



Florida's Warmest Welcome

**CITY OF POMPANO BEACH  
REQUEST FOR PROPOSALS  
H-28-13**

**LICENSE PLATE RECOGNITION SYSTEM AND/OR  
SECURITY CAMERAS**

**RFP OPENING: APRIL 12, 2013, 2:00 P.M.  
PURCHASING OFFICE  
1190 N.E. 3RD AVENUE, BUILDING C (Front)  
POMPANO BEACH, FLORIDA 33060**

March 13, 2013

CITY OF POMPANO BEACH, FLORIDA

REQUEST FOR PROPOSALS

H-28-13

LICENSE PLATE RECOGNITION SYSTEM AND/OR SECURITY CAMERAS

The City of Pompano Beach is seeking proposals from qualified firms who have the ability to install electronic surveillance equipment that consists of automatic license plate readers or video cameras at parks and other public locations throughout the City.

The City will receive sealed proposals until 2:00 p.m. (local), April 12, 2013, in the City's Purchasing Office, 1190 N.E. 3rd Avenue, Building C, Pompano Beach, Florida, 33060. E-mailed or faxed proposals will not be acceptable.

**1. Scope/Project Details/Requirements**

**Project Introduction**

The City of Pompano Beach recently had an outside consultant complete a public safety camera Feasibility Study. The study was done in three parts:

- Part-I: looked at the city's crime stats for the past three years to first identify problem areas, and then determine if the placement of electronic surveillance would have any impact on preventing the type of crime being committed in these areas.
- Part-II: based on the data obtained from Phase-I, the second phase of the study developed several surveillance models ranging from high cost/high technological sophistication to low cost/low sophistication. Costs and estimated impacts on crime prevention were provided along with a recommendation.
- Part III: Based on the final and agreed upon model, the Consultant developed a conceptual design that is incorporated into this RFP. A copy of all three phases of the study is attached as an appendix.

Based on the analysis performed by the Consultant, the City plans to initially target three main areas: Community Park, Mitchell/Moore Park and the Dog Park/Golf Course area. Moreover, the City desires to have automatic License Plate Readers (LPR's) installed at the locations identified in Part III of the Feasibility Study. The number of cameras to be installed is as follows:

- Community Park – 7 LPR cameras
- Dog Park and Golf Course – 2 LPR cameras
- Mitchell Moore Park – 2 LPR cameras

The installation of the LPR's will only be at the recommended locations (hereinafter referred to as Phase-1), rather than citywide. The reason for this is that the City wants to measure, over an 8 – 12 month period, the impact the LPR's will have on preventing crime and helping apprehend offenders, and to work out any unanticipated technological issues. If after this trial period the LPR's are determined to be successful, then the City will look at expanding the use of the technology. If the LPR's are not as helpful as originally anticipated, then staff will consider looking at implementing a video surveillance system (hereinafter referred to as Phase-2). Please note that the type of LPR's recommended by the Consultant have the ability to function as an LPR or as a traditional video camera. This is a new technology; hence, the additional desire for a trial period.

As already stated, at the conclusion of Phase-1, the City will make a determination as to whether additional LPR's should be installed, if video surveillance should be utilized instead or if a completely different direction should be taken. Therefore, the City is interested in firms that have experience in assisting municipalities in such endeavors.

### **Profile of the City**

The City was incorporated in 1947 and covers an area of approximately 25.08 square miles. The legal authority by which the City was created and is governed is its charter, which was derived from Chapter 57-1754, Special Acts 1957, as amended. The City is governed by an elected five-member district commission and a mayor at large. In addition to general government services, the City also provides community planning and redevelopment, public safety, public works and culture and recreation services to its residents. Furthermore, the City's water and sewer, stormwater, sanitation, golf, pier and airpark operations are reported as enterprise funds.

Located in Broward County, Florida, the City is centrally located between Palm Beach and Miami, and is the year round home to 100,319 residents. During the peak season (*September through March*), this number increases to nearly 150,000. As the name implies (Pompano - a species of in-shore tropical game fish) the City is famous for some of the world's best sport fishing and is locally known as the "dive capital" of Broward County. Once a thriving agricultural community, the City has evolved into a warehouse/distribution hub for a wide range of companies that service the over 5 million residents of the South Florida market. The Pompano Beach Air Park is also home to the famous Goodyear Blimp.

The City offers 3 miles of beautiful shoreline and the City's public beach has been declared a Blue Wave Award winner since 2000. Additionally, in 2005 the City was named an All-America City. The All-America City Award is America's original and most prestigious community recognition award honoring communities in which community members, government, businesses and non-profit organizations work together to address critical local issues. The City has also been declared a Tree City USA for the twenty-second year and is committed to enhancing its tree canopy and providing shade and fresh air to residents and guests. Due to its mild year round climate, visitors to the City can also enjoy its beautiful parks, beaches, boating, fishing, scuba diving and all other types of outdoor recreation.

Due to its tremendous transportation links, the City is now home to over 30 million square feet of industrial/warehouse/distribution space, which includes regional headquarters for companies such as, Aquathin, Associated Grocers, FedEx Ground and Stimpson Co. The City provides access to both the Florida Turnpike and Interstate 95 and also provides access to both the CSX and FEC railroads.

The City's police services have been carried out by the Broward Sheriff's Office for the past 13 years. The personnel, including dispatching, work out of the City's public safety building. In 2011 alone, there were 114,300 in 911 emergency calls dispatched and 240,168 non-emergency calls to the department.

Similar to the rest of the nation, the City's overall crime rate increased between 2010 and 2011. However, compared to the mid-2000's, the rate is lower. The majority of offenses that drive the City's Part-I crime statistics are burglaries and larceny. It is expected that the successful proposer will work in close partnership with the Sheriff's Office.

### **Scope of work and General System Requirements**

The initial Phase 1 deployment is for a fixed LPR solution in three of the City's Parks:

- Community Park – 7 LPR cameras
- Dog Park and Golf Course – 2 LPR cameras
- Mitchell Moore Park – 2 LPR cameras

The City wants the initial wireless network to be sized appropriately to handle the future bandwidth requirements of the proposed Phase 2 deployment:

- Community Park – Additional 3 LPR cameras or additional 16 CCTV cameras
- Dog Park and Golf Course – No additional LPR cameras or additional 8 CCTV cameras
- Mitchell Moore Park – Additional 2 LPR cameras or additional 11 CCTV cameras

### **PHASE 1**

We require a software analytics solution deployed with standard high- quality IP CCTV cameras as the best solution for Pompano Beach based on its requirements and the latest technological direction and developments within the industry.

As a software-based solution, rather than a hardware-based application, the newest features and developments can be easily incorporated into the deployed solution through software upgrades.

The design must consist of the following components:

- LPR software analytics and server to process video surveillance of license plates, check against locally downloaded databases, and automatically issue email alerts whenever a plate is flagged against a Be-On-Lookout (BOLO) list.
- High-quality standard multi-megapixel IP CCTV camera with wireless antenna, certified to work with the LPR software analytics utilizing H.264 image compression.

- Point-to-Multipoint wireless network in each of three Parks, total bandwidth of up to 200 Mbps per Park, operating in the 5.4 GHz range for transmission of images from each camera back to a central aggregation receiver in the Park.
- Point-to-Point wireless network from each Park to the Sheriff's tower, total bandwidth of up to 250 Mbps per Park, operating in the licensed 2.4-2.9 GHz range for transmission of License Plate and car image back to the Sheriff's Office for processing by the server-side software analytics.
- Network Video Recorder system, backed by a multi-terabyte RAID storage system using standards-based non-proprietary software.

