



Patna Smart City Limited (PSCL)

NOTICE INVITING TENDER FOR

"Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring (Nagar Netra)"

(Through e-procurement mode only- www.eproc2bihar.gov.in)

NIT No. – 08/MD/PSCL/2026-27

Date:-06/08/2026

1. Patna Smart City Limited (PSCL) invites bids from eligible experienced Firms/ /Contractors / Agencies / Bidders registered in appropriate category in any Government Organization/PSUs for execution of works as given below:-

Name of Work	Bid Document (Non-Refundable)	Bid Security (EMD)	Estimate Cost	Bid Processing Fee
"Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring (Nagar Netra)".	Rs. 11,800/-	1,791,720	8,95,86,000/-	As per Eproc2 website

2.	Date of Downloading of Bid Document	:	From 10.08.2026 to 31.08.2026 up to 1500 hours. Through website : www.eproc2bihar.gov.in
3.	Place & Date of pre-bid meeting	:	Date: 17.08.2026, Time 1500 hours; Patna Smart City Limited, 4th Floor, ICCS -cum- PSCL Building, SSP Office Campus, Gandhi Maidan, Patna-800001
4.	Last date of Receiving Queries (Online)	:	Date: 17.08.2026, Time 1700 hours (through e-mail)
5.	Last Date and time for uploading of bid.	:	Date: 31.08.2026 up to 1500 hours through website - www.eproc2bihar.gov.in
6.	Time & Date of opening technical bids	:	Date: 01.09.2026, Time 1000 hours
7.	Time & date of opening financial bids	:	To be communicated later on
8.	Place of opening of Bid	:	Through website : www.eproc2bihar.gov.in
9.	Periods of bids validity	:	120 Days.
10.	Officer inviting bids	:	Managing Director, PSCL, Patna.
11.	For participation in E-tendering proc. the contractor shall have to get themselves registered to get User ID, Password & digital signature. This will enable accessing the website www.eproc2bihar.gov.in & download/participate in E-tender.		
12.	The tender documents can be obtained through our website www.eproc2bihar.gov.in & http://www.smartpatna.co.in .		
13.	(i) Bid processing fees to be paid through online mode i.e. Internet payment gateway (Credit/Debit Card), Net Banking, NEFT/RTGS. (ii) Bids along with necessary online payments must be submitted through e-procurement portal www.eproc2bihar.gov.in before the date & time specified in the NIT. (iii) The department does not take any responsibility for the delay/Non availability of internet connection, Network Traffic/Holidays or any other reasons"		
14.	Bid document cost should be paid as per www.eproc2bihar.gov.in		
15.	Earnest Money should be online through eproc2 as per time specified on eproc2. All the information/corrigendum /addendum related to the project shall be published on the website www.eproc2bihar.gov.in & http://www.smartpatna.co.in .		
16.	The authority shall have the right to reject the bid without assigning any reason what so ever. For any information department Contact No. 0612-2219180 may be used.		
17.	Estimate amount may vary. So EMD will be deposited as per technical Sheet uploaded on the website www.eproc2bihar.gov.in		
18.	For queries & Clarifications, if any, send e-mail to patnasmartcity.pscl@gmail.com / pscl-bih@gov.in		

ज्ञापक:- 586 / पटना स्मार्ट सिटी लिमिटेड, पटना, दिनांक- 06/08/2026 ई०.

प्रतिलिपि:- निदेशक, सूचना एवं जन-संपर्क विभाग को राष्ट्र/राज्य स्तरीय हिन्दी के समाचार पत्रों, एवं राष्ट्र स्तरीय अंग्रेजी के समाचार पत्रों में प्रकाशित करने हेतु समर्पित।


Managing Director
Patna Smart City Limited



REQUEST FOR PROPOSAL

for

“Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring” (Nagar Netra).

Tender No. NIT No. - 07/MD/PSCL/2026-27

Dated: 22 / 04 /2026

PROJECT OFFICE:

PATNA SMART CITY LIMITED

4th Floor Patna Smart City Building,

SSP Office, North of Gandhi Maidan, Patna 800001, (Bihar) INDIA

email: pscl-bih@gov.in

Phone No. +91 0612 2219180

Notice Inviting Proposal and Necessary Instruction

1.	Scope of Work	Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with an AI-based solution for surveillance of Municipal Infrastructure (Nagar Netra).
2.	Tender submission Cost	Rs. 11,800/- (Rs. Eleven Thousand Eight Hundred Only) inclusive of GST. Bid processing fees to be paid through online mode, i.e., Internet payment gateway (Credit/Debit Card), Net Banking, NEFT/RTGS
3.	EMD (bid Security / Security deposit)	As per NIT
4	Estimated Cost of project	8,95,86,000 (Eight crore ninety five laks eighty six thousand only)/-
5.	PBG	2% of the total Contract value.
6.	Contract Period	5 months of Implementation & 36 Months of Operation & Maintenance period.
7.	Bid validity days	120 days from the last date of submission of bids
8.	Issue of Tender	The tender can be downloaded from the website below. www.Eproc2.bihar.gov.in
9.	Queries by email	As per NIT
10.	Pre-Bid	As per NIT
11.	Proposal due date (last date & time of Tender submission)	As per NIT

12.	Date & Time of opening of Tender	As per NIT
13.	For any Clarifications	Send email to pscl-bih@gov.in / patnasmartcity.pscl@gmail.com

Eligibility Technical Evaluation Criteria

The following will be the minimum qualification criteria. Each eligible service provider should possess all the following qualification criteria. Responses not meeting the minimum qualification criteria will be rejected.

Note:

1. The Bidder must attach valid documents in support of their Qualification as mentioned above. Without proper supporting documents, the bid proposals are liable to be rejected. The technical proposal should be submitted in EPROC.
2. Consortium is NOT allowed for this bid.

#	Qualification Criteria	Support Documents
1	Tender is invited from registered contractors/ agencies in suitable category , PSUs central or State. Definition of Public Sector Undertaking (PSU): For the purpose of this tender, a Public Sector Undertaking (PSU) shall be defined as any entity where the Central Government or any State Government, or a combination thereof, holds not less than 51% of the paid-up share capital. Rejection of Ineligible Bids: Any bid received from an entity that does not meet the eligibility criteria outlined in this clause shall be summarily rejected without further evaluation. The tendering authority reserves the right to verify the status of any bidder at any stage of the tendering process.	Registration Certification
2	The average annual turnover of the Bidder should be at least 50% of the estimated cost of the work for the last 5 financial years ending with 2024-25 (i.e. 2020-	The Bidder: Copy of audited Balance Sheet, audited Profit & Loss statements for each of the last 5 financial years.

	21,2021-22, 2022-23, 2023-2024,2024-25)	
3	The Bidder must have a positive net worth and profit in the for the last 5 financial years ending with 2024-25 (i.e. 2020-21,2021-22, 2022-23, 2023-2024,2024-25)	Certificate from the Statutory Auditor / CA on net worth (i.e. 2020-21,2021-22, 2022-23, 2023-2024,2024-25)
4	The Bidder must have successfully completed at least One Project of similar work, not less than 50 % of estimated cost of project. similar AI/ML-based assignments of value specified herein: <i>“Similar Nature” is defined as experience in Implementing IT/ITES/ SMART City / Safe City / AI based Solution which includes Hardware, Application Software/ AI based Application and other citizen Services projects, in Government/Semi Government/PSU in the last five years, as on date of bid submission.</i>	For completed projects certificate should be issued by not less than executive engineer or equivalent.
5	The Bidder should not be under a declaration of Ineligibility for corrupt and fraudulent practices issued by any Government or PSU in India during its operational tenure.	Affidavit in 1000/- non-judicial stamp paper
6	The Bidder should have at least one project office in Bihar. If the Bidder is not having any office in Bihar, then Bidder should submit a letter of undertaking to open the office within 45 days from the date of issue of the work order if he is awarded the work.	Declaration letter by Bidders 1) Copies of any two of the following: Property Tax / Electricity / Telephone Bill / GST Registration /Lease agreement Or 2) Undertaking to open the Office in Patna within 45 days of receiving the work order

Evaluation of Bids

PSCL Tender Evaluation Committee to evaluate the responses of the bidders. The Tender Evaluation Committee shall evaluate the responses to the RFP and all supporting documents/documentary evidence. Inability to submit the requisite supporting documents/documentary evidence by bidders may lead to rejection of their bids.

- a. The Committee may seek inputs from its professional and technical experts in the evaluation process.
- b. PSCL reserves the right to do a reference check of the experience stated by the Bidder. Any feedback received during the reference check shall be considered during the technical evaluation process.
- c. The decision of the Tender Evaluation Committee in the evaluation of bids shall be final. No correspondence will be entertained outside the process of evaluation with the Committee. The Tender Evaluation Committee may ask for meetings or presentations with the Bidders to seek clarifications or confirmations on their bids.
- d. The Tender Evaluation Committee reserves the right to reject any or all bids. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.

Technical-Qualification

PSCL will examine the bids to determine whether they are complete, responsive, whether the required Tender Fee and EMD have been furnished, whether the letters/certificates have been properly signed, and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting any criteria specified in the tender will be rejected by PSCL and shall not be included for further consideration. Any deviations in the proposal response may make the bid liable for rejection.

- All eligible bids will be considered for further evaluation by an Evaluation Committee according to the evaluation process defined in this Bidding document.
- Each of the Qualification conditions mentioned in the Qualification criteria Section is MANDATORY. In case the Bidder does not meet any one of the conditions, the Bidder shall be disqualified.

Award of contract

The employer will award the contract to the bidder whose bid has been determined :-

To be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid price;

BID OPENING AND EVALUATION

1. Bid Opening

1.1

"Technical Bid" shall be opened. The amount, form and validity of the Earnest money furnished with each bid will be verified . If the bid security furnished does not conform to the amount and validity period as specified in the Invitation for Bid

1.2 (i) Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid security will be taken up for evaluation with respect to the Qualification Information and other information furnished

(ii) Evaluation Committee will finalize the list of responsive bidders whose financial bids are eligible for consideration.

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2. Process to be Confidential

2.1 Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

3. Clarification of Financial Bids

3.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the

3.2 no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.

3.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or

contract award decisions may result in the rejection of the Bidders' bid.

4. Examination of Bids and Determination of Responsiveness

4.1 During detailed evaluation of "Technical Bids", the Employer will determine whether each Bid (a) meets

the eligibility criteria (b) has been properly signed; (c) is accompanied by the

required securities and; (d) is substantially responsive to the requirements of the Bidding documents.

During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications, and drawings.

4.2 A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or

reservation is one (a) which affects in any substantial way the scope, quality or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

4.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

5. Correction of Errors

5.1 "Financial Bids" determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

(a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and

(b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quality, the unit rate as quoted will govern.

5.2 The amount stated in the "Financial Bid" will be corrected by the Employer in accordance with the above

procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:

(a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the 'bid price' and the increase will be treated as rebate;

(b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the 'bid Price

Such adjusted bid price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Earnest money may be forfeited in accordance with Sub-Clause 16.6(b).

6. Evaluation and Comparison of Financial Bids

6.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 25.2.

6.2 The Employer reserves the right to accept or reject any variation or deviation. Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

6.3 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in

1. Introduction and Background

Bihar has been actively pursuing smart initiatives to foster urban development across the state. Under the Smart Cities Mission, the Urban Development and Housing Department (UDHD) is dedicated to elevating the quality of life for its residents through technology-driven solutions in its Smart Cities, namely Patna, Bhagalpur, Bihar Sharif, and Muzaffarpur. To effectively plan, design, and execute projects within this mission, UDHD seeks to engage capable agencies for various smart city endeavours.

Drawing from the overarching goals of the Smart Cities Mission, UDHD envisions leveraging technology to enhance urban governance, improve citizen services, and create safer and more efficient urban environments within its four smart cities. These initiatives align with the national objective of promoting sustainable and inclusive cities that provide core infrastructure and a decent quality of life.

In this context, UDHD aims to implement a comprehensive Civic-Services Surveillance & Monitoring solution across Patna as a Pilot Project. This initiative seeks to establish a unified platform harnessing intelligent technologies to enhance urban management, improve citizen services, and ensure a safer and more efficient urban environment in Patna city. This Request for Proposal (RFP) marks a critical step towards realizing this vision for Bihar's smart cities.

2. Problems Faced by Modern Cities in Bihar

Modern urban environments, including those in Bihar, grapple with a multitude of complex challenges that affect the quality of life, strain urban infrastructure, and hinder efficient governance. These challenges necessitate innovative and technology-driven solutions to ensure sustainable urban development.

- **Inefficient Waste Management:** Traditional waste management practices often struggle to keep pace with increasing urban populations, leading to the accumulation of garbage, unhygienic conditions, and environmental pollution. This includes issues like uncollected waste, construction and demolition (C&D) waste dumping, and overflowing dustbins.
- **Streetlight Malfunctions:** Non-functional or inefficient streetlights compromise public safety, particularly during nighttime hours, increasing the risk of accidents and criminal activity. Broken or non-working streetlights also reduce visibility and deter evening activities.
- **Illegal Constructions and Encroachments:** Unauthorized construction activities disrupt urban planning efforts, strain resources, and can encroach on public spaces, leading to disputes and legal challenges. Similarly, unauthorized kiosks, shops, and temporary structures along roadsides or in public places obstruct pedestrian and vehicular movement, creating congestion and safety hazards.
- **Road Damage and Infrastructure Deficiencies:** Potholes, damaged road surfaces, broken speed breakers, damaged traffic lights or poles, broken road edges, dividers, footpaths, and waterlogging significantly impede traffic flow, increase the risk of accidents, and reduce the overall quality of urban infrastructure. Faded road markings also contribute to traffic confusion and safety risks.
- **Unauthorized Visual Elements:** Unauthorized billboards, hoardings, posters, and graffiti clutter the urban landscape, detract from its aesthetic appeal, and can even pose safety risks due to structural instability or inappropriate content.

