

PUBLIC HEALTH WORKS DIVISION, JUNAGADH					
P.H.S. SUB DIVISION, MANAVADAR					
Name of Work:- Construction of Under Ground Sump of 1.20 lakh liters at THAPALA VILLAGE UNDER REJUVENATION PROGRAMME					
SCHEDULE - "B"					
	Item Discription	Qty	Unit	Rate	Amount
1	Item-1				
	RCC GSR (description of item for turnkey tender) Preparing structural design of of required capacity as per relevant I.S. standards and constructing the same, including excavation in all types of soil strata (including rock) including shoring strutting if required, for loose soil / to protect from collapse, casting 100 mm thick P.C.C. levelling course in M15, Refilling the pit with proper soil and disposing of the surplus stuff at all lead. Including cement plaster in CM 1:2 with approved water proofing compound to all over inside container (i.e. walls, base, top slab/dome bottom etc. all).				
	Including all types of labour and material charges of lowering, laying, erecting / hosting and jointing of pipe assembly to inlet, outlet overflow, washout and bye pass arrangement as per hydraulic design. Providing and fixing accessories, CI Manhole frame and cover, water level indicator, adequate cowl type ventilators or lantern type ventilator with stainless steel jail. RCC chambers for valves. Providing and applying three coats of cement paint / snowcem to the out side face of structure. It also includes satisfactory water tightness test as per relevant I.S. code and painting name of scheme and capacity on the tank as per direction of engineer in charge.				
	List of Indian Standards for Design of GSR / SUMP:The structural design of GSR shall be in accordance with provisions relevant I.S standards (1) I.S. 3370 part I & II 2009 or Its latest revision (1.1) I.S. 3370 part III & IV 1965 or Its latest revision (2) I.S. 456 – 2000 or Its latest revision. (3) I.S. 1893 – 2000 – 1984 or Its latest revision. (4) I.S. 875, Part – 1 to 3, 1987 or Its latest revision.				
	General Specifications: (1) Water depth in container shall be adopted as per data of tender. Capacity shall be calculated excluding free board of the reservoir. If water depth is not specified, the suitable water depth / acceptable to field engineer in accordance with hydraulic requirement shall be adopted for capacity. (2) Shape of container (in plan) specified by in data shall be adopted in absence circular shape shall be adopted. (3) Size shall be fixed as per availability of space (land area) at site / acceptable engineer in charge. (4) Effect of overlapping of pressure bulbs on soil due near by structure and proposed sump should be considered. (5) Care shall be taken that no damage should occur to nearby existing structure. Compensation shall be paid for the same by agency.				
	(6) The minimum concrete grade for RCC shall be M-30. (7) HYSD Fe 415 / 500 grade reinforcing bars conforming to I.S. 1786 / 1139 shall be considered in design. CRS / TMT bars shall be provided. In saline atmosphere corrosion resistance stainless steel / HCR rebar shall be provided. Any other steel can be used with approval of C.E./ in situation of non availability in market without extra cost. (8) Minimum size (or thickness) of various components shall be provided as per tender criteria / specifications in absence as per I.S./ Std. practice of G.W.S.S.B. Minimum dimensions specified for various components in tender data / specifications shall be provided without fail. (9) The safe bearing capacity (SBC) shall be referred from SBC test report. In absence of report it shall be referred from data sheet. If poor soil is found / water table is met with during excavation SBC shall be scientifically ascertained and design shall be revise. No extra shall be paid for increase in quantity. (10) DI pipes and special shall only be used if type is not specified in tender. (11) The rate shall include cost of dewatering during excavation making all arrangement when water table meets within depth.				

	(12) The structure shall be designed properly to resist uplift due to ground water table specified in data or actual ground water table meets with during excavation. If GWT / Uplift is mentioned in tender and during excavation it dose not meet 7.5% rate shall be reduced. (13) SS pipes railing shall be provided over sump periphery when sump height is ≥ 1.5 meter above ground level. (14.a) RCC staircase/RCC Steps should be provided from GL to sump top slab based on the height of the GSR above/below the ground.				
	(14.b) RCC Staircase with SS railing to be provided inside reservoir container. BB Masonry staircabin to be provided to cover the same with MS safety door having locking arrangement. (15) Appearance of structure should be aesthetically good looking acceptable to authority. (16) Any change in size, shape, depth below GL, height above GL, water depth, F.B., size of member etc can be permitted in exceptional case due to site condition or hydraulic design requirement by C.E. No extra shall be paid for change.				
	(17) Any change in data, dimensions, shape, water depth, reduction in size if permitted by competent authority and if it reduces quantity then payment shall be reduced prorated.				
	(18) When capacity of GSR / Sump is > 20 lakh litres two or sullable compariments acceptable to executive engineer shall be designed and provided.				
	(19) Agency shall engage qualified (at least graduate) consulting engineer for designing the structure and he / she shall visit the site for guidance of work.				
	(20) 75% part rate shall be payable for concrete, reinforcement and olastering tems of container until salisfaciary hydraulic testing for water tightness is performed as per lender condition. Till the work shail be treated as incomplete.				
	Above conditions / general specifications Sr. No. 1 to 20 are part and parcel of tender (contact) and prevail over other provisions in tender.				
	As above with water table (Sub soil water level below foundation) Capacity of GSR/Sump				
A	U.G Sump at H.W Site Circular (in Ltr)				
	1,00,000.00	1.00	No	4,69,612.86	4,69,612.86
	For additional 20000 Ltr.	20,000.00	Litre	3.04	60,800.00
				Total Rs.	5,30,412.86
				Say Rs.	5,30,420.00

I am/We are willing to carry out the work at _____ above/below (In Words) _____

Notes :-

- 1) All the items of works shall be carried out as per the P.W.D. Hand Book Vol. 1 (Latest Edn.) & other specification of division as directed.
- 2) All the column in schedule should be filled in ink & the total of entries in the last column shall be struck of by the contractor under his signature.
- 3) Rates quoted shall be for the completed items of works etc. shall include clearance of site (Prior to commencement of work its close) in all respect & hold goods for work under all condition.
- 4) The Amount Recoverable from the contractor by the Gujarat Water Supply & Sewerage Board on any Account shall be made to be recovered from the amount payable to the Contractors's / suppliers under this clause.

Contractor's Signature

**Deputy Executive Engineer
P.H.S.Sub Division,Manavadar**