The LPR solution requires a wireless network connecting each camera in the Parks to the Sheriff's Office, where the software analytics will automatically compare each license plate number to a database. With an LPR solution, a dispatcher or officer is not entering the license into the database, but the LPR software analytics automatically checks the license against a database and sends an email alert to an authorized dispatcher or MDT(s). The Pompano Beach District will need to determine where the data alerts are transmitted, who will respond to alerts, and how alerts will be controlled and updated through policies and procedures.

### **1 - 1. LPR Software Analytics Description and Requirements**

The number of license plates that can be scanned differs depending on the technology and product adopted. For Pompano Beach, we assume a low-traffic environment at LPR camera locations. Vehicle speed in the parks typically will be less than 40 miles per hour and may be less than 25 miles per hour.

Typical LPR software analytics solutions consist of a software-based search engine, surveillance manager/command center, reporting service, and server. The leading software analytics solutions are certified to work with high-quality IP CCTV cameras, such as AXIS, Pelco, Arecont, Panasonic, and Avigilon. Typical software analytics solutions require the following component features:

- IP digital cameras providing real time video feed back to centralized location; all camera feeds are processed at centralized location; most LPR software analytics have been certified with specific IP camera models.
- Windows 2008 or later server. Server typically requires minimum dual core/quad core Intel process 2 GHz or higher, minimum 16 GB memory, 500 GB hard drive.
- Suite of software components that work together to provide system management, plate/alert monitoring, real-time LPR-based alerts, alert policy configuration, and user notification configuration. The software shall provide connectivity to NCIC, State Crime Data, and local customized hotlists.

LPR software analytic solutions shall be able to meet the following minimum requirements:

- Capable of reading license plates at over 90% accuracy
- Supports license plates from all states
- Works with H.264, Mpeg4, or Mpeg video encoding and compression
- Speed of car between 0 and up to 50 mph
- License plate image between 80-300 pixels
- Support monochrome, grayscale, or color plates

- Read both alpha and numerical plates, including vanity plates
- Maximum distance of 120 feet from camera to car
- Maximum angle of 30 degrees
- I/O interfacing via RJ-45 ports
- User-friendly GUI for reporting and configuration
- Advanced search engine for retrieving data

LPR system software shall provide the following features and meet the following requirements in interfacing with the database(s) to be identified by the Broward Sheriff's Office:

- LPR software shall be able to compare the plate to multiple databases searching for matches; databases to be identified by Pompano Beach Sheriff's Office.
- LPR system shall be able to identify specific camera, plate number, time/date stamp.
- LPR system shall be able to retain captured plate data and an image of the car and plate in an integrated network video recorder.
- LPR system software shall perform ambiguous searches (using character wildcards) to
  - improve accuracy.
- LPR system software shall issue an alert within milliseconds if a vehicle is suspect.
- LPR system software shall feature multi-level alarm levels for prioritization, for example: Wants, Warrants, and Amber Alerts.
- LPR system software shall operate with data from different sources.

The image on license plates is scanned and matched with any database. The Broward Sheriff's Office will provide or build the database. Links can be made to daily downloads from existing federal, state, and local "hot list" databases and also matched to vehicle owners via a DMV database. Queries do not check against a "live" database but a local download of one, which will be updated at least daily. This database can be set with flags for vehicles that have been identified as:

- Stolen vehicles; lost or stolen plates
- Wanted for an AMBER/Silver alerts
- Expired registration
- Expired insurance
- Wanted as "Persons of Interest" for any investigation
- Vehicles associated with wanted felons, parolees, etc.
- Any locally created databases (hit and run vehicles, sex offenders, arsonists, drug trafficking, parking tickets, etc.)
- Suspended driver's license
- Outstanding criminal warrant
- Outstanding municipal taxes or other fines and fees
- Wanted for any other Law Enforcement or government purpose

Anytime one of these alerts is triggered, an officer in the vicinity can be immediately alerted to the vehicle's presence and for what reason it has been flagged.

## **1 - 2. IP CCTV Camera Description and Requirements**

The cameras shall be high-quality IP CCTV cameras that can be connected to the wireless point-to-multipoint network. CCTV camera manufacturers may include AXIS, Pelco, ARECONT, Panasonic, Avigilon, or approved equal.

The exact CCTV camera specifications may vary based on the LPR software analytics solution. The following functionality is indicative of typical requirements:

- 2-3 megapixel resolution, minimum 640x480
- 8-10 frames per second (dependent upon coding, resolution, and stream configuration)
- H.264, Mpeg4, or Mpeg video encoding and compression
- Day/night capability with infrared illuminators
- Sensitivity down to 0.03 lux
- Megapixel lenses: All lenses shall be designed and tested to deliver optimal image quality for the camera. It shall be the responsibility of the LPR integrator to provide the most suitable lens to approximate the specified fields of vision as shown on the drawings.
- Camera dome on a mounting platform with an external weatherproof aluminum casing enclosing the camera. All cameras shall be provided with integrated housing with heater and blower, complete with mounting hardware and brackets.
- Housing selection shall best conform to the size and shape of the area to be monitored, and the accessibility of the equipment (special attention shall be given to the potential for vandalism and disabling the camera). Refer to drawings for plan view of camera location and coverage.
- Port: RJ-45 connector for 100Base-TX Auto MDI/MDI-X for camera to be physically connected to a wireless subscriber unit.

Upon award of the project, the integrator's technician shall conduct a thorough site survey resulting in an installation plan, to be presented to the City and Sheriff's Office, based upon these locations. The contractor's technicians will coordinate the installation of the fixed LPR cameras for maximum effectiveness.

It shall be the responsibility of the contractor to supply any required training and to install all equipment, infrastructure, components, programming, and data to provide a fully operational system that is in compliance and meets the satisfaction of the owner.

## **1 - 3. LPR Camera Locations in Pompano Beach**

LPR cameras shall be placed at primary entrances/exits into the Parks. The objective is for the LPR cameras to flag any suspect vehicles entering the Parks and to provide a date/time stamp of cars leaving the Parks immediately following an incident. The license plate data may also be used to identify potential witnesses who were in the Parks around the time of incidents. Since Florida requires only rear license plates, the LPR cameras shall be positioned to capture the license plate as the car passes the camera, heading into or out of a Park.

Our Security consultants, Broward County Sheriff's Deputies, and City staff identified target locations for placement of fixed LPR cameras to best achieve this objective. Within these targeted areas and as shown on the enclosed map diagrams, the Security consultant has positioned LPR cameras on existing metal light poles or wood utility power poles, wherever possible. The diagrams indicate locations where an LPR is desired but a light pole or other power source is not available.

For expediency, we have positioned LPRs on the same pole facing two different directions to capture cars coming and going. This is to save the cost of having to install a new pole and associated power on the opposite side of the road. The downside is that if two cars are driving by each other, the view of the license plate may be blocked.

The desired camera locations were selected in consultation with Sheriff's Officers and the actual recommended placement was based on the availability of a power source. Existing traffic flow was considered in determining the placement. We did not assume the flow of traffic would be changed, other than where we indicate on the drawings blocking certain entrances into specific parking areas to direct traffic toward an alternate entrance and camera. Changes in landscaping did not influence the camera locations; some alterations to surrounding landscape and tree branches may be required upon camera installation.

