Ravi Urban Development Authority
Government of the Punjab

No. RUDA/ENGG-CON/2024/223 Dated: 30/12/2024

SMART SERVICES AT CHAHAR BAGH HOUSING SCHEME PHASE-I

ADDENDUM NO. 02

TO

BIDDING DOCUMENTS

Enclosed herewith, please find Addendum No. 02 which forms part of the Bidding Documents for the above-cited work. This addendum shall become an integral part of the Bidding Documents.

It is to be notified that following the issuance of this addendum, it is understood that the information contained therein shall be considered by you in your bid.

Nevertheless, the prospective contractors are required to immediately acknowledge the receipt of an addendum in writing to the Employer.

A/ **Executive Director Engineering**
Ravi Urban Development Authority (RUDA)

Encl: As stated

Copy To:

1- Director Infrastructure, RUDA
2- Director PP&C, RUDA
3- Director Contracts Management, RUDA
4- Dy. Director Smart Cities, RUDA
5- Office File

SMART SERVICES AT CHAHAR BAGH HOUSING SCHEME PHASE-I

ADDENDUM NO. 02

TO

BIDDING DOCUMENTS

The Bidding Documents for the above cited work are amended by revising and replacing the following pages. The prospective contractors shall replace these pages in his copy of the Bidding Documents and shall acknowledge receipt of this addendum.

Pages to be replaced:

Document Page No. (to be replaced)	Replacement Page No.	Volume No.
EQ&QUF – 33 & 34	EQ&QUF – 33 & 34 (R2)	I
EQ&QUF – 35	EQ&QUF – 35 (R2)	I
EQ&QUF – 36, 37 & 38	EQ&QUF – 36, 37 & 38 (R2)	I

A/ **Executive Director Engineering**
Ravi Urban Development Authority (RUDA)

Ravi Urban Development Authority RUDA Govt. of the Punjab

Address: 5-C Muslim Town, Facing Canal Road, Lahore

L – 1

Schedule – L to Bid

PAST PERFORMANCE, CURRENT COMMITMENT, EQUIPMENT & PERSONNEL QUALIFICATION AND EXPERIENCE

1- PAST PERFORMANCE AND CURRENT COMMITMENTS

Sr. #	DESCRIPTION	MAX MARKS	REMARKS
i)	**Projects of Similar Nature and Complexity - Completed** Each Project cost equal to or more than PKR **120 million** executed over the period of **last 10 years** of following Systems project. Similar Nature Projects (Design, Supply, Installation, Testing and Commissioning of Smart Services-related Systems) are: 1- IP Based Video Surveillance System. 2- Optical Fiber 3- Data Centre & Allied Systems *At least three (03) or more projects having similar nature mentioned in (1, 2 & 3) are required to achieve full marks. Proportionate marks shall be given for less than three (03) projects. Zero marks shall be given in case no project is submitted.*	**25**	No marks if Completion Certificate or Performance Certificate or Taking Over Certificate issued by the Client is not attached. (Attach list of similar nature and complexity of projects along with certificates issued by the employer with project worth). ***Note: Cost of relevant categories should be clearly mentioned and highlighted in the summary page of price BOQ issued by the Client.***
ii)	**Projects of Similar Nature and Complexity – In Hand** Each Project cost equal to or more than **PKR 150 million** currently **in hand** of following Systems project. Similar Nature Projects (Design, Supply, Installation, Testing and Commissioning of Smart Services-related Systems) are: 1- IP Based Video Surveillance System. 2- Optical Fiber 3- Data Centre & Allied Systems *At least three (03) or more projects having similar nature mentioned in (1,*	**10**	No marks if the Letter of Acceptance (LOA) or Award Letter issued by the Client is not attached. (Attach list of similar nature and complexity of projects along with certificates issued by the employer with project worth). ***Note: Cost of relevant categories should be clearly mentioned and highlighted in the summary page of price***

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Sr. #	DESCRIPTION	MAX MARKS	REMARKS
	2 & 3) are required to achieve full marks. Proportionate marks shall be given for less than three (03) projects. Zero marks shall be given in case no project is submitted.		***BOQ issued by the Client***
	Sub-Total of Work Experience	**35**	

Note:

- *For qualification of the Bidder (Single Entity/JV/Consortium), Minimum 65% marks are necessary in each category and Minimum 70% overall marks are necessary for qualification requirement as per criteria given in Schedules – K & L to Bid.*
- *In case of JV/Consortium, the lead member must secure at least 65% marks in each category.*

Page No. EQ&QUF – 33 & 34 (R2)

L – 2

Schedule – L to Bid

2. EQUIPMENT

Sr. #	DESCRIPTION	MAX MARKS	REMARKS
1	Crane (2 Nos.)	3	No marks if the manufacturing certificate / Purchase certificate / Leased / Rented / ownership proof is not attached. Proportionate marking if equipment is less than the minimum required number. Capacity of the equipment / Plant should be clearly mentioned. ***Note:*** *No marks will be awarded if any ambiguity is found or the attached documents are not readable.*
2	Cable Pulling Winches (3 Nos.)	3	
3	Earth Testers (10 Nos.)	2	
4	Splicing Machines (5 Nos.)	3	
5	Ladders (5 Nos.)	1	
6	Cable Testers (10 Nos.)	1	
7	Multimeters (10 Nos.)	1	
8	Wire Puller (4 Nos.)	1	
9	Tool Kit relevant to the project	1	
10	Label Printers (4 Nos.)	1	
11	Fluke Testers	3	
	Sub-Total of Tools & Plants	**20**	

