Council Meeting of
September 18, 2007

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the City Council:

SUBJECT: City Manager and Communications and Information Technology – Authorize the purchase a Wireless Local Area Network System for the Torrance Airport.

Expenditure: $34,986.04 (includes sales tax and shipping)

RECOMMENDATION

The City Manager, Emergency Preparedness Team, and Communications and Information Technology Director recommend that City Council:

> Authorize the purchase of a Ceragon 100Mbps Wireless Local Area Network system from Sun Wireless, Valley Center, CA, not to exceed $34,986.04 from FEAP #570 – Alternate EOC Project.

Funding
Capital funding is available from FEAP #570 – Alternate EOC Project.

BACKGROUND

The agenda item approved by Your Honorable Body on August 21, 2007 requesting a funding allocation and purchase approval for the Torrance Airport WLAN system did not include the proposed vendor's name and the correct purchase price. The item before you this evening includes the vendor being recommended for the purchase.

The Torrance Airport is currently served by two leased telecommunication circuits providing voice (i.e. telephone) and data network system access between the Airport and City Hall. Both circuits meet the minimum performance requirements for the existing noise abatement and Airport operations.

The Airport is undergoing security perimeter upgrade (i.e. gate access cards, video surveillance). The approved upgrades will require a third, dedicated, leased circuit.

Based on an overall review of telecommunications at the Airport and its designation as the Alternate Emergency Operation Center (AEOC), it has been determined that the facility would be better served by moving from a third party leased lines to a City-operated wireless system.

ANALYSIS

The Torrance Airport's combined voice and data requirements make it a prime location for a City-owned and operated Wireless Local Area Network (WLAN) communications link. The link would provide sufficient bandwidth to transport both the current and proposed voice and data network traffic. The current traffic is transported over two 1.544 Mbps circuits (e.g. T-1) and the proposed traffic would be transported over two, additional, T-1 circuits.

The proposed Ceragon 100 Mbps Licensed WLAN system provides a 100 Mbps Ethernet connection and two, separate, T-1 circuits. As opposed to an unlicensed system, the Ceragon system inherently offers certain FCC protections against radio frequency interference. The Ceragon's primary Ethernet connection would transport all current and proposed data network traffic. One of the wireless T-1 circuits would transport all current and proposed voice traffic. Surplus Ethernet bandwidth capacity will be available to support future applications or increased data traffic.

Based on the City's current lease rates, the proposed WLAN system, when fully populated with all current and proposed traffic would break-even before its 3rd year in service. Staff's breakeven analysis included recurring support costs and replacement costs. The analysis did not account for improved application performance or operational efficiencies.

This purchase is exempt from formal bidding per the provisions of Torrance Municipal Code, Section 22.3.19, Exception; Computer and Networking Hardware and Software Purchases. "The provisions of this Article do not apply to contracts for the purchase of computer and networking hardware and software. The purchase of computer and networking hardware and software will be done pursuant to regulations and procedures established by the City Manager."

It is recommended that the City Council authorize the purchase and installation of the Ceragon product to support the increasing demands for the Airport and other mission critical requirements.

Respectfully submitted,

LeRoy J. Jackson
City Manager

By _____
Brian K. Sunshine
Assistant to the City Manager

By _____
Richard Shigaki
Information Technology Director

CONCUR:

LeROY J. JACKSON
City Manager

Attachments:

A. Sun Wireless quote dated August 30, 2007
B. Council Item of August 21, 2007

Attachment A

SUN WIRELESS

13868 Little Creek Lane, Valley Center, CA 92082-5810 • Phone 760/749-5770 • Fax 760/749-5790 • License # 820709

Ceragon Radio and Support
Quotation

Customer: City of Torrance
3031 Torrance Blvd
Torrance, CA 90503

Date: August 30, 2007
Number: 0701-0830

Item	Part #	Qty	Description	CMAS Price
			100 Mbps Solutions	
1	82-7322J02	2	Ceragon 1500P 100 Mbps, 23 GHz	$21,883.39
2	AC-DC-5A	2	Power Supply	404.90
3	82-7363	2	24" High Performance, Integral, Parabolic Antenna	1,882.20
4	FCC	1	FCC Licensing	1,950.00
			Sales Tax (8.25%)	1,994.07
			Transportation	286.00
			TOTAL	$28,400.56
			Ceragon (Spare in the Air)	
5	EW-AR-24	2	Replacement Radio Within 24 Hours	$3,499.00
			TOTAL	$3,499.00
			Sun Wireless 24x7 Support	
6	OSS24x7	2	Sun On-Site Support	$3,499.00
			TOTAL	$3,499.00
			Sun Wireless 8x5 Support	
7	OSS8x5	2	Sun On-Site Support	$2,975.00
			TOTAL	$2,975.00
			Budgetary Installation Costs	
8		2	Cable Kits (LMR400 with Connectors)	$600.00
9		2	Antenna Mounts	1,700.00
10		1	Installation	3,997.00
			Sales Tax (8.25%)	189.75
			Transportation	98.73
			TOTAL	$6,585.48

