Indore Smart City Development Limited

Request for Proposal

"Conservation, Restoration and Redevelopment of Malhar Rao Holkar Chatri, Chattri Bagh Indore"

NIT No. 90/ISCDL/18-19;Date: 08.03.2019

Indore Smart City Development Limited, Indore

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1. Introduction:

An approach is being made under the Indore Smart City Project to conserve and restore various heritage sites in Indore which fall under the ABD(Area Based Development) of ISCP(Indore Smart City Project which is being monitored by ISCDL(Indore Smart City Development Limited), Indore headed by Hon'ble District Collector Indore with Hon'ble Municipal Commissioner, Indore, Addl. Commissioner IMC,CEO etc. as the Apex body titled as Client who are dedicatedly assisted by TASU-ISCP (Technical and Administrative Support Unit - Indore Smart City Project) i.e. EPTISA Pvt. Ltd. -a Spanish Company based in India with its head Office at Kolkata, West Bengal.

The architectural integrity and cultural inheritance of the city should be enriched through facade improvements and recreative use of historic buildings and spaces. Of the all Heritage and Cultural sites which are being covered under the ISCP Project this DPR is prepared for the Conservation of Malhar Rao Holkar Chhatri, Chhatribagh on the bank of Kahn River.

1.1 About Madhya Pradesh:

Madhya Pradesh (MP), meaning Central Province is a state in central India. Its capital is Bhopal and the largest city is Indore. Nicknamed the "heart of India" due to its geographical location in India, Madhya Pradesh is the second-largest state in the country by area. With over 75 million inhabitants, it is the fifth-largest state in India by population.

It borders the states of Uttar Pradesh to the north-east, Chhattisgarh to the south-east, Maharashtra to the south, Gujarat to the west, and Rajasthan to the northwest. Its total area is 308,245 km². Before 2000, When Chhattisgarh was a part of Madhya Pradesh, Madhya Pradesh was the largest state in India and the distance between two furthest points inside the state, Singoli and Konta was 1500 km.

Fig. No. 01: District Map of Madhya Pradesh

Fig. No. 02: Major Cities Of Madhya Pradesh

1.1.1 Population:

Total population of Madhya Pradesh as per 2011 census is **72,626,809** of which male and female are 37,612,306 and 35,014,503 respectively. In 2001, total population was 60,348,023 in which males were 31,443,652 while females were 28,904,371.

The population of Madhya Pradesh consists of a number of ethnic groups and tribes, castes and communities, including the indigenous tribal and relatively more recent migrants from other states. The scheduled castes and the scheduled tribes constitute a significant portion of the population of the State. The main tribal groups in Madhya Pradesh are Gond, Bhil, Baiga, Korku, Bhadia (or BMalharya),

Halba, Kaul, Mariya, Malto and SaMalharya. Dhar, Jhabua and Mandla districts have more than 50 percent tribal population.

1.1.2 Origin & History of Madhya Pradesh:

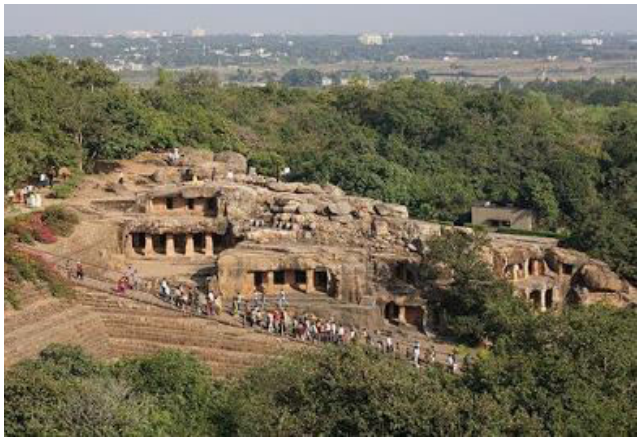
Isolated remains of Homo erectus found in *Hathnora* in the Narmada Valley indicate that Madhya Pradesh might have been inhabited in the Middle Pleistocene era. Painted pottery dated to the later Mesolithic period has been found in the *Bhimbetka* rock shelters. Chalcolithic sites belonging to *Kayatha* culture (2100–1800 BCE) and *Malwa* culture (1700–1500 BCE) have been discovered in the western part of the state.

Fig. No. 03: Mesolithic rock painting, Bhimbetka, a UNESCO World Heritage Site

The city of Ujjain arose as a major center in the region, during the second wave of Indian urbanization in the sixth century BCE. It served as the capital of the Avanti kingdom. Other kingdoms mentioned in ancient epics — Malava, Karusha, Dasarna and Nishada — have also been identified with parts of Madhya Pradesh. Chandragupta Maurya united Northern India around 320 BCE, establishing the Mauryan Empire, which included all of modern-day Madhya Pradesh. Ashoka the greatest of Mauryan rulers brought the region under firmer control. After the decline of the Maurya Empire, the region was contested among the Sakas, the Kushanas, the Satavahanas, and several local dynasties during the 1st to 3rd centuries CE. Heliodorus, the Greek Ambassador to the court of the Shunga king Bhagabhadra erected the Heliodorus pillar near Vidisha.

Ujjain emerged as the predominant commercial center of western India from the first century BCE, located on the trade routes between the Ganges plain and India's Arabian Sea ports. The Satavahana dynasty of the northern Deccan and the Saka dynasty of the Western Satraps fought for the control of Madhya Pradesh during the 1st to 3rd centuries CE. The Satavahana king Gautamiputra Satakarni inflicted a crushing defeat upon the Saka rulers and conquered parts of Malwa and Gujarat in the 2nd century CE.

Subsequently, the region came under the control of the Gupta Empire in the 4th and 5th centuries, and their southern neighbours, the Vakataka's. The rock-cut temples at Bagh Caves in the Kukshi tehsil of the Dhar district attest to the presence of the Gupta dynasty in the region, supported by the testimony of a Badwani inscription dated to the year of 487 CE. The attacks of the Hephthalites or White Huns brought about the collapse of the Gupta Empire, which broke up into smaller states. The king Yasodharman of Malwa defeated the Huns in 528, ending their expansion. Later, Harsha (c. 590—647) ruled the northern parts of the state. Malwa was ruled by the south Indian Rashtrakuta Dynasty from the late 8th century to the



10th century. When the south Indian Emperor Govinda III of the Rashtrakuta dynasty annexed Malwa, he set up the family of one of his subordinates there, who took the name of Paramara.

Fig No. 04: Kandariya Mahadev, Khajuraho

Fig. No. 05: Rock-cut temples at Bagh caves

The Medieval period saw the rise of the Gurjar clans, including the Paramaras of Malwa and the Chandelas of BundelKahnd. The Chandellas built the majestic Hindu-Jain temples at Khajuraho, which represent the culmination of Hindu temple architecture in Central India. The Gurjara-Pratihara dynasty also held sway in northern and western Madhya Pradesh at this time. It also left some monuments of architectural value in Gwalior. Southern parts of Madhya Pradesh like Malwa were several times invaded by the south Indian Western Chalukya Empire which imposed its rule on the Paramara kingdom of Malwa. The Paramara king Bhoja (c. 1010–1060) was a renowned polymath. The small Gond kingdoms emerged in the Gondwana and Mahakoshal regions of the state. Northern Madhya Pradesh was conquered by the Turkic Delhi Sultanate in the 13th century. After the collapse of the Delhi Sultanate at the end of the 14th century, independent regional kingdoms re-emerged, including the Tomara Gurjar kingdom of Gwalior and the Muslim Sultanate of Malwa, with its capital at Mandu.

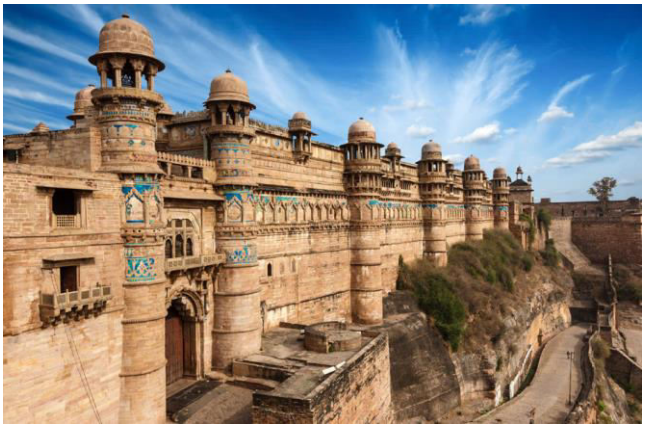


Fig. No. 06: Gwalior Fort, Gwalior

Fig. No. 07: Lakshmi Temple, Orchha

The Malwa Sultanate was conquered by the Sultanate of Gujarat in 1531. In the

1540s, most parts of the state fell to Sher Shah Suri, and subsequently to the Hindu king Hemu. Hemu, who had earlier served as the General of the Suri dynasty, operated from the Gwalior Fort during 1553–56 and became the rural of Delhi as a Vikramaditya king winning 22 battles continuously from Bengal to Gujrat and defeating Akbar's forces in Battle of Delhi 1556 on 7th Oct. 1556. Fig. No. 08: Chausath Yogini Temple, Mitavli, Morena

However, he chose Delhi as his capital after his formal Coronation and left Gwalior. After Hemu's defeat in the Second Battle of Panipat in 1556 to Akbar, most of Madhya Pradesh came under the Mughal rule. Gondwana and Mahakoshal remained under the control of Gond kings, who acknowledged Mughal supremacy but enjoyed virtual autonomy.

The Mughal control weakened considerably after the death of Emperor Aurangzeb in 1707. Between 1720 and 1760, the Marathas took control of most of Madhya Pradesh, resulting in the establishment of semi-autonomous states under the nominal control of the Peshwa of Pune: the Holkars of Indore ruled much of Malwa, Puars ruled Dewas and Dhar, the Bhonsles of Nagpur dominated Mahakoshal-Gondwana area, while the Scindias of Gwalior controlled the northern parts of the state. The most notable Maratha rulers of the region were Mahadji Shinde, Ahilyabai Holkar and Yashwantrao Holkar. Besides these, there were several other small states, including Bhopal, Orchha, and Rewa. The Bhopal state, which paid tribute to both the Marathas and the Nizam of Hyderabad, was founded by Dost Mohammed Kahn, a former General in the Mughal army.

After the Third Anglo-Maratha War, the British took control of the entire region. All the sovereign states in the region became princely states of British India, governed by the Central India Agency. The Mahakoshal region became a British province: the Saugor and Nerbudda Territories. In 1861, the British merged the Nagpur Province with the Saugor and Nerbudda Territories to form the Central Provinces.

During the 1857 uprising, rebellions happened in the northern parts of the state, led by leaders like Tatya Tope. However, these were crushed by the British and the princes loyal to them. The state witnessed a number of anti-British activities and protests during the Indian independence movement.[15] Several notable leaders such as Chandra Shekhar Azad, B. R. Ambedkar, Shankar Dayal Sharma and Atal

Bihari Vajpayee were born in what is now Madhya Pradesh.

. Fig. No. 09: Ahilya Fort, Maheswar, Near indore

After the independence of India, Madhya Pradesh was created in 1950 from the former British Central Provinces and Berar and the princely states of Makrai and Chhattisgarh, with Nagpur as the capital of the state. The new states of Madhya Bharat, Vindhya Pradesh, and Bhopal were formed out of the Central India Agency. In 1956, the states of Madhya Bharat, Vindhya Pradesh, and Bhopal were merged into Madhya Pradesh, and the Marathi-speaking southern region Vidarbha, which included Nagpur, was ceded to Bombay state. Bhopal became the new capital of the state. In November 2000, as part of the Madhya Pradesh Reorganization Act, the southeastern portion of the state split off to form the new state of Chhattisgarh.

1.1.3 Other famous religious places in Madhya Pradesh:

Of the 12 Jyotirlingas all over India Madhya Pradesh pride fully houses 2 of them in it i.e. **Omkareshwar Temple** and **Mahakaal Temple at Ujjain**.

Apart from the temples there is a famous massive Mosque at Bhopal i.e **Taj-ul-Masjid** which experiences a mammoth crowd on the festive days of Eid for prayer and that famous Buddhist Stupa at Sanchi.

Fig. No. 10: Mahakaal Jyotirlinga Temple at Ujjain

Fig. No. 11: Omkareshwar Jyotirlinga Temple

Fig. No. 12: Taj-Ul-Masjid at Bhopal

Fig. No. 13: Stupa at Sanchi

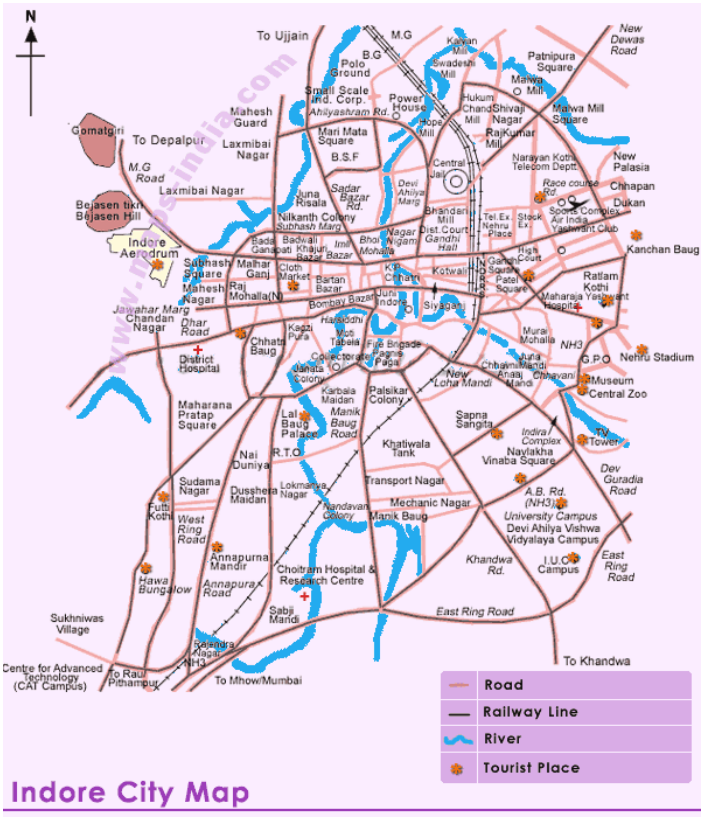
1.2 About Indore:

1.2.1 Location:

Indore is a tier 2 city, the largest city of the Indian state of Madhya Pradesh by population. It serves as the headquarters of both Indore District and Indore Division. A central power city, Indore exerts a significant impact upon commerce, finance, media, art, fashion, research, technology, education, and entertainment and has been described as the commercial capital of the state. Located on the southern edge

of Malwa Plateau, the city is located 190 km west of the state capital of Bhopal. With a Census-estimated 2011 population of 3,276,697[5] distributed over a land area of just (3,898 square kilometer)

Indore is the densely populated major city in the central province. The Indore Metropolitan Area's population is the state's largest, with 3.2 million people living there. It is the 9th largest city in India and 76th [6] largest city in the world. Indore traces its roots to its 16th century founding as a trading hub between the Deccan and Delhi. The city and its surroundings came under Maratha Empire on 18 May 1724 after Maratha Peshwa assumed the full control of Malwa. During the days of the British Raj, Indore State was a 19 Gun Salute (21 locally) princely state (a rare high rank) ruled by the Maratha Holkar dynasty, until they acceded to the Union of India.[7] Indore served as the capital of the Madhya Bharat from 1950 until 1956. The Indore District is bounded by the districts of Ujjain to the north, Dewas to the east, Khargone (West Nimar) to the south, and Dhar to the west.



Indore City Map

Fig. No. 14: Indore city Map

1.2.2 Climate:

Due to its location in Central India (approx.76o E, 23o N, far from the sea, Indore has a moderately extreme climate. Winter: In winter (November to February), the night low is around 10oC.At the peak of winter; it can be as low as low as 2°Cto 3°C. The record low is 1.5°C. Summer: During Summer (April-June) the days are hot (35-40°C) with the peak summer' (May)
day temperature sometimes touching 45°C.

However, unlike other places in central India, the summer nights in Indore are something special. Due to its location on the southern edge of the Malwa Plateau, however hot it may be during the day, in the late evening, cool breeze starts which

makes the evenings quite pleasant. Rainfall: Indore gets moderate rainfall of 30-35 inches (~80cms) during July-September due to S. W. Monsoon.

1.2.3 Topography:

Indore district consists of 5 Tehsils, Depalpur, Sanwer, Indore and Mhow. Number of Blocks in the district is 5 (consisting of 36 Police Stations). There are total 312 Panchayats and 622 villages in these 4 blocks, in urban areas 1 Nagar Palik Nigam, 9 Nagar Panchayat. Rojadi is one of them which are the first village in which every house has power cabel direct to the transformer. At present, after the delimitation of parliamentary and legislative assembly constituencies there are nine Vidhan Sabha constituencies in this district: Depalpur, Indore-1, Indore-2, Indore-3, Indore-4, Indore-5, Mhow, Rau, Sanwer.

1.2.4 Transport & Connectivity:

By Road:

Indore is connected to other parts of India through national and state highways. The major national highways passing through the city are:

- National Highway No. 3 (NH3 – Agra Bombay)
- National Highway No. 59 (Ahmedabad – Godhra - Indore)
- National Highway No. 59A (Indore – Betul – Nagpur connecting NH 69)

The Mumbai- Indore section of the National Highway No. 3 and the Ahmedabad – Indore section of the National Highway No. 59 are undergoing multi laning under the NHDP program.

Other important regional highways passing through the city are:

- State Highway No. 27 (Jhalawad - Ujjain - Burhanpur)
- State Highway No. 31 (Neemach - Ratlam - Dhar)

Fig. No. 15: Indore road connectivity Map

By Rail:

The Indore Junction is an A-1 grade railway station with revenue of more than Rs. 50 crore (500 million). The City Railway Division comes under Ratlam Division of the Western Railways. Indore Junction BG is the main and terminal station on the broad gauge line connecting it to the rest of the country. In the Railway budget of 2009 Indore main railway station was listed for upgrade along with other 300 stations across India. Indore is directly connected to the metro cities like Delhi, Mumbai, Kolkata, Chennai, Pune, Lucknow, Kochi, Jaipur and other cities like Ahmedabad, Hyderabad, Trivandrum, Chandigarh, Kollam, Gorakhpur, Coimbatore, Calicut etc.It has both meter gauge and broad gauge in operational. Regular train services connect Indore to most parts of the country. Electrification of the Indore – Dewas – Ujjain is completed in June 2012.

Indore lies on the Indore and Akola meter gauge railway line, one of the remaining functional meter gauge line in India. Ratlam-Indore meter gauge to broad gauge conversion is almost completed. This section is scheduled for conversion to standard broad gauge under Indian Railways' projected Unigauge system.

Fig .No. 16: Indore Railway Map

By Air:

Indore is served by the state of the art Devi Ahilyabai Holkar Airport, about 8 km from the city. It is the busiest airport in the state of Madhya Pradesh and Chhattisgarh and also serves as a hub for international cargo.

1.2.5 History of Indore:

Indore history gives an insight of its glorious past. The history of Indore reveals that the ancestors of the founders of the city were the hereditary Zamindars and indigenous landholders of Malwa. The families of these landlords led a luxurious life. They retained their possessions of royalty, including an elephant, Nishan, Danka and Gadi even after the advent of Holkars. They even retained the right of performing the first pooja of Dussehra (Shami Pujan). During Mughal rule, the families were granted

confirmatory sanads by the Emperors Aurangzeb, Alamgir and Farukhshayar, confirming their *'Jagir '* rights.