Note:

- *For qualification of the Bidder (Single Entity/JV/Consortium), Minimum 65% marks are necessary in each category and Minimum 70% overall marks are necessary for qualification requirement as per criteria given in Schedules – K & L to Bid.*
- *In case of JV/Consortium, the lead member must secure at least 65% marks in each category.*

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L – 3

Schedule – L to Bid

3. **PERSONNEL QUALIFICATION AND EXPERIENCE**

Sr. #	DESCRIPTION	MAX MARKS	REMARKS
1	Professional Engineer (Electrical / Electronics) with at least 15 years of overall experience	5	Attach CV's or valid PEC Registration No. No marks if documents are not attached.
2	Technical team for Data Centre and allied systems	4	
3	Technical team for IP Based Surveillance Systems	3	
4	Technical Team for Optical Fiber Systems	3	
	Sub-Total of Personnel Qualification & Experience	**15**	

Note: No marks if required documents are not attached.

- *For qualification of the Bidder (Single Entity/JV/Consortium), Minimum 65% marks are necessary in each category and Minimum 70% overall marks are necessary for qualification requirement as per criteria given in Schedules – K & L to Bid.*
- *In case of JV/Consortium, the lead member must secure at least 65% marks in each category.*

Page No. EQ&QUF –36, 37 & 38
(R2)

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2nd Set of Clarifications regarding Smart Services Project at CB-01

Sr. No.	Potential Bidders Queries		Employer's Response
1	**IP Based Outdoor ANPR Camera with Software** •Image Sensor Resolution: 2 MP Starlight camera technology with excellent lowlight performance •Sensor Technology: 1/1.8" CMOS •Frame Rate: 50 fps•SNR: >=50 dB•Lens Type: Spherical, Verifocal motorized lens with autofocus•Focal length: 8mm – 32mm•Video Compression: H.264 and H.265•Network Protocols Support: MAC protocol, DHCP, DNS, DDNS,RTP/RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP•Support latest version of ONVIF Profile S/G•Types of recognized number plates: All private, commercial official number plates used in Pakistan•RecogOnitionTRangeF: 80mOor hRigher BID SUB•Memory Card Slot: 128GB or higher•Degree of Protection: Water and Dust Resistant IP-67 and IK10•Power Supply: PoE+, 24 VDC/24 VAC•Operating Temperature: -40°C ~ 60°C	Spherical favors a particular brand, it should be removed	The bidder may propose Equivalent or better product as part of their solution.
2	**Outdoor PTZ Camera 4MP** •Image Sensor Resolution: 4 MP •Optical Zoom: 32 X or better•Day/Night mode: Auto, Color•Lens Type: Spherical, Verifocal motorized lens with autofocus•Focal length: 5.9mm to 188.8mm•Video/Audio Compression: H.264 and H.265•Network Protocols Support: MAC protocol, DHCP, DNS, DDNS,RTP/RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP•Input/Output: Alarm and Audio•Support latest version of ONVIF Profile S/G•IR Range: 250 meter or higher•Memory Card: 128 Gb or higher •Degree of Protection: IP 66, IK 10•Power Supply: PoE+, 24 VDC/24 VAC•Operating Temperature: -40°C ~ 60°C	Spherical favors a particular brand, it should be removed	The bidder may propose Equivalent or better product as part of their solution.
3	**IP Based Fixed Bullet Camera 5MP** •Image Sensor Resolution: 5 MP•SensorTechnology: 1/2.4" Progressive San CMOS•Lens Type: Spherical, Varifocal motorized lens with autofocus•Focal length: 2.8mm - 12mm•Iris: 1.2F•Sensitvity: 0.05 lux•Day/Night Switching Mode: Auto, Color•Frame Rate: 25 fps•Codec Profile: H.264, H.265•Function: Perimeter Intrusion Detection, Line Crossing Detection,Face Detection•IP Class: Water and Dust Resistant IP-67 and IK10•Memory: SD Card Slot 128 GB or higher•SNuppoOrt lateTst versFion oOf ONVRIF ProfBile SI/GD/TSUB•SNR: >=50 dB•Network Protocols Support: DHCP, DNS, DDNS, RTP/RTSP, PPPoE, SMTP, NTP, UPnP, SNMP, HTTPS, FTP•Exposure mode: Auto and Manual•Smart IR Range: 50m•Power Supply: POE +•Operating Temperature: -40°C ~ 60°C	Spherical favors a particular brand, it should be removed	The bidder may propose Equivalent or better product as part of their solution.

