मुख्य कार्यालय
यशवंत नगर, विरार (प.)
ता. वसई, जि. पालघर, पिन ४०१ ३०३.

दुरध्वनी: ०२५०-२५२५१०१/०२/०३/०५/०६
फॅक्स : ०२५०-२५२५१०७
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जावकक्र. : व.वि.श.म.पा/क्रिअ/उद्या/सच
दिनांक :- १७/०६/२०२६

प्रति,
क. अभियंता
माहिती तंत्रज्ञान विभाग ,
विरार मुख्यालय

विषय :- कोटेशन फॉर्म संकेत स्थळावर अपलोड करणेबाबत.

वसई विरार शहर महानगरपालिका क्षेत्रातील खालील उल्लेखीत काम करण्यासाठी सिलबंद लखोटयात महानगरपालिकेच्याअटी व शर्तीस अधिन राहून कोटेशन मागविण्यात येत आहे. सदर काम करण्यास इच्छुक संस्था/ ठेकेदार यांनी त्यांच्या लेटरपॅडवर खालील उल्लेख केलेल्या कामाच्या बाबींचे दर GST व कामगार विमाकर वगळून सादर करावयाचे आहे. सदर कामाचे कोरे निविदा कोटेशन फॉर्म www.vvcmc.in या संकेत स्थळावर दि. १७ /०६/२०२६ पासुन उपलब्ध करुन दयावयाचे आहे. याबाबतची ई-निविदा जाहिरात दि. १७/०६ /२०२६ रोजी वृत्तपत्रात प्रसिध्द होणार आहे.

कामाचे नाव:- वसई विरार शहर महानगरपालिका क्षेत्रात इको फ्रेंडली अंत्यसंस्कार यंत्रणा बसविणे अंदाजपत्रक तयार करणे कामी विविध बाबींचे दर मागविणे.

तरी वरिल कामाचे कोटेशन संकेत स्थळावर सोबत जोडलेल्या कोटेशन फॉर्मनुसार दि. १७ /०६ /२०२६ ते दि. २२/०६ /२०२६ दुपारी ३.०० वाजता अपलोड करण्यात यावे. तसेच सदरचे कोटेशन फॉर्म दि. २३ /०६/२०२६ दु.३.०१ वा. नंतर उघडण्यात यावे.

(संजय कुलकर्णी)
कार्यकारी अभियंता
वसई विरार शहर महानगरपालिका

वसई-विरार शहर महानगरपालिका

बांधकाम विभाग, मुख्यालय

जा.क्र. वविशम/बांध/मा.प्र३८०/२०२६
दिनांक:-१६/६/२०२६

"कोटेशन नोटीस"

वसई – विरार शहर महानगरपालिका कार्यक्षेत्रातील खाली उल्लेख केल्याप्रमाणे काम करण्यासाठी सिलंबद लखोट्यात महानगरपालिकेच्या अटी व शर्तीस अधिन राहून कोटेशन मागविण्यांत येत आहेत. सदर काम करण्यास इच्छुक संस्था/ ठेकेदारयांनी त्यांच्या लेटरपॅडवर खालील उल्लेख केलेल्या कामांच्या बाबींचे दर हे GST व कामगार विमाकर वगळून इतर सर्व करासहीत दि.२२/०६/२०२६ रोजी दुपारी २:०० वा. पर्यंत कार्यकारी अभियंता, वसई विरार शहर महानगरपालिका यांचेकडील आवक बारनिशीकडे सादर करावे.

सुचना:-

१) मुदती नंतर प्राप्त कोटेशन स्विकारले जाणार नाहीत.

२) याकामी प्राप्त दरपत्रकांपैकी कोणतेही एक दरपत्रक स्विकारण्याचा अथवा कोणतेही कारण न देता सर्व दरपत्रके नाकारण्याचा अधिकार निम्नस्वाक्षरीकार यांनी राखून ठेवला आहे.

३) खाडाखोड केलेले दरपत्रक स्विकारण्यात येणार नाहीत.

कामाचेनाव :- वसई विरार शहर महानगरपालिका क्षेत्रात इको फ्रेंडली अंत्यसंस्कार यंत्रणा बसविणेसाठी अंदाजपत्रक तयार करणेकामी खालील नमुद बाबींचे दर मागविणे.