Rao Nandlal Chaudhary Zamindar was the Chief Zamindar and received a special place in the emperor's court of Delhi. He was presented two jewel studded swords, which are now displayed in the Royal British Museum. He was also friendly with Raja Savai Jai Singh of Jaipur. He gifted him with a special "Gold Langar" which guaranteed a special place to him in all the Durbars of India. In 1713, Deccan plateau was handed over to Nizam. This renewed the struggle between the Marathas and the Mughals. Read on to know more about the historical background of Indore.

From time to time, Maratha invaders kept harassing the people of Malwa Rao Nandlal Chaudhary. Being the chief Zamindar, he had an army of 2000 soldiers. Once, while visiting the banks of river Saraswati, Rao Nandlal found a location surrounded by rivers on all sides. To protect his people from harassment by Marathas and Mughals, he started moving his people to this place and constructed the fort of Shree Sansthan Bada Rawala. This city was named Indrapur after Lord Indreshwar, and eventually came to be known as Indore.

In 1743 AD, Baji Rao Peshwa finally received the Viceroyalty of Malwa. However, he was bound by a treaty from infringing upon the rights of Zamindars. Malhar Rao Holkar was one of the four signatories of the treaty. So, on victory, the Peshwas appointed Malhar Rao Holkar as a "Subhedar". This marked the beginning of Holkars' reign in Malwa. Indore also came under the rule of Maratha Maharajas of the Holkar dynasty. In 1733, the dynasty's founder, Malhar Rao Holkar (1694-1766), was appointed as the Maratha Governor of the region.

By the end of his reign, the Holkar state was independent. He was succeeded by his daughter-in-law Ahilyabai Holkar (1767 - 1795). She ruled from a palace-fort at Maheshwar, situated to the south of Indore. Ahilyabai Holkar had a passion for architecture. She used to donate money for the construction of Hindu temples, across the Indian subcontinent. In 1818, the Holkars were defeated by the British in the Third Anglo-Maratha War and the Holkar kingdom became a part of the British Empire.

After the defeat in the Battle of Mahidpur, the treaty of Mandsaur was signed. According to which, the Cantonment town of Mhow was handed over to the British. The treaty also declared the shifting of the capital of the Holkar state from Maheshwar to Indore. In 1947, after India's independence, Indore, along with other princely states, became a part of the Indian state of Madhya Bharat. Indore was elected as the summer capital of the new state. Finally, on November 1, 1956, Madhya Bharat was merged into Madhya Pradesh.

1.2.6 Culture and Heritage:

Indore is an important stronghold of Malwa culture and history with its famous attractions such as the Rajwada, Chhatris, Kanch Mandir, Lalbagh Palace etc. Owing to its rich cultural background, Indore Festivals are celebrated with great zest and are one of the main attractions of the city. Though growing westernization has been a reason behind the celebration of events like Valentine's Day, Friendship Day and New Year's Eve, Indore has not lost its traditional values. The city still celebrates a host of traditional festivals which originated centuries back. All national festivals, like Diwali, Holi, Eid-ul-Fitr and Rakhi, are also celebrated in Indore with the same enthusiasm as in the other parts of Madhya Pradesh as well as India.

Ganesh Chaturthi is celebrated quite differently in Indore city. Earlier, when textile mills flourished here, the workers of the mills contributed money and labor to arrange a carnival of floats ("Jhanki") and celebrated the festival with great pomp and show. Another festival celebrated here is Makar Sankranti, also known as the Kite Festival. The sky over Indore is rendered colorful as people fly kites and organize competitions on this day. It is celebrated on 14th January each year. Some other major festivals celebrated in Indore are.

Anant Chaudas:

Anant Chaudas is celebrated around the month of September. On the night of Anant Chaudas, large processions are taken out and huge idols of Lord Ganesha are immersed in water. The festival is celebrated with great enthusiasm by the people.

Rangapanchami:

Rangapanchami is celebrated five days after Dulendi or Holi, but it is not the usual Holi colors that paint the atmosphere around, rather it is the color of music that fills the air. Indore has its own style of celebrating Rang Panchami. Here, it is

celebrated like Dulendi, but colors are mixed with water and then poured on others. On the event of the festival, the local municipal corporation sprinkles color mixed water on the main streets of old Indore. Earlier, they used Fire Brigade vehicles for this purpose. Rangapanchami is an age old festival, which was celebrated during the Holkar reign and continues to be celebrated till date.

Ahilya Utsav:

Ahilya Utsav is an annual festival celebrated in Indore. It is celebrated to commemorate the death anniversary of Rani Ahilya Bai, the brave queen of Indore.

Navratri:

Though Navratri is celebrated throughout the country, it has a special relevance for the people of Indore. The temple of Bijasen Mata is located on a small hillock called Bijasen Tekri. In the months of September/October, during Navratri, a fair is organized at this temple. It attracts pilgrims in huge numbers.

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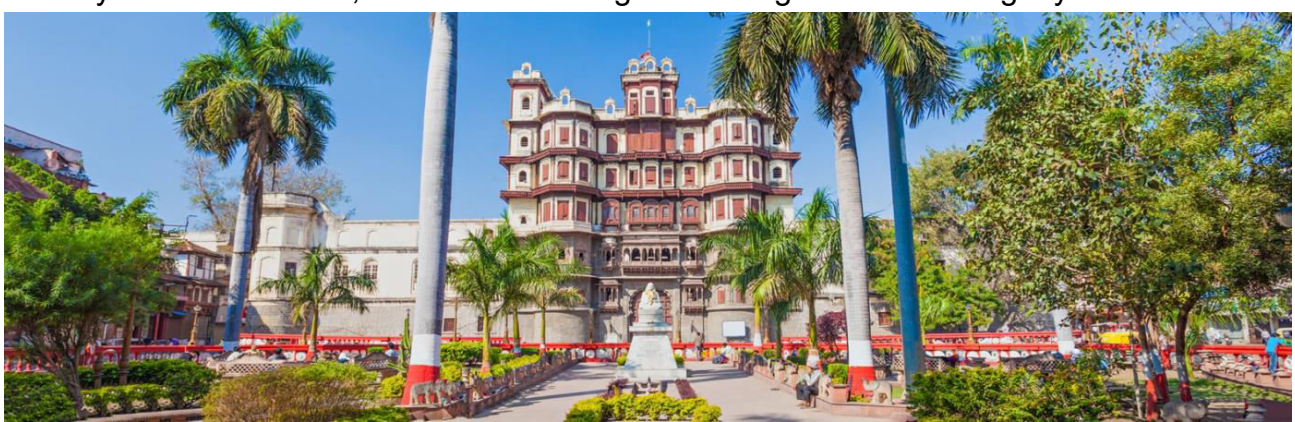
Fig .No. 17: Indore Festival celebration

1.2.7 About Rajwada:

Rajwada is one of the important historical buildings in Indore which is the historical palace of the Holkars. It was built about two centuries ago and is located near the Chhatris in the main square. It is a seven storied structure, which serves as the living example of the grandeur of the Holkars. Rajwada stands in the center of the city. The new palace is on the northern side, while the old palace stands in the old part of the town. The old palace is a multi-storied building which also serves as a gateway of the Rajwada. It stands amongst the crowded streets of the Khajuri Bazar and faces the main square of the city.

The palace was once the centre of all the trading activities in the city. It is a blend of Maratha, Mughal and French style of architecture. The entrance of the palace has a lofty archway with a giant wooden door which is covered with iron studs. The Gopura like monument is made up of wood and stone. It has a number of balconies windows and corridors. The entrance leads to a huge courtyard, which is surrounded by galleried rooms and the arcaded Ganesha hall, which was once the venue of all state and religious functions. This hall is now used for art exhibitions and classical music concerts.

Rajwada has been burnt three times in history. The last fire broke out in 1984 and caused the maximum destruction. The lower three floors are made up of stone, while the top floors are made of wood. This made it very vulnerable to destruction by fire. Now, only the front part of the original structure remains. The palace has recently been renovated, which has managed to bring back the old glory to some



extent. In the rear part of the palace, a beautiful garden has been created. It contains fountains, an artificial waterfall and some magnificent pieces of 11th century sculpture.

Fig .No. 18: Panoramic view of the Historic Palace of the Holkars: Rajwada, Indore

Presently Rajwada is occupied by the Department of Archaeology, Archives and Museums, Government of Madhya Pradesh, Madhya Pradesh wherein apart from a temple, office of DoAAM it also houses a Museum on the First floor at its Northern wing.

1.3.1 About Chhatris:

Chhatris are elevated, dome-shaped pavilions used as an element in Indian architecture. The word *Chhatri* means "canopy" or "umbrella." In the context of architecture, the word is used to refer to two different things. The usual and more widely understood meaning is of a memorial, usually very ornate, built over the site where the funeral (cremation) of an important man was performed. Such memorials usually consist of a platform girded by a set of ornate pillars which hold up a stone canopy. The word *chhatri* is also used to refer to the small pavilions that mark the corners, roof of entrance of a major building.

Originating in Rajasthani architecture where they were memorials for kings and royalty, they were later adapted as a standard feature in all buildings in Maratha ruled states, Rajasthan, and most importantly in Mughal architecture.

1.3.2 Historical Significance of the Chhatris:

The Maratha Rulers were skilled in the field of architecture. An exquisite example of their architectural style comprise of the Chhatris of Indore. These Chhatris are the cenotaphs built in the memory of the Holkar rulers. The memorials are built in stone and have stood the test of time. They stand elegantly on the banks of the Kahn River. The cenotaphs are tombs built on the cremation spot of the Holkar rulers near

Rajwada. The Chhatris have dome type structure with pyramidal spires on top.

Fig .No. 19-20: Malhar Rao Holkar Chhatri, Opp.Maheshwari School,ChhatriBagh,Indore

According to historical records, the Holkars ruled over a large area of the state of Madhya Pradesh. They were great rulers and enjoyed support of their people. During the year 1858, British dominated the country and India came under the rule of the Queen. The Holkars were defeated by the British in the war and had to submit their kingdom in their hands. As their capital was also lost, they shifted to Indore.

The city derives its name from the famous temples named Indreshwar and Indrapur. As a result, they erected these Chhatris, a constant reminder of their rule and their glory. Facing west, there is the cenotaph built over the ashes of a woman ruler of Malwa, Maharani Krishnabai. There are two other Chhatris dedicated to Tukoji Rao II and Shivaji Rao, father and son respectively. These cenotaphs are linked by a common prayer hall, which has delicately carved arches and pillars. It also contains life size statues of these rulers on a high platform along the garbha grihas.

There is a place called Chhatri Bagh here, which has two compounds. There is also a beautiful Chhatri in the memory of Bolia Sahib. It was constructed after his death near this Chhatri Bagh. At night, these Chhatris provide a breathtaking sight, as they get illuminated. The Chhatris glow ethereally against the dark of the sky and pay tribute to the great souls of the Holkar rulers. An artificial lake has been created in this stretch of the otherwise dry Kahn River. It has been further beautified with a fountain, well laid gardens on both banks and boating facility.

1.4 Vision for Conservation of Heritage sites in Indore City:

- The vision of Indore which is synthesized by city residents reflects their attachment to the city's heritage, their modernity in lifestyle and their passion for development along with a deep community feeling.

- The city is approximately 500 years old and through times it has been the most important trade and commerce Centre for the region. During this long period it has inherited a rich cultural and economic heritage which is significantly reflected in modern Indore.

- Identity and Culture being foremost priority of the city, vision for Indore highlights the importance of Inheriting its Cultural and Economic heritage.

- At present the market area is congested and chaotic, the river is polluted with slums mushrooming along the banks and heritage precincts not properly conserved.

- To transform this area as per the city's vision and aspirations is a challenge.

- The goal is to rejuvenate the identity of the city based on its key features (Cultural Identity, Cuisine, Built Heritages or Structures) and intelligent enhancement and capitalization of cultural resources for promotion and marketing of tourism.

- It will combine intelligent regeneration and conservation of the historic inner city, market areas, riverfront and public spaces with the redevelopment of select land parcels for creating compact, mixed-use and sustainable neighborhoods.

- Rejuvenation of the Heritage sites will ensure that Indore becomes a commercially viable, culturally dynamic, and environmentally-friendly city with gains evenly spread across all citizens.

- Ultimately the project will aim for the Conservation of Built Heritage, Heritage Street development including Facade treatment, Revitalization of Urban Heritage, Transformation of the Heritage Precincts & development of Tourism Potential.

2. Approach of Work 2.1

2.1 Approach for Selection:

Indore being a Historical city which is culturally rich houses many important Heritage sites. Some of them are identified by the Indore Municipal Corporation (IMC), Directorate of Archaeology, Archives and Museums. Conservation of the Heritage Sites is utmost need of the hour which will allow them survive for a longer period so as to showcase them to our coming generations. The Criteria for the selection of these buildings are as below: Significance and Values related to these. Its historical significance. Architectural and aesthetic importance (traditional building materials such as brick masonry in lime , ashlar masonry, ancient Sandstone works , lime plaster ,woodworks, ornamentation like the

decorative railings, grills etc., brackets, cornices ,architraves , , ancient title boards(if existing) Jharokhas, chajjas, brackets and jalis, floral mouldings, reliefs and ornamental plaster works in lime on building facades having greater architectural and aesthetic importance and other specialized building crafts etc. present which are prominently visible externally apart from its internal areas which might have much more traditional architecture supporting the heritage site. Integrity and Authenticity (buildings with original facade intact and less alteration & additions) Social significance Diversified experience (Heritage, Religion, Local Culture, and more)

2.2 Approach for Execution:

It shall be taken care that minimal interventions shall be proposed as necessary which shall also enhance the life of the building .Utmost care shall be taken that no structural damages are caused during the process of Conservation by means of hammering, mechanical vibrations etc.

2.2.1 Present Condition:

At many Heritage sites it has been observed that there are many alterations, modifications, damages (manmade and natural) taken place apart from the weathering effects on the Heritage structure which are causing threat to their long term existence. Thus it shall be taken on priority basis by involving necessary Conservation Methods.

2.2.2 Conservation Guidelines and Methodology:

a. Detailed documentation by means of

i. Photo documentation

ii. Condition Mapping shall be prepared

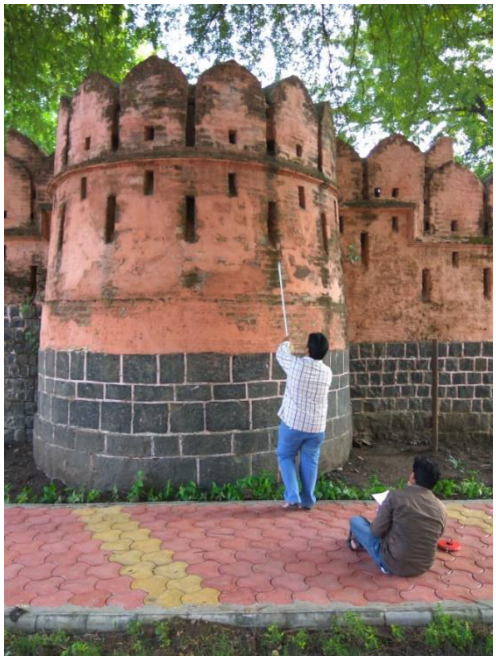
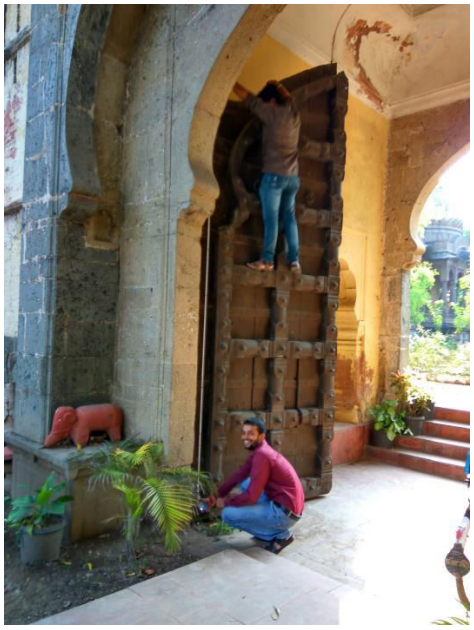



Fig .No. 21-24: Documentation work on site

b. Any alterations made to the Heritage site in the later period shall be recorded.

c. Structural damages to be recorded.

d. Proposals to be prepared and suggested:

i. For Structural Strengthening

ii. Building restoration

iii. Development of the surroundings areas

iv. Arranging public convenience /amenities for occupants and visitors

v. Providing better Services (water supply, electricity and sanitation) etc.

vi. Signages (Descriptive, Illustrative and Directive)

vii. Sign boards/Title boards of shops and buildings

e. Below are the natures of works to be undertaken during the process of Conservation w.r.t various materials for restoring them to their original form, design, type, pattern etc. Different approaches to retain them.

i. Lime plaster Restoration-Careful removal of lime plaster and lime mortar from various areas identified under damage, necessary Conservation works to be executed in the traditional lime mix god in strength quality, finish retaining the original finish, design etc.

ii. Wood Conservation - Careful removal of old finish, Anti termite Treatment, Necessary Conservation works, Clear Melamine Finish, Clear Lacquer Finish etc.

iii. Stone Restoration - Stitching of cracks, necessary Conservation works etc.

iv. Painting Restoration-careful removal of existing popped and peeled plaster, careful application of paint finish with necessary base preparation etc.

v. Metal Restoration - necessary Conservation works, replacing the damaged members etc.

vi. Structural Strengthening and stability of various parts of the structure by means of civil works etc.

f. For executing the above works below mentioned facilities, provisions have to be made:

i. Arrangement of water supply and drinking water arrangements etc.

ii. Arrangement of Electricity

iii. Providing the necessary Scaffoldings

iv. Machineries and Tools required.

v. Sufficient storage space to keep materials and machineries/tools separately during the progress of works.

2.2.3 Listing the various Conservation works to be executed to restore the Built Heritage at Malhar Rao Holkar Chhatri, Chattribagh, Indore

i. Stone Restoration

ii. Lime Restoration

iii. Metal Restoration

iv. Wood Restoration

v. Landscape redevelopment

3. Scope of work

Following are the natures of work that are undertaken in the project.

3.1 Conservation and Restoration of the Heritage structures

- All side Enclosure walls on external Periphery of Chhatri

- North, West and South side Gateways

- All Chhatris

- Ancillary Temples

- Ashlar Pathway and Platform

3.2 Amenities

- Parking - Administration Block - Sanitation (Visitors Toilet Blocks etc.) - Drinking Water facility to the Tourists, Visitors etc - Ticket Counter, Visitors Movement Plan, Signage (Directional) and Interpretation (Descriptive & Illustrative)

3.3 Landscaping

- Plantation - Pathways - Street Furniture. - Landscape Illumination

3.5 Developing the basic civic services etc.:

- Water supply works - Electrification works - Sewerage works (Sewage &Drainage) - Shifting of haphazardly lying cables and Electrical poles - Improvement of Roads - Safety and Security (CCTV)

INDORE SMART CITY DEVELOPMENT LIMITED

APPENDIX 2.10

TENDER DOCUMENT

FOR PERCENTAGE RATE ONLY IN WORKS DEPARTMENT AND OTHER DEPARTMENT

NIT Number and Date : NIT No. 90/ISCDL/18-19; Date: 08.03.2019

Agreement Number and Date : _____

Name of Work	**:**	**"Conservation, Restoration and Redevelopment of Malhar Rao Holkar Chatri, Chattri Bagh Indore."**
Name of the Contractor	**:**	
Probable Amount of Contract	**:**	
(Rs. In Figure)	**:**	**Rs. 5.10 Cr.**
(Rs. In Words)	**:**	**Rs. Five Crore ten Lakh only**
Contract Amount	**:**	
(Rs. In Figure)	**:**	**_____**
(Rs. In Words)	**:**	**_____**
Stipulated Period of Completion	**:**	**18 Months**

Tender Document

Table of Contents

Section-1
INDORE SMART CITY DEVELOPMENT LIMITED

Nehru Park, Indore (M. P.) 452 003

NIT No. 90/ISCDL/18-19;Date: 08.03.2019

Notice Inviting Tender

Online percentage rate tenders are invited for following works. Tender forms may be purchased online by the contractors registered in centralized registration of M.P. P.W.D. having relevant experience.