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Sr. No.	Potential Bidders Queries		Employer's Response
4	**LED Video Wall (6x9 Feet or higher)** LED Screens to be installed in Security Command & Control Center with Video Wall Solution of 1 Slim SMD Screens for Video,Wall including all Controllers, Matrix, PCs, Graphic Cards complete in all respect and accessories.•Aspect Ratio: 16 :16•Pixel pitch, mm: 3.9mm•Pixel configuration: SMD 3 in 1•Aspect: Black LED and Better Contrast•Visual Pixel Density (dot): 65536 dot/m²•BNrighOtness (Tcd): 90F0 cdO/m²R BID SUB•Resolution: 1538 x 1538•Grey scale Level: 14 bit (16384 levels)•Color: up to 4.4 trillion•Luminosity Level: up to 256•Viewing angle horizontal / vertical: 160° / 160°•Lifetime: > 100,000 hours•Protection Front / Rear: IP40 / IP20 •Operating System: Windows 10 or higher•Material: Die Casting Aluminum•Power supply: 100-240V / 50-60Hz•Operating Temperature: -40°C to 60 °C•with UPS CONTROLLER ,The Media controller shall be extra-large resolution, HDMI/DVI video input and Ethernet output ports, complete in all respect	As per Prebid, RUDA team asked to submit Video wall solution instead of SMD if cost effective	The bidder may propose Equivalent or better product as part of their solution.
5	**Outdoor Digital Signage (3.12Ft x 6.30Ft)** P5 Outdoor SMD screen, can be mounted on smart poles & gantries, Pixel Density 40000 Per Sqm, cabinet size 960x1920mm, Module size 320x160mm, sending card, receiving card, Contrast Ratio 1000:1, Brightness 6000 NITS, Brightness Uniformity 97%, Life 100000 Hours, Software included, working temperature -20 degrees to 70 degrees, Refresh rate 3840, IP65 protection rating. Video Wall Player, CPU: 4 Core Processor / 1.8Ghz Storage: RAM 1GB, ROM: 16GB, Decode Ability: 4K 60fps Operating System: Android 11, Max Capacity: 0.65 million pixels LED Output Port: RJ45 (1 Main 1 Backup), Sync Mode: NTP,GPS Sensor: Two aviation plug, LAN: 1000 Mbps, WiFi: 2.4G Switchable AP&STA, Windows based video wall control software	6000 nits is brand specific	The bidder may propose Equivalent or better product as part of their solution.
6	**12 Port Layer-2 Manageable Network Switch** Fixed configuration manageable layer-2 switch,with Rack Moint kit, 12 x 10/100/1000Base T Ports for connectivity over UTP, 2 x 1G Base T ports for uplink conenctivity over UTP , Switching capacity 24 Gbps or higher, support 802.1X authentication, MAC address authentication, support multiple VLANs, ACL, with complete installation, testing and minimum one year comprehensive warranty	support 802.1X authentication & ACL supports a particular brand	The bidder may propose Equivalent or better product as part of their solution.
7	***48 Port PoE Enabled Layer-2 Manageable Network Switch*** Fixed configuration manageable layer 2 PoE enabled switch with Rack Mount kit, 48 x 10/100/1000Base T Ports for connectivity over UTP, 2 x 10/100/1000Base T Ports for uplink connectivity (RJ 45 Interface), Switching capacity 96 Gbps or higher, support 802.1X authentication, MAC address authentication, support multiple VLANs, ACL, with complete installation, testing and minimum one year comprehensive warranty	Port 1-48: 48 × RJ-45 10/100/1000 Mbps Port 49-52: 4 × SFP+ 1/10 Gbps 2 x RJ 45 Supports a particular brand, and it should be open	The bidder may propose Equivalent or better product as part of their solution.

Sr. No.	Potential Bidders Queries		Employer's Response
8	**Access Point** Compliance with IEEE 802.11ax and compatibility with IEEE 802.11 a/b/g/n/ac/ax Wave 2, Provides service simultaneously on both 2.4 GHz and 5 GHz bands at a rate of at least 570 Mbps at 2.4 GHz (2x2), at least 2.4 Gbps at 5 GHz (4x4), Must have 2x GE Ports, Console Port, Built-in Omni directional antennas, Support 802.11k and 802.11v smart roaming, PoE, Support WEP authentication/encryption, WPA2-PSK authentication and encryption, WPA2-802.1X authentication and encryption, Support at least 100 users or more per Radio, Built in controller, support 802.1x authentication and MAC address authentication and with complete installation, testing & commissioning and one year comprehensive warranty	Red highlighted favors a specific brand	The bidder may propose Equivalent or better product as part of their solution.
9	**RFID Reader** Supply of MIFARE readers should be compatible with access controller and software, having RS485 and Wiegand interface on all readers for highest flexibility, support of coded MIFARE Classic credential, with Optical Technology and led indication lights, IP65 and IK08/IK10 ratings allow indoor and outdoor installations	Must provide Mifare support too, should be provided as option	Potential bidders refer to the specifications of the bidding documents
10	**Proximity Cards** EM/Mifare cards with printing	Must provide Mifare support too, should be provided as option	Potential bidders refer to the specifications of the bidding documents
11	**8 Port PoE + Access Switch**	Industrial grade 8 Port PoE + Access Switch with 42 Mpps forwarding	Industrial garde 8 port POE+ access swtich is required
	Fixed configuration PoE+ enabled manageable layer-2 switch with		
	Rack Mount Kit, 8-Ports 10/100/1000 Mbps RJ-45 interface for camera		
	connectivity over UTP, 2 x 10G Ports for uplink connectivity (SFP		
	Interface), 802.3bt Type 3 compliant built-in power supply, support		
	PoE+ cameras on all 8 ports up to 60-watt power simultaneously,	Kindly remove simultaneously	The word "simultaneously" may be deleted.
	power cable, IP67 rated with installation, configuration & testing.	IP40 rated and support OSFP/ IP67/1P68 term used when equipment placed without cabinet. Since this switch will be placed in a cabinet so IP40 rating is enough	Regretted, please

