PROPOSAL FOR

A REGIONAL
BROADBAND WIRELESS NETWORK
FOR SILICON VALLEY

Prepared by
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1 Executive Summary

Blue Horizon Group, Inc. (BHG) and Globetel Communications LLC (GTE) and their partners are pleased to provide this proposal to SAMCAT and its partners.

The proposal is divided in nine sections:

2. System Specifications Checklist of Compliance
3. Project Vision and Business Model
4. Usage, Applications and Services
5. Work Performance
6. Financial Model and Upgrades
7. Advertising Policy
8. Technical Approach to Work Requirements
9. Qualifications and Experience

1.1 Vision and Understanding of the project

SAMCAT is interested in installing a Wi-Fi network across 4 counties and about 40 cities. BHG can build such infrastructure, which is fast, secure and economical. BHG can also provide other service, which include VoIP, DECT phone, and utility wireless reading service.

In Addition, BHG will develop other applications that can be use by the municipalities.

1.2 Key Characteristics

Our hardware is unique in the sense that we support multiple radios within one device. Therefore, we can provide Hot Point Access as well using the same device we Backhaul from point-to-point or point-to-multipoint.

Our radios allow us to setup VPNs, VLANs, have multiple networks on the same frequency and provide the service at a very economical price.

We also provide telephone service via VoIP and DECT. We also provide several applications which municipalities can use.

1.3 Customer Base

GTE has installed networks in many parts of the world. Many pilot programs have been completed in countries like US, China, Germany, Mexico, Ghana and many others.

In Brazil, GTE and vozBrazil have launched VoIP service.

1.4 Members of the Team and roles

The team consists of members from BHG and GTE. The Project Manager is responsible for the overall project. GTE provides a Project Manager to work in a project of this size, as well as two to three engineers and we contract for the installation team. BHG also appoints a Finance Manager, an Engineering Manager, a Sales & Marketing Manager and a Support Manager.

The BHG Managers will work with the Project Manager and the entities to assist in various areas. The GTE engineers interface with the Project Manager and the other BHG staff to assist in all levels of the design and implementation of the network.

1.5 Wireless Business Model

BHG proposes the following Business Model for the deployment and usage of the Network.

- Basic Outdoor Service – Provide access to all users free of charge with limited service and speed. The service might work also indoors.
- Enhanced Outdoor Service – Provide access to all users for a fee. The service provides higher speed and extended access.

- Enhanced Indoor Service – Provide access to all users indoors for a fee. The service provides higher speed and extended access. This service might require equipment installed for it to be effective.
- Government Services – Provide wireless services to all Governmental Agencies. These services are negotiable in all cases.
- Public Safety Services – Provide wireless services to all Public Safety Agencies. This particular service is provided at the 4.9GHz range. The FCC reserves this range for Public Safety communications. This range also requires security protocol support. All these services are negotiable.
- BHG will provide Internet Service, VoIP and DECT Phone Service and IPTv (Internet Pay TV).

1.6 Broadband services, service models and pricing

Based on the above business model the services provided are as follows:

- Basic Outdoor Service – Provide access to all users with limited service and speed. The service might work also indoors. This service will have 768KB download speed and 256K uploads speed. The cost for this service is free.
- Enhanced Outdoor Service – Provide access to all users. The service provides higher speed and extended access. This service will have 1.5Mb download speed and 768Kb upload speed. The fee for this service will be $9.95/month.
- Enhanced Indoor Service – Provide access to all users indoors. The service provides higher speed and extended access. This service might require equipment installed for it to be effective. The service will have 1.5Mb download speed and 768Kb upload speed. This service will have a fee $9.95/month. It might also require additional hardware and additional setup costs.
- Government Services – Provide wireless services to all Governmental Agencies. These services are negotiable in all cases. It will probably require VPNs, VLANs and other networks setup. All these services will be negotiated as the need arises.
- Public Safety Services – Provide wireless services to all Public Safety Agencies. This particular service is provided at the 4.9GHz range. The FCC reserves this range for Public Safety communications. This range also requires security protocol support. All these services are negotiable.

1.7 Timelines and phases for deployment

Once the company has been selected and contracts have been negotiated, the analysis and design work begins. This process last about 60 days and the installation of the network begins from there. Once an area has been installed then it is activated. The installation process will be done town by town and the deployment will be beginning as soon as each one is completed.

The overall process is estimated to take approximately 12 to 16 months.

1.8 Coverage Areas for Wireless Broadband Networks

The area to be covered in this case is approximately 2,000 square miles. Majority of the area is rural. Initially we will cover the urban areas. The second phase we will cover the highways and freeways and we will provide mobile internet. The third phase we will provide coverage to the rural areas. The fourth and final phase we will make sure that coverage exists 100% in the area specified.

2 System Specifications Checklist of Compliance

Indicate if your proposal Fully Complies (C),Partially Complies (PC) or is Not Compliant (NC) with the following items:

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
Overview	2.2	Work Requirements			
		1. Independently own, operate, and manage the Silicon Valley Wireless Broadband network.	Y		
		2. Identify Service Providers (minimum of one (1)) who will provide residents, visitors, commercial, and governmental broadband services.			Y
		3. Work closely, cooperatively, and jointly with the participating City, County, and Entities of Wireless Silicon Valley.	Y		
	2.2.1	Network Specifications			
		1. Provide a high level Concept Design for the System, covering all the key components of the System. Include graphic illustrations where appropriate, but make sure to describe the architecture and operation of the System as well.	Y		
Open Service Provider Network	2.2.1.1	Open Service Provider Network			
		1. Describe how you plan to meet the requirements for an Open Service Provider Network as outlined in Section 2.2.1.1	Y		
		2. Address your criteria for allowing SPs onto the network, including the following components:			
		a. Criteria for initial SP partners	Y		
		b. Criteria for subsequent SP partners	Y		
		c. Technical criteria	Y		
		d. Financial criteria	Y		
		e. Volume commitments required	Y		
		f. Termination liabilities	Y		
		g. Customer focus	Y		
		h. Other criteria you deem relevant			
		3. Provisioning systems: Describe how SPs provision users			

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		on the network.	Y		
		a. Who is responsible for what?	Y		
		b. How long does it take?	Y		
		c. What provisioning system (OSS) is used?			
		4. Describe the support structure to other SPs, including:	Y		
		a. Commitments for response time	Y		
		b. Level 1 vs. level 2 support responsibilities	Y		
		c. Escalation procedures	Y		
		d. Cost structure for support			
		e. Additional costs	Y		
		5. Service Provider isolation:			
		a. What happens if one SP's customer takes too much bandwidth? Will it affect another SPs' customers?	Y		
		b. How much isolation is there between SPs and their users?	Y		
		c. What Quality of Service (QoS) assurances are provided by the Successful Proposer to the SP?	Y		
		6. Billing system:	Y		
		a. What billing system will be used?	Y		
		b. What kind of accounting information does the Successful Proposer provide to the SP?	Y		
		c. Do the end users need to be identified to the Successful Proposer?			
		7. Network layer boundaries: Describe the Successful Proposer's responsibilities compared to the SP in terms of IP address assignments, RADIUS, bandwidth shaping, etc.	Y		
		8. What services are the Service Providers obligated to purchase from the Successful Proposer? Upstream Internet? Mailboxes? Other?	Y		
		9. Customer Installation:			
		a. Who is responsible for end user equipment installation?	Y		
		b. Who installs the antenna, CPEs, bridges, boosters, and other related equipment? Is self provisioned possible?	Y		
		c. Does the SP offer on premise installation/maintenance service?	Y		
		10. Please address the following:			
		a. Confidentiality between Service Provider's customers and other Service Providers.	Y		
		b. How will you ensure a "level playing field" between Service Providers?	Y		