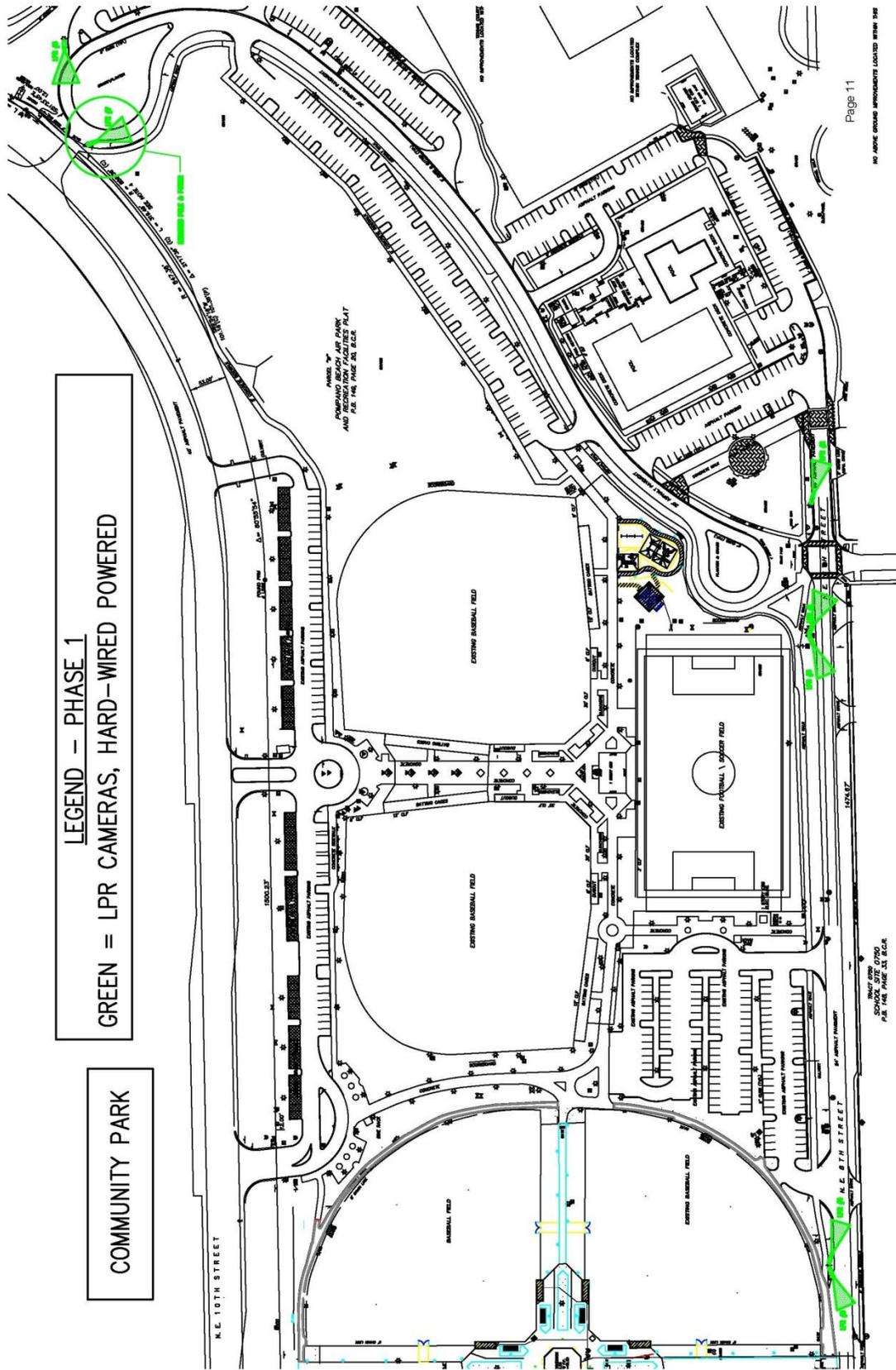
We require LPRs to cover every entrance into Community Park except for the three entrances from Northeast 10th Street into the parking lot above the baseball fields. According to the drawings, these lots do not provide further access into the Park.

Each LPR camera shall be placed by the contractor at the proper distance, height, and angle to maximize the plate image capture and minimize the ability for the LPR cameras to be vandalized. "Sweet spot" distances can vary from 15 to 60 feet, depending on the actual camera model, angle, lens, and height of installation. Lenses may vary from 16 to 75 mm. The cameras shall have shatterproof windows and be hardened for outdoor usage.

Refer to the diagrams on the following pages for recommended camera locations, summarized below:

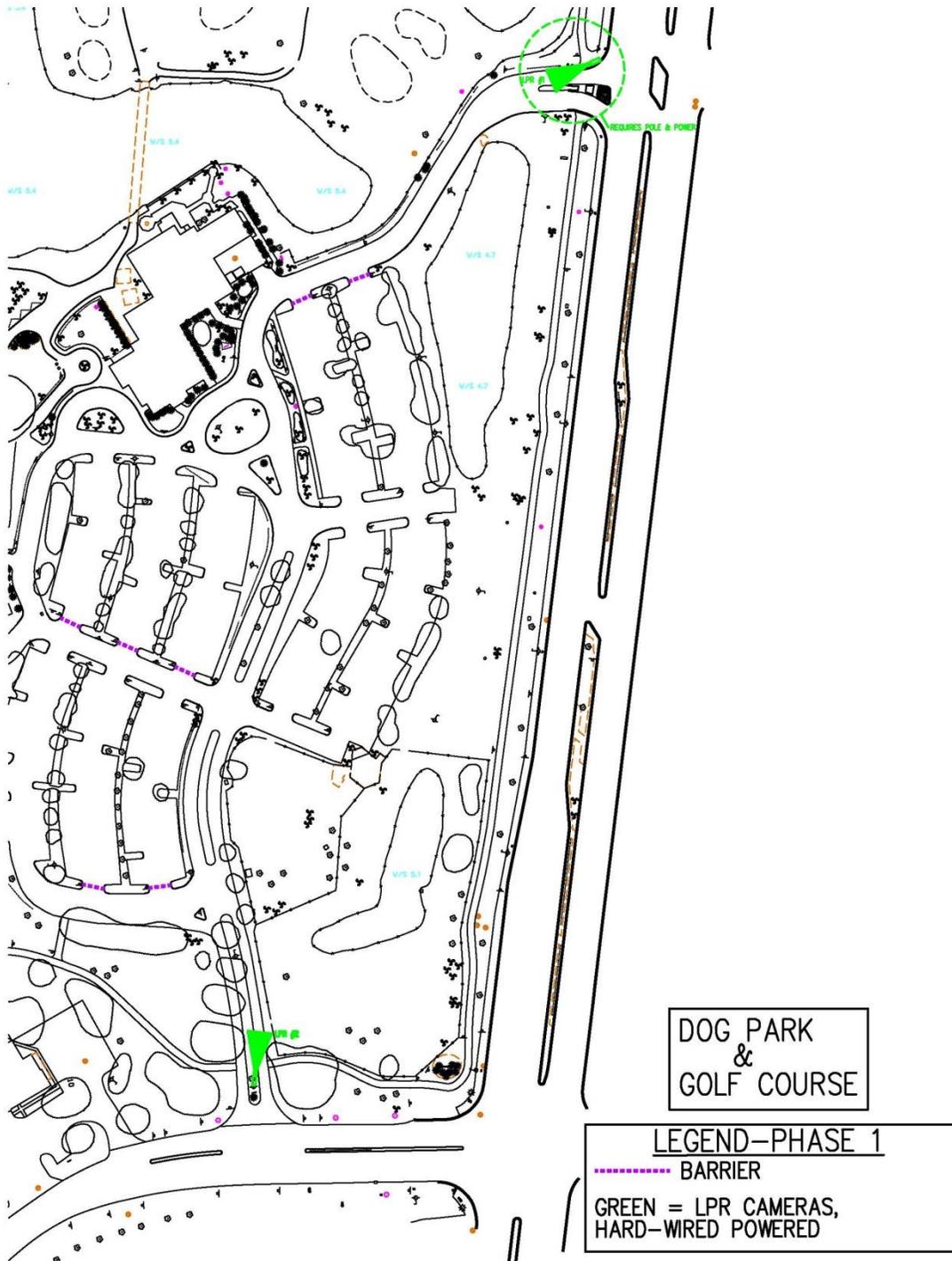
1. Community Park – 7 LPR cameras as follows:
  - 3 near the entrance to the Park from NE 18th Avenue by the pool area. One LPR capturing cars turning east on NE 8th Street toward the pool parking lot (green LPR #2), one LPR capturing cars turning west on NE 8th Street toward 4 Fields parking lot (green LPR #3), and one LPR capturing cars exiting the Park onto NE 18th Avenue (green LPR #1).
  - 2 along NE 8th Street by the southwestern entrance to the parking lots adjacent to 4 Fields. One LPR capturing cars traveling east (green LPR #4) and one capturing cars traveling west (green LPR #5).
  - 2 at the northeastern entrance to the Park from NE 10th Street. One LPR (green #7) capturing cars coming into the parking lot and one LPR capturing cars exiting the Park (green LPR #6). There is no pole available for LPR #7.