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Sr. No.	Potential Bidders Queries		Employer's Response
12	**Core Switch**		
	The modular switch having number of slots must be greater than or equal to 4 and should support: 12*10G SFP+, 4* 40/100 GE interface cards; Switching capacity ≥ 1 Tbit/s, supports at least 4K VLANs,Supports IEEE 802.1d, IEEE 802.1w and IEEE 802.1s; Static routes, RIP, OSPF, BGP, Qos/ACL, AAA authentication and multiple modes such as RADIUS authentication, Support SNMP, Telnet and SSH, The hot backup of main control boards, The active / standby switchover, Hardware-based Heat dissipation and air exhaust direction: rear exhaust; The Fan modules must use redundancy design. The number of fan modules must be larger than or equal to 2 so services are not interrupted when a fan module is faulty or not installed properly with complete installation, configuration, testing	2.7Tbps Switching Capacity or higher, Forwarding capacity ≥ 2150Mpps, Backbone of whole Infra so Core switch should be of higher performance	Required Switching capacity ≥ 1 Tbit/s, The bidder may propose Equivalent or better product as part of their solution.
13	**Firewall System**		
	Firewall throughput minimum 40 Gbps,		
	Uninterrupted Software upgrade capability	Kindly remove, Vendor Specific clause	Regreted since The ability to perform uninterrupted software upgrades is not vendor-specific, as it is the part of products specifications. When selecting a firewall solution, it's important to consider these capabilities as they can significantly impact network uptime and reliability during maintenance activities. Firewall should be upgradeable for all new patches released by OEM.
	Minimum 4 x 10GE SFP+ slots	Minimum 8 x 10GE SFP+ Ports plus 4 x expansion slots, Expansion slot should be added for future ports expansion	Regretted, please
	Minimum 8 x GE RJ45 and 8 x Combo slots		
	SATA hard disk (240 GB/960 GB/1000 GB/1920 GB)	2 x 480GB SSD Drive, Hard drive capacity need to be mentioned	Four differenet hard drive capacity options already mentioned, bidder may calculate and propose as per the requirement.
	Firewall throughput ≥40Gbps;		
	NGFW Throughput (iMix) ≥6Gbps		
	Threat Protection Throughput (Enterprise Mix) ≥5Gbps	Threat Protection Throughput ≥9Gbps, When UTM bundle enabled FW performance suffer so needed higher througput so that overall system performance do not disturb	The bidder may propose Equivalent or better product as part of their solution.
	IPSec VPN throughput (AES-256,1420 byte)≥25 Gbps	IPSec VPN throughput ≥16 Gbps, Vendor Specific clause	The bidder may propose Equivalent or better product as part of their solution.
	Application controlling and IPS throughput≥ 15 Gbps		
	Concurrent connections per second ≥ 15,000,000		
	New connections per second ≥400,000;		
	The appliance-based security platform should be a stateful NGFW, Next-Generation IPS, malware protection, URL protection, providing firewall, application visibility, and IPS functionality in a single appliances		
	Supports the smooth upgrade of HA(Active/Active or Active/Standby) Mode		
	the software of different versions can be used for hot standby		
	Supports application-layer flood attacks such as HTTP, HTTPS, DNS, and SIP		

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Sr. No.	Potential Bidders Queries		Employer's Response
	Supports traffic autolearning	Support WAF feature but currently license not required, Vendor specific clause	The bidder may propose Equivalent or better product as part of their solution.
	Adjust security policies in real time,		
	Security Features license for 3 years Comprehensive warranty		
14	**Interactive LED Touch Screen**		
	Screen Size: 65 inches,		
	Resolution: Minimum of 4K Ultra HD (3840 x 2160 pixels),		
	Aspect Ratio: 16:9		
	Brightness: Minimum of 350-400 cd/m2,	Brightness ≥ 300nit , Vendor Specific clause	The bidder may propose Equivalent or better product as part of their solution.
	Viewing Angle: 178° or wider,		
	Touch Type: Infrared (IR) or Capacitive		
	Multi-Touch Capability: Support for at least 10 touchpoints,		
	Touch Accuracy: Precision of ±2mm		
	Response Time: 10 milliseconds or faster		
	Operating System: Integrated Android OS (version 8.0 or higher) or compatibility with Windows 10 or above	Operating System: x86 Android 11 and Windows 11 dual-system architecture or higher, Both OS should be active	Multiple OS are not required, only one OS will fulfill the purpose
	CPU: Quad-core or higher, 1.5 GHz or higher for smooth operation	CPU: 11th Gen Intel Core i5, Vendor Specific clause	Its not Vendor Specific feature, multiple relavent products has the same features, However the bidder may propose Equivalent solution as part of their solution.
	RAM: Minimum 4GB,		Minimum 32GB is mentioned, The bidder may propose Equivalent or better product as part of their solution.
	Storage: Minimum of 32GB internal storage expandable through USB or SD card if needed.	Storage: Minimum of 256GB internal storage, More data can be saved	
	Integrated Speakers: Minimum of 2 built-in speakers with a combined output of 20W or higher		
	Microphone Compatibility: Built-in or external microphone support for video conferencing capabilities		
	Audio Output: 3.5mm audio jack or Bluetooth compatibility for external audio devices.		
	HDMI Ports: Minimum of 2 HDMI inputs (2.0 or higher) to support 4K video at 60Hz,		
	USB Ports: Minimum of 3 USB 2.0/3.0 ports (one front-accessible) for easy connection to peripherals		
	Wireless Connectivity: Dual-band Wi-Fi (2.4 GHz and 5 GHz)		
	Bluetooth 4.2 or higher		
	OPS Slot: Open Pluggable Specification (OPS) slot for optional computer integration if required	Kindly remove, Vendor Specific clause	The bidder may propose Equivalent or better product as part of their solution.
	Power Supply: 110-240V AC, 50/60 Hz		
	Screen Protection: 3mm or thicker tempered glass with anti-glare coating.	Screen Protection: 2mm thicker with tempered glass , Vendor Specific clause	The bidder may propose Equivalent or better product as part of their solution.