Addressing these multifaceted challenges through a technology-driven, integrated approach is crucial for fostering sustainable and livable smart cities in Bihar.

3. Objectives of the RFP

The primary objectives of this Request for Proposal (RFP) are to:

- **Select a Competent Agency:** Identify and select a qualified and experienced agency to design, develop, implement, integrate, and maintain a comprehensive "Civic Services Surveillance & Monitoring" solution specifically tailored to the needs of Patna and later for other Municipal Corporations across Bihar.
- **Establish a Centralized Platform:** Create a robust and centralized platform capable of aggregating and analyzing diverse data streams relevant to urban infrastructure and services across the city. This platform will serve as the backbone for all monitoring and management activities.
- **Enhance Situational Awareness and Public Safety:** Implement a system that significantly enhances situational awareness, thereby improving public safety and security, optimizing urban traffic flow, and facilitating the efficient delivery of municipal services within the designated city. This includes proactive identification of potential hazards and rapid response mechanisms.
- **Leverage Advanced Technologies:** Utilize cutting-edge technologies such as Artificial Intelligence (AI), Internet of Things (IoT), and advanced data analytics to provide real-time insights and support data-driven decision-making for urban administrators. The solution should incorporate Generative AI/Machine Learning for automation of repetitive tasks and improved efficiency.
- **Build a Scalable and Interoperable Platform:** Develop a scalable and interoperable platform that can seamlessly integrate with existing and future smart city components deployed in ICC, Patna. This ensures the long-term viability and adaptability of the solution.

- **Ensure Long-Term Sustainability and Operational Efficiency:** Establish a comprehensive maintenance and support framework for the "Civic Services Surveillance & Monitoring" solution to ensure its long-term sustainability, operational efficiency, and continuous performance across the city.

Through this RFP, PSCL aims to partner with an agency that can deliver an innovative and effective "Civic Services Surveillance & Monitoring" solution that will significantly contribute to the transformation of Patna into more livable, sustainable, and efficient urban center.

4. Key Components of the Solution

The proposed "Civic Services Surveillance & Monitoring" solution will be a comprehensive and integrated platform comprising several key components that work together to achieve the objectives outlined in this document:

4.1 Vehicle-Mounted Camera Systems (Dashcams):

- **High-Resolution Video Capture:** Dashcams capable of capturing video at a resolution of 4K @ 90 frames per second (f/s) or better, ensuring clear and detailed footage.
- **Video Compression:** Utilizing H.264 or better video compression formats for efficient data storage and transmission.
- **Memory and Storage:** Minimum 2GB DDR3 RAM for future-proofing and a Micro SD Card slot for local storage (minimum 256 GB) to record at least 7 days of footage. One Micro SD card will be provided with each dashcam. Footage is stored locally and overwritten unless flagged for investigation.
- **HDR Compatibility:** Support for High Dynamic Range (HDR) to ensure optimal image quality in varying lighting conditions.
- **Connectivity:** Wi-Fi 802.11 b/g/n for local connectivity, and Bluetooth 4.2 or better for pairing with mobile devices. The bidder will provide 5G SIM cards and dongles and pay for the data plan.
- **Field of View:** A wide-angle field of view of 110 degrees or more for comprehensive coverage.
- **Mounting Options:** Flexible mounting options including adhesive, bolted, or suction mounts.
- **Power Supply:** 5-10V DC (USB) or direct battery connection, with coordination for power connections and adjustment mechanisms.
- **GPS Integration:** Built-in GPS for accurate location tracking and geo-tagging of captured data.
- **Software:** Operating system based on Custom Linux or Android.
- **Warranty:** A minimum 3-year warranty.
- **On-Off Button:** On-off button to start and shut down camera recording
- **Anti-Tampering & Anti-Theft:** Dashcams must have anti-tampering and anti-theft design with protective covers. The bidder is responsible for data backup from faulty dashcams.

4.2 Electric Vehicles with Integrated Technology:

A fleet of electric vehicles (two-wheelers) will be supplied and deployed. For example, one electric two-wheeler for every four (4) wards in a city. This calculation will be applied to Patna for this pilot project.

Battery and Range:

- **Battery Type:** Lithium-ion type
- **Battery Capacity:** 3 kWh and above.
- **Range:** Range of 100 km and above on a single charge.
- **Motor Type:** BLDC (Brushless DC) hub motor.
- **Motor Power:** 3 KW & above

These vehicles will serve as the mobile platforms for the intelligent camera systems and speaker systems along with PSCL campaign branding.

- **Branding:** All electric vehicles shall be prominently branded with official Patna Smart City Ltd.(PSCL) & Patna Municipal Corporation colours and the designated scheme branding. This ensures high visibility, public recognition, and clear association with the "Civic Services Surveillance & Monitoring" initiative.

4.3 Charging Hubs for Electric Vehicles:

- Establishment of strategically located charging hub infrastructure in Patna to support the continuous operation of the electric vehicle fleet.
- The scope includes the design, supply, installation, and maintenance of these charging stations, ensuring a reliable power supply for the vehicles.
- The charging hub will be created at ICCC Patna or any other place as designated by PSCL authorities.

4.4 Central Civic Services Operations Centre (C-SOC) at Patna ICCC:

A central C-SOC will be established in Patna (at the current ICCC CUM PSCL BUILDING, SSP OFFICE CAMPUS, NORTH GANDHI MAIDAN, PATNA 800001) or at any other place as designated by PSCL authorities, serving as the nerve centre for the entire "Civic Services Surveillance & Monitoring" system.

Central C-SOC (Patna) Components:

- **Utilization of Existing Infrastructure at ICCC, Patna:** The agency will assess the availability of existing hardware, furniture, space, and infrastructure within the ICCC, , and propose optimal utilization to minimize redundancy and cost. The proposal should clearly indicate what existing resources will be used and what new components are required.
- **Equipment Provisioning:** The agency will supply and install any additional hardware (e.g., operator workstations) required for the effective operation of the C-SOC, beyond what is available.
- **Software Integration:** All software components of the solution, including the video management system (VMS), the AI analytics platform, and the intelligent dashboards, will be integrated within the C-SOC to provide a unified operational interface.
- Similar additional C-SOC will be established at PMC also.

4.5 Mobile Applications for Field Personnel & Contractors:

- Development and provision of an Android application for Field staff, Contractors, PMC & PSCL Officers to survey, monitor and rectify all civic services issues mentioned above
- Contractor and Officer apps will enable instant ticketing, task assignments for violations detected by the system or reported by field personnel.
- The mobile applications will be capable of capturing data through images and videos along with latitude and longitude information.

4.6 AI & ML Algorithms & Cloud Application Hosting:

- Implementation of advanced AI/ML algorithms, including Object Detection (e.g., YOLO, Faster R-CNN, SSD, Segmentation Models like Unet, Linknet, PSPNet, FPN) for identifying civic issues.
- Text Recognition (OCR, e.g., Tesseract) for extracting text from hoardings and other sources.
- These algorithms will analyze citywide data for trend detection, predictive maintenance, and automated resolution tracking.

- All Applications & AI models will be hosted NICS I Empanelled Cloud Provider or BSDC or govt. approved Public Cloud Provider)

4.7 Intelligent Dashboards and Reporting System:

- Development of a comprehensive reporting dashboard
- The dashboard will display real-time data and detected incidents, provide end-of-day summary reports, and allow for the calculation of probable challan amounts and submission of online challans.

4.8 Civic Services to Be Monitored

The "Civic Services Surveillance & Monitoring" solution will provide real-time monitoring and analytics for a wide array of civic services, ensuring proactive identification and resolution of urban challenges:

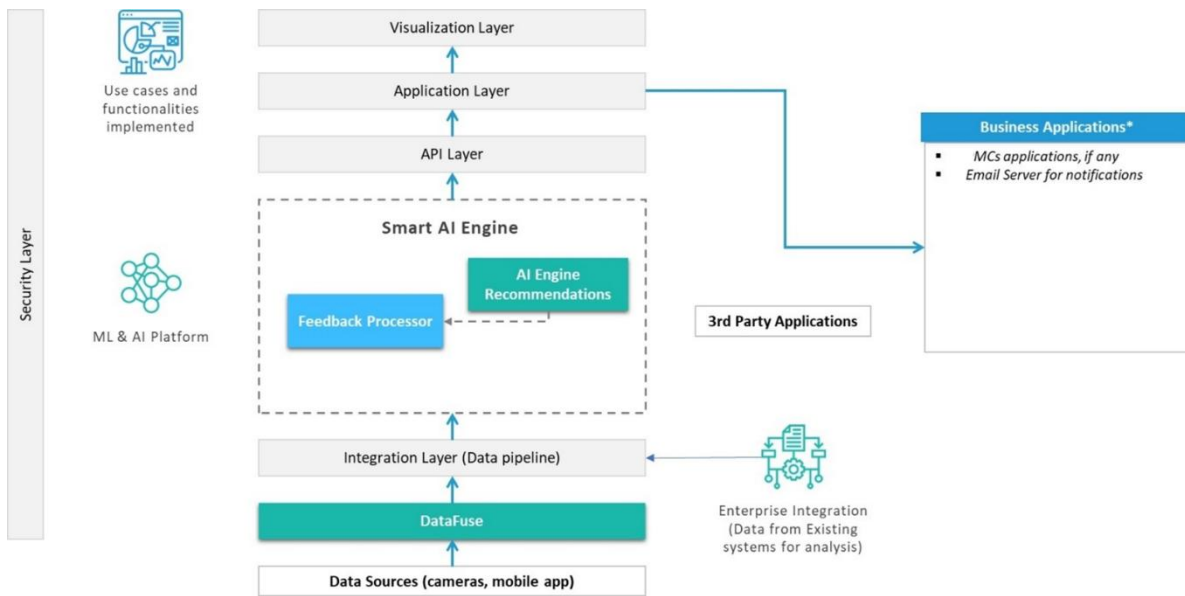
- **Detection of garbage on road:** The system will identify instances where garbage is lying on roads, footpaths, or in undesignated areas. It will specifically flag larger accumulations of litter (greater than 1 meter in any dimension) and automatically record these incidents with relevant details.
- **Detection of Road Potholes:** Identification of potholes present on the road surface, including those close together, focusing on potholes larger than 10 inches in any dimension.
- **Detection of Open/Broken Manholes:** Identification of open/broken manholes present on the road surface
- **Detection of non-working streetlights:** AI will detect non-functional lights and alert authorities.
- **Detection of Encroachments:** Identification of any kind of unauthorized occupation or obstruction on roads or streets.
- **Billboard & Hoarding Compliance:** Tracking unauthorized advertising and enforcing removal.
- **Detection of Cattle on road:** Detection of the presence of any cattle that are on the road, automatically generating a report with an image, camera details, and the time of detection.

4.9 Scope of Delivery

The selected agency will be responsible for the comprehensive end-to-end delivery of the "Civic Services Surveillance & Monitoring" solution, encompassing the following key areas:

A. Solution Architecture:

- **Conceptual View:** The solution architecture will comprise several layers: Data Sources (cameras, mobile app), Data Integration Component (DataFuse, Integration Layer/Data pipeline), ML & AI Platform (Smart AI Engine with AI Engine Recommendations and Feedback Processor), API Layer (REST API), Application Layer, and Visualization Layer. A Security Layer will encompass all components.
- **Physical Architecture:** The development infrastructure, including model development, API development, and front-end for users, will initially be hosted on cloud platforms (e.g., Azure/AWS). QA testing and User Acceptance Testing (UAT) will be performed on this development infrastructure. Post-UAT sign-off, all artifacts will be deployed on-premises infrastructure. Pre-launch testing will be performed by the QA team, followed by final sign-off for the on-premises deployment. The final deployment model will be provided as part of the detailed architecture phase.



B. Technical Approach:

Data Collection and Preparation:

- Hardware:** Utilize high-resolution cameras mounted on the electric vehicles.
- Mobile Application:** A mobile application will be installed on field personnel's mobile phones to capture data (pictures and videos) and push them to the system, especially during the initial phase or for specific data collection needs.
- Data Types:** Capture comprehensive video data of various zones and wards, covering all identified civic objectives.
- Data Storage:** Utilize cloud storage for scalable and secure data management during the development phase. For the production phase, data will be stored on-premises infrastructure.
- Data Annotation:** A dedicated team will be assigned for annotating collected data (garbage, debris, construction waste, streetlights, hoardings) using video annotation tools (e.g., Labeling, VGG Image Annotator (VIA), Amazon SageMaker Ground Truth).

C. AI Model Developments:

- Object Detection:** Implement state-of-the-art object detection algorithms such as YOLO versions, Faster R-CNN, SSD, and various architectures from Segmentation Models (Unet, Linknet, PSPNet, FPN) to accurately identify civic issues.

D. Reporting System:

- Develop a comprehensive reporting Dashboard for City coordinators, PSCL Officers, Field teams
- The dashboard will display real-time data and detected incidents, provide end-of-day summary reports, and facilitate the operations of the City Civic Services Surveillance and Monitoring.

E. Charging Hubs & Electric Vehicles:

- Supply and Deployment:** The agency will be responsible for the supply and delivery of the specified number of electric vehicles (two-wheelers) that will be used for data capture.
- Integrated Systems:** The intelligent vehicle-mounted camera systems will be seamlessly mounted into each electric vehicle, ensuring full functionality.