S.No.	Name of Work	Estimated Cost of Work	Cost of Tender Form	Earnest Money Deposit	Completion Period
1.	"Conservation, Restoration and Redevelopment of Malhar Rao Holkar Chatri, Chattri Bagh Indore"	Rs. 5.10 Cr.	Rs. 20000/-	Rs. 5.10 Lakh	18 Months

Key Dates: -

S. No.	Description	Date and Time
1.	Last date for Purchase of Tender (Online)	09.04.2019 till 1730 Hrs.
2.	Last date for submission of tender (Online)	09.04.2019 till 1730 Hrs.
3.	Technical bid opening (Online)	10.04.2019 at 1730 Hrs.
4.	Last date for Submission of Hard Copy of Technical Bid.	12.04.2019 till 1730 Hrs.
5.	Prebid Meeting	27.03.2019 at 1530 Hrs. at ISCDL Office Nehru Park, Indore

Note:

1. Tender Document and other details shall be available on: - Website- www.mptenders.gov.in
2. Amendment to NIT, if any would be published on website www.mptenders.gov.in
3. The EMD shall be in the form of online payment using Debit Card/ Credit Card/ Net Banking or System Generated Challan on portal.

Superintending Engineer
Indore Smart City Development Limited

INDORE SMART CITY DEVELOPMENT LIMITED

Notice Inviting e-Tenders

NIT No. 90/ISCDL/18-19;Date: 08.03.2019

Online percentage rate tenders are invited for following works. Tender forms may be purchased online by the contractors registered in centralized registration of M.P. P.W.D. having relevant experience.

S. No.	Name of Work	Estimated Cost of Work	Cost of Tender Form	Earnest Money Deposit	Completion Period
1.	"Conservation, Restoration and Redevelopment of Malhar Rao Holkar Chatri, Chattri Bagh Indore"	Rs.5.10 Cr.	Rs. 20000.0	Rs.5.10 Lakhs	18 Months

1. All details relating to the Bid Document(s) can be viewed and downloaded from the website mentioned in NIT.
2. Bid document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/internet banking.
3. At the time of submission of the Bid the eligible bidder shall be required to:
    i) Pay the cost of Bid Document;
    ii) Deposit the Earnest Money;
    iii) Submit a check list; and
    iv) Submit an affidavit.

Details can be seen in the Bid Data Sheet

4. Eligibility for Bidders:
    (a) At the time of submission of the Bid the bidder should have valid registration with the Government of Madhya Pradesh, PWD in appropriate class. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with appropriate authority.
    (b) The bidder would be required to have valid registration with MPPWD in appropriate class at the time of signing of the Contract.
    (c) Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.
5. Pre-qualification – Prequalification conditions, wherever applicable, are given in the Bid Data Sheet.
6. Special Eligibility - Special Eligibility Conditions, if any, are given in the Bid Data Sheet.
7. Amendment to NIT, if any, would be published on website only, and not in Newspaper.

Superintending Engineer
Indore Smart City Development Limited

SECTION 2

INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

1. SCOPE OF BID

The detailed description of work, hereinafter 'work', is given in the Bid Data Sheet.

2. General Quality of Work:

The work shall have to be executed in accordance with the drawings (prepared by Contractor and approved by the competent authority), technical specifications specified in the Bid Data Sheet/ Contract Data, and shall have to meet high standards of workmanship, safety and security of workmen and works.

3. PROCEDURE FOR PARTICIPATION IN E-TENDERING

The procedure for participation in e-tendering is given in the Bid Data Sheet.

4. ONE BID PER BIDDER

4.1 The bidder can be an individual entity or a joint venture (if permitted as per Bid Data sheet). In case J.V. is permitted, the requirement of joint venture shall be as per the Bid Data Sheet.

4.2 No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified.

5. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of his bid, and no claim whatsoever for the same shall lie on the ULB.

6. Site Visit and examination of works

The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the work. All costs shall have to be borne by the bidder.

B. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS

The Bid Document comprises of the following documents:

1. NIT with all amendments.
2. Instructions to Bidders,
3. Conditions of Contract:
   i. Part I General Conditions of Contract and Contract Data; and
   ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings,
6. Priced Bill of Quantities
7. Technical and Financial Bid
8. Letter of Acceptance
9. Agreement and
10. Any other document(s), as specified.

8. The bidder is expected to examine carefully all instructions, conditions of contract, the contract data, forms, terms and specifications, bill of quantities, forms and drawings in the Bid Document. Bidder shall be solely responsible for his failure to do

so.

9. Pre-Bid Meeting (where applicable)

Wherever the Bid Data Sheet provides for pre-bid meeting:

9.1 Details of venue, date and time would be mentioned in the Bid Data Sheet. Any Change in the schedule of pre-bid meeting would be communicated on the website only, and intimation to bidders would not be given separately.

9.2 Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. The Employer may, at his option, give such clarifications as are felt necessary.

9.3 Minutes of the pre-bid meeting including the gist of the questions raised and the responses given together with any response prepared after the meeting will be hosted on the website.

9.4 Pursuant to the pre-bid meeting if the Employer deems it necessary to amend the Bid Document, it shall be done by issuing amendment to the online NIT.

10. Amendment of Bid Documents

10.1 Before the deadline for submission of bids, the Employer may amend or modify the Bid Documents by publication of the same on the website.

10.2 All amendments shall form part of the Bid Document.

10.3 The Employer may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

C. PREPARATION OF BID

11. The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and submit Bid Seals (Hashes) of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice Inviting e-Tenders after signing of the same by the Digital Signature of their authorized representative.

12. DOCUMENTS COMPRISING THE BID

The bid submitted online by the bidder shall be in the following parts:

Part 1 – This shall be known as **Envelope A** and would apply for all bids. **Envelope A** shall contain the following as per details given in the Bid Data Sheet:

i. Registration number or proof of application for registration and organizational details in format given in the Bid Data sheet
ii. Payment of the cost of Bid Document;
iii. Earnest Money; and
iv. EPF Registration
v. An affidavit duly notarized.

Part 2 – This shall be known as **Envelope B** and required to be submitted only in works where pre-qualification conditions and/or special eligibility conditions are stipulated in the Bid Data Sheet. Online **Envelope B** shall contain a self-certified sheet duly supported by documents to demonstrate fulfillment of pre-qualification conditions.

Part 3 – This shall be known as Online **Envelope C** and would apply to all bids. **Envelope C** shall contain financial offer in the format prescribed enclosed with the Bid Data Sheet.

13. LANGUAGE

The bid as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer shall be in English or Hindi. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case, for the purposes of interpretation of the bid, such translation shall govern.

14. TECHNICAL PROPOSAL

14.1 Only, in case of bids with pre-qualification conditions defined in the Bid data sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.

14.2 All the documents/ information enclosed with the technical proposals should be self-attested and certified by the Bidder. The Bidder shall be liable for forfeiture of his earnest money deposit, if any document/ information are found false/ fake/ untrue before acceptance of Bid. If it is found after acceptance of the Bid, the sanctioning authority may at his discretion forfeit his performance security/ guarantee, security deposit, enlistment deposit and take any other suitable action.

15. FINANCIAL BID

i. The bidder shall have to quote rates in format referred in Bid Data sheet, in overall percentage, and not item wise. If the bid is in absolute amount, overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply for all items of work.

ii. Percentage shall be quoted in figures as well as in words. If any difference in figures and words found, lower of the two shall be taken as valid and correct.

iii. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies; and the Employer shall not be liable for the same., **GST shall be paid as per Appropriate rates.**

iv. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. PERIOD OF VALIDITY OF BIDS

The bids shall remain valid for a period specified in Bid Data Sheet after the date of "close for biding" as prescribed by the Employer. The validity of the bid can be extended by mutual consent in writing.

17. EARNEST MONEY DEPOSIT (EMD)

17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), of the amount specified in the Bid Data Sheet.

17.2 The EMD shall be transfer / deposit online using Debit card/ credit card / net banking or system generated challan in favour of name and particulars given in Bid Data sheet.

17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive.

17.4 EMD of bidders whose bids are not accepted will be returned within ten working days of the decision on the bid.

17.5 EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the Bank Guarantee of required value for Performance Security.

17.6 Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the Earnest money deposit.

D. SUBMISSION OF BID

18. The bidder is required to submit online bid duly signed digitally, and **Envelope "A"** in physical form also at the place prescribed in the Bid Data Sheet.

E. OPENING AND EVALUATION OF BID

19. PROCEDURE

19.1 **Envelope 'A'** shall be opened first online at the time and date notified and its contents shall be checked. In cases where Envelope 'A' does not contain all requisite documents, such bid shall be treated as nonresponsive, and **Envelope "B" and/or "C"** of such bid shall not be opened.

19.2 Wherever **Envelope 'B'** (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the **Envelope 'B'**. **Envelope 'C'** (Financial Bid) of bidders who are not qualified in Technical Bid **(Envelope 'B')** shall not be opened.

19.3 **Envelope 'C'** (Financial Bid) of the qualified bidders shall be opened online at the time & date notified. The bidder shall have freedom to witness opening of the **Envelope 'C'**.

19.4 After opening **Envelope 'C'** all responsive bids shall be compared to determine the lowest evaluated bid.

19.5 The Employer reserves the right to accept or reject any bid, and to annul the biding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.

19.6 The Employer reserves the right of accepting the bid for the whole work or for a distinct part of it.

20. Confidentiality

20.1 Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.

20.2 Any attempt by a bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of its bid.

F. AWARD OF CONTRACT

21. Award of Contract

The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted.

22. Performance Security

22.1 Prior to signing of the Contract the bidder to whom LOA has been issued shall have to furnish performance Security of the amount, form and duration, etc. as specified in the Bid Data Sheet.

22.2 Additional performance security, if applicable, is mentioned in the Bid Data Sheet and shall be in the form and for the duration etc. similar to performance security

23. Signing of Contract Agreement

23.1 The successful bidder shall have to furnish Performance security and additional performance security, if any, and sign the contract agreement within 15 days of issue of LOA.

23.2 The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the Employer to the contractor for commencement of work.

23.3 In the event of failure of the successful bidder to submit Performance Security and additional performance security if any or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking action against the bidder.

24. CORRUPT PRACTICES

The Employer requires that bidders observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the Employer:

i. may reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract; and

ii. may debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

For the purposes of this provision, the terms set forth above are defined as follows:

a. "**corrupt practice**" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;

b. "**fraudulent practice**" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

c. "**coercive practice**" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

d. "**Collusive practice**" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

End of ITB

BID DATA SHEET

General

S.N.	Particulars	Data
1	Office inviting Tender	Indore Smart City Development Ltd., Indore
2, 3	NIT No. and Date	NIT No. 90/ISCDL/18-19; Date: 08.03.2019
4	Bid document download Available from date & time	-
5	Website link	www.mptenders.gov.in

Section 1 – NIT

S.No.	Particulars	Data
1	Portal fees	Rs. _____ (shall be reflected on the portal)
2	Cost of bid document	Rs 20000.0
	Cost of bid document payable at	Bidders shall be directed to the payment gateway through the portal
	Cost of bid document in favor of	-
3	Affidavit format	Annexure B
4	Pre-qualifications required	Yes
	If Yes, details	As per Annexure C
5	Special Eligibility	-
	If Yes, details	As per Annexure D
6	Key Dates	Annexure A

Section 2 – ITB

Clause Reference	Particulars	Data
1	Name of work	**Conservation, Restoration and Redevelopment of Malhar Rao Holkar Chatri, Chattri Bagh Indore.**
2	Specifications	Annexure E
3	Procedure for participation in e-tendering	Annexure F
4	Whether Joint-venture is allowed	No
	If yes, requirement for Joint venture	As per ANNEXURE-G
9	Pre-bid meeting to held	Yes
	If Yes, Date, Time & Place	27.03.2019 at 1530 Hrs. at Indore Smart City Development Limited (ISCDL), Nehru Park, Indore (MP), India Pin 452003
12	Envelope –A containing: i. Registration number or proof of application for registration & organizational details as per Annexure 'H'	At the office of Chief Executive Officer Nehru Park, Indore (MP), India Pin 452003

Clause Reference	Particulars	Data
	ii. An affidavit duly notarized as per Annexure – B **Should reach in physical form**	
14	Envelope-B Technical Proposal	Annexure–I (Format I-1 to I-5)
	Envelope-C Financial Bid	Annexure – J
15	Materials to be issued by the department	Nil
16	Period of Validity of Bid	120 Days
	Earnest Money Deposit	Rs. 5.10 Lakh
17	Forms of Earnest Money Deposit	on the payment gateway through portal
	EMD valid for a period of	120 days
21	Letter of Acceptance (LoA)	Annexure L
	Amount of Performance Security	5% of contract amount
22	Additional Performance Security, if any	Equal percentage /(Amount) below,15% of bid
	Performance security in the format	Annexure M
	Performance security in favour of	Executive Director, ISCDL, Indore
	Performance security valid up to	Till issue of Physical Completion Certificate as per clause 35.1
	Performance security return	After 3 months of physical completion of work

Annexure – A

Key Dates & Events

S No.	Department Stage	Bidder's Stage	Start		Expiry		Envelopes
			Date	Time	Date	Time	
1.		Purchase of Tender – Online			09.04.2019	1730 Hours	
2.		Bid Submission – Online			09.04.2019	1730 Hours	
3.		Submission of Hard copy			12.04.2019	1730 Hours	Envelope A,B
4.	Technical Bid/ Proposal Open (Envelope A and B)		10.04.2019	1730 Hours			Envelope A,B
5.	Financial Bid Open (Envelope C)						

Annexure – B
(See clause 3 of Section 1-NIT)

|| AFFIDAVIT ||

(To be contained in Envelope A)
(On Non-Judicial Stamp of Rs.100)

I/we _____ who is/are _____ (status in the firm/company) and competent for submission of the affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and state that: I/we are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. _____ for _____ (name of work) dated _____ issued by the _____ (name of the ULB).

I/we are fully responsible for the correctness of following self-certified information/ documents and certificates:

1. That the self-certified information given in the bid document is fully true and authentic.

2. That:

   a. Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.

   b. Information regarding financial qualification and annual turn-over is correct.

   c. Information regarding various physical qualifications is correct.

3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name _____ Post _____ Present Posting _____

4. In response to the tender Reference No: _____ I as an owner/ Partner/ Director of <<Name of Bidder>>, I/We hereby declare that <<Name of Bidder>>, is having unblemished past record and was not declared ineligible for corrupt and fraudulent practices and/ or blacklisted either indefinitely or for a particular period of time by any State Government/ Central Government/ Semi Government/ PSU/ Municipal agencies in India.

Signature with Seal of the Deponent (bidder)

I/ We, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 4 are correct to the best of my knowledge and belief.

Verified today _____ (dated) at _____ (place).

Signature with Seal of the Deponent (bidder)

Annexure – C

(See clause 5 of Section 1 NIT)

PRE-QUALIFICATIONS CRITERIA

A) The bidder should have an Average Annual Financial Turnover for heritage conservation works not less than 50% of the probable amount of contract during last 3 financial years.

B) The bidder should have executed heritage conservation works either of the following within last 5 years.

a. One heritage conservation works costing not less than 50% of the probable amount of contract; **or**
b. Two heritage conservation works costing not less than 30% of the probable amount of contract; **or**
c. Three heritage conservation works costing not less than 20% of the probable amount of contract.

Note:

Bidders are required to submit the corresponding Work Order copies & Execution/Completion Certificates issued by the respective clients. The Certificates should be issued by respective authority (Not below Executive Engineer) of client. ISCDL may call for original certificates for verification.

Annexure – D

(See Clause 6 of Section 1 NIT)

SPECIAL ELIGIBILITY CRITERIA

Annexure – E

(See clause 2 of Section 2-ITB & Clause 10 of GCC)

1. MPUADD Specifications for Civil Works
(The soft copy of the specifications is available at departmental website
http://www.mpurban.gov.in/StandardSchedule.asp)
For items not covered under MP-UADD specifications with correction slips or those specifications are not given in the technical specifications appended or not incorporated in the nomenclature of the individual item, the work shall be done as per latest relevant BIS Codes of Practice or as per approval of Engineer-in-charge.

2. MPPKVVCO.LTD SPECIFICATIONS FOR ELECTRICAL WORKS
The Provisions of General/ Special Conditions of Contract, those specified elsewhere in the bid document, as well as execution drawings and notes, or other specifications issued in writing by the employer shall form part of the technical specifications of this work.

3. Handbook of Conservation of Heritage Buildings Published by Directorate General, Central Public Works Department in July 2013.

4. INDIAN NATIONAL TRUST FOR ART AND CULTURAL HERITAGE (INTACH) SCHEDULE OF RATES FOR
BUILDING CONSERVATION WORKS, ARCHITECTURAL HERITAGE DIVISION. The rates are as per prevailing market Rates and DSR 2016 rates / MPPWD.
All the works shall be executed as per the approved drawings/ designs. The patterns shown in the tender drawings can be modified as per the site requirements by the Engineer-in-charge and nothing extra whatsoever shall be payable over and above the quoted rates.
Material should be of the best approved quality obtainable and they shall comply to the respective Indian Standard Specifications. Samples of all materials shall be got approved before placing order and the approved sample shall be deposited with the Client/Engineer In-Charge.

1) DEMOLITION, DISMANTLING AND REMOVAL WORK
a) All special tools & equipment required for careful demolition and dismantling shall be arranged so that no harm is caused to any part of the Heritage structure.
b) The work shall be carried out under the supervision of a traditional craftsmen, so that the method of carrying out the work can be decided by him, knowing what the under layers may be and at what strength the demolition of dismantling should be carried out so as not to harm the structural integrity of the heritage structure.
c) Proper sheeting arrangement of the monument shall be done such that the work and the debris falling while carrying out the works does not harm or injure anybody and the dust doesn't spread in the adjoining areas.
d) Traditional crafts person shall inspect all the works while it is being carried out and shall inform the Engineer if any structural or other damage or cracks are seen to the monument when the outer layers/elements/flooring are removed.

2) SPECIFICATION FOR LIME MORTAR
SCOPE:
This Specification covers materials, proportions, preparation and storage of lime mortars.
MATERIALS:
Lime: --Lime A, B and C class shall be used in the preparation of mortar and shall conform to lime specification no. 3.3 and relevant IS codes.
Aggregates: --Any of the following or their mixture in the given proportion shall be used.
Sand: --Sand should be angular to sub angular moderately sorted aggregate of nominal size of 150um to 1.18mm. River sand shall not be used.

Water: --For all mortars water used shall be free from mud, clay, acidic, basic or organic impurities and shall be drinkable.

PROPORTIONS:
Different types of ratio shall be used for works as per different trades mentioned in BOQ in which the quantity of lime is based on standard lime. The volume of lime for purpose of the table in lime specifications shall be on dry hydrated lime
basis. Where Quick lime is used the ratio shall be worked out accordingly, so as to provide the necessary quantity of dry hydrated lime.