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Sr. No.	Potential Bidders Queries		Employer's Response
15	10 **1.5 kVA UPS Pure Sine Wave** e Including VRLA Battery 2 Hrs Backup • Pure sine wave • Power factors 0.7 lag to 0.9 lead • Efficiency at full load shall be 88% with • Power factor :0.8 • load crest factor: 3: 1 • remote monitoring and diagnostics System Racks, Power DB, Complete in all respect Nos. 80	BOQ ITEM # 10 : The requested 2-hour backup for the 1.5KVA UPS requires a significant number of batteries, which poses a challenging design layout and may result in a cluttered appearance during deployment. Please advise if you'd like to reconsider the backup duration or opt for a higher-capacity UPS.	02 hours backup required for items at camera pole sites only, active load will be much lesser than 1.5KVA.The Bidder need to ensure 02 hours backup for active load only
16	Quantities of pole required for CCTV System is not mentioned in BOQ . Please Clarify.		Referring to the Volume-II of the bidding documents (BoQ), the details are mentioned against field sites.
17	Do we need to quote complete solution of Under Vehicle Surveillance System , or just ANPR camera?		The Bidding documents are clear about scope, UVSS Solutions is not in the scope of work of the Chaharbagh 01 project,
18	What about the poles for ANPR, who will provide the poles?		However, the Bidder(s) may add cost for any redo, renovation, addition /alteration /allied works for Control room based on their technical proposal and design as various components has possibility of the redo/renovation.
19	What about the Control room is there any renovation part also from our end?		It's the Employer responsibility,
20	Do we need to fill prices and other documents on purchased tender or use soft copy?		The Bidder(s) to follow its previous practices for Tender document(s)
	Cabling (Power)	Kindly mention the cable size for power, not mentioned in the BOQ.	The Bidder(s) to propose as part of their solution, (according to Electrical Load Calculations).
21	Cable for all ELV System from UPS to Communication Rack to Control room in 25 mm PVC conduit / channel including termination and tagging at both ends. Complete in all respects.		
	Power Cabling	Please confirm the number of conductors for the power cable and diameter. Is 2.5mm square diameter?	The Bidder(s) to propose as part of their solution, (according to Electrical Load Calculations).
22	2.5 core power cabling along boundary wall and internal connectivity.		
23		For CCTV System , please specify the height , diameter of poles for camera installation?	Refer to Clarifications issued to the Bidder(s) on 09 December 2024. however, the Poles layout/drawings are attached herewith for further working.
24	Fiber Laying Mechanism:,	There is no mention of the fiber-laying process or its mechanism. Are the trenches already prepared, and is the piping complete? This will help us propose a solution accordingly.	The bidder may suggets his methadology to Optical Fiber Laying process/mechanism. Refer to Pre- bid meeting held in RUDA Head office on dated: the scope was defiend to the Bidder(s), for further respose, Yes Trench work and piping work till CCTV/Pole site is responsibility of the Employer. The Bidder may visit the Project Site and perform a survey for his better understanding.

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Sr. No.	Potential Bidders Queries		Employer's Response
25	Copper Cable Conduits:	The quantity of pipes for copper cables appears to be quite limited. Have conduits already been installed at the site, or will the existing infrastructure support additional conduits? Alternatively, should we include this as part of our proposal?	The Electrical work at CCTV Poles is the Employer Responsibility, the Bidder(s) may propose additional conduits for pole sites and command control center along with copper cables where required as solution and proposals.
26	Poles for Surveillance Cameras:	Are poles already installed on-site for deploying surveillance cameras? Additionally, what is the power arrangement at the site to initiate the project?	Refer to Pre- bid meeting held in RUDA Head office on dated 28th November 2024: the scope/responsibility matrix of project was defiend to the Bidder(s), for further respose, Yes Electrical/CCTV poles are already installed at SITE and is the work is responsibility of the Employer. The Bidder(s) may visit the Project Site and perform a survey for his Equivalent understanding.
27	Site Office Allocation:	Is there a possibility of allocating a site office at the location?	Yes, Space available to allocating Site office, The Bidder(s) may visit the Project Site and perform a survey for his better understanding.
28	Brand-Specific Terms:	Some specifications, such as "STARTECHNOLOGY," seem to restrict the scope to a single brand. Would it be acceptable to propose equivalent alternatives? This would encourage healthy competition and provide more options.	The bidder may propose Equivalent or better product as part of their solution.
29	6.Network Switching:	We have attached a document regarding network switching for your review. Kindly provide your feedback and clarifications.	
	network switching		
30	**8 Port PoE + Access Switch**	SFPs Required or Not(If Yes then Single Mode or MultiMode)?	Yes, Single Mode SFP required
	Managed Layer-2 Ethernet Switch		
	Should have at least 8 x 1G Ethernet Ports		
	Should have at least 02 x 10G SFP+ Ports		
	POE+		
	Core Switch	SFPs Required or Not(If Yes then Single Mode or MultiMode)?	Yes, Multi Mode SFP required
	Should have at least 12 x 10/40G QSFP+ Ports		
	Shall provide more than 30Tbps Switching Capacity	Is 30Tbps really required or it's a typo	
	Should Support Stacking on any standard	If Yes then please specify total port	