- **Branding:** All deployed electric vehicles will be branded with the official PMC & Patna Smart City Ltd.(PSCL) colors and the designated scheme branding. This includes logos, color schemes, and any specific visual elements to ensure high visibility and public association with the "Civic Services Surveillance & Monitoring" initiative.
- **Charging Infrastructure:** The agency will design, supply, install, and commission the necessary electric vehicle charging hubs and stations at strategic ICCCL, Patna, or any other location as designated by PSCL authorities. This includes all necessary power cables, accessories, and power adjustment mechanisms. The agency will also be responsible for the ongoing operation and maintenance of these charging facilities.

F. Central C-SOC (Civic Services Operations Center) at Patna & Rest at Individual Cities:

- **C-SOC Establishment:** Civic Services Operations Center (C-SOC) will be established in the existing ICCCL location in Patna or any other location as designated by PSCL authorities. This center will serve as the primary command and control hub for the entire surveillance and monitoring system.
- **Functionality:** The C-SOC will be equipped to receive real-time video and data feeds, process AI/ML analytics, generate alerts, manage incidents, and provide a unified operational picture for urban administrators.

G. Dashboard Details:

- **Features and Functionalities:** The bidder will create a comprehensive dashboard with specified features and functionalities.
- **Login Credentials:** The dashboard will have login credentials for various AMC departments, allowing a minimum of 'n' officials and a maximum of 25 concurrent logins.
- **Event Reporting:** Events identified by dashcams will be recorded daily as detailed reports.
- **Geospatial Visualization:** The dashboard will display violations/detections (from the use case list) on a Google Map interface, with time scale options ranging from 1 hour to 1 year for historical analysis.
- **Report Details:** Reports will include date/time stamp, precise location, navigation links, and event description.
- **Alerting:** The dashboard will generate alerts for missing dashcam feeds with date and time stamps.
- **Role-Based Access Control (RBAC):** Each department/ward/zone will have designated logins to view only their specific events, with a filter option provided. The system will implement robust RBAC to ensure data security and appropriate access levels.
- **Admin Notifications:** The dashboard will allow admin notifications to transfer events between departments/wards for efficient workflow management.
- **User Interface:** A user-friendly interface will be provided for easy event browsing within designated areas.
- **System Administrator Access:** SCADL/AMC authorities will have system administrator access to view all department events. Department heads/employees will have controlled dashboard access.
- **Status Updates:** An edit option will be provided in reports for department heads/employees to update the "Status" (Attended/Resolved) and "Seen time" columns.
- **Reporting Frequency:** The dashboard will generate daily/weekly/monthly/yearly reports.
- **Data Retention:** Events will be stored in the dashboard for at least one year.
- **Image Quality:** Images on the dashboard/reports must not be distorted.
- **Filtering:** Reports will allow filtering events by wards, zones, event type, department, dashcam source, and status.

- **Map Display:** The dashboard will display Google Maps showing use cases by zone, department, and source.
- All Applications will be certified from the Cert-in empanelled agency before hosting.
- Cyber Security measures to be taken as per the Government. Norms.

H. Manpower:

The successful bidder will deploy the below-mentioned minimum manpower for the entire contract duration:

Project Director (On-ICCC site): 1 nos

- **Roles & Responsibilities:** Supervise the entire project/resources on a regular basis during implementation & O&M Phase, coordinate with the authority nominated by AMC/SCADL, ensure implementation as per agreed plan and SLAs, prepare MIS Reports, and coordinate with field manpower for fault resolution and project implementation.
- **Desired Qualification:** BE/B.Tech with M.Tech/MBA with a minimum of 8 years of experience in large-scale ICT/IT/ITES infrastructure projects. Minimum 4 years of experience as a project manager of large-scale CCTV and Analytics Projects.

City Coordinators (On-ICCC site): 2 nos

- **Roles & Responsibilities:** Act on any critical issues, coordinate with various departments and stakeholders for necessary permissions, and possess end-to-end knowledge regarding the dashcams' status.
- **Desired Qualification:** Graduate in any stream with 4+ years of work experience in a similar field.

Field Coordinator & Data Analysts (Patna): 5 no

- **Roles & Responsibilities:** Act on any critical issues, coordinate with various departments and stakeholders for necessary permissions, and possess end-to-end knowledge regarding the dashcams' status.
- **Desired Qualification:** Graduate in any stream with 4+ years of work experience in a similar field.

Drivers and Maintenance workers: (Patna): 19+3 nos

- **Roles & Responsibilities:** Driving and maintaining vehicles and changing hubs. Coordinating with ground and central teams for necessary actions to deliver the results
- **Desired Qualification:** 4+ experience in driving and electric vehicle upkeep & maintenance

All resources must be available from the start of the installation period. The Project Director and Project Managers shall be available for discussion, meetings, and joint work with the PSCL team during the implementation and O&M phase.

I. Hardware:

- The agency must provide hardware specifications capable of supporting the full functionality and performance of the proposed AI models and software applications, with sufficient headroom for future expansion and increased data loads.

- The **Patna Smart City Ltd.(PSCL)**, after due diligence and based on the hardware specifications provided by the agency, shall be responsible for the procurement, provision, and physical availability of the specified hardware at the ICCC Patna location.

J. Vehicle Operations Scope

The operational framework for the "Civic Services Surveillance & Monitoring" system will be structured to ensure systematic and regular data collection across the designated smart cities. This will primarily be achieved through the deployment of the electric vehicle fleet equipped with the intelligent camera systems, operating on pre-defined schedules and routes.

- **Bi-Weekly Ward Road Screening:** A core operational activity will be the bi-weekly screening of all roads within each ward of Patna. This regular screening will ensure up-to-date data capture on the status of civic services and infrastructure.
- **Roster-Based Operations:** The deployment of vehicles and the assignment of routes will be managed through rosters jointly decided by the PSCL/Patna Nagar Nigam team and the selected vendor. This collaborative approach will allow for flexibility and optimization of coverage based on evolving needs and priorities.
- **Designated Routes:** For efficient and comprehensive coverage, specific routes will be designated within each ward. These routes will be planned to ensure that all key areas and roads are regularly monitored during the bi-weekly screenings.
- **Vehicle Timetables:** A detailed timetable will be created for each electric vehicle, outlining the specific wards, routes, and times of operation. This structured approach will ensure predictability and allow for effective monitoring of the data collection process. The vendor will be responsible for adhering to these timetables and ensuring the availability of operational vehicles.
- **Data Handling and Transfer:** The operations will also encompass the regular transfer of captured video and data from the vehicle-mounted systems to the central C-SOC for processing and analysis. The vendor will be responsible for ensuring the timely and secure transfer of this data.
- **Vehicle Maintenance and Readiness:** The operational scope includes the regular maintenance of the electric vehicle fleet and the associated camera systems to ensure their continuous readiness for deployment according to the planned schedules.

7. Future Extension of Scope

The "Civic Services Surveillance & Monitoring" platform is to be designed with scalability and adaptability in mind, allowing for significant future expansion beyond the initial deployment. Potential extensions of the scope for Phase 2 include:

- **Geographic Expansion:**

Replicating the successful model implemented at Patna across other Municipalities in Bihar state. This will involve deploying additional electric vehicles, cameras, and potentially establishing more localized monitoring centres integrated with the central C-SOC.

- **Use Case Expansion:**

Integrating a broader range of use cases across various urban domains to further enhance civic services and urban management. These include:

- a. **Public Transportation:** Integration with broader public vehicle fleets for comprehensive urban insights and emergency response coordination.
- b. **Corporation Vehicles:** Integration with municipal vehicle fleets for comprehensive urban insights and emergency response coordination
- c. **Traffic Police Vehicles:** Equipping traffic police vehicles with the same advanced camera and communication technology for enhanced enforcement capabilities, real-time incident reporting, and improved response times.
- d. **Waste Management:** Detection of construction and demolition (C&D) waste, Detection of Damaged/Overflowing Dustbin
- e. **Road Infrastructure Management:** broken speed breakers, damaged traffic lights or poles, broken road edges, dividers, and footpaths, automatically logging these occurrences. Detection of Faded Road Markings, Detection of Damaged/Broken Paver/Pavement, Detection of Broken Street Lights

This future-ready approach will allow PSCL to continuously enhance urban governance and citizen services across a wider geographical area and through a broader range of applications, truly realizing the vision of smart cities in Bihar.

8. Payment Milestones:

Capex 51% of Total Cost and Opex 49% of Total Cost

Project Phase	Payment Milestone	Payment %	Amount	Timelines
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Pilot Phase (3 months)	Requirements, Scoping Sign off, Supply, Installation, Testing, and Commissioning of Electric Vehicles with HW & Charging Hubs at Patna	25% of the Total CAPEX amount	T0+3 months
	Supply, Installation, Testing, and Commissioning of AI Applications, Mobile Apps	25% of Total CAPEX Amount	
	Supply, Installation, Testing, and Commissioning of Central C-SOC at Patna	30% Total CAPEX amount	
Complete Deployment Phase (2 months)	Supply, Installation, Testing, and Commissioning of Electric Vehicles with HW & Charging Hubs at Patna	7% of the Total CAPEX amount	T0+5 months
	Supply, Installation, Testing, and Commissioning of AI Applications, Mobile Apps	7% of Total CAPEX Amount	
	Supply, Installation, Testing, and Commissioning of Central C-SOC at Patna	6% Total CAPEX amount	
Operations & Maintenance Phase (up to 3 Years)	Quarterly Payment	Quarterly OPEX Amount	Operations Period (O&M)

9. Commercial:

9.1 Capex must be 51% of total Cost and Opex must be 49% of total cost.

9.2 Any deviations in the percentage will make the bidder non-responsive

9.3 BOQ:-

Patna Civic Services Monitoring Platform at ICCC, Smart City Patna						
SL. No	Item	Unit Cost (Including GST)	UoM	Qty	Total (Including GST)	Remarks
A) Pilot Phase (3 months)						
1	For AI-based detection, predictive alerts & civic service models for 03 use cases already developed a. Garbage b. Solid Waste c. Encroachment a. Unswept Roads b. Potholes on Roads c. Open Manholes d. Streetlight Malfunctions, etc.		per use case	3	-	
2	Manpower for the development of 7 Use cases as per the client's requirement and ICCC Integration a. Unswept Roads b. Potholes on Roads c. Open Manholes d. Streetlight Malfunctions, etc.		Months	3	-	Project Manager -1 Data Labeling and Preparation -2 AI/ML Developer-4 Data Scientist - 2 QA- 1 ICCC Integration Cost
3	Cameras and GPS module with complete set-up (Outdoor IP camera+GPS tracking for real-time data capture with memory card + Wifi set- up with automated video upload capability from Camera memory + Camera mount with Anti-Tampering & Anti-Theft Design Features)		Nos.	3	-	Includes the installation and commissioning
4	Product Application License, Mobile Apps, Dashboards & related Integrations		Lumsum	1	-	
5	Additional GPU Server requirement		Nos.	4	-	Includes the configuration & Deployment cost and one time warranty for 3 yrs
6	Training & Capacity Building		Lumsum	1	-	Workshops & Sessions for min 20 officials

7	E-Scooters & Connected Hardware with Branding		Nos.	3	-	
8	Driver's Salary for 3 months		Nos.	3	-	
9	ICCC Setup		Nos.	3	-	Workstation, Monitor and furniture, etc.
10	ICCC Supervisor +Coordinator Cost		Months	3	-	One Supervisor, two coordinator
A) Total Cost for Pilot Phase					-	
B) Complete Deployment Phase (2 months)						
11	Manpower for development of 7 Use cases as per client requirement and ICCC Integration a. Unswept Roads b. Potholes on Roads c. Open Manholes d. Streetlight Malfunctions, etc e. Garbage f. Solid Waste g. Encroachment		Months	2	-	Project Manager -1 Data Labeling and Preparation -2 AI/ML Developer-4 Data Scientist - 2 QA- 1 ICCC Integration Cost
12	Cameras and GPS module with complete set-up (Outdoor IP camera + GPS tracking for real-time data capture with memory card + Wifi set-up with automated video upload capability from Camera memory + Camera mount with Anti-Tampering & Anti-Theft Design Features)		Nos.	16	-	Includes the installation and commissioning cost
13	E- Scooters & Connected hardware with Branding		Nos.	16	-	For field patrolling & verification by ground team
14	Drivers Salary for 2 months		Nos.	19	-	Earlier 3 Vehicle driver included
15	ICCC Supervisor + Coordinator Cost		Months	2	-	
B) Total cost for Completed Deployment Phase					-	
(A+B) Total Capex cost for Pilot + Deployment Phase(3+2 Months)					-	
C) O&M Phase (3 Years)						
16	AMC of Cameras and GPS module for 19 vehicle		Yrs	3	-	

17	AMC of Product Application, Mobile Apps, Dashboard, analytics & AI Models		Yrs	3	-	Support & Maintenance Team: 1 Application Support +1 AI/ML Engine + 1 QA
18	AMC of GPU Server		Yrs	3	-	
19	AMC of ICCC Hardware		Yrs	3	-	
20	E- Scooters Serving		Yrs	2	-	
21	Drivers' Salary (19 Drivers)		Months	36	-	
22	ICCC Supervisor + Coordinator		Yrs	3	-	
23	Electricity Bill for 19 Scooties, charging & and its infrastructure provided by the SI, and space provided for this infrastructure by Patna Nagar Nigam		Yrs	3	-	
24	Infrastructure cost for charging stations for 19 scooties with AMC		Yrs	3	-	
	C) Total Opex Cost for a period of 3 years				-	
	(A+B+C) Total Project cost (Capex + Opex) for a period of 3 years Including GST				-	

- **Camera and other equipment should be approved from govt. organization**

CONDITIONS OF CONTRACT

Condition of Contract

VARIATION OF WORK

The scope of work, as mentioned above, shall be varied based on the requirement of the project. PSCL shall notify the successful bidder regarding the additional or varied requirements.

