

## CITY OF ALLEN

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**Submitted to:**  
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**City of Allen, TX**  
**305 Century Parkway**  
**Allen, TX 75013**

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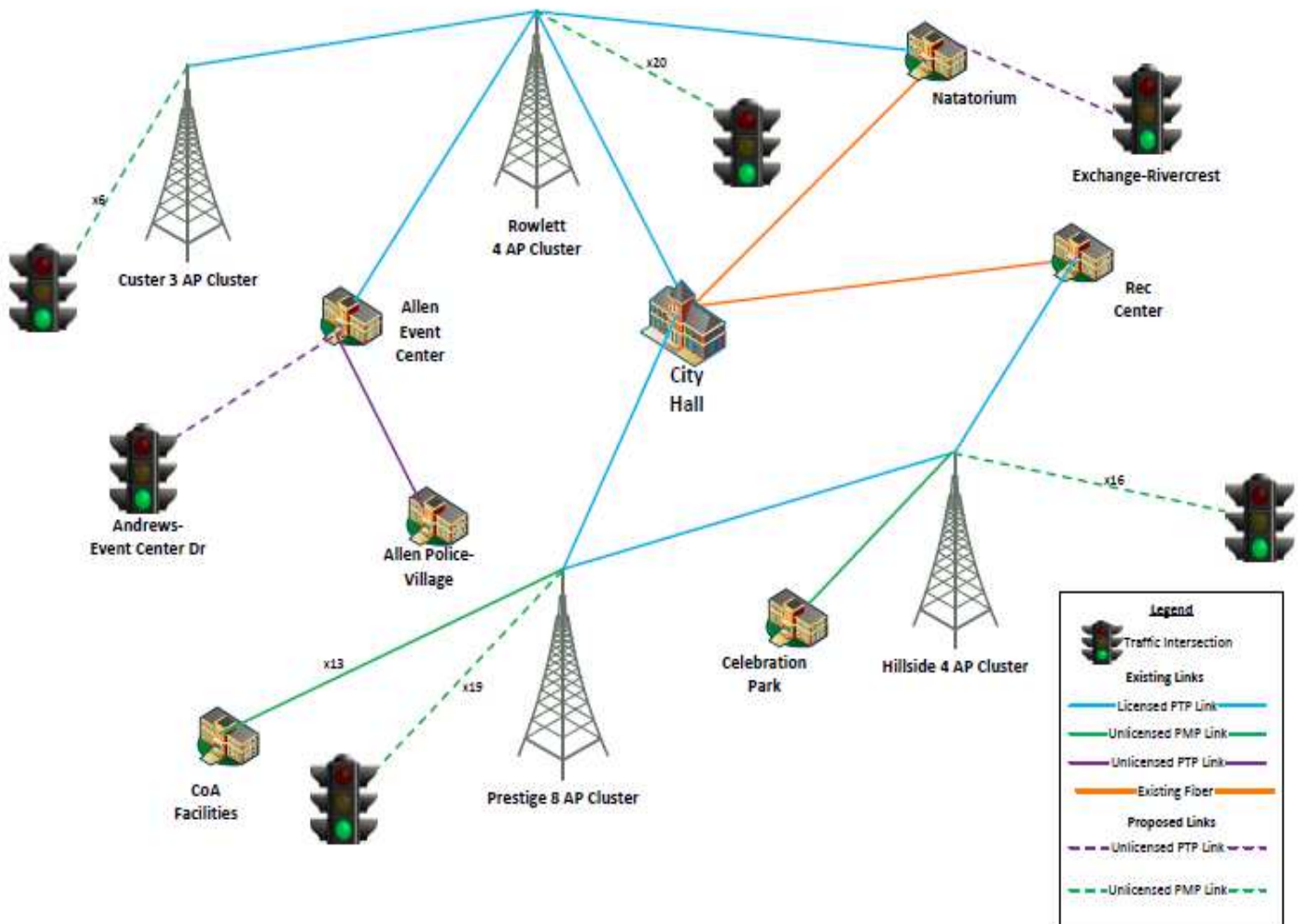
## 1. SCOPE OF WORK