PREPARATION OF MORTAR:
Slaking of lime: -- Quick Lime shall be properly slaked and then used. The hydrated lime can be used as such for making mortar or may be run into putty and then used for making mortar (In contrast to Quick lime.)

TANK SLAKING:
Two or preferably three tanks lined with stone or brick large enough to permit, stirring and hoeing shall be prepared (generally tanks suitable for 5 quintals or 10 quintals of quick lime are used in practice).
One of these shall be at the higher level and about 0.5 m deep and the remaining about 0.7 to 0.8 m, deep at lower level such that the contents of higher tank shall flow into the lower tanks by gravity.
The upper tank shall be filled to half its depth with water. Quick lime shall be gradually added till it fills the entire bottom to about half the depth of water. (Never add water to lime). While quick lime is being added it shall be constantly stirred and hoed so as to break up the lumps. No part of the lime shall be allowed to expose above water level. As the lime slakes with evolution of heat temperature begins to rise and more lime or water may be added till the required temperature is reached and that temperature should be maintained by the addition of more lime or water till all the lime apparently has slaked, the stirring and hoeing shall be continued during the above process and for some period even after the slaking is apparently over.

MATURING:
After the lime has cooled it shall be transferred to the lower tank allowing it to flow through I.S.
sieve size 1.18mm, more water shall be added if required and it shall be left undisturbed as under Class B lime for minimum of 12 hours and be used in seven (7) days. The putty shall be allowed to mature but not allowed to dry out till it is used.
Making Putty from hydrated lime:
The putty shall be obtained by adding hydrated lime to water in a tank and stirring to the consistency of cream and allowing to stand as under:
Class A lime = Not more than 12 hours.
Class B lime = Minimum for 2 days.
Class C lime = Minimum for 2 days for mortar used for finishing coat of plaster and minimum of 16 hours for mortar used for other purposes.
The putty shall be allowed to mature but not allowed to dry out till it is used.
Making of coarse stuff:
Manual mixing: -- After the lime has matured as specified above, more water shall be added and the putty stirred, till milk of lime is obtained. The fine aggregate shall be added with a whirling motion of hand so that the aggregate falls evenly in the tank. The milk of lime shall be stirred and hoed continuously till the required quantity of fine aggregate is added.
Mortar mill (Gharat) Mixing: -
Quick lime shall not be used directly while dry hydrated lime can be used directly for making mortar. Putty or dry hydrated lime and fine aggregates in required proportions shall be put along with water in the Gharat spreading uniformly all along its circumference and ground till

a mortar of uniform colour and desired consistency is obtained. As grinding is done the mixture shall be continuously raked and turned over and over specially from corners and sides. Mortar shall be ground not less 180 revolutions or for 1/2 hours minimum, considering a Gharat to have 15 rpm. Mortar for final coat of plaster: -- It shall be ground for a second time after an interval of 2 days for class C limes.

STORAGE OF MORTAR:
Lime mortars prepared from Class A and Class B limes shall be used up as soon as possible after mixing but not later than 12 hours for Class A limes from the time of first grinding and 2 days for Class B limes from the time of making Putty or first grinding as the case may be. Mortars from class C limes can be used for periods longer than 3 days after the making of mortar provided they are protected from drying out.

REJECTION OF MORTAR:
Dried out lime will not be used under any circumstances.
Mortar not found in accordance with the Specifications above and unsuitable according to field
and laboratory tests of lime mortar shall be rejected. The Contractor at his own cost shall remove rejected mortar from the site of work within 24 hours.

Lime Kara
Item: Lime Kara Finish 3 to 5 MM thickness
Providing and application of Lime Kara of 1:2 (1 slaked & sieved Lime: 2 Zikki powder) on Lime Surkhi / Lime rock sand plastered wall surfaces, with thickness between 3 to 6 MM including organic additives, as per traditional practices. Zikki powder shall be free of any impurities, lumps, etc. The preparation of mortar is to be done following traditional practice includes using chakki/garat (wet grinding of lime and Zikki powder by heavy stone mill / chakki/garat), application shall be done in 2 layers, first base layer shall be of 2 to 3 MM thick,
second layer shall be of not more than 2 mm and should be done with a gap of minimum 7 days of previous layer and not more than 12 days from previous layer. Lime shall be slaked minimum for 60 days in separate tanks, with repeated process of sieving with muslin cloth and changing water every 2 to 3 days. Only Fat Lime / non-hydraulic shall be used and should be free of any impurities. Preparation of kara (mortar) shall be done in small batches. Final layer of Kara shall be cured and traditional process of rubbing & polishing shall be done by expert craftsman till desired finish is not achieved on the surface. Post application, Surface shall be free from any kind of hairline cracks, undulations, patchy finish. Finished surface shall be free from any powder / chalk on the surface. Item also includes all lead and lift, establishing work yard / chakki, scaffolding, formwork tools and implements etc.

Note:
1) Before application of the Kara, base lime plaster shall be free from any cracks, bulge or undulations. Lime plaster shall be well cured and should be 60 days old.
2) Inspection of finished Kara surface shall be done after 1 month of application.
3) Item shall be measured for surface of application in Square Meters.
3) TREATMENT AROUND THE ROOTS OF VEGETATION
SCOPE:
The work covered under this specification includes opening up of all layers in plan and elevation, excavation /removal of the earth, cutting and removal of the trees with its roots and applying & pouring in the plinth, for stopping the growth of trees in earth or structure.

GENERAL:
The treatment shall be provided under the supervision of experienced traditional craftsmen and only the traditional materials should be used.

MATERIALS:
Lime :- Lime A, B and C Class shall be used and shall be in confirmation with the lime specifications and as suggested by traditional craftsmen.
TREATMENT:
Opening up of all layers in plan, elevation and excavation shall be done around the trees up to the depth till roots are found. Excavation shall be done in plan areas up to the roots wherever
the growth is seen. Cutting and removal of all roots from earth and ensure that no roots remain
in the earth. Engineer shall inspect this. Hot Tar shall be applied to the cut ends of the roots, which are not removable, and Hot lime slurry shall be poured around the roots. This work has to be executed under strict supervision of traditional craftsmen.
Refilling shall be done by using earth in layers of 200mm. thickness with compaction in pits. After refilling hot lime slurry shall be poured on the top surface.

MEASUREMENT& PAYMENT:
Measurement shall be done in Sq.M. for the plan in case of growth or elevation in case of building surface area as applicable and excavated or opened for the treatment only. The excavation shall be paid separately.
The depth should not be considered for payment purpose thus the payment cannot be made in cubic meters.

4) SPECIFICATION FOR SEALANT
The sealants of approved grade and color shall only be used. The silicone for perimeter joints
(between Aluminum section and RCC/Stone masonry) shall be of make approved by the Engineer in Charge.

METHOD OF APPLICATION
Surface Preparation: Clean all joints and glazing pockets by removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.
Masking: Areas adjacent to joints shall be masked to ensure neat sealant lines. Masking tape
shall not be allowed to touch clean surfaces to which the silicone sealant is to adhere. Tooling
shall be completed in one continuous stroke immediately after sealant application and before a skin forms and masking shall be removed immediately after tooling.

Application: Install backer rod of appropriate size and apply silicone sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint. The silicone sealant shall be tooled with light pressure to spread the sealant against backing material and the joint surfaces before a skin forms. A tool with convex profile shall be used to keep the sealant within the joint. Soap or water shall not be used as a tooling aid. Remove masking tape as soon as silicone joint is tooled.
Tolerance: A tolerance of + 3 mm shall be allowed in the width of silicone joints. The depth of
the joints at throat shall not be less than 6 mm.

5) SPECIFICATION FOR PANELLED GLAZED OR PANELLED AND GLAZED SHUTTERS

Paneled or glazed shutters for doors, windows, ventilators and cupboards shall be constructed in the form of timber frame work of stiles and rails with panel inserts of timber, plywood, block board, veneered particle board, fibre board wire gauze or sheet glass. The shutters may be single or multipaneled, as shown in the drawings or as directed by the

Engineer-in-Charge. Timber for frame work, material for panel inserts and thickness of shutters shall be as specified. All members of the shutters shall be straight without any warp or bow and shall have smooth well planned face at right angles to each other. Any warp or bow shall not exceed 1.5 mm. The right angle for the shutter shall be checked by measuring the diagonals and the difference between the two diagonals should not be more than ± 3 mm.

Frame Work
Timber for stiles and rails shall be of the same species and shall be sawn in the directions of grains. Sawing shall be truly straight and square. The timber shall be planed smooth and accurate
to the required dimensions. The stiles and rails shall be joined to each other by plain or hunched mortise and tenon joints and the rails shall be inserted 25 mm short of the width of the stiles. The bottom rails shall have double tenon joints and for other rails single tenon joints
shall be provided. The lock rails of door shutter shall have its centre line at a height of 800 mm
from the bottom of the shutters unless otherwise specified. The thickness of each tenon shall be approximately one-third the finished thickness of the members and the width of each tenon shall not exceed three times its thickness.

Gluing of Joints: The contact surfaces of tenon and mortise shall be treated, before putting together, with bulk type synthetic resin adhesive conforming to IS 851 suitable for construction
in wood or synthetic resin adhesive (Phenolic and amino-plastic) conforming to IS 848 or polyvinyl acetate dispersion based adhesive conforming to IS 4835 and pinned with10 mm dia
hardwood dowels or bamboo pins or star shaped metal pins; after the frames are put together
and pressed in position by means of press.
Stiles and bottom rail shall be made out of one piece of timber only. Intermediate rail exceeding
200 mm in width may be out of one or more pieces of timber. The width of each piece shall be
not less than 75 mm. Where more than one piece of timber is used for rails, they shall be joined with a continuous tongued and grooved joint glued together and reinforced with metal dowels at regular intervals not exceeding 200 mm.

Rebating
The shutters shall be single-leaf or double leaved as shown in the drawings or as directed by the Engineer-in-Charge. In case of double leaved shutters, the meeting of the stiles shall be rebated by one-third the thickness of the shutter.
Paneling
The panel inserts shall be either framed into the grooves or housed in the rebate of stiles and
rails. Timber, plywood, hard board and particle board panels shall be fixed only with grooves. The depth of the groove shall be 12 mm and its width shall accommodate the panel inserts such that the faces are closely fitted to the sides of the groove. Panel inserts shall be framed into the grooves of stiles and rails to the full depth of the groove leaving on space of 1.5 mm. Width and depth of the rebate shall be equal to half the thickness of stiles and rails. Glass panels, asbestos panels wire gauze panels and panel inserts of cupboard shutters shall be housed in the rebates of stiles and rails.
Stained glass panel :
Cobalt blue /Vaseline /fluorescent yellow/rubby gold/ cranberry glass/red glass/Egyptian blue /emerald green ,umber brown joinery with lead. Thickness not less than 6 mm .

Glass paneling (Glazing) shall be done with float sheet glass as per IS 14900. Glazing in the shutters of doors, windows and ventilators of bath, WC and Lavatories shall be provided with frosted glass the weight of which shall be not less than 10 kg/sqm. Frosted glass panes shall be fixed with frosted face on the inside. Glass panels shall be fixed by providing a thin layer of putty conforming to IS 419 applied between glass pane and all along the length of the rebate and also between glass panes and wooden beading.
Measurements:
Framework and paneling shall be measured separately.
Frame Work of Shutters:
The overall length and width of the framework of the shutters shall be measured nearest to a cm in fixed position (overlaps not to be measured in case of double leaved shutters) and the area calculated in square meters correct to two places of decimeter. No deduction shall be made to form panel openings or louvers. No extra payments shall be made for shape, joints and labour involved in all operations described above.
For paneling of each type or for glazed panel length and width of opening for panels inserts or glazed panels shall be measured correct to a cm before fixing the beading and the area shall be calculated to the nearest 0.01 sq.m. The portions of the panel insert or glazed panel inside the grooves or rebates shall not be measured for payment.

Rate
Rate includes the cost of materials and labor involved in all the operations described above.
The frame work and paneling of each type or glazed panels shall be paid separately. The rate for frame work includes the cost of butt hinges and necessary screws, However, extra shall be paid for providing moulded beading where specified.

6) SPECIFICATION FOR WOOD
TEAK WOOD FRAME
Teak wood frame shall generally conform to standard laid in I.S. 1002 or the latest revision for
requirements of materials, construction workmanship and shall be of specified thickness and of 1st class C.P. teak wood of approved design with stiles, top, bottom and lock rail generally as per drawing. Wherever shown, each panel shall be in a single width piece, but when two or more pieces have to be used and are permitted, all of them shall be of equal width and shall be jointed with a tongue and groove joint with chamfered edges glued together and reinforced
with metal dowels. panel shall be in a single width piece, but when two or more pieces have to be used and are permitted, all of them shall be of equal width and shall be jointed with a tongue and groove joint with chamfered edges glued together and reinforced with metal dowel.

Hardware Fittings
All hardware fittings for doors shall be either oxidized iron, brass, anodized aluminum as specified in the schedule of quantities. These hardware fittings shall be obtained from approved manufacturers and shall bear ISI mark wherever available. The samples for the fittings shall be submitted to the Employer for their approval. Hardware fittings for door shutters shall be paid in door shutter item or separately as given in schedule of quantities. No
separate payment shall be made for hardware fittings if not mentioned otherwise in the schedule of quantities. The rate for hardware fittings shall include for supplying, fitting and fixing the fittings with necessary cadmium plated screws, washer’s bolts, nuts etc. as required.
All locks shall be provided with keys in duplicate/triplicate and rate shall include for the same.
Approved samples of hardware fittings shall be deposited with Employer for reference.
Workmanship

a) The workmanship shall be first class and to the approval of the Employer. Scantlings and board shall be accurately sawn and shall be of required width and thickness. All carpenter's work shall be wrought except where otherwise described. The workmanship and joinery shall be accurately set out in strict conformity according to the drawings and shall be framed together and securely fixed in approved manner and with properly made joints. All work is to be properly tanned shouldered, wedged, pinned, braced etc. and properly glued with approved quality glue to the satisfaction of the Employer.
b) Screws: Unless otherwise specified all screws to be used in woodwork and joinery shall be
of cadmium plated and of approved quality. The size (diameter and length) should conform to
those specified in hardware schedule.
c) Tolerance: l.5 mm (l/l6") will be allowed for each wrought face of sizes specified except where described as finished in which case they shall hold to the full dimensions.
d) Protection: All edges of timber frames etc. shall be protected from being damaged during construction by providing rough timber casing securely fixed and other adequate protective measures.
e) frames/shelf shall have cut rebate. Planted rebates shall not be permitted.
f) Where frames are fixed flush with plaster to wall, teak wood cover mould 40 x l2 mm as per drawings shall be provided all round and shall be painted or polish finished to match with finished shutters. This will be paid as a separate item as described in Schedule of Quantities.
Rates to Include
Apart from other factors mentioned elsewhere in this contract the rate for item of wood work and joinery shall include for the following: -
A. Items of Scantling
i) All labor, materials and equipment's for fixing frame work as per drawing including the cost
of holdfasts, raw plugs, or other fasteners etc.
B. Items of display case
i) All labor, materials, hardware fittings and equipment's for carrying out the work as per drawing.
ii) Labor for fixing display case in position (including/excluding the cost of fittings as specified in the BOQ) as per drawing.

Mode of Measurement
All measurements shall be as per relevant section of I.S. l200 of latest edition.
i) Scantling shall be measured in cum. The sectional area shall be the area of the least square, or rectangles from which the scantling may be cut. The length shall be actual length of timber required for the purposes including the extra portion required for jointing.
ii) Shutter shall be measured in square meter for closed door shutters area i.e. rebate to rebate without extra measurement for rebates and/or splayed meeting styles of door.
iii) Partitions, encasing shall be measured in square meter of the finished work. For full height partition no payment shall be made for additional frame work extended up to ceiling for rigidity of the same.
iv) Display cases /frames /display box shall be measure in one unit including the complete finishing and fixing of individual unit

LIST OF MATERIALS OF APPROVED BRAND AND/OR MANUFACTURER
Description Name of Manufacturer as below or as approved by EIC
Glazing: M/s. Saint Gobain M/s. Asai Glass M/s. Modi Guard M/s.
Hindusthan Pilkington
Castors: M/s. Efficient Gadgets, M/s. EPCO or equivalent
Locks & Fittings: M/s. Godrej M/s. EPCo M/s. Hafele M/s. Hettich M/s. B & R

Brass Collection
Aluminum Hardware M/s. Allen, M/s. Metaco, M/s. Crown or equivalent with ISI mark.
Brass Hardware: M/s. Brass Arts (India) Pvt Ltd./ M/s. Vijay Industrial Eng Corp.
Screws: M/s. Nettle Fold, M/s. GKW or equivalent approved quality.
Note:
1. If the approved brands mentioned above are not available, equivalent make as may be approved
by the Employer only to be used for the work.
2. The Employer shall have the final say about which material amongst the above mentioned shall
be used in the project and the contractor shall have no claims on this account.

7) LIME SAND PLASTER (FOR UNDERCOATES AND EXCLUDING ITS USE ON FLOOR)

SCOPE:

The work covered by this specification shall be in furnishing and installation of lime plaster finish over walls, ceiling etc. For all plaster works, double scaffolding having two sets of vertical supports shall be provided, so that scaffolding is independent of walls. For ceiling scaffolding, in stages where required shall be done. Preferably, steel tubular scaffolding confirming to I.S. 2750 and carried out in accordance with I.S. 4014, shall be used.

SURFACE PREPARATION:

Surfaces to be plastered shall be thoroughly cleaned of all dust, grease, oil and loose mortar.

Efflorescence if any shall be removed by brushing and scraping and then applying few drops of hydrochloric acid added to water for 2 to 3 days. The entire surface shall then be thoroughly
washed with brush and clean water.

Joints shall be raked out to depth of 20mm. minimum with a hook tool made for the purpose. Care should be taken not to damage masonry edges while raking. All surfaces of concrete, old plaster and stone shall be roughened sufficiently for bond. Soft or crumbling stonework and other surfaces shall be dismantled and remade if required. All surfaces to be plastered shall be thoroughly wetted for 24 hours before commencing plaster and shall be kept damp during the progress of work. At the same time the wall should not be too wet, as plaster is then likely to fall out and will not be satisfactory. It is essential to maintain uniform suction of water by receiving surfaces, which shall be ensured by damping evenly all dry patches before applying plaster. The Engineer will inspect all preparatory work and plastering shall not be commenced, until the Engineer approves all preparatory works.

MATERIALS:

Lime: - Lime B class shall be used in the preparation of mortar and shall, conform to lime specification 3.3.

Aggregates: - Any of the following or their mixture in the given proportion shall be used.

Sand: - Sand should be angular to sub angular moderately sorted aggregate of nominal size of 150um to 1.18mm. River sand shall not be used.

Gur/ Sugarcane molasses: - ‘Lapti’ gur, without impurities, is to be added in the specified proportion.

Gugal/Bel: - ‘Bhainsa’ googal / Bel without impurities, is to be added in the specified proportion.

Methi :- Methi water to be prepared over a period of 3 days by keeping the methi soaked in water and hand-abraded on every day basis. The resultant liquid concoction should be filtered to make it ready for use.

Water : - For all mortars water used shall be free from mud, clay, acidic, basic or organic impurities and shall be drinkable.