Access to the Site:

The Authority and any person authorized by the Authority shall have the right to access the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

Instructions:

1. The Contractor shall carry out all instructions of the Authority pertaining to works, which comply with the applicable laws where the Site is located.
2. The Contractor shall permit the Authority to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Authority, if so, required by the Authority.

Penalties Due to shortfall in performance of Operation & Maintenance Facilities

The contractor shall be subject to the following penalties for failure to carry out its operations as indicated below during the “Performance Based O&M period” under Normal Operating Conditions. These penalties would be paid over and above the quarterly authorization premium as finalized through the bidding process by the successful bidder in case of shortfalls in performance.

Sl. No.	Basis of Penalty	Benchmark	Present value for each parameter specified in the bid documents.
1	Inadequate maintenance of facilities, Greenery, and ambience	For each case detected	Rs.1,000/- per case detected
2	Noncompliance to occupational safety, health & environmental guidelines, noncompliance to state & central statutes.	Up to 2 occurrences / Month	No penalty
		>2 & up to 5 Occurrences/Month	Rs.1,000/- per Occurrence
		>5 & up to 10 Occurrences/Month	Rs. 2,500/- per Occurrence

DISPUTES

That for the purpose of jurisdiction in the event of disputes if any of the Contracts would be deemed to have been entered in to within the State of Bihar at Patna and it is agreed that only the courts of Patna shall have the exclusive Jurisdiction to entertain the dispute or any proceeding.

FORCE MAJEURE

Force Majeure is herein defined as any case, which is beyond the control of the selected Bidder or PSCL as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as: -

- Natural phenomenon, including but not limited to floods, droughts, earthquakes, and epidemics
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos
- Terrorist attack, public unrest in work area

Provided either party shall within 10 (ten) days from occurrence of such a cause, notify the other in writing of such causes. The Bidder or PSCL shall not be liable for delay in performing his/her obligations resulting from any force Majeure cause as referred to and/or defined above. Any delay beyond 30 (thirty) days shall lead to termination of contract by parties and all obligations expressed quantitatively

TERMINATION

The Authority may terminate the Contract if the other party causes a fundamental breach of the Contract.

Fundamental breaches of Contract include, but shall not be limited to the following:

- a) The Contractor stops work for 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Authority;
- b) the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation.
- c) The Authority gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- d) The Contractor does not maintain adequate security level which is required;
- e) if the Contractor, in the judgment of the Authority has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

When either party to the Contract gives notice of a breach of contract for a cause other than those listed under Sub Clause 5.17.2 above, the Authority shall decide whether the breach is fundamental or not.

Notwithstanding the above, the Authority may terminate the Contract for convenience.

If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site, as soon as reasonably possible.

Payment upon Termination:

The PBG/Security Deposit will be forfeited if the Contract is terminated because of a fundamental breach of the Contract by the Contractor. If the total amount due to the Authority exceeds any payment due to the Contractor, the difference shall be a debt payable to the Authority.

No extra cost will be paid by the Authority for expenditure towards 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.

EXTENSION OF SERVICES

The duration of the Project shall be as defined above. However, PSCL shall reserve all rights for extension of services based on the requirement and satisfactory service provided by the successful bidder.

LAIBILITY INSURANCE

Items supplied under this Contract shall be comprehensively insured by Contractor at his own cost, against any loss, theft or damage, for the entire period of the contract. Contractor shall submit to the Authority, documentary evidence issued by the insurance company, indicating that such insurance has been taken.

Contractor shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the goods and also the charges like transportation charges, control, etc. that may be applicable till the goods are delivered at the respective sites of installation shall also be borne by Contractor.

Contractor shall take out and maintain at its own cost, on terms and conditions approved by the Authority, insurance against risks, and for coverages, as specified below;

At the Authority's request, Contractor shall provide evidence to the Authority showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

Employer's liability and workers' compensation insurance in respect of the Personnel of the Company, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate.

DAMAGES CLAUSE

In case of default in performance on the part of the agency, PSCL shall decide the damages to be imposed for such default considering the quantum and other related factors which shall be imposed on the selected bidder.

In case the agency fails to render the services/works as per the terms and conditions of the RFP and subsequent work order and if the services/works are not to the satisfaction of PSCL, PSCL shall be at liberty to terminate the contract.

INDEMNITY

The successful bidder/Agency shall indemnify, defend, and hold harmless the contracting authority, and their End Users, and their respective officers, directors, employees, subsidiaries, affiliates and successors and permitted assigns, from and against any and all losses, liabilities, damages, costs or expenses, including reasonable legal fees and disbursements and costs of investigation, litigation, settlement, judgment, interest and penalties, arising from or relating to third party claims, demands or actions (collectively, "Claims") arising from or relating to:

(a) Any breach by the successful bidder or its agents, employees, or subcontractors of any of the warranties if any, pertaining to the Work and Documentation that are passed through to End Users;

(b) any injury to any person, including death, illness or bodily injury, or damage to real or tangible personal property, resulting from (i) the Work, Documentation, or any other Deliverables furnished by the successful bidder or (ii) any act or omission of successful bidder or its agents, employees or subcontractors; and

(c) without limiting paragraph (a) above, any alleged or actual infringement, violation or misappropriation of any Intellectual Property Rights of any third party by successful bidder or its agents, employees or subcontractors or any Work, Documentation or other Deliverables furnished by successful bidder to the contracting authority.

While providing services as per Scope of Work, the successful bidder shall ensure that there is no infringement of any patent or design rights or violate any intellectual property or other right of any person or entity and shall comply with all applicable Laws, Statute, regulations and Governmental requirements and he/she shall be solely and fully responsible for consequence/ any actions due to any such infringement.

In instances of change in ownership/control of a company during the project period, it shall be the responsibility of the bidder to ensure that new management continues to deliver the terms of the contract. And in cases where there is such a change during the bidding process, the Department/Contracting authority reserves the right to reject the bid.

RISK MANAGEMENT

Bidder shall at his own expense adopt suitable Risk Management Methodology to mitigate all risks assumed under this RFP. The Bidder shall underwrite all the risk related to its personnel deputed under this project as well as equipment and components and any other belongings or their personnel during the entire period of their engagement in connection with this project and take all essential steps to reduce and mitigate the risk. Patna Smart City Limited (PSCL) will have no liability on this count.

MANPOWER

The Agency shall provide experienced managerial, technical, supervisory, and non-technical personnel, security personnel to implement and execute the works properly, safely, and efficiently on a continuous daily basis. While doing so due consideration shall be given to the labour laws in force.

The qualification and capability of Bidder's personnel shall be appropriate for the tasks they are assigned to perform. The staff provided shall be fully trained in the operation of the works before being given responsibility. If, in opinion of the Authority, a member of agency's staff is considered to be insufficiently skilled or otherwise inappropriate for the assigned task, and Authority informs the Agency in writing, the Agency shall replace him/her with a person of appropriate skills and experience for the task, approved by the Authority, within one week of being so informed. The Agency's Staff should be available at site and take instructions from the Authority/PSCL or other supervisory staff.

NON-DISPARAGEMENT

During the contract period here of and at all times thereafter, (I) the bidder shall not, directly or through any other person or entity, make any public or private statements (whether orally, in writing, via electronic transmission, or otherwise) that disparage, denigrate or malign (i) the PSCL or any of its affiliates, (ii) any of the businesses, activities, operations, affairs, reputations or prospects of the PSCL or any of its affiliates,

For purposes of clarification, and not limitation, a statement shall be deemed to disparage, denigrate or malign a person or entity if such statement could be reasonably construed to adversely affect the opinion any other person or entity may have or form of such first person or entity.

CLAUSE OF CONTRACT

CLAUSE 1

Performance Guarantee

- (i) The contractor shall submit an irrevocable PERFORMANCE GUARANTEE of 2% (Two percent) of the tendered amount including earnest money in the shape as mentioned in the Bihar Financial Rules or Bank Guarantee (for work costing more than one crore) or any other deposits mentioned for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in scheduled 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of N.S.C. of Post Office/ Pledged in favour of department; D.D. of any Scheduled Bank or State Bank of India or Bank Guarantee (for work costing more than Rupees one Crore).
- (ii) The performance Guarantee shall be initially valid up to 28 days beyond the defect liability.
- (iii) The Engineer-in-Charge shall not make a claim under the Performance guarantee except for amounts to which the Governor of Bihar is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- (a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance guarantee.
- (b) Failure by the contractor to pay Governor of Bihar any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- (c) Failure by the contractor to rectify any defects as defined in the defect liability clause in the schedule – F of contract data to the satisfaction of the Engineer incharge.
- (iv) In the event of the contract being determined or rescinded under provisions of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Governor of Bihar. ...

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CLAUSE 1 A

Recovery of Security Deposit

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit PSCL at the time of making any payment to him for work done under the contract to deduct a sum at 8 % (eight percent) from the gross amount of each running bill till full amount of security deposit 10% (ten percent) of agreement value or value of work (whichever is higher) is reached. If value of work exceeds the agreement value, security deposit (10%) will be recovered for the exceeded work.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by Government on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-Charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money at the time of tenders will be treated a part of the Security Deposit.

CLAUSE 2

Compensation for Delay (Liquidated Damage)

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Superintending Engineer (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

- i) *Compensation for delay of work -@ 2 % per month of delay to be computed on per Day basis*

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the PSCL. In case, the contractor does not achieve a particular milestone mentioned in schedule- F, or the rescheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 2A

Incentive for early completion

In case, the contractor completes the work ahead of scheduled completion time, a bonus @ 1% (one percent) of the tendered value per month computed on per day basis, shall be payable the contractor, subject to a maximum limit of 5% (five percent) of the tendered value. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Provided always that provision of the Clause 2A shall be applicable only when so provided in 'Schedule F'.

CLAUSE 3

When Contract can be Determined / Resigned

Subject to the other provisions contained in this clause the Engineer-In-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wind up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
- iii) if the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date of completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iv) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.

- v) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- vi) If the contractor commits any acts mentioned in Clause 21 hereof:
- vii) If the work is not started by the contractor within 1/8th of the stipulated time subject to the maximum of 45 days.

When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the Governor of Bihar shall have powers:

- a) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of Engineer-in-Charge shall be conclusive evidence). Upon such determination or rescission the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
- b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above course(s) being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the contractor as decided by Chief Engineer within 1/4th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all. the reasons shall be examined by the Superintending Engineer and his decision shall be final and binding.

CLAUSE 4

Contractor liable to pay compensation even if action not taken under Clause 3

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause- 3 thereof, shall have become exercisable and the same are not exercised the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work. or any part thereof, paying or allowing for the same in account at the contract rates or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5

Time and Extension for Delay

The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from

such time period as mentioned in letter of acceptance or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the security deposit absolutely.

5.1 As soon as possible after the contract is concluded the Contractor shall submit a Time & Progress Chart for each milestone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades or sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and Contractor within the limitations of time imposed in the contract documents, and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate Programme has been agreed upon) complete the work as per milestone given in schedule 'F'.

5.2 If the work(s) be delayed by.

- i) force majeure, or
- ii) Serious loss or damage by fire, or
- iii) Civil commotion, local.
- iv) delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- v) Non-availability of stores, which are the responsibility of Government to supply or
- vii) Non-availability or break down of tools and Plant to be supplied or supplied by Government or
- vii) any other cause which, in the absolute discretion of the authority mentioned in Schedule 'F' is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for the rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the hindering event causing delay on the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

5.4 In any such case the authority mentioned in Schedule 'F' may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

5.5 The basic centerlines, reference points and benchmarks will be fixed by the department. The contractor shall established at his own cost at suitable points, additional reference lines and bench marks as may be necessary and instructed by the engineer-in-charge. The contractor shall remain responsible for the sufficiency and accuracy of all the bench marks and reference lines.

CLAUSE 5A

The Engineer may require the contractor to attend a progress review meeting during execution of work.

The Engineer shall record the minutes of the meeting and provide a copy to the Contractor for compliance. These minutes will be a part of evidence in case of any request for extension of time or impunitive action against the contractor.

CLAUSE 6

Measurement of Work Done

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine measurement and the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works perform under the contract.

All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative at bast once in a month during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of India Standards and if for any item no such standard is available then a mutually agreed method as approved by the department shall be followed.

The contractor shall give not less than seven days notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-n-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement defects noticed till completion of the defects liability period.

CLAUSE 7

Payment on Intermediate Certificate to be Regarded as Advances

No payment shall be made for work for less than the estimated work of Rs. 2.5 Lacs till the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. 2.5 Lacs the interim or running account bill shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. The Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable

to the contractor. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Assistant Engineer together with the account of the material issued by the department, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge the period of ten working days will be extended to fifteen working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided as per clause - 2, without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

CLAUSE 8

Completion Certificate and Completion Plans

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within fifteen days of the receipt of such notice the Engineer-in-Charge shall inspect the work and if there is no defect in the work shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realised by the sale thereof.

CLAUSE 8A

Contractor to Keep Site Clean

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, color washing, painting etc. on walls, floor, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

CLAUSE 8 B

Completion Plans to be Submitted by the Contractor

The contractor shall submit completion plan as required vide General Specifications for Electrical works (Part-I internal) 1972 and (Part-II External) 1974 as applicable within thirty days of the completion of the work.