कोरे कोटेशन फॉर्म मिळण्याचा कालावधी	:-	**दि. १७/०६/२०२६ ते दि. २२/०६/२०२६ रोजी कार्यालयीन कामकाजाच्या वेळेत**
सिलबंद कोटेशन स्विकारण्याची तारीख व वेळ	:-	**दि. २२/०६/२०२६ रोजी दुपारी ३:०० वाजेपर्यंत**
सिलबंद कोटेशन उघडण्याची तारीख व वेळ	:-	**दि. २३/०६/२०२६ रोजी संध्याकाळी ३:०० वाजेपर्यंत**

वरिल प्रमाणे कोटेशन नोटीस महानगरपालिकेच्या नोटीस बोर्डवर प्रसिध्द करण्यात यावी.

(संजय कुलकर्णी)
कार्यकारी अभियंता
वसई विरार शहर महानगरपालिका

सोबत:-कोटेशन फॉर्म जोडले आहे.

वसई-विरार शहर महानगरपालिका

बांधकाम विभाग,मुख्यालय

कामाचे नाव : वसई विरार शहर महानगरपालिका क्षेत्रात इको फ्रेंडली अंत्यसंस्कार यंत्रणा बसविणेसाठी अंदाजपत्रक तयार करणेकामी खालील नमुद बाबींचे दर मागविणे.

Quotation Form For SITC of Renewable Energy Driven Traditional Fuel Based Natural Draft Self Sustainable Human Carcass Management System

Technical Specifications:-

The cremation furnace should be able to cremate minimum 10 (Ten) dead bodiesin 15 (Fifteen)hours.The furnace should be made of sturdy MS Structure of Angles, Channels, MSplate & MS fluxwelded to hold the refractory casting & ceramic coating 50 mmthick & jacketed with MS plate. The Furnace shall be suitable to use with Wood / Wooden Pellets / Briquettes for Cremation. Heat Ex-changer made of MS torecover the heat from the flue Gas through diffuser, cyclone made of MS toremovethe suspended particulate material before going to the scrubber. Material ofConstruction Cremation Furnace should be as per steel built IS:2062 & insulatedwith Refractory Bricks / Fire creet super with glass wool or mineral wool lining. Energized Air injection system with orifice for
The Cremation system should scientifically design based on Gasification Technologywith Reduction& Oxidation heating arrangement & made of sturdy MS steel structure. The hot insulation bricks should be able to withstand 1260-degree Celsiuscapacity, Bulk Density 0.55-0.60 (g/cm3), Cold Crushing Strength:1.2 (Mpa),Modulus of Rupture:0.9 (Mpa), Reheating Linear Change (%) CT-30 °C X 8H:1230°C -0.5 mm should be installed for inner lining of high temperature refractorychamber insulation.The ceramic fiber should be high thermal conductivity and refractoriness, lowthermal expansion and outstanding abrasion/erosion resistance, alpha silicon carbide crystals, bonding ensures properties should be match, with stand in 1260 degree Celsius high operating temperatures, resistance to corrosion, resistance tothermal shock, strength, Low gas permeability, Tight tolerance capability, glasscontact refractory should be installed for inner lining of high temperature refractorychamber insulation.

SITC of Trolley with Transfer track / Transfer mechanism with two set of trolleyper cremation furnace. 1 in Process & 1 as standby for preparation & performingRituals. Appx. Size 1980 mm X 800 mm X 850 height (Approx.), bogie type,manually operated, made of High Temp casting / Steel to withstand temperature upto 900 degree Celsius with ash tray made of SS plate and 1.5 mm thick beneath tocollect the Ash &Asthi. One set of transfer track / trolley shifting mechanism to movethe cremation trolley forward / backward & side wards on Standard Transfer Line.The cremation trolley should be as per IS:2062 steel along with high grade refractorylined.The working Chamber Size should be 1000 mm Width x 1000 mm Height x 2500mm long (+ _ 20%)The Furnace chamber should generate and maintain 700 degree Celsius to 900degree CelsiusMinimum 125 Kg. Dead Body weight suitable strength supports should installed inside of the cremation chamber. The highly efficient insulation of 100 mm proper thickness shall be provided inorder to operate the Furnace with minimum wood consumption.The Door opening and closing should be electrically or manually verticallysliding counter weight balance smoothly operated. All the air lines should be flange mounted.

The Scrubber system should be made by MS CRCA Sheet with three stage ofsprinkler system (One Vertical & Two horizontal) , Natural Draft Suction , Airventilation, self-sustainable water pump and re-circulating Droplet separator. The mist eliminator should condense the smoke through high pressure waterto settle heavy ash particles in the chamber and gases pass through second stage.The mist eliminator should wash the smoke through high pressure watermist

sprinkler and gas should pass to third stage.The Excess Carbon particles should mix with water and hot gases releasedthrough chimney.

