PLANNING, DESIGN, FABRICATION, SUPPLY AND LABOUR JOB FOR INSTALLATION, TESTING COMMISSIONING & TRIAL RUN OF 3 MONTHS OF GRAIN STORAGE SILOS SYSTEM OF CAPACITY 2500 MT (1 No's SILOS-1500 MT, 1 No SILO-1000 MT) COMPLETE WITH CLEANING SYSTEM, COLLECTION SYSTEM AND BAGGING UNIT WITH ALL ASSOCIATED ACCESSORIES, INCLUDING CIVIL, MEP WORKS MEANS ALL COMPLETE ON TURNKEY BASIS AND ANNUAL MAINTENANCE FOR THREE YEARS POST DEFECT LIABILITY PERIOD AT HAFED MEGA FOOD PARK, ROHTAK DISTRICT, HARYANA STATE

## **CORRIGENDUM**

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Sr No	Page No as per tender documents	Clause Reference	Clause as per tende	r documents	Clarifications		
1	289	Price Schedule	Price Scheo (To be filled by the bidder and uplo Planning, Design, fabrication, supply and commissioning & trial run of 3 months of grain stora SILO-1500 MT, 1 No SILO-1000 MT)complete w bagging unit with all associated accessories, includi turnkey basis and Annual Maintenance for three yea Food Park, ROHTAK Dist	labour job for installation, testing ge silos system of CAPACITY 2500 MT (1 No with cleaning system, collection system and ing Civil MEP Works means all complete on rs post defect liability period at HAFED Mega	It is clarified that the Commercial/ Financial Price Bid shall be submitted online only.  However, in addition to the above, the required price schedule break up of the financial proposal will be submitted by the technically qualified bidders in sealed envelope at the time of opening of online financial bids.  Further, it may be noted that if any variance is found between the total value of the price schedule (break up) submitted in the sealed envelope manually and the total value of the price bid (% above/below; uploaded online in the e-tendering portal), then the price bid uploaded in the e-tendering portal shall be considered final. The bidders who will not submit the required price schedule break up of the financial proposal in sealed envelope at the time of opening of online financial bids as mentioned above, their online commercial / financial price bid will not be opened and such bidders shall be considered as technically disqualified.		
Sr No	Clause Reference	Page no	Clause as per tender documents	Oueries	Clarifications		
1	Clause Reference	Pages-1, 2, 43 etc.	Annual Maintenance for three years post defect liability	( Please Clarrify on the post Defect Liability Period )	Please refer Page-43 of tender documents. Scope and Services for Annual Mainetance remains same as per tender documents.		

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
2	Heading		PLANNING, DESIGN, FABRICATION, SUPPLY AND LABOUR JOB FOR INSTALLATION, TESTING COMMISSIONING & TRIAL RUN OF 3 MONTHS OF GRAIN STORAGE SILOS SYSTEM OF CAPACITY 2500 MT (1 No's SILOS-1500 MT, 1 No SILO-1000 MT) COMPLETE WITH CLEANING SYSTEM, COLLECTION SYSTEM AND BAGGING UNIT WITH ALL ASSOCIATED ACCESSORIES, INCLUDING CIVIL, MEP WORKS MEANS ALL COMPLETE ON TURNKEY BASIS AND ANNUAL MAINTENANCE FOR THREE YEARS POST DEFECT LIABILITY PERIOD AT HAFED MEGA FOOD PARK, ROHTAK DISTRICT, HARYANA STATE	Civil scope not clear for other than silo system requirements like Admin building, Sheds required for bagging section, Weigh bridge, gates, security office, Lab and lab equipments, Work shop roads inside plant etc. Thers should be separate contract for Annual maintenance.	The whole works are on turnkey basis. For details on Civil works, please refer Page-42 of tender documents.  Weighbridge is not in the scope of the tender.  Scope and Services for Annual Mainetance remains same as per tender documents. Please refer Page-43 of tender documents.
3	10 (Pg-36)	Pages-2, 4 and 36	The time period for completion of work shall be Six Months from the date of handing over of site to the agency.	Time will not be sufficient considering quantum of work.	Time limit of 6 months remains same as per tender documents.
4	II-Financial Credentials	Page-7	Turnover: The bidder should demonstrate an average annual turnover of Rs. 3.76 Crores during the last three financial years.	( Can be provided for last fiscal 2019-20)	Average Annual Turnover for last three years as per eligibility criteria remain same as per tender document
5		Page 28 Clause 48	GST/Taxes as applicable will be deducted from gross payment as per govt. instructions.	What are the Standard deduction from the Bills? Pls clarify	As per prevelant GOI and Haryana state government norms
6		Page 29 Clause 49	The normal working hours of workers employed by contractors for the execution of work allotted to them should be 8 hours per day with a break of 2 hours during summer, one hour during winter after continuous work of 4 hours at the latest. The spread over should in no case exceed 10 hours. Workers working beyond these hours should be paid overtime wages at the double the ordinary rate of their wages calculated by the hour.	It should not be binding to vender / contractor. As Project ducration is very less. Contractor may work 14-16 hrs or any as per his own Plan. Also the wages offered to workers will be the role of contractor only.	Ammendment- Contractor may work on his plan. However, prior information on the work schedule should be submitted to the Engineer In Charge/HAFED for coordination and supervision of works. In addition the working hours shall be as per Government Instructions/Guidelines/Norms and following the Fair Wages standards.

