DEENDAYAL PORT AUTHORITY

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Post Box No. 50, Gandhidham–Kachchh
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No. PR/WK/2025/10 MW GH2/ **Dated: 13/08/2025**

EXPRESSION OF INTEREST

NAME OF WORK: 10 MW GH2 PLANT AT KANDLA –CONSTRUCTION OF VARIOUS CIVIL AND FABRICATION WORK FOR PLANT AND EQUIPMENT'S AT KANDLA.

Sir,

Deendayal Port Authority intends to carry out the various civil and fabrication works for 10 MW Green Hydrogen Plant at Kandla under project division of Civil Engineering Department.

Kindly submit your Expression of Interest along with budgetary offer for the items of work enclosed at **Annexure-I.**

The rates quoted must be inclusive of Profit, required Materials, Labours, Equipment's, tools, Plants etc. all complete. The rate quoted must be excluding of GST but inclusive of all other taxes, duties. The GST applicable shall be shown separately, which shall not be considered for evaluation purposes.

Your Expression of Interest along with budgetary offer for the above work should reach to the following address on or before **18/08/2025 by 17:00 Hrs.**

Address;
Executive Engineer (P)
Room No.105, Annexe Building A.O Building
Deendayal Port Authority,
Gandhidham, Kachchh -370201
M-97143 01528.

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Executive Engineer (Project)
Deendayal Port Authority

Annexure-I

PROJECT	**10MW DPA GH2,Kandla**
Doc. No.	**LTEG0009-C-B-0002&**
PARTICULARS	**PRELIMENARY CIVIL STRUCTURAL & ARCHITECTURAL BULK BOQ**

SL.NO	Description	unit	Quantities
1	**READY MIX NON-SHRINK FLOWABLE CEMENTITIOUS GROUT** of reputed manufacturer to be applied under equipment/ structure base plates etc. and for anchor bolt sleeves/ pockets etc. including chipping the concrete surface, cleaning, laying, finishing the surfaces smooth, curing etc. complete as specified Minimum crushing strength of 40 N/ mm^2 and /or one grade higher than base concrete.	Cum	3
2	**Bored Cast In Situ Piles:** **600 mm dia - 20 m** long bored cast in situ piles with permanent MS liner 6 mm th for top 10m of the pile. Quantity per pile , i) RCC of M30 grade = 5.65 cum ii) Reinforcement(HYSD Fe 500 D CRS (Corrosion Resistant Steel) =510 kg iii)Boring length 22 m long including empty boring 2m. Chipping of concrete 1m.	Nos.	312
3	**Plain Cement Screen Concrete (PCC)**: Grade: M 7.5 (1:4:8)	CUM	115
	d) **Water Proof cement Plaste**r (15 mm thk.) inside the tank.	Sqm	535
	e) **POP Punning** in two coats (2mm th finish surface) on the interior faces	Sqm	5521
4	**DPC 50mm THICK with 1.5 mm thick Elastomeric Membrane**	Sqm	149
5	**FLOOR FINISHES**		
	a) **IPS Floor finish with ironite hardner** - 50mm thk. IPS with metallic hardener topping . I.e providing & laying 38mm thk concrete flooring plus 12mm thk ironite hardner (To be used for floors of Switchgear rooms, electrolyser room, warehouse, workshop, pump house etc).	Sqm	2822
	b)Providing and laying **Acid Alkali Resistant Tiles 600x600mmx 15 Thk** of an approved, quality, make, pattern and size for areas requireing chemical resistance conforming to IS:4457 including but not limited to provision of cement mortar(1:4) bedding 25mmthk, cutting , levelling, jointing, filling the joints in acid proof expoxy moprtar of approved coloiur& Shades,curing ,finishing etc. complete as per manufacturer's specificaiton as directed by Engineer in charge.	sqm	253
6	**WINDOWS**		
	Electro colour coated (Anodised) aluminium frame glazed (glass min 4mm thk) window, including anodized aluminium grill, painting as per spec. and all other fittings.	Sqm	31.5
7	**STRUCTURAL STEEL WORK**		
	Structural Steel:	MT	216
	a) **Grating** :25mm thk electroforged steel grating with all fixtures.	MT	1
	b) **Handrail** 1m high with 32 dia NB (MED) GI Pipe verticals at 1.5m c/c, 32 dia NB (MED) GI Pipe as top and middle runners and 100mm x 6 mm MS toe plate including all painting works as defined for structural steel & all other fittings.	RM	153
	c) **M S Inserts** with anchors and painting	MT	5.5
	d) **Chequered Plate 6thk.**	MT	5.6
8	**BOLTS**		
	a) 8.8 Grade bolts for permanent connection	MT	3.24
	b) MS Foundation Bolts (4.6 grade)	MT	3.24
9	**SHEETING WORK**		
	Providing corrugated **galvalume sheets of approved colour**, "METACOLOR" or equivalent fixing heads, neoprene washers, including laps and seals in accordance with Manufacturer's instructions including all fixtures like Barge board, Ridge piece, etc.		
	a) for Roofing & side sheeting system base metal thickness shall be 0.5 mm	Sqm	1555
	b) **Flashing** without corrugation	RM	2260
	150 mm NB(M) **PVC Pipe** confirming ot IS-4985-2000 as downtake pipe with all fixtures.	RM	334
10	**MISCELLANEOUS WORK**		
	Water Stopper: 225 x 6mm thk PVC water stopper bar in liquid retaining structures	RM	65