The Chimney should be 300 mm Dia. X 5 mm Thick X 100 feet Length made by MS Pipe. MS Cone 1000 mm Base Dia. X 3000 mm Height X 6 mm Thick.1200mm x 1200mm X 16mm Thick Bottom Flange . 22 mm Diameter Half ThreadHigh Tension Nut/Bolts with one spring washer & two plain washers. Earthling tothe chimney as per the IS standards. Foundation Bolts/Nuts 35mm Dia. X 1500mmLong. Steel Core Wire Rope 10mm Diameter. The suitable size chimney foundationshould be as per the IS Standards or civil standards. The Chimney and scrubbersystem should comply stake emissions norms.

The crematorium furnace should cremate one dead body per day in 120 Kg.Dry wood in 120 minutes.The crematorium furnace should cremate two dead bodies per day in line in 110Kg. Dry wood per body in 90 minutesThe crematorium furnace should cremate three dead bodies per day in line in100 Kg. Dry wood per body in 90 minutes and further cremation at same Kg. Thecrematorium project one unit (One Furnace One Chimney) footprint should be maximum 40 feet x 20 feet and additional 10 Feet x 10 Feet for Chimney

The crematorium unit auxiliary load should be Hybrid off grid system with Wind Meal and Solar .Heat Exchanger and combustion system: The heat exchanger shouldseparate the combustion process from ambient air. It should be combinationmetal chamber passage way and ends at the chimney vent connects to the furnace.

Earthing: All the non-current carrying metal parts of electrical installation suchas metal conduits, switch gear, distribution switch boards and all other parts ofmetal shall be bonded together and connected by means of two separate earthcontinuity conductor to earth electrode. The earth pin of socket outlets shall beeffectively connected to earth. Each pump shall have an independent earthelectrode. Earth continuity conductors shall be of high conductivity. Modern / LatestEarthing Electrodes can be installed or G.I. wire of cross sectional area not less than 10 gauge shall be used. Protection against mechanical damage / corrosion shall beprovided wherever necessary by carrying earth conductor in B class G.I. Pipes of12 mm diameter and 12 mm G.I. bend at one end or suitable size B class G.I. Pipe &G.I. bend. Earthing conductor shall be so placed and connected so that it is notlikely to be accidentally damaged or cut. It shall be fixed over its entire length byclamps, clips, saddles, and staples which in no way will damage the conductor.Joints in earthing conductor shall not be normally permitted. The entire system ofearthing shall be tested for mechanical and earth continuity. Supply and fixingearthing bare wire, G.I. / Copper as instructed, to be laid along with cables or frompanels to furnace. Earthing Pit should be as per IS:3043. The test link shall beprovided as per Indian standard GI Pipe Earthing station with 100 mm Diameter, 13mm thick, 3000 mm long Class B or better GI pipe, The earth pit shall be providedwith Class B watering pipe with wire messed funnel, 25 mm x 3 mm GI strip / 2 x 8SWG G.I. wire up to chamber (wire or strip size as perfault level), disconnecting linkswith 600 x 600 mm RCC chamber & heavy duty 3 mm thick CIchequered plate cover with hinge &stainless steel bolts. Bentonite / Charcol 40 kg &Salt 40 Kg shall be provided for earth pits. Excavation, backfilling, removal of excesssoil is included in the scope as per IS : 3043. Or Should be modern package ChemicalEarthing

Sr. No.	Description	Technical Specification	Qty	Unit	Rate	
					In Figure	In word
1	Natural Draft Furnace	Eco Farewell cremation furnace is designed to optimize combustion efficiency and environmental sustainability. The system comprises two specialized chambers: a primary combustion chamber for initiating and sustaining the cremation process and a secondary retention zone for extended residence time of flue gases, ensuring complete combustion and minimal emissions. The chambers are separated by a strategically designed passage to maintain controlled airflow and thermal stability. It is equipped with a manually operated counterweight-balanced door,	1	Unit		

		thermally shielded to minimize heat transfer during operation, ensuring both operator safety and energy efficiency. Thermal barrier protection is achieved through a multi-layered insulation system comprising high-grade refractory bricks with a thermal conductivity of k1=1.1 W/m-Kk1=1.1W/m-K, insulation bricks with k2=0.2 W/m-Kk2=0.2W/m-K, and mineral wool filling to seal gaps, completely eliminating heat loss. This configuration ensures the surface temperature of the furnace walls remains at ambient levels, promoting operator safety and reducing energy consumption. Fabricated with TATA IS 2062 grade steel and SS 401 stainless steel, the furnace structure provides superior mechanical strength and resistance to thermal and chemical stresses. Its robust design supports long-term operational reliability in high-temperature environments. The external dimensions of the furnace are 3750 mm×1500 mm×4200 mm, optimized to accommodate high-load operations while maintaining a compact footprint. This naturally aspirated system harnesses advanced engineering to maintain a balanced draft, ensuring efficient oxygen supply for complete combustion. It exemplifies eco-friendly and energy-efficient cremation technology, adhering to stringent environmental and safety standards				
2	Track System	A high-strength steel track specifically designed to withstand operational stresses and environmental factors. It is treated with a corrosion-resistant coating, and epoxy-based polymers, to prevent degradation from prolonged exposure to heat, moisture, and chemical emissions typically encountered in cremation processes. precision-aligned surface ensures minimal friction and optimal movement of the trolley, contributing to operational efficiency and extended service life of the entire furnace system. This design also incorporates wear-resistant properties to maintain structural integrity under repeated high-temperature cycles and heavy loads. track length 6500mm. Anchoring and levelling materials	1	Unit		
3	Cremation Trolley	A high-load cremation trolley, specifically engineered to handle substantial thermal and mechanical stresses. It is lined with a high-grade refractory material, selected for its exceptional heat resistance and low thermal conductivity, which minimizes heat transfer to the underlying structure and prolongs operational longevity. The refractory lining is meticulously shaped and secured to resist spalling, thermal shock, and abrasion during repeated use. This integrated design not only enhances combustion efficiency but also supports operational safety and durability under high-temperature and high-load condition	1	Unit		
4	Ash Tray with Ashtray Stand Ash drum	The ash collection tray is meticulously crafted from corrosion-resistant, heat-tolerant stainless steel 401 to withstand the high-temperature environment of the cremation process. It is placed directly beneath the high-load cremation trolley to capture and contain ash and other combustion by products effectively, ensuring a clean and efficient collection process. Its design features a smooth, polished surface to facilitate easy cleaning and prevent the adherence of residues, enhancing operational hygiene. The tray's structural integrity is reinforced to support repeated exposure to thermal cycling without deformation, ensuring long-term reliability. Additionally, its precise alignment with the trolley ensures seamless integration into the furnace system, minimizing ash spillage and contributing to the overall efficiency of the cremation process. (complete rate with for ash Tray, 1 Ash Tray stand with ash drum)	1	Unit		
5	Heat Exchanger	This advanced heat exchanger is designed as a horizontal, inclined system to maximize natural convection, leveraging buoyancy-driven airflow for efficient thermal transfer without the need for mechanical fans. Measuring 2 meters in length, the unit employs an array of precision-fabricated finned copper tubes, renowned for their superior thermal conductivity and corrosion resistance. The fins significantly increase the heat transfer surface area, enabling rapid and efficient cooling ofexhaust smoke. The system is engineered to reduce the smoke's emperature from an initial 600∘C to a safe output of 90∘C, ensuring compliance with environmental standards and protecting downstream components.The inclined orientation further enhances	1	Unit		

		performance by promoting smooth airflow and minimizing resistance, while the shell is constructed with high-temperature-resistant materials to ensure durability under prolonged thermal stress. The heat exchanger's robust design integrates optimized spacing for the tubes and fins to balance heat dissipation and airflow efficiency, enabling effective operation in the demanding conditions of cremation furnaces. This system ensures high thermal efficiency, reduced energy losses, and reliable performance, supporting the eco-friendly objectives of the furnace.				
6	Flue Gas Ducting	The ducting system, Fabricated from IS 2062-grade structural steel, is designed to connect the furnace, heat exchanger, water scrubber, and chimney, creating a seamless pathway for flue gas flow. This material ensures high structural strength, excellent thermal endurance, and resistance to mechanical stress, making it suitable for the high-temperature and corrosive conditions encountered in the cremation process. With a uniform thickness of 5 mm, the ducting offers superior durability, minimizing the risk of deformation or leakage under operational loads. The 300 mm diameter is meticulously chosen to balance airflow velocity and pressure drop, ensuring optimal transfer of smoke and combustion by products through the system while maintaining consistent flow dynamics. Each section of the ducting is engineered with flanged or welded joints to facilitate secure and leak-proof connections between components. The internal surface is smooth to reduce resistance and prevent particulate accumulation. Additionally, the IS 2062 steel's corrosion resistance ensures long service life, even with exposure to moisture, acidic gases, and high temperatures, while maintaining structural integrity. This ducting system plays a critical role in maintaining operational efficiency and environmental compliance by ensuring the controlled and efficient movement of flue gases through the cremation furnace system.	1	Unit		
7	Cyclonic Water Scrubber with Baffle Tank	The cyclonic water scrubber is dual-function unit that combines the particulate separation capability of a cyclone separator with the cooling and cleaning efficiency of a water scrubber. Fabricated from IS 2062-grade steel, the scrubber is engineered for high durability and resistance to the demanding thermal and chemical conditions of the furnace system. The unit features a cylindrical body with a diameter of 950 mm and a length of 2500 mm, optimized for maintaining efficient air velocity and particulate capture while minimizing pressure losses.The cyclonic separator initiates the process by generating a high-speed rotational flow that forces heavier particulate matter toward the walls of the cylinder due to centrifugal forces. These particles settle out effectively, reducing the particulate load before the gas reaches the scrubbing zone. The integrated water scrubber further cools and cleans the flue gas by introducing fine water mists via four high-precision nozzles, strategically positioned to ensure uniform coverage. The water system is driven by a 745 W pump, capable of maintaining a consistent pressure to deliver the required flow rate of 0.288 L/min. The fine spray from the nozzles interacts with the gas stream, effectively capturing smaller particulates and dissolving soluble pollutants. The system achieves a high cooling efficiency, reducing the smoke temperature to 45∘C, and ensures compliance with environmental emission standards. The combination of centrifugal action and water scrubbing maximizes pollutant removal efficiency, addressing both particulate matter and gaseous emissions in a single compact system. This integration simplifies maintenance, reduces operational complexity, and aligns with the eco-friendly objectives of the Vaidika Eco Farewell furnace system	1	Unit		
8	Chimney	The self-supported chimney with a height of 30 meters is designed to be structurally robust and efficient for high-temperature exhaust gas dispersion. Constructed from 2062 steel, known for its high strength and resistance to corrosion, the chimney features a square bottom plate measuring 1400mm x 1400mm, providing a stable base for the entire structure. The chimney tapers from a 900mm diameter at the bottom to a 400mm diameter at the top, optimizing airflow dynamics and minimizing resistance as the gases rise. The tapering design also enhances the chimney's	1	Unit		

		structural integrity, allowing it to withstand wind forces and thermal stresses while maintaining a stable operation. The self-supported design eliminates the need for additional external bracing, relying on the steel's strength and the chimney's geometry to maintain stability and resilience over its 30-meter height. The foundation bolts for the 30-meter self-supported chimney are made from EN8 steel, with a diameter of 40mm and a length of 1800mm. These bolts anchor the chimney's 1400mm x 1400mm base plate into the foundation, providing secure attachment. The EN8 steel ensures high strength and durability, capable of withstanding the loads and stresses on the structure. The bolts are fitted with heavy-duty washers and nuts, torqued to the specified tension to prevent loosening and ensure long-term stability. This design provides reliable anchorage, minimizing the risk of movement or failure.				
9	Solar panel (Part of Hybrid System)	3kW solar panel system integrated into a furnace system includes the supply and installation of the 3kW solar panel array, designed to power a 1HP motor, ensuring eco-friendliness and sustainability. The system consists of high-efficiency photovoltaic panels, a solar inverter, and necessary wiring and mounting structures. The 3kW capacity is sufficient to cover the motor's energy needs while reducing reliance on conventional power sources, enhancing the system's overall sustainability. The setup also includes energy storage provisions to ensure continuous operation and integration with the furnace's requirements. MS Metal box to secured battery unit.	1	Unit		
10	Wind Energy (Part of Hybrid System)	The Off-Grid Hybrid System combines wind energy and solar energy to provide a reliable energy solution. It integrates a hybrid inverter, a battery bank, and mounting structures to ensure consistent power for small households or remote applications.	1	Unit		

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१. वर नमुद करावयाचे दर हे GST व कामगार विमाकर वगळून, इतर करासह द्यावयाचा आहे.
२. वर भरणा करण्यात येणाऱ्या दरा व्यतिरिक्त अन्य कुठलाही दर महानगरपालिका अदा करणार नाही.
३. सदरचे दरपत्रक इच्छुकांनी संस्थेच्या अथवा वैयक्तिक लेटरहेड वर सही-शिक्यानिशी सादर करणे आवश्यक आहे.