Notes:

1. Payment terms are net thirty (30) days after invoicing..
2. If a dispute arises out of or relates to this quotation, purchase order and/or project and if the dispute can not be settled through negotiations Sun Wireless and the Customer agree to first try, in good faith, to settle the dispute by mediation administered in San Diego, California by the American Arbitration Association under its Commercial Mediation Rules before resorting to arbitration, litigation or some other dispute resolution procedure. If mediation cannot resolve the dispute, the parties agree to settle the problem by arbitration, in San Diego, California, by the American Arbitration Association under its Commercial Arbitration Rules

and the judgment of award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

3. **Contractors are required by law to be licensed and regulated by the Contractors' State License Board. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, CA 95826.**
4. Unless extended in writing by Sun Wireless, the quotation is valid for only thirty (30) days from the above referenced date.

_____

Albert R. Pfeltz

Attachment B

Council Meeting of
August 21, 2007

Honorable Mayor and Members
of the City Council
City Hall
Torrance, California

Members of the City Council:

SUBJECT: City Manager and Communications and Information Technology – Authorize the appropriation of funds for the purchase and on-going maintenance and replacement funding of a Wireless Local Area Network System for the Torrance Airport.

Expenditure: $35,000.00 (includes sales tax and shipping) $22,000 for annual costs; $11,000 net additional annual cost for a total of $22,000

RECOMMENDATION

The City Manager, Emergency Preparedness Team, and the Information Technology Director recommend that City Council:

1. Authorize the purchase of a Ceragon 100Mbps Wireless Local Area Network system, not to exceed $35,000 from FEAP # 570 - Alternate EOC Project; and
2. Authorize the budget allocation of $11,000 for ongoing maintenance and replacement costs from the Airport Fund for a total first year expenditure not to exceed $46,000.

Funding

Capital funding is available from FEAP # 570 - Alternate EOC Project. Partial annual funding of $11,000 is budgeted in the Telecommunications Operations Program ($7,200), Data Communications Operations Program ($2,500). The additional annual funding required of $11,000 requires an appropriation from the Airport Fund.

BACKGROUND

The Torrance Airport is currently served by two leased telecommunication circuits providing voice (i.e. telephone) and data network system access between the Airport and City Hall. Both circuits meet the minimum performance requirements for the existing noise abatement and airport operations.

The Airport is undergoing security perimeter upgrades (i.e. gate access cards, video surveillance). The approved upgrades will require a third, dedicated, leased circuit.

Based on an overall review of telecommunication at the Airport and its designation as the Alternate Emergency Operations Center (AEOC), it has been determined that the facility would be better served by moving from third party leased lines to a City-operated wireless system.

ANALYSIS

The Torrance Airport's combined voice and data requirements make it a prime location for a City-owned and operated Wireless Local Area Network (WLAN) communications link. The link would provide sufficient bandwidth to transport both the current and proposed voice and data network traffic. The current traffic is transported over two 1.544 Mbps circuits (e.g. T-1) and the proposed traffic would be transported over two, additional, T-1 circuits.

The proposed Ceragon 100 Mbps Licensed WLAN system provides a 100 Mbps Ethernet connection and two, separate, T-1 circuits. As opposed to an unlicensed system, the Ceragon system inherently offers certain FCC protections against radio frequency interference. The Ceragon's primary Ethernet connection would transport all current and proposed data network traffic. One of the wireless T-1 circuits would transport all current and proposed voice traffic. Surplus Ethernet bandwidth capacity will be available to support future applications or increased data traffic.

Based on the City's current lease rates, the proposed WLAN system, when fully populated with all current and proposed traffic, would break even before its 3rd year in service. Staff's break even analysis included recurring support costs and replacement costs. The analysis did not account for improved application performance or operational efficiencies.

This purchase is exempt from formal bidding per the provisions of Torrance Municipal Code, Section 22.3.19, Exception; Computer and Networking Hardware and Software Purchases. "The provisions of this Article do not apply to contracts for the purchase of computer and networking hardware and software. The purchase of computer and networking hardware and software will be done pursuant to regulations and procedures established by the City Manager."

Ongoing costs have been reallocated among the Telecommunications Operations Program, Data Communications Operations Program and Airport Operations Program funds through the offset created by releasing the leased lines and applying those funds to the wireless network. The $11,000 in additional annual funding is to cover additional operational costs, maintenance and to create a replacement fund.

It is recommended that the City Council authorize the purchase and installation of the Ceragon product to support the increasing demands for the Airport and other mission critical requirements.

Respectfully submitted,

LeRoy J. Jackson
City Manager

By _____
Brian K. Sunshine
Assistant to the City Manager

_____
for RICHARD SHIGAKI
Information Technology Director

CONCUR:

_____
LeROY J. JACKSON
City Manager