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		11. Will the System be open for both the Wireless Broadband Network and the Backhauls? If not, explain why.	Y		
Backhaul	2.2.1.2	Backhaul Technology			
		1. What equipment will you deploy for the backhaul solution initially?	Y		
		2. Will it be standards based or proprietary? If proprietary, please provide substantiating documentation to support the selected radio protocols capabilities and the long-term viability of the products.	Y		
		3. Will you use the Backhaul for the backhaul solution? (Please make sure to illustrate the interaction between the Wireless Broadband Network and the Backhaul as part of your Concept Design.)	Y		
		4. What services will you provide via the Backhaul? Specify all potential service models and customer classes.			
Wireless Broadband Network	2.2.1.3	Wireless Broadband Network			
		1. At what speeds will users be able to connect to the Wireless Broadband Network?	Y		
		2. What standards will be included in your proposed Wireless Broadband Network?	Y		
		3. What devices will be supported by your proposed Wireless Broadband Network?	Y		
		4. How will you backhaul your Wireless Broadband Network?	Y		
		5. What bandwidth will be offered on your Wireless Broadband Network?	Y		
		6. Summarize the coverage of your Wireless Broadband Network. Specify your proposed Coverage Areas including timelines and geographies for expansion of Wi-Fi Coverage Areas.	Y		
		7. What are your plans to refresh/update the wireless technology used for the Wireless Broadband Network every 3 to 5 years?	Y		

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		8. Will there be support for products and technologies such as Voice over Wi-Fi phones and Mobile WiMax (802.16e) services – now or in the future – on your proposed network?	Y		
Equipment	2.2.1.4	Equipment Requirements			
		1. List the major pieces of equipment that will by supplied during implementation.	Y		
		2. Provide specifications for each type of equipment and include pictures if available. Make sure to address the following: a. Size/dimensions b. Weight c. Power output d. Potential mounting locations	Y		
		3. Provide an overview of how the equipment is installed and the relationship to other components of the System.	Y		
		4. Provide an overview of where equipment will be located. Please discuss how flexible you will be in determining locations for installation of the equipment?	Y		
		5. How will you upgrade as new technologies and standards become available?	Y		
		6. Discuss the resilience of the equipment, including its ability to function in adverse weather conditions and the temperatures within which it is capable of operation.	Y		
	2.2.1.5	Non-intrusive & Aesthetically Acceptable			
		1. Address potential concerns over the appearance of the equipment. Specifically, address the following areas of concern: a. Non-Intrusive b. Aesthetically acceptable c. Alternatives for Mounting	Y		
	2.2.1.6	City, County, Private Assets			
		1. Able and willing to negotiate with multiple owners for access and use of public and private assets.	Y		

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		2. Negotiate payment(s) and accept responsibly of same for use of asset.	Y		
Coverage	2.2.2	Coverage Area and Minimum Connection Rates			
		1. Describe your approach to portability, mobility, nomadic, etc. access.	Y		
		2. Describe how you plan to achieve the minimum acceptable coverage parameters outlined in this Section?	Y		
		3. How will users obtain coverage within buildings?	Y		
		4. Will coverage be available through in-building penetration on 1st and 2nd floors? Address the following different classes of indoor support: a. Best-effort b. Enhanced Service c. Premium Service d. Other	Y Y Y Y		
		5. Specify percentage in-street coverage within Wireless Broadband Network Coverage Areas.	Y		
		6. Elaborate on the expected service and assumptions.	Y		
		7. Identify devices supported by your proposed System.	Y		
		8. Discuss the coverage areas for both the Wireless Broadband Network and the Backhaul.	Y		
Coverage	2.2.2.1	Basic Outdoor Wireless Service			
		1. Mandatory service model providing free broadband access.	Y		
		2. Identify ability to provide Wi-Fi service through the coverage area and at what connection and throughput speeds.	Y		
		3. Identify service's capabilities: a. Features b. Functionality c. Restrictions d. Limitations	Y Y Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
Coverage	2.2.2.2	Outdoor Enhanced 1. Optional service model providing premium (for fee/subscription) outdoor broadband access. 2. Identify ability to provide Wi-Fi service through the coverage area and at what connection and throughput speeds. 3. Identify service's capabilities: a. Features b. Functionality c. Restrictions d. Limitations	Y Y Y Y Y		
Coverage	2.2.2.3	Indoor Coverage, may or may not require consumer premise equipment (CPE) 1. Optional service model providing premium (for fee/subscription) indoor broadband access. 2. Identify ability to provide Wireless Broadband Network services through the coverage area and at what connection and throughput speeds. 3. Identify service's capabilities: a. Features b. Functionality c. Restrictions d. Limitations	Y Y Y Y Y Y		
Coverage	2.2.2.4	Government Enhanced Service 1. Optional service model providing premium (for fee/subscription) indoor/outdoor/mobile broadband access. 2. Identify ability to provide Wireless Broadband Network services through the coverage area and at what connection and throughput speeds; also specify maximum speed allowed to travel and maintain continuous connection.	Y Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		3. Identify service's capabilities: a. Features b. Functionality c. Restrictions d. Limitations	Y Y Y Y		
Coverage	2.2.2.5	Government and Public Safety Enhanced Service			
		4. Optional service model providing premium (for fee/subscription) indoor/outdoor/mobile broadband access.	Y		
		5. Identify ability to provide Wireless Broadband Network services through the coverage area and at what connection and throughput speeds; provision of Department of Justice (DOJ), CLETS and public safety level of security, also specify maximum speed allowed to travel and maintain continuous connection.	Y		
		6. Identify service's capabilities: e. Features f. Functionality g. Restrictions h. Limitations	Y Y Y		
Security	2.2.3	Authentication and Authorization (Security)			
		1. How will the System separate traffic from the different classes of users (proposed service models, business, residential, government, public safety, and mobile)?	Y		
		2. How will the System support over the air encryption?	Y		
		3. What standards based encryption protocols will the System support?	Y		
		4. What Intrusion Protection/Detections System will the System implement to protect and detect against attacks?	Y		
		5. What abilities will the Service Providers have to shut down attackers?	Y		
		6. How will the System support Wi-Fi encryption for end users?	Y		
		7. Describe any mechanisms available in the access points	Y		

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		and base stations to support client-to-client isolation.	Y		
		8. How will the System authenticate mobile users at ingress points on the Wireless Broadband Network?	Y		
		9. How will the System authorize users to use resources depending on users' credentials, including access to different networks depending on the users' identity or location?	Y		
		10. How will the System and authentication system provide accounting information to provide data for customer billing and capacity planning for all devices?	Y		
		11. How will the Customer Premises Equipment (CPEs) be configured in the AA systems to be authorized to connect to the Backhaul with appropriate bandwidth, quality of service and access to appropriate network(s)?	Y		
		12. What capabilities will network managers of the Successful Proposer and/or Service Providers/Content Providers have to access System devices when needed?	Y		
		13. Describe the capabilities of the System to support single sign-on support whereby a single action of user authentication and authorization can permit a user roam without re-authentication.	Y		
		14. What abilities will exist and who will be authorized to shutdown subsets of the System when warranted?	Y		
Network Monitoring and Management	2.2.4	Continuous and Centralized Network monitoring / performance management	Y		
		1. Describe how the proposed System will support the following minimum requirements (as outlined in Section 2.2.1):	Y		
		a. Continuous, Centralized Management and Monitoring	Y		
		b. Proper Tools	Y		
		c. Logs and Reports	Y		
		d. Alarm and Error Management	Y		
		e. RF Management	Y		
		f. RF Interference Detection	Y		
		g. Asset Management	Y		
		h. Performance/SLA Management	Y		
		i. Prior Experience with NOCs	Y		
		j. Security Management	Y		