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
7		Page 31 Clause 4	The contractor shall also maintain a wage slip for each worker employed on the work. The wage slip shall contain all the particulars given in the wage book.		To be as per Government norms. However HAFED/Engineer In charges reserves the right to inspect and monitor the staff/labour deployed for monitoring and achieving the project progress
8			GM may grant exemption from the maintenance of Wage Book and Wage Slips to a contractor who in his opinion may not directly or indirectly employ more than 50 persons on the work.	It should not be binding to vender / contractor.	
9		Page 31 Clause 5i to iv	Fine and deductions which may be made from wages		
10		Page 31 Clause 6ii	The contractor shall maintain, both in English and local Indian Language, a list approved by the Chief Labour Commissioner clearly stating the acts and commissions for which penalty or fine may be imposed on workmen and display it in a good condition in a conspicuous place on the work	Langauge should be only in English. Contractor May work from other State and may use his own Langauge to maitain his all records.	English Language is accepted.
11		Page 32 Clause7	Preservation of Registers:- The wage book, the wage slips and the Register of fines, deductions required to be maintained under these regulations shall be preserved for 12 months after the date of last entry made in them	It should not be binding to vender / contractor.	To be as per Government norms. However HAFED/Engineer In charges reserves the right to inspect and monitor the staff/labour deployed for monitoring and achieving the project progress
12		Page 32 Clause 12	Inspection of Books	It should not be binding to vender / contractor.	
13		Page 35 SECTION-4 (II) SPECIAL TERMS & CONDITIONS OF CONTRACT	All applicable taxes (GST & others) are to be deducted from all the running bills as per standard norms of GoI.	Pls provide the list of deduction from Running Bills. So that no confustion will occusrs during releae of Payment.	As per tender documents. As per prevelant GOI and Haryana state government norms

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
14		Page 35	Cess @ 1% of the total cost of this package of project from the payment of contractor under section-3 of the "Building & Other Construction Workers Welfare Cess Act-1996" & registration of establishment under section-7 of the "Building & Other Construction Workers" (regulation of employment and condition of service tax act 1996) shall be deducted from all running & final bills	contract. As contrcat is inclusive of GST. Hence it is should be applicable only on basic amount. s this a separate deduction from all bills including erection bills.	Applicable for all the bills. To be done as per prevelant norms of Central and Haryana Govt.Remains same as per tender document.
15		Page 35	The rate to be quoted by the contractor shall be inclusive of applicable GST and other taxes	Confirm other taxes in details structure	As per tender documents. As per prevelant GOI and Haryana state government norms
16		Page 35	Since this is a turnkey contract, no extra items / claims will be accepted by HAFED under any circumstances	No extra work shall be incorporated by M/S Hafed. Scope/ Battery Limit should be final before award /execution of Contract.	Please refer Page-41 -45 for detailed scope of works
17		Page 36 Clause 11	The work shall be inspected and frequency of tests required shall be as per relevant IS Code	Any test at Site/at Vendor's factory shall be borned by M/S Hafed with their own cost including their representaive's travel expences such as local/Air/Rail Faire. Vender/ Contartor will not be reposnsible any delay due to Inspection/test. All test related to Raw maetrail should be Carry before Producton/Facbrication. Once Silos and all items are manufatured then Such test shall not be carried out.	All Tests performed are to be borned by the contractor. Travel expenses will be borne by the contractor for 2 persons.

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
18		Page 36 Clause 12	The defect liability period shall be 24 (Twenty Four)-calendar months after commissioning of the works.  Any defect in material or workmanship observed in the work during execution of work or within Defect liability period shall be rectified by agency at his own cost. In the case the contractor fails to rectify the defects within 15 days, the department shall get the work executed at his risks and costs and recovered from the Contractor.	Any Defect/ Damage in material Should not count/ applicable with respect to any ,Force majeure shall mean any circumstances beyond the reasonable control of a party war or hostilities or war like conditions, acts of God, riot, civil commotion or riot like conditions, epidemic, famine, earthquake, flood, fire or other natural physical disaster. Defect liability period shall be 12 (Twelve) calender months from the completion of erection work.	Remains same as per tender document. Damages fue to force majeure shall not be considered.
19		Page 36 Clause 14	All material to be arranged by contractor himself, shall be confirming to relevant ISI specification, duly ISI marked and as per list of approved manufactures/ makes by HAFED attached in the DNIT. Wherever referred ISI codes shall be with its latest amendments	Vendor Should have liberty to desing Silo's & his Mhe with his using all Standards Like, ASTM/DIN/IS/EURO/BIS etc.	ASTM/DIN/IS/EURO/BIS accepted
20		Page 37 Clause 16	Necessary certificate from the manufacturer for all the material brought at site shall be supplied to the GM HAFED, CFP, Rohtak/Executive Engineer, HAFED, Rohtak, certifying that this lot of material have been manufactured as per Standard of BIS and confirms to relevant ISI Code.		
21		Page 38 Clause 29	The contractor will bear all electricity & diesel charges during installation, testing, commissioning & trial run of 3 months period, at its own cost.		Remains same as per tender document. The site is located at IMT Rohtak, Water charges - will be applicable as per the norms of HSIIDC in the IMT Rohtak and Electricity is available at site premises

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
22			Contractor is required to make his own arrangement for the water required for the installation, testing & commissioning, trial run of 3 months period, as well as for drinking and other uses of his workers at its own cost. In either case water being provided should be fit for the respective usage and the contractor shall provide the test report of water being used. In case the water is provided by HAFED the same shall be charged at the prevailing rates of HAFED water policy/norms.	M/S Hafed should arrange all electricity and Water for Construction at free of Cost.	
23			Complete designs of P&M design proposal and Civil, Steel structure, MEP, fire fighting works i.e all applicable works to be executed should be duly vetted by IIT Delhi/Roorkee /NIT/ or any other technical body by the Contractor with the confirmation from HAFED at Contractor's own cost within 30days of issuing the Letter of Acceptance	What is the terminology for P & M, MEP. Pls clear and There is no need to vetted by any other agency for Such Small Project. Silo manufacture's Warrenty and Guarrenty stands for it This may delay in project & may be an additional cost impact on Project.	P&M-Plant and Machinery, MEP- Mechancial, Electrical, Plumbing.  Scope remains same as per tender document
24	Scope of Work	41	and related electrical system including all Electrical Panels, Cables, Transformer, Diesel Generator (Power Backup) etc.		DG for power backup for plant operations. Lighting for plant operations and other supporting structures/spaces like office/admin space, sheds etc.
25		Page 41 Section III -A) Design	Hoppers, Product pipelines, aspiration systems and ducting, flaps, sight glass if any etc., as is required for the Bulk storage Silo System defined above Piping distribution system for utilities such as compressed air including pipelines, valves, fumigation system and accessories required for the Bulk storage Silo System defined above.	Pls specify the capacityof Bulk Storage Silo	There are two silos of total capacity 2500 MT.  1 No Silo 1500 MT Silos-Flat Bottom Silo  1 No Silo 1000 MT Silo-Flat Bottom/Hopper Bottom Silo