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Sr. No.	Potential Bidders Queries		Employer's Response
31	Must consist of Redundant Power Supplies/Fans	If Yes then please specify total port density required .Total switching capacity for 12 ports will be 12x80G = 960G (non blocking switching capacity) therefore advise if a lower Switching capacity fulfills the requirement for 12 ports, otherwise share the total required port density.	Required Switching capacity ≥ 1 Tbit/s, However The bidder may propose Equivalent or better product as part of their solution.
	The proposed product should be latest and have at least three (03) years of roadmap. Documentary evidence is mandatory. (no nearing EOL/EOS product shall be quoted)		
32	**Distribution Switch**	total switching capacity for 12 ports will be 240G +160G = 400G therefore advise if a lower Switching capacity fulfills the requirement for 12 ports, otherwise share the total required port density.	Minimum 400Gbps is required
	Should have at least 12 x 10G SFP+ Ports		
	Should have at least 02 x 40G QSFP+ Ports		
	Should support more than 2Tbps switching capacity		
	Should support more than 900 Mbps forwarding performance		
	Should support MAC Address entries		
	Should support ACLs		
	Should include required SFPs		
	Should have redundant power supplies		
	Switch should be 1U high		
	The proposed product should be latest and have at least three (03) years of roadmap. Documentary evidence is mandatory. (no nearing EOL/EOS product shall be quoted)		
33	**Network Manageable Switch Layer 3**	Is Layer 3 Switch required as mandatory or a Layer 2 switch with basic Layer features will be suffice?	L3 Switch is required
	Fixed configuration manageable Layer 3 Switch with Rack Mount Kit, 12 x 1G Base T ports for conenctivity over UTP, Switching capacity 24 Gbps or higher, power cable,Support multiple VLANs, Security features: 802.1x, Access Control Lists (ACLs), SNMP enabled, remote monitoring, Telnet support, Web based management interface with complete installation, configuration, testing and minimum one year comprehensive warranty		
34	**48 Port Layer-2 Manageable Network Switch**		
	Fixed configuration manageable layer 2 switch with Rack Mount kit, 48 x 10/100/1000Base T Ports for connectivity over UTP, 2 x 1G Base T ports for uplink conenctivity over UTP,, Switching capacity 96 Gbps or higher, support 802.1X authentication, MAC address authentication, support multiple VLANs, ACL, with complete installation, testing and minimum one year comprehensive warranty		
35	**12 Port Layer-2 Manageable Network Switch**		
	Fixed configuration manageable layer-2 switch,with Rack Moint kit, 12 x 10/100/1000Base T Ports for connectivity over UTP, 2 x 1G Base T ports for uplink conenctivity over UTP , Switching capacity 24 Gbps or higher, support 802.1X authentication, MAC address authentication, support multiple VLANs, ACL, with complete installation, testing and minimum one year comprehensive warranty		
	48 Port PoE Enabled Layer-2 Manageable Network Switch		

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Sr. No.	Potential Bidders Queries		Employer's Response
36	Fixed configuration manageable layer 2 PoE enabled switch with Rack Mount kit, 48 x 10/100/1000Base T Ports for connectivity over UTP, 2 x 10/100/1000Base T Ports for uplink connectivity (RJ 45 Interface), Switching capacity 96 Gbps or higher, support 802.1X authentication, MAC address authentication, support multiple VLANs, ACL, with complete installation, testing and minimum one year comprehensive warranty		
37	**08 Port PoE Switch**		
	8 × gigabit PoE ports, and 2 × gigabit fiber optical ports, IEEE 802.3at/af standard for PoE ports, IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE, 802.3ab, and IEEE 802.3z standard, 6 KV surge protection for PoE ports.	Does this Watch Dog feature is required for all 8xgigabit PoE ports that is All 8 ports will be used for this	Following Feature is not required: Watch dog
	AF/AT camera can reach up to 300 m in extend mode, PoE watchdog to auto detect and restart the cameras that do not respond		AF/AT Camera can reach upto 300meters

Sr. No.	Criteria		
1	Net worth of the bidder for the last year, calculated as a difference between total assets and total liabilities must be positive.		The suggestion of potiential bidder is regreted. However, Potiential bidder are required to reffer to evaluation criteria prescribed in the bidding documents.
1.1	The Bidder must have average net annual sales turnover of minimum PKR 600 million/year for the last three years.		
1.2	The bidder shall demonstrate that it has access to, or has available, liquid assets (current assets except inventory) including an unutilized line of credit sufficient to meet the cash flow requirements estimated as PKR 300 million for the subject contract.		
2	The Bidder must be registered in Pakistan and must have valid tax registration and in active tax payer list.		
3	The bidder must have offices in Lahore, Karachi and Islamabad for after sale support with local engineers at each office.		
4	Bidders for lot 1 and lot 2 must comply with the following:		
4.1	Bidder Should not be Blacklisted from any Department in Pakistan		
4.2	Bidder must be registered with SECP for at least 10 years in Pakistan.		
4.3	Bidder must be ISO 9001, 27000, 20000 certified		
	Projects of Similar Nature and Complexity – Completed		
1	**Each Project cost equal to or more than PKR 120 million executed over the period of last 10 years of following Systems project.**	Looks Biased, Each IT Related Project cost equal to or more than PKR 120 million executed over the period of last 10 years.	Please refer to Addendum No 2 attached herewith.
	IP Based Video Surveillance System (CCTV System) (Rs.40 Million)		
	Computer Network (Rs. 35 Million)		
	Next Generation Firewall (Rs. 2 Millon)		
	Digital Signage System (Rs. 10 Million)		
	Fiber Optics (Rs. 10 Million)		
	IP PABX (Rs.2 Million)		
	Fire Alarm System (Rs 2 Million)		
	Access Control System (Rs. 0.5 Million		
	Projects of Similar Nature and Complexity – In Hand		
2	Each Project cost equal to or more than PKR 150 million currently in hand of following Systems project.		
	IP Based Video Surveillance System (CCTV System) (Rs.50 Million)		