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs. 15,000 (Rs. Fifteen thousand only) as may be fixed by the Superintending Engineer concerned and in this respect the decision of the Superintending Engineer shall be final and binding on the contractor.

CLAUSE 9

Payment of Final Bill

The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified herein under, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Assistant Engineer, complete with account of materials issued by the Department and dismantled materials.

- | | | | |
|-----|---|---|----------|
| i) | If the Tendered value of work is up to Rs. 1 crores | : | 2 months |
| ii) | If the Tendered value of work exceeds Rs. 1 crores | : | 4 months |

CLAUSE 9 A

Payment of Contractor's Bills to Banks

Payments due to the contractor may, if so desired by him, be made to his bank instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge (1) an authorisation in the form of a legally valid document such as a power of attorney conferring authority on the bank to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by PSCL or his signature on the bill or other claim preferred against PSCL before settlement by the Engineer-in-Charge of the account or claim by payment to the bank. While the receipt given by such banks shall constitute a full and sufficient discharge for the payment, the contractor shall wherever possible present his bills duly receipted and discharges through his bankers.

Nothing herein contained shall operate to create in favour of the bank any rights or equities vis-a-vis the Governor of Bihar.

CLAUSE 10

Materials supplied by PSCL

Materials which PSCL will supply in rare case are shown in schedule 'B' which also stipulates quantum, place of issue and rate(s) to be charged in respect thereof. The contractor shall be bound to procure them from the Engineer-in-Charge.

As soon as the work is awarded, the contractor shall finalise the programme for the completion of work as per clause 5 of this contract and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of the work. The Contractor shall give in writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. The contractor shall place his indent in writing for issue of such materials at least 7 days in advance of his requirement.

Such materials shall be supplied for the purpose of the contract only and the value of the materials so supplied at the rates specified in the aforesaid schedule shall be set off or deducted, as and when materials are consumed in items of work (including normal wastage) for which payment is being made to the contractor, from any sum then due or which may therefore become due to the contractor under the contract or otherwise or from the security deposit. At the time of submission of bills the contractor shall certify that balance of materials supplied is available at site in original good condition.

The contractor shall submit along with every running bill (on account or interim bill) material wise reconciliation statements supported by complete calculations reconciling total issue, total consumption and certified balance (diameter/section-wise in the case of steel) and resulting variations and reasons therefore. Engineer-in-Charge shall (whose decision shall be final and binding on the contractor) be within his rights to follow the procedure of recovery in clause 42 at any stage of the work if reconciliation is not found to be satisfactory.

The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading, storing under cover as required, cutting assembling and joining the several parts together as directed by the engineer-in-charge. Notwithstanding anything to the contrary contained in any other clause of the contract and (or the PWD Code) all stores/materials so supplied to the contractor or procured with the assistance of the PSCL shall remain the absolute property of PSCL and the contractor shall be the trustee of the stores/materials, and the said stores/materials shall not be removed/disposed off from the site of the work on any account and shall be at all times open to inspection by the Engineer-in-Charge or his authorized agent. Any such stores/materials remaining unused shall be returned to the Engineer-in-Charge in as good a condition in which they were originally supplied at a require, but in case it is decided not to take back the stores/materials the contractor shall have no claim for compensation on any account of such stores/materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores/materials.

On being required to return the stores/materials, the contractor shall hand over the stores/materials on being paid or credited such price as the Engineer-in-Charge shall determine, having due regard to the condition of the stores/materials. The price allowed for credit to the contractor, however, shall be at the prevailing market rate not exceeding the amount charged to him, excluding the storage charge, if any. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition, the contractor shall in addition to the throwing himself open to account for contravention of the terms of the licenses or permit and/or for criminal breach of trust, be liable to Government for all advantages or profits resulting or which in the usual course would have resulted to him by reason or such breach. Provided that the contractor shall in no case be entitled to any compensation or damages on account of any delay in supply or non-supply thereof all or any such materials and stores provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the Government within the original scheduled time for completion of the work plus 50% thereof or schedule time plus 6 months whichever is more if the time of completion of work exceeds 12 months but if a part of the materials only has been supplied within the aforesaid period then the contractor shall be bound to do so much of the work as may be possible with the materials and stores supplied in the aforesaid period. For the completion of the rest of the work, the contractor shall be entitled to such extension of time as may be determined by the Engineer-in-Charge whose decision in this regard shall be final and binding on the contractor.

The contractor shall see that only the required quantities of materials are got issued. Any such material remaining unused and in perfectly good/original condition at the time of completion or determination of the contract shall be returned to the Engineer-in-Charge at the stores from which it was issued or at a place directed by him by a notice in writing. The contractor shall not be entitled for loading, transporting, unloading and stacking of such unused material except for the extra lead, if any involved, beyond the original place of issue. Quantities issued in excess of requirement with respect to work done and not returned back to the department, recovery will be made of double of issue rate.

CLAUSE 10 A

Materials to be provided by the Contractor

The contractor shall, at his own expense, provide all materials, required for the works other than those, which are stipulated, to be supplied by the PSCL.

The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within fifteen days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether sample are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the

required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all time have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss for damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall borne by the Contractor.

CLAUSE 10 B

Secured Advance on Non-perishable Materials

i) The contractor, on signing an indenture in the form to be specified by the Engineer-in-Charge, shall be entitled to be paid during the progress of the execution of the work up to 75% of the assessed value of any materials which are in the opinion of the Superintending Engineer nonperishable, non-fragile and noncombustible and are in accordance with the contract and on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which advance has been made under this sub-clause are incorporated in the work the amount of such advance shall be recovered/deducted from the next payment made under any or the clause or clauses of this contract.

ii) Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. In such a case the contractor shall execute a Bank Guarantee/ Bond from a Scheduled Nationalised Bank as specified by the Engineer-in-Charge for the full amount of such advance before it is released. Such advance shall be in two or more installments to be determined by the Engineer-In-charge at his absolute discretion. The first installment of such advance before shall be released by the Engineer-in-Charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent installment shall be released by the Engineer-in-Charge only after the contractor furnishes a proof of the satisfactory utilisation of the earlier installment to the entire satisfaction of the Engineer-In-Charge.

Plant & Machinery & Shuttering Material Advance

iii) An advance for plant machinery required for the work and brought to site by the Contractor may be given if requested by the contractor in writing within one month of bringing such plant and machinery to site. Such advance shall be given on such plant and machinery which in the opinion of the Engineer-in-Charge will add to the expeditious execution of work and improve the quality of work. The amount of advance shall be restricted to 5% of the tender value. In the case of new plant and equipment to be purchased for the work the advance shall be restricted to 85% of the price of such new plant and equipment paid by the contractor for which the contractor shall produce evidence satisfactory to the Engineer-in-Charge and approval from Engineer-in-Charge. In the case of second hand and used plants and equipment, the amount of such advance shall be limited to 50% of the depreciated value of plant and equipment as may be decided by the Engineer-in-Charge. The contractor shall, if so required by the Engineer-in-Charge, submit the statement value of such old plant and equipment duly approved by a Registered Value recognized by the Central Board of Direct Taxes under the Income-Tax Act, 1961. No such advance shall be paid on any plant and equipment of perishable nature and on the plant and equipment of a value less than Rs. 50,000/- Seventy five percent of such amount of advance shall be paid after the plant & equipment is brought to site and

balance twenty five percent on successfully commissioning the same only after approval from Engineer-in-Charge.

Leasing of equipment shall be considered at par with purchase of equipment and shall be covered by tripartite agreement with the following:

1. Leasing company which gives certificate of agreeing to lease equipment to the contractor.
2. Engineer in Charge, and
3. The contractor.

This advance shall further be subject to the condition that such plant and equipment (a) are considered by the Engineer-in-Charge to be necessary for the works; (b) and are in and are maintained in working order; (c) hypothecated to the PSCL as specified by the Engineer-in-Charge before the payment of advance is released. The contractor shall not be permitted to remove from the site such hypothecated plant and equipment without the prior written permission of the Engineer-in-Charge. The contractor shall be responsible for maintaining such plant and equipment in good working order during the entire period of hypothecation falling which such advance shall be entirely recovered in lump sum. For this purpose steel scaffolding and from work shall be treated as plant and equipment.

The contractor shall insure the Plant and Machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amounts not recovered from the insurer will be borne by the contractor.

Interest & Recovery

iv) The mobilization advance and plant and machinery advance in (ii)&(iii) above bear simple interest and should be equal to the prevailing rate of interest charged by the bank as mentioned in contract date schedule 'F' and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty per cent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of the installment.

v) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the Chief Engineer.

vi) The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.

vii) Any materials including tools plants equipments etc brought to the site shall not be removed from the sites without the written permission of the Engineer-in-charge.

CLAUSE 10 C

Payment on Account of Increase in Prices/Wages due to Statutory Order(s)

If after submission of the tender the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 thereof) and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes in sales tax) and such increase in the price and/or wages prevailing at the time of the last stipulated date for receipt of the tenders including extensions if any for the work, and the contractor thereupon necessarily and properly pays in respect of that material (incorporated in the works) such increased price and/or in respect of labour engaged on the execution of the work such increased wages, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of the work in question.

If after submission of the tender, the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 thereof) and/or wages of labour is decreased as a direct result of the coming not force of any law or

statutory rules or order (but not due to any changes in sales tax) and such decrease in the prices and/ or wages prevailing at the time of receipt of the tender for the work. The government shall in respect of materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores in accordance with Clause-10 hereof) and/or labor engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the price of materials and/or wages of labour on the coming into force of such law, statutory rule or order.

The contractor shall, for purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase claimed or reduction available and shall allow inspection of the same by a duly authorised representative of PSCL, and further shall, at the request of the Engineer-in-Charge may require any documents so kept and such other information as the Engineer-in-Charge may require.

The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such material and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

CLAUSE 10 CA

Payment on Account of Increase/decrease in Prices of construction materials after receipt of tender.

If after submission of the tender, the price of cement or steel reinforcement bars / bitumen incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) increase(s) beyond the price(s) prevailing at the time of the last stipulated date for receipt of tenders (including extensions, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of work in question.

If after submission of the tender, the prices of cement and/or steel reinforcement bars / bitumen incorporated in the works (not being a material stipulated from the Engineer-in-Charge's stores in accordance with the Clause 10 thereof) is decreased, Government shall in respect of these materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores in accordance with Clause 10 thereof) be entitled to deduct from the dues of the contractor such amount as shall be equivalent to the difference between the prices of Cement and/or Steel reinforcement bars/ bitumen as prevailed at the time of last stipulated date for receipt of tenders including extensions if any for the work and the prices of these materials on the coming into force of such base price of cement and/or steel reinforcement bars/ bitumen issued under authority of Schedule of Rate Committee.

The increase/decrease in prices shall be determined by the All India Wholesale Price Indices for Cement and Steel (bars and rods) as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for cement and/or steel reinforcement bars / bitumen as issued under authority of Schedule of Rate Committee as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration.

The amount of the contract shall accordingly be varied for cement or steel reinforcement bars / bitumen and will be worked out as per the formula given below:-

Adjustment for cement component

- (i) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_0 = 0.85 \times P_c / 100 \times R \times (C_1 - C_0) / C_0$$

V_0 = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.

R = Value of the work.

C_0 = The all India wholesale price index for cement on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi.

C₁ = The all India average wholesale price index for cement for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

P_c = Percentage of cement component of the work.

Adjustment for Steel component

- (ii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R \times (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S₀ = The all India wholesale price index for steel (Bars and Rods) on 25 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India New Delhi.

S₁ = The all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi.

P_s = Percentage of Steel component of the work.

Note : For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment of bitumen component

- (iii) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \times P_b / 100 \times R \times (B_1 - B_0) / B_0$$

V_b = Increase or decrease in the cost of work during the month under consideration due to changes in rates for bitumen.

B₀ = The office retail price of bitumen at the IOC depot at nearest center on the day 28 days prior to date of opening of Bids.

B₁ = The official retail price of bitumen of IOC depot at nearest center for the 15th day of the month under consideration.

P_b = Percentage of bitumen component of the work.

CLAUSE 10 CC

Payment due to increase / Decrease in Prices / Wages after receipt of tender (Time of completion more than 18 months)

Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data :

(a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor.

(b) Following expressions and meanings are assigned to the work done during each month:

R = Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.

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

The formula (e) for adjustment of prices are:

Adjustment for labour component

- (i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$$V_L = 0.85 \times P_1 / 100 \times R \times (L_1 - L_0) / L_0$$

V_L = increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.

L_0 = the consumer price index for industrial workers for the State on 28 days preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.

L_1 = The consumer price index for industrial workers for the State for the under consideration as published by Labour Bureau, Ministry of Labour, Government of India.

P_1 = Percentage of labour component of the work.

Adjustment for cement component

- (ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$$V_0 = 0.85 \times P_0 / 100 \times R \times (C_1 - C_0) / C_0$$

V_0 = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.

C_0 = The all India wholesale price index for cement on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi.

C_1 = The all India average wholesale price index for cement for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

P_c = Percentage of cement component of the work.

Adjustment for Steel component

- (iii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

$$V_s = 0.85 \times P_s / 100 \times R \times (S_1 - S_0) / S_0$$

V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S_0 = The all India wholesale price index for steel (Bars and Rods) on 25 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India New Delhi.

S_1 = The all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi.

P_1 = Percentage of labour component of the work.

