## MINISTRY OF HEALTH AND FAMILY WELFARE, GOVT. OF INDIA, NEW DELHI

# Tender for TOPOGRAPHICAL, GEOTECHNICAL & HYDROGEOLOGOCAL SURVEY WORK

AT

## Setting up of New AIIMS at Kalyani (West Bangal)

Bill of Quantities (BOQ)

**VOLUME-11** 

May 2015



HSCC (INDIA ) LTD.
(CONSULTANTS & ENGINEERS FOR MEGA HOSPITALS & LABORATORIES)
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Tender No:- HSCC/AIIMS-Raebareli/Soil-Survey/2013



### Price Bid for Geo-technical (Soil) investigation and Topographical survey works for Setting up of New AIIMS at Kalyani (West Bangal)

### **BILL OF QUANTITIES**

	BILL OF QUARTITIES							
S.No.	Description	Unit	Quantity	Rate in figures (Rs.)	Rate in words (Rs.)	Amount (Rs.)		
1	Topographical Survey, Collection of field and report Submission:							
	(a) Site Survey and Collection of Field Data as per defined scope of work of the area ear marked in enclosed layout drawing.	Acre.	150					
	(b) Construction of Bench Mark and providing fencing around them as per drg. supplied.	No	2					
2	Soil boring, sampling, chemical analysis and report submission  Boring of holes of 150mm dia. In all types of soil excluding soft and hard rock but including boulders, gravels etc. upto the depth of 30m below the existig G.L. or refusal whichever is met earlier complete in all respects. (The quoted rate shall take care of following subheads.)  (a) Conducting standard penetration test in all bore holes at intervals of 1.5 m and also at change of strata as per IS codes of practices  (b) Collecting disturbed and undisturbed samples of soil at 1.5m interval and also at change of strata from the boreholes.  (c) Recording of water table in bore hole after completion of boring as per scope of work.  (d) Conducting necessary tests on samples collected from	RM	115					
	each hole. The laboratory tests include chemical analysis of soil and water as per scope.  (e) Collection of water samples from bore holes for chemical test and analysis.							



#### Price Bid for Geo-technical (Soil) investigation and Topographical survey works for Setting up of New AIIMS at Kalyani (West Bangal) **BILL OF QUANTITIES** Rate in **Description** Rate in words (Rs.) Amount (Rs.) S.No. Unit Quantity figures (Rs.) **Plate Load Test** Conducting plate load tests using 750mm x 750mm square plate. Test should be continued till 25mm settlement in normal circumstances and 50mm in special Each 01 cases such dense gravel, gravel and sand mixture is obtained or failure of the soil whichever is earlier as per IS:1888 or refusal whichever is earlier 4 **Rock Sampling** Boring of holes of 150mm dia. Into hard rocks in case hard rock is met at a depth lesser than 30 meter below the Metre 11 existing G.L. or refusal whichever is met earlier complete in all respects 5 Other penetration tests: Conducting static cone penetration test as specified and in locations indicated and depth upto 10.0 m or refusal 05 Each whichever is earlier Conducting Dynamic cone penetration test as specified and in locations indicated and depth upto 10.0m or refusal Each 05 whichever is earlier. Conducting field density test as specified at 1.5m, 2.5m Each 05 and 3.5m depth at each locations. 6 **Ground water investigation** Ground water investigation by Geo-physical equipments Lumpsum 01 for assessment of availability of ground water at site as

per scope of work specified including the followings:



Price Bid for Geo-technical (Soil) investigation and Topographical survey works for Setting up of New AIIMS at Kalyani (West Bangal)  BILL OF QUANTITIES									
	(a) Collection of geophysical field data at 4 no of required locations to suggest 2-3 no of tube wells/dug wells.								
	(b) Collection of data from existing underground water sources,.								
	(c) Collection of water samples from 2 no locations of existing underground sources and getting them tested (Physical, Chemical & Bacteriological) at every location. Suggesting design of tube wells/dug wells								
	(d) Suggested design for Rain water Harvesting System								
7	Conducting soil resistivity test as per IS 3043 and submission of test results as part of draft and final report.	Each	01						
					TOTAL				