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Sr. No.	Potential Bidders Queries		Employer's Response
	Computer Network (Rs. 40 Million)	Looks Biased, Each IT Related Project cost equal to or more than PKR 150 million currently in hand.	Please refer to Addendum No 2 attached herewith.
	Next Generation Firewall (Rs. 4 Million)		
	Digital Signage System (Rs. 15 Million)		
	Fiber Optics (Rs. 15 Million).		
	IP PABX (Rs. 4 Million)		
	Fire Alarm System (Rs 3 Million)		
	Access Control System (Rs. 1 Million)		
	Personnel Qualification & Experience		
3	Professional Engineer		
3.1	01 No. of Professional Electrical / Electronics Engineer with at least 15 years of overall experience each. (01 mark)	Looks Biased, 01 No. of Professional Network Engineer with at least 10 years of overall experience each. (01 mark)	Refer to Addendum No 2 attached herewith
4	Technical Team for LAN		
4.1	01 No. of System Designer (Must be System certified for LAN) Having 5 years of overall experience in relevant field (1 mark)	Look Biased, 01 No. of Network Engineer (Must be System certified for LAN) Having 5 years of overall experience in relevant field (1 mark)	
4.2	01 No. of Site Engineer (Electrical / Electronics) Having 5 years of overall experience in relevant field (1 mark)	Look Biased,, 01 No. of Site Engineer (Network) Having 5 years of overall experience in relevant field (1 mark)	
4.3	01 No. of Configuration & Testing Engineer (Electrical / Electronics) (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)	Look Biased, 01 No. of Configuration & Testing Engineer (Network) (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)	
5.2	02 No. of Configuration & Testing Engineer (Electrical / Electronics) (Must be System certified) Having 5 years of overall experience in relevant field (0.5 mark each)	Look Biased, 02 No. of Configuration & Testing Engineer (Must be System certified) Having 5 years of overall experience in relevant field (0.5 mark each)	
6	Technical Team for Digital Signage System		
6.1	01 No. of System Designer (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)	Looks Biased, Need to Remove	
6.2	01 No. of Configuration & Testing Engineer (Electrical / Electronics) (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)		
6.3	01 Nos. of Certified Cable Installer & Supervisor (DAE / B. TECH Electrical / Electronics) Having 5 years of overall experience in relevant		
7	Technical Team for IP PABX		
7.1	01 No. of System Designer (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)	Looks Biased, Need to Remove	
7.2	01 No. of Configuration & Testing Engineer (Electrical / Electronics) (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)		

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Sr. No.	Potential Bidders Queries		Employer's Response
8	Technical Team for Fire Alarm System		
8.1	01 No. of System Designer (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)	Looks Biased, Need to Remove	
8.2	01 No. of Configuration & Testing Engineer (Electrical / Electronics) (Must be System certified) Having 5 years of overall experience in relevant field (1 mark)		
8.3	01 Nos. of Certified Cable Installer & Supervisor (DAE / B. TECH Electrical / Electronics) Having 5 years of overall experience in relevant field2		
9	***EQUIPMENT***		
9.1	Hydraulic Jacks (4 Nos.)	Looks Biased	Refer to Addendum No 2 attached herewith
9.2	Cable Drum Trailers (3 Nos.)		
9.3	Cable Pulling Winches (3 Nos.)		
9.4	Hydraulic Cable Drum Jacks (4 Nos.)		
9.5	Mobile Cranes (2 Nos.)		
9.6	Boom Trucks (3 Nos.)		
9.7	Telehandlers (2 Nos.)		
9.8	Earth Resistance Testers (10 Nos.)		
9.9	Excavator (3 Nos.)		
9.10	Trenchers (2 Nos.)		
9.11	Backhoe Loaders (3 Nos.)		
9.12	Directional Drilling Machines (3 Nos.)		
9.13	Cable Fault Locators (3 Nos.)		
9.14	Dumpers (2 Nos.)		
9.15	Tractor Trolley (5 Nos.)		
9.16	Water Bowser (3 No)		
	Schedule-L and Technical Staff Certifications:	Instead of requiring category-specific engineers or technical staff qualifications, we propose focusing on certifications directly aligned with BOQ items. For example: For Project Management: PMP certification For other technical requirements: CDCE, CDCP, CDCS, HCNP, HCIE, Datacom, Security Certification, CCNP, etc. Additionally, you may request details of the proposed technical team to ensure capability alignment	Refer to Addendum No 2 attached herewith