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		2. Describe any other network monitoring and management tools and aspects supported by your proposed System, as well as the System control granularity expected.	Y		
Bandwidth SLAs	2.2.5	Bandwidth and Service Level Agreements 1. How will the System support different classes of bandwidth for different user classes for both the Wireless Broadband Network and Backhauls? 2. What mechanisms will be in place to control bandwidth allocation to support tiered services? 3. Will control of the bandwidth be available for different user classes at the ingress point and over the "air" in the System? 4. What levels of bandwidth will the System provide to each User Class?	 Y Y Y Y		
Quality of Service	2.2.5.1	Quality of Service (QoS) 1. What standards based or proprietary QoS mechanisms will be implemented for both Wireless Broadband Network and Backhauls? 2. How will traffic be prioritized on the System? Please be specific about prioritization given to various types of traffic, including for each user category and anticipated applications. 3. How will the System support/provide dynamic bandwidth allocation, including fixed bandwidth increase per user or dynamic increase per traffic type?	 Y Y Y		
Service SLAs	2.2.5.2	Service Level Agreement (SLA) per Service Model 1. Will the System support SLAs for customers? a. Please specify any SLAs for i. each service model (customer) ii. enhanced individual SLAs; premium iii. SLAs between the Successful Proposer and Service Provider iv. SLAs between Successful Proposer and government agencies 2. How will "pass-through" SLA requirements be managed?	 Y Y Y Y Y Y		

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Reliability / Redundancy	2.2.6	Reliability / Redundancy			
		1. What percentage uptime can you guarantee? Please breakdown by Backhaul and Wireless Broadband Network, as well as by type of user.	Y		
		2. What redundant capabilities will be built into the System?	Y		
		3. What mechanisms will you include to mitigate or eliminate single points of failure for all key components of the System?	Y		
		4. What is your MTBF for your proposed network equipment as well as other components of the System? What processes will be in place to guarantee these service levels?	Y		
		5. Describe your emergency power backup plan.	Y		
		6. Describe your PoP backup plan.	Y		
		7. Describe the redundant paths in the Backhaul and, if applicable, the Wireless Broadband Network.	Y		
		8. Describe any self-healing capabilities of your proposed System.	Y		
		9. Describe your proposed System's support for detections of RF interference and reconfiguration/detection of possible interference-free channels.	Y		
Scalability / Expandability / Capacity	2.2.7	Scalability / Expandability / Capacity			
		1. Describe how the system will be tested and how "peak load" is determined. Calculate the capacity of the System and the expected throughput for the subscriber.	Y		
		2. Describe how your proposed System will allow for scalable growth to increase coverage areas, and support additional users, capacity, and functions.	Y		
		3. Describe your approach to expanding capacity if network congestion occurs in an area, including the extent of re-engineering required.	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		4. Describe your proposed System's support for the creation of multiple network "peering points".	Y		
		5. How will your proposed System adapt to increased demand whether due to geographic coverage, increased amount of users, as well as other drivers of increased demand? Please address both the Wireless Broadband Network and the Backhaul in your response.	Y		
		6. Describe your Business Continuance and Disaster Recovery Plans for the System.	Y		
Segmentation of Network Names – SSID	2.2.8	Segmentation of Network Names – Set Service Identifier (SSID)			
		1. How many actual SSID names can be supported (also include theoretical limit)?	Y		
		2. Will the System support non-broadcast as well as broadcast SSIDs? How many of each?	Y		
		3. Specify any capabilities to restrict access to one (or more) SSID in emergency situations.	Y		
Back Office Systems	2.2.9	Back Office Systems: Operations, Maintenance, and Support Systems			
		1. List and describe the software supplied and its function(s). Include any System management software and support/billing software.	Y		
		2. Proposals should include specific information about and diagrams of the preliminary design of the following required aspects of System operations, services and functions:	Y		
		a. ACD: Automatic Call Distribution for Call Center.	Y		
		b. Financial System	Y		
		c. Billing System:	Y		
		d. Settlement (with support for multiple SPs)	Y		
		e. Capacity for Tiered Billing Rates	Y		
		f. Authentication repository	Y		
		g. Network Utilization Database	Y		
		h. Customer Service System:	Y		
		i. Customer Repository	Y		
		j. Trouble Ticket System:	Y		
		k. Asset Management	Y		
		l. Network Failure Management	Y		
		m. Console for Network Operations Center System	Y		
		n. RADIUS-based Support	Y		
		o. Other subsystems needed to support the rest of	Y		

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		the technical specifications and requirements, as outlined in Section 2.2 supported in the System you propose.	Y		
Desirable Network Characteristics	2.2.10	Desirable Network Characteristics Roaming 1. Specify any roaming capabilities in your proposed System, including support for the following: a. Seamless Roaming b. Persistent Session c. Consistent Connection 2. Describe any known limitations (i.e., speed of travel) that would affect roaming performance. Interoperability 1. Describe how your Wireless Broadband Network would interoperate with existing Wireless Broadband and Wi-Fi networks in areas adjacent to the Wireless Silicon Valley project area within Silicon Valley.	 Y Y Y Y Y Y		
Network Architecture and Solution Design	2.2.11	Network Architecture and Solution Design Requirements 1. Provide a Concept Design for the System, including diagrams or flowcharts where appropriate. Concept Design should address the following: a. Expected Access Point density in urban areas, commercial areas, downtown. b. Expected number of backhauls per Access Point. c. Expected aggregate speed between Access Points, from Access Points to backhaul, and from backhaul to the PoP (Network operators Point Of Presence). d. Expected number of simultaneous connections per Access Point. The Concept Design should address design for all tiers of the System, including assumptions for data rates, numbers of subscribers, oversubscription rates, ratio of concurrent users to total users, ratio of Wi-Fi access points or nodes to backhaul nodes, etc. 2. Proposals must include a plan for developing a Detailed Design. This plan must include the following (as outlined in Section 2.2.11): a. Detailed overview describing the tools and processes to be used for the following:	 Y Y Y Y Y Y Y Y		