2. Dog Park/Golf Course – 2 LPR cameras as follows:
  - 1 at the northern entrance to the Park from Federal Highway toward the Golf clubhouse (green LPR #1). There is no pole available for LPR #1.
  - 1 at the southern entrance to the Park from NE 10th Street (green LPR #2).
  
3. Mitchell Moore Park – 2 LPR cameras as follows:
  - 1 heading west along NW 10th Street near the Community Center parking lot (green LPR #1).
  - 1 along Asphalt Drive, entering the Park from NW 10th Street (green LPR #2).



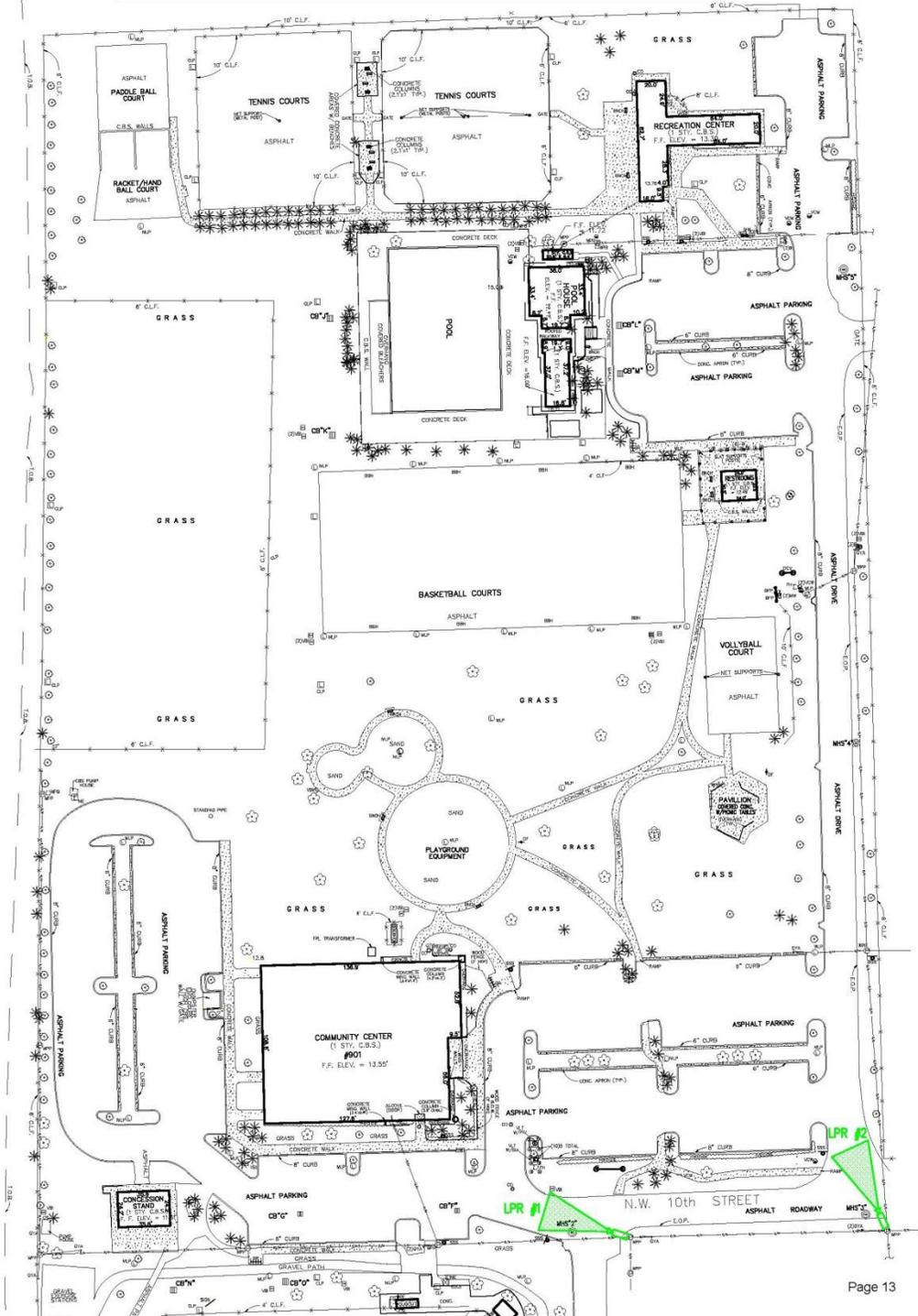
**LEGEND - PHASE 1**  
**GREEN = LPR CAMERAS, HARD-WIRED POWERED**

**COMMUNITY PARK**



MITCHELL MOORE PARK

LEGEND-PHASE 1  
GREEN = PHASE 1 LPR CAMERA, HARD-WIRED POWERED



#### **1 - 4. Network Design Sized for Full System (50 Cameras)**

One of the challenges in deploying an LPR or streaming CCTV video surveillance solution is the requirement for a network to allow connectivity of the bandwidth-intensive surveillance images back to the centralized software integrated with the City's database(s) to issue an alert. The City is requesting for the network to be designed with the capacity to support the future deployment as stated in the Scope of Work and General System Requirements.

Scalability is an important requirement for the City of Pompano Beach, since the City may add cameras to the system after the initial Phase 1 deployment. The system shall have the capability for installing additional devices (cameras, workstations, storage, etc.) using the standard network infrastructure. Addition of new devices shall be achieved by connecting the device to the network, configuring the network settings on the device, and configuring the NVR to recognize the device.

#### **1 - 5. Network Design and Bandwidth Assumptions**

In developing the bandwidth assumptions for the transmission network, the Security consultants have made the assumptions below. Based on these assumptions, a backhaul network offering 250 mbps upstream capacity can support up to approximately 50 cameras. Changing these assumptions will impact the number of cameras that can be placed on the network. LPR software analytic solutions vary in many of these assumptions, which impact the image bandwidth per camera (for example, frame rate, megapixels per camera, and compression methodology); these assumptions shall be re-evaluated based on the actual software analytics solution:

- All cameras are assumed to require similar bandwidth consumption, whether they are being used for LPR analytics or video surveillance.
- H.264 compression and compressed storage
- 2-megapixels per camera (1600x1200)
- 8 frames per second
- Bandwidth requirements for Phase 2 expansion (based on 3 Mbps/camera)
  - Community Park: 26 cameras (Phase 2B) will require approximately 45 Mbps of network bandwidth
  - Dog Park/Golf Course: 15 cameras will require approximately 26 Mbps
  - Mitchell Moore Park: 10 cameras will require approximately 18 Mbps
- Recording data 24x7 with RAID server storage of 10 days, after which Pompano Beach Sheriff will download data onto DVD storage media to meet investigative storage requirements. Storage requirements for 10 days:
  - Community Park: 8 TB of data storage
  - Dog Park/Golf Course: 4.5 Tb of data storage
  - Mitchell Moore Park: 3 Tb of data storage

#### **1 - 6. In-Park Camera Aggregation via Point-To-Multipoint Radio System**

Network connectivity to the cameras is a challenge for the City of Pompano Beach. The City does not have existing cable or fiber loop in the Parks and is not interested in installing physical media. Therefore, wireless network connectivity shall be used to connect each IP camera back to a central base station in the Park.