Note : For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment of bitumen component

- (iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_b = 0.85 \times P_b / 100 \times R \times (B_1 - B_0) / B_0$$

V_b = Increase or decrease in the cost of work during the month under consideration due to changes in rates for bitumen.

B_0 = The office retail price of bitumen at the IOC depot at nearest center on the day 28 days prior to date of opening of Bids.

B_1 = The official retail price of bitumen of IOC depot at nearest center for the 15th day of the month under consideration.

P_1 = Percentage of bitumen component of the work.

Adjustment of POL (fuel and lubricant) component

- (v) Price adjustment for increase or decrease in the cost of POL (fuel and lubricant) shall be paid in accordance with the following formula.

$$V_f = 0.85 \times P_f / 100 \times R \times (F_1 - F_0) / F_0$$

V_f = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants.

F_0 = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at nearest center on the day 28 days prior to the date of opening of Bids.

F_1 = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.

P_1 = Percentage of fuel and lubricants component of the work.

Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.

Adjustment for Plant and Machinery Spares component

- (vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Contractor shall be paid in accordance with the following formula :

$$V_p = 0.85 \times P_p / 100 \times R \times (P_1 - P_0) / P_0$$

V_p = Increase or decrease in the cost of work during the month under consideration due to changes in rates for plant and machinery spares.

P_0 = The all India wholesale price index for heavy machinery and parts on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development Government of India, New Delhi.

P_1 = The all India average wholesale price index for heavy machinery and parts for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

P_1 = Percentage of plant and machinery spares component of the work.

Note: For the application of this clause, index of Heavy Machinery and Parts has been chosen to represent the Plant and Machinery Spares group.

Adjustment of other materials component

- (vii) Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the contractor shall be paid in accordance with the following formula:

$$V_m = 0.85 \times P_m / 100 \times R \times (M_1 - M_0) / M_0$$

V_m = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.

M_0 = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.

M_1 = The all India wholesale price index (all commodities) for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.

P_1 = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

The following percentages will govern the price adjustment for the entire contract:

- | | | |
|-------------------|---|------|
| 1. Labour - P_1 | } | 25 % |
| 2. Cement - P_c | | 5 % |

3. Steel – P _s	5 %
4. Bitumen – P _b	10 %
5. POL – P _f	5 %
6. Plant & Machinery Spares – P _p	5 %
7. Other materials – P _m	45 %
Total	100%

(viii) In contract where clause 10CA is applicable, this clause 10CC will not be applicable and in contract where this clause 10CC is applicable previous clause 10CA will not be applicable.

CLAUSE 10 D

Dismantled Material Govt.

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Government's property and such materials shall be disposed off to the best advantage of Government according to the PWD codal provision.

CLAUSE 11

Work to be Executed in Accordance with Specifications, Drawings, Orders etc.

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the contractor shall be furnished free of charge one copy of the contract documents together with specification, designs, drawings and instruction as are not included in the standard specifications of Public Works Department specified in Schedule 'F' or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

Deviations/ Variations Extent and Pricing

The Engineer-in-Charge (As per codal provision) shall have power (i) to make alternation in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge after approval from competent authority and such alterations omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered be extended, if requested by the contractor, as follows:

- i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus.
- ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge after approval from competent authority

**Deviation,
Extra items
and Pricing**

12.2 In the case of extra item(s) the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-Charge after approval from competent authority shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates as per power delegated in PWD Code and on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

**Deviation,
Substituted
Items, Pricing**

In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

- (a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

**Deviation,
Deviated
Quantities,
Pricing**

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates as per power delegated in PWD Code and on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule 'F' and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of receipt of the notice, revise the rates as per power delegated in PWD Code for the work in question within one month of expiry of the said period of fifteen days having regard to the market rates or current schedule of rate.

12.4 The contractor shall send to the Engineer-in-Charge once every three months an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge after approval from competent authority which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Superintending Engineer is authorized for consideration of such claims on merits.

12.5 For the purpose of operation of Schedule 'F' the following works shall be treated as works relating to foundation :

- i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.C. but including base concrete below the floors.
- ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.
- iii) For retaining walls where floor level is not determinate 1.2 meters above the average ground level or bed level.
- iv) For Roads all items of excavation and filling including treatment of sub-base.

12.6 Any operation incidental to or necessary has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

**Foreclosure of
Contract due to
Abandonment
or Reduction in
Scope of Work**

If at any time after acceptance of the tender Government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the contractor and the contractor

shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates for works executed at site only.

CLAUSE 14

If the contractor :

Cancellation of contract in full or part

- i) at any time makes default in proceeding with the works or any part of the work with due diligence and continues to do so after a notice in writing of 7 days from the Engineer-in-Charge; or
- ii) Commits default to comply with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or
- iii) Fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or
- iv) Shall offer or give or agree to give to any person in Government service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for Government; or
- v) Shall enter into a contract with Government/ PSCL in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/Engineer-in-Charge; or
- vi) Shall obtain a contract with Government / PSCL as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- vii) Being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- viii) Being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- ix) Shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- x) Assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Competent Authority;

The Competent Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to Government, by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Engineer-in-Charge shall on such cancellation by the Competent Authority have powers to :

- (a) Take possession of the site and any materials, constructional plant, implements stores, etc., thereon; and/or
- (b) Carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part, the Engineer-in-Charge shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the works or in case the works or part of the works is not to be

completed, the loss of damage suffered by Government. In determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

Any excess expenditure incurred or to be incurred by PSCL in completing the works or part of the works or the excess loss or damages suffered or which may be suffered by PSCL as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to PSCL in law be recovered from any moneys due to the contractor on any account, and if such moneys are not sufficient the contractor shall be called upon in writing and shall be liable to pay the same within 31 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days the Engineer-in-Charge shall have the right to sell any or all of the contractors unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the contractor under the contract and if thereafter there be any balance is outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.

Any sums in excess of the amounts due to PSCL and unsold materials, constructional plant, etc., shall be returned to the contractor, provided always that if cost or anticipated cost of completion by PSCL of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

CLAUSE 15

Suspension of Work

i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof, for any of the following reasons :

- a) on account of any default on the part of the contractor or;
- b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
- c) for safety of the works or part thereof.

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.

ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above, the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;

CLAUSE 16

Action in case Work not done as per Specifications

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Control Organization of the Department and of the Cabinet (Technical) Vigilance, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-Charge or his higher authority or his authorised subordinates in charge of the work or to the Cabinet (Technical) Vigilance or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or article provides by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the contractor shall, on demand in writing which shall be made within the period specified in schedule – F of contract data from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the contractor failing do so within a period specified by the Engineer-in-Charge in his demand

aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure and incidental items rectified, or removed and re-executed at the risk and cost of contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17

Contractor Liable for Damages, defects during maintenance period

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wired, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within defect liability period after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit except for the portion pertaining to asphaltic work which is governed by sub-para (iii) of clause 35 or the proceeds of sale thereof or of a sufficient portion thereof. The security deposit of the contractor shall not be refunded before the expiry of defected liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of Electrical & Mechanical services, the security deposit deducted from contractors shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE 18

Contractor to Supply Tools & Plants etc.

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other document forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-Charge at cost to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18 A

Recovery of Compensation paid to Workman

In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, Government is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Government will recover from the contractor the amount of the compensation so paid; and without prejudice to the right of the Government under sub-section (2) of section 12, of the said Act, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government / PSCL to the contractor whether under this contract or otherwise. Government / PSCL shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his giving to Government / PSCL full security for all costs for which Government / PSCL might become liable in consequence of contesting such claim.

CLUASE 18 B

Ensuring Payment and Amenities to Workers if Contractor fails

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, PSCL is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by P.W.D. Contractors, PSCL will recover from the contractor the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the PSCL under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, PSCL shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Government/PSCL to the contractor whether under this contract or otherwise PSCL shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the PSCL full security for all costs for which Government/PSCL might become liable in contesting such claim.

CLAUSE 19

Labour Laws to be complied by the Contractor

The contractor shall obtain a valid license under the State Labour Act, and the Contract Labour (Regulation and Abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) ACT, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) ACT, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of the contract arising out of the resultant non-execution of the work.

The bidder should registered in EPF.

The bidder should submit the Project Insurance and professional liability insurance documents after award of the contract.

CLAUSE 19 A

No labour below the prescribed age shall be employed on the work.

CLAUSE 19 B

Payment of wages :

Payment of Wages

i) The contractor shall pay to labour employed by him either directly or through sub-contractors, wages not less than fair wages as defined in P.W.D. Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.

ii) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

iii) In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Public Works Department contractor's Labour Regulations made by Government from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per

the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation And Abolition) Central Rules, 1971, wherever applicable.

iv) a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of nonfulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.

b) Under the provision of Minimum Wages (Central) Rules 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at same rate as for duty. In the event of default the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.

v) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Act, 1970, or the modifications thereof or any other laws relating thereto and the rules made hereunder from time to time.

vi) The contractor shall indemnify and keep indemnified PSCL against payments to be made under and for the observance of the laws aforesaid and the P.W.D. Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub-contractors.

vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

viii) Whatever is the minimum wage for the time being, or if the wage payable higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.

ix) The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19 C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs. 200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 20

Minimum wages Act to be complied with.

The contractor shall at least pay and comply with all the provisions of the Minimum wages Act s and rules framed there under other labour laws related to contract labour .

CLAUSE 21

Work not to be sublet. Action in case of insolvency

The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employment of PSCL in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Governor of

Bihar shall have power to adopt the courses specified in Clause 3 hereof in the interest of PSCL and in the event of such course being adopted the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

Compensation

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of PSCL without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLUASE 23

Changes in firm's Constitution to be intimated

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 thereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24

Approval of Engineer In charge

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

CLAUSE 25

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in-before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim right matter or thing whatsoever in any way arising out of or relating to contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

i) If the contractor considered any work demanded of him to be outside the requirements of the contract, or dispute any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 7 days request the Superintending Engineer, PSCL in writing for written instruction or decision. Thereupon, the Superintending Engineer, PSCL shall give his written instructions or decision within a period of fifteen days from the receipt of the contractor's letter.

If the Superintending Engineer, PSCL fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision of the Superintending Engineer, PSCL the contractor may, within 15 days of the receipt of Superintending Engineer's decision, appeal to the Chief Engineer, PSCL who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Chief Engineer, PSCL shall give his decision within 30 days of receipt of contractor's appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice to the Chief Engineer, for reference of the same to arbitration tribunal failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through Arbitration Tribunal already established by the state government under Bihar Public Work Contract Disputes arbitral Tribunal Act 2008.

It is also a term of this contract that if the contractor does not make any reference to the arbitration Tribunal in respect of any claims in writing as aforesaid within 45 days of receiving the intimation from the Engineer-in-Charge that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and the PSCL shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Bihar Public works contract Dispute Arbitration Tribunal Act 2008 or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

All arbitration shall be held at PATNA and at no other place.

CLAUSE 26

Contractor to indemnify Govt. against Patent Rights

The contractor shall fully indemnify and deep indemnified the Governor of Bihar against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under the action brought against Government in respect of any such matter as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the Governor of Bihar if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

CLAUSE 27

Lumpsum Provisions in Tender

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge capable of measurement, The Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

CLAUSE 28

Action where no Specifications are specified

In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications, Indian Road Congress for road works and Indian Building Congress for building works or any central government agency. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers specifications. If not available then as per Department Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29

With-holding and lien in respect of sums due from contractor

i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the Government shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the Government shall be entitled to withhold and have a lien to retain to the extent of payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the Government or any contracting person through the Engineer-in-Charge of the Government or any contraction person through the Engineer-in-Charge pending finalisation of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or PSCL will be kept withheld or retained as such by the Engineer-in-Charge or PSCL till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) or by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the PSCL shall be entitled

to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- ii) PSCL shall have the right to cause an audit and technical examination of the works and the final bills of the contractor 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 any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for PSCL to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; 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 PSCL to the contractor, without any interest thereon whatsoever.

CLAUSE 29 A

Lien in respect of claims in other Contracts

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the PSCL or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or PSCL or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the PSCL or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the PSCL will be kept withheld or retained as such by the Engineer-in-Charge or the PSCL till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30

Unfiltered water supply

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor?(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.