At the request of the City of Allen, Scientel Solutions is pleased to provide a quotation herein for the procurement, project management, design, installation, and optimization of total 63 traffic intersections to provide the connectivity to all of them we are proposing hybrid solution which includes both the unlicensed Point to Multi-point and unlicensed point to point links. As part of the existing design we have the Cambium PMP Access Points (APs) both at the Prestige and the Hillside tower. In addition to these two towers, we will utilize the Custer and the Rowlett tower too. We will add 10 more APs to the existing network. The outlined system proposal contains the following hardware, spares are also included in this proposal:

### 1.1 Equipment Breakdown

5 GHz PMP 450i Connectorized Access Point (AP)-(FCC)	Total 10 (No Spares Included)
5.4-6.0 GHz Antenna for 60 Degree Sector	Total 10 (No Spares Included)
5 GHz PMP 450i Subscriber Module (SM), Integrated high Gain Antenna	Total 67 (Includes 6 Spares)
5 GHz PTP 450i END, Integrated High Gain Antenna (FCC)	Total 5 (Includes 1 Spares)

## 1.2 Network Layout



### 1.3 Site Specific Scope of Work



#### 1.3.1 Hillside Tower (4 Access points)

- Install four PMP 450i Access points and antennas at this tower location
- Install CMM5 and connect one uGPS
- Install NEMA enclosure only for CMM5
- Run CAT-5 cable to connect AP's, CMM and uGPS
- Install PoE injector for installed PMP 450i AP at CMM5
- Verify operation of the PMP AP's

#### 1.3.2 Custer Tower (3 Access points)

- Install three PMP 450i Access points, antennas and CMM5 at this tower location
- Install NEMA enclosure only for CMM5
- Run CAT-5 cable to connect AP's, CMM5
- Install PoE injector for installed PMP 450i AP at CMM5
- Verify operation of the PMP AP's

#### 1.3.3 Rowlett (3 Access points)

- Install three PMP 450i Access points and antennas at this tower location
- Install CMM5 and connect uGPS
- Install NEMA enclosure only for CMM5
- Run CAT-5 cable to connect AP's, CMM and uGPS
- Install PoE injector for installed PMP 450i AP at CMM5
- Verify operation of the PMP AP's

### 1.3.4 Traffic intersections (2 PTP Relay links)

- Install two PTP 450i relay links one at Allen event center and other at Natatorium which will serve Andrew-Even center Dr and Exchange-Rivercrest traffic intersections respectively.
- Run CAT-5 cable to connect SM's at each site\*
- Install PoE injector for 2 relay links at each locations
- Verify operation of the PTP links

## 1.4 Assumptions

For this proposal, Scientel has made the following assumptions:

1. Any other network configuration, outside of this scope is not included in this price proposal.
2. Scientel Solutions will work with the city of Allen on utilizing the current IP scheme and extending the IP plan.
3. It is the responsibility of the City of Allen to provide Network Design/IP Plan
4. It is the responsibility of the City of Allen to obtain authorization/permission to access all sites necessary for installation and testing. Scientel is not responsible for lease negotiations/modifications with third party site owners.
5. Scientel can perform the installation and optimization activities during normal business hours.
6. City of Allen Traffic is responsible for the installation of all the PMP 450i SM's
7. \*Scientel asks for a pull stream or we utilize existing CAT-5 as a pull stream. Scientel is not responsible for damage conduit.
8. Scientel will run CAT5 cable only for AP's and PTP 450i END equipment's installed
9. Scientel will only provide up to 300' CAT5 for AP installation runs.
10. Standard mounting hardware for AP installation is included in this proposal. Cost doesn't include cold-welds, paint, nor structural reinforcement.
11. No structural re-enforcing, analysis is included in this pricing for water tanks and/or towers and will be a city responsibility.
12. Final Acceptance Milestone will be deemed met upon signed written acceptance or fair-use of system.