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		i. Pre-installation site acquisition ii. Site survey and Spectrum Analysis iii. Propagation modeling iv. Parameter Configuration of the System v. Determination of quantity, type, location and configuration of all equipment b. Description of diagrams/blueprints that will be created. c. Determination of frequency allocation, and maximization of efficiency and interference reduction. d. Approach to dealing with terrain and other challenges. e. Integration and management of all elements of the System. f. Expectations for Stakeholder participation in the design process. g. Approach to incorporation of Disaster Recovery capabilities in the design. 3. Please describe in detail the design, architecture, and location of the NOC and PoP. Please address the following characteristics in your response, as well as any other characteristics of the proposed NOC and PoP: a. Based and Staffed in Oregon b. Back-up Source of Energy c. Proper Bandwidth and Redundancy d. Multiple Peering Points	Y Y Y Y Y Y Y Y Y Y Y		
Installation and Deployment Rollout	2.2.12	Installation and Deployment Rollout Requirements 1. Provide a narrative statement defining the implementation methodology the Proposer intends to use to provide equipment installation, using the Architecture and Design described in Section 2.2.11. 2. Describe your implementation plan for the System. Please address the following in your response: a. Project Execution Plan b. Management Plan c. Expectations of Stakeholder Resources d. Verification Process e. Installation of Equipment on Stakeholder Assets f. Adherence to Regulations 3. Describe your approach to phased build out for the System. 4. Wireless Broadband Network: Specify Wireless Broadband	Y Y Y Y Y Y Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		Network Coverage Areas, including plans to expand Wireless Broadband Network Coverage Areas over time, geographically, and as demand increases and plans to expand Wireless Broadband Network Coverage Areas over time, geography, and as demand increases.	Y		
		a. Specify individual phases and estimate total square miles covered.	Y		
		5. Backhaul: Specify geographies and timelines for the Backhaul point-to-point and/or point-to-multipoint capabilities.	Y		
		a. What percentage of the city will be able to receive fixed coverage through the Backhaul?	Y		
		b. Provide a map of fixed areas covered by the Backhaul.	Y		
		c. Specify individual phases and estimate total square miles covered.	Y		
		6. Address whether the proposed phases are reasonable and attainable. Specify where your plan does not meet, meets, or exceeds the requirements and preferences outlined in Section 2.2.10.	Y		
		7. Provide a timeline for when the System will be at full build-out if different from initial turn-up.	Y		
		8. At full build-out, describe how your proposed System will cover the geography of the Wireless Silicon Valley members.	Y		
		a. Will there be equal coverage to all parts of the geography (or all parts within your defined coverage areas)?	Y		
		b. Specify any areas that will not offer equal access for either the Wireless Broadband Network or the Backhaul.	Y		
		9. Describe in detail how you will operate, maintain and support the System and its users. Make sure to address the following in your response:	Y		
		a. Customer Support Structure			
		i. Customer Assistance	Y		
		ii. Onsite Maintenance and Support	Y		
		iii. Escalation Process			
		iv. Service Level Agreements			
		b. Inventory	Y		
		c. Warranty	Y		
		d. System Access and Provisioning Requests	Y		
		e. System Failures			
		10. Provide a copy of your proposed service agreement(s) and SLA(s) for each class of user, where appropriate.	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		11. Provide an overview of customer support structure and procedures.	Y		
		12. Specify planned inventory of replacement parts to be kept on-site.	Y		
		13. Describe the warranty offered to all types of customers based on the services rendered.	Y		
		14. Provide an overview of how the end-user will access and use the System. Please address from the viewpoints of residents, visitors, businesses, and local governments.	Y		
		15. Describe the process for dealing with System failures related to failed access units in the field and System maintenance. a. Include a list of what equipment will be required to access the units located on various public/private assets.	Y Y		
Request Resources	2.2.12.3	Request Resources			
		1. What external resources will be needed?	Y		
		2. What challenges are foreseen with securing and scheduling those resources when needed?	Y		
Public/Private Assets	2.2.12.4	Identify and secure available Public and Private assets			
		1. What assets shall be requested?	Y		
		2. How will these assets be secured?	Y		
		3. Foreseeable issues or challenges of obtaining proper locations for ideal placement of equipment?	Y		
Radio Non-Interference	2.2.12.5	Co-existence and non-interference with existing wireless infrastructures			
		What measures will be performed to ensure installation of new radio equipment will not create inference with existing radio installations?	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		If/When notified of (possible) inference with other radio devices: How do you respond? How quickly will you respond? What radio frequencies will be used in your design?	Y Y Y Y		
Adherence to regulations	2.2.12.6	Adherence to regulations 1. Ability to obtain, in timely fashion, all applicable a. Permits b. Zoning c. Other Licenses and Approvals	Y Y Y Y		
Deployment Statistics	2.2.12.7	Implementation deployment statistics and reporting 1. Provide information on what data would be provided to the Wireless Silicon Valley organization on the progress of the installation and the frequency of reporting. 2. Provide information on what data would be provided to the Wireless Silicon Valley organization on a regular basis on the operation of the network and the frequency of reporting. 3. Identify data categories that are considered company confidential and would not be provided to the Wireless Silicon Valley organization.	Y Y Y		
EULA	2.2.12.8	End User License Agreement (EULA) & Privacy Protection Provide a copy of the End User License Agreement and any End User Privacy Protections policies the company would implement if it were selected as a provider of services for the Wireless Silicon Valley wireless broadband network.	Y		
Sale or Transfer	2.2.12.9	Sale or Transfer of the Agreement State whether or not your company agrees to the terms regarding sale or transfer of the agreement in section 2.2.12.9 of the RFP.	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
Net Neutrality	2.2.12.10	Net Neutrality Policy and Plans Describe your policies and plans for providing equal access to the Internet and your network for all users of the Wireless Silicon Valley wireless broadband network. State whether or not your company plans to adhere to the concepts of Net Neutrality.	Y		
Splash Page	2.3.1	Splash Page 1. Provide a description of the Splash Page. Provide an initial prototype layout including the following in addition to other relevant details: a. Entity Web sites b. Service Providers c. Content Providers 2. Describe other components of your proposed Splash Page.			Y Y Y Y
	2.3.2	Community Broadband Alliance (Public Benefit) Applications 1. Will “Entity Web Site” concept be supported? 2. Suggestions/recommendations of additional Public Benefit applications?	Y Y		
Entity Web Site Section	2.3.2.1	Entity Web Site Section Describe your approach to the Entity Web Site information appearing on the Wireless Silicon Valley splash page when entering the Wireless Broadband Network. 1. Specifically address the following: a. Sites expected to be contained within the Entity Web Site section. Please specify any suggested sites in addition to those outlined in this Section. b. Any limitations on the adjustment of Entity Web Site section content in the future. c. Any bandwidth or access limitations. d. Please describe any innovative ideas to enhance the Entity Web Site section. 2. Please specify any restrictions you are planning to apply to the Entity Web Site section in terms of bandwidth, time, space, ports, etc.? 3. What is the speed you will allocate for Entity Web Site	Y Y Y Y Y Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		section services?			
		4. How do you propose to work with the Wireless Silicon Valley Entities to update Entity Web Site section sites periodically? How often do you propose to update Entity Web Site section sites?	Y		
Economic and Community Development	2.3.2.2	Economic and Community Development			
		1. Please provide a summary of public benefits associated with your System. Include specific examples and programs of Economic and Community Development concepts.	Y		
		2. How will your System achieve economic and/or community development objectives as outlined in Section 2.3.2.2?	Y		
		3. What, if any, programs do you propose to develop to achieve these objectives? Specify any reduced or subsidized access you plan to offer to low-income or other groups, or for educational or other purposes. Please be specific about the program criteria, objectives,	Y		
Application	2.3.3	Applications			
		1. Identify and describe and least three and no more than ten applications that are likely to generate cost savings and efficiencies for public agencies.	Y		
		2. For each application provide data on costs, cost savings, efficiencies and other benefits the application would generate.	Y		
Work Performance	2.4	Work Performance			
		1. How can the Wireless Silicon Valley Entities best assist you to make your project a success?	Y		
		2. Which assets do you like (intend) to utilize. Estimate numbers of each asset that will be needed for equipment placement (relate to Concept Design).	Y		
		3. Estimate the value for access to public facilities. Specify value for each category of asset on a per unit basis and in total. What do you propose would be fair rates to pay the	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		Cities, Counties, Entities, and other private owners for access to these assets? Please be specific per category.			
		4. Are there any additional assets Proposers would like access to? If so, please specify market value of access to and proposed use of such assets.	Y		
		5. What additional forms of assistance might the Wireless Silicon Valley Entities offer to assist your project and achieve the project objectives?	Y		
Place of Performance	2.4.1	Places of Performance			
		1. Specify any preferences for meeting locations.	Y		
		2. How frequently would you propose to meet with the Wireless Silicon Valley Entities and/or participating City, County, Entity personnel for status reviews?	Y		
Period of Performance	2.4.2	Period of Performance			
		1. What difficulties, if any, do you expect with starting work on the date referenced in Section 2.4.2?	Y		
		2. When do you propose beginning detailed design work following your selection?	Y		
		3. When do you propose beginning permitting?	Y		
		4. When do you propose beginning full/phased implementation of the System?	Y		
		5. When do you estimate completion of Phase I? All phases (project completed)?	Y		
Work Areas	2.4.3	Proposer Access to Work Areas			
		2. Will all employees, contractors, sub-contractors performing work on behalf of the Success Proper have proper identification provided by Success Proposer available for display at all times?	Y		
		3. Public/Private work sites and areas shall be maintained in an orderly fashion.	Y		

Area	Section	Response to the Topic, Questions, or Specifications of Section	C Y/N	PC Y/N	NC Y/N
		4. Coordination and consideration will be pre-emptive at all times when accessing public/private work areas that require scheduling and/or special equipment.	Y		
Insurance	2.4.4	Insurance Requirements 1. Please provide certificates of insurance as proof of coverage for each of the types of required insurance as specified in Section 2.4.4, including: a. Workers Compensation Insurance b. General Liability Insurance c. Automobile Liability Insurance	Y Y Y Y Y		
Removal of Equipment	2.4.5	Provide evidence of ability and willingness to post bond for the removal of equipment should the company cease operations.	Y		

2.1 Project Vision and Business Model

BHG' s vision is to provide Wireless Network Service across the State of California. At this time, BHG is concentrating in building its first Wireless Network in its own backyard. BHG is coming in this proposal as three different vendors: (1) Wireless Infrastructure, (2) Wireless Service Provider and (3) Wireless Content Provider.

In each phase, BHG is collaborating with other companies to provide solutions in this proposal.