We require a dedicated 5.4 GHz Point-to-Multipoint wireless network for transmitting the IP CCTV camera images back to a base station, which will be located in a central building in each Park.

The Security consultant has researched the following products and any of them may offer viable network alternatives:

- RADWIN 5000 HPMP High Capacity Point-To-Multipoint
- Firetide HotPort 5020 and 7020 Wireless Mesh Node
- Fluidmesh MITO Series Wireless Security System
- Motorola Cambien 5.7-5.8 GHz system
- Aruba
- Dragon

Each IP camera shall be physically connected to a wireless subscriber unit radio on the pole, which transmits back to a central base station in the Park. The radio units shall consume low power and be powered through a power box (transformer) on the pole.

The central base unit is the main hub of information to the cameras in the park. It receives the data/images from the cameras and transmits the data/images back to the Sheriff's Office.

The City's network antennas are at the highest point in each Park, and any new antennas cannot interfere with the existing network infrastructure. If required, depending on the roof/building structure, a mast or sidearm may need to be added. The exact location, position and optimization of the antenna configuration will be determined by the integrator based on a path-link study to confirm Near Line Of Sight requirements.

The point-to-multipoint network shall provide the following features and meet the following requirements:

#### Base Station

- Minimum bandwidth 100 Mbps asymmetric per Park; up to 250 Mbps desired for Community Park
- System shall operate at 5.4 GHz and shall not interfere with the City's existing Canopy system operating at 5.7 GHz. The system shall support multiband 4.9 to 6 GHz in the same unit.
- System shall automatically switch across bands whenever it encounters interference, including any that may come from radar in the area. This switch will occur in such a way as to not impact or delay transmission of digital camera output.
- OFDM, MIMO 2x2/diversity to enable near Line Of Sight (nLOS) and non Line Of Sight (NLOS) signal reception
- Support up to 32 subscriber unit radios simultaneously
- Dual polarized antenna
- AES 128 encryption
- Hardened to operate in harsh conditions
- Temperature -31F to 140F

## Subscriber Unit Radios

- PoE port for connectivity to high resolution fixed video cameras and LPR cameras
- Support transmission rates of 5, 10, 20, to 50 Mbps
- Small form factor MIMO subscriber units
- Minimum range 5 miles; long range up to 25 miles
- Hardened to operate in harsh conditions
- Ethernet interface 10/100BaseT

### 1 - 7. Backhaul Requirements

A high-capacity licensed (2.4-2.9 GHz range) Point-to-Point radio solution capable of delivering up to 200 Mbps per link, as shown on the network diagram on the next page.

The base station receiver, which aggregates the data from each LPR camera, will connect to a separate radio base station, which will transmit data and video images to an antenna/receiver at the Sheriff's Headquarters tower. Each Park will have its own independent point-to-point link that will continuously send images to Sheriff's Headquarters.

**Refer to the "Proposed LPR Network" Diagram 1** at the end of this section for the point-to-multipoint camera aggregation network. The recommended location is at or near the highest point in each Park. The City's network antennas are at the highest point in each Park, and any new antennas cannot interfere with the existing network infrastructure. If required, depending on the roof/building structure, a mast or sidearm may need to be added. The exact location, position and optimization of the antenna configuration will be determined by the integrator based on a path-link study to confirm Near Line Of Sight requirements.

The point-to-point network shall provide the following features and meet the following requirements:

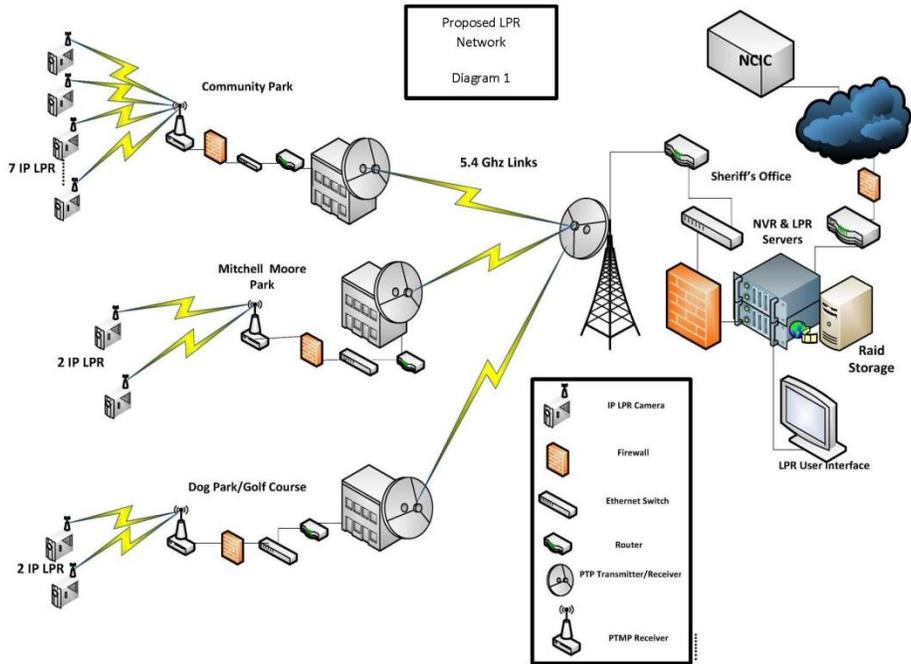
- 2x2 MIMO technology and diversity to enable near Line Of Sight (nLOS) and non Line Of Sight (NLOS) signal reception
- OFDM modulation (BPSK, QPSK, 16-QAM, 64-QAM)
- System shall operate at licensed 2.4-2.9 GHz and shall not interfere with the City's existing Canopy system operating at 5.7 GHz. System shall not be impacted by wireless devices in homes/businesses.
- System shall automatically switch across bands whenever it encounters interference,
- Including any that may come from radar in the area. This switch will occur in such a way as to not impact or delay transmission of digital camera output.
- Outdoor Unit Base Station with integrated antenna
- Transmission power up to 25 dBm
- Long range up to 75 miles
- Indoor Unit supporting 6 ports, 10/100/1000BaseT
- Up to 200 Mbps net aggregate throughput per Park
- Maximum frame size 2048 bytes
- RJ-45 connector
- Comply with all Ethernet transport standards and able to seamlessly integrate with a backbone IP network

- Support multiband 4.8 to 6 GHz in the same unit
- Channel bandwidth from 5 MHz to 40 MHz
- Configurable maximum information rate
- AES 128 encryption
- Hardened to operate in harsh conditions
- -20 to -60 VDC
- Temperature -31F to 140F

#### **1 - 8. Network Security Strategy**

All network equipment shall provide a minimum of AES 256 encryption. The network requires a secure firewall to control unauthorized access to the public safety video network. The firewall shall use a multi-layered engine to analyze network traffic and identify potentially infected cameras in the system. It shall use Real-Time security intelligence to identify infections based on IP/DNS/URL addresses and initiated spam outbreaks. The firewall shall permit remote and mobile access to data for client users with authorization. It shall provide real-time alerting to performance, security, or functionality issues. Data loss prevention (DLP) shall restrict sensitive public safety information being sent outside the City's network.

