## **District SL**

Various Counties, Various Routes			
Job No:	J6Q2025H, J6Q2026H, SL0096H		
Consultant Services Required:	This project will provide independent support, modification, expansion, and maintenance of the Gateway Guide (GWG) Network. The Offeror will be responsible for all network maintenance activities and documentation management.		
Other Comments:	The following is an overview of the major responsibilities to manage the GWG Network:		
	<ol> <li>Daily Network Support:         <ul> <li>a. Support predetermined network tasks.</li> <li>b. Support emergency or critical maintenance efforts.</li> <li>c. Work with partners, clients, and vendors on network interconnection projects.</li> <li>d. Deliver training if requested.</li> <li>e. Take direction from MoDOT's designated network manager.</li> </ul> </li> <li>Configure, manage, maintain, troubleshoot:         <ul> <li>a. Layer 1 through layer 3 network devices</li> <li>b. Video stream transport and distribution hardware and software</li> <li>c. SolarWinds Orion network management platform or a similar Network Monitoring System software package as deployed by MODOT.</li> <li>d. Network security procedures, by performing regular security audits.</li> <li>e. Respond to network security incidents as required.</li> </ul> </li> <li>Implement and support:         <ul> <li>a. Video streaming software parallel adoption.</li> <li>b. Continuation of ASR-920 conversion</li> <li>c. St. Louis TMC network security</li> </ul> </li> </ol>		
	<ul> <li>c. St. Louis TMC hetwork security between multiple networks.</li> <li>4. Document, Review, and Manage <ul> <li>a. Network Classless Inter-Domain</li> <li>Routing (CIDR) IP address and 802.1Q</li> <li>VLAN allocations.</li> </ul> </li> </ul>		

	<ul> <li>b. HSRP, REP, and other redundancy features and suggest potential upgrades and improvements.</li> <li>c. Bandwidth usage and suggest strategies on how to mitigate bandwidth congested areas.</li> <li>d. PIM design and suggest potential upgrades and improvements.</li> <li>e. Current Cisco device portfolio and provide a product lifecycle management strategy.</li> <li>f. Current database of IP devices.</li> <li>g. Network changes using industry standard tools.</li> </ul>
	Complete a monthly status report covering adds, moves, changes, and remedial activities.
Other Comments:	<ul> <li>Networking Experience</li> <li>The following is an overview of the desired staff experiences and past efforts that would be seen as valuable in managing the GWG Network:</li> <li>1. 5+ years in layer 1 Ethernet technologies including single mode fiber, multimode fiber, and 802.11 (wireless LAN) technologies</li> <li>2. 5+ years in layer 2 switching technologies including 802.1Q VLANs, REP, and STP</li> <li>3. 5+ years in layer 3 routing technologies including OSPF routing, Classless Inter-Domain Routing (CIDR) IP addressing, PIM routing, HSRP routing, Dynamic Multipoint Virtual Private Network (DMVPN), private networks over cellular, and NetFlow traffic analysis</li> <li>4. 3+ years in video compression standards and protocols, codecs, and real-time media streaming solutions (e.g., Wowza)</li> <li>Device Experience</li> <li>1. Circo IE series switches (IE 2000, IE 4000)</li> </ul>
	1. Cisco IE series switches (IE-3000, IE-4000, IE-5000)

2.	Cisco ME series routers (ME3600) and
	ASR-920 devices
3.	Ubiquiti AirLink series wireless devices
	(PowerBeam 5AC)
4.	Cisco 800 series VPN devices (C819)
5.	Sierra Wireless RV50 devices connected to
	Verizon Wireless Mobile Private Network
6.	Cisco 6800 series routers (C6807)
7.	Cisco C4500X series routers
8.	Cisco NCS2000 series DWDM shelves
	(NCS2006)
9.	Cisco ASR 1000 series firewalls (ASR
	1001)
	rk Security
1.	5+ years in installation, configuration,
	upgrade, maintenance, and troubleshooting
	of firewalls and other network security
2	devices
2.	5+ years with network security practices,
	hardening, and audits
Netwo	rk Management
	Experience with SolarWinds Orion or
1.	similar network management automation
	software
2.	Experience managing SolarWinds Orion
	modules: Network Performance Manager
	(NPM), Network Configuration Manager
	(NCM), NetFlow Traffic Manager (NTM),
	User Device Tracker (UDT), and IP Address
	Manager (IPAM)
Troubleshooting	
1.	Experience with troubleshooting remote
	instrumentation devices such as CCTV
	cameras, vehicle detection stations, and
	industrial control systems
0	
	cations and Experience
1.	5+ years of experience managing networks
	of similar (or greater) size and scope

	<ol> <li>Cisco Associate level certification (e.g., Cisco Certified Network Associate (CCNA) Routing and Switching)</li> </ol>		
	Availability		
	<ol> <li>Be available 24x7x365 by telephone, email, or other approved method for emergency network support</li> <li>Work with TMC staff during normal business hours (Monday-Friday 7:30 AM - 4 PM) unless other arrangements made</li> </ol>		
Other Comments:	Depending on the responses, the Department my		
	short list firms and request interview/presentations		
	from those teams.		
	The Consultant Short List will be posted to the web		
	Tentative Date of Consultant Interviews-May 23, 2024		
	Tentative Date of Consultant Selection-June 1, 2024		

## **Rating Criteria w/Weighted Values**

25 Points Max 15 Points Max 10 Points Max 15 Points Max 25 Points Max <u>10 Points Max</u> 100 Points Max Total