2.1.1 Vision and Project Understanding

BHG's vision has always been to provide a wireless network over the State of California. This is the simplistic approach to our vision. The wireless network is to provide services to anyone living or visiting California with the ability to communicate conveniently and without a lot of cost and at their own privacy with one hand held smart device. Technology provides us with the capability to have access to all of or information via smart hand held devices but for those devices to be effective, we need to have wireless connectivity.

The model that we see fit this mold is as follows:

- A low speed free network access
- An outdoor enhanced premium network service
- An indoor enhanced premium network service
- Provide municipalities with the ability to utilize the outdoor high speed communication service to communicate with their staff on the field
- The Public Safety sector of each county an utilize the special frequency set by Homeland Security as the Public Safety frequency to communicate with its mobile units and needs to have the ability to communicate on the field at high speeds across secure networks
- In the event of a disaster, setup a wireless network and be operational in hours

2.1.1.1 Business Model

As we indicated above, our Business Model deals with six distinct services, which has been supported by the Wireless Silicon Valley Business Model. Of course, we have added other factors to it, which makes this model unique.

2.1.1.2 Relationship to the Service Providers

Our belief is that the radio waves are available to everybody. The premium waves will have a price associated with them. Any Service Provider that wants to use our infrastructure and is not one of the Service Providers that BHG brings along, they will have to register with BHG and if they charge for their services then they pay to access the service, otherwise there is no fee involved. The same applies with all the content providers.

2.1.1.3 Relationship to the Content Providers

Since our network has many capabilities, we will encourage content providers to place their services in our network. Like always when a content provider charges for his service then we will collect from the content provider for such a service. All content providers will need to have a licensing agreement with BHG in order for the service to be available on the network.

2.1.1.4 Relationship to SAMCAT and the Wireless Silicon Valley Entities

Non-disclosed

2.1.1.5 BHG and its Service and Content Providers

BHG is currently discussing with Yahoo and Microsoft for their participation in the Network as sponsors. In addition, BHG is in the process of discussing with other companies for their sponsorship of the network. Based on the level of sponsorship money is provided by the company then the company becomes the sponsor of the network of the particular municipality.

Yahoo and Microsoft are asked to provide the free e-mail service for all signers to the program. In addition, they are asked to participate in becoming a premium service provider and provide access to the premium indoor and outdoor services for residential users only. The Physical Layer of the network will be owned and operated by BHG and its Affiliates. Once BHG is selected as the vendor of choice to build the Network then BHG will start a separate entity that will be a Service and Content Provider.

In addition, we are contracting with a company that will do all the installations of the network. Detail information will be provided later.

2.2 Proposed System Work Requirements

We propose to install, own, operate and manage the Wireless Silicon Valley Broadband Network along with one or more Service Providers (SP) to offer broadband wireless internet access to all venues, for residential, commercial customers, government agencies and visitors throughout all the Wireless Silicon Valley entities.

2.2.1 Network Specifications

One of the major characteristics of this network is the fact that will have enough redundancy on it to accommodate fault tolerance and minimum 99% up time on all levels of service. The network will be an open service provider network but registrations will be required in all levels of service.

2.2.1.1 Open Service Provider Network

The Physical Network is owned and operated by BHG and its affiliates.

BHG requires that all users register in order to access the basic service as well as all other enhanced services.

Users can access any service provider they would like, as long as the Service Provider is registered with BHG, the Service Provider follows standard connection protocols, and the service provider is in good standing with BHG.

If a Service Provider or Content Provider requires enhanced services such as higher speeds than already available for a specific level of service then they should contract with BHG in order to provide such service.

BHG is going to provide its own services to end-users. BHG will compete on the same level as all the other Service Providers or Content Providers.

BHG will not block any content or any service on the network unless it is a security issue or the law requires it.

BHG can provide billing services to the Service Providers and the Content Providers that have no interest in performing that function themselves.

2.2.1.2 Backhaul Tier

Our radios support multiple protocols. A standard Access Point is also a Backhaul point as well. For Backhauling we utilize 802.16 and we achieve high speeds of communications. During the design phase of the Network, we will determine if the use of Fiber is necessary. If we find it necessary, we will work with someone in the area to provide us with that capability.

In the near future, the backhauling will be done via the use of the Stratellites. The Stratellites are the brainchild of Globetel Communications and is a separate division under the name of Sanswire. The Stratellites are expected to go live some time in 2008. In the interim, we will utilize all the products available to us on earth.

During the design phase of the Network, we will design the network to be fault tolerant and remove all single points of failure.

All our equipment are based on standards and are FCC approved as well as all the certifications required.

Please see Appendix I - Equipment Specifications.

2.2.1.3 Wireless Broadband Network Tier

The Wireless Broadband Network is based on the 802.11 standards. The minimum speed used is 11Mbps. The same radios can accept speeds of 54Mbps. In another words we support 802.11b/g protocols, which operate at 2.4GHz. The outside coverage will be excellent and the inside premium coverage will require Customer Premise Equipment (CPE) for the premium cervices.

The WiFi standards used are as follows:

- Frequencies:
  - to 2.7 GHz
  - to 6.1GHz
- Packet Bursting
- Fast Frames
- Hardware Compression and Encryption
- WEP 64, 128, 154
- WAP PSK, WPA EAP/w TKIP and AES
- Multi channel Bonding (108MBps)
- Super A/G
- Distance Adjustment in Km
- Associations with MAC, User Name, signal, noise, and assigned bandwidth
- 802.1x support
- 802.11e prioritization
- Multiple SSID's
- Wireless to wireless filtering
- Walled Garden
- Country code selection

2.2.1.4 Equipment Requirements

All equipment are registered and certified by the Wi-Fi, WiMax, ETSI and the FCC.

The standards supported by our radios are as follows:

- 802.16 –2004 (WiMAX for fixed wireless broadband)
- 802.16e (upgrade possible, Mobile WiMAX)
- 802.11a/b/g/h (Wi-Fi for customer interface)

- ETSI 300175 (DECT for Mobile VoIP in 1.9GHz, FCC approved)

All hardware was designed to operate under extreme conditions and they are compliant to IP56/NEMA 4 dust and water ingress ratings.

All equipment incorporates protection and resilience against power surges from the electrical grid or from lightning.

2.2.1.5 Non-intrusive, Interference & Aesthetics

After a successful acceptance of our program and signing of a contract with a municipality, we perform a complete RF analysis and review of the area via ground and the air. A complete design of the network is performed so the location of the radios and antennas is non-intrusive. In addition, the RF analysis will show if there are any Interferences and they will be resolved prior to the installation of the radios and antennas.

All equipment are certified and approved by the FCC for radiated signal and Electric and Magnetic Frequency concerns.

2.2.1.6 City, County and Private Assets

At this point we have not determined if the use of any and type of City, County and any other private assets will be used but can estimate that that will be the case. After the RF analysis is performed then the determination of which assets are required.

2.2.2 Coverage Area and Minimum Connection Rates

Below we indicate the coverage area and the minimum connection rates in our network. Our networks are designed for 100% Coverage and all systems running at top through put speed.

	95% Area Coverage			100% Area Coverage		
	Minimum Connection Rate	Minimum Throughput	Mobile Connection	Minimum Connection Rate	Minimum Throughput	Mobile Connection
Outdoors						
Basic	11 Mbps	256 Kbps	NA	11 Mbps	256 Kbps	NA
Enhanced	54 Mbps	1 Mbps	30MPH	54 Mbps	1 Mbps	30MPH
Indoors (1)						
Basic	54 Mbps	2 Mbps	NA	54 Mbps	2 Mbps	NA
Enhanced	54 Mbps	5 Mbps	NA	54 Mbps	5 Mbps	NA
Government						
Basic	54 Mbps	1.5 Mbps	Max 30 MPH	24 Mbps	1 Mbps	Max 30 MPH
Enhanced	54 Mbps	4 Mbps	Max 90 MPH	54 Mbps	4 Mbps	Max 90 MPH
Public Safety (2)						
Basic	54 Mbps	1.5 Mbps	Max 30 MPH	54 Mbps	1.5 Mbps	Max 30 MPH
Enhanced	54 Mbps	4 Mbps	Max 90 MPH	54 Mbps	4 Mbps	Max 90 MPH

(1) For Indoors service a CPE might not be required for the Basic service but it will be required for the Enhanced service. Based on the topography and location of the indoor service different types of CPEs may be required. During the design stage of the network, products will be defined in detail for usage in different areas.