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
26			Hot dip galvanised steel structure for the Bulk storage Silo System including the box type (in Rectangular hollow Section) steel columns & beams, channels, angles, flats etc. for silos, platforms, ladders, catwalks/walkways, staircase and railings including Galvanized chequered plates for complete silo system.		
27		Page 41 Section III -B)	Commissioning of the bulk storage silo system including SCADA software and related communication software	Pls specify the capacityof Bulk Storage Silo	There are two silos of total capacity 2500 MT.  1 No Silo 1500 MT Silos-Flat Bottom Silo  1 No Silo 1000 MT Silo-Flat Bottom/Hopper Bottom Silo
28			All steel structure of silo system above plinth, supports of silos, elevators, Pipe Bridge in steel structure etc. are in the successful bidder's scope.		Remains same as per tender document. The subject mentioned works are in the scope of works on turnkey basis.
29			All GI structures of elevators and overhead conveyor bridge/walk way including columns, beams, purlins cross bracing etc. on RCC foundation above FFL, GI chequered plates for walk way/ maintenance platform/ staircase etc., toe guards on maintenance platform etc., are in the bidder's scope of works.		

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
30			All frames, foundation bolts for GI steel structure and equipment, including ladder and safety railing, supports for steel structure / equipment / piping/isolators, cables etc., maintenance platform with safety railing of equipment including grouting etc. to be provided by bidder. In addition, nosing angles around cut out of intake conveyor in dumping area shall be provided by the bidder.		
31			Suitable structure for roofing of all elevator towers to be provided along with roof sheeting.  Bidder's scope also includes providing stability certificate of storage silos and its supporting structure, structural housing for elevators and overhead conveyors by reputed structural consultant, arranging inspection and obtaining approval for this steel structure of silo system from Local Factory Inspector or as applicable.	There is no need to vetted by any other agency for Such Small Project. Silo manufacture's Warrenty and Guarrenty stands for it This may delay in project & may be an addtional cost impact on Project. Secondly All Approval from Local Authourity is in Scope of HAFED.	Vetting is required and will remain same as per tender document. Approvals Remains same as per tender document.  The Contractor shall obtain the necessary statutory approvals and any other state and local authorities as may be required and the cost of obtaining such approvals shall be included in the Contract Price. All the necessary details, drawings, submission of application and proforma will be furnished by the Contractor to the HAFED for verification/ signature.  The necessary application duly filled-in, together with the prescribed fees shall be submitted to the appropriate authorities by the Contractor on behalf of the HAFED. However all the actual statutory prescribed fees paid by the Contractor shall be reimbursed by the HAFED upon production of the receipt/vouchers.

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
32		Page 42 Section III -D	Trial run shall be for the period where consistent capacity proof is achieved for every component. Consistent capacity means running the plant at a rated capacity. Raw material (for material handling section) and staff required for successful trial run are to be arranged by the Contractor. Raw material for trial run –Material handling section,	Pls confirm the quantity of Grains (Wheat)	The time period of Trial Run is to be weekly / fortnightly on one shift basis within 3 months trial run period to ensure all parameters are achieved.  Raw material for 5 days on shift 3 hr basis is to be arranged minimum i.e considering MHE capacity of 40 MT/Hr, raw material of 600 MT is required.  Testing will be as per HAFED's decisions with prior information and shall be done in a continous manner.  Further if the performance of machinery of scope of this tender is not satisfactory during this trial run, it will be the contractor's responsibility for procuring the raw material required for further trial run.
33	С	42	Suitable structure for roofing of all elevator towers to be provided. However roofing sheeting will be done by Contractor.	Two contradictory statement.	Clarification- Suitable structure for roofing of all elevator towers to be provided along with roof sheeting.
34	С		Suitable structure for roofing of all elevator towers to be provided along with roof sheeting.		
35	d	42	successful trial run, etc. All staff and materials required (for	Material, labour, Staff and all trial run requirements should be in buyer scope. Supervision should be provided by contractor.	Remains same as per tender document. All manpower and material required for trial run is in the scope of the tender.
36			calendar months after commissioning of the Equipment,	Pls confim the terminology of Commssioning, as Allcation of Grains are in Scope of M/S Hafed. If the Grains delay then Commssioning of all system should not be delayed.	Please refer Page-44 of tender documents-Date of start of defect liability and warranty-From the date of Commissioning

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
37		Page 44 Section III -A) Design and supply of	equipment, steel supporting system and related electrical system including all Electrical Panels, Cables, Transformer,	Conveyoing Capacity & Capacity of Hopper bottom silos to be confirmed and Detail BOM is to be published to under stand extact requirement even though it is Trunkey- Project.	Conveying Capacity-40 TPH.  There are two silos of total capacity 2500 MT.  1 No Silo 1500 MT Silos-Flat Bottom Silo  1 No Silo 1000 MT Silo-Flat Bottom/Hopper Bottom Silo  Type of silo-flat bottom/hopper bottom is to be as per bidder's design, however stability certificate must be provided by the successful bidder.
38	14.1 a	52		given with Tender submission? Will this affect the tender cost?  Only Spare List and price price to be given with Tender submission. They may or may not take	Yes separate Spare List and price to be given with Tender submission. Please refer detailed scope in Page- 43-E) Defect Liability period and Warranty, Annual Maintenance of the Plant and Machinery in the scope of the tender:  Yes, the list is for getting the price of spare parts. Further procurement of spare parts if required during AMC, it will be as per HAFED decisions. Remains same as per tender documents
1	PREPARATION OF DRAWINGS FOR APPROVA	Page 67 Clause 3	The Contractor shall prepare and submit all Drawings to the HAFED for approval:	The Contractor shall prepare ONLY G.A Drawing	This is a turrnkey tender. All drawings including GFC are in contractor's scope. Approval will be given by HAFED
40			Drawings showing fabrication details, dimensions, layouts and bill of materials submitted for approval shall be signed by responsible representative of Contractor and shall be to any one of the following sizes in accordance with Indian Standards: A0, A1, A2, A3 and A4.		