Please refer to the **“Proposed LPR Network” Diagram 1** on the next page.



## **1 - 9. Network Video Management & Storage**

The three receiving antennas at the Pompano Beach District Office shall be connected over Cat 6 cable to the LPR system's central control server. Server requirements shall be specified as part of the core LPR system. The LPR system command center/management software shall capture each license plate image and save it with the time, data, and location by GPS coordinates.

The LPR system software shall include data/image retrieval with features for searching and archiving. The data shall be stored 24-hours in the LPR system, and then automatically transferred to a terabyte-storage system.

## **1 - 10. Network Video Recorder**

The IP CCTV System shall use a dedicated standard IP network to transmit digitally encoded video and other data. The IP CCTV System shall use standard PoE IP network switching and routing technology (IP PoE switch) to manage the connection of live or recorded video sources to one or more destinations, resulting in a Virtual Matrix. Video data shall be recorded and stored centrally on RAID video servers. The quantity of PoE switches supporting IP cameras shall be based upon combinations of 24-port count.

The system IP PoE switch matrix shall be used to pull out the LPR camera data feed to the server for processing by the software analytics management system. All switches are to be rack mounted in MDF/IDFs nearest to corresponding IP CCTV camera locations. Cable run distances are not to exceed 295 linear feet and with jumpers a total of 328 feet (100 m).

Network Video Recorders (NVR) shall be utilized to record and manage the IP video streams, and one or more operator workstations shall be provided in specified locations. A Digital Video Management System (DVMS) will provide high-resolution digital video recording and monitoring capabilities. The DVMS/NVR system shall be NICE NiceVision Net 2.5 or approved equal.

The system will be connected to and will convey digital video data via the dedicated network and be capable of storing digital video files on hard drive(s). The system programming and file retrieval will be password protected at Client Workstation(s). Viewing of all video cameras will be available at any authorized PC(s) connected to the network and equipped with DVMS viewer software.

## **1 - 11. Video Storage Requirements**

The initial LPR system deployment of 11 cameras will require approximately 4 TB of data storage for 10 days. Subsequent deployment of up to 50 cameras will require approximately 15 TB of data storage for 10 days.

Following the 10-day storage, the Sherriff's Office shall be able to automatically download images for longer-term storage, as desired. Since the LPR software reads and retains all plates, the information can be stored for future review and investigative query.

Digital video data shall be stored on hard disks by the LPR server. These internal hard disks shall be within separate RAID (Redundant Array of Independent Disks) units. This shall be arranged as separate RAID5 servers with four hot-spare drives, each storing up to 6 TB of data and video, which shall provide a memory capacity for 24 TB of storage. Each server shall offer a minimum of up to 10 days of storage based on 100% of the cameras in the network. The storage architecture for the system shall be located at two separate locations eliminating a single point of failure.

One 19 inch x 72 inch x 36 inch rack will be required with 120 VAC and 30-amp power for the system server and storage.

The IP CCTV System shall provide for storage of large amounts of recorded video and provide instant access to this data. The video shall be stored as digital data alongside other video-related data such as the camera ID, date and time, and video-analytics information to provide instant content-based retrieval of recorded video. Digital video data shall be stored on hard disks by the NVR. These internal hard disks shall be within separate RAID (Redundant Array of Independent Disks) array units. This shall be arranged as separate RAID5 servers with four hot-spare drives that provide a memory capacity up to 24 TB. Each server shall offer a minimum of up to 10 days of storage. The storage architecture for the IP CCTV system shall be located at two separate locations eliminating a single point of failure.

The Network Video Recorder (NVR) shall be modular in design allowing for ease of scalability. The NVR shall employ a digital video data transmission/recording solution with the ability to interconnect with an IP network. Video streams shall be delivered by remote cameras transmitted via a wireless radio network and shall be recorded upon detection of motion.

## **1 - 12. Training**

Any training that is required for staff to operate and maintain the LPR system will be provided by the Contractor

## **PHASE 2**

If the evaluation of Phase 1 results indicates that the LPR system is not effectively achieving the desired impact on crime, the City (at its own discretion) may decide to add CCTV, streaming surveillance into the system, rather than adding additional LPR functionality.

### **2 - 1. Solar-Powered and Hard-Wired IP CCTV Cameras**

We would like a combination of solar-powered and hard-wired IP CCTV cameras. Hard-wired cameras would be placed at the entrances/exits of primary parking areas within the Parks to capture images of all cars entering and leaving the parking areas. The crime prevention benefit is to identify a car that enters and leaves an area immediately before/immediately after the time of a “smash and grab” incident.

Solar-powered cameras are needed to record surveillance images within primary parking areas, but not covering every parking area or parking spot. The City would move these solar-powered cameras to different parking areas, as crime patterns change. Signs will be posted indicating areas are under video surveillance and being recorded.

Hard-wired cameras would be installed on light poles or Park buildings and connected to a power box:

- Low-profile, durable NEMA 4 enclosure
- Meet IP66 standards to prevent the induction of minute particles
- Pole mount option and clips
- Switch-selectable power input 120 VAC or 240 VAC, 50/60 Hz
- 4-6 amps of power at 12 VDC
- Complements outdoor camera housings
- Designed for direct conduit connections
- Includes video and power surge protection

Solar-powered cameras would have integrated solar panels, which increases the flexibility of relocating them without being dependent upon a hard-wired power source but significantly increases the cost of each camera. This is an option when cameras need to be installed in areas that do not have access to light poles or other power sources and enables the City to easily move the cameras as crime patterns change.

Both types of cameras require the use of a bucket truck to reach the height of the mounting location and the physical installation of a mounting bracket, to which the camera is then attached. For a hard-wired camera, the initial placement also requires an electrical contractor to install a twist lock connector (“power box”), which is fed from the structure’s existing power line. A solar-powered camera does not require this connector. Once a power connector is mounted on a pole, moving a camera back to that location requires no special expertise and the camera is simply plugged into the existing connector.