(2) CLETS is a software security protocol, which integrates different Departments of Public Safety together, and they can exchange data seamlessly. CLETS is supported but has no effect on the Wireless Network.

(3) For the Mobile Connection we provide specific Hardware, which allows us to keep a steady transmission of data at the rate of higher than 90 MPH. This is our unique design and it is a Trade secret as well as Proprietary Information. We will provide more detail regarding the mobile network later.

(4) Initially we will cover about 95% of the area by the time we complete the network implementation Sanswire, a division of Globetel Communications, will deploy one of our future products, which is called the Stratellite. The Stratellite is a hot air balloon that flies at 65,000 ft and transmits from the sky to earth. This type of transmission will provide interference free transmissions at high speed in all locations of any county.

2.2.3 Authentication and Authorization

To access the system will require Authentication and Authorization. The System shall support controlling and logging access to the network:

- Consumer authentication:

  Logging on to the system is required for all levels of service. For security services, it is imperative even for guests to go through a simple registration process so they can obtain a login and a password. Our RADIUS software will allow us to control access of resources speeds and so on.

- Authorization to grant or block resources based upon credentials and/or location

  Our authorization system allows us to grant or block resources based on the connection type, the service, control the bandwidth, quality of service, VLAN access, provide additional level(s) of secure data transmission.

- Network Security will be based upon 802.11i standards or superior
- Prevent unauthorized users logon at hot spots
- Provide effective protection from damaging Denial of Servi ce attacks, viruses and other similar threats
- Automatic authentication of wireless broadband consumer premise equipment (CPE).

2.2.4 Continues and Centralized Network monitoring/performance management

The company has a NOC established in the West Coast and all monitoring of the network is 24x7. The NOC engineers have the ability to diagnose and resolve network problems remotely. If necessary then a technician will be dispatched to resolve the problem.

The NOC is equipped with the proper tools to resolve all the issues involved in running a heavily run network.

Logs and reports are generated all the time. Status reports are generated on-line that report and diagnose the status of the Network. In addition, proactive capacity planning, modeling and reporting is part of the system management of the Network.

All radios are self-configured and always report their status to the Network Manager. Any problems the Network Managers can resolve problems remotely from the NOC. The radios have enough intelligence to determine any points of interference and alert the Network Manager.

2.2.5 Bandwidth and Service Level Agreements

2.2.5.1 Quality of Service (QoS)

Our network support Quality of Service in order to be able to support VoIP, Voice/Video over Wireless and mission-critical applications.

Quality of Service allows network managers and Service Providers to:

- Guarantee Bandwidth
- Latency
- Jitter

Based on

- Application type
- User type
- Service Level

Dynamic bandwidth Allocation for services such as

- Pay-per-view
- Streaming video

Customizable connection Time-outs, Ports and Protocols

2.2.5.2 Service Level Agreement (SLA) per Service Model

The Service Level Agreements can get complicated based on the systems running and the service providers responsibilities. We recommend the following SLA structure based on the model supported.

The following table indicates the SLA levels based on levels of priority and not necessarily implementation of network build-out.

Priority	**Usage Model Service Type**	**Network Availability**	**Network Performance**	**Response Time**	**Repair Time**	**Escalation Process**	**Customer Service in Person**
One	Public Safety Wireless	At least 99% Uptime	Min 1.5 Mbps Max 6 or better Mbps	Immediate via phone	30 minutes to one hour	Described below	30 minutes to One hour 24x7
Two	Government Wireless Services	At least 99% Uptime	Min 1.5 Mbps Max 6 or better Mbps	Immediate via phone	30 minutes to one hour	Described below	30 minutes to One hour 24x7
Three	Indoor Guarantee Wireless	At least 99% Uptime	Min 2 Mbps Max 5 Mbps	Immediate via phone, e-mail, Web chat.	One to two hours	Described below	One to two hours 8:00am to 8:00pm Monday through Saturday
Four	Enhanced Outdoor Wireless	At Least 99% Uptime	Min 2 Mbps Max 5 Mbps	Immediate via phone, e-mail, Web Chat	One to two hours	Described Below	One to two hours 24x7
Five	Basic Outdoor Wireless	At Least 99% Uptime	Min 128K Max 256K	Via e-mail, Web chat, via phone	Best Effort	Described Below	Best Effort

2.2.5.3 Escalation Process

The escalation process of a customer service problem is one way of polling resources to resolving a critical problem. Priority levels one and two are critical processes. The first level of a problem we refer to as Critical Level I. At Critical Level I, if the problem has not been diagnosed and resolved within 30 minutes from the time the engineer is on-site then the service call escalates to Critical Level II. At Critical Level II, the Network Manager begins to call the hardware and software engineers involved in the design and implementation of the specific segment of the Network to diagnose and resolve the network problem. Once a call has gone to Critical Level II all the hardware must be replaced and check for full resolution of the problem. If the problem still not resolved one hour after the hardware has been replaced then the call goes to Critical Level III. At this time, the Network Manager in charge dispatches the Field Engineering Manager on-site regardless of the time of the day. The Support Service Engineer must be present at the NOC and any other engineering resources required resolving the issues are called upon. The call stays on this level until the problem is resolved. At this time, all company management is notified, all decision makers have been alerted, and standing by for decisions to be made in regards to the resolution of the problem(s). On this priority level, all problems must be resolved no later than three hours from origination of the call.

Priority levels three and four escalate in a similar process as priority levels one and two but on one to two hour intervals as oppose to 30-minute intervals.

Priority level five, which is the Basic outdoor service the company, will make its Best effort to resolve the problem within one hour or two based on the load of the field engineers or the network engineers. In general, all problems in all levels should be resolved within four hours from the time they are reported. On level five, if the problem occurs at the end of the working day, the network engineers will try to resolve the problem but if the problem requires field-engineering support then it will have to wait for the next morning for the problem to be resolved.

2.2.6 Reliability/Redundancy

After analysis of the topology and identification of the resources, the network design team will design the network for

- Redundancy
- Fault tolerance
- Uptime of 99% minimum
- Emergency power backup
- PoP backup
- Redundant paths to Point of Presence
- Redundant paths in the Backhaul backbone
- Redundant paths to the Wireless Broadband Network nodes
- Support for self-reconfiguration of network paths in case of equipment failure
- Support for detection of RF interference and reconfiguration/detection of possible interference free channels.

2.2.7 Scalability/Expandability/Capacity

When the analysis process begins, we will need to identify the possible number of users and especially the Public Safety side and the Government User side and the potential applications of those two major groups. Therefore, in the initial design we accommodate at least the minimum number of users for Public Safety and the Government Users.

The network is designed to be scalable and easily expandable. At the same time, in the initial design of the network we will assume that a certain number of users from each category will be signing on quickly. The network will be designed to accommodate planned and mostly unplanned growth.

2.2.8 Segmentation of Network Names – Set Service Identifier (SSID)

On a large level network of this size, it is imperative to have a special identification for all the smaller VLANs on the Network. In this Network, you also have Government Services and Public Safety Enhanced Services.

On the Network, you have the Basic Service, which is going to be dealt as one large network across all communities. For the enhanced services, the Government and Public Safety Services each community will have its own code and each department within each community will properly be defined. Networks that are

constantly logged-on and collect data constantly those will be setup as VPNs and they have different identifications.

A standard naming convention nomenclature will be used in defining networks. At design stage, the naming convention will be revealed.

2.2.9 Back Office Systems: Operations, Maintenance, and Support Systems

BHG as an Infrastructure provider and a Service Provider will have to setup an operation that operates 24x7 and provides the outmost service to its clients. BHG has an agreement with Globetel Communications to design, install and support all operational networks.