13. This project only has 4 rolls in total of CAT5 allocated for replacements (water tanks/towers-intersections).

## **2. GENERAL PROJECT RESPONSIBILITIES**

The following general project responsibilities, not defined by specific tasks, include:

### **2.1 Scientel Solutions Responsibilities**

Scientel will designate a Project Manager who will direct Scientel's efforts and serve as the primary point of contact for the client. The Scientel Project Manager will have significant authority to make certain decisions relative to the project, on behalf of Scientel, and will have direct access to Scientel's executive management for resolving problems beyond the Project Manager's immediate authority. The responsibilities of the Scientel Project Manager include:

- Participate with the client in daily progress review meetings and submit status reports that identify the activities of the previous review period, as well as activities planned for the upcoming review period, including an updated Project Schedule. Maintain project communications with the client's Project Manager(s).
- Participate in weekly conference calls or face-to-face meetings and issue a mutually agreed upon agenda for each call or meeting.
- Manage the efforts of Scientel staff and coordinate activities with client's project team members.
- Measure, evaluate and report the progress against the Project Schedule.
- Resolve deviations from the Project Schedule.
- Monitor the project to ensure that support resources are available as scheduled and as identified in the contract.
- Assume accountability for all Scientel Solutions contractor and subcontractor supplied tasks within the Project Schedule, if any.



- Coordinate and oversee the installation of all hardware and software.
- Review and administer change control procedures through the client's Project Manager, commonly referenced as a "Project Change Request" (PCR), issued by the Scientel Project Manager.
- Work with the client Manager(s) in designing and approving the format of an action item log to be used in conjunction with the Project Schedule. The purpose of the log is to identify outstanding issues, provide continual status updates on specific tasks and to identify responsibilities of the parties.
- Prepare and submit regular status reports that identifies the activities and milestones completed in the previous month and activities planned for the current month and the next month, including progress and payment milestones, and an updated Project Schedule.
- In the event that Scientel must replace or substitute a Project Manager, Scientel will immediately notify the client of such a change and will provide the client with a resume of the person Scientel intends to substitute or change.
- Provide and coordinate lift trucks and trained/authorized operators as well as licensed electricians to install devices as required. If tower crews are required per the defined type of installation in the summary section, it is the responsibility of Scientel.



## 2.2 Client Responsibilities

The client will designate a Project Manager who will direct the client efforts and serve as the primary point of contact for Scientel. The client's Project Manager(s) will have significant authority to make certain decisions relative to the project, on behalf of the client, and will have direct access to the client's executive management for resolving problems beyond the Project Manager's immediate authority. The responsibilities of the client's Project Manager(s) include:

- Maintain project communications with Scientel's Project Manager.
- Identify the efforts required of the client's staff to meet the client task requirements and milestones in the Statement of Work and Project Schedule.
- Measure and evaluate progress against the Project Schedule.
- Monitor the project to ensure that support resources are available as scheduled.
- Participate in Progress Reviews meetings.
- Provide timely responses to issues related to project progress raised by Scientel's Project Manager.
- Approve and release payments in a timely manner predicated on project deliverables.
- Ensure that all appropriate client personnel attend and actively participate in Progress Reviews, conference calls, and other project meetings.
- Assign one or more personnel who will work with Scientel staff as needed for the duration of the project, including at least one system administrator.
- Ensure acceptable Standard Change Request and Approval Letter(s) are approved by authorized signature(s).
- Provide building access to Scientel personnel to all facilities where the system is to be installed during the project. Temporary identification cards should be issued to Scientel

personnel if required for access to client facilities. Access must be available after business hours where required by Scientel, or as necessary to meet the project schedule.