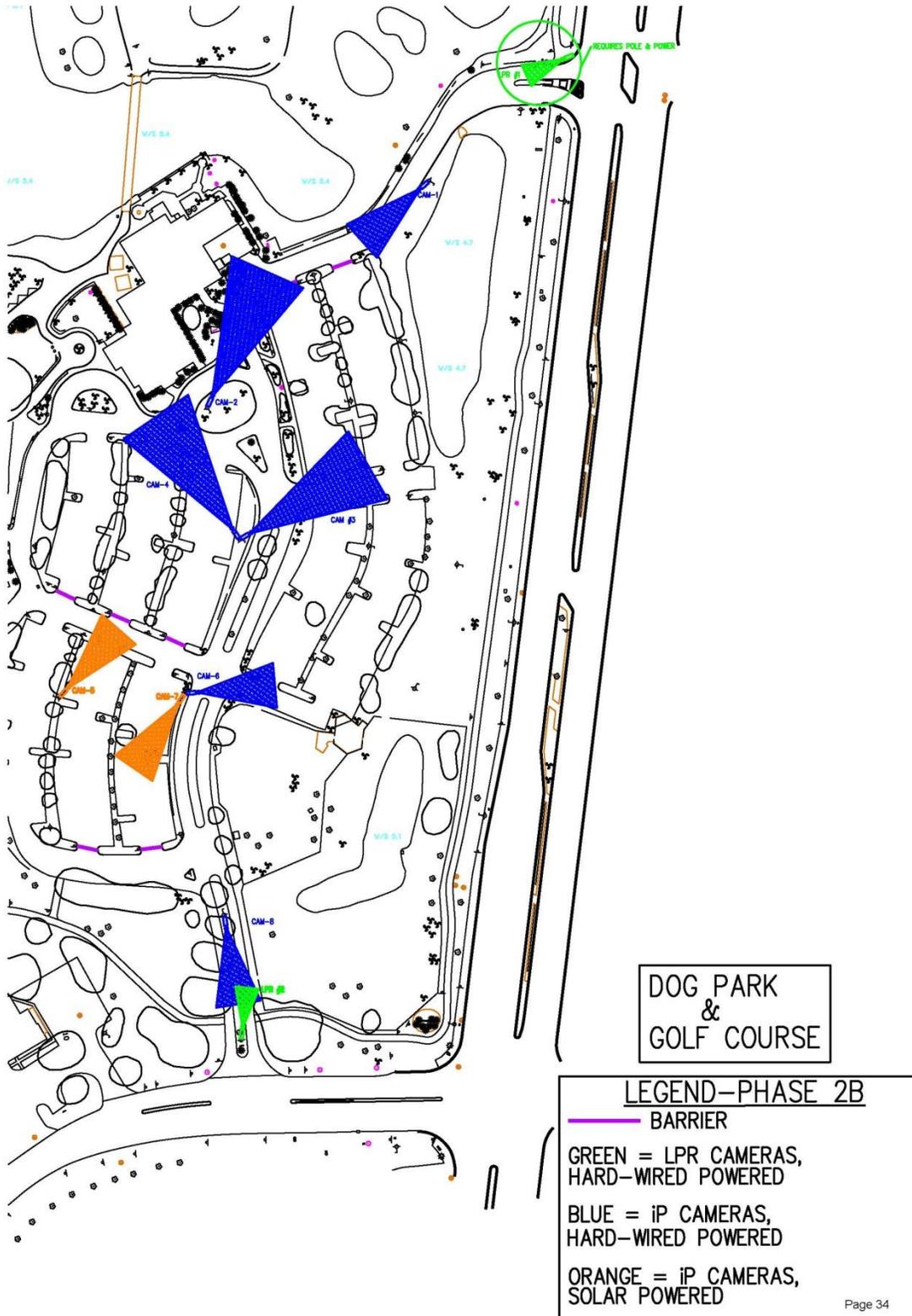
## **2 - 2. Proposed Locations for CCTV Cameras in Phase 2**

Refer to the Diagram on the next page for the locations where up to 35 CCTV cameras shall be positioned during Phase 2, color coded as follows (blue for hard-wired to power and orange for flexible solar-powered), in addition to the green-coded LPR cameras deployed during Phase 1:

1. Community – 16 CCTV cameras as follows: 7 hard-wired to power and 9 solar-powered.
  - 2 hard-wired cameras at the entrance/exit off NE 10th Street, above the baseball fields (blue cameras #1, 4).
  - 2 solar-powered cameras at the entrance/exit off NE 10th Street, above the baseball fields (orange cameras #2, 3).
  - 5 solar-powered cameras at the entrance/exit of the parking lots above the Aquatic Center, from the Park entrance off NE 10th Street (orange cameras #5, 6, 7, 8, 10).

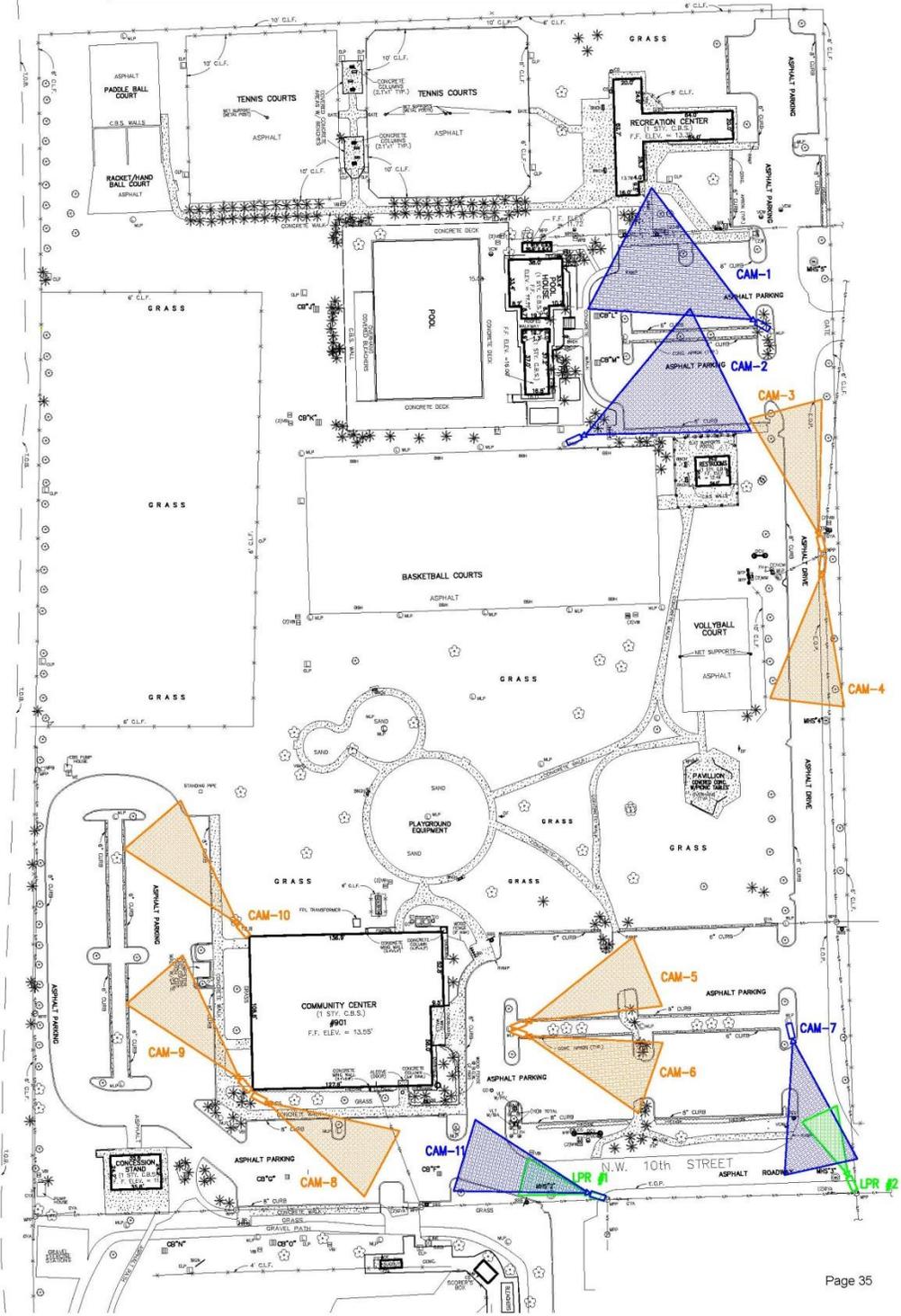
- 4 hard-wired at the entrance/exit of the parking lots immediately surrounding the Aquatic Center off NE 8th Street, entering the Park from NE 18th Avenue (blue cameras #9, 11, 12, 13).
  - 1 hard-wired camera at the entrance/exit of the parking lots adjacent to 4 Fields, coming from NE 8th Street (blue camera #14).
  - 2 solar-powered cameras at the parking lots adjacent to 4 Fields, coming from NE 8th Street (orange cameras #15, 16).
2. Dog Park/Golf Course – 8 cameras as follows: 6 hard-wired to power and 2 solar-powered.
- 2 hard-wired cameras near the Club House to record vehicles coming into and out of the Park by the Golf Course (blue cameras #1, 2). We recommend barricading some parking area entrances to funnel cars into the view of cameras, as indicated.
  - 2 hard-wired cameras to record the traffic flow in and out of the parking lots by the Club House (blue cameras #3, 4).
  - 2 solar-powered cameras observing the parking lots above the Dog Park (orange cameras #5, 7).
  - 2 hard-wired cameras at the entrance from Federal Highway by the Dog Park, one observing the entrance/exit to the Park and one observing cars entering and leaving the parking lot above the Dog Park (blue cameras #6, 8). We recommend barricading these lots from the main drive coming in from Federal Highway, as shown in the diagram.
3. Mitchell Moore – 11 cameras as follows: 4 hard-wired to power and 7 solar-powered.
- 2 hard-wired cameras at the entrance/exit of the parking lots by the Pool (blue cameras #1, 2).
  - 2 solar-powered cameras along Asphalt Drive (orange cameras #3, 4).
  - 2 solar-powered cameras at the entrances into the parking lots to the east of the Community Center (orange cameras #5, 6).
  - 2 hard-wired cameras covering NW 10th Street by the Community Center (blue cameras #7, 11).
  - 1 solar-powered camera observing cars traveling westbound along N.W. 10<sup>th</sup> Street in front of the Community Center (orange camera #8)
  - 2 solar-powered cameras at the western end of the Community Center to record the parking area north of the concession stand where staff parks (orange cameras #9, 10).