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Sr. No.	Potential Bidders Queries		Employer's Response
	Exclusion of Civil/Construction Clauses:	As 80% of the RFP document pertains to construction or works tenders, we recommend excluding civil/construction-related clauses, particularly in Volume III, to avoid unnecessary overlap and ensure clarity.	Regreted, since the provision prescribed in Volume-III are relevant to the subject project.
	Ravi Urban Development Authority (RUDA) Volume - I Smart Services at Chaher Bagh Phase-I Evaluation Criteria and Qualification Updating Form L – 2 Schedule – L to Bid 2. EQUIPMENT Sr. # | DESCRIPTION | MAX MARKS | REMARKS 1 | Hydraulic Jacks (4 Nos.) | 1 2 | Cable Drum Trailers (3 Nos.) | 1 3 | Cable Pulling Winches (3 Nos.) | 1 4 | Hydraulic Cable Drum Jacks (4 Nos.) | 1 5 | Mobile Cranes (2 Nos.) | 2 6 | Boom Trucks (3 Nos.) | 2 7 | Telehandlers (2 Nos.) | 2 8 | Earth Resistance Testers (10 Nos.) | 1 9 | Excavator (3 Nos.) | 1 10 | Trenchers (2 Nos.) | 2 11 | Backhoe Loaders (3 Nos.) | 1 12 | Directional Drilling Machines (3 Nos.) | 2 13 | Cable Fault Locators (3 Nos.) | 1 14 | Dumpers (2 Nos.) | 1 15 | Tractor Trolley (3 Nos.) | 0.5 16 | Water Bowser (3 Nos) | 0.5 | Sub-Total of Tools & Plants | 20 No marks if the manufacturing certificate / Purchase certificate / Leased / Rented / ownership proof is not attached. Proportionate marking if equipment is less than the minimum required number. Capacity of the equipment / Plant should be clearly mentioned. *Note: No marks will be awarded if any ambiguity is found or attached documents are not readable.* **Note:** • *For qualification of the Bidder (Single Entity/JV/Consortium), Minimum 65% marks are necessary in each category and Minimum 70% overall marks are necessary for qualification requirement as per criteria given in Schedules – K & L to Bid.* • *In case of JV/Consortium, the lead member must secure at least 50% marks in each category.* EQ&QUF - 55	Please elaborate the purpose of this table (Schedule L-2) of evaluation criteria, as equipment is related to other domains, not related to Smart Services, seems document error by the consultant.	Refer to Addendum No 2 attached herewith

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Sr. No.	Potential Bidders Queries		Employer's Response
	16.2 The Bid Security shall be, at the option of the Bidder, in the form of Call Deposit Receipt (CDR)/ Pay Order or a Security issued in the prescribed form included in the Bidding Documents, by (a) a Scheduled Bank in Pakistan or (b) a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan or (c) an Insurance Company listed in the **Bidding Data** and rated by PACRA/VIS of rating as provided in Table below in favour of the Employer valid for a period 14 days beyond the Bid Validity date. The Bid Security of Joint Venture shall be in the name of Joint Venture or Lead/either Firm of the JV or in ratio of shares of the individual JV partners, submitting the bid. Bid Price (In Eq. million PKR) / Minimum Rating of Insurance Companies Up to 1000 / A (+) 1001 to no limit / AA *[Note: Insurance Company includes Joint Ventures of Insurance Companies also]*	As per the discussed point, we the Bidder(s) may submit the earnest money in the form of an insurance guarantee from any A+ or AA-rated insurance company. Kindly confirm your understanding.	Please refer to Clause 16.2 of Bidding Data Sheet.
	Projects of Similar Nature and Complexity - Completed Each Project cost equal to or more than PKR 120 million executed over the period of last 10 years of following Systems project. Basic Criteria: Design, Supply, Installation, Testing and Commissioning of Smart Services related Systems given below: i. IP Based Video Surveillance System (CCTV System) (Rs.40 Million) ii. Computer Network (Rs. 35 Million) iii. Next Generation Firewall (Rs. 2 Million) iv. Digital Signage System (Rs. 10 Million) v. Fiber Optics (Rs. 10 Million) vi. IP PABX (Rs.2 Million) vii. Fire Alarm System (Rs 2 Million) viii. Access Control System (Rs. 0.5 Million)	Please clarify that the Bidder(s) can attach Purchase order for categories i-viii as per values mentioned in criteria or attach 01 Purchase Order of 120Mn to secure maximum marks	Refer to Addendum No 2 attached herewith
	Cumulative Purchase Orders: Considering the BOQ items, we recommend shifting from category-specific separation to a cumulative evaluation approach. Specifically, we suggest requiring Bidder(s)s to provide cumulative purchase orders amounting to PKR 300 million in relevant categories (e.g., IT, IP, CCTV, Command & Control, etc.) over the last five years.		Refer to Addendum No 2 attached herewith

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Sr. No.	Potential Bidders Queries		Employer's Response
	IB.17 Alternate Proposals by Bidder 17.1 Unless otherwise specified in the Bidding Data, alternative proposal(s) shall not be considered. 17.2 Should any Bidder consider that he can offer any advantages to the Employer by a modification to the designs, specifications or other conditions, he may, in addition to (12) Ravi Urban Development Authority (RUDA) Volume - I Smart Services at Chahar Bagh Phase-I Instructions to Bidders his Bid to be submitted in strict compliance with the Bidding Documents, submit any alternative proposal(s) containing (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details/conditions, provided always that the total sum entered on the Letter of Bid shall be that which represents complete compliance with the Bidding Documents. 17.3 Alternative proposal(s), if any, of the Bidder having submitted most advantageous Bid only may be considered by the Employer as the basis for the award of Contract to	Can we submit options in the BID, including mid-range and low-range solutions with value additions, while maintaining the design integrity?	Alternative proposals are not allowed.
		Only lead bidder can submit bid security of JV partner also,	Please refer to Clause 16.2 of Bidding Data Sheet.

A/ Executive Director Engineering
Ravi Urban Development Authority (RUDA)

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