- Provide any required parking permits to Scientel personnel for restricted access entry and/or parking.
- Obtain all zoning, site access, and other permits (including, but not limited to, easements, impact studies, planning commission approval, variances, etc) necessary for this project and any other agreements required to gain use of sites.
- Provide the appropriate fire inspection and building inspection certificates.
- Provide adequate space, electrical power, communications lines and environmental appropriations for the communications equipment to be installed by Scientel.
- Review and approve or revise delivered design documents within ten days of submission.
- The client must inform Scientel of all relevant rules, regulations, and requirements for installation. Should these conditions impact the project schedule and limit installation, the client may incur additional cost.
- Scientel's demarcation point on the network infrastructure end is the client-owned switch (to be determined on the IP Network Design). The client is responsible for connecting Host end servers to this router.
- Provide wall penetrations, conduit, cable trays and other supporting equipment necessary for the routing of power, grounding and networking cables.
- The client shall provide power and grounding within 5' of each location.

### **3. WARRANTY STATEMENT**

Scientel Solutions, LLC warrants that work will be performed in accordance with sound engineering practice and professional standards, but makes no other warranty, expressed or implied including the merchantability.

In the event of any error, omission, or other professional negligence or any breach of the above warranty of which Scientel Solutions, LLC is notified in writing within one year after system acceptance, the sole and exclusive responsibility of Scientel Solutions, LLC shall be to re-perform deficient work at its own expense, and Scientel Solutions, LLC shall have no other liability whatsoever.

In no event shall Scientel Solutions, LLC be liable, whether in contract or tort, including negligence, for loss of profit, loss of product, loss of use, or for indirect, consequential or special damages. The liability of Scientel Solutions, LLC for injury or damage to persons or property arising out of this work shall not exceed the lesser of the total amount received by Scientel Solutions, LLC pursuant to this contract or \$1,000,000, whether in contract or tort, including negligence and shall not extend to liability arising out of the negligence or other fault of the client

#### 4. PRICING:

Scientel Solutions Equipment List

Main Infrastructure			
Item No.	Item	Description	Quantities
1	5.4-6.0 GHZ, ANTENNA FOR 60 DEGREE SECTOR		10
2	5 GHz PMP 450i Connectorized Access Point (FCC)		10
3	PTP450i 5GHz End, Integrated, FCC		5
4	5 GHz PMP 450i SM, Integrated High Gain Antenna		67
5	POWER SUPPLY, 30W, 56V - Gbps support		72
6	CABLE, UL POWER SUPPLY CORD SET, US		72
7	Tilt Bracket Assembly		72
8	Gigabit Surge Suppressor (56V)		67
9	LPU Lightning Protection Kit		15
10	SURGE SUPPRESSOR for CMM PS		3
11	Coaxial Cable Grounding Kits for 1/4" and 3/8" Cable		50
12	N-to-N CABLE (16")		20
13	Universal GPS		2
14	CMM5 Controller		3
15	Cambium CMM5 Power & Sync Injector 56V		3
16	Cambium 54V Power Supply for CMM4		3
17	CMM5 to uGPS Shielded Cable (20meter)		3
18	Surge Suppressor		3
19	Ferrite Snaplts 4.9mm clamp on, roun SOI		3
20	Ferrite Snaplts 6.3mm clamp on, roun SOI		33
21	AP Installation Kit		10
22	CMM Installation Kit		3
23	CAT 5 cable AP's and PTP relays only		4
24	PTP Installation Material		4
25	AP 1 Year Ext Warranty		10
26	Shipping		1
<b>Equipment Total</b>			<b>\$ 93,400.00</b>

Services			
Item No.	Item	Description	Quantities
1	Phase 1 - Design	RF, IT and Infrastructure Design	1
2	Phase 2 - Staging	Staging of all Equipment	1
3	Phase 3 - Implementation	Installation of all hardware and system software	1
4	Phase 4 - Optimization	Optimization of Installed Hardware and System Software	1
5	Phase 5 - Documentation & Close Out	Acceptance Testing, As Built Documentation and Close Out	1
<b>Services Total</b>			<b>\$ 91,600.00</b>
<b>Grand Total</b>			<b>\$ 185,000.00</b>

#### **Billing Milestones:**

##### **Network and Ancillary Equipment**

- 50% on Receipt of Equipment
- 50% on Installation Completion

##### **Installation Services:**

- 50% on receipt of PO
- 30% on Equipment Delivery
- 10% on Installation
- 10% on Closeout

All payment terms are net 30