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
41	13.1	Page-77		will be Buyer Scope	Remain same as per tender document.  The Contractor shall obtain the necessary statutory approvals and any other state and local authorities as may be required and the cost of obtaining such approvals shall be included in the Contract Price. All the necessary details, drawings, submission of application and proforma will be furnished by the Contractor to the HAFED for verification/signature. The necessary application duly filled-in, together with the prescribed fees shall be submitted to the appropriate authorities by the Contractor on behalf of the HAFED. However all the actual statutory prescribed fees paid by the Contractor shall be reimbursed by the HAFED upon production of the receipt/vouchers.
42		81	The raw material shall be received through hoppers and then cleaned. Weight of the grains is to be recorded on manual basis (weigh-bridge)	Who will install weigh bridge and which grain wt will it measure? Cleaned grain or grain brought by farmers?	Weighbridge is not in the scope of this tender
43		Page 81	Minimum of Three Numbers Receiving Hoppers for 40 TPH loading and unloading capacity	2 Receiving hoppers are enough to fullfill capacity	3 Hoppers are required and remain same as per tender documents.
44		Page 81	Electronic load cell based automatic bagging machine (net weigher type) –having weighers with chute suitable for both Jute & HDPE bags	for jute and HDPE both options- semi automatic	Okay.Accepted.
45	LUBRICANT	Page 81	Icharge of libricant (grease/gear oil) etc. slipplied loose in	Supply in loose drums not possible for such small quantity.	Okay.Accepted.
46	PAINTING	Page 82	Supporting steel structure, transition pieces & piping etc. being fabricated at site	Fabrication will be done at our end and shifted to site for installation. No fabrication work will reuired at site.	Okay.Accepted However all structures are to be inspected by HAFED/Engineer in charge prior to fabrication.

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
47		Page 83	silos shall be designed for wind load (highest as per historical records)	150 Km/ Hr wind load capacity as per our silo design	Please refer relevant IS Codes-Reference-180 Km/Hr as per IS 875: Part 3
48	STIFFNERS	Page 83	Stiffeners may be C channels/omega shaped	As per our design Hat type shaped. Sizes are as per our std design	Okay accepted
49	BOLTING	Page 84	The bolting shall be coated by a hot dip galvanization process following the norm EN-ISO 10684:2006	Bolts are Yellow passivated	As per industrial standards
50	AERATION SYSTEM	Page 84	flat bottom silos the aeration system shall be Y type made of special galvanized corrugated and perforated steel sheets with min. 20% area covering the entire flat bottom silo	As per BGSCTPL design std.	As per tender documents and industrial standards
51	CAT WALKS	Page 84	Flooring of walkway shall be made ofgalvanized steel perforated sheets of 3mm thick. Steel quality shall conform to S 280 GD according to normUNE-EN-10346:2009 and galvanization 450 gm/sq.m according to norm UNE-EN-10346:2009. Tensilestrength of galvanized perforated sheet shall not less than 500 N/mm2 and lower yield point not less than 380N/mm2	As per our standard design,we use Chequred plates for flooring of walkway. Otherwise we have to order special galvanized perforated sheet whose TS is not less than 500 N/mm2 and lower yield point not less than 380 N/mm2. It will be difficult to procure due to less Qty.	Okay accepted
52		Page 85	Shell wall size is mentioned 1140x2400 as against	we are using 1144 x 2790 mm.	Okay accepted
53			Level indicators membrane type is mentioned.	we are using vibrating fork type.	Okay accepted
54			Control gates pneumatic type mentioned mentioned.	We are using motorised gate	Okay. Minimum One manual option to be provided.
55			Sweep Auger:- Tractor drive is mentioned & Main drive motor kept out side of silo	traction wheel with gear motor drive & Main drive motor is inside of silo	Okay option accepted.
56			Bag capacity	Capacity not mentioned	As per industrial standards

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
57		Page 85	Conveyor casing thickness mentioned, bottom 5mm thk, side- 4mm & top cover 3mm. AR steel liner & TISCRAL rail mentioned.	As per our std. we are providing 3mm bottom with 10 mm thk UHMWPE as a liner, 3mm side & 2mm top cover. UHMWPE rollers we are using instead of TISCRAL rail. no partition plate is reqd.	Accepted. However design vetting will be required as per tender documents.
58		Page 86	Hold back for elevator is mentioned Pawl & ratchet type. Food quality belt is menioned in tender,	We are giving in built with gear box. we are using N/N with M24 grade cover reguler belt.	In built gear box accepted.
59		Page 86	Elevator capacity is mentioned 80TPH,	where as conveyor cap. is 40TPH	Ammendment- It is to be considered 40 TPH
60	AERATION FANS	Page 88	aeration area should be considered 20 % of total area and suitable to run on auto mode	14-15% as per our design std.	As Per FCI Norms
61	SLIDEGATES	Page 90	These shall be either manually or pneumatically operated or as applicable pneumatic gate shall be provided with slots/stoppers and control mechanism to control the flow rate	Manually operated or MOTORIZED WITH LIMIT SWITCH as per application	Okay. Minimum One manual option to be provided.
62	Electrical battery limit	93	After Silo system MCC panel, HT line (including supply to MCC from PCC). Power and control of all supplied equipment and earthing. With Lighting arrester and Lighting Provision near Inline motors. (i.e. Elevators, Conveyors, Cleaners, Bag Filters). All applicable transformers and Diesel Generatot (Power Elevators, Conveyors, Cleaners, Bag Filters). All applicable transformers and Diesel Generatot (Power Backup) are to be included accordingly.		Haryana State Electricty Board will provide electrical connection till Transformer.  The transformer along with further connections for electrical including Power backup remains in the scope of the successful bidder.
63	DOORS AND WINDOWS	Page .204 Clause16		Please provide Metal doors as an option. All doors require at site will be MS powder coated	The clause is in reference for Admin facilities where timer door and windows are required and remains same as per tender document.