CLAUSE 31

Return of surplus material

Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of PSCL either by issue from PSCL stocks or purchase made under orders or permits or licences issued by PSCL the contractor shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the PSCL and return, if required by the Engineer in Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer in Charge shall determine having due regard to the condition of the materials. The price allowed to the contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer in Charge shall be final and conclusive. In the event of breach of the aforesaid condition the contractor shall in addition to throwing himself open to action for contravention of the term of the licence or permit and/or for criminal breach of trust, be liable to PSCL for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

CLAUSE 32

Hire of Plant & Machinery

- i) The contractor shall arrange at his own expense all tools, plant machinery and equipment (hereinafter referred to as T & P) required for execution of the work except for the Plant & Machinery listed in Schedule 'C' and stipulated for issue to the contractor. If the contractor requires any item of T & P on hire from the T & P available will, if such item is available, hire it to the contractor at rates to be agreed upon between him and the Engineer-in-Charge. In such a case all the conditions hereunder for issue of T & P shall also be applicable to such T & P as is agreed to be issued.
- ii) Plant and Machinery when supplied on hire charges shown in Schedule 'C' shall be made over and taken back at the departmental equipment yard/shed shown in Schedule 'C' and the contractor shall bear the cost of carriage from the place of issue to the site of work and back. The contractor shall be responsible to return the plant and machinery in the condition in which it was handed over to him, and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation and otherwise during transit including damage to or loss of plant and for all losses due to his failure to return the same soon after the completion of the work for which it was issued. The Executive Engineer shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor.
- iii) The plant and machinery as stipulated above will be issued as and when available and if required by the contractor. The contractor shall arrange his programme of work according to the availability of the plant and machinery and no claim, whatsoever, will be entertained from him for any delay in supply by the Department.
- iv) The hire charges shall be recovered at the prescribed rates from and inclusive of the date the plant and machinery made over up to and inclusive of the date of the return in good order even though the same may not have been working for any cause except major breakdown due to no fault of the contractor or faulty use requiring more than three working days continuously (excluding intervening holidays and Sundays) for bringing the plant in order. The contractor shall immediately intimate in writing to the Engineer in Charge when any plant or machinery gets out of order requiring major repairs as aforesaid. The Engineer in Charge shall record the date and time of receipt of such intimation in the log sheet of the plant or machinery. Based on this if the breakdown occurs before lunch period or major breakdown will be computed considering half a day's breakdown on the day of complaint. If the breakdown occurs in the post lunch period of major breakdown will be computed starting from the next working day. In case of any dispute under this clause the decision of the Superintending Engineer shall be final and binding on the contractor.
- v) The hire charges shown above are for each day of 8 hours (inclusive of the one-hour lunch break) or part thereof.
- vi) Hire charges will include service of operating staff as required and also supply of lubricating oil and stores for cleaning purposes. Power fuel of approved type, firewood, kerosene oil etc. for running the plant and machinery and also the full time chowkidar for guarding the plant and machinery against any loss or damage shall be arranged by the contractor who shall be fully responsible for the safeguard and security of plant and machinery. The contractor shall on or before the supply of plant and machinery sign an agreement indemnifying PSCL against any loss or damage caused to the plant and machinery either during transit or at site of work.
- vii) Ordinarily, no plant and machinery shall work for more than 8 hours a day inclusive of one hour lunch break. In case of an urgent work however, the Engineer in Charge may, at his discretion, allow the plant and machinery to be worked for more than normal period or 8 hours a day. In that case the hourly hire charges for overtime to charge (1/8)th of the daily charges) subject to a minimum of half day's normal charges on any particular day. For working out hire charges for over time a period of half an hour and above will be charged as one hour and a period of less than half an hour will be ignored.
- viii) The contractor shall release the plant and machinery every seventh day for periodical servicing and/or wash out which may take about three to four hours or more. Hire charges for full day shall be recovered from the contractor for the day of servicing/Wash out irrespective of the period employed in servicing.
- ix) The plant and machinery once issued to the contractor shall not be returned by him on account of lack of arrangements of labour and materials, etc. on his part, the same will be returned only when they are required for major repairs or when in the opinion of the Engineer in Charge the work or a portion of work for which the same was issued is completed.
- x) Log Book for recording the hours of daily work for each of the plant and machinery supplied to the contractor will be maintained by the Department and will be countersigned by the contractor or his authorised agent daily. In case the

contractor contests the correctness of the entries and/or fails to sign the Log Book the decision of the Engineer in Charge shall be final and binding on him. Hire charges will be calculated according to the entries in the Log Book and will be binding on the contractor. Recovery on account of hire charges for road rollers shall be made for the minimum number of days worked out on the assumption that a roller can consolidate per day and maximum quantity of materials or area surfacing as noted against each in the annexed statement (see attached annexure).

xi) In the case of concrete mixers, the contractors shall arrange to get the hopper cleaned and the drum washed at the close of the work each day or each occasion.

a)	In case rollers for consolidation are employed by
the contractor himself, log book	for such rollers shall be maintained in the same manner as
is done in case of departmental rollers, maximum quantity of any item to be consolidated for each roller day shall also be same as in Annexure to Clause 34(x). For less use of rollers recovery for the less roller days shall be made at the stipulated issue rate.	

xii) The contractor shall be responsible to return the plant and machinery in the condition in which it was handed over to him and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation or otherwise or during transit including damage to or loss of parts, and for all losses due to him failure to return the same soon after the completion of the work for which it was issued. The Executive Engineer shall be the sole judge to determine the liability of the contractor and its extent in this regard and his decision shall be final and binding on the contractor.

xiii) The contractor will be exempted for levy of any hire charges for the number of days he is called upon in writing by the Engineer in Charge to suspend execution of the work provided by PSCL plant and machinery in question have, in fact remained idle with the contractor because of the suspension.

xiv) In the event of the contractor not requiring any item of plant and machinery issued by PSCL though not stipulated for issue in Schedule 'C' any time after taking delivery at the place of issue, he may return it after two days written notice or at any time without notice if he agrees to pay hire charges for two additional days without in any way affecting the right of the Engineer in-Charge to use the said plant and machinery during the said period of two days as he likes including hiring out to a third party.

CLAUSE 33

Contractors Superintendence, Supervision, Technical Staff & Employees

Employment of Technical Staff and employees

i) The contractor shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor along with bidding of the tender, intimate in writing to the Engineer-in-Charge the name, qualifications, experience, age, address and other particulars along with certificates, of the technical representative to be in charge of the work. If there is any change then the new incumbents qualifications and experience shall not be lower than specified in Schedule in I.T.B. (Annexure – 2). The Engineer-in-Charge shall within 15 days of issue of letter of acceptance intimate in writing his approval or otherwise it is deemed to be approved. Any such approval may at any time be withdrawn and in case of such withdrawal the contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting authority / Superintending Engineer shall be final and binding on the contractor in this respect. Technical staff shall be available at site within fifteen days of start of work.

If the contractor (or any partner in case of firm/company) himself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the Clause will also be applicable in such a case to contractor or his responsible agent. The principal technical representative and/or the contractor or his responsible authorised agent shall be actually available at site at least two working days every week, these days shall be determined in advance and also during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative in the site order book and in token of acceptance of measurements. There shall be no objection if the representative/agent looks after more than one work and not more than three works in the same station provided these details are disclosed to the Engineer-in-Charge and he shall be satisfied that the provisions and the purpose of the clause are fulfilled satisfactorily.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative or agent is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical representative or responsible agent and if such appointed persons are not effectively present or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as a suitable agent is appointed and the contractor shall submit a certificate of employment of the technical representative/responsible agent along with every on account bill/fixed bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- ii) The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

Levy/Taxes payable by Contractor

The Engineer in Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer in Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer in Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 34

- i) Sales Tax or any other tax on materials in respect of this contract shall be payable by the contractor according to law in effect.
- ii) The contractor shall deposit royalty and obtain necessary permit for supply of the red earth, moorum, sand chips bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the hike becomes payable to the Government of India and does not at any time become payable by the contractor to the State Government/ Local authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from the dues of the contractor.

CLAUSE 35

Conditions for reimbursement of levy/taxes if levied after receipt of tenders

- i) All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment) Act. 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Chief Engineer (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorised representative of the Government and/or the Engineer-in-Charge and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.
- iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 36

Imprisonment of Contractor

If the contractor is imprisoned, becomes insolvent compound with his creditors, has a receiving order made against him or carries on business under a receiver for the benefit of the creditors or any of them, or being a partnership firm becomes dissolved, or being a company or corporations goes into liquidation or commences to

be wound up not being a voluntary winding up for the purpose only of amalgamation or reconstitution the department shall be at liberty.

- (a) To give such liquidator, receiver, or other person in whom the contract may become vested, the option of carrying out the contract or a portion thereof to be determined by PSCL, subject to his providing an appropriate guarantee for the performance of such contract or.
- (b) To terminate the contract, forthwith by notice in writing to the contractor, the liquidator, the receiver or person in whom the contract may become vested and take further action as provided in the relevant clauses of the contract.

CLAUSE 37

Termination of Contract on death of contractor

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the Divisional Officer on behalf of the Governor of Bihar shall have the option of terminating the contract without compensation to the contractor after the affidavit of his/ their legal heir/heirs that they are not going to be in this profession in future.

CLAUSE 38

If relation working in PWD then the contractor not allowed to tender

The contractor shall not be permitted to tender for works in the P.W.D. Division (responsible for award and execution of contracts) in which his near relative is posted as Accountant or as an officer in any capacity between the grades of the Superintending Engineer and Assistant Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the P.W.D. or in PSCL. Any breach of this condition by the contractors of PSCL shall lead to blacklisting. If the contractor is registered in any other department, he shall be debarred from tendering in PSCL for any breach of this condition.

NOTE : By the term "near relatives" is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in law.

CLAUSE 39

No-Gazetted-Engineer to work as Contractor within two years of retirement

No engineer of gazetted rank of other gazetted officer employed in engineering of administrative duties in an engineering department of the Government of Bihar shall work as a contractor or employee of a contractor for a period of two years after his retirement from government service without the previous permission of State Government in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained said permission prior to engagement in the contractor's service, as the case may be.

CLAUSE 40

Return of material and recovery for excess material issued

i) After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance (see Clause 10) theoretical quantity of materials issued by the PSCL for use in the work shall be calculated on the basis and method given hereunder.

a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required different items of work as shown in the Schedule of Rates mentioned in-Schedule 'F'. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer in Charge.

b) Theoretical quantity of steel reinforcement of structural steel sections shall be taken as the quantity required as per design or as authorised by Engineer in Charge, including authorized lappages, chairs etc., plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and category wise separately.

c) For any other material as per actual requirements.

ii) Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule 'F'. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorised variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer in Charge within fifteen

days of the issue of written notice by the Engineer in Charge to this effect shall be recovered at the rates specified in Schedule 'F' without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer in Charge in regard to theoretical quantities of materials, which should have been actually used as per the Annexure of the standard schedule of rates and recovery at rates specified in Schedule 'F', shall be final & binding on the contractor

For non scheduled items, the decision of the Superintending Engineer regarding theoretical quantities of materials, which should have been actually used, shall be final and binding on the contractor.

iii) The said action under this clause is without prejudice to the right of PSCL to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE 41

Release of Security deposit

On completion of the whole of the work, half of the total amount of security shall be repaid to the contractor after six months of completion. However, the balance half of the total amount of security will be returned after completion of defect liability period and after the Engineer has certified that all defects notified by him to the contractor before the end of this period have been corrected and also after recovery of any dues.

CLAUSE 42

Responsibility of Technical Staff and employees

Technical officers / staff deployed by the Contractor at any construction site will also be responsible for inferior quality / poor performance of any work and his name will be circulated to all works Sites of PSCL to debar from any other site, if his name is being proposed by other contractor.

CLAUSE 43

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 other than the excepted risks are the responsibility of the Contractor.

CLAUSE 44

Contractor's Risks Insurance

The Contractor shall provide, in the joint names of PSCL and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks :

- (a) loss of or damage to the Works, Plant and Materials ;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

If the Contractor does not provide any of the policies and certificates required, PSCL may effect the insurance which the Contractor should have provided and recover the premiums PSCL has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

Alteration to the terms of an insurance shall not be made without the approval of the Engineer.

Both parties shall comply with any conditions of the insurance policies.

CLAUSE 45

Cash Flow Estimate to be Submitted

The Contractor shall, within the time stated in special Conditions of contract after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate, in quarterly periods, of all payments to which the Contractor will be entitled under the Contract and the Contractor shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer. in charge

CLAUSE 46

Safety, Security and Protection of the Environment

The Contractor shall, throughout the execution and completion of the Works and the remedying of any defects therein :

- (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by PSCL) in an orderly state appropriate to the avoidance of danger to such persons,
- (b) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watchmen and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
- (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

CLAUSE 47

Cost of Samples All samples shall be supplied by the Contractor at his own cost if the supply thereof is clearly intended by or provided for in the Contract.

CLAUSE 48

Cost of Tests The cost of making any test shall be borne by the Contractor if such test is :

- (a) clearly intended by or provided for in the Contract, or
- (b) particularized in the Contract (in case only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfill) in sufficient detail to enable the Contractor to price or allow for the same in his Tender.

CLAUSE 49

Cost of Tests not Provided for If any test required by the Engineer which is :

- (a) not so intended by or provided for,
- (b) (in the cases above mentioned) not so particularized, or
- (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested,

shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Contractor, but in any other case department will bear the cost.

CLAUSE 50

Commencement of Works The contractor shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the Appendix to Tender after the date of the Letter of Acceptance. Thereafter, the Contractor shall proceed with the Works with due expedition and without delay.

CLAUSE 51

Substantial completion of parts If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Test on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the Works and, upon the issue of such Certificate, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.

CLAUSE 52

Force Majeure

Force Majeure

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of acts of GOD such as Unprecedented flood, Volcanic eruption, Earthquake or other convulsion of nature and other acts such as general/ partial strikes by a section of government employees/ invasion, the act of foreign countries/ hostilities or war like operations before or after declaration of war, rebellion/ military

or usurped power which prevent performance of the contract and which could not have been foreseen or avoided by a prudent person.

CLAUSE 53

Recovery

Force Majeure

Any amount found recoverable from the contractor shall be recovered as public demand under the Bihar Public Demand Act. without prejudice to any other mode of recovery.

SECTION IV FORMATS FOR BID SUBMISSION

ANNEXURE 1

COVERING LETTER

{In Letterhead of the Applicant (in case of sole applicant) }

Dated:

To,

**The Managing Director,
4th Floor Patna Smart City Building
Patna Smart City**

Sub: “Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring(Nagar Netra).”

Dear Sir:

1. We are submitting this Bid (Proposal) on our own,:

Sl.	Names of Members	Address
1		

We understand the obligations of the Authorize to implement the Project.