BHG will provide an ACD for a Call Center for Sales and Support

Globetel Communications provides a very extensive Billing system that allows us to keep track everything that goes on the network.

BHG is implementing a complete Training program regarding sales and support staff as well performing background checks on all employees so they qualify for a security bond.

BHG is implementing a Customer Service System with a Help Desk, with Trouble ticket generation, resolution and escalation as necessary. All Customer requests are stored in a repository for review and further education in customer problem resolution. In addition, the customer service system provides Service Level Agreements, Network Provisioning, Asset Management, Inventory Control and Parts Management.

Globetel Communications provides RADIUS-based support software for network authorization and service access.

2.2.10 Desirable Network Characteristics

The basic characteristics of our network are seamless roaming, persistent session and continuous connection. In addition, BHG will provide additional support for wireless SCADA devices and Industrial Human Machine Interfaces and not limited to automated parking meters, automated traffic signs and signals, webcams, utility meters and any other type of monitoring equipment.

BHG along with GTE provides a wireless meter reading system for utilities as well as all type of monitoring devices. The system can be customized to interface to any billing system the utilities use or interface to a SAP billing system.

All GTE devices have a GPS system on them so determination of a device location can be easily attained. Since we intent to install a Mobile network in this large area, tracking of mobile devices cannot be very difficult to attain.

2.2.11 Network Architecture and Solution Design Requirements

Once an entity has agreed to sign an agreement with us, BHG will proceed with the Analysis phase of this project.

During the analysis phase, the following will be completed:

- Complete RF analysis will be performed which includes a study of the topology, Radio Frequency use, RF allocation, review of local entity assets, weather, man-made structures, buildings, trees, lakes, etc.
- Analysis of the requirements of the Public Safety Agencies
- Analysis of the requirements of the Government Agencies
- Analysis of the requirements of the local Utility companies
- Business Continuance and Disaster Recovery requirements of the entity will be reviewed

Upon completion of the Analysis phase, the Design phase of the project will begin.

In the Design phase, we will detail out the following:

- Diagram as to the location of each radio, antenna and power sources
- Location of all radios that need to be placed on municipality assets
- Details for VPNs, VLANs, etc

- Details on Spectrum allocation for each Agency, starting with Public Safety and other government Agencies
- Detail Schedule of implementation, which the municipality will have to agreed to and assist the Project Manager in minimizing delays caused by bureaucracy.

2.2.12 Installation and Deployment Rollout Requirements

2.2.12.1 Project Manager/Management

The Project Management Team will consist of a Project Manager, a Technical Manager, a Financial Manager, Sales and Marketing Manager and Support Manager. The Project Manager will be responsible for the installation of the Network and the coordination of the resources to deploy the complete network. The Technical Manager will be responsible for handling all the Technical issues that arise during deployment. The Financial Manager will be responsible for all financial decisions made during the deployment phase. The Sales and Marketing Manager will be responsible for deployment of the sales and marketing programs that takes lace at the same time as deployment of the Network and continue afterwards. The Support Manager is present during deployment to acquaint himself with the Network and VPNs and VLANs in each Municipality so he can train support staff as to the inter-workings of the specific networks.

2.2.12.2 The Project Schedule

The Project Manager along with SAMCAT and the Wireless Silicon Valley Entities participating in the project will develop a Project Plan together for the analysis, design and implementation phases of the project. Milestones will be setup for On-track, On-schedule and On-budget information will be provided on regular status meetings.

The PM along with SAMCAT and the Wireless Silicon Valley Entities will coordinate and resolve potential problems. In addition, PM is responsible for the identification of resources external to the winning RFP team. The Pm is responsible for the timing and scheduling of external resources according to the lead time(s)) provided by the ir organizations. Such external organizations may include, but are not limited to:

- City
- County
- Private
- Service Providers
- Subcontractors

The PM will work with SAMCAT and other participating entities to identify and secure available Public and Private assets.

The PM will work with SAMCAT and other participating entities to secure that non-interference happens with existing wireless infrastructures.

The PM is to oversee that his team adhere and abide by the regulations in the geography or municipality where the installation of the networks occur.

The PM is to provide implementation deployment statistics and reporting on a regular basis to the participating entities as to the progress, installation and performance of the network. The PM is also to be discussing issues that might be coming up and they need clarification or approvals from the municipalities.

2.2.12.3 Net Neutrality Policy and Plans

It is this company's policy and plans to provide a neutral policy on the usage and access of the Internet. Access to the network will be based on the plans described above. One point needs to be made clear is that the network is available on equal access. In addition, there are customers on the network that pay a premium to obtain a faster service. Other customers pay higher premiums to perform their work on a daily basis. That service is not to be confused as equal access.

Service Providers can have access to the network free as long as they do not charge for their services. If a Service Provider charges for their services then the Service Provider must pay BHG for access to the network.

2.3 Usage, Applications and Services

The splash page, which you receive upon connecting to the wireless network, will be based on the location of the user. Once the user has logged-on then the system will forward the user to his home page based on his preferences. Most users will be forwarded to the Wireless Silicon Valley Entity Web Pages.

The Web pages will be designed to accommodate each entity and notify the member of the community of events in the community and other methods of participation. We have creative methods of designing the web pages and we will discuss those methods once we have been selected to offer those services.

In addition, to assist the entity and offer greater participation we will introduce many different programs, so many community members participate and the lower income members have the opportunity to participate.

BHG will design a whole program and offer applications that will allow the participation by the community to increase more than the normal. Those programs will be discussed the company has been selected to built the network.

2.3.1 Applications

Many applications can be offered on a wireless network. BHG will offer some applications of its own, which has the rights to market. One of the aspects that have not been discussed at all in this proposal is the fact that the Department of Transportation has established a standard for vehicle related and traffic related applications. In our network, we have the capability to allocate a radio to utilize the frequencies used by DOT. Those applications pertain mostly to Public Safety and Public Works. In addition, there are applications available to assist the visitors in finding services in any given town they travel.

2.3.1.1 Public Safety

Many video applications can be used utilizing small remote cameras with the clarity of large expensive cameras.

BHG provides DECT phone and VoIP, which can be used area wide to cut cell phone costs.

As the security of the country tightens, database applications running over the internet and interagency communications increase the chances of arresting criminals' increases while providing a safer environment to the community.

All our network radios have a GPS on them. On our mobile network environment, we can position all public safety vehicles on a map and can improve response time to emergencies a lot better.

Many Public Safety programs can e provided and many of them are federally funded.

2.3.1.2 Public Works

Like in the Public Safety sector, many applications can utilize the bandwidth, to monitor the streets, pavements and all aspects of the public works environment.

The DECT phone and VoIP can be used for dispatching and cut cell phone costs tremendously.

Access of the Internet and the usage of databases can save a lot of money on people and increase the quality of service in any sector of the local government.

BHG provides a system for reading gas, electric and water meters as well as any SCADA device. By monitoring closely the utilities in a community allows you to provide a better service to the community when they need it as oppose to providing no service at all. The savings of this type of a system are tremendous over the course of a year. Energy conservation is extremely important to any community.

2.3.1.3 Visitor Bureau

For the Visitor Bureau, BHG has an application for car racing utilizing a wireless network for viewing of car races.

In general, the WiFi network allows us to communicate with the visitors in our communities as to locations, events, hotels, restaurants and so on. This can allow us to build applications to assist the visitors I navigating through our cities with out any difficulty. There are many revenue-producing applications available in this sector.

2.3.1.4 Parks and Recreation

Utilizing a wireless network in this sector can bring more people out of their cars and into the parks. When people have knowledge of events that take place they tend to attend those events. Any way to make an event easy to view then more people will go and see it.

As more and more professionals utilize WiFi devices, the more opportunities exist in providing a service and generate revenue from it.

2.4 Work Performance

2.4.1 Places of Performance

Most of the initial work will be performed in the entity sites. RF analysis, Asset assessment and such needs to be performed on site. Design work will be performed on our site and regular scheduled meetings will be performed on our site or the entity site.

The physical work to setting up the network will be performed at the entity site.