APPLICATION & CURING:
The first coat shall be done for saresi. Saresi is a lime plaster as specified in specification should be in ratio 1:1 (lime: Sand). The saresi shall be applied to the wall with trowel in thickness 5 to 8mm. The saresi surface shall be raked out, immediately after applying saresi when it is wet, by trowel at distances 30mm. to 45mm. in jig jag pattern. The saresi shall be done for complete area under execution and should be left for 2-3 days.
Now the surface shall be thoroughly wetted for 24 hours before applying Sand plaster. Ceiling
plaster shall be completed before commencement of wall plaster. The Lime Sand plaster in ratio 1:1 (lime: sand) for wall shall be done from the top to bottom and if possible each wall should be done on the same day if to avoid defects or unevenness at the joints. To ensure even thickness and a true surface, about 150mm. x 150mm. of Lime Sand plaster shall first be applied horizontally and vertically at 2m. centres approximately, over the entire surfaces, to serve as gauges.
The lime sand mortar shall be filled between two gauges with a straight edge wooden piece (plainer or butkada). The plastered surface shall be firmly pressed to uniform plumb and plane.
The surface shall be left for 24 hours. The surface shall develop cracks after 24 hours.
The surface shall be hammered at the cracks with the help of wet wooden sticks (jaal / bent wood) made for the purpose. The process should continue till the cracks are removed. The surface shall be left for 7 days and shall be cured.
All corners, angles, junctions, etc. shall be truly vertical, horizontal or carved as the case may be and shall be carefully finished. Rounding or chamfering of corners or junctions wherever
required shall be done without any extra payment. No portion shall be left out initially to be patched up later on. Before applying Lime Sand, loi the entire surface of the Lime Sand plaster
should be rechecked with a true straight edge (wooden or aluminium plainer 2.5m long), plumb, string, level, etc.
If any crack appears on surfaces or if any portion found soft or if sound defective due to less lime, improper curing or any other reason, the relevant portion shall be removed and redone as per the instruction of the Engineer.
The surface is thoroughly wetted before applying loi. Now the Lime Sand loi shall be apply in thickness 2mm. (ratio 1:2) is applied with the plainer. The surface shall be smoothened by rubbing and pressing. The total thickness of the lime Lime Sand plaster, inclusive of all three coats could be from 15MM to 40 mm as required at site.

MEASUREMENT & PAYMENT:
The measurement shall be in Sq.M. as per drawings and BOQ. Opening shall be deducted in full and jambs or soffits shall be considered. The rate shall include jambs, curves at the junctions of walls, ceilings, arches etc. and at all corner. The above procedure shall apply to the both faces of the wall. No extra charge shall be paid for drip moulds, tapkas or grooves areas. If the average thickness of the plaster done by the Contractor is more than the specified one then no extra payment shall be made.

8) LIME PLASTER (FINISHING COATS)
SCOPE:
This specification covers lime-sand and lime surkhi plasters and lays down requirements for mortar for plaster and specified method of application of the different coats and mode of measurement & payment for lime plaster.
MATERIALS:

Mortar For Plaster: Unless otherwise specified in the Bill of Quantities, lime mortar mixes shall
be as per specification and shall be prepared as per specification of lime mortar. The mortar, which has set or hardened before being used shall be rejected and immediately, removed from site.

TWO/THREE COAT PLASTER:
Application of Rendering Coat: In this case the rendering coat shall be a combination of the rendering floating coat of the “Three coat Plaster”’ and done under one continuous operation except that the scratching of the rendering coat as specified for three coat plaster work above
shall not be done here and the total thickness shall be 12 mm.
Application of Floating or Second Coat:
The rendering coat shall be cleaned of all dirt, dust and other loose mortar droppings and lightly wetted. Patches 15 x 15 cm. or strips 10 cm. wide shall be applied at suitable spacing to act as gauges. Then the mortar shall be thrown with mason’s trowel spread and rubbed to the required plain surface with wooden float. The surface obtained shall be dead true in all directions. In case of lime and plasters the finishing coat shall generally be applied immediately as given below.
In case of lime-surkhi plasters the floating coat shall be allowed to slightly set and then lightly beaten crises cross with float’s edge at close spacing for about 4 cm. This shall be cured to set completely for a minimum period of 10 days and then allowed to dry out completely.
Application of finishing coat with: Immediately after the floating coat has been applied the finishing coat consisting of the cream of lime shall be applied with steel trowels rubbed and finished smooth. The rubbing should be continued till it is quite dry.
It shall be cured for at least 7 days, curing should be started only after 24 hours.
Loi : -The surface shall be cleaned of all dirt, dust and any mortar droppings etc. It shall be fully wetted and then the finishing coat shall be applied with suitable trowels rubbed hard and finished smooth.
Jhiki – Marble powder
Water proofing Jhiki plaster 5-8 mm thick to be done instead of Loi on the two coats of lime surkhi plaster, Lime is slaked with curd and gur in proportion – (50 Kg Lime: 2 Kg Curd: ½ Kg
Gur) for 15 days with changing of water every day. After 15 days, one part of this lime putty is
mixed with 2 parts of Jhiki and manually grounded on stone. The process is repeated two to three times with interval of one day between the process. The obtained mixture is now ready for use on the prepared surface. The surface is prepared by cleaning it removing all dust and then receives a coat of solution of sugar and water. The Jhiki plaster is normally done in three coats with interval of one day between coats. Before applying fresh coat, the surface is given a rub using masons wooden hand-held tool locally called ‘batkara’.
No curing shall be done after the finishing coat has been applied.

MEASUREMENT & PAYMENT:
The measurement shall be in Sq.M. as per Standard specifications.

9) RED OR WHITE FINE DRESSED SAND STONE FLOORING
Stone Slabs
The slabs shall be red or white as specified in the description of the item. The stone slabs shall be hard, sound, durable and tough, free from cracks, decay and weathering. In case of red sand stone, white patches or streaks shall not be allowed. However, scattered spots up to 10 mm diameter will be permitted. Before starting the work, the contractor shall get samples of slabs approved by the Engineer-in-Charge.
The slabs shall be hand or machine cut to the requisite thickness along planes parallel to the natural bed of stone and should be of uniform size if required.

Dressing of Slabs
Every slab shall be cut to the required size and shape and chisel dressed on all sides to a minimum depth of 20 mm. The top and the joints shall be fine tooled so that straight edge laid
along the face is fully in contact with it. In case machine cut stones are used, chisel dressing and fine tooling of machine cut surface need not be done provided a straight edge laid anywhere along the machine cut surface is in contact with every point on it. The thickness of the slabs after dressing shall be 40 mm or as specified in the description of item with a permissible tolerance of ± 2 mm.

Laying
Base concrete on which the slabs are to be laid shall be cleaned, wetted and mopped. The bedding for the slabs shall be with lime mortar 1:5 (1 lime : 1 sand) or as given in the description of the item.

The average thickness of the bedding mortar under the slabs shall be 20 mm and the thickness at any place under the slabs shall not be less than 12 mm.
The slab shall be laid in the following manner: Mortar of specified mix shall be spreaded under each slab. The slab shall be washed clean before laying. It shall then be laid on top, pressed and larried, so that all hollows underneath get filled and surplus mortar works up through the joints. The top shall be tapped with a wooden mallet and brought to level and close
to the adjoining slabs, with thickness of joint not exceeding 5 mm. Subsequent slabs shall be laid in the same manner. After laying each slab surplus mortar on the surface of slabs shall be cleaned off and joints finished flush.
In case pointing with other mortar mix is specified, the joint shall be left raked out uniformly and to a depth of not less than 12 mm when the mortar is still green. The pointing shall be cured for a minimum period of 7 days. The surface of the flooring as laid shall be true to levels and slopes as instructed by the Engineer-in-Charge.
Slabs which are fixed in the floor adjoining the wall shall enter not less than 12 mm under the plaster, skirting or dado. The junction between wall plaster skirting and floor shall be finished neatly and without waviness. The finished floor shall not sound hollow when tapped with wooden mallet.

Finishing
In case of chisel dressed stone flooring slight unevenness, if any existing between the edges of slabs at joints shall then be removed by chiseling in a slant.

Measurements
These shall be as per Standard specifications.
Rate
The rate shall include the cost of all materials and labor involved in all the operations described above. Where pointing is to be done, this will be paid extra unless specifically included in the description of the item.

10) MARBLE FLOORING:-

10.0 GENERAL:
Marble shall be hard, sound, dense and homogeneous in texture with crystalline texture as far as possible. It shall generally be uniform in color and free from stains, cracks, decay and weathering.

10.0.1 Marbles are metamorphic rocks capable of taking polish, formed from the re-crystallization of lime stones or dolomitic lime stones and are distinguished from lime stone by even visibly crystalline nature and non-flaggy stratification.
Note : Marble is a product of nature hence it is difficult to guarantee uniformity of colour, veining or other characteristics that may be represented in any sample submitted. A sample will indicate only an average of colour, veining and other general texture and specified finish.
10.1 CLASSIFICATION:
The marble blocks, slabs and tiles shall be classified broadly in the following two categories:
10.1.1 White Marble Raj Nagar (plain white) Marble/ Makrana / Makrana Dhobi Doongr
It shall be plain white marble with coarse grains predominantly showing mica particles giving reflection in light.
Makrana Dhobi Doongri Marble: Greyish marble with white flowery pattern available at Dhobi
Doongri.
10.1.2 Granite Stone
It shall be of any colour and size as directed by Engineer-in-Charge. Granite shall be plain machine cut and mirror polished. The stone shall be smooth and of even surface without holes
or pits.
10.2 SIZES AND TOLERANCES
The Thickness of marble is 18 mm and size, pattern of marble tiles as per design provided by
Employer.
10.3.1 Approval of Sample
Before starting the work, the contractor shall get samples of marble approved by the Engineering-Charge.
Approved samples shall be kept in the custody of the Engineer-in-Charge and the
marble supplied and used on the work shall conform to samples with regard to soundness, color,
veining and general texture.
10.4 MARBLE WORK - TABLE RUBBED AND POLISHED (PLAIN WORK)
Marble work in steps, jambs, columns and other plain work shall be as specified below:
Joints in staircase treads, kitchen platforms shall be permitted only at curvature or when width/length is more than 0.6/2 mtrs. respectively. Number of joints in each direction shall not
be more than one number for every 2 mtrs. length beyond the initial 2.00 m length. Additional
joints due to curvature or for providing fixture shall be providing judiciously.

10.5.1 Dressing, Cutting and Rubbing
Every marble stone shall be gang saw/machine cut to the required size and shape, chisel dressed machine finished on all beds and joints, so as to be free from any waviness and to give truly vertical, horizontal, radial or circular joints as required. The exposed faces and sides of stones forming joints upto 6mm. from the face shall be fine tooled machine cut such that a straight edge laid along the face of the stone is in contact with every point on it. All window sills, tread of steps, counters vanities moulding edges etc. shall be machine cut & polished to give high gloss mirror finish as per direction of Engineer-in-Charge. These surfaces shall then be rubbed smooth.

10.5.2 Mortar
The mortar used for jointing shall be as specified.
10.5.3 Laying
All marble stones shall be wetted before placing in position. These shall then be floated on mortar and bedded properly in position with wooden mallets without the use of chips or under

pinning of any sort.
The walls and pillars shall be carried up truly in plumb or battered as shown in the drawings. All courses shall be laid truly horizontal and all vertical joints shall be truly vertical.
In case of work without backing of brick work or coursed rubble masonry, face stone shall be laid in headers and stretchers alternatively unless otherwise directed. The headers shall be arranged to come as nearly as possible in the middle of stretchers above and below. Stone shall be laid in regular courses of not less than 15 cm in height and all courses shall be of the same height unless otherwise specified.
10.5.4 Joints
The depth of joints 6 mm from the face shall be uniform and as fine as possible but shall be not more than 1.5 mm thick on the exposed face. Beyond the depth of 6 mm from face, the thickness of joints shall increase in an inverted V shape so as to give good mortar bond between two stones. The inverted portion of the joints shall be filled with bedding mortar and the face 6 mm portion with pointing mortar.
10.5.6 Curing
The work shall be kept constantly moist on all faces for a period of at least seven days.
10.5.7 Finishing
After the marble work is cured, it shall be rubbed with carborandum stone of different grades no. 60, 120 and 320 in succession or with electrical rubbing machines rubbed with carborandum items 0 to 6 nos.in succession, so as to give a plane true and highly smooth surface. It shall then be cleaned with a solution of oxalic acid, washed and finished clean.
10.5.8 Protection
Green work shall be protected from rain by suitable coverings. The work shall also be suitably
protected from damage during construction.
10.5.9 Measurements
For plain work: Measurements shall be taken correct to a cm in length and breadth and correct
to 0.5 cm in thickness.

11) TECHNICAL SPECIFICATIONS FOR ELECTRICAL WORK
Specifications/ standards applicable to this work shall be Indian Standard Specifications, Indian Electricity Act. National Electrical Code, Indian Electricity Rules and Punjab. PWD specifications, unless otherwise specified in the description of item, given in the Bill of Quantities or in the special conditions and/or Technical Specifications, Requirements of these specifications shall be fulfilled by the contractor within the tendered rates. Item rates quoted shall be deemed to have taken these specifications, fire insurance regulations and SEB requirements into account. Sales tax, tax return over and any other tax levies by any authority and or any other statutory requirements.
NOTES:
1. Employer reserves the right to have any or all random samples of materials checked / tested
by an approved test house. Contractor will bear all such test fees and other liaison works.
2. Wherever switchgears, DB etc., of specific ratings are not manufactured by the manufacturer next available higher size appropriately fused shall be used within the rated quoted.
3. Materials shall be brought to site in original packing. Manufacturing test certificates and or/ invoice for all materials shall be handed over to the site engineer on demand.
4. All materials specified in these specifications and conditions of contract must conform to the above brand name, and be of First quality, ISI marked wherever available and Department
(Electricity), Punjab approved. Fabricated items shall be manufactured in accordance with the

ISI specification and be first quality. Samples of all materials to be used must be submitted and got approved before procurement, and the Employer reserves the right to select any of the Brand named specified herein for use.

12) TECHNICAL SPECIFICATIONS FOR PLUMBING WORK

1. The Bill of Quantities shall be read in conjunction with the Technical Specification and Drawings supplied by the Consultant. In case of any discrepancy between Schedule of Quantities,
Technical Specification and Drawings, during execution period, the decision of the Employer will be final and the Contractor has to do the works as per the instruction of Engineer in Charge
without any extra cost.

2. The quantities given in the Bill of Quantities are estimated and are given to provide a common basis for bidding. The quoted rates shall not vary if the actual quantities arrived as per working drawings differ from that of the tender quantities. The basis of payment will be the actual quantities of work carried out as per the final specifications and drawings issued for execution and as measured by the Contractor and Engineer jointly. The method of measurement of completed work for payment shall, unless said otherwise, be in accordance with the joint measurement carried out by the Contractor and Engineer and the decision of Engineer in Charge will be final and the Contractor will be liable to accept the decision.

3. Unless otherwise mentioned, the Contractor shall consider all work items on supply, installation, balancing, testing and commissioning of equipment & accessories.

4. All civil works such as groove cutting in wall and floor and finishing of all grooves, making opening in wall /floor and making good etc. shall form part of item rates quoted against each item in the Bill of Quantities and shall not be measured separately. Only Sanitary & Plumbing works which have been specifically indicated in the Bill of Quantities shall be paid for at an agreed cost.

GENERAL REQUIREMENTS:

The installation shall be carried out in conformity with the requirements of relevant bye-laws of Municipal and other Authorities in whose jurisdiction; the work is being carried out and also with specification laid down by Indian Standards in this codes and National Building Code of Practice
- No. SP: 7 - 1983 (Part IX) plumbing services. & SP: – 35: 1987

i) All water supply, drainage and sanitary work shall be executed by a Licensed Plumbing Contractor and shall be in accordance with the requirement of relevant bye-laws of Municipal or other Authorities in whose jurisdiction the work is being carried out.

ii) The diameter of pipes and fittings wherever mentioned shall mean the internal diameter, unless otherwise specified.

iii) The job shall include the cost of making necessary chases, holes etc. in walls, floors and in other places and also making good on completion of the work. The contractor shall make good, to the satisfaction of Employer in case of any damage caused to floors during sanitary and plumbing works.

iv) Careful Handling, fitting and fixing the sanitary fixtures, as per drawings/ specifications and instructions of authorities concerned and complete testing of necessary pipe connections, etc.

v) Fitting and fixing including jointing of uPVC Soil, waste pipes and fittings to be completed. Prior to fixing, all pipes and fittings are to be properly checked. After fixing of pipelines, the same are to be tested by water test to ensure the system is leak proof.

vi) Fitting & fixing of CPVC Pipe as per ASTM D 2846, SDR-11 for hot & cold-water supply (concealed work) with various fittings such as tee, elbow, reducer, union, valves, cocks, float valve etc. with Solvent Cement Joint as per ASTM D-2564 for cold fusion.

On TECHNICAL SPECIFICATIONS 4 UECPL completion the pipelines are to be tested by Hydraulic Pressure Testing Machine to ensure that the system is absolutely leak proof.

vii) Fitting & fixing of PVC pipe (lead free) as per ASTM D-1785, schedule 40 for ring main, vertical distribution & fittings such as tee, elbow, reducer, union, coupling, male/female adapter, end cap, valves, cocks, float valve etc. with solvent cement solution as per ASTM D-2564. On completion, the pipelines are to be tested by Hydraulic Pressure Testing Machine to ensure that the system is absolutely leak proof
viii)Fitting, fixing & jointing of rain water pipe shall be laid over the M.S clamp (if required) with plastic clamps of suitable designs. Provision shall be made for movement in the suspended pipe caused due to thermal differences such that it does not grip or disturb the pipe at supports between the nut-bolts. The supports shall allow the repeated movements to take place without abrasion. Jointing of uPVC pipes shall be made by means of solvent cement for horizontal lines & “O” rubber ring for vertical line
ix) Provide all tools and equipment’s including testing machines required for testing and supporting & fixing devices so as to install the sanitary fittings, pipe lines etc. securely in position.

ANNEXURE-F

(See clause 3 of Section 2-ITB)

Procedure for participation in e-Tendering

1. Bidder should do Online Enrolment in this Portal using the option Click Here to Enroll available in the Home Page. Then the Digital Signature enrollment has to be done with the e-token, after logging into the portal. The e-token may be obtained from one of the authorized Certifying Authorities such as eMudhraCA/GNFC/IDRBT/MtnlTrustline/SafeScrpt/TCS.
2. Bidder then logs into the portal giving user id / password chosen during enrollment.
3. The e-token that is registered should be used by the bidder and should not be misused by others.
4. DSC once mapped to an account cannot be remapped to any other account. It can only be Inactivated.
5. The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under My Documents option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents.
6. After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document, otherwise, the bid will be rejected.
7. The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant coulmns, else the bidder is liable to be rejected for that tender. Bidders are allowed to enter the Bidder Name and Values only.
8. If there are any clarifications, this may be obtained online through the eProcurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published before submitting the bids online.
9. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/XLS/RAR/DWF formats. If there is more than one document, they can be clubbed together.
10. Bidder should arrage for the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date and time for the tender.
11. The bidder reads the terms and conditions and accepts the same to proceed further to submit the bids
12. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
13. There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.
14. It is important to note that, the bidder has to Click on the Freeze Bid Button, to ensure that he/she completes the Bid Submission Process. Bids Which are not Frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.