2. Having visited the site and examined the RFP Documents, for the execution of the Contract Agreement for the captioned Project, we the undersigned offer to finance, market, operate & maintain the whole of the said ‘Project’ for the Authorization Period in conformity with the RFP.
3. This Bid and your written acceptance of it shall form part of the Project Agreementsto be signed between the Authorize and PSCL. If a Bidder is nominated as Preferred Bidder, we understand that it is on the basis of the technical, financial & organizational capabilities and experience of the Bidder taken together. We understand that the basis for our qualification will be the complete Bid documents submitted along with this letter, and that any circumstance affecting our continued eligibility as per RFP, or any circumstance which would lead or have lead to our disqualification, shall result in our disqualification under this Bidding process.
4. We agree that
- (a) if we fail to meet the technical specifications and/ or the Performance Standards according to the conditions/ stipulations of the RFP/ Contract Agreement,
OR
- (b) If we fail to offer provide required facilities to PSCL or its Authorized Representative for carrying out the inspection of works, operations and performance,

Then PSCL or its representative shall be at liberty to take action in accordance with the RFP/ Contract Agreement.

- We undertake, if our Bid is accepted, we will complete the Project, commence operations, and maintain the project facilities as per the RFP/ Contract Agreement.
5. We agree to abide by this Bid for a period of **120 days** from this bid submission Due Date fixed and it shall remain binding upon us and may be accepted at any time before the expiry of that period.
 6. In the event of our Bid being accepted, we agree to enter into a formal Contract Agreement with PSCL as per the RFP.
 7. If our Bid is accepted, we agree for the following:
 - (a) To furnish an irrevocable Demand Draft / Bank Guarantee towards performance security within 15 days of LoI and as pre-condition for signing of Contract Agreement as per the RFP.
 8. We agree that if we fail to fulfill any of the conditions mentioned above, PSCL shall have the right to forfeit the Bid Security being furnished by us along with this Bid.
 9. Notwithstanding any qualifications or conditions, whether implied or otherwise, contained in our Proposal, we hereby represent and confirm that our Proposal is unqualified and unconditional in all respects and we agree to the terms as under
 - Minimum Development Obligations as indicated in the RFP;
 - The Technical specifications, the performance standards etc as stipulated in the RFP;
 - Any other regulation as applicable.
 10. We understand that PSCL is not bound to accept any or all Bids it may receive.
 11. We declare that we have disclosed all material information, facts and circumstances, which would be relevant to and have a bearing on the evaluation of our Bid and selection as Authorize.
 12. We do, also, certify that all the statements made and/or any information provided in our proposal are true and correct and complete in all aspects.
 13. We declare that in the event that PSCL discovers anything contrary to our above declarations, it is empowered to disqualify us and our Bid from further participation in the Bid evaluation process and forfeit our Bid Security.

Dated this _____ day of _____ 2016

(Signature)

(Name of the person)

(In the capacity of)

Company Seal

(Name of firm)

Duly authorized to sign Proposal for and on behalf of (Fill in block capitals)

ANNEXURE 2

TECHNICAL BID CHECKLIST SHEET				
Name of Authority			PATNA SMART CITY LIMITED	
NIT No				
Dated			-.....-2026	
Name of Work			Selection of Agency for “Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring (Nagar Netra)” under Smart City Mission (SCM) in Patna	
Sl No.	Details		Relevant Page No. (To be filled by Bidder)	To be Filled in by Bidder (yes/No)
1	Name of the Bidder			
2	Address of the Bidder			
3	Type of Firm/Company/Organization (PSUs/Partnership/LLP/Private/Public/Govt.)			
4	Cost of Bidding Document (Tender Fee)	Tender Fee Rs 11,800 (Non Refundable) in the form of Demand Draft in favour of "Managing Director, Patna Smart City Ltd", payable at Patna.		
5	Earnest Money	As per NIT		
6	Certificate of Registration in proof that the bidder must be a Proprietorship concern/Partnership Firm registered under Partnership Act 1932/ LLP registered under LLP Act 2008/Company or corporation registered under Indian Companies Act 2013/ PSU's central & state , or a society registered under Societies Act 1860, capable of delivering work outlined in scope, as mentioned in the RFP.			
7	Audited statement Certificate from the Chartered Accountant/	Financial Year 2020-21		

	statutory auditor/ Company Secretary clearly specifying the annual turnover from the work.	Financial Year 2021-22		
		Financial Year 2022-23		
		Financial Year 2023-24		
		Financial Year 2024-25		
8	Similar Work experience (Must be signed with govt. Executive engineer or equivalent)			
9	Copy of PAN card attached			
10	GSTIN Number			
11	Copy of Work Order / Completion Certificate			
12	Technical Bid Covering Letter (As per Annexure - 1)			
13	Details of Bidder (As per Annexure - 3)			
14	Power of attorney for signing the BID (As per Annexure 4)			
15	Declaration of Non-Blacklisting/ debarment (As per Annexure – 9)			
16	Anti-Collusion Certificate (As per Annexure 5)			
17	Technical bid checklist (As per Annexure – 2)			
18	Project Undertaking (As per Annexure – 6)			
19	Technical experience Detail of O&M experience (As per Annexure – 7)			
20	Financial Capacity of the bidder (As per Annexure – 8)			
21	Price Bid format			
22	All other Documents, Forms, Formats and compliances as per the tender document / RFP.			

.....
...

**PATNA SMART CITY
LIMITED**

ANNEXURE- 3

DETAILS OF BIDDER

[On the letter head of the Bidding Company]

1.
 - (a) Name:
 - (b) Country of incorporation:
 - (c) Address of the corporate headquarters and its branch office(s), if any, in India:
 - (d) Date of incorporation and/or commencement of business (Please provide a true copy of the incorporation certificate):
2. Brief description of the Bidder including details of its main lines of business and proposed role and responsibilities in [this/these Project(s)]:
3. Details of individual(s) who will serve as the point of contact/communication
 - (a) Name:
 - (b) Designation:
 - (c) Company:
 - (d) Address:
 - (e) Telephone number:
 - (f) E-Mail Address:
 - (g) Fax number:
4. Particulars of the authorized signatory of the Bidder:
 - (a) Name:
 - (b) Designation:
 - (c) Address:
 - (d) Phone number:
 - (e) Fax number:
5. In case of a Consortium: Not Applicable
 - (a) The information above (1-4) should be provided for all the Members.

POWER OF ATTORNEY FOR SIGNING OF BID

(To be executed on stamp paper of appropriate value)

Know all persons by these presents, [I (name of the company) incorporated under the laws of India and having its registered office at [] **“Company”**] do hereby irrevocably constitute, nominate, appoint and authorize Mr/Ms (name), son/daughter/wife of and

presently residing at, who is presently employed with us and holding the position of, as our true and lawful attorney (hereinafter referred

to as the “Attorney”) to do in our name and on our behalf, all such acts, deeds, matters and things as are necessary or required in connection with or incidental to submission of our Bid for Setup **“Nagar Netra”** pursuant to the RFP dated [] (“RFP”) issued by the PSCL (the “PSCL”) and for our selection as Successful Bidder including but not limited to signing and submission of all Bids and other documents and writings, participate in pre-bid conferences and other conferences and providing information/responses to PSCL, representing us in all matters before PSCL, signing and execution of all contracts including the Contract Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with PSCL in all matters in connection with or relating to or arising out of our Bid for the said Project and/or upon award thereof to us and/or till the entering into of the Contract Agreement with the PSCL.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deed, matters and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us. Capitalized terms not defined herein shall have the meaning assigned to them under the RFP.

IN WITNESS WHEREOF,, THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF

....., 2.....

For

(Signature, name, designation and address)

Witnesses:

(Name, Title and Address of the Attorney)

1.

2.

Accepted

(Notarized)

.....
(Signature)

ANNEXURE 5

ANTI-COLLUSION CERTIFICATE

(To be executed on stamp paper of 1000 Rs.)

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India

namely “Prevention of Corruption Act, 1988” and its subsequent amendments thereof.

We hereby certify and confirm that in the preparation and submission of our Proposal, we have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.

We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or operator in connection with the instant Proposal.

Dated thisDay of, 20__

.....

(Name of the Bidder)

.....

(Signature of the Bidder / Authorized Person)

.....

(Name of the Authorized Person)

PROJECT UNDERTAKING

(On the Letter Head of the Bidder)

Date ----

To,

**The Managing Director,
4th Floor Patna Smart City Building
Patna Smart City**

Sub: “Selection of Agency for the Supply, Installation, Testing & Commissioning of Electric Vehicles with AI based solution for Civic-Services Surveillance & Monitoring (Nagar Netra)”

We have read and understood the Request for Proposal (RFP) document in respect of the captioned project provided to us by PSCL.

We hereby agree and undertake as under:

Notwithstanding any qualifications of conditions, whether implied or otherwise, contained in our Proposal, we hereby represent and confirm that our Proposal is unqualified and unconditional in all respects, and we agree to the terms of the proposed Agreement, a draft of which also forms a part of the RFP document provided to us.

We are also not barred by PSCL, Government of India, Government of Bihar, or any other state government or any of their agencies, departments from participating in tenders.

Dated this Day of 202...

Name of the Bidder

Signature of the Authorized Person Name of the Authorized Person

ANNEXURE 7

TECHNICAL EXPERIENCE DETAILS OF OPERATIONS & MAINTENANCE EXPERIENCE

[On the letter head of the Bidding Company]

Item	Details
Number of Years in business of O&M	
Incorporation Date	
Nature of Projects handled in the last Five years (Project)	
Costs of Project being handled in last 03 years (Project)	
Client details	
Location	
Period (year)	

Instructions:

A separate sheet should be filled out for each Project.

Particulars such as name, address, and contact details of owner/client should be provided.

Agreement copies or Certificates from the client must be furnished.

All the documentary evidence submitted by the Bidder(s) shall be to the satisfaction of PSCL. The decision of PSCL in accepting or rejecting such documentary evidence as submitted by the Bidder(s) is final and binding on the Bidder(s).

FINANCIAL CAPACITY OF THE BIDDER

Applicant type	Turnover (in INR)					Net worth (in INR)
	2021-22	2022-23	2023-24	2024-2025	2025-2026	
Bidding Company						

A Bidder consisting of a single entity should fill in details.

The Bidder should provide details of its own Financial Capacity

(The Bidder is to attach audited annual reports, balancesheets, profit & loss account, and audit reports certified by CA)

ANNEXURE-9

CERTIFICATE

**DECLARATION REGARDING BLACKLISTING/ NON-
BLACKLISTING/DEBARMENT**

FROM TAKING PART IN GOVT. TENDER BY PSCL/GOVT. DEPT

(To be executed on Rs. 1000/- stamp paper & attested by Public Notary/Executive Magistrate by the bidder)

I/ We Proprietor / Partner (s) / Director (s) of M/s.....hereby declare that the firm/company namely M/s..... has not been blacklisted or debarred in the past by PSCL or any other Government organization from taking part in Government tenders.

Or

I/ We Proprietor / Partner (s) / Director (s) of M/s..... hereby declare that the firm/company namely M/s..... was blacklisted or debarred by PSCL, or any other Government Department from taking part in Government tenders for a period..... of years w.e.f..... The period is over on..... and now the firm/company is entitled to take part in Government tenders. In case the above information found false. I/We are fully aware that the tender/ contract will be rejected/cancelled by MANAGING DIRECTOR, PSCL, Patna and EMD/SD shall be forfeited. In addition to the above MANAGING DIRECTOR, PSCL Patna will not be responsible to pay the bills for any completed/ partially completed work.

Signature.....

Name.....

Capacity in which as signed:.....

Name & address of the firm:.....

Dated:
of Bidder with seal.

Signature

ANNEXURE- 10

Performance Bank Guarantee

Ref:

Date

.....

Bank Guarantee No.

<Name>

<Designation>

<Address> <Phone Nos.> <Fax Nos.>

<Email Id>

Whereas, <<name of the supplier and address>> (hereinafter called “Contractor”) has undertaken, in pursuance of contract no. <insert Contract No.> dated.<Date> to provide Implementation for <<Name of the assignment>> to Patna Smart City Limited (hereinafter called “the PSCL”)

And whereas it has been stipulated by in the said contract that the bidder shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, Name of Bank> a banking company incorporated and having its head/registered office at

<Address of Registered Office> and having one of its offices at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the contractor, up to a total of Rs. <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value> (Rupees<Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

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

Date.....

Place.....

Signature.....

Witness.....

Printed Name.....
seal)

(Bank’s common

ANNEXURE 11

Unconditional Bank Guarantee for Earnest Money Deposit

To,

<Name>
<Designation>
<Address>
<Phone Nos.>
<Fax Nos.>
<Email Id>

Whereas <<Name of Bidder>> (hereinafter called Contractor) has submitted the bid for Submission of RFP <<RFP Number>> dated <Date> for <Name of Assignment> (hereinafter called "the Bid") to <PSCL>.

Know all Men by these presents that we <<....>> having our office at <Address> (hereinafter called "the Bank") are bound unto the << Patna Smart City Limited >> (hereinafter called "the PSCL") in the sum of Rs. <<Amount in Figures>> (Rupees <<Amount in words>> only) for which payment well and truly to be made to the said PSCL, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <Date>.

The conditions of this obligation are:

1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the PSCL during the period of validity of bid
 - a) Withdraws his participation from the bid during the period of validity of bid document; or
 - b) Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the PSCL up to the above amount upon receipt of its first written demand, without the PSCL having to substantiate its demand, provided that in its demand the PSCL will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <insert date> and including <extra time over and above mandated in the RFP> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

(Authorized Signatory of the Bank)

Seal:

Date:

Witness: