

NIT NO.:/ CS/MAR/2017/464



LIMITED TENDER DOCUMENT

NAME OF WORK: PROVIDING SECURITY SERVICES & INTEGRATED SECURITY SURVILLANCE SYSTEM IN MDU CAMPUS

Last date submission of the filled Tender document: 27.03.2017, up to 5.00 pm.
(The Tender document is to be submitted duly signed in blue/black ink on each page and stamped with official seal on each page)

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Maharshi Dayanand University, Rohtak

[Established in Act No. 25 of 1975 of the Haryana Legislative Assembly in 1976]

NAAC Accredited 'A' Grade

No.CS/MAR/2017/464

Dated 15.03.2017

:
Security Controller

Phone: 9996344884

E-mail: securitychief.tarun@mdurohtak.ac.in

STANDARD BIDDING DOCUMENT FOR PROVIDING SECURITY SERVICES& INTEGRATED SURVILLANCE SYSTEM ON BEHALF OF REGISTRAR, MAHARSHI DAYANAND UNIVERSITY, ROHTAK Limited to Only companies who has Qualified in the Expression of Interest floated earlier by MDU Rohtak.

PART1: COMPLETE BIDDING DOCUMENT

Name of work: Providing Security & Integrated Surveillance System& Services in MDU Campus Rohtak.

PRESS NOTICE

M. D. UNIVERSITY, ROHTAK	
Name of work	Providing Security & Integrated Surveillance System& Services in MDU Campus Rohtak
Contract Amount	13 Crores
Earnest Money	26 Lakh
<p>(1) The tenders will be received only through E-tendering for further details visit website https://haryanaeprocurement.gov.in. (2) Cost of Bid document is Rs. 15,000(To be Paid Online) (4) The Earnest Money of the tender is 26 Lakh for providing Security Services to be Online.</p>	

REGISTRAR

The Bidders can download the tender documents from the Portal:

<https://haryanaeprocurement.gov.in>.

- 1) Earnest Money and Document Fee Deposit have to be deposited through Online Mode Only.
- 2) Agency shall have to pay the e- service fees of Rs.1000/- through Online mode
- 3) However, the details of the EMD, Tender document Fee & E-Service Fee are required to be filled/provided scan copies at the time of online Bid Preparation Stage the Bidders are required to keep the EMD, Tender document fee & E- Service fee details ready beforehand. The Agencies can submit their tender documents as per the date mentioned below:

KEY DATES

Sr. No.	M.D.U. Rohtak Stage	Agency Stage	Start Date & Time	End Date & Time
1		Tender Document Download and Bid Preparation & Submission	15.03.2017	27.03.2017
2		Submission of Tender Fees and online EMD Fees	15.03.2017	24.03.2017
3		Manual Submission of Specification of Item, Tender Document Fee, EMD, E-Service Fee etc. in Security Controller Office	15.03.2017	27.03.2017
4	Technical Opening/ Technical Evaluation/ Opening of Financial Bid		27.03.2017	Financial Bid date will be decided and will be informed

Important Note:-

- 1) The bidders shall have to complete Bid Preparation & Submission" stage on scheduled date & time as mentioned above. If any bidder failed to complete his/her aforesaid stage in the stipulated online time schedule for this stage, his/her bid status will be considered as "bids not submitted".
- 2) Bidder must confirm & check his/her bid status after completion of his/her all activities for e-bidding.

DETAIL NOTICE INVITING TENDER

e-Tender is invited for providing of below mentioned items in single stage two cover system i.e. Request for Technical Bid (online Bid under PQQ/ Technical Envelope) and Request for Financial Bid (comprising of price bid Proposal under online available Commercial Envelope).

Sr. No	Name of work	Appx. Cost (Rs. In lacs)	EMD to be deposited by Bidder	Tender Document Fee & eService Fee (Rs.)	Start Date & Time of Bid Preparation & Submission	Expiry Date & Time of Bid of EMD Submission	Expiry Date & Time of Bid Preparation & Submission
1.	Providing Security & Integrated Surveillance System& Services in MDU Campus Rohtak in MDU, Rohtak.	Rs. 13.00 Crores	26 Lakh	Rs. 15000/-for Tender Document fee & Rs. 1000/- for e-Service fee	15.03.2017	24.03.2017	27.03.2017

1. Detailed notice inviting tender/estimate drawing can be seen in the office of the undersigned during office hours.
2. Bidding documents available on website
<http://mdurohtak.haryanaeprocurement.gov.in>
3. Newly enlisted Agency/societies/suppliers/manufactures should bring with them proof of their enlistment in appropriate class.
4. The bidders would submit bid through e-tendering only on the website i.e.
<http://haryanaeprocurement.gov.in>

Under this process, the Pre-qualification/ Technical online bid Application as well as online Price Bid shall be invited at single stage under two covers i.e. PQQ/Technical & Commercial Envelope. Eligibility and qualification of the Applicant will be first examined based on the details submitted online under first cover (PQQ or Technical) with respect to eligibility and qualification criteria prescribed in this Tender document. The Price Bid under the second cover shall be opened for only those Applicants whose PQQ/ Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.

1. The payment for Tender Document Fee and e-Service Fee shall be made by eligible bidders online directly through Debit Cards & Internet Banking Accounts and the payment for EMD can be made online directly through RTGS/NEFT or OTC Please refer to 'Online Payment Guideline' available at

the Single e-Procurement portal of GoH(Govt. of Haryana) and also mentioned under the Tender Document.

2. Intending bidders will be mandatorily required to online sign-up (create user account) on the website <https://haryanaeprocurement.gov.in> to be eligible to participate in the e-Tender. He/She will be required to make online payment of 26 Lacs towards EMD fee in due course of time. The intended bidder fails to pay EMD fee under the stipulated time frame shall not be allowed to submit his / her bids for the respective event / Tenders.
3. The interested bidders must remit the funds at least T+1 working day (Transaction day + One working Day) in advance i.e. on or before **Error! Reference source not found.** and make payment via RTGS /NEFT or OTC to the beneficiary account numbers specified under the online generated challan. The intended bidder / Agency thereafter will be able to successfully verify their payment online, and submit their bids on or before the expiry date & time of the respective events/Tenders at <https://haryanaeprocurement.gov.in>.

The interested bidders shall have to pay mandatorily e-Service fee (under document fee – Nonrefundable) of Rs.1000/- (Rupee One Thousand Only) online by using the service of secure electronic gateway. The secure electronic payments gateway is an online interface between bidders & online payment authorization networks.

The Payment for document fee/ e-Service fee can be made by eligible bidders online directly through Debit Cards & Internet Banking.

The Bidders can submit their tender documents (Online) as per the dates mentioned at Page no 3 of Document: -

Important Note:

1. The Applicants/bidders have to complete 'Application / Bid Preparation & Submission' stage on scheduled time as mentioned above. If any Applicant / bidder failed to complete his / her aforesaid stage in the stipulated online time schedule for this stage, his / her Application/bid status will be considered as 'Applications / bids not submitted'.
2. Applicant/Bidder must confirm & check his/her Application/bid status after completion of his/her all activities for e-bidding.
3. Applicant/Bidder can rework on his/her bids even after completion of 'Application/Bid Preparation & submission stage' (Application/Bidder Stage), subject to the condition that the rework must take place during the stipulated time frame of the Applicant/Bidder Stage.
4. In the first instance, the online payment details of tender document fee + e-Service and EMD & PQQ/Technical Envelope shall be opened. Henceforth financial bid quoted against each of the item by the shortlisted bidder/ Agency wherever required shall be opened online in the presence of such bidders/ Agency who either themselves or through their representatives choose to be present. The bidder can submit online their bids as per the dates mentioned in the schedule/Key Dates above.

The bids shall be submitted online:

Commercial Bid

The bidders shall quote the prices in price bid format under Commercial Bid.

CONDITIONS: -

1. DNIT & prequalification criteria can be seen on any working day during office hours in office of the undersigned.
2. Conditional tenders will not be entertained & are liable to be rejected.
3. In case the day of opening of tenders happens to be holiday, the tenders will be opened on the next working day.
4. The undersigned reserve the right to reject any tender or all the tenders without assigning any reasons.
5. The tender without earnest money/bid security will not be opened.
6. The Jurisdiction of court will be at **Rohtak** for all disciplinary if any.
7. The tender of the bidder who does not satisfy the qualification criteria in the bid documents are liable to be rejected summarily without assigning any reason and no claim whatsoever on this account will be considered.
8. The bid for the work shall remain open for acceptance during the bid validity period to be reckoned from the last date of 'Manual submission of BS. If any bidder/tenders withdraws his bid/tender before the said period or makes any modifications in the terms and conditions of the bid, the earnest money shall stand forfeited. Bids shall be valid for 120 days from the date of bid closing i.e. from last date of manual submission of EMD. In case the last day to accept the tender happens to be holiday, validity to accept tender will be the next working day.

For & on behalf of Registrar, MDU, Rohtak

CONTROLLER SECURITY



INSTRUCTIONS TO BIDDER ON ELECTRONIC TENDERING SYSTEM

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

REGISTRATION OF BIDDERS ON E-PROCUREMENT PORTAL: -

All the bidders intending to participate in the tenders process online are required to get registered on the centralized e - Procurement Portal i.e. <https://haryanaeprocurement.gov.in>. Please visit the website for more details.

OBTAINING A DIGITAL CERTIFICATE:

- 1.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.
- 1.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details, please visit the website – <https://haryanaeprocurement.gov.in>.
- 1.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-Certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from:

M/s Nextenders (India) Pvt. Ltd.
O/o. DS&D Haryana,
SCO – 09, IInd Floor,
Sector – 16,
Panchkula – 134108
E-mail: chandigarh@nextenders.com
Help Desk: 1800-180-2097 (Toll Free Number)

- 1.4 The bidder must ensure that he/she comply by the online available important guidelines at the portal <https://haryanaeprocurement.gov.in> for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.
- 1.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised **to keep a backup of the certificate** and also keep the copies at safe place under proper security (for its use in case of emergencies).

- 1.6 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate /power of attorney / lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000.
- 1.7 The digital signature of this authorized user will be binding on the firm.
- 1.8 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.
- 1.9 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

OPENING OF AN ELECTRONIC PAYMENT ACCOUNT:

For purchasing the tender documents online, bidders are required to pay the tender documents fees online using the electronic payments gateway service shall be integrated with the system very soon till then it will be submitted manually. For online payments guidelines, please refer to the Home page of the e-tendering Portal <https://haryanaeprocurement.gov.in>.

Pre-requisites for online *bidding*:

In order to operate on the electronic tender management system, a user's machine is required to be set up. A help file on system setup/Pre-requisite can be obtained from Nextenders (India) Pvt. Ltd. or downloaded from the home page of the website - <https://haryanaeprocurement.gov.in>. The link for downloading required java applet & DC setup are also available on the Home page of the e-tendering Portal.

ONLINE VIEWING OF DETAILED NOTICE INVITING TENDERS:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal eProcurement system on the Home Page at <https://haryanaeprocurement.gov.in>.

DOWNLOAD OF TENDER DOCUMENTS:

The tender documents can be downloaded free of cost from the eProcurement portal <https://haryanaeprocurement.gov.in>

KEY DATES:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

ONLINE PAYMENT OF TENDER DOCUMENT FEE, ESERVICE FEE , EMD FEES & BID PREPARATION & SUBMISSION (PQQ/ TECHNICAL& COMMERCIAL/PRICE BID):

i) **Online Payment of Tender Document Fee + e-Service fee:**

The online payment for Tender document fee, eService Fee & EMD can be done using the secure electronic

payment gateway. The Payment for Tender Document Fee and eService Fee shall be made by bidders/ Vendors online directly through Debit Cards & Internet Banking Accounts and the Payment for EMD shall be made online directly through RTGS / NEFT & OTC. The secure electronic payments gateway is an online interface between Agency and Debit card / online payment authorization networks.

ii) **PREPARATION & SUBMISSION of online APPLICATIONS/BIDS:**

Detailed Tender documents may be downloaded from e-procurement website (<https://haryanaeprocurement.gov.in>) and tender mandatorily be submitted online.

Scan copy of Documents to be submitted/uploaded for Prequalification or Technical bid under online PQQ/ Technical Envelope: The required documents (refer to DNIT) shall be prepared and scanned in different file formats (in PDF /JPEG/MS WORD format such that file size is not exceed more than 10 MB) and uploaded during the on-line submission of PQQ or Technical Envelope.

FINANCIAL or Price Bid PROPOSAL shall be submitted mandatorily online under Commercial Envelope and original not to be submitted manually)

ASSISTANCE TO THE BIDDERS: -

In case of any query regarding process of e-tenders and for undertaking training purpose, the intended bidder can also avail the following and can contact service provider as per below:

Office Timings of Help-desk support for Single e Procurement Portal of Government of Haryana- Technical Support Assistance will be available over telephone Monday to Friday (09:00 am. to 5:30 pm) & Training workshop will be conducted on every 1st, 2nd Friday (from 3:30 pm upto 6:00 pm) and 4th Saturday (from 11:30 am upto 3:00 pm) of each month.

All queries would require to be registered at our official email-chandigarh@nextenders.com for on- time support (Only those queries which are sent through email along with appropriate screenshots or error description will be considered as registered with the Help-desk)

IMPORTANT NOTE: -

- (a) Any intending bidder can contact the helpdesk on or before prior to 4 hours of the scheduled closing date & time of respective e-Auction/ Tender event.
- (b) For queries pertaining to e-Payment of EMD, please contact the helpdesk at least 2 business days prior to the closing date & time of e-Auction/Tender event.
- (c) Help-desk support will remain closed during lunch break i.e. from 1:30 PM up to 2:15 PM on each working day.

SCHEDULE FOR TRAINING:

Training workshop will be held on 1st, 2nd Friday (from 3:30 pm upto 6:00 pm) and 4th Saturday (from 11: 30 am upto 3:00 pm) of each month at following addresses:		
Nextenders (India) Pvt. Ltd Municipal Corporation Faridabad, Near B.K. Chowk, Opp. B.K.Hospital, NIT, Faridabad Contact no.	Nextenders (India) Pvt. Ltd. Public Health Division No. 2 Hisar, Model Town Opp. N.D Gupta Hospital, Hisar	Nextenders (India) Pvt. Ltd., Nirman Sadan (PWD B&R), Plot No.- 01, Basement, Dakshin Marg, Sec- 33 A, Chandigarh -160020 For Support- 1800-180-2097,

Haryana eProcurement Help Desk Office will remain closed on Saturday (except 4th Saturday), Sunday and National Holidays

NOTE:- Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal <https://haryanaeprocurement.gov.in>.

For help manual please refer to the 'Home Page' of the e-Procurement website at <https://haryanaeprocurement.gov.in>, and click on the available link 'How to...?' to download the file.

GUIDELINE FOR ONLINE PAYMENTS IN E-TENDERING

Post registration, bidder shall proceed for bidding by using both his digital certificates (one each for encryption and signing). Bidder shall proceed to select the tender he is interested in. On the respective Department's page in the e-tendering portal, the Bidder would have following options to make payment for tender document & EMD:

- i. Debit Card
- ii. Net Banking
- iii. RTGS/NEFT

OPERATIVE PROCEDURES FOR BIDDER PAYMENTS

A) DEBIT CARD

The procedure for paying through Debit Card will be as follows.

- i. Bidder selects Debit Card option in e-Procurement portal.
- ii. The e-Procurement portal displays the amount and the card charges to be paid by bidder. The portal also displays the total amount to be paid by the bidder.
- iii. Bidder clicks on "Continue" button
- iv. The e-Procurement portal takes the bidder to Debit Card payment gateway screen.
- v. Bidder enters card credentials and confirms payment
- vi. The gateway verifies the credentials and confirms with "successful" or "failure" message, which is confirmed back to eProcurement portal.
- vii. The page is automatically routed back to e-Procurement portal
- viii. The status of the payment is displayed as "successful" in e-Procurement portal. The e-Procurement portal also generates a receipt for all successful transactions. The bidder can take a print out of the same,
- ix. The e-Procurement portal allows Bidder to process another payment attempt in case payments are not successful for previous attempt.

B) NET BANKING

The procedure for paying through Net Banking will be as follows.

- i. Bidder selects Net Banking option in e-Procurement portal.
- ii. The e-Procurement portal displays the amount to be paid by bidder.
- iii. Bidder clicks on "Continue" button
- iv. The e-Procurement portal takes the bidder to Net Banking payment gateway screen displaying list of Banks (v) Bidder chooses his / her Bank
- v. The Net Banking gateway redirects Bidder to the Net Banking page of the selected Bank
- vi. Bidder enters his account credentials and confirms payment
- vii. The Bank verifies the credentials and confirms with "successful" or "failure" message to the Net Banking gateway which is confirmed back to e-Procurement portal.
- viii. The page is automatically routed back to e-Procurement portal
- ix. The status of the payment is displayed as "successful" in e-Procurement portal.

The e-Procurement portal also generates a receipt for all successful transactions. The bidder can take a print out of the same. (xi) The e-Procurement portal allows Bidder to process another payment attempt in case payments are not successful for previous attempt.

C) RTGS/ NEFT

The bidder shall have the option to make the EMD payment via RTGS/ NEFT. Using this module, bidder would be able to pay from their existing Bank account through RTGS/NEFT. This

would offer a wide reach for more than 90,000 bank branches and would enable the bidder to make the payment from almost any bank branch across India.

- I. Bidder shall log into the client e-procurement portal using user id and password as per existing process and selects the RTGS/NEFT payment option.
- II. Upon doing so, the e-procurement portal shall generate a pre-filled challan. The challan will have all the details that is required by the bidder to make RTGS-NEFT payment. iii.
- III. Each challan shall therefore include the following details that will be pre-populated:
 - Beneficiary account no: (unique alphanumeric code for e-tendering)
 - Beneficiary IFSC Code:
 - Amount:
 - Beneficiary bank branch:
 - Beneficiary name:
- iv. The Bidder shall be required to take a print of this challan and make the RTGS/NEFT on the basis of the details printed on the challan.
- v. The bidder would remit the funds at least T + 1 day (Transaction + One day) in advance to the last day and make the payment via RTGS / NEFT to the beneficiary account number as mentioned in the challan.
- vi. Post making the payment, the bidder would login to the e-Tendering portal and go to the payment page. On clicking the RTGS / NEFT mode of payment, there would be a link for real time validation. On clicking the same, system would do auto validation of the payment made.

D) OVER-THE-COUNTER (OTC)

This solution shall allow the bidder having account with ICICI Bank, to make the payment from any CMS enabled Branch of ICICI Bank in India. Bidders can make the payment via cash (if amount is <= 49,999), ICICI Bank Cheque.

The procedure for paying through OTC mode is as follows:

- i Bidder selects Over-the-Counter remittance option in e-Procurement portal.
- ii The e-Procurement portal displays the amount to be paid. Bidder chooses the bank account no. for refund of the amount.
- iii Bidder clicks on "Continue" button
- iv (iv)The e-Procurement portal displays the details of payment. Bidders clicks on "print _challan" and prints the OTC challan.
- v Bidder submits the OTC challan at the counter of any designated branch of ICICI Bank with
- vi Cash / Demand Draft / ICICI Bank Cheque (Payment in cash is allowed upto Rs. 49,999/-)
- vii ICICI Bank verifies the URN (format to be discussed and decided) and Amount with e-Procurement portal prior to accepting the payment

- viii On successful verification from e-Procurement portal, ICICI Bank accepts the payment. In case of failure, ICICI Bank shall return back the OTC challan and payment to the Bidder.
- ix ICICI Bank will commit the payment transaction (in case of successful verification from e- Procurement portal) and sends the Bank Transaction Number (I-Sure Reference Number) online against the URN and Amount.
- x ICICI Bank will generate receipt for the payment transaction and issues the same to the Bidder.
- xi The e-Procurement system updates the bank transaction number against the URN and Amount based on details sent by ICICI Bank online prior to generation of receipt.
- xii The status of payment will be displayed as “verification successful” in e-Procurement portal, when the bidder clicks on verification option in the portal

Bidder would be required to upload the scan copy of receipt as received from ICICI Bank as part of proof in Nex-tender portal before submitting the tender

 IMPORTANT NOTES(DO'S/DON'T)

Sr no.	Scenario	Do's / Don'ts
1	<p>In the event of making</p> <p>Payment through</p> <p>NEFT/RTGS</p>	<p>Do's</p> <ul style="list-style-type: none"> • It is the bidder's responsibility to ensure that RTGS/NEFT payments are made to the exact details as mentioned in the challan which are: 1) Beneficiary account no: <client code> + <random number> 2) Beneficiary IFSC Code: As prescribed by ICICI Bank (this shall remain same across all tenders) • Amount: As mentioned on the challan. It is specific for every tender/transaction • Beneficiary bank branch: ICICI Bank Ltd, CMS • Beneficiary name: As per the challan • For every tender, details in the challan are different and specific to that tender only. Bidder should not make use of a challan for making payment for another tenders' EMD • It is advised that all the bidders make payment via RTGS/NEFT at least one day in advance to the last day of tender submission as certain amount of time is required for settlement and various parties are involved. The payment may not be available for the bidder validation. In such cases bidder may not be able to submit the tender • Bidder has to make only single payment against a challan as per the amount mentioned on the challan. • Bidder must do the payment before tender validity gets expired <p>Don'ts</p> <ul style="list-style-type: none"> • Bidder should not enter erroneous details while filling the NEFT/RTGS form at their bank. The following possibilities may arise: <p>1) Incorrect IFSC code mentioned: - Transaction would be rejected and the amount would be refunded back in to the bidders account 2) Incorrect Beneficiary account number mentioned (<client code> + <random number>):-</p> <p>a) In case, the beneficiary account number mentioned is incorrect the transaction would be rejected and the bid would not be accepted.</p> <p>3) Incorrect Amount mentioned: The amount would be rejected if the amount mentioned in while making the payment is incorrect. Such cases will be captured as unreconciled transactions and will be auto-refunded directly to bidder's account.</p>

		<p>In the event of any discrepancy, payment would not be considered and bidder would not be allowed to bid/ participate.</p> <ul style="list-style-type: none"> • Bidder is not supposed to use challan generated in one tender for payment against another tender since details in the challan are unique to the tender and bidder combination. • Bidder must not make multiple or split payments against a particular challan. Any split payment received against the same challan will be refunded back to the bidder. • Bidder would not be entitled to claim that he is deprived of participating in the tender because his funds are blocked with the division on account of incorrect payment made by the bidder
<p>2</p>	<p>In the event of making Payment through OTC</p>	<p>Do's</p> <p>It is the bidder's responsibility to ensure that OTC payments are made to the exact details as mentioned in the challan which are:</p> <p>Beneficiary account no: <client code> + <random number> Amount: As mentioned on the challan It is specific for every tender/transaction</p> <p>Beneficiary name: As per the challan</p> <p>Bidder has to make only single payment against a challan as per the amount mentioned on the challan</p> <p>Bidder must do the payment before tender validity gets expired Bidder needs to mandatorily upload the scan copy of the payment receipt issued by ICICI Bank, in Nextender Portal before submitting the Tender</p>
		<p>Don'ts</p> <ul style="list-style-type: none"> • If the bidding amount is greater than Rs49,999, then • Bidder should not make payment in cash. In this case, • Bidder should pay via Demand Draft/ICICI Bank Cheque • It is bidder's responsibility to ensure that Demand draft should be valid and should not have discrepancies such as signature not found, stale DD, mutilated, material alteration, favouring third party etc., Inthe event of Demand Draft returned by bidder's Bank on account of such discrepancies, ICICI Bank shall ensure that such communication is sent to the Client within 3 days from the date of rejection by the Bidder's Bank

		<ul style="list-style-type: none">For every tender, details in the challan are different and specific to that tender only. Bidder should not make use of a challan for making payment for another tenders' EMD
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COVERING LETTER:

Format of letter to be submitted with the Tender for Providing Security & Integrated Surveillance System& Services in MDU Campus Rohtak, M.D. University, Rohtak- 124001.

TO,

Controller Security
MD University
Rohtak – 124001 (Haryana)

SUB: PROVIDING SECURITY & INTEGRATED SURVEILLANCE SYSTEM& SERVICES IN MDU CAMPUS ROHTAK TO MD UNIVERSITY

Dear Sir,

1. This is with reference to your TENDER notice dated I have examined the TENDER document and understood its contents. I hereby submit **Providing Security & Integrated Surveillance System& Services in MDU Campus Rohtak**, M.D. University, Rohtak-124001,
2. The Bid is unconditional for the said Tender. This bid is valid for a period not less than 120 days.
3. It is acknowledged that the Authority will be relying on the information provided in the Tender and the documents accompanying such Tender for qualification of the bidders for the above subject items and we certify that all information provided in the Tender and in Annexures are true and correct; nothing has been misrepresented and omitted which renders such information misleading; and all documents accompanying the bid are true copies of their respective originals.
4. This statement is made for the express purpose of the above mentioned subject.
5. We shall make available to the Authority any additional information it may find necessary or require to supplement or authenticate the Qualification statement.
6. We acknowledge the right of the Authority to reject our bid without assigning any reason or otherwise and hereby relinquish, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
7. It is declared that:

- a) We have examined the Tender document and have no reservations to the Tender document.
 - b) We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in respect of any Bid or request for proposal issued by or any Agreement entered into with the Authority or any other public sector enterprise or any Government, Central, State or local.
8. It is understood that the University may cancel the Bidding Process at any time without incurring any liability to the University and that you are neither bound to invite the applicants to Bid for the items nor to accept any bid that you may receive.
 9. It is understood that the University can use any evaluation scheme/evaluation metrics/weightage or take the help of any consultant, as required in selecting the successful agency/agencies and we agree to abide by it.
 10. It is certified that we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Services or which relates to a grave offence that outrages the moral sense of the community.
 11. It is hereby certified that the firm has not been debarred/blacklisted for any reason/period by any central/state Govt. department/University/PSU etc. if so particulars of the same may be furnished. Concealments of facts shall not only lead to cancellation of the order but may also warrant legal action.
 12. It is hereby affirmed that we are in compliance of/shall comply with the statutory requirements, as applicable.
 13. We hereby irrevocably relinquish any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of bidders, selection of the Agency, or in connection with the selection/Bidding Process itself, in respect of the above mentioned items and the terms and implementation thereof.
 14. We agree to undertake to abide by all the terms and conditions of the TENDER document.
 15. We agree to undertake to be liable for all the obligations of the Agency under the Agreement. In witness, thereof, we submit this application under and in accordance with the terms of the TENDER document.

Place:-

Date :.....

Yours faithfully,

(Signature, name and designation of the Agency/Authorized Signatory)

Official Seal



1. SCOPE OF WORK

Protection of property and personnel (faculty, officers staff, students, official visitors and residents) of the University against wilful harm; the University meaning All Gates, Academic Areas, Activities Area, Hostels, Guest Houses, Play Grounds / Open spaces, Residential Houses, Community Centres, Commercial Centres and Hospital etc. all within the boundary of University Campus.

The Scope of work consists the following two parts:

- 1.1 Supply, installation, Configurations & Commissioning of Surveillance system.
- 1.2 Safety, Security & Services by deployment of manpower

1. PROVIDING/INSTALLATION/FUNCTION OF SURVEILLANCE SYSTEM

- 2.1 To execute the work of surveillance system in the University Campus as per direction of the Controller Security/Officer Incharge and per the BOQ at **Annexure -A**
- 2.2 The quantity of surveillance system may be increased or decreased upto any extent by the University.
- 2.3 The agency will be responsible for any damage of services/utility /property during the execution of surveillance system and it should be got repaired/maintained by the agency at their own level.

3. SAFETY, SECURITY & SERVICES BY DEPLOYMENT OF MANPOWERS

The Agency shall provide services of safety and Security of Entire campus as mentioned in the tender document by deploying the manpower.

- 3.1 To maintain various gates and any other sensitive points specified by the University.
- 3.2 Security personnel deployed by the Agency shall check the material/property/ public/casual workers entering and exiting the campus through the procedure of entry pass/gate pass, as laid down by the University.
- 3.3 The Security Agency will be responsible for proper controlling of the all three main gates of the university. The agency will be responsible to handle any nuisance during the entry at his or her own level. The Agency will also be responsible to check the cameras installed at gate weather they are properly working or not .If not then the agency will immediately report to the controlling officer of the M.D. University. Further, vehicles with Black glasses will not be permitted to enter in the campus. Agency will also be responsible for proper entry of the vehicles from main gate traffic jam.
- 3.4 Round the clock security guards will be deputed at each institutional building/hostels on the entry points and control the illegal entry. The agency is also responsible for any theft/loss/damage of the property of the buildings. Further the agency is also responsible to handle mob/ agitation to avoid any damage of property and shall check that no nuisance is created in the campus. If required the agency may take help of the local police at their own level and same will be informed to competent authority.

- 3.5 The agency is responsible for controlling vehicles creating loud noise by using pressure horn, playing loud music and without silencer etc.
- 3.6 The agency is responsible to check mischievous elements/unethical behaviour at university parks and other premises of the university.
- 3.7 The agency is responsible to check the movement of unauthorized vehicles having Jet-Black glasses, drinking of alcohol in the vehicles and any other prohibited drugs in any university buildings and parks etc.
- 3.8
- 3.9 The Agency is responsible for the protection cash/ documents etc.(static or in transit) due to burglary.
- 3.10 Regulate access control at gates, prevent misuse of University grounds and facilities by outsiders, preventing trespassing, unauthorized parking, unauthorized construction, squatting in the University Campus, and prevent vandalism, breaking of twigs / trees throwing of garbage / littering and ensuring cleanliness. Ensure proper & timely reporting of any such violations to concerned authorities.
- 3.11 To carryout, lift rescue operations in the University Campus.
- 3.12 To undertake fire-fighting operations with provided equipment.
- 3.13 Regulate parking of vehicles at designated areas of the University and also regulate traffic movement at the entry/ exit gates within the campus and ensure traffic rules are followed.
- 3.14 Adhere to the Standard Operating Procedures (SOPs) given by the Competent Authority which may be modified from time to time by the Competent Authority/Controller Security.
- 3.15 The Agency will provide extra security guards a oneday notice
- 3.16 .The Agency will carry out 'on the job' training of Guards at the time of induction and ensure Refresher Training during the period of the contract every 06 months.
- 3.17 The Agency will also carry out regular Mock fire drills, Mock lift rescue operations and Mock Security exercise to train staff, students, faculty and residents at least once in a year.
- 3.18 Prevent defacing/ damage to University property buildings etc. (prevent Graffiti/ poster pasting etc.)
- 3.19 To prevent entry of stray/wild animals into the University Campus.
- 3.20 The Agency will ensure to switch off lights/ leakage of water taps of the buildings/common places etc. When not in use and same may be intimated to the concerned officer.
- 3.21 The Agency is responsible to carry out any other job assigned by the Controller Security or Competent authority in the interest of Security of University.
- 3.22 To Provide extra security as and when required for any function/ festivals, VVIP/ VIP visits inside the University Campus.
- 3.23 The Security Agency must ensure patrolling of the campus, round the clock by deployment of Two Jeeps,along with drivers including fuel and maintenance etc.
- 3.24 The agency will provide trained Security Guard who can handle Access Control System, CCTVs & Recorders, Computers& Communication, Wireless Surveillance System and Electronic Gadgets etc.

4. VARIOUS ZONES

The whole area of MDU Campus will be divided into the following zones:

A. MAIN GATE ZONE

The following gates will be under this zone for controlling of safety and security including access control of the vehicle, trespassers.

- i. MDU Campus Gate No.1
- ii. MDU Campus Gate No.2
- iii. MDU Campus Gate No.3

B. BOYS HOSTEL COMPLEX ZONE:

The following hostels will be under this Zone:

- i) Kailashgiri Boys Hostel
- ii) Vindhya Boys Hostel
- iii) Himalaya Hostel
- iv) Nilgiri Hostel
- v) Udaigiri Hostel and its extension
- vi) Himgiri Hostel
- vii) Dhaulagiri Hostel
- viii) Mount Abu Hostel
- ix) All roads and open areas in the zone

The agency will be responsible for controlling of entry/exit of vehicles and the trespassers including all the roads in the hostel as well as in the complex.

C. GIRLS HOSTEL

The following Girls Hostel will be in this Zone:

- i. Ganga Hostel
- ii. Narmada Hostel
- iii. Saraswati Hostel
- iv. Kaveri Hostel and its extension
- v. Godawari Hostel
- vi. Sabarmati Hostel and its extension
- vii. Meghna Hostel
- viii. Yamuna Hoste
- ix. Bhgirathi Hostel
- x. All roads and open areas in the zone

The agency will be responsible for controlling of entry/exit of vehicles and the trespassers including all the roads in the hostel as well as in the complex.

D. WEST SIDE OF CH.RANBIR SINGH ROAD.

The following area/road will be included in this Zone:

- i. UIET
- ii. ACBT
- iii. Physics
- iv. Mathematics
- v. Hindi /History
- vi. Statistics/ Geography
- vii. Pharmacy
- viii. Yagshala
- ix. Sociology
- x. Psychology/ Defence studies
- xi. New Arts Building
- xii. Swaraj Sadan
- xiii. All roads and open areas in the zone

However, the following will not be included in this Zone:

- i. Tagore Auditorium
- ii. Radha Krishnan Auditorium
- iii. Students Activity Centre
- iv. Administrative Block

E. BUILDING IN BETWEEN CHAUDHARY RANBIR SINGH AND CH.HARDWARI LAL ROAD

The following buildings will be included in this Zone:

- i. DDE
- ii. Chemistry
- iii. Old Bio-Science
- iv. New Science Block
- v. Law Department
- vi. IMSAR
- vii. IHTM
- viii. Dr. B.R.Ambedkar Hall /Law Library
- ix. All roads and open areas in the 30 meters

The following building will not be included in this Zone:

- i. Pariksha Sadan
- ii. Main Library

F. PARIKSHA SADAN ZONE

Pariksha Sadan including entire complex.

The Vivekananda Library including its complex .

G. LIBRARY ZONE

Library including its complex.

H. TYPE/IV/9J ZONE

Type-IV/9-J including Engineering Cell, Transport Office, Visual Arts Building, Non-Teaching Employees Association Office, Rose Garden, all type of IV , 9-J Houses and 12- Flats.

I SPORTS COMPLEX ZONE

- i. Stadium Building
- ii. Gymnasium Hall
- iii. All Courts/Play Fields
- iv. Synthetic track
- v. Football Ground
- vi. Basket-ball Court
- vii. Lawn Tennis Court
- viii. Volleyball Court etc.
- ix. Press
- x. All roads & open areas in this zone

The following will not be included in this zone:

- i. Faculty Club
- ii. Shopping Complex
- iii. Campus School
- iv. V.C. Residence and Faculty House.

J. TYPE I, II, III ZONE

The following will be included Type-1Houses, 1-A, II, II-A, III and III duplex,16-New Flats water works and all road & open areas in this zone.

The following will not be included in this Zone:

- i. Registrar Residence
- ii. Director IIM, Residence

K. CONTROL ROOM ZONE

NOTE: For all above said zones, two jeeps equipped by security gadgets i.e. Radio set, Light, Hooter etc. along with drivers and four security guards will be provided by the agency, who will patrolling entire the whole campus round the clock or as directed by Controller Security.

University reserves to right to add or remove any other building in the zones and rate may be finalized with mutual consent.

5. GENERAL OBLIGATION OF THE AGENCY

The agency shall be responsible for the discharging of the following obligation in addition to mention in the scope of work.

- 5.1 Complete safety and security of the entire campus including the internal safety and security of the zones.
- 5.2 The agency shall be responsible for complete safety and security for entire University Campus.
- 5.3 The agency shall be responsible for maintaining the register for material/equipment/machinery coming in or coming out from the buildings or as per directed by the Controlling Officer/Controller Security.
- 5.4 The agency shall be responsible for deployment of minimum manpower as per the following table:

Physical Security Gaurds

Venue	6 AM to 2 PM	2 PM to 10 PM	10 PM to 6 AM
Main Gate Zone	18	18	18
Boys Hostel Zone	-	-	5
Girls Hostel Zone	-	-	4
Sports Complex	6	6	3
West of Ranbir Singh Road Zone	13	13	8
In between Ranbir Singh Road and hardwari Lal Road Zone	8	8	4
Pariksha Sadan Zone	9	4	4
Library Zone	5	5	3
Type- IV/9J Zone	8	8	7
Other Residential Zone	4	4	4

Control Room Zone**

Designation	Required
IT Supervisor	01
Operators for control room /Cameras	11

**The payment of the control room zone shall start after installation/functioning of Surveillance system including control room

- 5.5 The helpline No. alongwith the attendant is also to be provided by the Agency who will sit in the control room for receiving /recording of all types of complaints regarding safety and security, and report to the concerned person of the agency.
- 5.6 The agency shall be responsible to provide ladies guard for specific areas /buildings as per the direction of the Controlling Officer/Security Incharge.
- 5.7 The Agency will provide 10 hand held metal detector, hand held search lights at least 20 each and 20 sets of portable radios / Walky –Talky for M.D. University campus ,Rohtak. The portable radios / Walky – Talky and similar / such instruments should be under license issued as per the rules / provisions of Indian Telegraph Act & Rules / Indian Wireless Telegraph Act Rules.
- 5.8 Theagency shall be responsible for engaging the extra manpower beyond as mentioned above during the crisis/occasions/functions/seminars etc.However, no extra payment will be given for engaging manpower at any cost. The Following minimum Supervisors shall be deployed by the agency in Shifts

6AM to 2 PM	4 Supervisors
2PM to 10PM	4 Supervisors
10PM to 6 AM	2 Supervisors

- 5.9 In addition to, one overall In charge will be deputed by the Agency in the University Campus.

5. REJECTION OF TENDER

- 6.1 The Registrar of the University may reject any or all tender(s) without assigning any reason.

- 6.2 If the bidder proposes any alternation in or additions to the prescribed form of tender or decline to carry out any work of the tender document; or any conditions mentioned, etc., his tender is liable to be rejected.

6. PARAMETERS AND PROCESS TO BE FOLLOWED

7.1 The various category of security personnel shall be as under:

- (i) 25% of the security personnel amongst the security guards shall be Ex-Servicemen/Ex-Para Military Forces Personnel.
- (ii) The Security Officer/Supervisors/ Gunman should be Ex-Servicemen/Ex-Para Military Forces Personnel aged below 55 years having minimum five years of experience to handle security arrangement. Security Supervisor should be able to supervise fire fighting operations and lift rescue operations.
- (iii) The personnel deployed must be medically fit for the job and free from any contagious disease.
- (iv) Educational Qualification & Experience for Others Security Personnel's:

	Security Officer	Security Supervisor	Ex Servicemen Security Guard	**Trained Security Guard	Ladies Security Guard	Driver
	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
	35 years	35 years	35 years	18 years	25 years	21 years
	Maximum	Maximum	Maximum	Maximum	Maximum	Maximum
Age	55 years	55 years	55 years	45 years	45 years	50 years
Height	Min 5'7"	5'7"	5' 7"	5' 7"	5' 5"	5' 7"
Educational Qualification	Retd. as JCO	Retd. as Sub 10th or Army Edu	10th or Army Edu	Matric	Matric	Matric
Experience	Minimum15 Exp	Minimum15 years Exp	Minimum15 years Exp	Minimum3 years Exp	Minimum3 years Exp	Minimum five years

**Trained Security Guard Means He should possess formal security training certificate as per 'PASARA' Act.

- 7.2 A complete list of the Security personnel to be engaged by the Agency for deployment at the campus, shall be furnished by the Agency along with complete address and other antecedents after acceptance of tender. The agency should deploy only those personnel whose antecedents have been verified by the Haryana Police. The agency should submit an indemnity bond in support of having Police verification for all deployed personnel to the University and the agency will be solely responsible to the deployed personnel to the University.
- 7.3 The agency shall inform to the concerned authority for any replacement of manpower deployed in the University Campus.
- 7.4 The agency shall submit the weekly duty chart prior to the commencement of the week and the daily attendance sheet of all the security personnel deployed in the University to the

- Authorized officer of the University, failure to do so will result in non-payment for the day/days for which the duty chart/attendance sheet is not furnished.
- 7.5 If any security personnel deployed/deputed by the Security Agency does not report at the University Campuses, the agency will depute/deploy alternate security personnel and no extra payment shall be made by the University in this regard.
 - 7.6 The agency shall ensure that at no time, violation of minimum requirement as specified in the tender is left unmanned. A register shall be maintained by the Agency at every gate / point where round the clock duty is performed till the ANPR start functioning.
 - 7.7 The University will arrange to provide lock/seal for stores, godowns and offices etc. of the university.
 - 7.8 The University will be authorized to fix timing of the various duty shifts. A single duty shift will have normal duration of eight hours. In case of any compelling reasons, if the duty shift is to be extended, the same shall not be resorted to by the Agency without the prior consent of the University.
 - 7.9 The Agency shall arrange Uniform for all security personnel on duty on pattern according to season i.e. summer uniform during summer and winter uniform during winter and a badge bearing his name and designation. The dress shall be of neat & clean and uniform colour and design.
 - 7.10 The agency shall provide Fire uniform / equipment such as Gumboot, Helmet, Gloves, Extension Ladder, Rope, Safety belt, tool kits & other related equipment etc for the fire safety in the campus.
 - 7.11 The agency shall ensure good behaviour of security personnel with officials of University/students and visitors to the University.
 - 7.12 The Security Personnel shall abstain from taking part in any staff union and associations activities.
 - 7.13 The Agency will ensure that unauthorized entry is not permitted at the entry points will recognize the legitimate visitors without causing unnecessary embarrassment.
 - 7.14 The Security personnel shall ensure that the entry of visitors (Pedestrians, Scooterist, Motor Cyclist or Motorist) and allowed only after recording and verifying identity details as may be necessary in the register at the entrance gates and will check and regulate entry of vehicle as per direction of the concerned authority.
 - 7.15 If any lapse in security is found in any zone, the University will deduct double of the amount payable for that zone.
 - 7.16 The quality and disciplines of the Security personnel will be ensure on regular basis and daily reports will be prepared by the Agency and the same will be submitted to the concerned authority.
 - 7.17 The University will provide no stationary and other allied items for the maintenance of Records.
 - 7.18 As and when the University requires additional security personnel on temporary or emergency basis beyond the scope of work mentioned in the tender the agency will depute such security personnel under the same terms and conditions.
 - 7.19 The agency shall also provide following items/articles at its own cost :-
 - (i) Torches and cells to the security personnel on night duty.
 - (ii) Duty charts at specified locations for inspection
 - (iii) Raincoats to their security personnel for rainy season
 - (iv) Stationary & allied items for the keeping of records.
 - (v) Uniform for the personnel on Duty
 - (vi) Bent Rod (Lathi) to guards
 - (vii) Unique ID Cards issued by the security agency to every security personnels
 - (viii) Bio-metric machine with software duly approved by the University or maintain the attendance register properly.
 - (ix) Maintenance/upkeep of above items/articles to be ensured by the security agency. Nothing extra shall be paid by the University on this accounts.
 - (x) Any other item required for safety and security purpose.

- 7.20 The agency shall prepare the SOP for safety and security of the campus personnel and property in consultation with competent authority.
- 7.21 Any liability arising out of any litigation (including those in consumer courts) due to any act of Agency’s personnel shall be directly borne by the Agency including all expenses/fines. The concerned Agency’s personnel shall attend the court as and when required.
- 7.22 Security personnel shall be hired by the security agency. Security agency shall have full control and supervision on the acts of its security personnel including their employment etc. Agency shall indemnify the University regarding any claim of the personnel w.r.t. employment or anything else, whatsoever.

7. DUTY HOURS (FOR ALL RANK EXCEPT SECURITY OFFICER) ON ALL THE SEVEN DAYS OF WEEK.

- 8.1 First Shift 06:00 hrs to 14:00 hrs
- 8.2 Second shift 14:00 hrs to 22:00 hrs
- 8.3 Third shift 22:00 hrs to 06:00hrs
- 8.4 General shift – 09:00 hrs to 18:00 hrs (with staggered Lunch Break with appropriate arrangement to be made by the agency)
- 8.5 Duty timing shall be changed by the University as per requirement and necessity.

8. DUTIES AND RESPONSIBILITIES OF THE SECURITY

- 9.1 The respective Security Personnel/ Security Supervisor/ Security Officer will be responsible for overall Security arrangements of the University.
- 9.2 The Security Officer will ensure that all the instructions of the University are strictly followed and there is no lapse of any kind.
- 9.3 The security personnel will also take round of all the important sensitive points regularly and the duty report will be prepared at the interval of every shift and submitted to the Security Incharge of the University.
- 9.4 The security personnel will be on duty for twenty four hours (round the clock in three shifts of eight hours each) as per zone requirement and will take care of all the property of the University.
- 9.5 The Security personnel are required to keep the keys of all main entrance of building , where they are deployed and open and close the same as & when required by the authorized officials.
- 9.6 The Security personnel deployed at the Entry and Exit Gates are required to open and close the gates, whenever an authorized car enter/exits through the gates.
- 9.7 It will be the duty of the Security personnel to open the locks to enable cleaning operations in the campus. They are also required to be present and vigilant in the campus during the entire work of the cleaning operations. Moreover, they will also open the premises as and when required for Civil/Public Health& Electrical maintenance works by authorized officials on holidays. Authentic Records of all maintenance activity in the campus will be maintained, in consultation with the University, which should be made available for any later date investigation, if required.
- 9.8 The Security personnel shall carry out such other duties as are entrusted to them from time to time by the University.
- 9.9 Entry of street Dogs and cattle’s etc. into the campus will be prevented by the Security personnel.
- 9.10 The Security personnel on duty shall take care and immediately inform about the leakage in the water taps, valves and water hydrants installed in the open area and other parts of premises.

- 9.11 The Security personnel shall ensure that flowers, plants, trees and grassy lawns are not damaged by the staff or students or by the outsiders.
- 9.12 The Security personnel will also help the fire fighting staff in extinguishing / controlling the fire, or meeting any exigency, if there is a fire or any other natural calamities at the site. The Security personnel deployed should be well trained and conversant with the fire fighting procedure and apparatus at the site. A certificate to the effect that the personnel deployed on site are conversant with Basic Fire Fighting Techniques and conversant with the Evacuation procedure of the campus, shall be furnished by the Agency within one month of commencement of providing service. In case of change in staff it will have to be resubmitted along with notification of change, well in advance.
- 9.13 The security personnel will be trained and conversant with the lift rescue operation.
- 9.14 That the Security personnel shall be available all the time as per their duty roaster and they shall not leave their place of duty without the prior permission of the University, or they are duly relieved, even if it results in extended duty hours.

9. PERIOD OF TENDERED WORK

The tender will be awarded for initially Three (3) years which can be extended for another two years in the mode of 1+1(years). However the extension of contract will be solely at the discretion of University at the same terms and conditions. The contract will automatically stand terminated on completion of three years if the authority not extended. The decision of Competent Authority shall be final & binding upon the security service provider.

10. PAYMENTS OF BILLS

- 11.1 Payment will be done by University after verification of the bills by the controlling officer. The bills shall be submitted in triplicate along with requisite document i.e. Attendance record through Bio-metric system installed or through attendance register maintained by the security agency. The disbursement of wages will be made by cheque/ECS (Electronic Clearance Service) by the Agency awarded the contract and a copy of the same shall be submitted by the Agency to the office of officer In-charge (E&S) for record and necessary action.
- 11.2 Wherever any over payment comes to the notice of University the same shall be deducted by University from any sum due or which at any time thereafter may become due to the Agency under this tender/agreement/contract and failing that under any other tender/contract/agreement with University or from the Security deposit of the Agency.
- 11.3 If as a result of such audit and technical examination, any overpayment is discovered in respect of any work done by the Agency or alleged to have been done by the Agency under the tender/agreement/contract, it shall be recovered by University from the Agency by any or all the methods prescribed above or through a Court of law as the situation warrants.
- 11.4 Last payment as well as security of the agency will be cleared only after ascertaining clearance of any liability pending with the Agency.

11. NOTICE OF UNIVERSITY

Subject to as otherwise provided in this Tender, all notices to be given on behalf of University and all other actions to be taken on its behalf may be given or taken by the Registrar or any other official authorized by the University.

12. LEGAL LIABILITY AND RESPONSIBILITY OF AGENCY

- 13.1 The Agency shall compensate the full loss sustained by University on account of theft, burglary or tempering with locks of the premises. The amount of loss to be compensated, shall be assessed by the University and the same shall be binding on the Agency. In addition to this, Agency shall also be liable to pay a penalty, in each case, for theft in the Campus. The agency shall also be fully responsible for any loss of office equipment, Fixtures and any Articles etc. installed on the campus. All losses suffered by the University on this account, lapse of security services, shall be compensated fully by the Agency.
- 13.2 It will be the responsibility of the Agency to get all the related clearances as applicable under the Indian Laws and complete the necessary formalities as required under relevant statutes, rules and regulations, including Private Security Agencies (Regulation) Act, 2005 (29 of 2005) and any other act applicable.
- 13.3 The agency shall comply with all the statutory provisions as laid down under various Labour Laws/Act/Rules & Regulations and other Labour Laws/Acts/Rules in force from time to time at its own cost. In case of violation of such statutory provisions under Labour Laws and/or any other law etc. applicable, by the Agency, there will not be any liability on part of the University.
- 13.4 By virtue of the provisions of the Workman's Compensation Act or any other Act, the University if obliged to pay compensation to person employed by the Agency in execution of the work, then the University will be entitled to recover the same from the Agency. The amount of compensation so paid shall be recovered from the Agency.
- 13.5 The agency will maintain all the relevant records, register and documents as required by the Labour Department, Regional Provident Funds Commissioner and Employees State Insurance Corporation or other local bodies etc. as per the existing rules and/or regulations as amended from time to time.
- 13.6 The Agency shall indemnify the University against all damages/charges and expenses for which the University is held liable or pays on account of the negligence of the Agency or its servants or any persons under its control, whether in respect of accident, injury to the person or damages to the property of any member of the public or any persons or in executing the work or otherwise and against all claims and demands thereof.
- 13.7 In case, any public complaint is received attributable to misconduct/misbehaviour of Agency's personnel, a monetary penalty for such incident shall be levied and the same shall be deducted from Agency's bill. Further the concerned Agency personnel shall be removed from the University immediately in case of repeated misconduct.
- 13.8 In case the Agency fails to commence/ execute the work as stipulated in the agreement or unsatisfactory performance or does not meet statutory requirements of the contract, University reserves the right to impose the penalty as detailed below:-
 - i 0.5% of cost of order/agreement per day subject to maximum of 10%.
 - ii After four weeks delay University reserves the right to cancel the contract. The agency shall be blacklisted for a period of 5 years from participating in any such type of work and Earnest Money will be forfeited.
- 13.9 The Agency shall ensure that its personnel shall not at any time, without the consent of University in writing, divulge or make known any trust, accounts matter or transaction undertaken or handled by University and shall not disclose to any information about the affairs of University. This clause is not applicable to the information which becomes public knowledge.
- 13.10 The Agency shall not engage any sub Agency or transfer the contract to any other person in any manner.
- 13.11 The Agency shall provide the copies of relevant records during the period of contract or otherwise even after the contract is over as required by University etc.

13. LIABILITY OF THE UNIVERSITY

- 14.1 The University shall be liable to pay the bills as per terms and conditions to be entered before commencement of the work.
- 14.2 The University will not provide any residential accommodation to the Security personnel employed by the Agency. No cooking or lodging shall be allowed in the University for the personnel engaged by the Agency.
- 14.3 The University will be under no obligation to provide employment to any personnel of the Agency after expiry of tender/agreement/contract period and the University recognizes no employer-employee relationship between University and the personnel deployed by the Agency.
- 14.4 The University shall not be responsible financially or otherwise for any injury to the security personnel in the course of performing the Security duties as per this tender.

14. FORCE MAJEURE

If at any time during the currency of the contract, either party is subject to force majeure, which can be termed as civil disturbance, riots, strikes, tempest, acts of God etc. Which may prevent either party to discharge his obligations, the affected party shall promptly notify the other party about the happening of such an event. Neither party shall by reason of such event be entitled to terminate the contract in respect of such performance of their obligations. The obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist. The performance of any obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist. If the performance of any obligation under the contract is prevented or delayed by reason of the event beyond a period mutually agreed to if any or seven days, whichever is more, either party may as its option terminate the contract.

15. TERMINATION OF TENDER

- 16.1 If the agency at any time makes default in executing security services with due diligence and continue to do so, and / or the Agency commits defaults in complying with any of the terms and conditions of tender and does not re-modify it or does not take effective steps to remedy it, or fails to complete the work as per terms and conditions of the tender and does not complete them within the period specified in the notice given to him in writing, the University may without prejudice to any other right or remedy, which shall have accrued or shall accrue thereafter to the Agency, cancel the tender/contract/agreement by serving one month's notice and security deposit of the Agency will also be liable to be forfeited by the University.
- 16.2 The University reserves the right to terminate the contract without assigning any reason by giving to the Agency one month's notice of its intention to do so and on the expiry of the said period of notice; the tender/contract/agreement shall come to an end without prejudice to any right of remedy that may be accrued to the Agency.
- 16.3 If any information furnished by the Agency is found to be incorrect at any time, the tender/contract/agreement is liable to be terminated and the security deposit will be forfeited by the University.
- 16.4 In case the Agency wants to terminate the tender/contract/agreement, it shall have to give three month's notice in advance to this effect to the University.

16. ARBITRATION

Any disputes arising out of and / or in relation to this agreement shall be resolved through Arbitration in terms of Arbitration & Conciliation Act, 1996. Any party may approach the Hon'ble Vice Chancellor in writing with copy to other party for appointment of Sole Arbitrator. The Hon'ble Vice Chancellor may appoint any person as Sole Arbitrator and refers the matter for Arbitration. The decision of the Sole Arbitrator, so appointed shall be final and binding upon the parties.

17. SECURITY DEPOSIT

- 18.1 The Earnest Money Deposit of the successful bidder shall be adjusted towards performance Security if the offer is accepted by the Competent Authority.
- 18.2 The performance security of 5% of contract value including the earnest money of Rs. 26 Lakh will be submitted by the agency within 15 days of receipt of LOI. This balance security (excluding Rs. 26 Lakh) may be in the form of bank guarantee in the name of Finance Officer, MDU, Rohtak. It will be retained minimum for three years or till the performance of the contract whichever is higher. The security shall be forfeited if the agency backs out without any reason from the contract besides forfeiting the due payment to the agency by MDU at that time
- 18.3 No interest shall be paid by the University on Earnest Money or Security Deposit.
- 18.4 In case of non submission of Performance Security within specified time, the earnest money will be forfeited and work may be assigned to next lowest bid.

18. PENALTY CLAUSE

The following penalties will be imposed:

- 19.1 For misbehaving on part of security staff Rs. 2000/- per default
- 19.2 For non-wearing of uniform and/or identity card Rs.2000/- per default.
- 19.3 For causing damage to property i.e. University's building and other properties at M.D.University Campus Rohtak– market value of such property or Rs. 10000/-, whichever is higher, per each default.
- 19.4 For removal of any item(s) for which the agency is not authorized or theft 3times of the market value of such property or Rs. 10000/-, whichever is higher, per each default
- 19.5 For violation of any of the condition of the contract, Rs.10000/- per default.
- 19.6 In case the Security Guard is found absent from the duty and if no alternative arrangement is made by the Agency, then a penalty of Rs 1000/- per guard per duty will be imposed.

19. OTHER CONDITION OF THE TENDER

- 20.1 Change in the name of the Agency will not be allowed. The authorized signatory of Agency with seal of Agency/Firm/company should sign every paper of the tender. In case any person signing the tender/contract/agreement on behalf of Limited Company or Firm, he will produce letter of authority/resolution passed by the company/firm empowering him to sign the tender/agreement/contract on behalf of the company or firm.
- 20.2 No change in constitution/share holding of the successful Agency will be done under any circumstances without the prior approval of the University in writing.
- 20.3 The University will deduct Income Taxes at source as applicable from time to time.
- 20.4 The tender shall remain valid and open for acceptance for a period of 120 days from the last date of Submission of tender.
- 20.5 The Agency submitting the tender will be presumed to have considered and accepted all the terms and conditions of this tender.
- 20.6 Any person who is in Government Service or an employee of the University should not be made a partner to the tender by the Agency directly or indirectly in any manner whatsoever.
- 20.7 The agency shall not transfer the tender to any other person in any manner. The Agency shall not be permitted to sub-contract the work to any other person/firm/agency.
- 20.8 Any other provisions as required by the University shall be incorporated in the agreement to be executed by the Agency and the same shall be binding on the Agency.
- 20.9 The security agency shall provide a non-judicial stamp paper of Rs. 100/- for preparing a contract / agreement. The successful Agency shall enter into a contract/ agreement with the University as per the terms and conditions of the tender within one month from the issue of letter of acceptance or whenever called upon to do so by the University, whichever is earlier. No payment shall be released with our signing of agreement.
- 20.10 University shall be at liberty to direct and to require the Agency to remove from the work, any person employed by the Agency, who in the opinion of University misconducts himself or is incompetent or negligent in the proper performance of his/her duties or is infirm and invalid/or indulges in unlawful activity or the like and such person shall not be again employed on the work without written permission of the University.
- 20.11 All the terms and conditions contained in this tender document will be a part and parcel of the agreement/contract to be executed by the Agency with the University including correspondence leading to award of work.
- 20.12 Once the Competent Authority accepts the tender, the Agency will be liable to provide the Security service within 15 days from the date of issue of letter of intent. In such eventuality of non commencement of work, within the prescribed time limit, University further reserve the right to get the work done from some other agencies and also shall cancel the tender/agreement/contract. The contracting agency shall be black listed by the University for a period of four years from participating in such type of tender of the University and its earnest money/performance security deposit shall be forfeited.
- 20.13 Canvassing in connection with the tender is strictly prohibited. Tender must be unconditional.
- 20.14 Tender not conforming to the requirement as per the terms and conditions is liable to be rejected and no correspondence shall be entertained whatsoever.
- 20.15 Any extra claim which is mentioned in the Financial Bid specifically shall not be entertained.
- 20.16 For any clarification regarding the scope of work and /or any terms and conditions of tender the intending Agency in person can seek clarification from the office of Registrar or Controller Security on any working day during office hours, with prior appointment, before last date of submission of tender. No representation, what so ever, will be entertained after the tenders have been opened and all the decisions taken by the University will be binding on the Agency.

- 20.17 The Security personnel deployed by the Agency shall not consume liquor or any other intoxicant while on duty otherwise suitable penalty will be imposed as per rules.
- 20.18 All the documents pertaining to the Firm / Company submitted by the Agency should bear the same name and address, as recorded earlier in EOI. In case of any variation, it should be specifically clarified, as to whether the changes have been duly notified to the respective Authority and proof of acceptance by the Authority must be attached with the respective document submitted by the Agency.
- 20.19 Tender for Any act on the part of the Agency to influence anybody in the University is liable for rejection of his tender.
- 20.20 The staff of the Agency shall work under overall supervision and directions of Controller Security of Maharishi Dayanand University Campus Rohtak or as notified by University from time to time.
- 20.21 The agency appointed for providing above services shall enter into a binding agreement with the University for the execution of services wherein all the obligations of both the parties shall be spelt out.
- 20.22 The payment terms shall be as under:-
- i. The Agency shall raise the bills to Controller Security on monthly basis along with all supporting documents.
 - ii. Payment of the bills shall be made to the agency as early as possible and subject to satisfactory report of the work from the Controller Security.
 - iii. TDS towards income tax and any other statutory taxes/cesses/levies as per rules on the rates prevalent at the time shall be deducted at source and deposited with the quarter concerned.
- 20.23 The acceptance of the tender shall rest with the committee constituted for the purpose and the committee does not bind itself to accept the lowest quotation and reserves the right to reject any or all items of quotation/tender without assigning any reason therefor. The Committee also reserves the right to accept quotation/tender in part or whole i.e. any item or any quantity or any zone and to reject it for the rest or to accept the tender in toto.
- 20.24 If the performance of the agency is not found satisfactory at any time during the contract period, the University shall be at liberty to terminate the contract without any liability on its part by giving one month notice.
- 20.25 The agency shall indemnify/ compensate MDU and its properties against any loss and/ or damage caused or likely to be caused by any omission/neglect/ action, demand, proceedings, prosecutions, attachments, non-payment of taxes, non-clearance of liabilities, non-observance of statutory laws/ rules of the local bodies/ state/ central Governments and the like arising due to its workmen's fault and /or deficiency/ negligence.
- 20.26 The University shall not be responsible for payment of any claim whatsoever made by the workmen engaged by the agency. The service provider will ensure all the safety precautions required for a job and ensure that his workmen are insured to cater for any mishappening inspite of all the precautions.
- 20.27 The agency shall be responsible for fulfilling its obligation towards its employees under various Labour Laws as applicable and amended time to time. The ESI and EPF Challan will be submitted along with the bills by the agency. No payment will be released without proof of depositing of ESI & EPF payments of previous months of the employers engaged by the agency for this contract.
- 20.28 The dispute if any shall be subject to the jurisdiction of courts at Rohtak. Any other jurisdiction mentioned in the quotation/ tender or invoices or any other document shall have no legal sanctity.
- 20.29 Any dispute arising with regard to any aspect of the contract shall be settled through mutual consultations and agreement between the contractor and the university. In case settlement is not arrived at, the dispute (s) will come under the purview of Indian Arbitration Act 1996 and the area of jurisdiction shall be Rohtak.

- 20.30 **Amendment to the Agreement:-**
The obligations of agency and MDU have been spelt out of the agreement. However, during the operation of the agreement, circumstances may arise which may call for amendment or modification of the terms and conditions of this agreement. In such a situation, the amendments/ modifications as may be mutually agreed upon shall be incorporated in this agreement.
- 20.31 **Doubts/Ambiguities:-**
If any doubt or ambiguity arises as to the meaning and effect of any provision(s) of this agreement, the same shall be referred to the Vice-Chancellor, MDU, Rohtak for clarification. The clarification so provided by the Vice-Chancellor shall be binding.
- 20.32 Copies of all correspondence between the Controller Security and the agency will be endorsed to the Registrar. All instructions/ directions of the Controller Security and compliance report etc. by the agency shall be in writing. There shall be no verbal communication in these matters.
- 20.33 Whenever there is a duplication of clause either in the terms and conditions or in the agreement, the clause, which is beneficial to the MDU, Rohtak will be considered.
- 20.34 The agency will pay the wages to their employers DC rate or minimum wages of Rohtak whichever will be higher. However, proportionate rate will be increased whenever these rates will be increased by the Haryana Govt. on 80% part of the rate allotted to the agency considering 80:20 proportionate of labour: consumable and machineries involved in the contract.
- 20.35 The specific instructions to a zone keeping within the parameters of the service contract after conclusion of the contract will be issued by respective Heads of the buildings/ zone.
- 20.36 The agency should pay the wages to their employees strictly as per labour laws. The service provider shall intimate the date of payment to the Controller Security whose authorized rep. will have full authority to check the payments and the documents pertaining to the payments.
- 20.37 All type of Register/formats should be maintained by the agency as per labour Act.
- 20.38 In case of failure of the agency after the conclusion of the contract the University reserves the right to call the other two lowest tenderers for award of the contract at the negotiated rates at the risk and cost of the engaged agency or otherwise to carry out the work at the risk and cost of the engaged agency or otherwise to carry out the work at their own risk and cost by other means as deemed fit by University.
- 20.39 The service provider shall raise the bills to the Controller Security on monthly basis who will process the bills and make payments after fully satisfying.
- 20.40 MDU shall make payment of the bills within at the earliest after submission of correct and complete bills alongwith satisfactory report of the work from officers referred to.
- 20.41 The performance security of 5% of contract value including the earnest money of Rs. 26 Lakh will be submitted by the agency within 15 days of receipt of LOI in the form of bank guarantee in the name of Finance Officer, MDU, Rohtak. It will be retained minimum for three years or till the performance of the contract whichever is higher. The security shall be forfeited if the agency backs out without any reason from the contract besides forfeiting the due payment to the agency by MDU at that time.
- 20.42 Controller Security will be the Officer in-Charge of Physical Security work.
- 20.43 After the execution of the surveillance system, the entire surveillance system will be the property of MDU and same will be under the control and possession of Director, UCC. However, the proper functioning and maintenance of the system will be responsibility of the Agency during contract period.
- 20.44 The University reserves the right to negotiate one or all the bidder for the work.
- 20.45 The rates quoted by the agency for surveillance system shall be valid for 1 year after allotment of work and for any additional requirement of the agency, the agency will be bound to execute the work on the same rates, Terms and Conditions.

20. MINIMUM QUALIFICATIONS FOR MANPOWER DEPLOYED IN MD UNIVERSITY BY THE AGENCY.

1. Field Officer:
 - a) Ex-Serviceman having good Physique not below the rank of JCO
 - b) Maximum Age Not more than 55 Years of Age
 - c) Having Five Years' experience in the same field
2. Security Supervisors:
 - a) Ex-Serviceman having good Physique not below the rank of Subedar
 - b) Maximum Age Not more than 55 Years of Age
 - c) Having Five Years' experience in the same field
3. Trained Security Guard
 - a) Good Physique
 - b) Minimum Height of the Guard should be 5'8"
 - c) The Security Guard should be minimum matric pass
 - d) Age should be between 21-45 Years.
 - e) Trained Security Guard Means He should possess formal security training certificate as per 'PASARA' Act
4. IT Supervisor
 - a) The Person should have successfully passed B.Tech/M.Tech or Higher in IT Discipline. Persons with higher educational qualifications will be preferred.
 - b) The Person should have minimum 5 years of experience in managing network equipment's, Camera and Passive Components.
 - c) Age should be between 25-40 Years.
5. Camera Operator
 - a) The Person should minimum 12th pass or above
 - b) IT diploma of 2 years or Above.
 - c) The Person should have minimum 2 years of experience in operating Camera's and Setup.
 - d) Age should be between 21-40 Years.

21. TERMS & CONDITIONS FOR SURVEILLANCE SYSTEM

The Providing Security & Integrated Surveillance System & Services in MDU Campus Rohtak as per BOQ are required to be purchased and installed for this University. You are requested to kindly quote your rates for the same. The terms & conditions for quoting/tendering the rates given in enclosed page may also be kept in view and signed. Your tender will interalia be subject to the following conditions: -

1. The rate quoted by the agency shall be inclusive of all types of expenses and taxes, etc. complete.
2. The offer/rates must be valid for a period of at least three months from the date of opening of tender.
3. The quantity may increase or decrease or obsoleted without any notice.
4. The Work shall be executed within the time limit specified in the Work Order. However, the time can be extended by the prior approval of authority in exceptional case. In case, the Work is not executed within the specified period the firm shall be eligible to pay the university the compensation equivalent to 1 % of the cost of work per week for such other amount as the university may decide till the work remain incomplete, provided that the total amount of compensation shall not exceed 10% (ten percent) of the total amount of the cost of works. Appeal against these orders shall, however, lie with the Vice-Chancellor, M.D. University, Rohtak whose decision shall be final.
5. In case, the supplier/contractor fails to execute the supply order/contract on the rates, and terms and conditions as contained in the supply order within the stipulated period, the firm shall be liable to such action as blacklisting, debarring from having any business with this University, forfeiture of earnest money/ performance security, besides any other action as may be deemed proper by the University.
6. The University will make payment after the receipt of material subject to proper installation, wherever applicable, and satisfaction of the Inspection Committee. No advance payment or payment against documents shall be made. However, Advance payment up to a maximum of 90% can be made in form of Letter of Credit(LC) for imported items to avail Custom Duty Exemption.
7. The acceptance of the material shall be subject to satisfactory report of this Office's Inspection Committee/Technical Committee/Experts Committee.
8. All the features present in the devices should come with all required licences from day 1.
9. All the ports should carry valid licences for enabling or disabling. No port constraint should be put as a hidden cost on MDU.
10. All Access points and L2 Switches should carry a warranty and support of 8x5 NBD.
11. All Core equipment's/switches should carry a warranty and support of 24x7.
12. All layer 2 switches should be manageable via GUI preferably over http/https.
13. The acceptance of the tender shall rest with the University who does not bind himself to accept the lowest tenderer and reserves the right to reject any or all items of tender without assigning any reason therefore. The University also reserves the right to accept tender in part i.e. any item or any quantity and to reject it for the rest.

14. The University is registered with the Department of Scientific & Industrial Research, Ministry of Science & Technology, New Delhi in terms of Govt. Notification No. 10/97- Central Excise dated 1 March, 1997 and Notification No. 51/96-Customs dated 23.7.1996 vide Registration No. TU/V/RG-CDE(244)/2015 dated September, 1,2015 up to 31-08-2020. Thus the University is exempted from payment of Custom Duty and Excise Duty. The consignee shall issue necessary certificates duly countersigned by the Registrar, M.D. University, Rohtak to avail of exemption.
15. It may be certified that you have not been debarred/ blacklisted for any reason/period by DGS&D, DS&D (Haryana) or any other Central/State Govt. Dept./University/PSU etc. If so, particulars of the same may be furnished. Concealment of facts shall not only lead to cancellation of the supply order, but may also warrant legal action.
16. In case, any other information/clarification is required, the agency may contact at Telephone No. 01262-393548, 393594 on any working day (Monday to Friday) during office hours (9 a.m. to 5.00 p.m.) in the office of the UCC.
17. The successful bidder has to deposit a Performance Guarantee equivalent to 5% of cost of work in the form of FDR/Bank Guarantee/TDR for the contract period, in the name of Finance Officer MD University Rohtak. When Performance Guarantee/warranty is deposited, EMD will be returned subsequently.
18. After winning the order, if the agency fails to Deliver product and provides satisfactory Warranty, EMD will be forfeited and also the vendor will be blacklisted from participating in any future bid.
19. The University Reserves the right for negotiation thereafter if considered necessary.
20. The rates should be quoted for required specifications. The technical specification of the equipment's required must accompany the tender. The decision of the University will be final with regard equipment's to be purchased.
21. The bidders must quote rates and other terms and conditions for all the equipment/items failing which tender will be rejected. Total cost of the bid will be one of the important deciding factor while deciding the bid in favour or against any bidder.
22. University reserves the right at the time of award of Work Order to increase, decrease, or even delete the number of items without any change in terms and conditions.
23. The tender should be submitted only if the material is readily available in your stock or items can be supplied within the time frame.
24. The dispute, if any, shall be subject to the jurisdiction of Courts at Rohtak. Any other jurisdiction mentioned in the tender or invoices of the manufacturers/distributors/ dealers/suppliers etc. shall be invalid and shall have no legal sanctity.
25. Terms and conditions printed on tender/Invoice of the firm, if any, shall not be binding on the University.
26. Payment for Passive Equipment's and installation charges will be made as per actual usage/ installed.

- 27. The Surveillance System Project will be executed by the Agency within 3 months. However Defect liability Period will be of 3 years or during the whole contract period of this tender which ever is more.
- 28. 75% payment can be made after delivery of items/ equipment's against invoice after duly inspected and verified by the university. However 90% payment can be made after complete installation of the surveillance system & balance 10% payment will be made after 6 month successfully.
- 29. The University will provide a room for the purpose of control room for monitoring installed surveillance equipment's. All the furniture's & fixtures and other support systems required in control room/datacentre will be arranged by the agency.

Signature _____
Name of the firm with seal/stamp _____
Affix Rubber Stamp of the firm

M. D. University, Rohtak

23 SOLUTION SCOPE (VIDEO SURVIVALLANCE)

DESIGN & SCOPE OF JOB for Camera and Other Equipment's

1. The offered new CCTV systems (camera & software) should be integrated in the existing LAN network over a static IP and the stream of the cameras should be viewed in minimum 60 computers simultaneously over the common LAN network.
2. Bidder has to give special attention to safety aspects and ensure compliance of all safety while executing job. Any scaffolding requirement for working at height will be in scope of bidder.
3. As part of failsafe strategy one to one redundancy is required. All the NVR's shall be placed in the centralized control room or as per site requirement.
4. The bidder shall ensure that his specified equipment must withstand specified environmental conditions without degradation of the quality & performance of any part and/or overall system.
5. The software for the Digital video management should have Software License for 600 number of Camera & at least 60 number of computer Client license. All the clients should have facility of selection of camera and viewing in multi window/ single screen large view.
6. All hardware in control room shall be placed in suitable server rack. All Network switch, firewall, LIU and all other communication components in main control room shall be placed in suitable network rack. Network switch, LIU and all other communication components in individual control room shall be placed in suitable wall mountable network rack. All servers in individual control room shall be placed in suitable console.
7. Recording back up (H.264 or MPEG4, minimum 24 x 7 @ full HD 1080p for 30 days) for each CCTV camera have been envisaged. On completion of the data storage, the recorded data will be washed away from storage memory on FIFO basis.
8. All materials required for mounting the camera, fabrication and erection to mount cameras, junction boxes etc complete in all respect are in the scope of bidder only. Supply of all material like cement etc for civil work of foundation is also in vendor scope.
9. Required Interconnecting cables (Power, OFC, Video, Data, LAN , power /signal cables etc) between Power Distribution Boards (PDB), Cameras, Video Management Systems, etc at Field and Main Control Room may be properly considered.
10. Database server, if applicable, shall keep track of all configurations & events. This will help in proper system administration etc.
11. The new system individually shall use video signals from cameras located at different locations, process them for viewing on client PCs through LAN and simultaneously record all the cameras after suitable compression.
12. The solutions may be based on Network Video Recorders (NVR's) or may use commercially available off-the-shelf server PC, storage & networking hardware.
13. The system shall offer both video stream management and video stream storage management. Recording resolution in respect of individual channel shall be programmable.
14. The main power supply feeder to the system shall be protected by a suitably sized circuit breaker with manual trip lever. The breaker shall be housed in a suitable surface-mount enclosure. Power distribution to Monitors and cameras and associated circuits shall be via fused terminals with dedicated switch.
15. The system should ensure that once recorded, the video should not be altered/ edited by unauthorized user. The system shall be able to detect any tempered video by applying techniques like digital signature on recorded video. The system shall ensure the audit trail is intact for evidential purposes.

16. System shall provide storage of all the cameras recording for full HD 1080p with MPEG4, H.264 or better compressor technique. The recording resolution and frame rate for each camera shall be user programmable.
17. Bidder has to provide license copy of all supplied software.
18. The CCTV system shall operate on 110 V AC/230VAC, 50Hz single-phase power supply. If any equipment operates on any voltage other than the supply voltage and supply frequency, necessary conversion/correction device for supply shall be supplied along with the equipment and shall be in bidder's scope.
19. In order to optimize the memory, while recording, video shall be compressed using MPEG-4, H.264 or better and stream over the IP network. Once on the network, video can be viewed on a control room or in any designated location and shall be recorded on Video recording server/data base server.
20. All the clients should have the facility of selection of cameras and viewing in multi-window /single screen in large view. Any number of clients can be programmed with the system without any additional software cost.
21. Video stream from individual cameras shall be recorded on NVR or Servers. System shall automatically over-
 - a. write the new information after the specified period & necessary script/algorithm must be available in the applications. The system shall have fail over facility so that if recorder server is down the standby failover server takes over the recording automatically without any manual intervention.
 - b. All the workstations/severs in network should be with software to view and control the cameras and retrieve the recorded video image from the Camera server seamlessly.

Work and Workmanship

1. Workmanship shall be best possible quality. All the work shall be carried out by skilled workmen except for those, which normally require unskilled persons to complete the work as per overall project schedule. If by laws, regulations and acts of local government, municipal or other authorities require employment of licensed or registered workmen of various trades, vendor shall arrange to have the work done by such registered or licensed persons. In case of manufactured materials being used in work, vendor shall arrange to have at its own cost, the services of the supervisors of the respective manufactures to ensure that work is performed in accordance with manufacturer's specification.
2. Vendor shall deploy qualified engineers and supervisors in requisite number to assure execution of good quality job as per best engineering practices and to the full satisfaction of the organisation.

Video Loss Alarm

The VMS shall support the video streamer Video Loss Alarm feature. The Video Loss Alarm feature shall provide VMS operators with a notification when the video signal from the camera to the video streamer is lost. A video loss alarm shall result in an alarm being raised, the change of the camera icon in the camera tree to indicate the alarm condition and an entry in the system audit log for future reference.

Camera Tamper Detection

The system shall provide the ability to detect attempts to tamper with connected cameras. The system will at minimum detect the following:

1. Changed field of view: repositioning the camera away from a reference position shall trigger an alarm
2. 2. Camera blur: any attempt to defocus or blur the camera shall trigger an alarm
3. Camera blind: any attempt to cover or blind the camera (via abnormally high light levels) shall trigger an alarm.

Storage

Online storage capacity of 30 days at a minimum resolution of 720p HD shall be provided.

EARTHING REQUIREMENT

Earthing requirements of the system (if required) including Earth pit preparation, earthing cable etc. shall be in the scope of the bidder.

WARRANTY

1. 36 months from date of successful Site Acceptance Test (SAT), OR, 42 months from date of supply whichever is earlier with total support of maintenance, spares and service without any cost implication
2. Any changes in equipment, manuals and other material shall be informed to the owner during the warranty period.
 - a. Vendor shall be fully responsible for the manufacture in respect of proper design, quality workmanship and operation of all the equipment, accessories etc. supplied by vendor during warranty period.
 - b. It shall be obligatory on the part of vendor to modify and/or replace any hardware and modify the operating, application and diagnostic software free of cost, in case any malfunctions is revealed even during on line operation after taking over within the warranty period.
 - c. Supply of consumables during time of warranty is in vendor's scope.

DETAILED SCOPE OF WORK for PASSIVE:

The scope of work shall include but not limited to the following for the maintenance of OFC network in the physical layer of network as mentioned under

1. The CONTRACTOR shall undertake all preventive measures with the information to respective authorities for maintaining the end-to-end continuity of OFC cable, which shall include but not limited to the following:
 - Regular surveillance of OFC route along the road should be carried to have proactive check to prevent OFC link disruptions.

- Monitoring of jobs undertaken by other agencies in the vicinity of contractor fiber network to ensure the safety of university OFC cable.
 - Attending to / safe-guarding & rectification against any signs of damage or potential damage of university OFC network.
 - Attending breakdown maintenance within minimum time period. The preventive maintenance should be carried out with prior approval and during planned shutdown period only granted by University.
 - The additional shutdown is not guaranteed as number of users traffic will be in operation. The problem of Fibers in ODF at node should be carried out with prior approval and if any replacement of the pigtail is required, contractor to replace the same with the consent of University and for which required pigtails be arranged by contractor.
2. Collecting information & accordingly, coordinate with other agencies before the execution of work, who shall carry out any OFC laying/maintenance job in the vicinity of University's OFC route, to safe-guard against the damages to University's OFC cable and existing infrastructure, the contractor shall effectively co-ordinate with other agencies working along the University's OFC route along the road to prevent damage to OFC link and the contractor shall be held accountable for any cut of the link by other agencies and the downtime so ever will be considered for downtime calculations.
 3. The Contractor shall provide the OFC maintenance service on Retention Basis to keep but not limited to the following provisions on round the clock basis for attending & rectifying the OFC fault in minimum downtime from the time of lodging the complaint of fault/OFC cut by the NOC over mobile phone to the representative of Contractor at their designated office / Head Quarter/site maintenance office.
 4. Contactor shall carry out testing of laid fibres and there-upon the OFC repairs along with testing of OFC route for improvement in the performance with link margin as per standards with the consent of University.
 5. Supply of consumables like: Joint enclosure, RCC Jointing pit, GI pipe, Warning mat, OFC Route marker, DWC pipe, Electronic marker/stone marker etc. meeting the specification as detailed under the Technical specification and approval of University should be used. Contractor has to keep minimum stock of above items up to the satisfaction and monthly reconciliation of provided supply has to be submitted to University OFC team.
 6. The CONTRACTOR shall submit the list of manpower (skilled/unskilled), machines, equipment's and consumable items with quantities suitable to meet the contractual requirements.
 7. Under OFC link cut condition, the following minimum activities shall have to be taken up by then CONTRACTOR for the restoration of OFC cut/fault for the end-to- end restoration of the network traffic/service.
 8. For the identification of exact cut/fault location on immediate basis, the OTDR measurement of spare fibre shall be made from the nearest Node. For better clarity, the OTDR measurement on spare fibre shall be taken at nodes nearest OFC joint situated at both ends of cut and using dummy fibre spool, in case required. OTDR should never be done on working fibres, if required to check the working fibre, consent of NOC and OFC team is required.

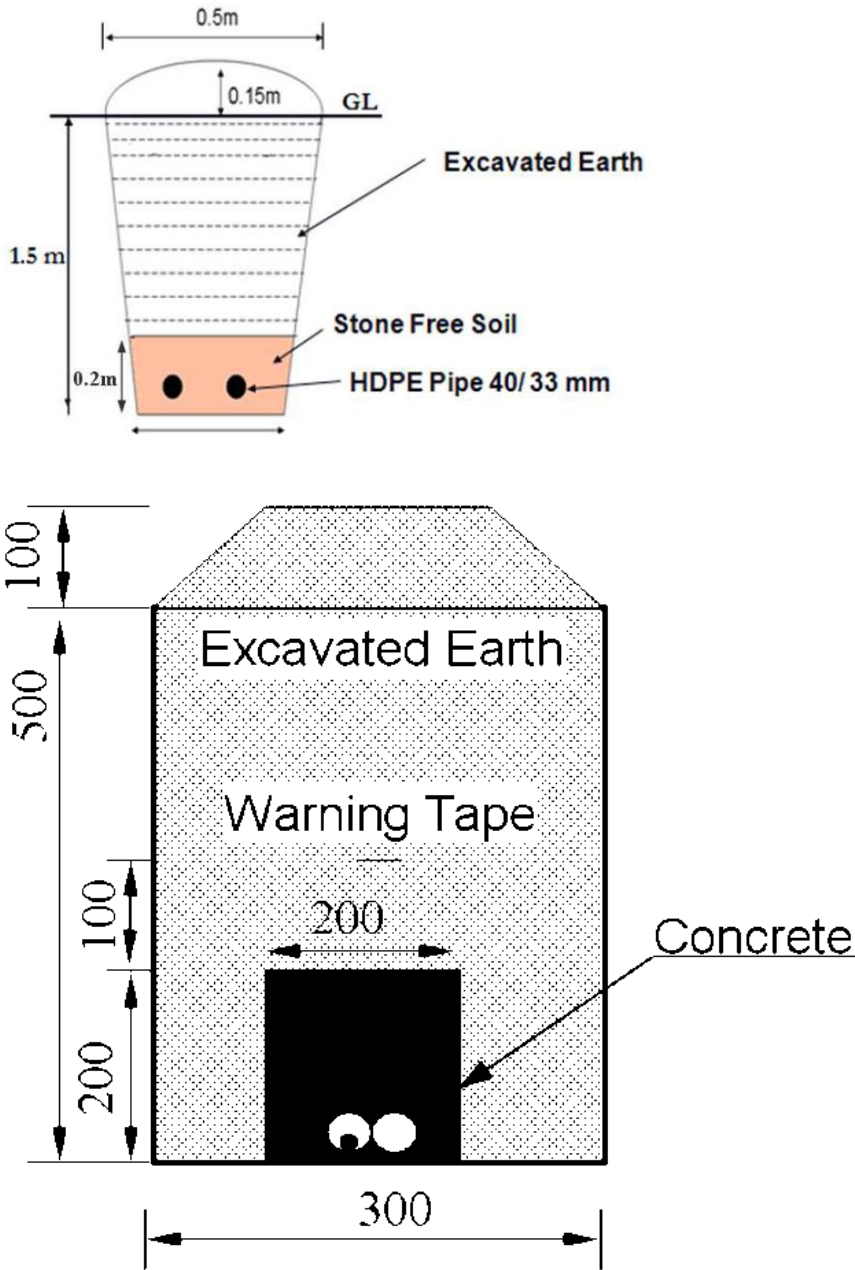
9. After the completion of site activities, the CONTRACTOR shall ensure of the restoration of the traffic from the NOC and thereafter fresh OTDR measurement & traces shall be taken for all fibres within the time frame & submit to University team.
10. After the completion of site activities, OTDR test shall be carried out from the node/nearest & reports shall be generated from the time of restoration and laying of the as-built drawing shall be updated by incorporating the new details like:
 - OFC loop used Joint-pit location,
 - Position of OFC should be shown from the Centre and edge of the road in As built drawing and the length of loop in joint pit after fault restoration shall be incorporated in as built drawing.
11. After attending the fault & permanent restoration, a Fault-Rectification report, jointly signed by University representative & CONTRACTOR, shall be generated for the closure of the complaint.(Detailed / fault restoration report is to be filled up and forwarded to University site in-charge/NOC/OFC Team).
12. Any other job required for the restoration of the OFC fault/cut in totality is to be taken up by the Contractor.
13. Contractor should collect and transport consumable materials “deliverable by University” from University’s designated stores. The detail address of University stores shall be provided to the Contractor. The contractor have to draw the material from designated University’s store, if not available, the same may be arranged from other University’s stores & contractor should collect and transport the same from the other University stores up to the working site of the Maintenance Jurisdiction or contractors own store.
14. Submission of weekly, monthly & emergency report as desired by University’s Team. The Performa of the reports shall be finalized with mutual understanding.
15. In a situation, where in the vicinity of University’s team and network any major construction projects are going on, or about to start, & it is necessary to re-route our OFC/hang the OFC through a new safe route to avoid damage, Contractor shall explore feasibility of alternate routes & provide detailed route plan for new location, where re-routing is proposed. University shall advise to shift/ re-route the OFC cable through the same contract or other contractor depending upon the feasibility for the same.
16. OTDR test report (soft copy) is to be submitted after the completion of the basis for all routes.
17. No relaxation in downtime or time extension shall be granted due to OFC cuts by agencies working along OFC route, intentional cuts, HDD/boring work, sabotage, and theft, inaccuracy of as built documents or any other site activities at site.
18. During critical conditions, if it is required, the contractor has to arrange JCB / water pump or more manpower including labour, the same shall be arrange by contractor. No extra payment is applicable/ to be paid except as quoted in the commercial contract.

HANDING OF OFC NETWORK TO University :

Contractor shall be responsible for handing over of OFC to Operator in good condition. One to one continuity of fibre between two nodes and sites, attenuation loss / km should be as per specification at both 1310 and 1550nm. Any loss of more than 0.5 dB in splice loss event in OTDR testing of OFC is to be attended by maintenance team without cost implication to OPERATOR. Depending on site conditions & consent of Operator’s permanent restoration is to be done as per the satisfaction of Operator’s OFC Team/Site In-charge while handing over the link. No extra payment for consumables

required for attending the rectification of OFC loss minimization on the same joint closure shall be payable.

1.1 Excavation in Normal soil (Depth 1.5 m)



Fibre Duct requirements if any

General

The duct and its accessories are to be used as underground conduit for carrying fibre cables. All the duct and its accessories shall be made up of the same material as that of duct.

Scope

This specification covers detail requirements for the PVC duct and its accessories listed as below:

- (1) 6.1 meters PVC DUCT 110×3.7+4.3 mm which shall be fitted with rubber gasket
- (2) 110m double socket which shall be fitted with rubber gasket.
- (3) Spacers for 4-way and 2-way ducting.
- (4) Weight1.938

This specification covers the technical provisions governing the supply of materials but does not include all the provisions of commercial contract.

Expected life

- 1 The product shall be designed to meet the average life expectancy of about 5 years without serious degradation of the performance or reliability of the product.
- 2 The product shall be capable of maintaining its performance for 24 hours daily throughout the year under the temperature range of 10°C to 45° C

24. BOQ (CONSOLIDATED REQUIREMENT SHEET)

Proposed BoQ: as per specifications below		
S. No.	Description	Required Qty
1.	Outdoor IP Bullet Cameras 2MP Outdoor Camera with 30 Mtr IR Illuminator	75
2.	Outdoor IP Bullet Cameras 2MP Outdoor Camera with 50 Mtr IR Illuminator	20
3.	OUTDOOR IP SPEED DOME CAMERA	5
4.	VIDEO MANAGEMENT Software for 600 Camera Licences & 60 Client License	1
5.	Video Analytics Software	1
6.	ANPR SYSTEM & CAMERA	12
7.	BLADE SERVER CHASIS	1
8.	BLADE SERVER	5
9.	Unified Storage 500TB	1
i.	Per 100 TB Expansion	
10.	POE+ Switch 8 Port	20
11.	CLIENT WORKSTATIONS/DESKTOP	9
12.	VIDEO WALL WITH COMPLETE ACCESSORIES (6 LCD of 48")	1
13.	HALF HEIGHT TURNSTILE	2
14.	P TYPE TURNSTILE	2
15.	ACCESS CONTROLLER:	12
16.	SOFTWARE FOR CARD READER	4
17.	Boom barrier	5
18.	RFID LONG RANGE READER	20
19.	RFID VEHICLE TAGS	1000
20.	Passive Equipment's	
i.	CAT-6 Patch Cords 2 Mtr (Siemon / Corning / Panduit / Molex / AMP)	400
ii.	CAT-6 Patch Cords 1 Mtr Approved Makes(Siemon / Corning / Panduit / Molex / Amp)	400
iii.	IP 55 Rated Box with accessories for mounting at Pole	50
iv.	Single Mode Outdoor OFC 8 core (Siemon / Corning / Panduit / Molex / Amp)	1000
v.	SINGLE MODE OUTDOOR OFC 24 CORE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)	2000

vi.	Fiber Pigtaills 1.5 Mtr. Single mode (Siemon / Corning / Panduit / Molex / Amp)	100
vii.	Fiber Optic Patch Cords: (Siemon / Corning / Panduit / Molex / Amp)	
(a)	3 Mtrs LC Sc-LC Style Single Mode 50/125 Micron Duplex Patch Cord 3 Mtrs complete as required and as per specification	50
viii.	UTP CAT-6 Cable Roll of 305 meter (Siemon / Corning / Panduit / Molex / Amp)	50
ix.	Information Outlet Single port(Siemon / Corning / Panduit / Molex / Amp)	400
x.	CAT 6 Outside Plant Cable Roll of 305 meter (Outdoor Application)	20
xi.	HDPE PIPE	5000
xii.	Route Marker	50
xiii.	Universal Joint Closure(UJC)	50
xiv.	Compact LIU 8 port with embedded splice tray loaded with SC pigtaills and FC couplers	50
xv.	Camera Poles 15 feet	50
xvi.	1GBPS Single Mode Media Convertor for Out Door	50
xvii.	2.5mm sq mm 3 core armoured cable havells/polycab electric Cable	5000
SFP Modules		
21.	1 G Base LR SFP+ Optic LC, SMF complete as per requirement and as per specification	50
Networking Job Works (rates to be Quoted per Mtr) - Complete Connectivity from switch to I/O Port with installation		
22.	Fibre Cable Laying through Conduit Pipe	
	a) Soft Digging (1.5 M depth)	
	b) Hard Digging/Moring/Chamber Installation	
	c) Etc.	
23.	UTP/STP Cabling through Conduit (including Conduit laying/fitting)	
	Underground Pipe laying with Cable with Material;	
	Outer PVC Pipe Laying with Cable with material On wall	
11	CCTV Support Engineer/Assistant on site for a duration of warranty /AMC by the firm for Facility management/onsite warranty & Maintenance	2

Technical Compliance Envelope

ANNEXURE-A

Outdoor IP Bullet Cameras 2MP Outdoor Camera with 30 Mtr IR Illuminator

Outdoor IP Bullet Cameras 2MP Outdoor Camera with 30 Mtr IR Illuminator				
	Approved Makes	Axis, Flir, Sony, Samsung, Arecont Vision, Cisco		
Sr.No	Specifications	Descriptions	Compliance(Yes/No)	Remarks
1	Image Sensor	1/3" progressive scan RGB CMOS or better		
2	Operating Frequency	50 Hz		
3	Day/ Night Operation	Yes, with IR Cut Filter		
4	Minimum Illumination	Colour: 0.3 Lux @ 30 IRE F1.4; 0 Lux with IR		
5	Mechanical Pan Tilt Adjustment	Pan: $\pm 135^\circ$, Tilt: $0^\circ - 90^\circ$		
6	Lens	3 - 10 mm, IR corrected, P-Iris, Megapixel Lens with remote zoom and focus (3-9mm Lens)		
7	Electronic Shutter	1 s to 1/25000 s or better – (1/1-10000s)		
8	Image Resolution	1920 x 1080 or better		
9	Compression	H.264 MJPEG		
10	Frame Rate and Bit Rate	Upto 60 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate. In CBR Priority to be defined for Video quality or frame rate and the bandwidth quality or upper limit shall not exceed the defined frame rate and the bandwidth quality or frame rate and the bandwidth limit		
11	GOV Length	It should be possible to vary the GOV length in the camera setting for better control on bandwidth		
12	Pixel Counter	Built in Required		

13	Image reproduction	The camera shall have the capability to produce Colored video images in low light conditions		
14	Multi View Streaming	Minimum to 2 individually cropped out view areas		
15	Video Streams	Minimum 4 Nos, individually configurable streams in H.264 @ 1920 x 1080 & 25 Fps and Motion JPEG with Controllable frame rate and bandwidth VBR/CBR H.264 or better		
16	Motion Detection	Yes built in with multiple configurable areas in the video stream		
17	Image Configuration	The Camera shall be able to Include or Exclude any area of any size/ dimension within the scene, in order to Eliminate else alarm and also optimize the bandwidth and Storage		
18	Pan Tilt Zoom	Digital PTZ		
19	Wide Dynamic Range	90 dB or better		
20	Backlight Compensation	Required		
21	IR	30 Meter (Built in or External) Optimized IR with adjustable intensity and angle		
22	Alarm Connectors	1 Input & 1 Output for Alarm Interface		
23	Event Triggers	Live Stream Accessed, Motion Detection, Day/Night Mode, Network, Temperature, , Camera Tampering, Edge Storage Disruption, Video Analytics, Manual Trigger,		

24	Event Actions	FTP, HTTP, network share, email Notification: email, PTZ function, Edge Storage/ NAS Storage, Pre & Post Alarm Recording, Actions configurable by web interface, WDR Mode, External Output Trigger, Text Overlay		
25	Edge Storage	Built in SD card slot with support upto 64 GB with Class 10 speed		
26	Protocols	IPv4/v6, HTTP, HTTPS, SSL/TLS, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, IPv4/v6, HTTP, HTTPS, SSL/TLS, QoS Layer 3, DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3 (MIB - II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP,DHCP,ARP,SOCKS, SSH		
27	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.2		
28	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, Digest authentication, User access log		
29	Firmware Upgrade	The firmware upgrade shall be done though web interface, the firmware should be available free of cost		
30	Interface	RJ 45, 100 Base TX		
31	Memory	512 MB RAM, 256 MB Flash or better		
32	Enclosure	IP66 rated and NEMA-4X-rated casing (polyester polycarbonate blend), IK 08		
33	Power requirements	Vendor to Specify		
34	Operating Temperature	-10 °C to 50 °C		

35	Operating Humidity	Humidity 20–80% RH (condensing)		
36	Certification	UL, CE, FCC, IEC,		
37	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and applications in public domain		
38	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera		
39	Mount	Wall Mount/ Pole Mount		
40	Onvif S	Required		

OUTDOOR IP BULLET CAMERAS 2MP OUTDOOR CAMERA WITH 50 MTR IR ILLUMINATOR

Outdoor IP Bullet Cameras 2MP Outdoor Camera with 50 Mtr IR Illuminator				
Sr.No	Approved Makes	Descriptions	Compliance(Yes/No)	Remarks
	Axis, Flir, Sony, Samsung, Arecont Vision, Cisco			
1	Image Sensor	1/3" progressive scan RGB CMOS or better		
2	Operating Frequency	50 Hz		
3	Day/ Night Operation	Yes with IR Cut Filter		
4	Minimum Illumination	Color: 0.16 lux B/W: 0.02 lux. 0 Lux with IR on		
5	Mechanical Pan Tilt Adjustment	Pan: $\pm 135^\circ$, Tilt: $0^\circ - 90^\circ$		
6	Lens	3-9mm, IR corrected, P-Iris, Varifocal Megapixel Lens with remote zoom and focus		
7	Electronic Shutter	1 s to 1/10000 s or better		
8	Image Resolution	1920 x 1080 or better		
9	Compression	H.264 MJPEG		
10	Frame Rate and Bit Rate	Upto 60 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate		
11	GOV Length	It should be possible to vary the GOV length in the camera setting for better control on Bandwidth		
13	Image reproduction	The camera shall have the capability to produce Coloured video images in low light Conditions		
14	Multi View Streaming	2 Areas		

15	Video Streams	Minimum 4 Nos, individually configurable streams in H.264 @ 1920 x 1080 & 25 Fps and Motion JPEG with Controllable frame rate and bandwidth VBR/CBR H.264 or Better		
16	Motion Detection	Yes, built in with multiple configurable areas in the video stream		
17	Intelligent Analytics	The Camera shall be able to Include or Exclude any area of any size/ dimension within the scene in order to Eliminate False alarm and also optimize the bandwidth and storage		
18	Digital Auto tracking	The camera shall have Built in Capability to digitally track the movements or Using Video Analytics		
19	Pan Tilt Zoom	Digital PTZ		
20	Wide Dynamic Range	90 dB or better		
21	Aspect Ratio	16:9 or 9:16 without change in image quality or change in Image		
22	IR	50 Meter (Built in or External) Optimized IR with adjustable intensity and angle		
23	Alarm Connectors	1 Input & 1 Output for Alarm Interface		
24	Event Triggers	Live Stream Accessed, Motion Detection, Day/Night Mode, Network, Temperature, Edge Storage Disruption, Video Analytics, Manual Trigger,		

25	Event Actions	FTP, HTTP, network share, email Notification: email, PTZ function, Edge Storage/ NAS Storage, Pre & Post Alarm Recording, Actions configurable by web interface, WDR Mode, External Output Trigger, Text Overlay		
26	Edge Storage	Built in SD card slot with support upto 64 GB with Class 10 speed		
27	Protocols	IPv4/v6, HTTP , HTTPS, SSL/TLS, QoS Layer 3, DiffServ, FTP , CIFS/SMB, SMTP, Bonjour, UPnP,SNMPv1/v2c/v3 (MIB - II), DNS,DynDNS, NTP, RTSP, RTP,TCP, UDP, IGMP,RTCP,ICMP,DHCP,ARP,SOCKS, SSH		
28	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc		
29	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, Digest authentication, User access log		
30	Firmware Upgrade	The firmware upgrade shall be done though web interface, The firmware shall be available free of cost		
31	Interface	RJ 45, 100 Base TX		
32	Memory	512 MB RAM, 256 MB Flash or better		
33	Enclosure	IP67 rated and NEMA-4X-rated casing, IK 08, PVR Free		
34	Power requirements	Vendor to Specify		
35	Operating Temperature	-10 °C to 55 °C		

36	Operating Humidity	Humidity 20–80% RH (condensing)		
37	Certification	UL, CE, FCC, IEC,		
38	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and applications in public domain		
39	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera		
40	Mount	Wall Mount/ Pole Mount		
41	Onvif S	Required		
42	Approved Makes	Axis, Flir, Sony		

OUTDOOR IP SPEED DOME CAMERA

	Approved Makes	Axis, Flir,Sony, Samsung,Arecont Vision, Cisco		
Sr.No	Specifications	Descriptions	Compliance(Yes/No)	Remarks
1	Image Sensor	1/3" Progressive Scan CMOS or better		
2	Operating Frequency	50 Hz		
3	Day/ Night Operation	Yes, with IR Cut Filter		
4	Minimum Illumination	Color: 0.3 lux at 30 IRE F1.6; B/W: 0.02 lux at 30 IRE F1.6 or better		
5	high-speed pan-tilt functionality	360° endless pan range and +20 to - 90° tilt Range		
6	Optical Zoom	30x Minimum, 12x Digital Zoom		
7	Lens	4.44-132 mm		
8	Group of Video/ Pictures	The camera shall be able to change the GOP/ GOV settings to optimize the Bandwidth		
9	Field of View	63° – 2.3°		
10	Pan speed	0.05° - 700°/sec or better		
11	Tilt speed	0.05° - 500°/sec or better		
12	Image Resolution	1920x1080 (HDTV 1080p) or better		
13	Compression	H.264 in Main, High and Base profile, MJPEG		
14	Frame Rate and Bit Rate	25 FPS at all resolutions with Controllable Bit Rate/ Bandwidth and Frame Rate. In CBR: The camera shall limit Bandwidth at constant level and it shall not throw continuous Constant Bandwidth.		
15	Video Streams	Multiple Streams (Minimum 4 Streams)in H.264 with controllable frame rate and Bandwidth		
16	GOV Length	It should be possible to vary the GOV length in the camera setting for better control on Bandwidth		
17	Motion Detection	Yes, built in with multiple configurable areas in the video stream		

18	Electronic Shutter	-1/1-10000 s to 1 s or better		
19	Electronic Exposure & Control	Automatic/ Manual		
20	Wide Dynamic Range	115 dB or better		
21	Image Stabilization	Required		
22	Defog	Automatic		
23	Privacy Masks	Minimum 32 configurable 3D zones		
24	Preset Positions	Minimum 255		
25	Image Flip	Yes, Automatic		
26	Guard Tour	Minimum 5 Nos		
27	Built In Heater & FAN	Required		
28	Auto tracking of moving objects	Required		
29	On-screen directional indicator	Required		
30	Event Triggers	Live Stream Accessed, Motion Detection, Network, Manual Trigger, Virtual Inputs, PTZ Auto tracking, PTZ error, PTZ Preset, Fan & Heater Malfunction, Temperature, Edge Storage Disruption, 3rd Party Analytics, Shock Detection, Storage Events		
31	Event Actions	File upload: FTP, HTTP, network share and email Notification: email, HTTP and TCP PTZ preset, Guard tour, Auto tracking, Day/night mode, Video recording to edge storage, Pre- and post-alarm video buffering. The Event Actions shall be configurable using web interface		
32	Edge Storage	Built in SD card slot with support of 64 GB with Class 10 speed		

33	Storage	The Cameras shall have the feature to directly record the videos/ images onto Nas without any Software, Alarm based recording		
34	Protocols	IPv4/v6, HTTP, HTTPS, SSL/TLS, QoS Layer 3, DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP, SNMPv1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NTCIP		
35	Text Overlay	Date & time, and a customer-specific text, camera name, graphical image etc.		
36	Memory	1 GB RAM, 512 MB Flash		
37	Security	Password protection, IP address filtering, HTTPS encryption, IEEE 802.1Xa network access control, Digest authentication, User access log		
38	Firmware Upgrade	The firmware upgrade shall be done through web interface, The firmware shall be available free of cost		
39	Logs	The camera shall provide minimum 200 logs of latest connections, access attempts, users connected, changes in the cameras etc.		
40	Interface	RJ 45, 100 Base TX		
41	Enclosure	Die Cast Aluminum, IK08 rated, NEMA4X, IP66 rated Aluminum casing, polycarbonate clear dome and sunshield		
42	Mount	Wall / Pole Mount		
43	Power requirements	POE 60W Maximum with Power Supply, Standards EN 60950-1, GS, UL, cUL, CE, FCC, VCCI, CB, KCC		
44	Operating Temperature	-50 °C to 50 °C		
45	Operating Humidity	10–100% RH (condensing)		
46	Certification	UL, CE, FCC, IEC with EN 61000-3-2		

47	Embedded Applications	The camera shall provide a platform allowing the upload of third party applications into the camera		
48	Application Programmers Interface	The interface shall be available for integration with 3rd party analytics and 2 applications and preferably edge based		
49	Onvif S	Required		

VIDEO MANAGEMENT SERVER

SR.No	Specifications	Compliance Yes/No	Remarks
	Approved Make: Videonetics/Milestone/DigiFort/Cisco		
A	NVMS: General Specification		
1	Network Video Management software (NVMS) to manage the cameras should be supplied		
2	VMS shall support open protocol IP cameras from all major vendors. Bidders shall clearly list in their proposal the brands and models already integrated into VMS. VMS should be ONVIF Profile S Compliant.		
3	The software should be supplied with software license registration, software license certificate and instructions for registration. It should be fully compatible with the supplied cameras and work seamlessly for an effective monitoring and management environment.		
4	The VMS shall be a fully distributed solution, designed for limitless multi-site and multiple server installations.		
5	The VMS shall offer centralized management of all devices, servers and users and must empower a flexible rule-based system driven by schedules and events.		
6	To ensure openness, VMS and cameras shall not be from the same manufacturer.		
7	VMS shall support Windows, Linux and Open Source DBMS (PostgreSQL, MySQL etc.).		
8	Microsoft technology based system will be Preferred		
9	The Bidder can use microsoft sql server 2012 as database. The University has licences of sql server 2012 enterprize.		
10	The VMS should manage, store and deliver video. It should support encoding, distributing, managing and archiving video feed.		
11	The viewer application shall allow recipients of the video to browse and playback the exported video without installing separate software on their computers.		
12	The VMS should authenticate and manage access to video feeds. It should act as a centralized tool for management of virtual matrixes, cameras, encoders, and viewers, as well as, for viewing network based video.		
13	VMS should support Remote access for Live viewing and Archive search using any standard Browsers, e.g., Mozilla Firefox, Chrome, Internet Explorer, Safari, etc.		

14	The management server shall allow access to a system manager from where the administrator can configure and manage all servers, cameras and users.		
15	The VMS shall allow for a minimum of 62cameras to be connected to each recording server and an unlimited number of recording servers to be connected to each management server across multiple sites, if required. The VMS architecture should confirm this scalability.		
16	VMS should be scalable 1000 cameras that can be added as & when required.		
17	The VMS should be able to run on a hardware server of a reputable brand supporting Microsoft Windows Operating system and Linux (Ubuntu , SuSE).		
18	VMS should allow interoperability of Operating systems; i.e., while the servers run on Linux, the Workstations/Laptops running client applications can be a Windows system. System monitor shall give actual and historic performance and use reports of server performance, storage availability, network usage and camera performance.		
19	The software OEM should have its own R&D Center so that customization as per user requirement can be done as and when required.		
20	The software OEM should have a proven track record of at least one live surveillance system of any large government establishment/PSU/Airports/City Surveillance with minimum of 600 IP cameras. Such project should have all components like VMS and VCA etc. working satisfactorily for minimum 6 months from the date of this NIT. End customer/user certificate/site acceptance report to this effect should be submitted along with PO copy from relevant system integrator & invoice copy from software OEM as a proof of commercial transaction.		
21	NVMS, Video Analytics and ANPR software should be integrable, to ensure seamless integrated performance of all required functionalities. Various combinations of 3rd party software (howsoever integrated they may be) will not be accepted.		
22	The system shall allow moving of camera/Encoder hardware from one recording server to another without effecting the Live and Playback of the Client system. The previous recorded data of Old Recording server should remain in same storage and the same should be reachable by clients with notice. This is required to reduce unwanted load on storage and bandwidth.		
23	VMS shall already support IP cameras from at least fifty (50) major vendors. Bidders shall clearly list in their proposal the brands and models already integrated into VMS.		
B.	Watermarking and Encryption		

1	VMS shall watermark each and every frame of the Video files with Watermarks to authenticate the source of the video for forensic evidence. While exporting video segments to external media (CD/DVD) or to any folder in workstations, the VMS shall be able to apply encryption of the video files with at least 128 bit encryption technique		
C	Multicast Support		
1	The system shall support multicasting of video feeds to client workstations in order to conserve network resources. Multicasting should be enabled from the recording servers and not directly from the cameras.		
2	The recording server must accept, display and record individual streams of video from each camera that supports it, for example, display a stream in H.264 format and record another stream in MPEG4 format. The intent of this functionality shall be providing independent streams of video from the camera to the server with different resolution, encoding and user defined frame rates.		
D	Multi-Streaming Support		
1	Multi-streaming support shall allow the system to be configured with H.264 with a high frame rate for live viewing and shall allow the system to be configured with high resolution H.264 at low frame rates for recording and playback.		
E.	Alarm Support		
1	The alarm support shall allow for continuous monitoring of the operational status and event-triggered alarms from servers, cameras and other devices, and will show the summary of the status on the live view panel for continuous monitoring by the operators. The status shall also include the recording ON/OFF and Storage full indications.		
2	The alarm support shall provide a real-time overview of alarm status, or technical problems, while allowing for immediate visual verification and troubleshooting		
F.	Client application functionality		

1	The client viewer shall provide remote users with a comprehensive suite of features. It shall be possible to playback recordings from cameras on the surveillance system, with a selection of advanced navigation tools, including an intuitive timeline browser. The Client Viewer shall support real time simultaneously view of 1, 2x2, 3x3, 4x4, 1+5, 1+7, 1+11, 8x8 multi-screens video display and a simple click shall allow enlarging any of the multi-screen displays into a full screen display. On clicking again on the enlarged display, multi-screen display shall reappear.		
2	The Client Viewer shall offer the capability of browsing recordings from cameras on the same panel where other cameras are displayed live. There shall be provision to replay multiple such cameras from various timestamps, independent to one another.		
3	The Client viewer shall allow the same camera to be placed on different tiles of the matrix layout; one tile may replay archived video from a user selectable timestamp, while the other shall display live view from the camera.		
4	The Client viewer shall have the feature to synchronize replay of selected cameras/all cameras in the view panel. Other cameras which are not in replay mode shall show live video on other tiles of the matrix view.		
5	The system shall allow views to be created which are only accessible to the user, or to groups of users optimized for 4:3, 4:3 Portrait, 16:9 and 16:9 Portrait display ratios.		
6	It shall be possible to control PTZ cameras		
7	The Client viewer shall popup on-screen floating PTZ buttons when mouse is placed on a PTZ Camera live view panel. On screen adjustment of PTZ speed shall also be there so that the speed can be adjusted independently for each camera.		
8	It shall be possible to use digital zoom on live as well as recorded video.		
9	It shall be possible to activate manually triggered events.		
10	It shall be possible to use sound notifications for attracting attention to detected motion.		
11	It shall be possible to get quick overview of sequences with detected motion.		
12	It shall be possible to get quick overviews of alerts.		
13	It shall be possible to quickly search selected areas of video recording for motion.		
14	It shall be possible to Bookmark the display layout with selected distribution of cameras in matrix layout.		

15	Matrix Switching: The Client viewer shall allow switching amongst multiple selected bookmarked cameras in matrix layout in sequence.		
16	It shall be possible to configure and use several different joysticks, including gaming joysticks.		
17	It shall be possible to print images, with optional comments. It shall be possible to use a forced playback mode allowing the user to playback recorded video from inside the 'live' mode while viewing 'live' video.		
18	The client viewer shall support the use of 3-axis USB joysticks for control of pan, tilt, zoom and auxiliary camera functions.		
19	The operator shall have the ability to use digital zoom where the zooming is performed in the image only on any number of cameras simultaneously. This functionality shall be the default for fixed cameras. The use of digital zoom shall have no affect on recording, or other users.		
20	It should be possible to allow for time synchronized playback of selected cameras together in the same video pane.		
21	The VMS shall incorporate intuitive map functions allowing for multilayered map environment. The map functionality shall allow for the interactive control of the complete surveillance system, at-a-glance overview of system integrity, and seamless drag-and-drop integration with video wall module option.		
22	The web-based remote client viewer shall offer live view of all the cameras, including PTZ control with joystick. The playback function shall give the user concurrent playback of up to 9 recorded videos with date, alert sequence, or time searching.		
23	The system shall support H.264, MPEG-4 (Part 2), compression formats for all analog cameras connected to encoders, and all IP cameras connected to the system.		
24	The system shall support dual-streaming cameras and shall support the following compression formats: H.264, MPEG-4 (Part 2) and MJPEG.		
25	The recording server shall utilize high performance ISCSI, SCSI, SAS and SSD disk drives for online recording storage and shall allow the use of lower cost SATA drives for the RAID arrays for online archive storage. Use of online archiving shall ensure that data always is readily available. Use of tape-backup systems shall not be acceptable.		

26	The recording server shall have the ability to accept the frame rate (25 to 30 fps) supplied by the cameras, while recording a lower frame rate yet still shall make the higher frame rate available to the clients for live viewing.		
27	The recording shall support multiple storage containers with individual archiving schemes and retention times. Recording capacity is limited only by disk space		
28	The Recording video data grooming shall be supported which enables compression (grooming) of the video by reducing the frame rate of the video data.		
29	The supervisor client shall be provided with dynamic control of the layout of the video wall, and content shall easily be added by dragging and dropping cameras into view positions on the video wall.		
30	The client viewer shall support GPU based video decoding to improve video rendering performance and up to 75% reduction in CPU load of the workstation running Client software. The use of GPU based video rendering shall also make client ready for 4K/UHD camera technology		
G	Investigation & Forensic Analysis		
1	Video tagging: VMS shall allow the user to bookmark any Analytics event clip or any selected segment of video from the recorded video files for ready reference at any later point of time.		
2	Critical event Tagging: The solution shall allow the user to tag critical Analytics event clips or selected segment of video from the recorded video files so that they do not get removed from the storage based on FIFO/Retention settings.		

VIDEO ANALYTICS

SR.No	Specifications	Compliance Yes/No	Remarks
	Approved Make: Videonetics/Milestone/DigiFort/Cisco		
	Video Analytics		
1	Video Content Analytics systems should be native to the VMS.		
2	The VMS and VCA must have tight integration so that there is no need to add cameras to VMS and VCA servers separately. The camera tree in VMS should automatically be available for as it is for VCA configuration.		
3	Operator shall use a single user interface when managing VMS and VCA Following Video Analytics should be provided if asked:		
a)	People Monitoring		
b)	Activity detection		
c)	Zone Monitoring		
d)	Fence Jumping		
e)	Tripwire violation (line crossing)		
f)	Object Monitoring		
g)	Unattended Object		
h)	Object removed		
i)	Object Tampering		
j)	Artefact Protection		
k)	Camera Tampering Suite		
l)	Camera Moved		
m)	Camera Defocused, Blocked or Covered		

ANPR SYSTEM & CAMERA

SR.No	Specifications	Compliance Yes/No	Remarks
	Approved Makes Videonetics/Milestone/Allgovision/Digifort/Cisco		
	The ANPR System shall enable monitoring of vehicle flow at strategic locations. The system shall support real-time detection of vehicles at the deployed locations, recording each vehicle, reading its number plate, database lookup from central server and triggering of alarms/alerts based on the vehicle status and category as specified by the database. The system usage shall be privilege driven using password authentication.		
A	Vehicle Detection and Video Capture Module		
1	The System should automatically detect a vehicle in the camera view using video detection and activate license plate recognition		
2	The System shall automatically detect the license plate in the captured video feed in real-time.		
3	The system shall perform OCR (optical character recognition) of the license plate characters (English alpha-numeric characters in standard fonts).		
4	The System shall store JPEG image of vehicle and license plate to physical path of storage and enter the path of file (license plate number) into DBMS like MSSQL etc. database along with date timestamp and site location details.		
5	System should be able to detect and recognize the English alpha numeric License plate in standard fonts and formatsof all four wheelers including cars, HCV and LCV.		
6	The system shall be robust to variation in License Plates in terms of font, size, contrast and color and should work with good accuracy		
7	The system shall be robust to variation in License Plates in terms of font, size, contrast and color and should work with good accuracy.		
B	Vehicle Detection by Color		
1	The system shall detect the color of all vehicles in the camera view during daytime and label them as per the predefined list of configured system colors. The system will store the color information of each vehicle along with thelicense plate information for each transaction in the database.		
2	The system shall have options to search historical records for post event analysis by the vehicle color or the vehicle color with license plate and date time combinations		
C	Alert Generation		

1	The system should have option to input certain license plates according to the hotlisted categories like "Wanted", "Suspicious", "Stolen", etc by authorized personnel.		
2	The system should be able to generate automatic alarms to alert the control room personnel for further action, in the event of detection of any vehicle falling in the hot listed categories.		
D	Vehicle Status Alarm Module		
1	On successful recognition of the number plate, system should be able generate automatic alarm to alert the control room for vehicles which have been marked as "Wanted", "Suspicious", "Stolen", "Expired". (System should have provision/expansion option to add more categories for future need).		
2	The Instantaneous and automatic generation of alarms. In case of identity of vehicle in any category which is define by user.		
E	Vehicle Log Module		
1	The system shall enable easy and quick retrieval of snapshots, video and other data for post incident analysis and investigations.		
2	The system should be able to generate suitable MIS reports that will provide meaningful data to concerned authorities and facilitate optimum utilization of resources. These reports shall include.		
a.	Report of vehicle flow at each of the installed locations for Last Day, Last Week and Last Month.		
b.	Report of vehicles in the detected categories at each of the installed locations for Last Day, Last Week and Last Month.		
c.	Report of Vehicle Status change in different Vehicle Categories.		
3	The system shall have Search option to tune the reports based on license plate number, date and time, site location as per the need of the authorities.		
4	The system shall have option to save custom reports for subsequent use. The system shall have option to export report being viewed to common format for use outside of the ANPRS or exporting into other systems.		
5	The system should provide advanced and smart searching facility of License plates from the database. There should be an option of searching number plates almost matching with the specific number entered (up to 1 and 2 character distance).		
F	Vehicle Category Editor		
1	The system should have option to input certain license plates according to category like "Wanted", "Suspicious", "Stolen", "Expired" etc. by Authorize personnel.		

2	The system should have an option to add new category by authorized personnel.		
3	The system should have option to update vehicle status in specific category by authorized personnel. E.g. on retrieval of stolen vehicle, system entry should be changed from "Stolen" to "Retrieved". System should have option to specify maximum time to retain vehicle records in specific categories.		
G	Central Management Module for ANPR, VMS Software		
1	The Central Management Module shall run on the ANPRS Central Server in control booth. It should be possible to view live video & records and edit hotlists from the Central Server. ANPR software, VMS & ANPR should be from the same manufacturer, to ensure seamless integrated performance of all required functionalities. The ANPR & VMS shall be a fully distributed solution, designed for limitless multi-site and multiple server installations. It should support Windows/ Linux/ Mac OS on Client machine, independent of what operating system is there in the servers.		
H.	Minimum IP Camera Specification		
1	At least 2 MP, IP Box Camera, with 1/3 inch CMOS sensor		
2	8mm to 40 mm Vari focal PIRIS Lens		
3	Dual Stream support: MJPEG stream and H264 independently configurable. MJPEG Stream must be available in 2MP resolution		
4	Simultaneous Streaming of both H264 and MJPEG streams		
5	At least 3 concurrent access to Camera		
6	MJPEG on RTSP/HTTP and H.264 in RTSP protocol		
7	Fully ONVIF Compliant		
8	IR led for about 30 Mtr.		
I	Systems requirement:		
	Local Server At Intersection:		
1	The system must run on a Commercial Off the Shelf Server (COTS). Outdoor IP 66 Quad core processor based server should be able to cover at least 4 lanes.		
2	The system must be based on open platform, and should run on Linux or Windows Operating System.		
3	The system should work with 4 fps video per ANPR Camera.		

4	Workstation must run on Windows 7 (64Bit.)or latest Windows OS irrespective of whether the Server is on Linux or Windows.		
J	Failover Support for ANPR & VMS System.		
1	The system shall support automatic failover for recording servers. The allocation of cameras to recording servers shall be done automatically by the VMS in a load balanced manner. On failure or any particular Recording server, the cameras associated with the failed server should be automatically distributed across all the active servers without any human intervention. When the failed server becomes active, the cameras will be automatically allocated to the server again without any human intervention. There shall not be any need to deploy a dedicated redundant server for this purpose.		
K	System Health Monitoring		
1	Health monitoring module shall provide intuitive alarm management through the use tools including:- Detailed listing of all active or incoming alarms with available filters for time period, alarm source, operator and alarm state.		
L	Watermarking & Encryption		
1	ANPR & VMS shall watermark each and every frame of the Video files with watermarks to authenticate the source of the video. While exporting video segments to external media (CD/DVD) or to any folder in workstations, the VMS shall allow encryption of the video files with at least 128 bit encryption technique.		
2	Video Cart Facility for ANPR along with VMS Software.		

BLADE SERVER CHASIS

Technical Specifications for Chasis & Blades IBM/Lenovo, DELL, CISCO or HP make			
S.No.	Description with Specification	Compliance Yes/No	Remarks
A	Blade Chassis (If Required) Same OEM as that of Blade Servers		
1	Blade Chassis		
a)	Blade chassis shall be 19" Electronic Industries Alliance Standard Width rack mountable and provide appropriate rack mount kit.		
2	Power		
a)	The enclosure should be populated fully with power supplies of the highest capacity 80plus platinum certified & energy efficiency of a minimum of 90%.		
b)	The power subsystem should support N + N power redundancy (where N is at least equal to 2) for a fully populated chassis with all servers configured with the highest CPU configuration, maximum memory and IO configuration possible		
3	Cooling		
a)	Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers enabled with technologies for improved power consumption and acoustics		
4	Chassis connectivity		
a)	The uplink connectivity from the chassis should be able to support up to 160 Gb bandwidth or up to 20 Gb per server blade.		
5	Converged Module		
a)	Chassis should have sufficient number of redundant 10gb based converged modules to provide a minimum of 20Gbps per blade server and 10Gbps sustained per blade server (with 1 module failure)for a fully populated chassis for LAN & SAN Traffic.		
6	Ethernet Module		
a)	Chassis should have sufficient number of redundant 10 Gb based ethernet modules to provide a minimum of 20 Gbps per blade server and 10 Gbps sustained per blade server (with 1 module failure)for a fully populated chassis for LAN Traffic.		
7	FCOE Module		

a)	The uplink from the chassis should support FCoE (Fibre Channel over Ethernet) technology.		
8	Management		
a)	Must be able to show the actual power usage and actual thermal measurement data of the servers across chassis		
b)	Administrators should have the ability to set a cap on the maximum power that the chassis / physical server can draw in order to limit power consumption for non critical applications		
c)	Redundancy should be built in the management subsystem so that if one management module fails other should be able to take over automatically. Management solution should be provided so that management upto 8 blade per chassis can be done from single console.		
d)	Role Based Access Control and remote management capabilities including remote KVM should be included		
e)	It should also have the capability to enforce policies in the system BIOS settings and configuration , so once administrators define a common policy for a server BIOS, all subsequent deployments use this policy .		
f)	Should support an environment where server identity including - server BIOS version, MAC ID, NIC firmware version, WWPN, FC-HBA firmware version, Management module firmware version, Server Boot Policies, KVM IP etc can be created		
g)	Management of both rack & blade form factor servers from the same console		
h)	Supports multiple level of authentication methods including TACACS+, LDAP and RADIUS		
i)	Movement of server identity from one slot to another in the event of server failure within chassis as well as across chassis.		
9	Licensing		
a)	Should include all necessary licenses for management for a fully loaded Blades chassis.		
10	Access Connectivity		

a)	Vendor should quote either LAN and SAN TOR Switch or FCoE TOR switch and should be compatible with existing one.		
11	Network scalability		
a)	Vendor should provide standard access/TOR 10g based Layer - 2 switch which can aggregate minimum 2 chassis and more and provide 10g of uplink connectivity per blade chassis.		
12	SAN Scalability		
a)	Vendor must supply FC TOR / edge switch which can accommodate minimum 2 chassis and more.		
13	FCoE Enable Switch		
a)	For Vendor supplying FCoE based solution must quote TOR FCoE enabled switch to aggregate minimum 15 chassis and 120 blade servers. FCoE TOR switch must in turn connect to existing LAN core / Aggregation switch using 10 Gig SFP+ connectivity and SAN core switch using line rate 8 Gbps FC ports.		
14	Warranty		
a)	3 yrs - 24/7 support for all parts on all working days.		

BLADE SERVER

B	Blade Servers. IBM/Lenovo, DELL, CISCO or HP make		
1	Processor		
a)	Each blade server should be configured with a minimum of two CPU of Intel® Xeon® Processor E5-2698 v4 series 20 core per processor with a minum of (50M min Cache, min 2.20 GHz)/ DDR4 2400MHz or higher available in latest series		
2	Memory		
a)	Each blade server should be configured with 256GB (2133MHz) ECC memory (All modules of Equal capacity) upgradable in a total capacity of 512 GB of memory which can be further scalable up to 768GB or more with higher DIMMS.		
b)	The server should have at least 24 DIMM slots and a maximum scalability of up to 1.5 TB of DDR4 memory.		
3	Graphics		
	Nvidia M6 GPU		

4	HDD		
a)	2 x 300GB 12Gbps 10K SAS Hard Disk Drive with RAID1 & should be able to support hot swap SSD drives		
5	Interface ports		
a)	The Blade server should support Ethernet and fiber channel connectivity OR Converged Network Adapters in lieu of the same. The Converged Network Adapters should aggregate both the Ethernet and FC connectivity on a single fabric		
6	IO bandwidth		
a)	The server should provide a minimum of 40Gb aggregate bandwidth per server (4X10Gb for Converged Network adapter). Server should support the scalability to 80gb of LAN & SAN traffic.		
b)	The server should be able to offer 32 number of virtual NIC and virtual HBAs also from virtualization perspective server should support up to 256 virtual interfaces that can be anything either FC or NICS.		
7	Management		
a)	It should support remote/virtual KVM capability from an external keyboard, video monitor and mouse to all blades installed in the chassis through the management controllers and should also support virtual media for DVD access and through single management 15 chassis(120 servers) can be managed.		
8	Operating System compatibility		
a)	Red hat Linux 5 or above, Win 2016 standard and datacenter, SuSe Enterprise server 10 and above		
9	Windows OS		
a)	All servers has to be supplied with Windows Server 2016 R2, Datacenter Edition, x64, Including 10 CALs, with Support for High availability clustering		
10	Warranty		
a)	3 yrs - 24/7 support for all parts on all working days.		

STORAGE(500TB+PER 100 TB ENCLOSURE)

Sr.No	Item Specifications/ (Approved Makes Netapp/EMC/HP)	Compliance Yes/No	Remarks
1	Architecture		
	The proposed Unified Storage should be a Dual Controller in active-active configuration, no single point of failure, data storage system for file and block protocols which can scale-up and scale-out upto 6 or more numbers of unified controller in one single cluster.		
2	Storage Quality Certification		
	The Storage OEM should be established in the Gartner Leader Quadrant		
3	Storage Controllers		
	The proposed system should have dual unified controllers in active-active configuration with minimum of two Octa-core processors and minimum 64GB of Memory per controller. Separate NAS header solution shall not be acceptable. Array must support fully automatic de-staging of cache contents to disks in order to prevent possible data loss during extended power outage. Additional cache of minimum 48TB should be provisioned using mirrored Flash Disks usable by both controllers. The controllers should be supporting RAID levels 0/1/1+0, 4/5 and 6/RAID-DP		
4	Storage Capacity		
	The system should support a minimum of up to 720 disk drives with a backend throughput of 3 Gb/s in a HA configuration with a mix of 7200 RPM NL-SAS, 10K or 15K RPM SAS Disks and Enterprise Flash Disks co-existing in the same array in a HA Configuration.		
	Storage Array should be supplied with minimum 800TB usable capacity on RAID-5/RAID-6/Raid-DP after RAID penalties and hot-spare disks as per the best-practices of the OEM.		
	The storage shall have the ability to expand LUNS/Volumes on the storage online and instantly.		
5	Storage Functionality		
	The storage should be configured with Quality of Service feature.		
	The proposed storage system should be configured to provide data protection against two simultaneous drive failures.		
	System should have redundant hot swappable components like controllers, disks, power supplies, fans etc.		

	The required number hard disks for parity & spares, should be provided exclusively of the usable capacity mentioned. At least 2% of the usable capacity requested on each tier should be configured as spare drives with the subsequent disk types		
	Proposed storage should support block level data de-duplication and compression for all kinds of data (structured & unstructured);		
6	Network Interconnects		
	The storage should be configured with 4 x 16 Gb/s FC ports, 4 x 10GbE Ports and 4 x 1Gbps per controller. The 10GbE and 1 GbE Ports should be usable for both Block and File access. The system should have capability for VLAN, Link Aggregation, and Ethernet Trunking for high availability and performance.		
7	Storage Protocols		
	The proposed system should support and be fully licensed for entire capacity supplied and for all protocols iSCSI, Fiber Channel, SMB (SMB2 and SMB3) and and NFS (NFS 3 and NFS4) protocols. The system should also support VSI, VASA and VVOLs. The storage should also be fully licensed and have in-built feature of replication of block and file data to another storage of the same make and model.		
8	System Protocols		
	The System should support SNMP, Address Resolution Protocol, Network Time Protocol, LDAP.		
9	File Features		
	The file system should support NIS (Network Information Service) and PDC (Primary Domain Controller) integration. The system should be configured with CIFS, NFS, De-duplication, File Compression, Thin Provisioning software licensed for the entire system.		
10	Block Features		
	The system should be configured with iSCSI and FC, licensed for the entire system. The system should optionally support automatic movement of data between various disk tier pools depending on the performance requirement of the data. The system should also be capable of using solid state disk as read and write cache for all the protocols supported		
11	Snapshots		
	The system should be configured with Snapshot licenses and snapshot restore licenses. The system should be configured with software license for creating clone copy of production LUN /volume accessed by FC/iSCSI hosts for the entire systems capacity. File level snapshots and restores should also be supported and licenses.		

12	Management		
	The system should have a built-in browser based management. There should be no requirement of dedicated computer for management of the storage system. It should be able to support automated email to vendor support centre for proactive maintenance.		
13	Integrity		
	The system design should provide data integrity features for stringent reliability and Five 9's availability. Storage system should be upgradable to higher model without any data migration. The system must keep write cache persistent during fault conditions, i.e. Single power supply failure / single fan failure etc. Array Cache/ Memory should be mirrored between the Active- Active controllers using separate Inter controller paths. Disk replacement process should be non-disruptive and not cause any other disk to go offline for replacing failed drive. The system should provide management control of SNMP, email and dial-home notification		
14	Warranty		
	The system should be supplied with three years 24x7 onsite support and warranty		

8 PORT SWITCH

Sr.No	Item Specifications	Compliance Yes/No	Remarks
1	8 port POE Switch with SFP uplink		
a	The switch should support a minimum of 8 x 10/100/1000 Gigabit Ethernet Ports		
b	The switch should support a minimum of 2 x 1G copper and 2 x 1G SFP Uplinks Ports		
c	The switch should support Forwarding bandwidth of 12 Gbps		
d	The switch should have Packet Forwarding Rate of 17 Mpps		
e	The switch should support 4000 VLAN IDs		
f	The switch should have 120W POE budget		
g	The switch should support IEEE 802.1D Spanning Tree Protocol		
h	The switch should support IEEE 802.1p		
i	The switch should support IEEE 802.1Q Trunking		
j	The switch should support IEEE 802.1s Multiple Spanning Tree (MSTP)		
k	The switch should support IEEE 802.1w Rapid Spanning Tree (RSTP)		
l	The switch should support IEEE 802.1x		
m	The switch should support IEEE 802.1ab (LLDP)		
n	The switch should support IEEE 802.3ad Link Aggregation Control Protocol (LACP)		

CLIENT WORKSTATIONS/DESKTOP

	Brief Description	Compliance Yes/No	Remarks
Approved Make	HP/DELL/Lenovo (Qty:5)		
Processor:	Intel(R) Xeon®/I7 Equivalent Processor		
Physical Memory:	16GB (2x8GB) 2133MHz DDR4 Non-ECC		
Fixed Disk:	500GB 3.5inch Serial ATA (7,200 RPM) Hard Drive + 250 GB SSD		
Optical Drive:	16X Half Height DVD +/- RW		
Graphic Adapter:	NVidia QUADRO, 4GB, 1 DP, 1 DVI		
Input Device:	Keyboard & Optical Mouse		
OS:	Windows(R) 8.1 Pro (64Bit) English		

Screen	Three 24 Inch studio LED monitors with stand for continues monitoring		
Approved Make	HP/DELL/Lenovo		
Qty	3		
Processor:	Intel(R) Xeon®/I7 Equivalent Processor		
Physical Memory:	16GB (2x8GB) 2133MHz DDR4 Non-ECC		
Fixed Disk:	500GB 3.5inch Serial ATA (7,200 RPM)		
Optical Drive:	16X Half Height DVD +/- RW		
Graphic Adapter:	Intel Integrated		
Input Device:	Keyboard & Optical Mouse		
OS:	Windows(R) 8.1 Pro (64Bit) English		
Screen	19 inch studio LED monitors with stand for continues monitoring		
Qty	5		
Processor:	i5 Equivalent Processor		
Physical Memory:	8GB (1x8GB) 2133MHz DDR4 Non-ECC		
Fixed Disk:	500GB 3.5inch Serial ATA (7,200 RPM)		
Optical Drive:	16X Half Height DVD +/- RW		
Graphic Adapter:	Intel Integrated		
Input Device:	Keyboard & Optical Mouse		
OS:	Windows(R) 8.1 Pro (64Bit) English		
Screen	19 inch studio LED monitors with stand for continus monitoring		

VIDEO WALL WITH COMPLETE ACCESSORIES

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Makes (LG/Samsung/Sony) Qty :9		
A	General Specs		
	Screen Size Screen Size49" (48.50" diagonal) or bigger		
	Panel Technology: IPS		
	Aspect Ratio: 16:09		
	Native Resolution: 1920 x 1080 (FHD) or Higher		
	Contrast Ratio:1,300 : 1		
	Viewing Angle: 178 x 178		
	Response Time: 8ms (G to G)		
	Orientation: Portrait & Landscape		
	Surface Treatment: Hard coating(3H), Anti-glare treatment of the front polarizer (Haze 10%)		
	Lifetime: 50,000 Hrs		
B	CONNECTIVITY		
	Input: HDMI, DVI-D, RGB		
	Output: DVI-D		
	External Control: RS232C (In/Out), RJ45, IR Receiver, USB		
C	PHYSICAL SPECIFICATION		
	Packed Weight: 50.5 lbs		
	Bezel Width: 2.3mm (Left / Top), 1.2mm (Right / Bottom) 39.3 lbs lesser will be preferred		
	Bezel Color: Bezel Color Black and thin line Bezel		
	Standard Mount Interface 600 x 400mm		

	Monitor Dimension (W x H x D)		
D	SPECIAL FEATURES		
	Temperature Sensor, Tile Mode (Up to 15x15),		
	Natural Mode @Tile Mode, Energy Saving,		
	Smart Energy Saving, File Play with USB		
	STANDARD (CERTIFICATION)		
	Safety UL / cUL / CB / TUV / KC		
	EMC FCC Class "A" / CE / KCC		
E	POWER		
	Power Supply 100–240V~, 50/60Hz		
	Power Consumption Typ. 90 W		
	Power Type Built-in Power		
	Power Consumption-Smart Energy Savingon:40W		
	MEDIA PLAYER COMPATIBILITY		
	External Media Player Attachable		
F	Wall Mount		
	wall mount kits should be landscape as well as portrait available		
	All Required cable necessary for making a video wall must be accompanied.		

HALF HEIGHT TURNSTILE

Sr.No	Specifications	Compliance (Yes/No)	Remarks
1	Standard measurements should be:		
	Usable bar length: =< 480 mm		
	Width: =<820 mm		
	Height: =<950 mm		

	Depth: =<1004 mm		
2	Materials		
	Casework: 304 grade grained stainless steel,Casework lid: 304 grade grained stainless steel,Tripod hub: Cast aluminium with painted grey finish,Tripod arms: 38mm diameter 480mm 304 polished stainless steel		
3	Finish:		
	Tripod should be made with AISI 304 stainless steel and satin finish.		
4	Function:		
	Electro-mechanical head mechanism :Positive locking action for one passage at a time,Self-centering mechanism to ensure complete rotation into the home position,Hydraulic damper to ensure smooth operation,Anti-backup device to prevent reverse rotation once the mechanism has moved 60° from home.Power Failure / Fire Alarm,Either one or both directions can be fail-safe (standard), i.e. rotates freely, or fail lock, i.e. locks in the home position,Fire alarm - emergency input. Input facility available for free voltage contact to effect fail-state,Mechanism fail state will be the same as power failure choice,Drop arm option: the horizontal arm drops to create passage for evacuation,Flow Rates Insertion Type Reader: 20 passages per minute,Swipe Type Reader: 30 passages per minute,Proximity Reader "Hands Free": 40 passages per minute		
5	MCBF : IP rating / MCBF / MTTR IP 44 / 10M cycles (12M if Normally Open) / less than 30 min		
6	Electric:		
	Power Supply 230Vac 50 Hz or 115Vac 60 Hz,50VA (stand by 5VA if Normally Open)		
7	Installation:		
	The tripod barrier should have dowelled on finished floor level FFL and should be suitable for outdoor installations.		
8	Protection types: Housing should be IP 44, components conducting supply voltage should be:IP 43		

P TYPE TURNSTILE

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make: KABA/Gunnebo		
1	Standard measurements:		
	Leaf radius: 900 mm Leaf upper edge: 900 mm		
2	Construction:		
	Rotor column: 220mm dia. 304 grade grained stainless steel,Rotor wing: 10mm-thick clear toughened frameless glass panel		
3	Finish:		
	Stainless steel semi-gloss smooth finish AISI 304		
4	Function:		
	Motorised, pass left or pass right. Logic Voltage 24Vac,Power Failure / Fire Alarm In the event of an emergency or isolation of power supply, the unit will failsafe i.e.rotor will freely turn in both directions. Input facility available for voltage free contact supplied by others to effect fire alarm fail safe state. Additional Interface Potential-free contact provided by either a card reader or push button input. Card reader inhibit and reset output signals available as standard :Flow Rate: Insertion Type Reader, 10 passages per minute , Swipe Type Reader, 15 passages per minute, Proximity Reader "Hands Free", 20 passages per minute		
5	IP Rating / MCBF / MTTR :IP20 / 1M cycles / less than 30min		
6	Electrical system:		
	230Vac 50Hz or 115Vac 60Hz. Power rating 250VA		
	Three floating messages (closer and opener) for type 2: Rotation message entry, rotation message exit, message ready.		
7	Installation:		

	The swing door is dowelled at finished floor level FFL and is suitable for outdoor installation. Protection class: Housing IP 20, components conducting supply voltage: IP 20		
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ACCESS CONTROLLER:

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make: HID/Honeywell (prowatch), Schneider (Continuum), DDS, Tyco (Software house)		
A	Should Have 2 Reader IP Access Controller with on-board buffer memory of 1,00,000 transaction and should have cardholder database of 99000 per controller. The controller should be intelligent to take decision in offline mode when communication link is not available. The controller supplied should come with battery back-up and power supply units. The controller should have on-board TCP/IP port.		
	Access control units = 06, IP Based 2 Reader controller (POE) , with IN/out reader, electrical door strike(Fail safe/Fail secure) ,Door Contact and all related accessories.		
B	Hardware:		
1	32-bit RISC CPU, 100 MHz • Microcontroller		
C	Memory:		
	8 MB onboard Flash memory		
	16 MB / 32 MB memory expansions available		
	32 MB SDRAM • 256K SRAM		
	Enclosure Material: UL94 Polycarbonate		
D	Power Supply Requirements 160 mA @ 12-18 VDC		
E	Operating Environment		
	Indoors or customer supplied NEMA-4 rated enclosure		
	Temperature - 32° to 122° F (0° to 50° C)		

	Humidity - 5% to 95% relative, non-condensing		
F	Communication Ports TCP/IP – 10 or 100 Mbps, IA standard Wiegand/Clock-and-Data – two ports		
G	Certifications		
	UL 294 and UL 1076 Recognized Component for the US CSA 205 for Canada, FCC Class A Verification, EMC for Canada, EU (CE Mark), Australia (C-Tick Mark), New Zealand, Japan		
H	Interface:		
	RJ-45 connector for Ethernet TCP/IP		
	Quick-disconnect screw terminal connectors • Inputs for:		
	2 readers		
	2 doors monitor switches 2 Request-to-Exit switches		
	2 door strikes (configurable)		
	2 auxiliary devices: (door held/forced alarm, alarm shunt, host offline (communication down), or general purpose		

Smart Card Reader

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make: HID or reputed Wiegand readers		
1	Maximum Read Range:2”–3” (5.0 -7.5 cm)		
2	Material: UL94 Polycarbonate 10 - 16 VDC reverse voltage protected Linear supply		
3	Power Supply: Recommended		
4	Current Requirements (Avg/Peak): 80/300 mA @ 12 VDC		
5	Operating Temperature:-31° to 150° F (-35° to 65° C)		
6	Operating Humidity: 5% to 95% relative humidity non-condensing		
7	Transmit Frequency: 13.56 MHz UL 294/cUL, FCC Certification, Canada Certification Certifications CE Mark (Europe), New Zealand, Australia c-Tick IP55		

SOFTWARE FOR CARD READER

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make: DDS,Honeywell (prowatch), Schneider (Continuum),Tyco (Software house), HID		
1	Minimum 250 readers, unlimited card holders database, Visitor Pass Management system. The Software provided should be able to support multiple card formats and facility code and should be able to work in a multitenant configuration. Vendor to provide suitable server for above software along with original windows and SQL DB licenses' shall provide graphical user interface functionality for the display and operator control via on-screen site graphic maps. It shall provide graphical display maps of the site that clearly indicate all access control alarm points throughout the site		
i.	The software system design shall be object oriented, and shall support Server- Client Architecture.		
ii.	The Access Control Software shall be a native 32-bit application running under the Windows Server Environment. All client workstations and the Server(s) shall have full system functionality and shall not be segregated in any way by function, except as defined by the user authentications of sign on and password.		
iii.	The system shall have a simple, easy to use graphical user interface, browser based. Help text shall be provided for each screen function, and shall be sufficiently interactive that a user may access page help directly and be provided with explicit information relevant to the particular screen being displayed.		

iv.	The system shall have a distributed architecture; however the central server(s) shall have the capability to make transaction decisions for access requests, alarm handling and output control. The software shall be provided with a high-speed real time functionality, which allows the server to take over the transaction handling function of Access Controllers, which are being downloaded, or whose database is incomplete or corrupted, and thus maintain the fully functional access and security response of the Access controllers under these circumstances.		
v.	It is vitally important that the access and alarm functionality of the system shall in no way be impaired during periods when database information is being downloaded to Access Controllers or other field devices, or when these Access Controllers or other field devices have insufficient information to make necessary transaction decisions. Thus, it is unacceptable for the performance of Access Controllers to be degraded in any way. Access decisions based solely on company codes or facility codes or even a combination of the two are not acceptable.		
2	Functional Features of ACS software:		
i.	The ACS software system shall have the modules that connect the controllers on TCP/IP or RS-485, scans all the units defined for any events/alarms, and downloads any settings configured by the operator.		
ii.	The ACS shall be designed and configured in such a way so that single point failure shall have no degradation in overall functionality.		
iii.	It shall be the responsibility of the installer to ensure that the hardware and software solution using the PC specified meets the standards and performance criteria as set down in this bid.		
iv.	The system software architecture shall be designed not only to provide a high speed open architecture platform for individual single server applications, but also be specifically designed to insure high speed and high integrity partitioning.		
v.	The ACS architecture should store its data in MS – SQL Database		
vi.	Access Control system software shall, as a minimum, support the following features:		

a)	Integration with a wide range of data collection devices such as biometric, smart card (iClass & Mifare), PIN and Proximity.		
b)	User defined role and operations		
c)	255 time zones for multi-shift operation support.		
d)	180 Holidays		
e)	Configure up to 8 digit Pin for Keypad		
f)	Global and local, hard, soft and timed anti-pass back/anti-tailgate capability.		
g)	Bulk addition of cards		
h)	Navigation window to facilitate easily access to employee details, remote controlling of controller operations & operating modes etc.		
i)	Configurable alarm-to-relay linking downloaded to field controllers for local operation		
j)	Configurable automatic, time controlled report generation and/or disk backup commands.		
k)	Communication monitoring		
l)	Address book of Employees at security station		
m)	History/audit trail.		
n)	Ability to respond to access requests/alarm conditions before and during download		
o)	Automatic card activation and deactivation		
p)	Global and local alarm masking by operator or cardholder		
q)	Access activity analysis by card reader		
r)	English language software, user friendly and menu driven operator screens		
s)	On screen help and /or manual		
t)	Support for different category like employee/ contract employee/ visitors etc.		
u)	Login and authority rights to the software for each operator		
v)	cardholder fields updating, deletion & addition		
w)	User defined database fields per card user.		

x)	Data searching parameters as and where require		
y)	anti-pass back/anti-tailgate feature definition		
z)	Access card enable and disable, Expired card deletion		
aa)	Database backup ,restore, export ,import, archival ,validation		
bb)	Access group definition , assignment, activation, deactivation		
cc)	It should define different transaction status like access denied, access granted, Egress pressed, invalid enable or expiry date for card user, anti-pass back violation etc.		
dd)	Windows options like tile horizontal /vertical or cascade open form windows		
ee)	Generation of various reports for Admin evaluation.		
ff)	Ability to Customise the Report		
gg)	Export of report to text, PDF, excel ,CSV, Tif, XML format		
hh)	Should be capable of integrating with following as a part of this Tender , and / Or in Future as per the directive of the Consultant / Client :		
	<input type="checkbox"/> ERP,HR and legacy Systems		
	<input type="checkbox"/> Time attendance		
	<input type="checkbox"/> Basic Visitor management		
	<input type="checkbox"/> Vehicle Management Systems		
	<input type="checkbox"/> Asset tracking system		
	<input type="checkbox"/> Canteen management system		
	<input type="checkbox"/> IP Modbus integration with BMS		
	<input type="checkbox"/> IP CCTV integration		
3	The access control system software shall, as a minimum, support the following features:		
i.	Cardholder records – 2000 expandable up to 250,000 as per user requirement.		
ii.	Escort Functionality for any specified Zone / Reader Set / Access controller defined to the directives of the client/ consultant.		

iii.	Alarm input points – 1,024 minimum		
iv.	Relay outputs - 1,024 minimum		
v.	Client workstations - 32 minimum		
vi.	255 time schedules and multiple Shift Capability.		
vii.	User-defined alarm categories.		
viii.	Local, hard and soft anti-pass back / anti-tailgate Configurable alarm-to-relay linking, downloaded to field controllers for local operation.		
ix.	Configurable automatic time zone controlled commands, downloaded to the field controller for automatic local operation.		
x.	History/audit trail.		
xi.	Alarm masking by operator		
xii.	Capability to define within the system variable card formats.		
xiii.	Optional elevator control functions		
xiv.	Capability to support multiple site and facility codes at card readers		
xv.	Capability to support biometric access control and verification readers.		
4	On-Line System Management & Reporting		
i.	The system shall maintain, on disk, an Event Transaction Log File, and be capable of Historical Data Reports as well as Cardholder Report Listings in a variety of formats		
a	System Event Transaction Log File.		
i.	The system shall maintain an Event Transaction Log File on hard disk for the recording of all historical event log data.		
ii.	The historical data file shall maintain the most recent 120,000 log file physical records without having to resort to archived media.		
iii.	The system shall warn the user of the need to archive historical data before data is over-written.		

iv.	The system shall provide the utilities by which the historical event log file may be backed up to a removable disk cartridge of not less than 100-Mbyte capacity, which may be accessed on-line, without the need to copy the archived data back to hard disk. The system shall be capable of recalling historical events directly from the backup magnetic media without the need to interrupt normal on-line activity of the ACCESS CONTROL APPLICATION system.		
B	<u>Historical Reports.</u>		
i.	The system shall be capable of producing the following reports, based on logged historical events over a specified date and time period, both individually and in any combination.		
ii.	Report of valid accesses for a selected cardholder, selected card reader, on selected area.		
iii.	Report of rejected access attempts for a selected cardholder, selected card reader, and selected alarm activation's for a selected alarm point, on selected area.		
iv.	Report of alarm acknowledgments for a selected alarm or group of alarms.		
v.	In addition, the system shall offer the user the option of directing the historical reports to a client workstation color monitor for display or to the report printer.		
vi.	The system shall have the flexibility to customize Report which are not easily available in the standard report with MDB/SQL Query.		
C	<u>Cardholder Reports.</u>		
i.	The system shall be capable of producing lists of selected cardholder data records on a client workstation color monitor and/or a report printer. The system shall allow the user to select sorting by card number, cardholder name or other fields.		
ii.	Standard Cardholder Record Reports may be requested by an operator, with the data records sorted numerically by encoded card number, alphabetically by cardholder name, numerically by employee number, and numerically by the embossed card serial number. Such listings may also be requested to include only those cardholders who are authorized access to a specified area (list by security area).		

iii.	Special Employee Report Generator reports may be created by the operator to provide cardholder record listings that include only operator specified data fields. Each report may include conditional testing on up to two (2) data fields in order to include data for only those cardholders that comply with those conditions specified. Each report shall be capable of being sorted in alphabetical or numeric order.		
5	OPERATIONAL OBJECTIVES		
A	<u>Card Access Control</u>		
	The Security Access Control System shall provide the following card access control operational objectives:		
i.	Controlled entry, via access card readers, of only authorized personnel to secured areas based on cardholder information entered and stored in the system database.		
ii.	The access request response time from card presentation, database verification, to electric lock unlock shall be no more than one second in normal operating mode on a fully loaded system.		
iii.	All access requests, both authorized and denied, shall be sent to the host for storage and annunciation, as required, with the cardholder number, name, and access point/area where access was attempted or gained.		
iv.	The software package shall provide for Local Anti-Pass back, and also provide a facility for "soft" Anti-Pass back (i.e. allowing entry following an Anti-Pass back violation but still report and log the violation.) The system shall also be capable of providing timed Local Anti-Pass back for security areas.		
v.	The system shall provide for automatic lock/unlock of access-controlled doors on a scheduled basis using time schedule.		
vi.	Each card and cardholder shall be entered into the database prior to their use. Each card can be manually disabled at any time without the requirement to delete the card. Each card can then be subsequently re-enabled at a later time.		
vii.	Card records shall include the entry of activation and deactivation dates to provide for the automatic enabling and expiring of the card record.		

viii.	The operating mode of access controlled doors shall be indicated as locked, unlocked, or controlled. The door status shall be indicated as open or closed.		
ix.	The system shall provide for the monitoring of the reader controlled door position in order to detect and report Door Forced Open and Door Held Open alarm conditions. Door Held Open condition shall be based on a user-adjustable time period. The act of opening the door shall initiate the door timer, and also cause the immediate reset of the door lock. Shall be able to activate the In-Built Buzzer on the Reader during the said Conditions		
x.	The system shall provide for the designation of certain calendar days to be holidays, with special access privileges and system activity to be specified for those days.		
xi.	The system shall provide the capability to unlock the door and/or mask (shunt) the door alarm, as user-configured, via a request-to-exit door motion sensor device or exit push-button. The capability shall be software programmable to allow selectable exit reporting.		
xii.	All system controlled electric locks shall be capable of being unlocked via a client workstation color monitor/keyboard and request-to-exit devices.		
xiii.	The system shall provide for a completely downloaded and distributed database such that access control decision are made locally at the access controller and, in the event of the failure of the host computer or loss of communication to the host computer, the access control system shall continue to operate using full database information for all cardholders including security areas authorizations, time schedules, expiration dates of cards, holidays, etc. At no time after a card has been entered into the database of the file server and validated, shall the system fail to respond to an access request by a valid cardholder. (Restricted subsets of access control privileges and time schedule facilities in the distributed database shall not be accepted).		
B	<u>Alarm Monitor Points</u>	-	
	The Security Access Control System shall provide the following alarm monitoring and reporting functions:		

	<p>1. All door contacts and request-to-exit devices shall be connected in such a manner to provide supervised alarm monitoring. They shall be terminated at the remote reader module local to the door, and shall not be required to be routed back to the networked intelligent controller, unless it is more advantageous to do so. The input points used for door contact and request-to-exit device shall be user-configurable.</p>		
	<p>2. The system shall provide for special purpose alarm monitoring and/or transaction reporting for specific events, such as, but not limited to the following:</p>		
	a. Duress condition at a card reader		
	b. Anti-Pass back		
	c. Rejected access request		
	d. Controller Cabinet Tampered		
	e. Commercial AC Power Failure		
	f. Controller Failure		
	j. Low battery at UPS power supply		
C	<u>RELAY OUTPUT Points</u>	-	
	The Security Access Control System shall provide the following relay output control and operational functions:		
	<p>1. Each security system output point (door lock, gate controller and other associated relay outputs) shall have a user-specified 16 character, minimum, text identifier. Each point shall be software programmable for activation and deactivation.</p>		
	<p>2. The system shall allow activation and deactivation of output points manually by the operator, automatically by time schedule, automatically by the activation of an alarm point.</p>		
D	<u>Database Management System.</u>	-	
	The system shall provide for the following Database Management capabilities:		

i.	1. The software shall be capable of providing for the recall of system historical transactions with a minimum of 6,000 transactions recallable by operator command from the main event transaction file on the file server hard disk. Additional events may be recalled directly from an archived history log file on a removable hard disk cartridge.		
ii.	2. Data searching parameters shall be provided in the ACCESS CONTROL APPLICATION system software. The search capability shall include, but is not limited to the following:		
a)	a. Card Number, Serial Number, Employee Number or Name.		
b)	b. Card readers.		
c)	c. Security Areas.		
d)	d. Alarm Points.		
e)	e. Alarm Categories.		
f)	f. Date and time periods.		
iii.	The software shall provide report creation capabilities which offer search, organize and sorting according to the operator instructions, and have the ability to print, spool, or display a full report at a printer or client workstation.		
iv.	All operator commands and database entry functions shall be Internet Browser driven with plain English text and prompts, and the system shall provide on-screen 'Help' information by one click of a button. It shall also include multi-media help for certain critical functions.		
v.	All access to the operator system functions shall require the entry of a valid password. A password shall be used by the operator, manager, or administrator to access the system, with each password access authority being completely user-selectable by individual <u>menu</u> selection.		
6	1.05 Key Points for all bidders to follow:		
i.	API should be provided along with the software for integration with 3 rd party software's.		

ii.	Upgrade to new Access Software version or upgrade of Windows OS to latest versions shall not call for change in hardware by any means for a period of minimum 10 years.		
iii.	Redundancy at Access software level has to be maintained if required.		

BOOM BARRIER

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make:Somfy/Gunnebo		
1.	HEIGHT		
2.	Housing size : Barrier size: 350MM*400MM*1000MM		
3.	Road passage: 2.5 to 5.0 m		
4.	Finishing: Cataphoresis, powder paint Red or white		
5.	Foundation: Concrete, 500 x 500 x h.400mm		
6.	Intelligence : The use of a Blockable Torque Motor Drive with continues Torque Output and the microprocessor based controller eliminates the need for friction clutches to ensure maintenance free operation. The barrier may be stalled at any position		
7.	Motor: Self-cooled in permanent grease gear reduction, rod/crank or Worm Gear Motor		
8.	Obstacle detection: Reversal of movement during closing and stop of movement during opening		
9.	Lock: Mechanic		
10.	Unlock Hand operation from outdoor with key		
11.	Opening time:		
12.	from arm 3.0 to 4.0m - from 2.0 to 3.0 s		
13.	from arm 4.0 to 5.0m - from 3.0 to 4.0 s		
14.	Operating ambient temperature: -20°C +60°C		
15.	Operating humidity: up to 100%		
16.	IP grade: IP54		
17.	Total barrier weight 48KG or greater		
18.	Electrical Requirements		
19.	Power: 1-phase 230 Vac ±10%, 50-60 Hz		

20	IP grade: IP54		
21	Operating ambient temperature: -20°C +60°C		
22	Operating humidity up to 95%, non condensing		
23	Power consumption 100 W (50Hz)		
24	Signalling: LED lights on the arm		
25	Sensor inputs: Photocell		
26	Local/Remote control: Digital inputs		
27	Radio remote control (RX on board, TX optional)		

RFID LONG RANGE READER

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make::Somfy, IDCube HID/DDS/ROSSLARE)		
	Physical Characteristics: 440mmx440mmx50mm Weight =<1 kg		
	Read Range: Approx. 10- 12 m		
	Read Rate: Software Programmable Average Reading per 64Bits : <6ms Read Mode: Timing or Touch, Software Programmable		
	Antenna: Built-in round polarization Antenna Gain 7dBi		
	Controller: Built-in. Card: 10000 & Transaction Memory: 30000 Frequency Range: ISM 865 ~868MHz, other frequency available Environment: Operating Temp: -200C to 750C Storage		
	Temp: -400C to 850C (-400F to 1850F) Humidity: 10% to 95% Non-condensing Connectivity: Ethernet/ Wiegand		
	Power Supply DC +9V direct current power (power adapter)		
	Reading Clue Buzzer and LED		
	RF Power 0~30dBm, software programmable		
	Input /Output Ports Two Outputs (Relay); One Input (TTL)		

RFID VEHICLE TAGS

Sr.No	Specifications	Compliance (Yes/No)	Remarks
	Approved Make:Somfy, IDCube /HID/DDS/ROSSLARE)		
1	Vehicle tag should be UHF Gen2 long-range passive tag.		
2	Electrical Characteristics		
3	Air Interface Protocol - ISO/IEC 18000-6C, EPC Global C1G2 Operating Frequency Range 860-960MHz		
4	Memory 512 bits user memory Read Distance 10-12 meter		
5	Mechanical Characteristics		
6	Length =<110 mm / 4.33 inch Width =<35 mm / 1.37 inch		
7	Thickness=< 2.5 mm / 0.10 inch Weight =<9 gms		
8	General Characteristics		
9	Storage Temperature -40°C to +85°C Attaching Mechanism Adhesive		
10	Applicable Surface Materials Vehicle Glass		

PASSIVE SPECIFICATIONS

Sr.No	Item Specifications/ (Approved Makes)	Compliance Yes/No	Remarks
I.) CAT-6 PATCH CORDS 2 MTR			
a)	CAT-6 PATCH CORDS 2 MTR (SIEMON / CORNING / PANDUIT / MOLEX / AMP)		
A	Category 6 Patch Cords shall be factory terminated with modular plugs featuring a tangle- free latch design and clear strain-relief boots to support easy moves, adds and changes. Each patch cord shall be 100% performance tested at the factory to meet TIA/EIA-568-C.2 Category 6 and ISO 11801 2nd Edition Class E channel requirements at frequencies up to 250 MHz. OUTER SHEATH LSZH		
b	FCC compliance: Meets ANSI/TIA-968-A; contacts plated with 50 microinches of gold		
c	IEC compliance: Meets IEC 60603-7		
d	PoE compliance: Meets requirements of IEEE 802.3af and IEEE 802.3at for PoE applications		
e	UL rated: UL 1863 approved		
f	RoHS compliance: Compliant		
g	The patch cords shall come in standard lengths of 1& 2 mtr and four standard colors of Blue, Green, Red, and Yellow.		
h	Quality Control: Individual Component should have individual QC No. to provide lifetime traceability.		
II.) CAT-6 PATCH CORDS 1 MTR			
b)	<u>CAT-6 Patch Cords 1 Mtr Approved Makes(Siemon / Corning / Panduit / Molex / Amp)</u>		
a	Category 6 Patch Cords shall be factory terminated with modular plugs featuring a tangle- free latch design and clear strain-relief boots to support easy moves, adds and changes. Each patch cord shall be 100% performance tested at the factory to meet TIA/EIA-568-C.2 Category 6 and ISO 11801 2nd Edition Class E channel requirements at frequencies up to 250 MHz. OUTER SHEATH LSZH		
b	FCC compliance: Meets ANSI/TIA-968-A; contacts plated with 50 microinches of gold		
c	IEC compliance: Meets IEC 60603-7		
d	PoE compliance: Meets requirements of IEEE 802.3af and IEEE 802.3at for PoE applications		
e	UL rated: UL 1863 approved		

f	RoHS compliance: Compliant		
g	The patch cords shall come in standard lengths of 1& 2 mtr and four standard colors of Blue, Green, Red, and Yellow.		
h	Quality Control: Individual Component should have individual QC No. to provide lifetime traceability.		

III.) IP 55 RATED BOX WITH ACCESSORIES FOR MOUNTING AT POLE

c)	IP 55 Rated Box for mounting accessories at Pole		
a	Size 200 x 200 x150		
b	Made of Stainless Steel		
c	IP 55 rated		
d	Should have PU gasket		
e	Front section with lock & light Facility		
f.	Power strip with 4 socket maximum of 2u		
g.	With fan tray and two fans downwards		
h.	Minimum 2 Duct type cable managers with Rack		

IV.) SINGLE MODE OUTDOOR OFC 8 CORE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)

d)	Single Mode Outdoor OFC 8 core (Siemon / Corning / Panduit / Molex / Amp)		
a	Should be ISO.IEC 11801 - 2nd Edition and ITU-T REC G 652D		
b	Tube Identification : Single tube/Multi-tube		
c	Fibre protection(Tube) : Polybutylene Terephthalate (PBT)		
d	Water Blocking : Thixotropic Gel (Tube) and Petroleum Jelly (Interstices)		
e	Core Wrapping : Polyethylene Terephthalate		
f	Armouring : Corrugated Steel Tape Armour (ECCS Tape)		
g	Peripheral Strength Member: Two Steel wires/Two FRP rods/FRP Central Strength member		
h	Sheath : UV Stabilized Polyethylene (HDPE)		
i	Minimum. Tensile Strength-Short Term : 1500N or better		

j	Minimum Cores 8 or more		
V.) SINGLE MODE OUTDOOR OFC 24 CORE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)			
e)	Single Mode Outdoor OFC 24 core (Siemon / Corning / Panduit / Molex / Amp)		
a	Should be ISO.IEC 11801 - 2nd Edition and ITU-T REC G 652D		
b	Tube Identification : Multitube		
c	Fibre protection(Tube) : Polybutylene Terephthalate (PBT)		
d	Water Blocking : Thixotropic Gel (Tube) and Petroleum Jelly (Interstices)		
e	Core Wrapping : Polyethylene Terephthalate		
f	Armouring : Corrugated Steel Tape Armour (ECCS Tape)		
g	Peripheral Strength Member: FRP Central Strength member		
h	Sheath : UV Stabilized Polyethylene (HDPE)		
i	Minimum. Tensile Strength-Short Term : 3500 Newton or Better		
j	Minimum Cores 24 or more		

VI.) FIBER PIGTAILS 1.5 MTR. SINGLE MODE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)

f)	Fiber Pigtails 1.5 Mtr. Single Mode (Siemon / Corning / Panduit / Molex / Amp)		
a	Precision ferrule endface geometry LC type		
b	Factory polished, tested and serialized.		
c	Buffer Diameter: 900um tight buffer		
d	Minimum bend radius: install: 30 mm		
e	Retention Strength: 100N		
f	Cable: 900um Tight Buffered		
g	Bidder to Provide equivalent SM LC adaptors in form of Singlex/Duplex/Quad adaptors		

VII.) FIBER OPTIC PATCH CORDS: (SIEMON / CORNING / PANDUIT / MOLEX / AMP)

g)	Fiber Optic Patch Cords: (Siemon / Corning / Panduit / Molex / Amp)		
a	All optical fiber patch leads shall comprise of Single mode 9/125µm OS2 fiber LC -LC		

b	Jacket should be LSZH sheath		
c	Connector: Zirconia ceramic ferrule		
d	Cable: 9/125, SM Strength member: Aramid Yarn		

VIII.) UTP CAT-6 CABLE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)

h)	UTP CAT-6 Cable (Siemon / Corning / Panduit / Molex / Amp)		
a)	Category 6 Unshielded Twisted Pair 100 Ohm cable shall be compliant with EIA/TIA 568-C.2		
b)	Should be 4 pair, 23 AWG		
c)	Cable should be CM rated		
d)	Cable Should Have Internal cross separator		
e)	Jacket: LSZH (Low smoke zero halogen)		
f)	Should ETL verified		
g)	Quality Control: Individual Component should have individual QC No. to provide lifetime traceability		

IX.) INFORMATION OUTLET SINGLE OUTLET FACEPLATE AND GANGBOX CAT6 (SIEMON / CORNING / PANDUIT / MOLEX / AMP)

i)	Information Outlet (Siemon / Corning / Panduit / Molex / Amp)		
a)	Category 6, EIA/TIA 568-C.2		
b)	All information outlets for 22-24 AWG copper		
c)	Should be UL Listed and ETL verified		
d)	Quality Control: Individual Component should have individual QC No. to provide lifetime traceability		

X.) CAT 6 OUTSIDE PLANT CABLE (OUTDOOR APPLICATION)

j)	CAT 6 Outside Plant Cable (Outdoor Application)		
a)	TYPE: 4 pair CAT 6 UTP Cable outdoor cable with Two Jackets Primary and secondary Low Smoke Zero Halogen		
b)	CONDUCTORS Wire gauge: 23 AWG solid copper		
c)	CROSS FILLER Star cross fillers to separate the individual pairs		
d)	OPERATING TEMPERATURE: -40 Deg C to + 70 Deg C		

XI.) HDPE PIPE

a)	HDPE pipe should be permanently lubricated type with coefficient of friction between the pipe and OFC to the level of 0.06. The Specifications will be as under: Size 40/33 mm, (OD=40+0.4mm), Wall thickness=3.5mm, PE rating=80, PN rating 10.		
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XII.) ROUTE MARKERS

a)	Concrete Coloured Graved Route Markers after every 300 metres and on every corner		
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XIII.) UNIVERSAL JOINT CLOSURE (UJC)

a)	Universal Joint Closure(UJC)		
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XIV.) COMPACT LIU 8 PORT WITH EMBEDDED SPLICE TRAY LOADED WITH SC PIGTAILS AND FC COUPLERS

a)	Should accepts up to 8 fusion of mechanical splices		
b)	Should have label Holder		
c)	Should have Cable tie feature		
d)	Should have Top, bottom and rear access		
e)	Should be Lockable		
f)	Should be made of Rugged white plastic		
g)	Should Have 08 Duplex LC SM adaptors		
h)	DIMENTION 184 x 127 x 38mm		

XV.) CCTV POLES

a)	1.5" Pole 6 Mtr. GI (ISI mark) with Cable Hole at Bottom & Top and T Junction at Bottom including Fixing with Concrete Foundation		
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XVI.) 1 GBPS SINGLE MODE MEDIA CONVERTOR

b)	Complies with IEEE 802.3ab & IEEE 802.3z standards		
c)	1- SC type Singlemode Fiber port (Duplex)		
d)	1 x 10/10/1000Mbps LAN port, supporting Auto MDI/MDI-X for TX port.		
e)	Transmission distance support up to 4 Km		
f)	Output Wavelength: 1310nm		

g)	Plug-N-Play		
h)	LED status indicators for power & network link activity		
i)	Operating Temperature - 0°C ~ 60°C		

XVII.) 2.5MM SQ MM 3 CORE ARMOURED CABLE HAVELLS/POLYCAB ELECTRIC CABLE

a)	2.5mm sq mm 3 core armoured cable havells/polycab electric Cable		
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25. FINANCIAL BID

A.SUPPLY AND INSTALLATION OF SURVILANCE & SECURITY SYSTEM & SERVICES

FINANCIAL BID: RATES TO BE QUOTED WITH INSTALLATION & SUPPORT								
S. No.	Description	Required Qty in Nos	Product Model No/Part no Quoted	Per Unit Rate including all taxes (applicable) With three years warranty with maintenance Support	Total Rate including all taxes (applicable) With three years warranty with maintenance Support	Per Unit per year Warranty Rate including all taxes (applicable) with maintenance Support	Total Rate including all taxes (applicable) for next two years with maintenance Support	Remarks if any
1.	Outdoor IP Bullet Cameras 2MP Outdoor Camera with 30 Mtr IR Illuminator	75						
2.	Outdoor IP Bullet Cameras 2MP Outdoor Camera with 50 Mtr IR Illuminator	20						
3.	OUTDOOR IP SPEED DOME CAMERA	5						
4.	VIDEO MANAGEMENT Software for 600 Camera Licences & 60 Client License	1						
5.	Video Analytics Software	1						
6.	ANPR SYSTEM & CAMERA	12						
7.	BLADE SERVER CHASIS	1						

8.	BLADE SERVER	5						
9.	Unified Storage 500TB	1						
i.	Unified Storage 100 TB Expansion	1						
10.	POE+ Switch 8 Port	20						
11.	CLIENT WORKSTATIONS/DESKTOP	9						
12.	VIDEO WALL WITH COMPLETE ACCESSORIES	1						
13.	HALF HEIGHT TURNSTILE	2						
14.	P TYPE TURNSTILE	2						
15.	ACCESS CONTROLLER:	12						
16.	SOFTWARE FOR CARD READER	4						
17.	Boom barrier	5						
18.	RFID LONG RANGE READER	20						
19.	RFID VEHICLE TAGS	1000						
20.	Passive Equipment's	1						
i.	CAT-6 Patch Cords 2 Mtr (Siemon / Corning / Panduit / Molex / AMP)	400						
ii.	CAT-6 Patch Cords 1 Mtr Approved Makes(Siemon / Corning / Panduit / Molex / Amp)	400						
iii.	IP 55 Rated Box with accessories for mounting at Pole	50						
iv.	Single Mode Outdoor OFC 8 core (Siemon / Corning / Panduit / Molex / Amp)	1000						

v.	SINGLE MODE OUTDOOR OFC 24 CORE (SIEMON / CORNING / PANDUIT / MOLEX / AMP)	2000						
vi.	Fiber Pigtails 1.5 Mtr. Single mode (Siemon / Corning / Panduit / Molex / Amp)	100						
(a)	Fiber Optic Patch Cords: (Siemon / Corning / Panduit / Molex / Amp) 3 Mtrs LC Sc -LC Style Single Mode 50/125 Micron Duplex Patch Cord 3 Mtrs complete as required and as per specification	50						
vii.	UTP CAT-6 Cable (Siemon / Corning / Panduit / Molex / Amp)	50						
viii.	Information Outlet Single port(Siemon / Corning / Panduit / Molex / Amp)	400						
ix.	CAT 6 Outside Plant Cable Roll of 305 meter (Outdoor Application)	20						
x.	HDPE PIPE	5000						
xi.	Route Marker	50						
xii.	Universal Joint Closure(UJC)	50						
xiii.	Compact LIU 8 port with embedded splice tray loaded with SC pigtailed and FC couplers	50						
xiv.	Camera Poles 15 feet	50						
xv.	1GBPS Single Mode Media Convertor for Out Door	50						
xvi.	2.5mm sq mm 3 core armoured cable havells/polycab electric Cable	5000						
21.	1 G Base LR SFP+ Optic LC , SMF complete as per requirement and as per specification	50						

	Networking Job Works (rates to be Quoted per Mtr) - Complete Connectivity from switch to I/O Port with installation for any other extra work	1						
22.	Fibre Cable Laying through Conduit Pipe	1						
	a) Soft Digging(1.5 M depth)	1						
	b) Hard Digging/Moring/Chamber Installation	1						
	c) Etc.	1						
23.	UTP/STP Cabling through Conduit (including Conduit laying/fitting)	1						
	Underground Pipe laying with Cable with Material;	1						
	Outer PVC Pipe Laying with Cable with material On wall	1						

1. Payment for Passive Equipment's and installation charges will be made as per actual usage.
2. All the Financial Documents should be uploaded on the e-tender portal and a copy of same in coloured printout state should also be submitted at the time of tender submission in well hard binding manner. The non-submission/poor management of documents may lead to disqualification as well. Any extra term & conditions may please be mentioned at the time of submission of financial and technical bids
3. Networking Job Works (rates to be Quoted per Mtr) - Complete Connectivity from switch to I/O Port with installation for any other extra work FROM SR NO 22-24

B. SECURITY SERVICES BY DELPLOYEMENT OF MANPOWER ETC.

Annexure -A

Sr. No.	Name of Zone	Unit Per Month	Lump sum Monthly Rates to be quoted by the Agency with all taxes and statutory requirement
1.	MAIN GATE ZONE		
2.	BOYS HOSTEL COMPLEX ZONE		
3.	GIRLS HOSTEL ZONE		
4.	WEST SIDE OF CH.RANBIR SINGH ROAD		
5.	BUILDING IN BETWEEN CHAUDHARY RANBIR SINGH AND CH.HARDWARI LAL ROAD.		
6.	PARIKSHA SADAN Zone		
7.	LIBRARY ZONE		
8.	Type-IV/9J Zone		
9.	Sports Complex Zone		
10.	Type I,II,III & Other Zone		
11.	Control Room Zone		