15. In case of Offline payments, the details of the Earnest Money Deposit (EMD) document submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected
16. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
17. The bidder may submit the bid documents online mode only, through this portal. Offline documents will not be handled through this system.
18. At the time of freezing the bid, the eProcurement system will give a successful bid up-dation message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
19. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
20. Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.
21. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected
22. The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e-Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.
23. All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not viewable by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.
24. During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer (SSL) with 256 bit encryption technology. Data encryption of sensitive fields is also done.
25. The bidders are requested to submit the bids through online eProcurement system to the TIA well before the bid submission end date and time (as per Server System Clock).

JOINT VENTURE (J.V.)

If J.V. is allowed following conditions and requirements must be fulfilled –

1. Bids submitted by a joint venture of two or more firms as partners shall comply with the following requirements:

a. one of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;

b. the bid and, in case of a successful bid, the Agreement, shall be signed so as to be legally binding on all partners;

c. the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge;

d. all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under [c] above, as well as in the bid and in the Agreement [in case of a successful bid];

e. The joint venture agreement should indicate precisely the role of all members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer;

f. The joint venture agreement should be registered, so as to be legally valid and binding on all partners; and g. a copy of the Joint Venture Agreement entered into by the partners shall be submitted with the bid.

2. The figures for each of the partners of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria required for the bid. All the partners collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.

3. The performance security of a Joint Venture shall be in the name of the partner Lead Partner/joint venture.

4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) on behalf of the joint venture

5. Attach the agreement among all partners of the joint venture [and which is legally binding on all partners], which shows the requirements as indicated in the Instructions to Bidders'.

6. Furnish details of participation proposed in the joint venture as below:

DELETED

DETAILS OF PARTICIPATION IN THE JOINT VENTURE FIRM

PARTICIPATION DETAILS	A' (Lead Partner)	'FIRM 'B'	FIRM 'C'
Financial			
Name of the Banker(s)			
Planning			
Construction Equipment			
Key Personnel			
Execution of Work (Give details on contribution of each			

The partners of J.V. should satisfy the qualification criteria as below,

a. The Lead Partner must meet at least 50% requirement of technical and financial eligibility criteria required for the bid.
b. The other partner(s) must meet at least 25% requirement of technical and financial eligibility criteria required for the bid.
.
c. The lead partner and the other partners should together meet 100% of all the eligibility criteria required for the bid.

8 For meeting the minimum qualification criteria of experience of similar nature work, every partner can have experience of different works as defined in similar nature works and together should have the experience of all types of works described in similar nature works.

ANNEXURE-H

(See clause 12 of Section 2 ITB & clause 4 of GCC)

ORGANIZATIONAL DETAILS

(To be enclosed with technical proposal)

S.N.	Particulars	Details
1.	Registration No. issued by centralized registration system of Govt. of MP or proof of application for registration	(If applicable, scanned copy of proof of application for registration to be uploaded)
2.	Valid registration of Bidder in appropriate class through centralized registration of Govt. of MP Registration no……. date…….	(Scanned copy of Registration to be uploaded)
3.	Name of Organization/ Individual	
4.	Entity of Organization Individual/Proprietary Firm/Partnership Firm (Registered under Partnership Act)/ Limited Company (Registered under the Companies Act–1956)/ Corporation	
5.	Address of Communication	
6.	Telephone Number with STD Code	
7.	Fax Number with STD Code	
8.	Mobile Number	
9.	E-mail Address for all communications	
	Details of Authorized Representative	
10.	Name	
11.	Designation	
12.	Postal Address	
13.	Telephone Number with STD Code	
14.	Fax Number with STD Code	
15.	Mobile Number	
16.	E-mail Address	

Note: *In case of partnership firm and limited company certified copy of partnership deed/ Articles of Association and Memorandum of Association along with registration certificate of the company shall have to be enclosed.*

Signature of Bidder with Seal

Date:

Annexure – I

(See clause 14 of Section 2 of ITB)

Envelope – B, Technical Proposal

Technical Proposal shall comprise the following documents:

S.N.	Particulars to be submitted	Format
1.	Financial and Physical Experience	(Format: I - 1)
2.	Annual Turnover	(Format: I - 2)
3.	List of technical personnel for the key positions	(Format: I - 3)
4.	List of Key equipment's/ machine/s quality control labs	(Format: I - 4)
5.	List of Key equipment's/ Machines for Construction Work.	(Format: I – 5)

Note:

1. Technical Proposal should be uploaded duly page numbered and indexed.
2. Technical Proposal should be uploaded otherwise will not be considered

Annexure – I (Format: I - 1)

(See clause 14 of Section 2 of ITB

FINANCIAL & PHYSICAL EXPERIENCE DETAILS

Annexure – I (Format: I - 2)

(See clause 14 of Section 2 of ITB

ANNUAL TURN OVER

Requirements:

Average annual construction turnover for the construction works to be provided in the following format for the last 3 financial years;

Financial Information			
Financial Year	2015-16	2016-17	2017-18
Annual Turnover (in INR)			
AVERAGE ANNUAL TURNOVER			
Note: i. Annual turnover of construction works should be certified by chartered accountant. Mandatory Supporting Documents: ii. Audited balance sheet including all related notes and income statements for the above financial years to be enclosed.			

Annexure – I (Format: I - 3)

(See clause 14 of Section 2 of ITB

LIST OF TECHNICAL PERSONNEL FOR THE KEY POSITIONS

Contractor will have to appoint the following key personnel during the execution and entire contract period.

The qualification and experience requirements are as under.

S.N.	Details	Required nos.
1.	Project Manager - Heritage Expert (Degree holder) 5 years of relevant experience	1
2.	Architect - Heritage Expert (Degree holder) 5 years of relevant experience	1
3.	Project Engineer/ Billing Engineer with Degree/ Diploma in Civil Engineering having minimum 5 years of relevant experience.	1

Annexure – I (Format: I - 4)

(See clause 14 of Section 2 of ITB

List of Key Equipment/ Machines for Quality Control Labs

Annexure – I (Format: I - 5)

(See clause 14 of Section 2 of ITB

LIST OF EQUIPMENTS / MACHINES FOR CONSTRUCTION WORK

Annexure – J
(See clause 14 of Section 2 of ITB)

FINANCIAL BID
(TO BE CONTAINED IN ENVELOPE C)

NAME OF WORK:

_____
(Name of the work as appearing in the bid for the work)

I/We do hereby BID to execution of the above work within the time specified at the rate (In figures) _____ (In words) _____ percent below / above or at par based on the Bill of Quantities and item wise rates given therein in all respects and in accordance with the specifications, designs, drawings and instructions in writing in all respects in accordance with such conditions so far as applicable.

I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work. I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/ kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labour etc. required for the satisfactory execution of contract.

Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or in default thereof to forfeit and pay to the Executive Director, Indore Smart City Development Limited, Indore or his successors in office the sums of money mentioned in the said conditions.

Note:

i. *Only one rate of percentage above or below or at par based on the Bill of Quantities and item wise rates given therein shall be quoted.*
ii. *Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found lower of the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance security and sign the agreement his earnest money deposit shall be forfeited.*
iii. *In case the percentage "above" or "below" is not given by a bidder, his bid shall be treated as non-responsive.*
iv. *All duties, taxes, and other levies payable by the bidder shall be included in the percentage quoted by the bidder.* ***GST shall be paid as per Appropriate rates*****.**

Signature of Bidder
Name of Bidder

The above bid is hereby accepted by me on behalf of the Executive Director, Indore Smart City Development Limited, Indore dated the _____ day of _____ 20_ _

_____

Signature of Officer by whom accepted

Annexure – K
(See clause 15 of Section 2 of ITB)

MATERIALS TO BE ISSUED BY THE DEPARTMENT

S.No	Name of material	Rate (Issue rate)	Unit	Remarks

DELETED

Annexure – L
(See clause 21 of Section 2 of ITB)

No. _____ Dated: _____

LETTER OF ACCEPTANCE (LOA)

M/s. _____

(Name and address of the contractor)

Subject: _____
(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the (Name of ULB), at your bided offer as per scope of work given therein. You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:

a. The performance security/ performance guarantee of Rs. _____ (in figures) Rupees_____ (in words only). The performance security shall be in the shape of term deposit receipt/ bank guarantee of any nationalized / schedule commercial bank.

b. Sign the contract agreement.

Please note that the time allowed for carrying out the work as entered in the bid is _____ months including/excluding rainy season, shall be reckoned from the date of signing the contract agreement.

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required. Therefore, after signing of the agreement, you are directed to contact Engineer-in-charge for taking the possession of site and necessary instructions to start the work.

Yours faithfully,

EXECUTIVE ENGINEER

Annexure – M
(See clause 22 of Section 2 of ITB)

PERFORMANCE SECURITY

To
_____ [Name of Employer]
_____
_____ [Address of Employer]
_____

WHEREAS_____ [name and Address of Contractor] (Hereinafter called "the Contractor") has undertaken, in pursuance of Letter of Acceptance No._____ Dated _____to execute_____ [Name of Contract and brief description of works] (herein after called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the contract;

AND WHRereas we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of _____ [amount of Guarantee]*_____ (in words), such sum being payable in the types and proportions of currencies in which the contract price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of_____ [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid till issue of physical completion certificate.

Signature, Name and Seal of the

Guarantor_____

Name of Bank

_____

Address

_____

_

Phone No., Fax No., E-mail Address, of Signing

Authority_____

Date_____

** An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.*

SECTION 3
Conditions of Contract

Part – I General Conditions of Contract [GCC]

Table of Clauses of GCC

A. General

1. DEFINITIONS

1.1 "**Bill of Quantities**" means the priced and completed Bill of Quantities forming part of the Bid.

1.2 "Chief Executive Officer" means the Chief executive officer as defined under the relevant section of the article of association;

1.3 "Completion "means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of agreement.

1.4 "Contract" means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.

1.5 "Contract Data Sheet" means the documents and other information which comprise of the Contract.

1.6 "Contractor "means a person or legal entity whose bid to carry out the work has been accepted by the Employer.

1.7 "Contractor's bid" means the completed bid document submitted by the Contractor to the Employer.

1.8 "Contract amount" means the amount of contract worked out on the basis of accepted bid.

1.9 "Completion of work" means completion of the entire contracted work. Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.

1.10 "Day" means the calendar day.

1.11 "Defect" means any part of the work not completed in accordance with the specifications included in the contract.

1.12 "Drawings" means drawings including calculations and other information provided or approved by the Engineer-in-Charge.

1.13 "Department" means Indore Smart City Development Limited, Indore as the case may be.

1.14 "Employer" means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer/Government/Department wherever used denote the Employer.

1.15 "Engineer" means the person named in contract data sheet.

1.16 "Engineer in charge" means the person named in the contract data.

1.17 "Equipment" means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work.

1.18 "Executive Director" means the executive director of the Board as appointed under the provision of the article of association;

1.19 "Government" means Government of Madhya Pradesh.

1.20 "In Writing" means communicated in written form and delivered against receipt.

1.21 "Material "means all supplies including consumables used by the Contractor for incorporation in the work.

1.22 "Stipulated date of completion" means the date on which the Contractor is required to complete the work. The stipulated date is specified in the Contract Data.

1.23 "Specification" means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.

1.24 "Start Date "means the date 14 days after the signing of agreement for the work. However, the employer may extend this time limit by another 14 days, as and when required.

1.25 "Sub-Contractor" means a person or corporate body who has a Contract (duly authorized by the employer) with the Contractor to carry out a part of the construction work under the Contract.

1.26 "Temporary Work" means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.

1.27 "Tender/ Bid, Tenderer/ Bidder" are the synonyms and carry the same meaning where ever used.

1.28 "Variation "means any change in the work which is instructed or approved as variation under this contract.

1.29 "Work" the expression **"work" or "works"** where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations: In the contract, except where the context requires otherwise:

a. words indicating one gender include all genders;

b. words indicating the singular also include the plural and vice versa.

c. provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;

d. written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

2.2 Documents Forming Part of Contract:

1. NIT with all amendments.
2. Instructions to Bidders
3. Conditions of Contract:
    i. Part I General Conditions of Contract and Contract Data; with all Annexures
    ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings
6. Bill of Quantities
7. Technical and Financial Bid
8. Agreement
9. Any other document (s), as specified.

3. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Communications

All certificates, notice or instruction to be given to the Contractor by Employer/Engineer shall be sent on the address or contact details given by the Contractor in [Annexure H of ITB]. The address and contract details for communication with the Employer/Engineer shall be as per the details given in Contract Data Sheet. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge

5. Subcontracting

Subcontracting shall be permitted for contracts value more than amount specified in the Contract Data with following conditions.

a. The Contractor may subcontract up to 25 percent of the contract price, only with and after the approval of the Employer in writing, but will not assign the Contract. Subcontracting shall not alter the Contractor's obligations.

b. The following shall not form part of the sub-contracting:

   i. hiring of labour through a labour contractor,

   ii. hiring of plant & machinery

c. The sub-contractor will have to be registered in the appropriate category in the centralized registration system for contractors of the GoMP.

6. Personnel

6.1 The Contractor shall employ for the construction work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data sheet, if applicable. If the Contractor fails to deploy required number of technical staff, recovery as specified in the Contract Data will be made from the Contractor.

6.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.

7. Force Majeure

7.1 The term "Force Majeure" means an exceptional event or circumstance:

a) Which is beyond a party’s control,

b) Which such party could not reasonably have provided against before entering into the contract,

c) Which, having arisen, such party could not reasonably have avoided or overcome, and

d) Which is not substantially attributed to the other Party

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

(i) War, hostilities (whether war be declared or not), invasion, act of foreign enemies),

(ii) Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
(iii) Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
(iv) Munitions of war, explosive materials, ionizing radiation or contamination by radio activity, except ass may be attributed to the Contractor's use of such munitions, explosives, radiation or radio activity, and
(v) Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity,

7.2 In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of Price adjustment clause.

7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.

8. Contractor's Risks

8.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

8.2 All risks and consequences arising from the inaccuracies or falseness of the documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that designs/drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

The contractor shall be deemed to have indemnified and saved harmless the Government and/or the employer, against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act, or any other statute in force at the time of dealing with the question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim there under.

10. Contractor to Construct the Works

10.1 The Contractor shall construct, install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data

10.2 In the case of any class of work for which there is no such specification as is mentioned in contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.

10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, Machinery, tools implements and generally of all means used for the fulfillment of this contract whether such means may or may not approved of or recommended by the Engineer.

11. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

12. Dispute Resolution System

12.1 No dispute can be raised except before the Competent Authority as defined in Contract data in writing giving full description and grounds of Dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.

12.2 No issue of dispute can be raised after 45 days of its occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such disputes.

12.3 The Competent Authority shall decide the matter within 45 days.

12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract data. The Appellate Authority shall decide the dispute within 45 days.

12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh Madhyastham Adhikaran Adhiniyam, 1983.

12.6 The contractor shall have to continue execution of the works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. Programme

13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works for the construction of works.

13.2 The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment's being placed in field laboratory and the location of field laboratory along with the Programme

13.3 An update of the Programme shall be a Programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.

13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations

14. Extension of Time

14.1 If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-charge shall forward the aforesaid application to the competent authority as prescribed.

14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause- 15 of this agreement.

14.3 In case of the work already in progress, the contractor shall proceed with the execution of the works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

15. Compensation for delay

15.1 The time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.

15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.

15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.

15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data

15.5 In the event of delay in execution of the works as per the timelines mentioned in the contract data the Engineer-in- charge shall retain from the bills of the Contractor Amount equal to the liquidated damages leviable until the contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.

15.6 If the contractor is given extension of time after liquidated damages have been paid, the engineer in charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.

15.7 In the event the contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against liquidated damages levied.

16. Contractor's quoted percentage

The contractor’s quoted percentage rate referred to in the "Bid for works" will be deducted/ added from/to the net amount of the bill after deducting the cost of material supplied by the department.

C. Quality Control

17. Tests

17.1 The Contractor shall be responsible for:

a. Carrying out the tests prescribed in specifications, and

b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.

17.2 The contractor shall have to establish field laboratory within the time specified and having such equipment’s as are specified in the Contract Data.

17.3 Failure of the contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.

17.4 Ten percent of the mandatory tests prescribed under the specifications shall be got carried out through Laboratories accredited by National Accreditation Board of Laboratories (NABL) by the Engineer-In –Charge and the cost of the such testing shall be deducted from the payments due to Contractor.

18. Correction of Defects noticed during the Defect Liability Period

18.1 The defect liability period of work in the contract shall be the Contract Data

18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.

18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of having the Defect corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

D. Cost Control

19. Variations - Change in original Specifications, Designs, Drawings etc.

19.1 The Engineer in charge shall have power to make any alterations, omissions or additions to or substitutions for the original specifications, drawings, designs and instructions, that may appear to him to be necessary during the progress of the work and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Employer, and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the contractor on the same conditions in all respects on which he agree to do the main work.

19.2 The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer in charge shall be conclusive as to such proportion.

20. Extra items

20.1 All such items which are not in the priced BOQ and UADD SOR VOL-I TO IV shall be treated as extra items.

21. Payments for Variations and/ or Extra Quantities

21.1 The rates for the additional (Extra Quantities), altered or substituted work/ extra items under this clause shall be worked out in accordance with the following provisions in their respective order: -

a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.
b. If the item is not in the priced BOQ and is included in the SOR of the department, the rate shall be arrived at by applying the quoted tender percentage on the SOR rate.

c. If the rates of the altered or substituted work are not provided in applicable SOR-such rates will be derived from the rates for a similar class (type) of work as is provided in the contract (priced BOQ) for the work.

d. If the rates are for the altered, substituted work cannot be determined in the manner specified in the sub clause (c) above-then the rates for such composite work item shall be worked out on the basis of the concerned schedule of rates minus/plus the percentage quoted by the contractor.

e. If the rates of a particular part or parts of the item is not in the schedule of rates and the rates for the altered, or substituted work item cannot be determined in the manner specified in sub clause (b) to (d) above, the rate for such part or parts will be determined by the Competent Authority as defined in the Contract data on the basis of the rate analysis derived out of prevailing market rates when the work was done.

f. But under no circumstances, the contractor shall suspend the work on the plea of non-acceptability of rates on items falling under sub clause (a) to (d). In case the contractor does not accept the rate approved by Engineer in charge for a particular item, the contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

22. No compensation for alterations in or restriction of work to be carried out.

22.1 If at any time after the commencement of the work, the Government, for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out, the Engineer in charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.

22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.

22.3 The Engineer in charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

23. No Interest Payable

No interest shall be payable to the Contractor on any payment due or awarded by any authority.

24. Recovery from Contractors

Whenever any claim against the Contractor for the payment arises under the contract, the Department shall be entitled to recover such sum by:

a) Appropriating, in part or whole of the Performance Security and additional Performance Security, if any; and/or Security deposit and/or any sums payable under the contract to the contractor.

b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor under any other contractor of the department, including the securities which become due for release.

c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land revenue Code.

25. Tax

25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities. **GST shall be paid as per Appropriate rates.** But the rates shall be excluding excise duty exemption on pipes as per Norms

25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor. Any Changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. Check Measurements

26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.

26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.

26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer in Charge

27.1 If the contractor fails to carry out any obligation under the Contract, the Engineer in charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

27.2 The Engineer in charge shall be entitled to terminate the contract if the Contractor

a. Abandons the works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the contract;
b. the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
c. without reasonable excuse fails to comply with the notice to correct a particular defect within a reasonable period of time;
d. the Contractor does not maintain a valid instrument of financial Security, as prescribed;
e. the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is recoverable;
f. If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data.
g. if the Contractor, in judgmental of the engineer in charge has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
h. Any other fundamental breaches as specified in the Contract Data.

27.3 In any of these events or circumstances, the engineer in charge may, upon giving 14 days' notice to the contractor, terminate the contract and expel the Contractor from the site. However, in the case of sub paragraph (b) or (g) of clause 27.2, the Engineer in charge may terminate the contract immediately.

27.4 Notwithstanding the above, the Engineer in charge may terminate the contract for convenience by giving notice to the contractor.

28. Payment upon Termination

28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for value of the work accepted on final measurements, less advance payments and penalty as indicated in the Contract Data. The amount so arrived at shall be determined by the Engineer-in-charge and shall be final and binding on both the parties.

28.2 Payment on termination under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the contractor's personnel employed solely on the works, and the contractor's costs of protecting and securing the works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

28.3 If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered as per clause 24 above.

29. Performance Security

The Contractor shall have to submit performance security and additional performance security, if any, as specified in Bid data sheet at the time of signing of the contract. The contractor shall have to ensure that such performance security and Additional performance, if any, security remains valid for the period as specified in the Contract data.

30. Security Deposit

30.1 Security deposit shall be deducted from each running bill at the rate as specified in the contract data. The total amount of security deposit so deducted shall not exceed the percentage of contract price specified in the Contract data.

30.2 The Security may be replaced by equivalent amount of bank guarantee or fixed deposit receipt assigned to the Employer, with validity up to 3(three) months beyond the completion of defect Liability Period/ Extended Defect Liability Period.

30.3 The Security deposit shall be refunded on completion of defect liability period /maintenance period.

30.4 50% of the security deposit will be released after expiry of 2.5 years defect Liability /maintenance period and balance will be released after 2.5 years defect Liability /maintenance period.

31. Price Adjustment

31.1 Applicability

1. Price adjustment shall be applicable only provided for in the contract data.
2. 2. The price adjustment clause shall apply the works executed from the date of singing of the agreement until the end of the intended completion date or extensions granted for reasons
3. 3. attributed to the Employer by Engineer The contractor shall not be entitled any benefit arising from the price adjustment clause for
4. extension in the contract period reasons attributed to the contractor. In the Force Majeure event price escalation clause shall apply.

31.2 Procedure

1. Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with following and procedures and as per formula given in the contract data.
2. The price adjustable shall be determined from the formula given in the contract data.
3. Following expression and meaning are assigned to done during each quarter:
   R= Total value of work during the quarter include the amount of secured advance granted, if any, during the secured advance recovered, if any during 3 the quarter, less value of department, if any during the quarter. Weightages of various components they shall be as per the Contract Data.

31.3 To the extent that full compensation any rise or fall in costs to the contractor is not covered by the provisions of this or clauses in the contact, the unit rates and prices included in the contract shall be deemed amounts to cover the contingency of such other rise or fall in costs.

31.4 The index relevant to any quarter, for which such compensation is paid, shall be the arithmetical average of the indices relevant of the calendar month.

31.5 For the purpose of clarity it is pointed out that the adjustment may be either positive or negative, i.e. if the price adjustment is in favor the same shall be recovered from the sums payable to the Contractor.

32. Mobilization and Construction Machinery

32.1 Payment of advances shall be applicable if provided in Contract Data.

32.2 If applicable, the Engineer bearing advance payment to the contractor of the against provision by the contractor of an unconditional Bank in nationalized/Scheduled banks, in the name as stated in the in the advance payment. The Guarantee shall remain effective been repaid, but the amount of the guarantee shall be progressively repaid by the contractor.

32.3 The rate of interest shall be as per Contract data.

32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of new construction machinery.

32.5 The advance shall be recovered as stated in the Contract data by deducting proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.

33. Secured Advance

33.1 Payment of secured advance shall be applicable if provided in Contract data.

33.2 If applicable, the Engineer shall make advance materials intended for but not yet incorporated in the works and against of an unconditional bank guarantee in a form and by a nationalized/scheduled name as stated in the contract data, in amounts equal to the guarantee shall remain effective until the advance payment has been of the guarantee shall be progressively reduced by the amounts adjusted contractor.

33.3 The amount of secured advance and conditions to be fulfilled shall be as stipulated in the Contract Data.

33.4 The secured advance paid shall be recovered as stated in the Contract data.

34. Payment Certificates

The payment to the contractor will be as follows for construction work:

a. The contractor shall submit to the engineer monthly statement of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
b. The engineer shall check the Contractor's monthly statement and certify the amount to be paid to the contractor.
c. The value of work executed shall be determined, based on the measurements approved by the Engineer/ Engineer in charge.
d. The value of work executed shall comprise the value of the quantities of the items in the Bill of quantities completed.
e. The value of work executed shall also include the valuation of variations and compensation events.
f. All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
g. The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
h. Payment of intermediate certificate shall be regarded as payments by way of advance against the final payment and not as payments for work actually done and completed.
i. Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.
j. The payment of final bill shall be governed by the provisions of clause 36 of GCC.

E. Finishing the Contract

35. Completion Certificate

35.1 A completion certificate in the prescribed format in Contract data shall be issued by the Engineer in charge after physical completion of the work.

35.2 After final payment to the contractor, a final completion certificate in the prescribed format in the contract data shall be issued by the Engineer in charge.

36. Final Account

36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the competent authority as defined in the Contract data, who shall decide on the amount payable to the contractor after hearing the Contractor and the Engineer in Charge.

36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 32.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days. G. Other Conditions of Contract.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. COMPLIANCE WITH LABOUR REGULATIONS

39.1 During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in the Contract data. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/byelaws/Acts/Rules/ regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

40. Audit and Technical examination

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers, abstract etc. To be made after payment of the final bill and if as a result of such audit and technical examination nay sum is found to have been overpaid in respect of any work done by the contractor under the contract or nay work claimed by him to have been done under the contract and found not to, have been executed, the contractor shall

be liable to refund the amount of overpayment and it shall be lawful for government to recover the same from him in the manner prescribed in clause 24 above and if it is found that the contractor was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by government to the Contractor.

41. Death or permanent invalidity of contractor

During continuance of the contract, the contractor and his sub- contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications, and bye laws of the state or central government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the state or the major labour laws that are applicable to construction industry are given in the contract data. The contractor shall keep the employer indemnified in case any action is taken against the employer by the competent authority on account of contravention of any of the provisions of any Act or rules made their under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules regulations including amendments, if any, on the part of the contractor, the engineer/employer shall have the right to deduct from any money due to the contractor including his amount of performance of security. The employer/engineer shall also have right to recover from the contractor any sum required or estimated to be required for making good the loss or damage suffered by the employer. The employees of the contractor and the sub-contractor in no case shall be treated as the employees of the employer at any point of time.

42. Jurisdiction

This contract has been entered into the State of Madhya Pradesh and its validity, construction, interpretation and legal effect shall be subjected to the exclusive jurisdiction of the courts in Indore or of the courts at the place where this agreement is entered into. No other jurisdiction shall be applicable.

[End of GCC]

CONTRACT DATA SHEET

Clause Reference	Particulars	Data
1.14	Employer	Indore Smart City Development Limited, Indore
1.15	Engineer	Engineer as notified by employer
1.16	Engineer In Charge	Executive Engineer of ISCDL
1.22	Stipulated period of completion	18 Months
3	Language & Law of Contract	English and Indian Contract Act 1872
4	Address & contact details of the Contractor	As per “Annexure – “H”
	Address & contact details of the Employer/Engineer-phone, Fax, e-mail.	-
5	Subcontracting permitted for contract value	Not permitted
6	Technical Personnel to be provided by the contractor	As per 'Annexure-I' (Format I-3)
	Penalty, if required Technical personal not employed	Rs.25,000/- per month
10	Specifications	As per “Annexure – E”
	Drawings	As per “Annexure – N”
12	Competent authority for deciding dispute under Dispute resolution system	Chief Executive Office, ISCDL, Indore
	Appellate Authority for deciding dispute under Dispute resolution system	Executive Director, ISCDL, Indore
13	Period of submission of updated construction program	-
14	Competent authority for granting time permission	Executive Director, ISCDL, Indore
15	Milestones laid down for the contract	Yes
	If yes, details of milestone	As per “Annexure O”
	Liquidated damages	As per “Annexure P”
17	List of equipment for lab	-
	Time to establish	-
	Penalty for not establishing lab	-
18	Defects Liability	3 years, after physical completion of the civil work. and 5 years for electricals and others works (after physical completion of work.)
18 i	Maintenance period	5 years maintenance period for electricals, others work after physical completion.
21	Competent authority for determining the rate	Executive Director, ISCDL, Indore
27	Any other condition for breach of contract	-
28	Penalty	Penalty shall be recovered from a. Security deposit as per clause 30 of General Conditions of Contract; and

Clause Reference	Particulars	Data
		b. Liquidated damages imposed as per clause 15 from performance security (Guarantee) including additional Performance Security (Guarantee), if any, as per clause 29 of General Conditions of Contract, whichever is higher.
29	Performance guarantee (Security) shall be valid up to	Till completion of physical period as per Clause 35.1.
30	Security deposit to be deducted from each running bill	At the rate of 5%
	Maximum limit of deduction of Security Deposit	5% of final contract amount
31	Price adjustment formula and procedure to calculate	Not Applicable
31.1 (1)	Price adjustment shall be applicable	Not Applicable
32	32.1 Mobilization and Construction Machinery Advance applicable	No Mobilization Advance and Construction Machinery Advance payable
	32.2 If yes, unconditional Bank Guarantee	-
	32.3 If Yes Rate of Interest	-
	32.4 If Yes, Type and Amount that can be paid	-
	32.5 If Yes, Recovery of Payment	-
33	33.1 Secured Advance Payable	No Secured Advance Payable
	33.2 If Yes, Amount of Secured Advance	-
	33.3 If Yes, Conditions for Secured Advance	-
	33.4 If Yes, Recovery of Secured Advance	-
35	Completion Certificate – after physical completion of work	As per Annexure – U
	Final Completion Certificate – after final payment on completion of the work.	As per Annexure – V
39	Salient features of some of the major labour laws that are applicable	As per Annexure – W

Annexure – N

(See clause 10 of Section 3 of GCC)

DRAWING

Annexure – O

(See clause 13 of Section 3 of GCC)

DETAILS OF MILESTONE

25 % of work completed within 5 months
50 % of work completed within 9 months
75 % of work completed within 13 months
100 % of work completed within 18 months

Annexure – P

(See clause 15 of Section 3 of GCC)

COMPENSATION FOR DELAY

If the contractor fails to achieve the milestones, and the delay in execution of work is attributable to the contractor, the Employer shall retain an amount from the sums payable and due to the contractor as per following scale –

I. Slippage up to 25% in financial target during the milestone under consideration – 2.5% of the work remained unexecuted in the related time span.
II. Slippage exceeding 25% but up to 50% in financial target during the milestone under consideration – 5% of the work remained unexecuted in the related time span.
III. Slippage exceeding 50% but up to 75% in financial target during the milestone under construction – 7.5% of the work remained unexecuted in the related time span.
IV. Slippage exceeding 75% in financial target during the milestone under consideration – 10% of the work remained unexecuted in the related time span.

Note: For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to maximum of 10% of contract price.

The decision of Chief Executive Officer shall be final and binding upon both the parties.

Annexure – Q
(See clause 17 of Section 3 of GCC)

LIST OF EQUIPMENT FOR QUALITY CONTROL LAB

Annexure – R
(See clause 31 of Section 3 of GCC)

Price Adjustment
(Not Applicable)

Annexure – S

(See clause 32 of Section 3 of GCC)

BANK GUARANTEE FORM FOR MOBILIZATION AND CONSTRUCTION MACHINERY ADVANCE

(Not Applicable)

Annexure – T
(See clause 33 of Section 3 of GCC)

BANK GUARANTEE FORM FOR SECURED ADVANCE

(Not Applicable)

Annexure - U

(See clause 35 of section 3 -GCC)

Physical Completion Certificate

Name of Work:

_____
_____
_____
_____

Agreement No. _____Date_____

Amount of Contract Rs _____

Name of Agency: _____

Used MB No.: _____

Last measurement recorded

a. Page No. & MB No.: _____

b. Date: _____

Certified that the above-mentioned work was physically completed on..... (Date) and taken over on..... (Date) and that I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Engineer

_____
_____

Annexure-V
(See clause 35 of section 3 -GCC)

Final Completion Certificate

Name of Work:
_____
_____
_____
_____

Agreement No._____ Date:
_____

Name of Agency:
_____

Used MB No._____

Last Measurement recorded
a. Page No. & MB No._____
b. Date_____

Certified that the above-mentioned work was physically completed on_____ (date) and taken over on_____ (date).

Agreement amount Rs. _____

Final amount paid to contractor Rs. _____

Incumbency of officers for the work

I have satisfied myself to best of my ability that the work has been done properly.

Date of Issue: _____

Engineer in Charge _____
Indore Smart City Development Limited, Indore

Annexure – W

(See clause 39 of Section 3 -GCC)

Salient Features of Some Major Labour Laws Applicable

(a) Workmen Compensation Act 1923: - The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

(b) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.

(c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:

i. Pension or family pension on retirement or death as the case may be. '
ii. Deposit linked insurance on the death in harness of the worker.
iii. Payment of P.F. accumulation on retirement/death etc.

(d) Maternity Benefit Act 1951: - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

(e) Contract Labour (Regulation & Abolition) Act 1970: - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is, required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.

(f) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.

(g) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.

(h) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.

(i) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus 'within the prescribed range of percentage of wages to employees

drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.

(j) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

(k) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.

(l) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.

(m) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations for employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.

(n) Inter -State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter- State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.

(o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as. may be modified by the Government., The Employer of the establishment- is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the-work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

(p) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. it is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed

minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

Section 3

Conditions of Contract

Special Conditions of Contract [SCC] Part II

The Contractor shall:

(a) comply with all applicable safety regulations,

(b) take care for the safety of all persons entitled to be on the Site,

(c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to the persons.

(d) provide fencing, lighting, guarding and watching of the Works until completion and taking over and

(e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and workers.

Not limiting to the above, the contractor shall also take care of the following

1. The Contractor has to ensure that the waterproofing works included in this contract were installed in strict accordance with all requirements of the plans and specifications and in accordance with manufacturer's instructions for application.
2. The site shall have to be sprinkled with water so that dust settles down. Dust control sprinkling shall have to be done several times a day during hot, dry weather depending on the site requirement.
3. Contractor shall ensure safe workplace and shall install safety signs.

(Special Conditions of Contract - Electrical)

I.E. Rule and Approval of Electrical Safety Dpt. And MPPKVVCL.:

The complete electrical work shall be done as per the Indian Electricity Rules amended till date and as per relevant I.S. specifications amended till date. The Electrical Installation and all Related Drawings shall be got approved from Electrical safety dept. at no extra cost. The amount deposited by the contractor in Govt. Treasury for inspection of Electrical Safety Dept. shall be reimburse to the contractor on receipt submission. The approved Drawings and Inspection Report of Electrical Safety Dept. shall be submitted to Engineering In-charge in original.

'A' Class Electrical Contractors License:

1. The Electrical Contractor /Sub Contractor caring out Electrical Installation Work Must possess a Valid 'A' Class Electrical Contractors License Issued by Electrical Safety Dept. Govt. of M.P.
2. The contractor shall make his own arrangements for supply of water and electricity at his expense required for execution of work. The ISCDL shall neither make any such arrangements nor shall make any payments in this regard.

3. The contractor shall not be entitled to any compensation for any loss suffered by him on account of delay in commencement or execution for work whatever the cause of delay may be including delay arising out of other materials, supply of materials, transportation for any matter related with MPPKVV Co. Ltd. & Electrical Safety Department or any other reasons whatsoever, the ISCDL shall not be liable for any claim in respect thereof.

4. GA and Electrical drawing of the various panels shall be given by ISCDL and Panels should be approved by the Engineer in charge of ISCDL.

5. The contractor shall design the illumination scheme with LED type fixtures, brackets, smart controls, software, panels and circuits offered by his company to achieve the lux levels and smart controls as per tender guidelines for each get it approved by Engineer In-charge / consultant.

6. The contractor shall give the inspection notice before or at least 10 days prior to the last date of supply of any batch of material. The material will be dispatched by the supplier after inspection by the representatives of ISCDL if required by engineer in-charge.
7. The manufacturer is required to dispatch the material within 10 days from the date of acceptance of material.
8. ISCDL's representatives will visit the manufacturer's work and witness the tests as per specifications on each type of lighting fixtures as per the samples selected by ISCDL's representatives. The sample of the material may also be sent to the government approved NABL laboratory at the cost of contractor for any kind of specific test required by ISCDL. Supplier shall submit the schedule with date, time & venue of the inspection to ISCDL in writing for the inspection of material. ISCDL is authorized to get the material tested from the approved laboratory at the contractor’s cost for any kind of specific test if required. The contractor needs to make arrangements for Factory Inspection at his own cost for Luminaires, Pole, Bracketsetc. INSPECTION WILL BE CARRIED OUT AT MANUFACTURER’s PREMISIS ONLY.

9. LED luminaires and Poles should conform to the various National / International standards for safety & performance. Luminaires shall conform to Performance Requirements as defined in IS 16107 Part 2/Sec 1. Manufacturer should provide test reports as per LM 79 & LM80. Luminaires should conform to the IS standards for Safety & Performance and test certificates as per IS 16107 or as required should be provided by the manufacturer.

10. The contractor shall be responsible for **DG Set** performance and maintenance of work carried out by him for a period of two years (24 months) from the actual date of charging. During the performance and maintenance period of two years, if any damage/ failure occurs due to any reason whatsoever the contractor will have to consumable /non-consumable items as per site conditions at his own cost and Diesel shall be provided by Departments /concerning Authority.

11. It shall be the duty of the contractor to arrange all clearances, NOCs from Electrical Inspector MP Govt, to coordinate and peruse the officers of MPPKVV Co. Ltd. for periodical inspections and final inspection of the work and get the complete installation electrically charged and also contractor shall be responsible for arranging such clearances No extra payment shall be made to

the contractor in above account. Any fees payable to department for above reimburse by ISCDL against deposit receipt.

APPROVED MAKES:

1. LED fixtures Make Phillips /Bajaj / Wipro / Havells or Any other national or multinational & internationally reputed brand with good presence in India, upon prior approval by ISCDL Engineer In-charge /Consulting engr.
   (Models of these makes which conforms to the technical specifications of this tender upon prior submission of sample for approval of ISCDL Engineer Incharge/Consulting eng.)
2. Wire / Cables Finolex / Havells /Polycab / RR/RPG
3. Switchgear, timer, contactor etcL&T/ ABB/Siemens / Hager/ Legrand
4. Smart control hardware: reputed make with THREE years warranty.
5. 315 KVA, 11/0.415 KV CSS (compact substation) Make Shouldbe, Simens, SCHIENDER, ABB, etc.
6. 320 KVA DG Set Make Should be Cummins, Kirlokar, Sterling Wilson.

MAINTENANCE:

Post installation and commissioning, the contractor shall be responsible for system should be operational and maintenance of entire electrical items like lighting, sound system, audio video system, DG set and other installed by him for the period of 5 years on his own risk and cost basis. The responsibilities of contractor shall be as mentioned below:

i. To ensure timely automatic switching on/Off as per programme.
ii. To ensure that all lighting fixture and associated panels, controls, automation, software etc are in working condition.
iii. To carry out maintenance of the system as required.
iv. To coordinate with MPPKVVCL / power distribution company to ensure the smooth operations.
v. The contractor shall ensure to provide proper tools, tackles, hydraulic trolley vehicles, ladders, vehicles, instruments etc. to ensure smooth running of lighting system and safety measures.
vi. The contractor shall establish store and testing facility to ensure proper stock of spares and facilitate testing of all components of lighting system.
vii. The contractor shall be responsible for all compensation / liability due to any injury or death of any personnel while performing duties related to the work under this contract. ISCDL shall not be responsible in any such case and shall not be liable for any compensation in this regard.
viii. All workmen, staff and engineers of contractor shall ensure that all installations, and commissioning activities are carried out with full safety and by using all safety aids like helmets, gloves, earthing devices, testing gadgets.
ix. The contractor must ensure that earthing shall be provided as per rules and IS codes in entire electrical system system to ensure human and equipment safety.