Sr No	Clause Reference	Page no	Clause as per tender documents	Queries	Clarifications
64			We would request you to kindly share contour map for Rohtak Silos Turnkey Project.		Level Sheet is attached as Annexure A, Avg NGL of Plot-98.718 Avg Road Level-99.94
65			AutoCAD drawing		soft copy will be provided to the bidders through email whosoever request for the same
66			BOQ of civil work (In tender we have found specification for civil works, however we have not found detail BOQ of Civil works and battery limit with scope of work)		The whole works are on turnkey basis. For details on Civil works, please refer Page-42 of tender documents. In addition for Civil works a tentative indicative BoQ is attached, however since the works are turnkey nature the bidders are advised to bid as per their own design and minimum requirements as per the scope of tender document.
67			Contact number of concern person for further technical queries.		The pre bid meeting was conducted on 27th August 2020 and queries were to be received by 31st August 2020. However, as given in Page-293,the contact mail Id is: hafed@hry.nic.in

	NGL SHEET											
CHANAGE	OFFSET	BACK SIDE	FORE SIDE	ISTRUMENT	HEIGHT OF	REDUCED LEVEL	REQUERED	DEFFRENCE	REMARK			
				SIDE	INSTRUMENT		REDUCED LEVEL					
T.B.M.		1.790		2.460	101.730	00.570			T.B.M 2 ON RIGHT SIDE ROAD CENTER			
0	5			3.160		98.570			T.B.M. R.L.= 99.94			
	10			2.950 2.880		98.780 98.850						
	15			2.720		99.010						
	20			2.910		98.820						
	25			2.980		98.750						
	30			3.170		98.560						
	35			3.060		98.670						
	40			3.060		98.670						
	45			3.200		98.530						
	50			3.310		98.420						
5	0			2.910		98.820						
	5			2.920		98.810						
	10 15			2.820 2.900		98.910 98.830						
	20			3.150		98.580						
	25			3.150		98.580						
	30			3.100		98.630						
	35			3.150		98.580						
	40			3.000		98.730						
	45			3.040		98.690						
	50			2.810		98.920						
10	0			3.070		98.660						
	5			3.080		98.650						
	10			2.980		98.750						
	15			2.930		98.800						
	20 25			3.130 3.140		98.600 98.590						
	30			3.140		98.590						
	35			3.090		98.640			1			
	40			3.080		98.650						
	45			3.000		98.730						
	50			2.950		98.780						
T.B.M.		1.735			101.675				T.B.M 2 ON RIGHT SIDE ROAD CENTER			
15	0			2.990		98.685			T.B.M. R.L.= 99.94			
	5			2.930		98.745						
	10			2.900		98.775						
	15			2.920		98.755						
	20			3.010		98.665						
	25			3.060		98.615						
	30			2.900		98.775						
	35 40			3.000 2.940		98.675 98.735						
	45			2.940		98.735						
	50			2.950		98.725						
20	0			3.000		98.675						
	5			2.920		98.755						
	10			2.900		98.775						
	15			2.950		98.725						
	20			2.900		98.775						
	25			3.000		98.675						
	30			3.030		98.645						
	35 40			3.000		98.675						
	45			3.000 2.910		98.675 98.765						
	50			2.900		98.775						
25	0			2.920		98.755						
	5			2.850		98.825						
	10			2.880		98.795						
	15			2.880		98.795						
	20			3.050		98.625						
	25			3.040		98.635						
	30			3.060		98.615			1			
	35 40			3.040 3.000		98.635 98.675						
	45			3.000		98.675			1			
	50			2.960		98.715			1			
30	0			2.910		98.765						
	5			2.950		98.725						
	10			2.870		98.805						
	15			2.930		98.745						
	20			3.070		98.605						
	25			3.040		98.635						
	30			3.000		98.675						
	35 40			3.050 3.050		98.625 98.625						
	45			2.960		98.625						
	50			3.000		98.675			1			
35	0			2.930		98.745						
	5			2.870		98.805						
	10			2.970		98.705						
	15			2.980		98.695						
	20			2.950		98.725						
	25			3.030		98.645						
	30			3.040		98.635						
	35			3.010		98.665			1			
	40			3.010		98.665			1			
	45 50			2.970 2.920		98.705 98.755						
	J 30	1	l	2.920		20./33	l	l	1			

40	0	2.900	98.775		
	5	2.870	98.805		
	10	2.850	98.825		
	15	2.950	98.725		
	20	3.060	98.615		
	25	3.060	98.615		
	30	3.070	98.605		
	35	3.070	98.605		
	40	3.030	98.645		
	45	3.000	98.675		
	50	2.980	98.695		
45	0	2.900	98.775	<del>                                     </del>	
45	5	2.800	98.875		
	10	2.750	98.925	+	
-	15	2.770	98.905		
	20	2.950	98.725	+ + + + + + + + + + + + + + + + + + + +	
	25	2.970		+ + + + + + + + + + + + + + + + + + + +	
-			98.705		
	30	3.030	98.645	<del>                                     </del>	
	35	3.000	98.675		
	40	3.000	98.675		
	45	3.030	98.645		
	50	2.960	98.715		
50	0	2.930	98.745		
	5	2.790	98.885		
	10	2.720	98.955		
	15	2.670	99.005		
	20	2.820	98.855		
	25	2.900	98.775		
	30	2.930	98.745		
	35	3.010	98.665		
	40	3.040	98.635		
	45	2.930	98.745		
	50	3.030	98.645		
55	0	2.890	98.785		
	5	2.960	98.715		
	10	2.830	98.845		
	15	2.910	98.765		
	20	3.050	98.625		
	25	3.060	98.615		
	30	3.040	98.635		
	35	3.020	98.655		
	40	3.030	98.645		
	45	3.010	98.665		
	50	3.030	98.645		
60	0	2.880	98.795		
- "	5	2.920	98.755		
	10	2.770	98.905	<del>                                     </del>	
	15	3.000	98.675	+	
	20	3.000	98.675		
	25	2.920	98.755	<del>                                     </del>	
	30	3.010	98.665		
	35	3.020	98.655	+ + + + + + + + + + + + + + + + + + + +	
	40	2.970			
	45		98.705		
		2.980	98.695		
65	50	2.980 3.050	98.695 98.625		
H-33	0	2.980 3.050 2.960	98.695 98.625 98.715		
	0 5	2.980 3.050 2.960 2.970	98.695 98.625 98.715 98.705		
	0 5 10	2.980 3.050 2.960 2.970 2.920	98.695 98.625 98.715 98.705 98.705		
33	0 5 10 15	2.980 3.050 2.960 2.970 2.920 2.910	98.695 98.625 98.715 98.705 98.755 98.765		
33	0 5 10 15 20	2.980 3.050 2.960 2.970 2.920 2.910 2.970	98.695 98.625 98.715 98.705 98.755 98.765 98.765		
	0 5 10 15 20 25	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060	98.695 98.625 98.715 98.705 98.755 98.765 98.705 98.615		
	0 5 10 15 20 25 30	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010	98.695 98.625 98.715 98.705 98.705 98.765 98.705 98.665 98.665		
	0 5 10 15 20 25 30 35	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020	98.695 98.625 98.715 98.705 98.705 98.765 98.765 98.765 98.615 98.665 98.655		
	0 5 10 15 20 25 30 35 40	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030	98.695 98.625 98.715 98.705 98.705 98.785 98.765 98.705 98.615 98.665 98.655 98.655		
	0 5 10 15 20 25 30 35 40	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020	98.695 98.625 98.715 98.705 98.755 98.765 98.765 98.655 98.665 98.665 98.655 98.645		
	0 5 10 15 20 25 30 35 40 45	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 3,020 3,020	98.695 98.625 98.715 98.705 98.705 98.765 98.765 98.655 98.665 98.665 98.655 98.655		
70	0 5 10 15 20 25 30 35 40 45 50	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 3,020 2,930	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.705 98.615 98.665 98.655 98.655 98.655 98.655		
	0 5 10 15 20 25 30 35 40 45 50 0	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 3,020 2,930 2,930 2,940	98.695 98.625 98.715 98.705 98.705 98.785 98.785 98.655 98.665 98.645 98.655 98.655 98.655 98.735		
	0 5 10 15 20 25 30 35 40 45 50 0 5	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 3,020 2,930 2,940 2,860	98.695 98.625 98.715 98.705 98.705 98.765 98.765 98.655 98.665 98.655 98.655 98.655 98.655 98.655 98.655 98.655 98.655 98.655		
	0 5 10 15 20 25 30 35 40 45 50 0 5	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950	98.695 98.625 98.715 98.705 98.705 98.765 98.765 98.765 98.665 98.665 98.655 98.655 98.645 98.655 98.655 98.745 98.735 98.815		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 2,970	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.705 98.665 98.655 98.655 98.655 98.655 98.655 98.705 98.735 98.735 98.815 98.725		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 25 30 25 30 25 30 35 40 40 20 20 20 20 20 20 20 20 20 20 20 20 20	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 2,930 2,940 2,860 2,950 2,970 3,000	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.765 98.665 98.665 98.655 98.655 98.655 98.655 98.765 98.765 98.765 98.765 98.765 98.765 98.765 98.765		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 25 30 35 40 40 45 45 45 45 45 45 45 45 45 45 45 45 45	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,000	98.695 98.625 98.715 98.705 98.705 98.765 98.765 98.765 98.665 98.665 98.665 98.655 98.645 98.655 98.655 98.745 98.735 98.735 98.725 98.705		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 35 40 35 35 35 35 35 35 35 35 35 35 35 36 36 37 37 37 37 37 37 37 37 37 37 37 37 37	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.615 98.655 98.655 98.655 98.655 98.735 98.735 98.735 98.735 98.725 98.725 98.705 98.665		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 0 5 40 40 40 40 40 40 40 40 40 40 40 40 40	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.765 98.665 98.665 98.655 98.655 98.655 98.765 98.765 98.765 98.765 98.765 98.765 98.765 98.765 98.765 98.765 98.765		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 5 40 45 45 45 46 47 48 48 49 49 40 40 40 40 40 40 40 40 40 40 40 40 40	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.655 98.655 98.655 98.745 98.735 98.735 98.735 98.735 98.725 98.705 98.675 98.665 98.665		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 40 45 50 40 45 45 45 40 40 40 40 40 40 40 40 40 40 40 40 40	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,050 3,010 2,980	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.665		
	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 45 45 45 40 45 45 40 45 45 40 40 40 40 40 40 40 40 40 40 40 40 40	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,030 3,020 2,930 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,980	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 20 25 30 35 40 45 5 5 40 6 5 40 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,980 2,990	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.655 98.655 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.675		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 40 45 50 0 0 5 45 45 45 45 45 45 45 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,050 3,010 2,980 2,990 2,990	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 45 50 0 5 45 45 45 45 45 45 45 45 45 45 46 46 46 47 48 48 48 48 48 48 48 48 48 48 48 48 48	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 2,930 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,050 3,010 2,980 2,980 2,990 2,990 2,990 2,900 2,900	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 20 25 30 35 40 45 50 0 0 5 40 20 5 5 40 6 6 6 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,980 2,990 2,990 2,990 2,990 2,820 2,970	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.665 98.655 98.735 98.735 98.735 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 45 50 0 5 45 45 45 45 45 45 45 45 45 45 46 46 46 47 48 48 48 48 48 48 48 48 48 48 48 48 48	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 2,930 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,050 3,010 2,980 2,980 2,990 2,990 2,990 2,900 2,900	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605 98.605		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 20 25 30 35 40 45 50 0 0 5 40 20 5 5 40 6 6 6 6 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,980 2,990 2,990 2,990 2,990 2,820 2,970	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.665 98.655 98.735 98.735 98.735 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725 98.725		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 2,930 2,940 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 2,940 2,940 2,940 2,940 2,940 2,940 2,940 2,970 3,000 3,010 3,010 3,010 3,010 3,050 3,010 2,980 2,910 2,990 2,990 2,990 2,990 2,990 2,970 3,040	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.665 98.655 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 25 30 35 40 45 50 0 5 10 15 20 25 5 10 10 10 10 10 10 10 10 10 10	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,990 2,990 2,990 2,990 2,990 2,990 3,040 3,040 3,040 3,040	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.655 98.755 98.755 98.755 98.755 98.755 98.655 98.655 98.655 98.655 98.655 98.755 98.775 98.775 98.775 98.875 98.705 98.775 98.875 98.705		
70	0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 40 45 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,930 2,940 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,910 2,990 2,990 2,990 2,990 2,990 2,990 3,040 3,040 3,040 3,040 3,040 3,050 3,050 3,040 3,040 3,040	98.695 98.625 98.715 98.705 98.705 98.755 98.765 98.765 98.665 98.665 98.655 98.655 98.745 98.735 98.745 98.735 98.745 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.755 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 40 45 50 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,030 3,020 2,930 2,930 2,940 2,860 2,950 3,010 3,010 3,010 3,010 3,010 3,010 2,940 2,940 2,950 2,970 3,000 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.605		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 5 10 10 10 10 10 10 10 10 10 10	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,910 2,900 2,900 2,900 2,900 3,040 3,040 3,040 3,040 2,980 3,020 3,000	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.765 98.665 98.665 98.655 98.675 98.675 98.675 98.765		
70	0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 40 45 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,940 2,940 2,950 2,970 3,000 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.635 98.605		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 20 25 30 35 40 40 45 50 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,930 2,940 2,860 2,950 3,010 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,990 2,990 2,820 2,970 3,040 3,040 3,040 3,040 3,040 2,980 3,000	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.605 98.605 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.705 98.605 98.705 98.705 98.705 98.705 98.635 98.635 98.635 98.635 98.635 98.635		
70	0 5 10 15 20 25 30 35 40 45 50 0 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 0 15 20 20 20 20 20 20 20 20 20 20	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 3,020 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 2,980 2,940 2,980 2,900 2,900 2,900 2,900 2,900 2,900 3,040	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.765 98.665 98.665 98.655 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665		
70	0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 40 45 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.655 98.635 98.725 98.725 98.725 98.725 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665		
70	0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 45 50 0 5 10 15 20 25 30 35 40 40 45 50 0 0 5 10 10 10 10 10 10 10 10 10 10	2,980 3,050 2,960 2,970 2,920 2,910 2,970 3,060 3,010 3,020 3,020 2,930 2,930 2,940 2,860 2,950 2,970 3,000 3,010 3,010 3,010 3,010 3,010 3,010 2,980 2,910 2,900 2,900 2,900 2,900 2,900 2,900 3,040 3,040 3,040 3,040 3,000	98.695 98.625 98.715 98.705 98.705 98.705 98.765 98.765 98.665 98.665 98.655 98.675 98.675 98.675 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665		
70	0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 45 50 0 0 5 10 15 20 25 30 35 40 40 45 50 60 60 60 60 60 60 60 60 60 6	2,980 3,050 2,960 2,970 2,970 2,920 2,910 3,060 3,010 3,020 3,020 2,930 2,940 2,860 2,950 3,010	98.695 98.625 98.715 98.705 98.705 98.705 98.705 98.705 98.605 98.605 98.605 98.655 98.635 98.725 98.725 98.725 98.725 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665 98.665		

	35	3.060	98.615	
	40	2.970	98.705	
	45	2.960	98.715	
	50	3.000	98.675	
85	0	2.910	98.765	
	5	2.920	98.755	
	10	2.860	98.815	
	15	2.350	99.325	
	20	3.000	98.675	
	25	3.020	98.655	
	30	3.040	98.635	
	35	3.000	98.675	
	40	3.040	98.635	
	45	3.040	98.635	
	50	3.000	98.675	
90	0	2.930	98.745	
	5	2.920	98.755	
	10	2.510	99.165	
	15	3.000	98.675	
	20	3.010	98.665	
	25 30	2.960 2.970	98.715 98.705	
	35	3.010	98.665	
	40	3.000	98.675	
	45	2.950	98.725	
	50	3.050	98.625	
95	0	2.920	98.755	
	5	2.900	98.775	
	10	2.510	99.165	
	15	2.780	98.895	
	20	3.070	98.605	
	25	3.030	98.645	
	30	3.020	98.655	
	35	3.010	98.665	
	40	3.030	98.645	
	45	3.050	98.625	
100	50	3.040	98.635	
100	5	2.900 2.880	98.775 98.795	
	10	2.510	99.165	
	15	2.940	98.735	
	20	3.030	98.645	
	25	2.980	98.695	
	30	3.050	98.625	
	35	3.020	98.655	
	40	2.980	98.695	
	45	3.020	98.655	
	50	3.050	98.625	
105	0	2.900	98.775	
	5	2.860	98.815	
	10	2.520	99.155	
	15 20	2.810 3.040	98.865 98.635	
	25	3.040	98.675	
	30	3.030	98.645	
	35	3.000	98.675	
	40	2.970	98.705	
	45	3.010	98.665	
	50	3.040	98.635	
		AVERAGE R.L.	98.718	