11	**INFRASTRUCTURE WORK**		
	FENCING		
	a) **PVC coated chain link fence** : 3m height PVC coated chain link Fencing with galvanising & MS angle post ISA 65x65x6 at every 3m c/c along with foundations.	RM	82
	b) **MS entry gates :** Providing and fixing M.S. Gate consisting of 80 dia medium MS tube frame, 50mm X 6mm MS flats welded to frame with necessry MS clamps nuts, bolts, washers, hold fasts, 50 X 6 MS guide strips with hold fast, steel wheel, 2 coats of red oxide zinc chromate primer and two coats of aluminium paint of approved make with necessary fabrication, fixing, to required line and level drilling etc. complete as specified and directed.	Sqm	72
12	100 mm th paving with M20 grade Reinforced concrete underlayed by 50mm thk. PCC(1:2:4) in the plant area. The reinforcement shall be 8 dia bars @ 200 mm c/c in both directions centrally placed	SQM	3200
13	**PLINTH PROTECTION**: 75mm thk. PCC M 15 grade over 150mm thk stone soling of 750mm wide Plinth protection around the buildings.	SQM	451
14	**False flooring system** -Removable type flooring shall consist of fire resistant phenol formaldehyde bonded particle board panels 600x600x35mm size, mounted on steel pedestals of adjustable height and supporting steel grid system to provide under floor space. RCC floor slab shall be sunk to a depth 1200 mm which shall be height of the false floor system.	SQM	111
15	**DRAINAGE**		
	a) Open Brick Drain: Constructing open brick drain around the buildings as well as either side of approach roads of average size 450 X 500mm (average depth) laid over PCC 1:4:8 base block . Quantity per drain - PCC = 0.05 cum/m masonary works - 0.22 cum / m, plastering (12 mm th smooth finish) - 1.45 sqm / m	RM	2084
16	Toilets		
	a) Gents Toilet with the following fixtures - 2 nos wash basin as per IS 2556 (IV), 2 nos frameless plate glass mirrior, 1 hand dryer, 2 soap container, 2 flat back lipped front urinals of Hindustan Sanitaryware or equivalent make and 1 WC (western type) of hindustan sanitaryware or equivalent make complete with all pipe fittings & fixtures	Nos.	3
	b) Ladies Toilet with the following fixtures -1 nos wash basin as per IS 2556 (IV), 1 nos frameless plate glass mirrior, 1 hand dryer, 1 soap container and 2 WC (western type) of hindustan sanitaryware or equivalent make complete with all pipe fittings & fixtures	Nos.	2
17	**Boundary wall** around the periphery of the plant . It is an RCC wall, 3 m height. Quantity per m of the boundary wall is as follows - RCC -1.8 cum , Rebar - 100 Kg/cum, Shuttering - 12 Sqm, Excavation - 24 cum, Sandfill below foundation - 12 cum , Backfill with sand - 9 cum, PCC -0.23 cum, Plastering - 6 sqm, Painting - 6 sqm	RM	620
18	**PILE TEST**		
	INITIAL LOAD TEST : Carrying out load tests for initial vertical compression, pullout and lateral loading including all necessary equipment, tools and tackles, recording the pile load test results as per Consultant's specification and as directed by Engineer-in-Charge, and supplying the pile load test results in one original and three copies to the Consultant etc. complete on 600 mm diameter pile (Pile provision and installation to be paid under relevant items.)Test Loads shall be as per Geotechnical Requirements/ Specifications/Test loads shall be 2.5 times of design load whichever is higher.		
	Compression:- Design Loads : Pv=200 MT	Nos.	2
	Uplift :- Design Loads : Pu=75 MT	Nos.	2
	Lateral:- Design Loads : H=10 MT	Nos.	2
	ROUTINE LOAD TEST :Carrying out pile load tests on working piles for routine vertical compression, pullout and lateral loading including all necessary equipment , tools and tackles, recording the pile load test results as per Consultant's specification and as directed by Engineer-in-Charge, and supplying the pile load test results in one original and three copies to the Consultant etc. complete on 600 mm diameter pile.Test Loads shall be as per Geotechnical Requirements/ Specifications /Test loads shall be1.5 times of design load whichever is higher.		
	Compression:- Design Loads : Pv=120 MT	Nos.	4
	Uplift :- Design Loads : Pu=45 MT	Nos.	4
	Lateral:- Design Loads : H=6 MT	Nos.	4