PENALTIES.

If the contractor fails to deliver the desired results in the installed lighting system as per the tender guidelines following penalties shall be applicable for noncompliance:

i. If contractor fails to rectify after expiry of the period as mentioned above, ISCDL shall have right to get the faulty item rectified or replaced on contractor's cost and risk basis.

ii. Non-achieving of the above parameter department may impose below penalty from contractor.

Section 4
Bill of Quantities

(Attached)

SECTION 5
FORM OF AGREEMENT

This agreement, made on the day of _____between (name and address of Employer) (hereinafter called “the Employer) and _____ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute _____(name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. _____

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred' to and they shall be deemed to form and be read and construed as part of this Agreement.

2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.

3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.

i. Letter of Acceptance
ii. Contractor's Bid
iii. Condition of Contract: General and Special
iv. Contract Data
v. Bid Data
vi. Drawings
vii. Bill of Quantities and
viii. Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written. The Common Seal of_____ was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said _____ in the presence of:

Binding Signature of Employer ……

Binding Signature of Contractor ……

4. Malhar Rao Holkar Chhatri (Chattribagh):

4.1 Inventories:

1.	**Identification**: **Malhar Rao Holkar Chhatri**				
			Location Plan		
a	Name	Malhar Rao Holkar Chhatri.	 **Malhar Rao Holkar Chhatri** Fig. No. 25: Google map		
b	Land Use	Public (Religious)			
c	Common Name	*Malhar Rao Holkar Chhatri*			
d	Historic Name				
e	Location/Address	*ChhatriBridge.*			
f	Construction Date	1850's			
g	No. of Occupants	5-6 Persons (Guard Family)			
	No. of visitors, pilgrims	30-40 Persons per Day.			
2.	**Historic Evolution :**				
	Period	Usage	Ownership/ Patron	Additions & Alterations	Inscriptions/other References
a	British Period: 1857-1947	Chhatri (Samadhi)	Holkar Royal family	None	• Various intricately carved and sculpted stone mural panels
b	Post-Independence: 1947-2016	Chhatri (Samadhi)	Trust	• New RCC residence of the Caretaker's family. • WC to the priest's old building	
c	Current: 2016	Chhatri (Samadhi) Temple – Religious Tourist site	Trust	Painting of various ancillary structures with dry distemper and lime wash.	• No specific inscription found.
3.	**Architecture :**				

a	Area under consideration	The enclosure wall, Internal precincts of the Chhatri and Parking Area in front of the West gate.
b	Architectural Description	The area under consideration is a Chhatri (Memorial) of Malhar Rao Holkar, ruler of Holkar state from 1834 to 1843. This Chhatri is a cenotaph built on the cremation spot of Malhar Rao Holkar and is built as a memorial in his memory. The structure is built in stone and has a dome type structure with pyramidal spires on top.
c	Spatial Planning	The Chhatri is built on the bank of river Kahn. The entire precinct is surrounded by a enclosure and has three entrance gates on North and West and South side. North side gate acts as a main entrance gate while South side gate open up to a *Ghat* on the bank of river Kahn. The precinct consists of a Main Chhatri Along with that there are five small temples, and Guard room.

4. ***Chhatri* under Conservation and Development proposal:**







Fig. No. 26: Main Chhatris , Gate, Enclosure wall, Temples

5. Construction System and Material Matrix :

	Building Components	Material Description/Sections	Finish	Condition
a.	Enclosure wall	Exposed Stone/Ashlar Masonry & Exposed Brick Masonry	Stone	Poor
b	Entrance gates 3Nos	• Ground Floor(including plinth upto ground floor roof top): i. Exposed Black basalt / trap Stone/Ashlar Masonry ii. Wooden Door with defensive metal bolts on its external facade. iii. Ashlar flooring • First Floor (ground floor roof top to terrace top): i. Brick Masonry with lime plaster	Stone & Wood Brick	Average

		internally and externally. ii. Wooden Doors and windows with metal hardware. iii. Lime concrete flooring iv. Lime plastered cornices and coping bands. • <u>Terrace Floor:</u> i. One lime plastered brick masonry dome.	& Wood Brick	
c	Chhatris1 to 7	• Walls: Exposed Black basalt/trap Stone/Ashlar Masonry. • Roof: Black basalt/trap and Red sandstone with stone tiles. • Shikhar: Black basalt/trap and Red/Yellow sandstone • Dome: Black basalt/trap stone • Doors: Wooden doors with metal hardware and Ivory carving. • Flooring: Black basalt.	Stone	Average
d	Temple 1	• Walls: Exposed Black Basalt/trap stone/Ashlar masonry and Red sandstone. • Roof, Dome & Shikhar: Black basalt/trap and Red Sandstone • Doors: Wooden Doors with Metal Hardware. • Flooring: Black Basalt	Stone	Average
e	Pathways	Red sand stone	Stone	Poor
f	Guard's room	RCC Structure and Brick Masonry.	RCC	Poor
i	Electric cables	Haphazardly lying		Unpleasant

6	**<u>Significance</u> :**				
a	Historic	√	f	Educational	×
b	Associational	√	g	Environmental	√
c	Architectural	√	h	Religious	√
d	Aesthetic	√	i	Commercial	×
e	Social	√	j	Any Other	×
7	**<u>Notes</u> :**				

a	Issues (in brief-details mentioned in the list of interventions).	-Degradation of Heritage structures -Inadequate and Haphazard parking area -Damaged Enclosure wall -Wild Vegetation and algae growing on the structures. -RCC structure does not go with the heritage structures and sanctity of the site. -No directive, informative and instructive signages. -Garbage Collections and spills are visible along with the Enclosure wall. -Improperly maintained garden area. -Basic public amenities such as toilet, drinking water facility, ticket counter etc. are missing from the site.
b	Recommend ations (in brief-details mentioned in the list of interventions).	-All the Heritage structures shall be restored by using specified conservation methods and techniques. -Wild vegetation and algae shall be removed carefully from the heritage structures. -Parking area shall be provided with proper planning. -All the basic amenities shall be properly planned and developed. -Signages (Directive, informative & Instructive) should be provided.
c	References	-Physical field/site analysis and interaction with the nearby shop Owners/occupants.

4.2 Site Analysis:

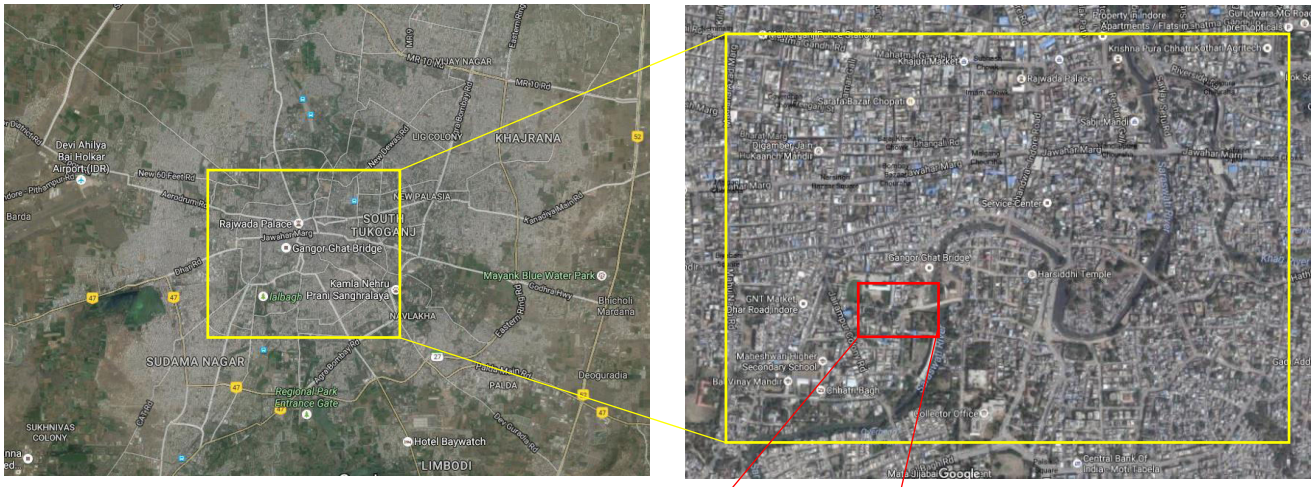


Fig. No. 27: Satellite image of Malhar Rao Holkar Chhatri, Indore

Location: Site is located at the core area of the Indore city, at the bank of the Kahn River Chattribagh, opposite Maheswari school. The area is not far from the Rajwada area. River Kahn flows on the East side of the side.

Approach: The site is approachable by *Gangor Ghat* Bridge from Rajwada side and by an internal road from Collector's Office.

Vegetation: Site is full of plants and trees as evident from the satellite image.


KAHN RIVER
GHAT
EXISTING HOUSE
EXISTING HOUSE
EXISTING HOUSE
EXISTING HOUSE
EXISTING HOUSE
EXISTING HOUSE
WAY TO SLUM AREA
DN
S-E BASTION
SOUTH BASTION
ENTRANCE
S-W BASTION
WALK WALL
GATE -03
EXISTING MARRIAGE GARDEN
(1)
(2)
(3)
(4)
(5)
(6)
(7)
(8)
GATE-2
C.C.ROAD
EXISTING HOUSE
N-E BASTION
NORTH BASTION
N-W BASTION
ENTRANCE GATE-1
PAVER BLOCK
PAVER BLOCK
PAVER BLOCK
C.C.ROAD
COMPOUND WALL
C.C.ROAD
WAY TO SAI MANDIR
BITUMEN ROAD
WAY TO NIMDHA NAKA
EXISTING MAHESHWARI SCHOOL
NOTE :-
- ALL DIMENSION IS IN 'MM' UNTIL SPECIFIED.

SITE PLAN

4.3 Proposed List of Interventions in Malhar Rao Holkar Chhatri, ChhatriBagh, Indore (M.P)

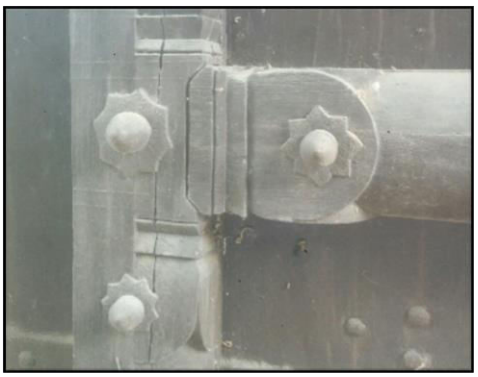
4.3.1 Exterior Interventions:

S.No	Nature of Works	Present Condition / Site Analysis	List of Interventions/ Proposals
1.	**Site Clearance / Cleaning** (Common for all sides)	Garbage, waste materials, vegetation etc. is witnessed in front of the Facade. The same is causing unpleasant surrounding. 	• Careful cleaning of Ground in front of the Facade and disposing the loose material etc. complete in all respects. • The massive basalt base (Probably of some existing columns) are haphazardly lying adjacent to the newly executed compound wall to be collected, lifted and kept safe in the enclosure of heritage site.

2.	**Surface cleaning** **i. Vegetation** (Common for all sides)	Dense Vegetation on the all sides of Turret Wall, and Entrance gates are witnessed. The same is causing risk to the Heritage Structure and also creating unpleasant Surrounding.  	• Careful Removal and Treatment of Dense Vegetation manually. • Drying, careful removal and disposal of the grown up trees, plants with thick stems and deeply spread roots upon the enclosure walls by using traditional methods on their stem/trunk. • Careful and complete removal of vegetation and its roots shall be monitored & executed accordingly by adopting appropriate methods during the rainy season so that further development & growth of vegetation does not occur for longer period.
	ii. Algae, Fungal Infection And Organic Deposits (Common for all sides)	Dense Algae, Fungal Infection and Organic deposits visible on all sides of the Turret Wall and Entrance Gates are witnessed. The same is causing risk and damage to the Heritage Structure. It is also creating unpleasant surrounding. 	• Careful Cleaning and Careful cleaning and Treatment of Algae, Fungal Infection and Organic deposits from the entire external and Internal stone, brick, lime surfaces on all areas by adopting Traditional Methods of Conservation.
S.No	**Nature of Works**	**Present Condition / Site Analysis**	**List of Interventions/ Proposals**

	iii. Pointing (common for all sides)	• Cement pointing on the stone masonry on all Facades is witnessed. The same is causing risk and damage to the Heritage Structure. • Recessed lime Mortar Pointing can be done to the coursed rubble Masonry at the lower plinth height level of Main enclosed / security wall on either sides of Main Entrance Gate with necessary base preparation. 	• Any Cement Pointing done later shall be Carefully Removed by adopting appropriate method and Tools. • Careful cleaning of exposed stone surfaces (chemical treatment). The flat cement pointing done to the coursed rubble Masonry at the lower plinth height level of Main enclosed/security wall on either sides of Main Entrance Gate shall be carefully removed. • Excess cement pointing wherever visible shall be carefully removed and deepened to recessed type as, otherwise while removing; it will damage the bricks of brick masonry wall externally.
	iv. Plaster (Common for all sides)	• Cement Plaster, Peeled and Popped Plaster on all the Facades are witnessed. The same is causing unpleasant view and risk to the Heritage Structure's life. • All motifs in lime plaster above the Main Entrance Gate to be restored/ conserved. 	• Any Cement Plaster done later shall be Carefully Removed by adopting appropriate method and Tools. Plaster and Conservation of the Brick Masonry Wall on the Facade including the corner Bastions and Turret walls etc. complete in all respects. • Careful removal of popped and peeled plaster on the external facade's all sides and disposing the removed material. • Restored Necessary restoration works shall be carried out prior to it, like filling the Cracks, lime plaster works to the arches, floral motifs etc.

3.	**Repair, Strengthening Of Structural Damages Works And Other Works By Appropriate Conservation Method** (Common for all sides)	Cracks and Structural Damages to the Turret Wall, Gate 1, East Gate and all side Facades are witnessed. The same is causing risk and Damage, the Heritage Structure's life. 	• Necessary Repair works to be carried out by adopting appropriate Conservation methods Complete in all respect. • Strengthening of structural damages to the various parts of the facades, to be executed by means of adopting appropriate methodology, complete in all respects. • Necessary repair works to the damaged portion by redoing / relocating / replacing them as per the original design.
S.No	**Nature of Works**	**Present Condition / Site Analysis**	**List of Interventions/ Proposals**
4.	**Stone Conservation** (common for all sides)	• Stones have been missing, damaged and in the Cornices, Coping Eaves, Weather Shades, Arches, Platform on Either side of Main Entrance Gates, Decorative panels etc. • Cracks, joints of Stones/Ashlar Masonry is opened is witnessed on Stones/Ashlar Masonry of Facades. The same is causing unpleasant view and Risk to Damage the Heritage Structure. 	• Any Stone repairing done later, shall be Carefully Removed by adopting appropriate method and Tools. • Careful cleaning of exposed stone surfaces (chemical treatment). • Careful removal of enamel paint from Main Entrance. • Necessary repair works to Main Entrance Gate-replacing the damaged member in similar size, design and material. All stone motifs in Ashlar Masonry at the Main Entrance West Gate to be restored by adopting careful methods.

5.	**Wood Restoration** (Common for all sides)	External paint and damages are witnessed in the woodwork of the Entrance Gates.  	• Careful removal of enamel paint from wooden shutters and frames. • Careful cleaning of exposed Wooden surfaces (chemical treatment). • Careful providing Anti termite, Melamine Polish, Lacquer Coats etc. Hardware's fixing Methods. Complete in all Respects. • All the Wooden Entrance Gates shall be restored. If necessary those beyond the state of repairs shall be carefully removed and disposed. The same shall be replicated in similar design, Material, type, Pattern Matching to that of those which existed originally. <u>Wooden Treatment Stages</u>: • Careful removal of dry distemper paint/ red oxide. • Necessary repair works. • Anti-termite treatment. • Clear Melamine polish. • Clear lacquer polish.

6.	**Metal Restoration**	Nails and some metal Hardware are missing in the Entrance Gates. Careful cleaning and Conservation of the wrought iron/M.S. Iron of Main Entrance Gate. 	• Hardware's proper fixing by Traditional Methods. Complete in all Respects. • Re-fixing the missing / damaged hardware's in similar type design materials and details complete in all respect. • Carefully cleaning of the existing/original hardware's in brass /wrought/cast iron. For example handles, hinges, L-drops, tower bolts etc.
7.	**Conservation Of Sign Board** West	The Sign Board of the Hari Rao Holkar Chhatri Stating/titling- *"Alampur Subedar Malhar Rao Holkar Chhatri Trust, Indore – Chhatri Shrimant Maharaj Hari rao Holkar."* 	• The Sign Board to be repainted in Bengal Enamel type as it originally exists. • Careful Cleaning of Rusted Metal Sheet Surface. • Necessary frame Preparation and strengthening by means of M.S Angles. • Application of Metal Primers both sides. • Application of Bengal Enamel Paint (2 coats). • Titles to be written in White paint above the base paint in the similar Font Size and Text similar to that existing.
8.	**Plinth Protection** (Common for all sides)	No Plinth Protection is witnessed on site. The same is causing Risk to Damage, the Foundation of Heritage Structure.	• Plinth protection with Traditional Method to the entire external facade by means of necessary repairing works. • Careful removal of the recently executed P.C.C. on the Main Entrance Way.. • Providing and laying 200mm thick Rubble soling after proper base preparations at the Main Entrance Way. • Careful Laying of Black Basalt cobble stone flooring upon the bed concrete with proper slopes at the Main Entrance Way.

			• Black basalt flooring to the Plinth Protection complete in all respects.
9.	**Paving** North side	• Cement flooring is witnessed in front of Main Entrance gate. • The same is causing unpleasant surrounding and does not go with the heritage character of the building. 	• Existing cement flooring to be removed and disposal. • The base material to paver block flooring shall be carefully removed and disposed murum filling. • Providing and laying 200mm thick rubble soling with sieved sand remain in filled. • Providing and laying Hand dressed black basalt cobble stone flooring in lime mortar.
10.	**Parking**	The existing parking area is insufficient and no proper parking space is provided.	Providing well planned parking area.
11.	**Public Amenities**	All the basic amenities such as public toilet, drinking water facility, ticket counter, security cabin etc. have been missing at present on the site.	Providing all the basic amenities such as Public toilet, water facility, ticket counter, security cabin etc. with proper planning.
12.	**Civil services**	Electrification, water supply, drainage etc. are not properly planned. Electric cables are laying haphazardly causing risk to the visitors and the structure.	Carefully shifting of the haphazardly lying electric cables. Lying of planned water supply and drainage system.
13.	**Illumination & Lighting**	No Illumination and Lighting arrangements is witnessed on site, the same is causing Risk in Night.	Sufficient Illumination and Lighting arrangements should be done, without causing any damage to the Heritage Structure.
14.	**Signages**	No Directive, Cultural Signages are witnessed on site.	Proper Directive, Cultural Signages (having History of Heritage Structures), Illustrative Signages shall be located all around the site wherever tourists and visitors will have access.