2.4.2 Period of Performance

After completion of negotiations with a given entity, BHG will appoint a Project Manager and will generate a schedule of network implementation for that specific entity. The schedule originally will be of a general nature, after the initial analysis it will become very detailed. Before any other work continues, the entity will have to sign off to the schedule. The entity will be required to appoint a Project Manager on its side to allow us to expedite matters a lot quicker and minimize delays.

2.4.3 Proposer Access to Work Areas

All BHG employees will wear badges and will be appropriately identifiable.

2.4.4 Insurance requirements

BHG will provide proof or Insurance for Workers Compensation, General Liability, Automobile (truck, heavy equipment, etc).

2.4.5 Removal of Equipment

BHG agrees that upon completion of the contract will remove all its equipment with out damaging any property. Any property damage will be repaired immediately. BHG can acquire a bond to cover the removal of its equipment at the completion of the project.

3 Financial Model and Upgrades

When building a network of this size everybody would like to know as to how the network will be built. The simple answer is one piece at the time. Everybody will like to know as to whom will pay the network to not only build it but also maintain it.

Like all projects of this nature, they are very expensive. The best way to deploy this network is one entity at a time. Once the first entity is up and running and that means all services the Basic Outdoor, the Enhanced Outdoor, and Enhanced Indoor, Government and Public Service services are all functioning. In addition, we are providing VoIP and DECT phone service. This way there is revenue generated and we can afford to proceed to the next entity and duplicate everything we did before. The mode of implementation increases as well as the marketing effort in its entity that is completed. As the level of participation increases so, do the revenues.

As time also passes more standards are implemented and more updates have to be made. Software updates are made on daily basis. Hardware updates will be made as the new products and services become available.

Hardware updates are normally slated to be made once every three to six months. We will schedule accordingly the updates of all the hardware. A network that stays up to speed on its updates also is considered a healthy network.

3.1.1 Advertising Policy

It is our belief that the advertising will be limited to the splash pages of its entity and will be limited to existing applications that are designed for that purpose. For example, when looking for a restaurant in a specific entity and you are searching through the entity page then an advertisement for that and other restaurants in the area will be allowed. Advertising by other non-relevant businesses or vendors will not be allowed.

Advertising is not the driving force for revenue generation. We will attempt to obtain a sponsor for each entity. The sponsor will cover the basic costs for the network in that entity. Certain privileges will be given to the sponsor and in many cases they will be the only advertiser on that entity's web site.

3.1.2 Technical Approach to Work Requirements

In section 3.2 we discussed in detail the network and some of its technical characteristics and how it pertains to Work Requirements and how they all fit together.

3.1.3 Qualifications and Experience

3.1.3.1 Proposer Capability

Blue Horizon Group, Inc. is a California Corporation. It was incorporated in 2004. BHG is a privately held company. Its purpose was to establish a base which the company can formulate its Business Plan and begin the fundraising process to fund the Company. BHG is in the middle of a fundraising round and such round has every indication to be completed before September 2006. In the meantime, BHG is soliciting businesses.

Paul Mataras, the President and CEO of the Blue Horizon Group, Inc., has over 35 years experience in Computers and Communications. The staff at BHG consists of some engineering people with extensive application development across small, medium and large networks.

At BHG, we have a lot of experience with running large projects. Our experience is in software projects and this project is a network project. All projects have hardware and software issues involved on it and this includes this one.

BHG does not have a customer service manager but we will attain one as soon as the company is funded.

Globetel Communications LLC (GTE) will perform the bulk of the work in analyzing and designing the network. GTE is a publicly traded company on the American Exchange Board and trades under the symbol GTE. GTE has developed the hardware and the software and now they are working in solving one of the biggest problems you are facing in communications. The last mile connectivity. There Sanswire division is launching an unmanned hot air balloon at 65,000 feet that is equipped with all the networking center equipment required so it can transmit data at very high speeds. This type of transmission eliminates the Line

of Sight issues as required for high-speed communications. One hot air balloon covers an area as big as Texas.

GTE has deployed networks in Germany and the US. They have completed pilot installations in Shenzhen China, and other cities around the Globe. In addition, new pilot installations are starting in some of the major cities around the Globe and deployment of a network is in discussion in the Guangdong Province of China, where the population is 80 million people. Globetel along with an ISP have deplaoyed VoIP phone service in Brazil. www.vozBrazil.com.

3.1.3.2 Company's Personnel Qualifications

BHG staff has at least over 100 years experience in the computer business. That includes software development, hardware development and communications. In addition, the staff is very marketing savvy. BHG role in this effort is, to built and market the network. GTE will analyze, design and implement the Network. BHG and GTE are partners in this endeavor. BHG will provide the first two levels of support and GTE will provide support for levels three through five.

GTE staff has over 300 years of communications, software and hardware development experience.

The President and CEO of GTE, Timothy Huff has spent most of his career in the telecommunications business.

Uli Altvater is the President and CEO of Globetel Communications Wireless Inc., a division of Globetel Communications, LLC. Uli is responsible for the day-to-day operations of the GTE Wireless Division. Uli is a veteran of the Wireless industry with several patents under his belt. Uli has been in the wireless industry for at least 35 years.

Bob Jones is the President and CEO of Sanswire Communications, Inc., a division of Globetel Communications, LLC. Bob is responsible for the day-to-day operations of the Stratellites. Bob is a veteran engineer and project manager from NASA. Bob's group is the one that analyzes all the data in a given area and designs the wireless network.

Since GTE is a publicly traded company, we **cannot** disclose on this proposal any future plans. BHG can disclose some of its plans but will have to protect the confidentiality established with the publicly traded company in that disclosure.

We will more than happy to provide more detail information on the structure of the company and its plans upon request and not as an attachment to this document.

In addition, we can provide a list of employees and their qualifications, of both entities

3.1.3.3 Financial Qualifications

On the CD, we have included the latest 10K filing by GTE. The financials for BHG are confidential and will be provided under another cover upon request. In addition, we would like to note that BHG is in the middle of a funding cycle, which should be completed prior to September 2006.

Both companies will be in a position to install and maintain a large network the size proposed. In other sections, we discussed other potential vehicles in funding this network.

3.1.3.4 Relevant Experience

All information pertaining to the qualifications of the employees, financial information and all relevant experience at both companies GTE and BHG will be provided under a separate cover during the interviewing process.

3.1.4 Suggestions and Enhancements

BHG as a marketing company has many creative ways in dealing with this wireless network. BHG is also involved with other networks around the globe and some in California. We do have any creative ways of doing things but we would like to deal with those issues once the basic ones have been resolved. During the interviewing process, we will discuss all these items.

3.1.5 Proposed Pricing and Cost Structure

In reviewing this proposal, in essence performing a typical design of a network, determining the cost of establishing the network are still an estimate which is $180 million. The pricing will vary based on usage and member's position within the entity.

Each plan will have a different price and each category within each plan will have a different price as well. At proposal time the numbers were not available as of yet.

Upon approval and selection then we will be able to determine the basic rates. The rates for different applications will be determined on an application-by-application basis and plan-by-plan.

The only plan that definitely will be free to all is the Basic plan. Every member of the community and/or member visiting the community can obtain an id and be able to access the network free.

The other plans that have been determined as to their costs are the Enhanced outdoors and the Enhanced Indoors service. The rate for the enhanced services will be $9.95 per month and any hardware costs required, primarily for the Enhanced Indoor service.

All entities will receive discounts based on sponsorship participation and based on asset usage participation.

This information is still in flex since we are still discussing with a lot of Service Providers and Sponsors for participation.

3.1.6 Supportive Material and Information

Since we are entering into or still into negotiations with other municipalities, it is difficult to provide contractual agreements for review at this time. Later we will be able to do that.

At this time, we do not see any risk for SAMCAT or the Wireless Silicon Valley Entities or Silicon Valley Authorities or residents.

We are trying to establish a unique relationship with SAMCAT and its entities. This type of a relationship is not often seen between the private sector and the public sector. Therefore, during the interviewing process will provide a full presentation of this relationship.

