	148.00	112759.72
16	DSR	Distemping with oil bound washable distemper of approved brand and manufacture to give an even shade								
	13.41	13.41.1 New work (two or more coats) over and including water thinnable priming coat with cement primer								
		Over Brick Work	2	34.60		7.80	539.76			
			2	34.60		1.70	117.64			
			2	58.05		0.90	104.49			
		Over RCC Walls								
		RCC Wall for Ramp	4	70.00		2.00	560.00			
							<b>1321.89</b>	Sqm	140.88	186227.86

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
17	12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.								
	(I)	Work Shop Shed. for cladding	1	33.70	37.80		1273.86			
			1	32.50	1.30		42.25			
							<b>1316.11</b>	m <sup>2</sup>	547.00	719912.17
18	12.51	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :								
	12.51.1	Ridges plain (500 - 600mm)	1	34.00			<b>34.00</b>	M	360.00	12240.00
	12.51.6	Gutter (600 mm over all girth)	2	34.00			<b>68.00</b>	M	835.00	56780.00

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
19	10.2	Structural steel work welded in builtup sections, trusses & framed work including cutting, hoisting fixing in position and appying a priming coat of approved steel primer all complete.								
		For Truss					10324.52			
		For Purlin					11520.22			
		Top Bracing					7411.20			
		Bottom Chord Bracing					12198.99			
		Tie Runner					2053.81			
							<b>Total</b>			
							<b>43508.74</b>	<b>Kg</b>	75.00	3263155.81
20	DSR 12.41.2	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. 110 MM dia	28	11.00			308.00	M	277.13	85356.04
21	DSR 17.59.1	Providing and fixing M.S. stays and clamps for sand cast iron/ centrifugally cast (spun) iron pipes of diameter : 100 mm dia	28	4.00			112.00	Nos	111.50	12488.00
22	2.25(a)	Excavating, supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete.	2	5.00	70.00	2.50	1750.00	Cum	103.00	180250.00

Sl. No.	LPWD/CPWD	Description	No.	L	B	H	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
23	NS	Prefabricated Control room	1.0	2.5	2.5		1.00	Nos.		150000.00
24	NS	Supplying Fitting & Fixing of Stainless Steel Direct Roof Top Air Ventilation, Automation Grade: Semi-automatic Usage/Application Ventilation Material Stainless Steel Driven Type Direct Automation Grade Semi-automatic	10.0				10.00	Nos	7875.00	78750.00
									Total	<b>37144015.19</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**ESTIMATE OF WATER SUPPLY FACILITY IN CAMPUS**

<b>Sl. No.</b>	<b>Description of work</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE IN Rs.</b>	<b>AMOUNT IN Rs.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Providing and fixing G.I. Pipes complete with G.I. Fittings including tranching and refilling etc. 50mm dia				
	50 mm dia.	70.00	M	250.00	17500.00
	32 mm dia.	180.00	M	150.00	27000.00
2	Providing and fixing gun metal gate valve with C.I. Wheel of approved quality (screwed end)				
	50 mm dia.	2.00	Nos.	650.00	1300.00
	32 mm dia.	4.00	Nos.	350.00	1400.00
3	Construction of elevated service reservoir (ESR) of 30 KL capacity with 8 m staging as per drawing and specification including piping and painting etc. complete.				
		1.00	No.	360000.00	360000.00
4	Boring 150 mm dia Bore hole for tube well, upto 120 m depth lowering PVC casing pipe and tube well assembly such as strainers, blind pipe etc. including supply of all materials, T & p for construction of tube well.				
		1.00	No.	650000.00	650000.00
5	Providing and laying 100 mm dia G.I. Heavy duty pipe for rising main upto ESR.				
		20.00	M	600.00	12000.00
6	providing and fixing C.I. Sluice Valve with cap complete with bolts nuts rubber etc.				
	100 mm dia class II	2.00	Nos.	8500.00	17000.00
7	Supply, installation testing and commissioning of 10 HP water submersible pump to lift ground water to ESR including making electric connection with all necessary accessories, such as starter, switch, box, AMP and volt meter, pressure guage, air line etc. all complete job.				
		1.00	No.	125000.00	125000.00

Sl. No.	Description of work	QTY.	UNIT	RATE IN Rs.	AMOUNT IN Rs.
1	2	3	4	5	6
9	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked indicating the BIS license no. with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank (Sintex, Electroplast, Star, Lotus or equivalent having valid ISI license).	1000.00	Ltrs.	10.00	10000.00
10	Providing and fixing C.I. Double acting air valve of approved quality with bolts, nuts, rubber insertions etc. complete (the tail pieces, tapers etc. if required will be paid separately). 50 mm dia.	2.00	Nos.	5000.00	10000.00
				<b>Total Rs.</b>	<b>1231200.00</b>
				<b>Say Rs.(in lacs)</b>	<b>12.31</b>

**MRF Cum TRANSFER STATION SWM LUCKNOW**

**ESTIMATE OF ELECTRIFICATION**

Sl. No.	Description	Qty.	Unit	Rate Rs.	In	Amount In Rs.
1	2	3	4	5	6	7
1	<b>Campus Electrification</b>					
1.( i)	N.S Erection of Metallic Pole of following length in cement concrete 1:3:6 foundation including excavation and refilling etc. as required.	11	Nos	7087.01		77957.11
1 (ii)	N.S Supply and fixing of factory wired sodium vapour street lighting lummeries single piece cast Al body suitable for 250 W S V lamp on pole with integral control gear with lamp complete in all respects.	11	Nos	9552.40		105076.40
1 (iii)	NS Supply and fixing of junction box of size 280 x 170 x 130 mm with hinges and locking arrangement & MS clamp made of 50 x 6 mm flat complete in all respects.	11	Nos	1080.30		11883.30
1 (iv)	NS Supply and laying of following sizes Al. conductor PVC insulated armoured seathed cable of 1100 V grade at a depth of 750 mm B.G.L.					
	a) 3.5 core, 35 sqm	90.00	M	345.80		31122.00
	b) 2 core 16 sqm	1200.00	M	227.50		273000.00
1 (v)	NS Supply and fixing of GI pipe 75 mm dia 'B' class JINDAL/HISSAR make complete in all respects.	18.00	M	364.00		6552.00
1 (vi)	NS Supply and fixing of 600 mm x 600 mm x 6.0 mm GI plate vertically for earthing with its top at least 3 meters below ground level complete with 20 mm GI pipe and funnel for watering and one earthing lead of one No. 8 to 10 SWG GI wire in 15 mm dia GI pipe to switch board 30 cm square CI frame with hinged cover masonry housing laternate layers of charcoal/coke and salt at least 150 cm thick around etc. as per directions of Enginner In Charge complete in all respects.	4	Nos	2476.50		9906.00
1 (vii)	NS Supply and fixing Al. unarmored cable 6 mm 2 core flat PVC insulated used for connection of sodium fitting to junction box.	11	Nos	55.90		614.90

Sl. No.	Description	Qty.	Unit	Rate Rs.	In	Amount In Rs.
1	2	3	4	5	6	7
1 (viii)	NS Supply and fixing of feeder pillar of M.S cubical box of size 100 x 75 x 40 cm made from 2 mm M.S sheet using angle of size 40 x 40 x 6 mm duly hinged and locking arrangement, painting two coats of enameled paint over red oxide primer providing aluminium Bus-bar or suitable size with 100 A/415 V TPN rewirable type main switch with cement concrete foundation providing 1 Mtr GI pipe on 100 mm dia complete in all respects as per direction of E/I.	3	Nos	9369.10		28107.30
	a) Painting of street light pole	11	Nos	196.30		2159.30
	b) Supply and making of earth main hole of size 1' x 1' and 2' deep with 1' x 1' CI chamber brick work etc.	4	Nos	520.00		2080.00
				<b>Sub. Total (A)</b>		<b>548458.31</b>
2	<b>Estimate of Transformer</b> Cost of 100 KVA transformer of GEC or equivalent make	1	No	500000.00		500000.00
	Supply and laying of 3.5 x 50 mm <sup>2</sup> Al. armoured cable.	70.00	M	585.00		40950.00
				<b>Sub. Total ( B )</b>		<b>540950.00</b>
3	<b>Estimate of LT panel</b> LT panel having one no incoming panel, 5 nos, outgoing panel and one number change over switch for DG set.	1	No	325000.00		325000.00
4	Provision for payment to State Electricity Board for connection	1	No	500000.00		500000.00
5	125 KVA DG Set	1	No	550000.00		550000.00
				<b>Sub. Total ( C )</b>		<b>1375000.00</b>
				<b>Grand Total Rs.(A)+(B)+( C )</b>		<b>2464408.31</b>
				<b>Say Rs.(in lacs)</b>		<b>24.64</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**

**Abstract of cost of Parking and working floor**

Sl. No.	LPWD/CPW D	Description of work	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7
1	2.6.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:  For Paver Area (902 Sqm.)	270.60	Cum	161.00	43566.60
2	2.27	Supply and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing Complete. For Paver Area (902 Sqm.)	90.20	Cum	843.00	76038.60
3	DSR Pg No-338 16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge	902.00	Sqm	824.23	743455.46
4	DSR Pg No-338 16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	7.50	Sqm	7465.36	55990.20
<b>Total Amount(in Rs.)</b>						<b>9,19,050.86</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**Detailed Measurement of Parking and working floor**

Sl. No.	LPWD/CP WD	Description Of Work	No	L(m)	B(m)	H(m)	Qty	Unit
1	2	3	4	5	6	7	8	9
1	2.6.1	Earth work in surface excavation not exceeding 30 cm in depth but exceeding 1.5 m in width as well as 10 sqm on plan including getting out and disposal of excavated earth upto 50 m and lift upto 1.5 m, as directed by Engineer-in- Charge:  For Paver Area (902 Sqm.)	1	902.00		0.3	270.60 270.60	Cum Cum
2	2.27	Supply and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing Complete.  For Paver Area (902 Sqm.)	1	902.00		0.1	90.20 90.20	Cum Cum
3	DSR Pg No-338 16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge	1	902.00			902.00	Sqm
4	DSR Pg No-338 16.69	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	1	125		0.2 0.3	7.50	Sqm

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**Abstract of cost of Horticulture Works**

Sl. No.	DSR /Hort. 2021	Description of work	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7
1	DSR/Hor. Pg No-85 2.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60 cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts	500.00	Sqm	60.95	30475.00
2	DSR/Hor. Pg No-85 2.13	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately	500.000	Cum	222.85	111425.00
3	DSR/Hor. Pg No 83 2.2	Supplying and stacking of good earth at site including royalty and carriage upto 5 km lead complete (earth measured in stacks will be reduced by 20% for payment For Lawn Area	150.00	Cum	515.60	77340.00
4	DSR/Hor. Pg No 83 2.10	Grassing with selection No. 1 Doob grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately				
	2.10.2	With grass Turf( Lawn Area)	500.00	Sqm	13.30	6650.00

Sl. No.	DSR /Hort. 2021	Description of work	Qty.	Unit	Rate	Amount
1	2	3	4	5	6	7

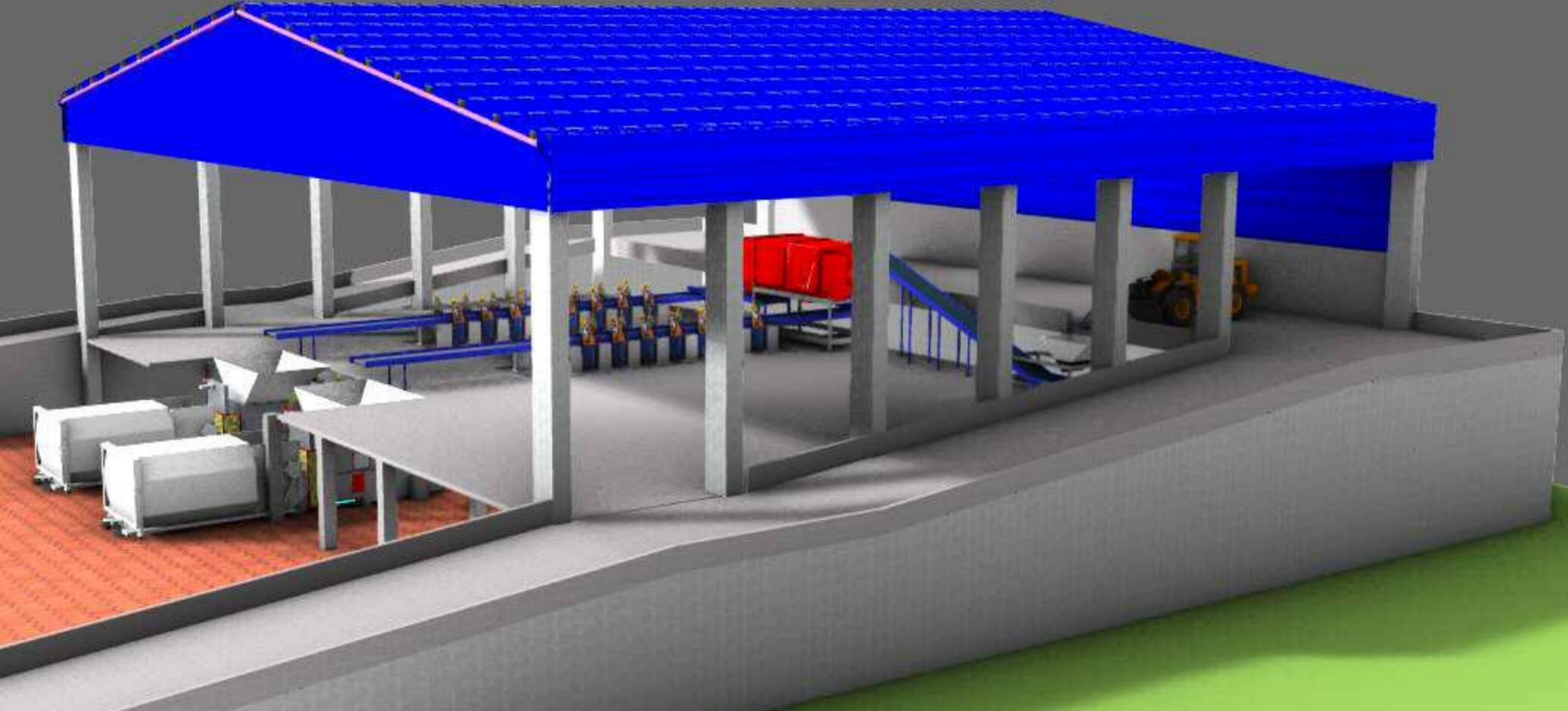
5	DSR/Hor. Pg No101	Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserveiceable material's as per direction of officer in charge (excluding cast of plant & water)				
	2.57					
	2.57.1	Trees Plant	400.00	Each	7.30	2920.00
	2.57.2	Shrubs Plant	400.00	Each	3.65	1460.00
	2.57.3	Hedge Plant /Ground cover	1200	Each	2.45	2940.00
6	DSR/Hor. Pg No 141	Providing and stacking of plant Canna dwarf of height 25 to 30 cm., 2 to 3 suckers in earthen pots of size 20 cm Earthen Pot/Plastic Pot and as per direction of the officer-in-charge				
	4.89		400.00	Each	35.90	14360.00
7	DSR/Hor. Pg No 161	Providing and stacking of Azadirachta indica ( Neem ) of height 120-130cm in big polybag of size 25 cm as per direction of the officer-in-charge				
	7.5		400.00	Each	65.00	26000.00
<b>Total Amount(In Rs.)</b>						<b>2,73,570.00</b>

**MRF CUM TRANSFER STATION SWM LUCKNOW**  
**Detailed measurement of Horticulture works**

Sl. No.	DSR /Hort. 2021	Description of work	No	L(m)	B(m)	H(m)	Qty	Unit
1	2	3	4	5	6	7	8	9
1	DSR/Hor. Pg No-85 2.12	Uprooting rank vegetation and weeds by digging the area to a depth of 60 cm, removing all weeds and other growth with roots by forking repeatedly, breaking clods, rough dressing, flooding with water, uprooting fresh growths after 10 to 15 days and then fine dressing for planting new grass, including disposal of all rubbish with all leads and lifts	1	500.00			500.00	Sqm
2	DSR/Hor. Pg No-85 2.13	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing,	1	500.00			500.00	M <sup>3</sup>
3	DSR/Hor. Pg No 83 2.2	Supplying and stacking of good earth at site including royalty and carriage upto 5 km lead complete (earth measured in stacks will be reduced by 20% for payment For Lawn Area	1	500.00	0.30		150.00	M <sup>3</sup>
						Total	150.00	M <sup>3</sup>
4	DSR/Hor. Pg No 83 2.10	Grassing with selection No. 1 Doob grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed (the grass and good earth shall be paid for separately						
	2.10.2	With grass Turf( Lawn Area)	1	500.00			500.00	M <sup>2</sup>
						Total	500.00	M <sup>2</sup>
5	DSR/Hor. Pg No101 2.57	Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserveiceable material's as per direction of officer in charge (excluding cast of						
	2.57.1	Trees Plant	400.00				400.00	Each
	2.57.2	Shrubs Plant	400.00				400.00	Each
	2.57.3	Hedge Plant /Ground cover	1200				1200.00	Each

Sl. No.	DSR /Hort. 2021	Description of work	No	L(m)	B(m)	H(m)	Qty	Unit
1	2	3	4	5	6	7	8	9
6	DSR/Hor. Pg No 141 4.89	Providing and stacking of plant Canna dwarf of height 25 to 30 cm., 2 to 3 suckers in earthen pots of size 20 cm Earthen Pot/Plastic Pot and as per direction of the officer-in-charge	400.00				400.00	Each
7	DSR/Hor. Pg No 161 7.5	Providing and stacking of Azadirachta indica ( Neem ) of height 120-130cm in big polybag of size 25 cm as per direction of the officer-in-charge	400.00				400.00	Each

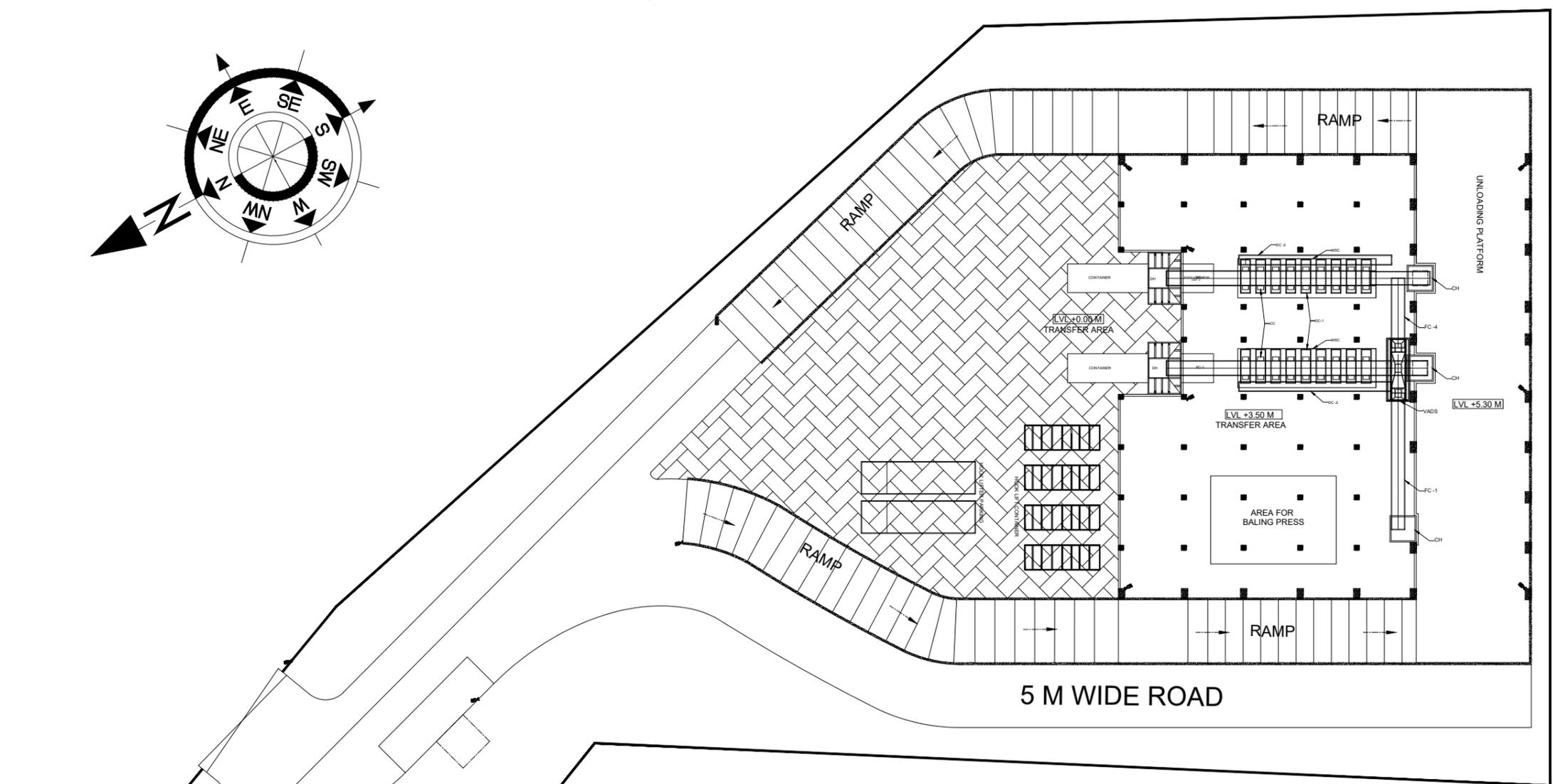
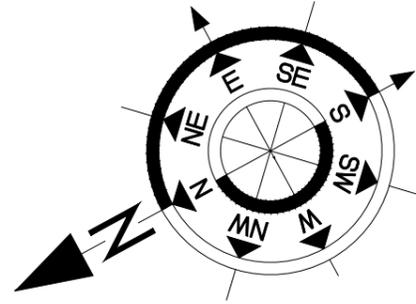








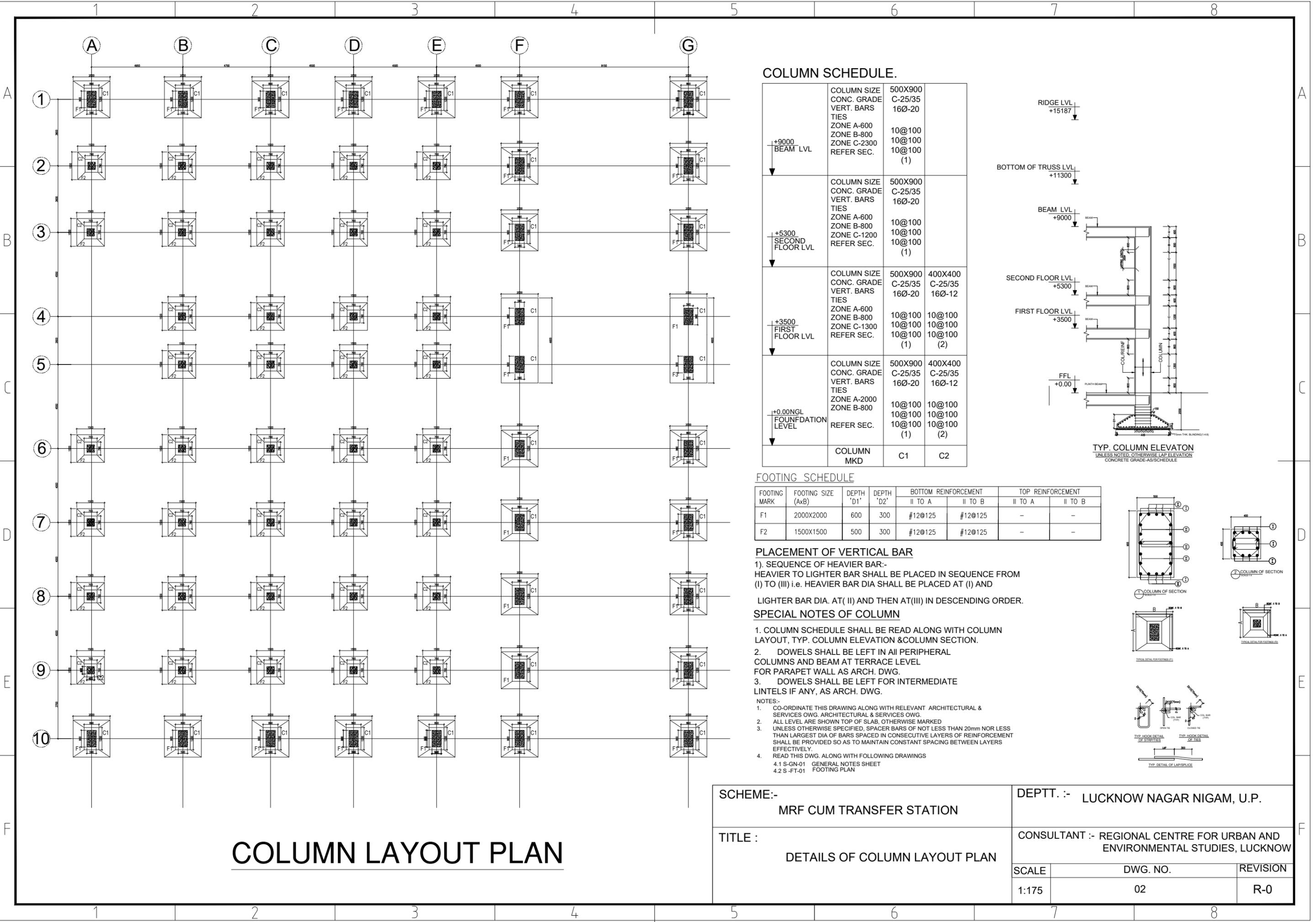




**EQUIPMENTS LIST**

SR. NO.	CODE NO.	NAME OF MACHINES	QTY.	SIZE
1	CH	COLLECTION HOPPER	3	1.90Mx1.9M
2	FC-1	FEEDER CONVEYOR-1	1	1.20Mx11.5M
3	VADS	VOLUMETRIC AIR DENSITY SEPERATOR	1	--
4	MSC	MANUAL SORTING CONVEYOR	2	1.2Mx16.00M
5	DH	DISCHARGE HOPPER	2	1.5Mx1.5M
7	CC	COLLECTION CHUTES	36	--
8	DC-1	DISCHARGE CONVEYOR-1	18	0.800Mx2.7M
9	DC-2	DISCHARGE CONVEYOR-2	2	0.800Mx12.0M
10	SC-1	STATIC COMPACTOR UNIT-1	1	--
11	SC-2	STATIC COMPACTOR UNIT-2	1	--

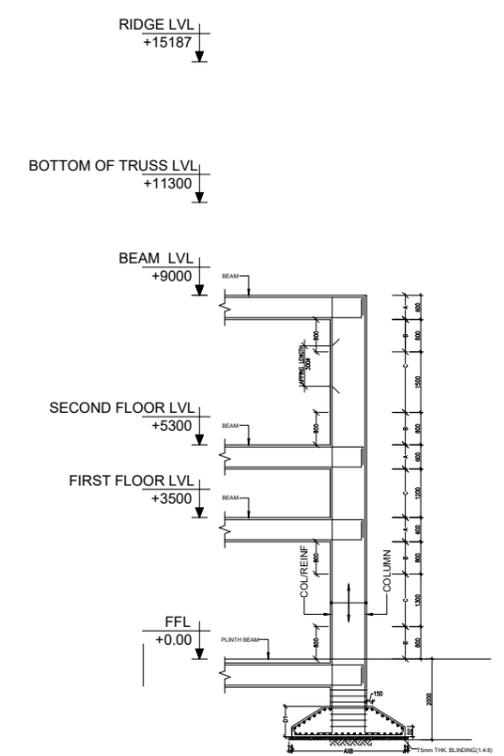
SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : LAYOUT PLAN		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:400	01	R-0	



# COLUMN LAYOUT PLAN

## COLUMN SCHEDULE.

+9000 BEAM LVL	COLUMN SIZE CONC. GRADE VERT. BARS TIES ZONE A-600 ZONE B-800 ZONE C-2300 REFER SEC.	500X900 C-25/35 16Ø-20 10@100 10@100 10@100 (1)	
+5300 SECOND FLOOR LVL	COLUMN SIZE CONC. GRADE VERT. BARS TIES ZONE A-600 ZONE B-800 ZONE C-1200 REFER SEC.	500X900 C-25/35 16Ø-20 10@100 10@100 10@100 (1)	
+3500 FIRST FLOOR LVL	COLUMN SIZE CONC. GRADE VERT. BARS TIES ZONE A-600 ZONE B-800 ZONE C-1300 REFER SEC.	500X900 C-25/35 16Ø-20 10@100 10@100 10@100 (1)	400X400 C-25/35 16Ø-12 10@100 10@100 10@100 (2)
+0.00NGL FOUNDATION LEVEL	COLUMN SIZE CONC. GRADE VERT. BARS TIES ZONE A-2000 ZONE B-800 REFER SEC.	500X900 C-25/35 16Ø-20 10@100 10@100 10@100 (1)	400X400 C-25/35 16Ø-12 10@100 10@100 10@100 (2)
	COLUMN MKD	C1	C2



TYP. COLUMN ELEVATION  
UNLESS NOTED, OTHERWISE LAP ELEVATION  
CONCRETE GRADE-AS/SCHEDULE

## FOOTING SCHEDULE

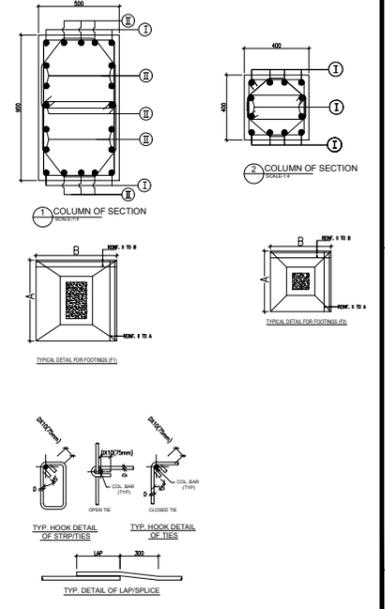
FOOTING MARK	FOOTING SIZE (AxB)	DEPTH 'D1'	DEPTH 'D2'	BOTTOM REINFORCEMENT		TOP REINFORCEMENT	
				II TO A	II TO B	II TO A	II TO B
F1	2000X2000	600	300	#12@125	#12@125	-	-
F2	1500X1500	500	300	#12@125	#12@125	-	-

**PLACEMENT OF VERTICAL BAR**  
 1). SEQUENCE OF HEAVIER BAR:-  
 HEAVIER TO LIGHTER BAR SHALL BE PLACED IN SEQUENCE FROM (I) TO (III) i.e. HEAVIER BAR DIA SHALL BE PLACED AT (I) AND LIGHTER BAR DIA. AT (II) AND THEN AT(III) IN DESCENDING ORDER.

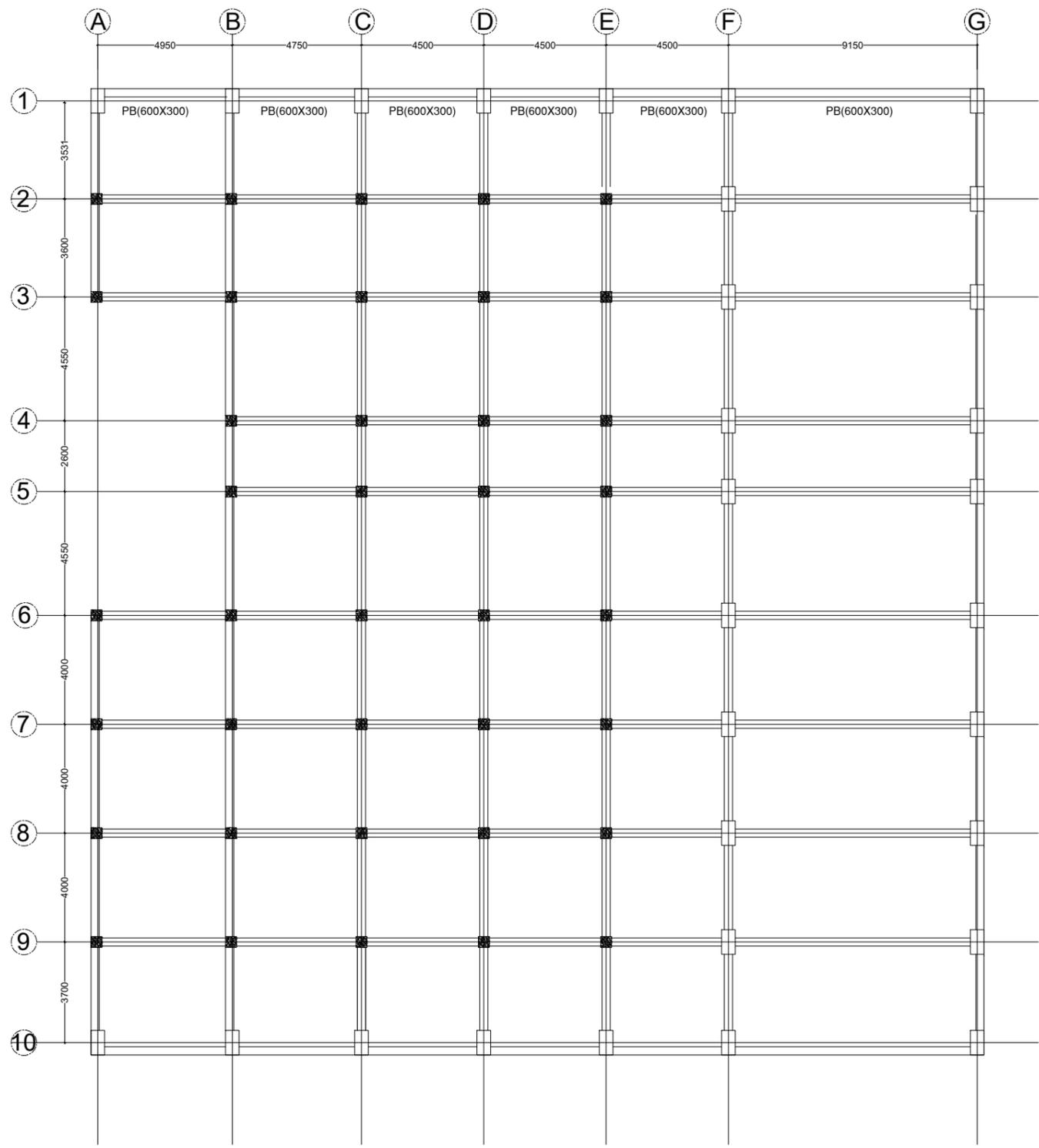
## SPECIAL NOTES OF COLUMN

- COLUMN SCHEDULE SHALL BE READ ALONG WITH COLUMN LAYOUT, TYP. COLUMN ELEVATION & COLUMN SECTION.
- DOWELS SHALL BE LEFT IN ALL PERIPHERAL COLUMNS AND BEAM AT TERRACE LEVEL FOR PARAPET WALL AS ARCH. DWG.
- DOWELS SHALL BE LEFT FOR INTERMEDIATE LINTELS IF ANY, AS ARCH. DWG.

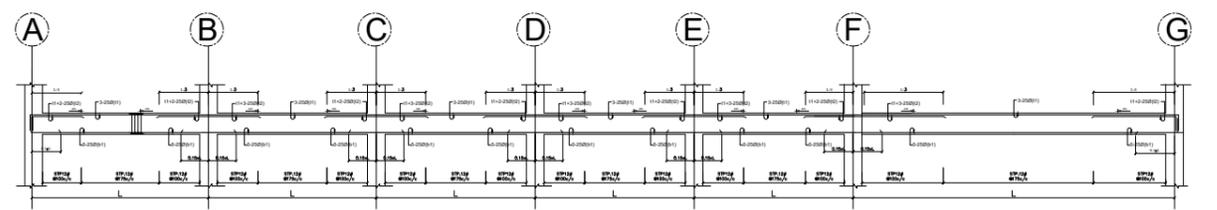
- NOTES:-
- CO-ORDINATE THIS DRAWING ALONG WITH RELEVANT ARCHITECTURAL & SERVICES DWG. ARCHITECTURAL & SERVICES DWG.
  - ALL LEVEL ARE SHOWN TOP OF SLAB, OTHERWISE MARKED UNLESS OTHERWISE SPECIFIED, SPACER BARS OF NOT LESS THAN 20mm NOR LESS THAN LARGEST DIA OF BARS SPACED IN CONSECUTIVE LAYERS OF REINFORCEMENT SHALL BE PROVIDED SO AS TO MAINTAIN CONSTANT SPACING BETWEEN LAYERS EFFECTIVELY.
  - READ THIS DWG. ALONG WITH FOLLOWING DRAWINGS  
 4.1 S-GN-01 GENERAL NOTES SHEET  
 4.2 S -FT-01 FOOTING PLAN



SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : DETAILS OF COLUMN LAYOUT PLAN		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:175	02	R-0	



**PLINTH BEAM**

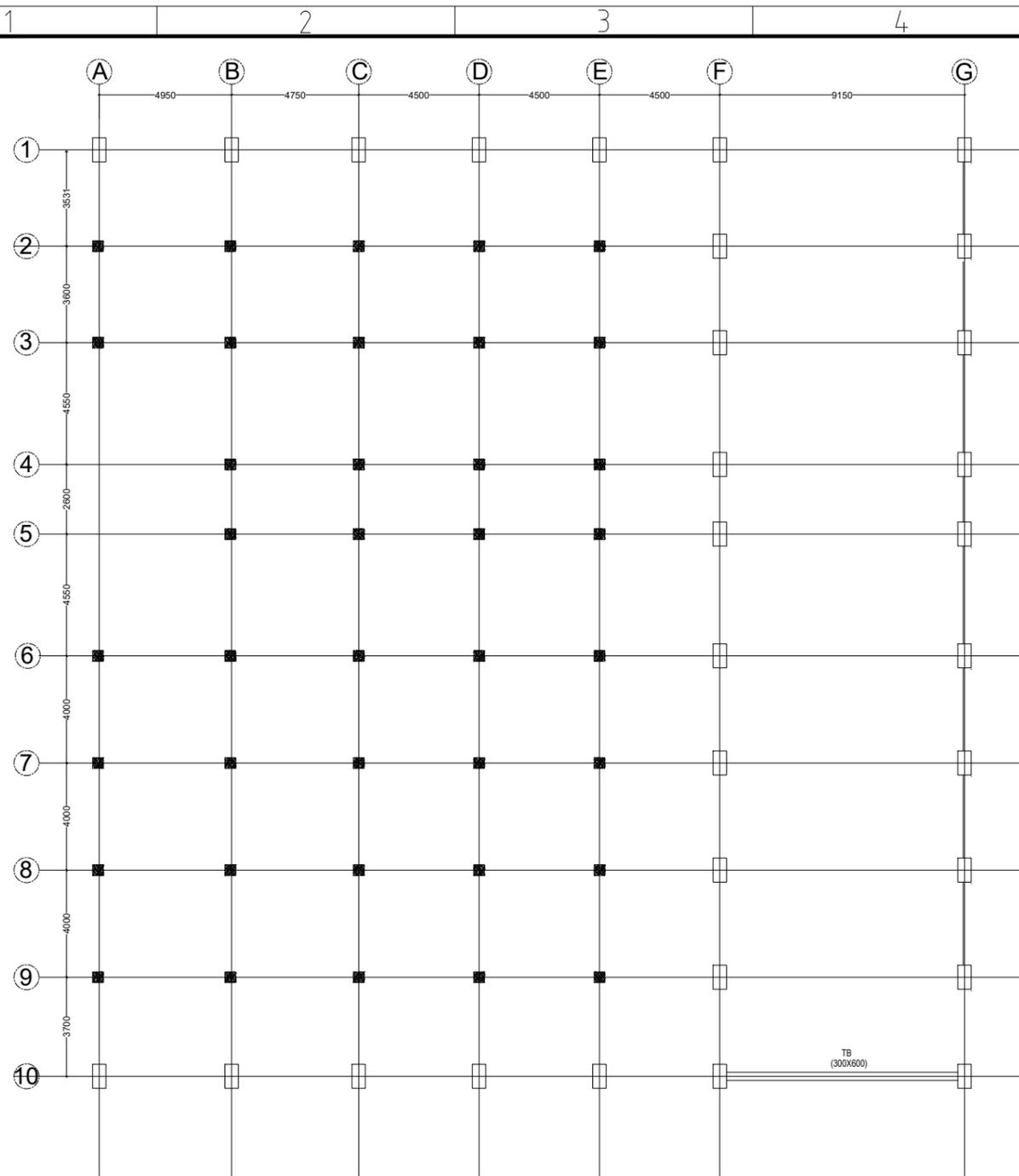


TYPICAL PLINTH BEAM DETAILS

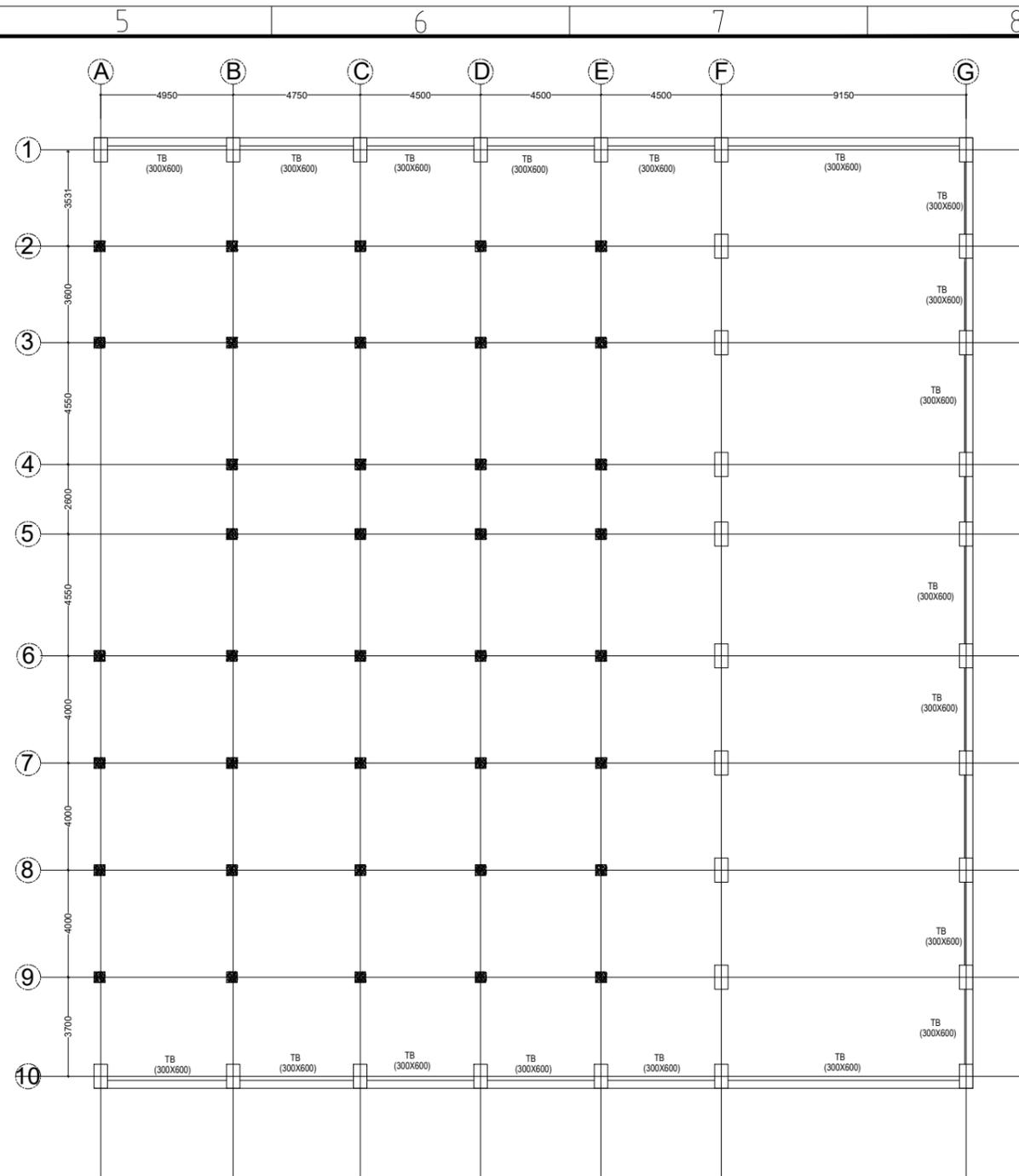
**NOTES:**

1. CO-ORDINATE THIS DRAWING ALONG WITH RELEVANT ARCHITECTURAL & SERVICES DWG'S.
2. ALL LEVELS ARE SHOWN IN THE PLAN, UNLESS OTHERWISE MARKED.
3. ALL SLAB THICKNESS 150 mm; OTHERWISE MARKED.
4. FORMWORK OR ITS SUPPORT SYSTEM SHALL BE EFFECTIVELY KEPT IN POSITION WITHOUT ANY MOVEMENT DURING AND AFTER PLACEMENT OF CONCRETE UNTIL THEY ARE READY TO BE RELEASED AFTER A SPECIFIED PERIOD.
5. FOR BEAMS WHERE DEPTH EXCEED 600mm., A 1Ø12 SHOULD BE ADDED TO EACH SIDE OF EVERY 30cm. OF BEAM DEPTH.
6. FOR BEAMS, SLABS AND RIBS WHERE LENGTH EXCEED 6.0m. CAMBER SHOULD BE MADE AT THE MIDDLE OF THE SPAN=1/300 SPAN.
7. WATER PROOFING TREATMENT SHOULD BE DONE AS PER SITE CONDITION.
8. HORIZONTAL CONSTRUCTION JOINTS MUST BE AVOIDED IN BEAM & SLAB.
9. READ THIS DWG. ALONG WITH FOLLOWING DRAWINGS.
  - 9.1. 00 - S-CS -01 COLUMN SCHEDULE
  - 9.2. 00 - S-CS -02 COLUMN REINFORCEMENT DETAILS.
  - 9.3. 00 - S - 1F- 02 BEAM REINFORCEMENT DETAILS.

SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : DETAILS OF PLINTH BEAM		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:200	03	R-0	



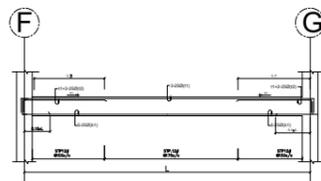
**TIE BEAM DETAIL AT LVL. 4.0M**



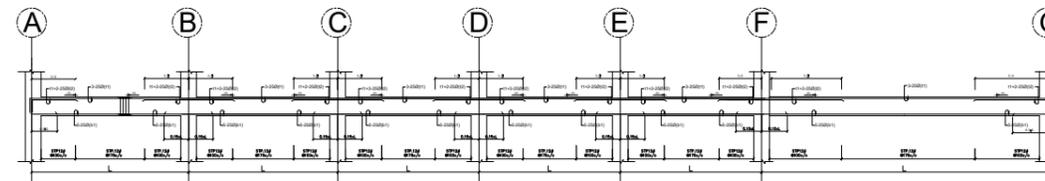
**TIE BEAM DETAIL AT LVL. 9.0M**

**NOTES:**

1. CO-ORDINATE THIS DRAWING ALONG WITH RELEVANT ARCHITECTURAL & SERVICES DWG'S.
2. ALL LEVELS ARE SHOWN IN THE PLAN, UNLESS OTHERWISE MARKED.
3. ALL SLAB THICKNESS 150 mm; OTHERWISE MARKED.
4. FORMWORK OR ITS SUPPORT SYSTEM SHALL BE EFFECTIVELY KEPT IN POSITION WITHOUT ANY MOVEMENT DURING AND AFTER PLACEMENT OF CONCRETE UNTIL THEY ARE READY TO BE RELEASED AFTER A SPECIFIED PERIOD.
5. FOR BEAMS WHERE DEPTH EXCEED 600mm., A  $\phi 12$  SHOULD BE ADDED TO EACH SIDE OF EVERY 30cm. OF BEAM DEPTH.
6. FOR BEAMS, SLABS AND RIBS WHERE LENGTH EXCEED 6.0m. CAMBER SHOULD BE MADE AT THE MIDDLE OF THE SPAN= $1/300$  SPAN.
7. WATER PROOFING TREATMENT SHOULD BE DONE AS PER SITE CONDITION.
8. HORIZONTAL CONSTRUCTION JOINTS MUST BE AVOIDED IN BEAM & SLAB.
9. READ THIS DWG. ALONG WITH FOLLOWING DRAWINGS.
- 9.1. 00 - S-CS -01 COLUMN SCHEDULE
- 9.2. 00 - S-CS -02 COLUMN REINFORCEMENT DETAILS.
- 9.3. 00 - S - 1F-02 BEAM REINFORCEMENT DETAILS.

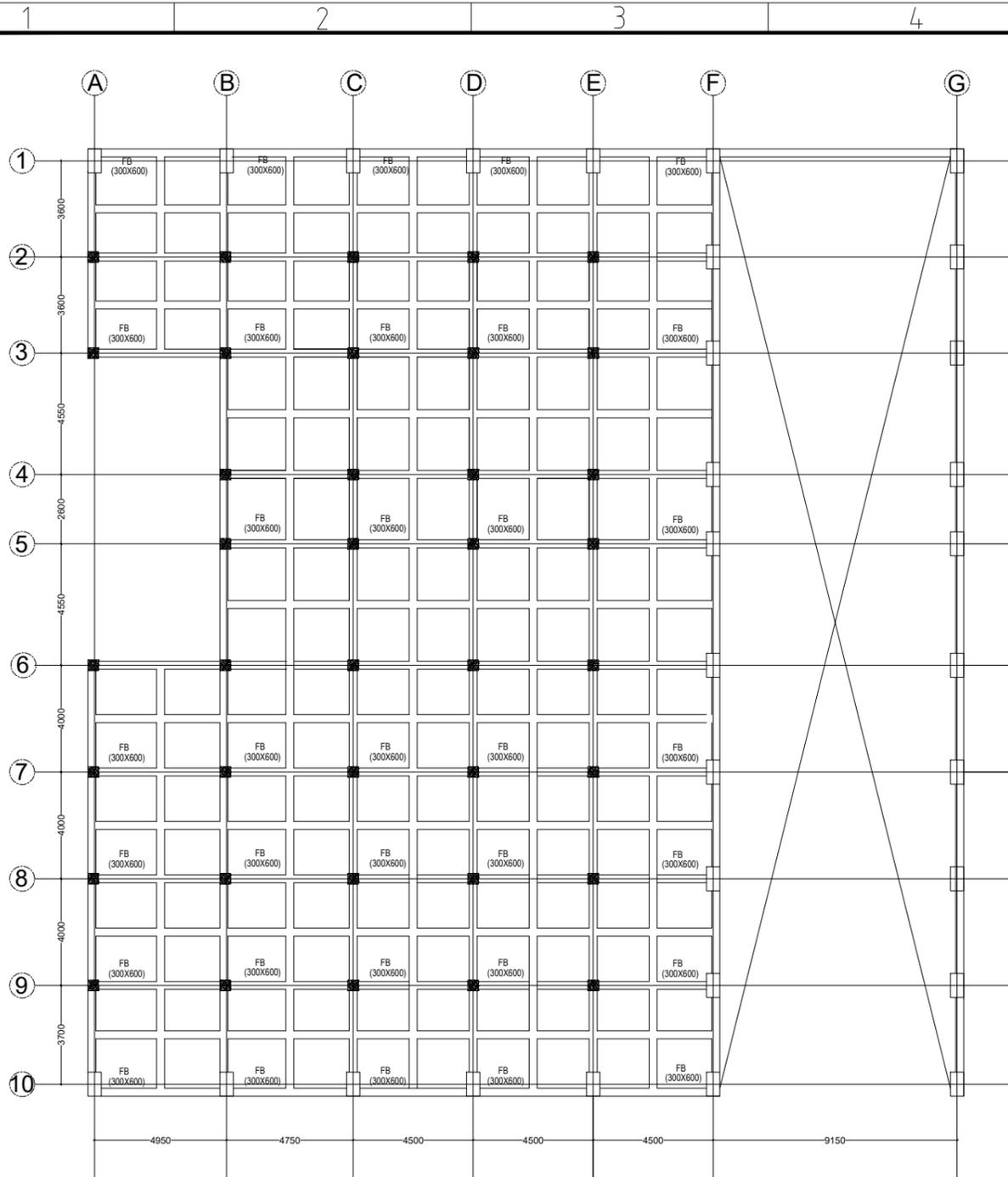


TYPICAL BEAM DETAILS

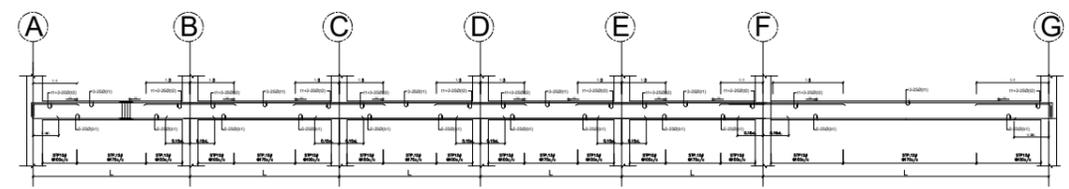


TYPICAL PLINTH BEAM DETAILS

SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : DETAILS OF TIE BEAM		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:225	04	R-0	

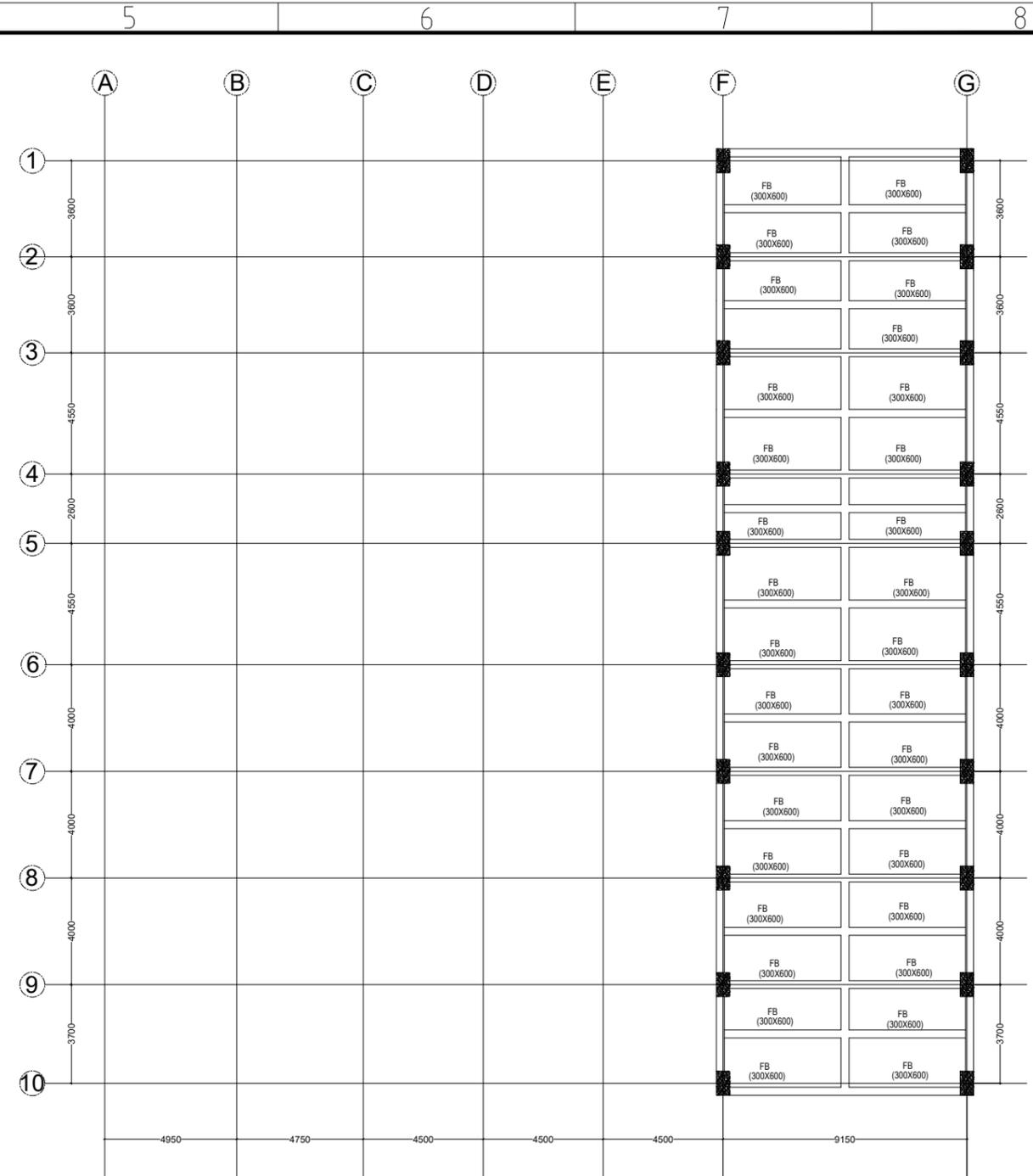


**FLOOR BEAM DEATILS AT LVL. 3.5M**

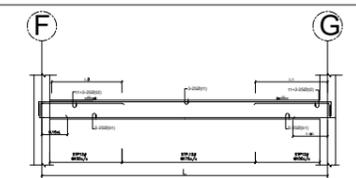


TYPICAL BEAM DETAILS

- NOTES:**
1. CO-ORDINATE THIS DRAWING ALONG WITH RELEVANT ARCHITECTURAL & SERVICES DWG'S.
  2. ALL LEVELS ARE SHOWN IN THE PLAN, UNLESS OTHERWISE MARKED.
  3. ALL SLAB THICKNESS 150 mm; OTHERWISE MARKED.
  4. FORMWORK OR ITS SUPPORT SYSTEM SHALL BE EFFECTIVELY KEPT IN POSITION WITHOUT ANY MOVEMENT DURING AND AFTER PLACEMENT OF CONCRETE UNTIL THEY ARE READY TO BE RELEASED AFTER A SPECIFIED PERIOD.
  5. FOR BEAMS WHERE DEPTH EXCEED 600mm., A 10 $\phi$ 12 SHOULD BE ADDED TO EACH SIDE OF EVERY 30cm. OF BEAM DEPTH.
  6. FOR BEAMS, SLABS AND RIBS WHERE LENGTH EXCEED 6.0m. CAMBER SHOULD BE MADE AT THE MIDDLE OF THE SPAN=1/300 SPAN.
  7. WATER PROOFING TREATMENT SHOULD BE DONE AS PER SITE CONDITION.
  8. HORIZONTAL CONSTRUCTION JOINTS MUST BE AVOIDED IN BEAM & SLAB.
  9. READ THIS DWG. ALONG WITH FOLLOWING DRAWINGS.
  - 9.1. 00 - S-CS -01 COLUMN SCHEDULE
  - 9.2. 00 - S-CS -02 COLUMN REINFORCEMENT DETAILS.
  - 9.3. 00 - S -1F-02 BEAM REINFORCEMENT DETAILS.

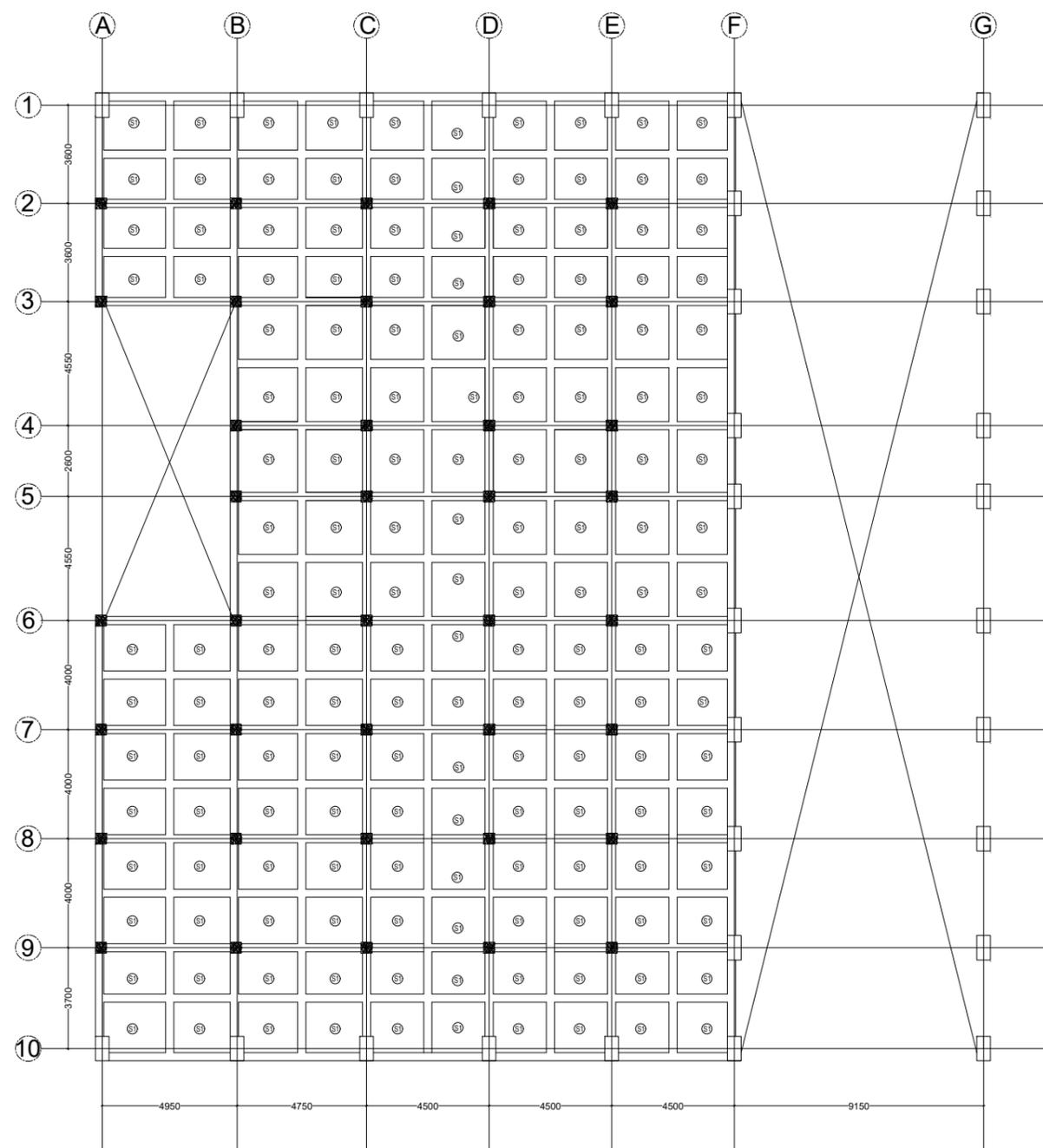


**FOOR BEAM DEATILS AT LVL. 5.3M**

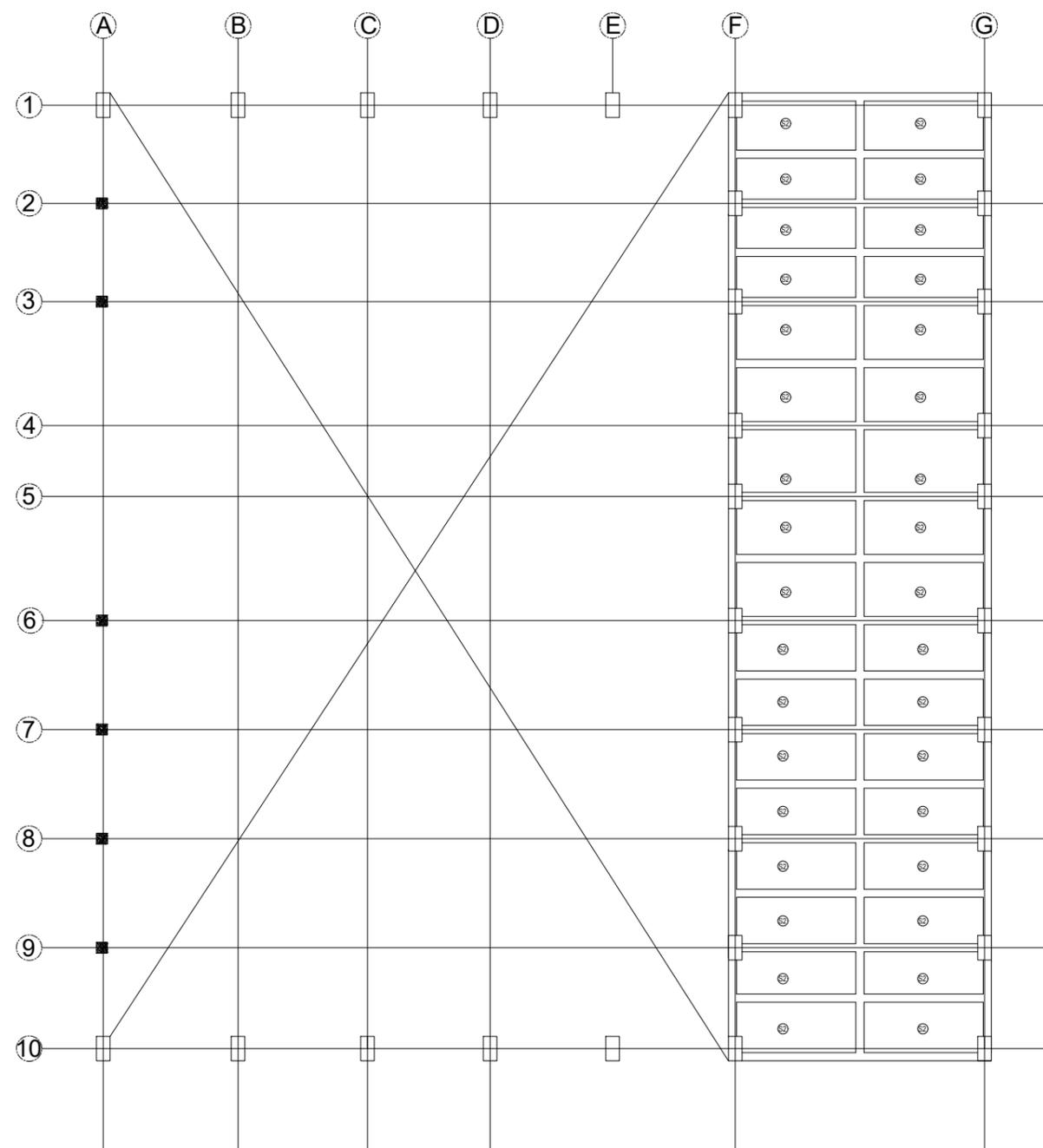


TYPICAL BEAM DETAILS

SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : DETAILS OF FLOOR BEAM		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:225	05	R-0	



**SLAB DETAILS AT LVL. 3.5M.**



**SLAB DETAILS AT LVL. 5.3M.**

**NOTES:**

1. CO-ORDINATE THIS DRAWING ALONG WITH RELEVANT ARCHITECTURAL & SERVICES DWG'S.
2. ALL LEVELS ARE SHOWN IN THE PLAN, UNLESS OTHERWISE MARKED.
3. ALL SLAB THICKNESS 150 mm; OTHERWISE MARKED.
4. FORMWORK OR ITS SUPPORT SYSTEM SHALL BE EFFECTIVELY KEPT IN POSITION WITHOUT ANY MOVEMENT DURING AND AFTER PLACEMENT OF CONCRETE UNTIL THEY ARE READY TO BE RELEASED AFTER A SPECIFIED PERIOD.
5. FOR BEAMS WHERE DEPTH EXCEED 600mm., A 1012 SHOULD BE ADDED TO EACH SIDE OF EVERY 30cm. OF BEAM DEPTH.
6. FOR BEAMS, SLABS AND RIBS WHERE LENGTH EXCEED 6.0m. CAMBER SHOULD BE MADE AT THE MIDDLE OF THE SPAN=1/300 SPAN.
7. WATER PROOFING TREATMENT SHOULD BE DONE AS PER SITE CONDITION.
8. HORIZONTAL CONSTRUCTION JOINTS MUST BE AVOIDED IN BEAM & SLAB.
9. READ THIS DWG. ALONG WITH FOLLOWING DRAWINGS.
- 9.1. 00 - S-CS -01 COLUMN SCHEDULE
- 9.2. 00 - S-CS -02 COLUMN REINFORCEMENT DETAILS.
- 9.3. 00 - S - 1F- 02 BEAM REINFORCEMENT DETAILS.

**REINFORCEMENT DETAIL.**

SLAB	DEPTH IN(MM)	X-DIRECTION			Y-DIRECTION			CONCRETE GRADE	REMARKS
		BOTTOM REINF.	TOP REINF.	EXTRA AT TOP END REINF.	BOTTOM REINF.	TOP REINF.	EXTRA AT TOP END REINF.		
S1	150	10@150C/C		10@150C/C	10@150C/C		10@150C/C	M-25	
S2	150	10@175C/C		10@175C/C	10@175C/C		10@175C/C	M-25	

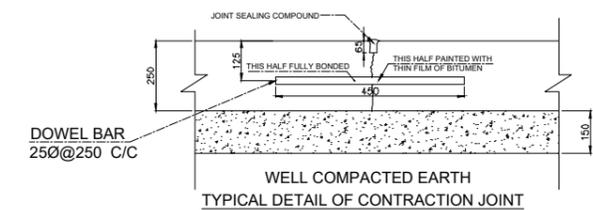
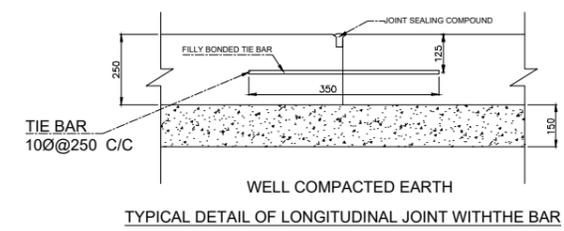
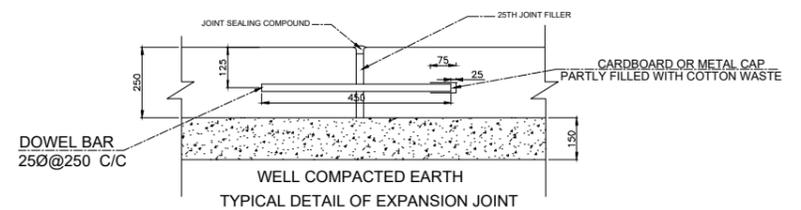
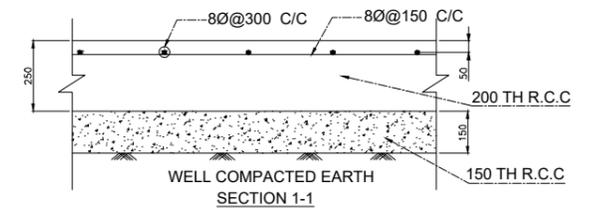
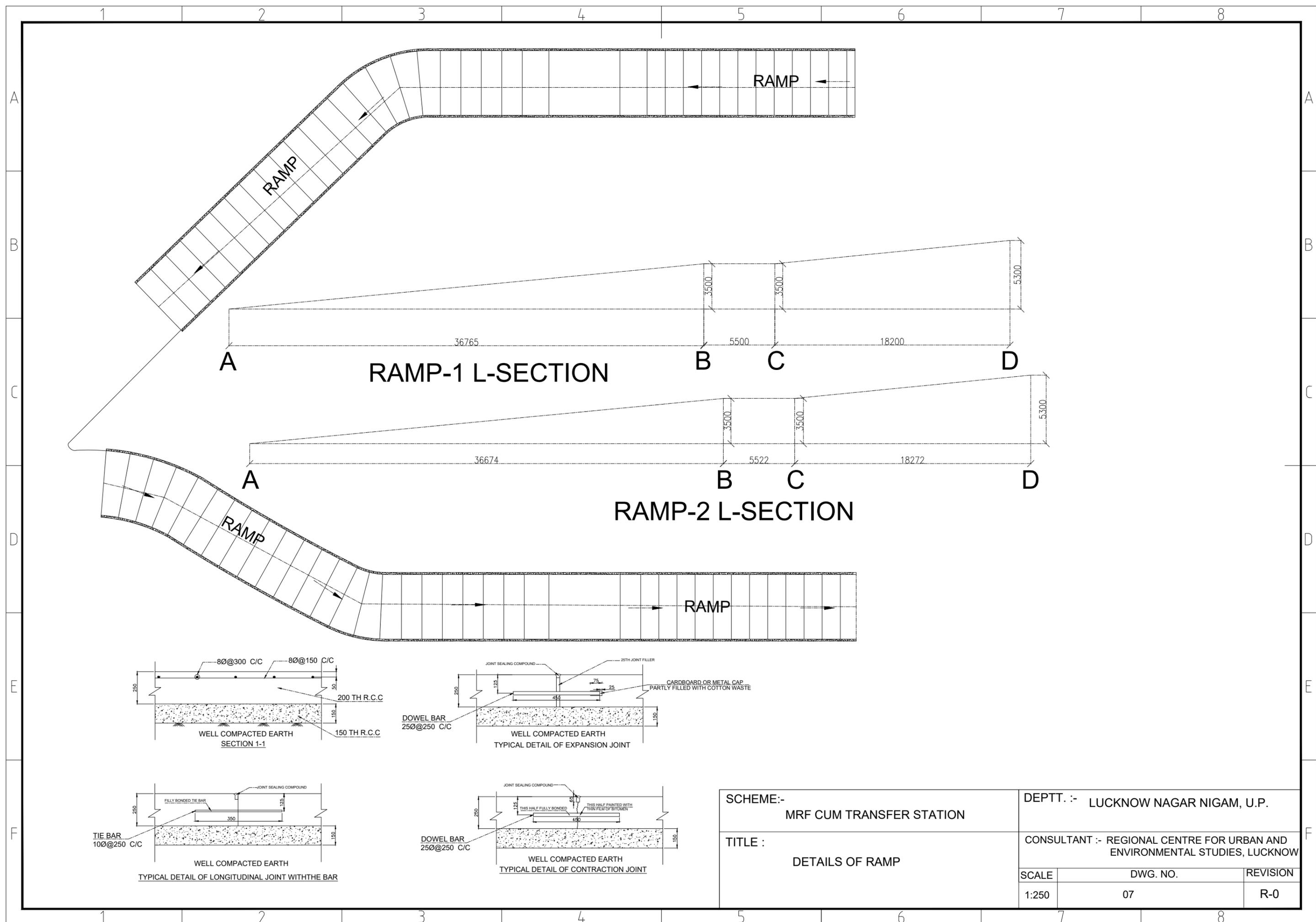
**SCHEME:-**  
MRF CUM TRANSFER STATION

**DEPTT. :-** LUCKNOW NAGAR NIGAM, U.P.

**TITLE :**  
DETAILS OF SLAB

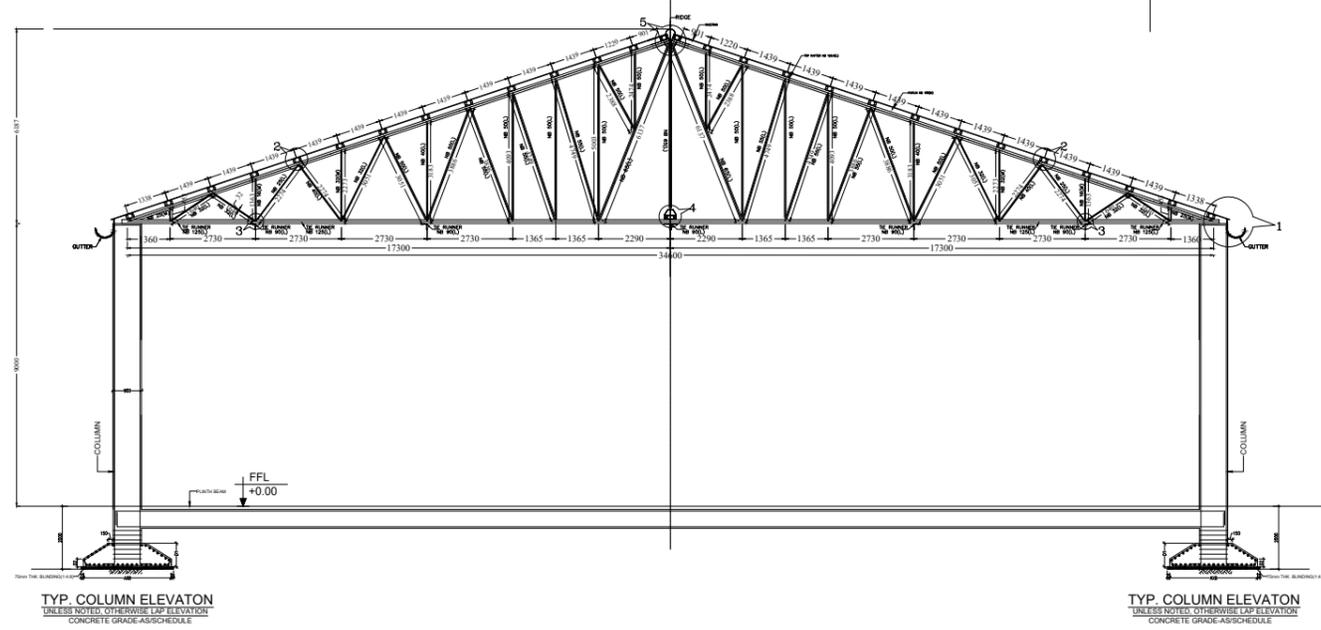
**CONSULTANT :-** REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW

SCALE	DWG. NO.	REVISION
1:225	06	R-0

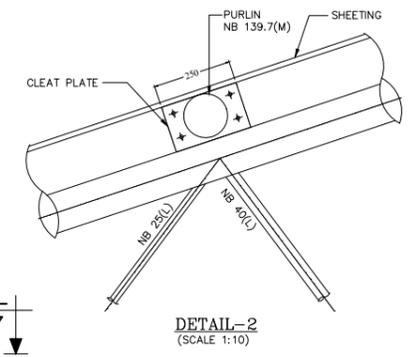


SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : DETAILS OF RAMP		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:250	07	R-0	





ELEVATION OF TRUSS



DETAIL-2  
(SCALE 1:10)

RIDGE LVL  
+15187

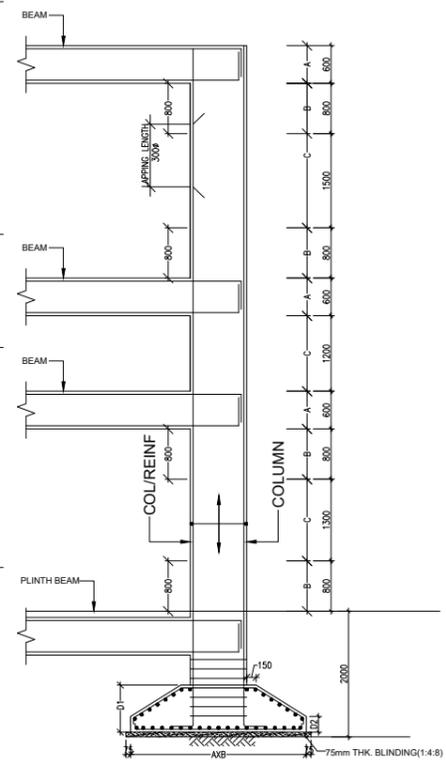
BOTTOM OF TRUSS LVL  
+11300

BEAM LVL  
+9000

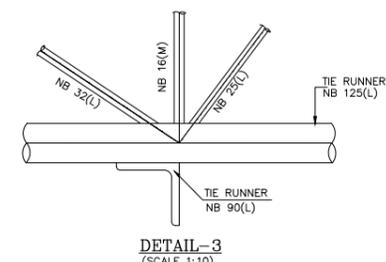
SECOND FLOOR LVL  
+5300

FIRST FLOOR LVL  
+3500

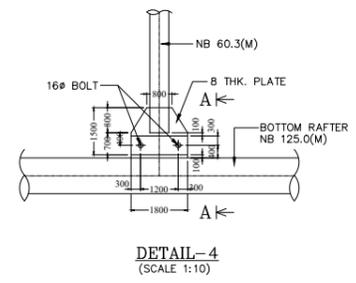
FFL  
+0.00



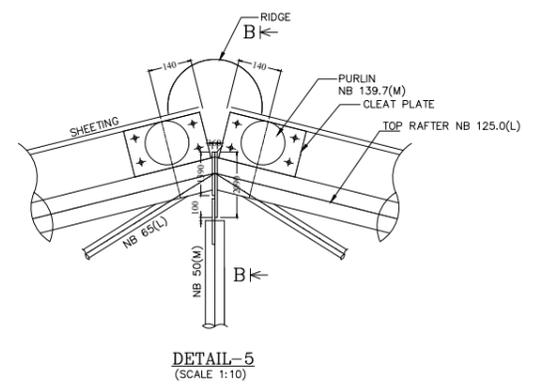
TYP. COLUMN ELEVATION  
UNLESS NOTED, OTHERWISE LAP ELEVATION  
CONCRETE GRADE-AS/SCHEDULE  
SCALE- 1:2



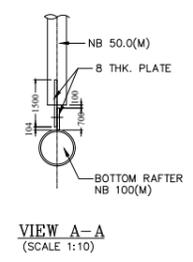
DETAIL-3  
(SCALE 1:10)



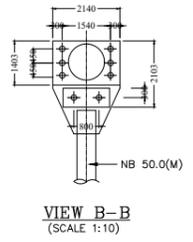
DETAIL-4  
(SCALE 1:10)



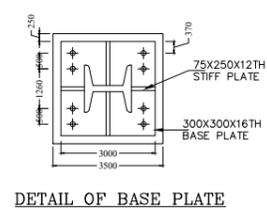
DETAIL-5  
(SCALE 1:10)



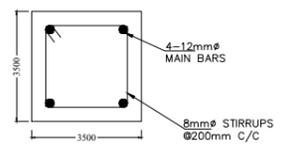
VIEW A-A  
(SCALE 1:10)



VIEW B-B  
(SCALE 1:10)



DETAIL OF BASE PLATE



COLUMN DETAIL  
SCALE- N.T.S

SIZE- 350X350  
R/F- 4-12#  
MIX- M25  
RING- 8#@200C/C

SCHEME:- MRF CUM TRANSFER STATION		DEPTT. :- LUCKNOW NAGAR NIGAM, U.P.	
TITLE : G.A & STRUCTURAL DETAILS OF TRUSS (34.6 M)		CONSULTANT :- REGIONAL CENTRE FOR URBAN AND ENVIRONMENTAL STUDIES, LUCKNOW	
SCALE	DWG. NO.	REVISION	
1:225	08-B	R-0	