	PILE INTEGRITY TEST : Conducting pile integrity load test by means of Sonic Pile testing Equipment (NDT test) or Design Equivalent test for 600 Dia Pile to measure Quality of pile construction, correctness of pile length, Integrity along pile length & location of major defects along pile which may not only affect its load carrying capacity but also have future implication with respect to durability & Reinforcement corrosion including all necessary arrangements such as small impact device (Hammer), highly sensitive accelerometer, Pile integrity tester, signal conditioning center, PIT Processer, an output device such as plotter /	Nos.	207
19	**Main Road** : Providing and laying **6m wide RCC road with 1m wide shoulder on either side** as per design mix, using coarse sand and graded stone aggregate of 40 mm nominalsize in appropriate proportions as per approved & specified designcriteria,laying at site, spreading and compacting mechanically by usingneedle and surface vibrators, levelling to required slope/camber,finishing with required texture, curing, making provision for contraction/expansion, construction & longitudinal joints (10 mm wide x 50 mmdeep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge . Specifications as below - For road - a) 200 mm th M40 RCC road with 10 dia bars @ 200 mm c/c both sides at center. b) Underlaid by 50 mm th PCC (1:3:6) c) Underlaid by 230 mm th graded stone boulders (approx 200 mm size max) Specifications for shoulder - Paver blocks at top, underlaid by 50 mm th PCC (1:3:6)	RM	730
20	**Approach Road** : Providing and laying **3.5 m wide** RCC road **with 1m wide shoulder on either side** as per design mix, using coarse sand and graded stone aggregate of 40 mm nominalsize in appropriate proportions as per approved & specified designcriteria,laying at site, spreading and compacting mechanically by usingneedle and surface vibrators, levelling to required slope/camber,finishing with required texture, curing, making provision for contraction/expansion, construction & longitudinal joints (10 mm wide x 50 mmdeep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge . Specifications as below - For road - a) 200 mm th M40 RCC road with 10 dia bars @ 200 mm c/c both sides at center. b) Underlaid by 50 mm th PCC (1:3:6) c) Underlaid by 230 mm th graded stone boulders (approx 200 mm size max) Specifications for shoulder - Paver blocks at top, underlaid by 50 mm th PCC (1:3:6)	RM	115
21	Roof extractors - 4000CFM capacity aluminium fan, axial flow upward type, ceiling mounted on inclined portion for industrial use with weather protection cowl. Motor shall be designed for zone II C category	Nos.	16
22	UPVC Pipe of appoved material for Sewage lines	RM	
	a.300mm dia	RM	10
	b.200mm dia	RM	40