			Estimate for silos (Civil)	at HAFE	D Mega Foo	od Park, IM	IT Rohtak.			
S.No	Item Source	Item Ref.	Description	Unit	Qty	Rate	Ceiling Premium in %	Rate + Ceiling Premiu m	Final Rate	Amount (Rs.) I/C CP
1	HSR	6.6	Earth work in excavation in foundations, trenches, etc. in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 metres.	100 Cum	2566.65	1,108.10	425	5817.53	5512.10	1,41,476.35
2	HSR	6.13A	earth filling under floors with surplus soil, excavated from foundation and taken only from outside the building plinth, in 15 cm layers, including ramming watering and consolidating lead upto 30 metres.	100 Cum	2848.80	343.4	370	1613.98	1529.25	43,565.15
3	NS	NS	Earth work in embankment with material from borrow areas with supplying, rolling, watering & compaction to the desired specifiction complete as per grades & cross-section show in the drawing & density not less than 95% of maximum laboratory dry density MORT&H sepcifiction for Road & bridge work 2013 (Fifth Revision) Clause-305 of section 300 complete in all respects to the satisfaction of the Engineer-incharge.	Cum	433.47	176.76			176.76	76620.95
4	NS	NS	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	Cum	631.15	917.75		917.75	852.82	5,38,261.05
5	HSR	10.39	1:4:8 (1 Cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 40 mm nominal size)	Cum	110.72	403.10	450	2217.05	2100.65	2,32,590.98
6	HSR	9.13	Shuttering for faces of concrete foundations and foundations beams (vertical or battering)	Sqm	426.37	30.65	400	153.25	145.20	61,911.46

7	HSR	9.6	Centring and shuttering for faces of walls, partitions, retaining Walls, well steining and the like (vertical or battering) including attached pilasters, buttresses etc. when curved.	Sqm	1335.36	60.70	400	303.50	287.57	3,84,003.26
8	HSR	9.7	Centering and shuttering for side and soffits of beams hunchings, girders. bressumers and lintels	Sqm	312.18	57.80	400	289.00	273.83	85,482.54
9	HSR	9.1	Centering and shuttering for flat surfaces such as suspended floor, roof,landing,chhajjas,shelves	Sqm	218.92	40.65	400	203.25	192.58	42,159.36
10	HSR	9.9	Centering and shuttering for columns (square or rectangular or Polygonal in plan)	Sqm	379.79	49.45	400	247.25	234.27	88,972.14
11	HSR	10.66	Design mix cement concrete of grade M-25 with minimum cement contents 300 kg per cum in foundation and plinth.							-
			All works upto plinth level	Cum	508.08	668.90	450	3678.95	3485.81	17,71,056.70
12	HSR	10.73	Design mix cement concrete of grade M-25 with minimum cement contents 300 kg per cum in First storey up to 4 meters above plinth level	Cum	43.59	675.15	450	3713.33	3518.38	1,53,359.55
13	HSR	18.22	FE-500 EQR TMT steel bars R.C.C. works, where not included in the complete rate of R.C.C including bending, binding and placing in positon complete.							-
			Cold twisted bars	Qtl	606.83	917.05	500	5502.30	5213.43	31,63,672.89
14	HSR	11.28.	First class brick work laid in cement, stone dust (from crusher) mortar 1:5 in first storey upto 4 metres above plinth level.	cum	116.38	448.70	600	3140.90	2976.00	346347.20
15	HSR	15.6	12mm Cement Plaster to mix 1:4 ( 1 Cement : 4 fine Sand)	Sqm	1012.00	11.60	500	69.60	65.95	66,737.35
16		N/s	stone soling including supply of stones and 1:6 preparing surface complete.	cum	227.551002				1476.81	3,36,049.60
17		N/s	Providing and fixing 50 mm thick Thermacoal for making Expantion joint in pocket complete as per the direction of Engineer-in-charge.	mtr	43.50				217.00	9,440.31
18		N/s	GP-2 filling in pockets	kg	4676.65				19.82	92,709.97
19		18.8	Structural Steel work in girders or stanchions built up one joint or channel sections welded including cutting and fixing all gusset plate bolts nuts welding rods etc. complete with flange plates heads sole plates angle connection etc. with hoisting and erecting in position with one R.S. Joint	Qtl	12.0537			5943.600	5631.56	67,881.15

	Estimate for Shed for Silos loading & unloading Area, HAFED Mega Food Park, IMT Rohtak.											
SR.NO.	DESCRIPTION	Unit	Qty	Rate		Amount						
1	Colour Coated Galvalume Roofing Sheet ( 0.50 mm TCT )	sqm	464	531		2,46,384.00						
2	Supply & Erection of Structural Steel (Base Plate, Columns, Trusses, Cross-bracings, Purlins)	kg	9240	106		9,79,440.00						
		Total				12,25,824.00						

Total

77,02,297.95

			Estimate for RCC Road work	at Silos I	HAFED Mega	a Food Park	, IMT Rohtak			
S.No	Item Source	Item Ref.	Description	Unit	Quantity	HSR Rate (Rs.)	Ceiling Premium in %	Rate + Ceiling Premiu m	Final rate (Less 5.25% WCT on HSR)	Amount (Rs.) I/C CP
1	NS	NS	Providing and laying of compacted Granular Sub Base Grading-I, in two layers including preparation and compaction complete as per MORT&H specification Clause 401.	Cum	137.50	1,002.50		1002.50	1002.50	1,37,844.07
2	HSR	10.63	Design mix cement concrete of grade M-10 with minimum cement contents 220 kg/cum in foundation and plint.	Cum	82.50	542.75	450	2985.13	2828.41	2,33,343.49
3	HSR	10.66	Design mix cement concrete of grade M-25 with minimum cement contents 300 kg per cum in foundation and plinth.							
			All works upto plinth level	Cum	165.00	668.90	450	3678.95	3485.81	5,75,157.85
								T	`otal	9,46,345.40