**MITCHELL MOORE PARK**

**LEGEND-PHASE 2-B**  
 GREEN = LPR CAMERA, HARD-WIRED POWERED  
 BLUE = IP CAMERAS, HARD-WIRED POWERED  
 ORANGE = IP CAMERAS, SOLAR POWERED



## 2. Proposal Submittal Requirements

### Proposal Requirements

Vendors should include sufficient documentation in their Proposal to allow the City to evaluate their response on the following points and others enumerated herein. The City of Pompano Beach reserves the right to solicit additional information from the proposers to determine which solution best meets the City's needs.

Proposals are required to comply with the following conditions that are considered an integral part of this RFP.

1. The Proposal must remain valid for acceptance for a minimum of 120 days after Proposal opening.
2. Vendor is responsible for determining the amount of time needed to perform the scope of services requested in this RFP and shall provide a proposed schedule of critical dates in the Proposal.
3. The City shall evaluate the Proposal(s) and award any contract in consideration of the Proposal that is most advantageous to City. Factors to be considered shall include, but not limited to, all of the evaluation criteria stated below and elsewhere in this document, including:
  - a. Price, net first-year cost to the City.
  - b. Price, net ongoing costs to the City, including annual maintenance.
  - c. Ability to provide a highly reliable and available License Plate Recognition (LPR) and/or video camera system.
  - d. Vendor Experience and qualifications: Evaluation of the vendor's experience in building the required infrastructure, and identifying the most effective spots for surveillance.
  - e. Flexibility: ability to convert easily change locations of surveillance and/or switch from a LPR system to a video surveillance system.
  - f. Interviews with entities that have contracted with the proposed vendor for similar projects (reference checks.)
  - g. Vendor Support/Service Capabilities: Remote serviceability and technical support.
  - h. Vendor must maintain its own, full time, qualified technical staff.
  - i. Scalability: cost-effective and pragmatic expansion of either LPR's or video cameras.

- j. Ability to coordinate and work directly with service providers during implementation of the new system.
- k. Training provided to in-house staff.

### **3. Submission/Format Requirements**

Submit one (1) original unbound and five (5) bound copies of the proposal. All copies will be on 8 ½" x 11" plain white paper, typed, and signed by an authorized representative who is able to contractually bind the Proposer. In addition, Proposers must submit one (1) original copy of the Proposal on electronic media in printable Adobe or Microsoft Word format (or other format approved by the City). Failure to adhere to the submittal quantity criteria may result in the Proposal being considered non-responsive.

**Information to be included in the proposal:** In order to maintain comparability and expedite the review process, it is required that proposals be organized in the manner specified below, with tabs or dividers between the sections:

1. A title page showing the RFP number and title; the firm's name and FEI number and address; the name, address, telephone number, fax number, email address of a contact person; and the date of the proposal.
2. Table of contents with page numbers referenced.
3. Transmittal letter stating the Proposer's understanding of the work to be done; the commitment to perform the work; a statement why the firm believes itself to be the best qualified to perform the work; and a statement that the proposal is a firm and irrevocable offer for a 120-day period from the closing date of this RFP. Include the name and signature of the representative who has been authorized to submit the proposal on behalf of their firm.
4. A brief description of the company, including a history of experience, and any available brochures about the business. Contact information, including the name, address, phone number, e-mail address, and mailing address of the vendor's primary contact person, must be included in this section.
5. A minimum of five references and contacts, with name, phone number(s) and address and the dates that service was provided.
6. A description of any deviations from the stated specifications, which are germane to the proposed services and/or costs.
7. The number of full time employees certified to work on the proposed system.
8. Detailed description of equipment and components.
  - a. LPR's
  - b. video cameras

9. Detailed network diagrams and drawings.
  - a. LPR's
  - b. video cameras
10. A complete description and associated costs of any proposed "electives" available that are not described in this RFP.
11. A cost quotation for eleven (11) LPR's at the locations proposed by the City - this quotation must be itemized and include all costs, including system license fees, hardware, installation, implementation, training, travel and per diem, documentation, software, maintenance, third party software and any other cost to make the system operational.
 

One-time costs versus recurring costs should be separately identified.
12. A cost quotation for thirty-nine (39) additional LPRs (locations to be determined).
 

One-time costs versus recurring costs should be separately identified.
13. A cost quotation for thirty five (35) video cameras, broken down by hired wired and solar powered, at the locations proposed by the City. This quotation must be itemized and include all costs, including maintenance, upgrades, support, etc.
 

One-time costs versus recurring costs should be separately identified.
14. A detailed schedule of installation and implementation of the eleven LPR's in the proposed first phase.
15. Disclose any litigation within the past 5 years arising out your firm's performance.
16. Return City Provided Forms:
  - a. RFP Proposal Signature Page must be completed and signed
  - b. All RFP pages, initialed where indicated
  - c. Completed System Feature Matrix
  - d. Small Business Enterprise program forms, with copies of certifications for any certified Small Businesses to be used on the project.
  - e. Local Business Enterprise forms listing project participation and outreach efforts to City of Pompano Beach businesses.

#### 4. **Insurance**

The insurance described herein reflects the insurance requirements deemed necessary for this contract by the City. It is not necessary to have this level of insurance in effect at the time of submittal, but certificates indicating that the insurance is currently carried or a letter from the Carrier indicating upgrade ability will speed the review process to determine the most qualified Proposer.

The successful Proposer(s) shall not commence operations until certification or proof of insurance, detailing terms and provisions of coverage, has been received and approved by the City of Pompano Beach Risk Manager.

The following insurance coverage shall be required.

- a. Worker's Compensation Insurance covering all employees and providing benefits as required by Florida Statute, Chapter 440, regardless of the size of the company (number of employees). The Contractor further agrees to be responsible for employment, control and conduct of its employees and for any injury sustained by such employees in the course of their employment.
- b. Liability Insurance
  - 1) Naming the City of Pompano Beach as an additional insured, on General Liability Insurance only, in connection with work being done under this contract.
  - 2) Such Liability insurance shall include the following checked types of insurance and indicated minimum policy limits.

**LIMITS OF LIABILITY**

Type of Insurance	each occurrence	aggregate
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**GENERAL LIABILITY: MINIMUM \$200,000 per OCCURRENCE/\$300,000 AGGREGATE**

\* Policy to be written on a claims incurred basis

XX	comprehensive form		
XX	premises - operations	bodily injury	
—	explosion & collapse hazard	property damage	
—	underground hazard		
—	products/completed operations hazard	bodily injury and property damage	
XX	contractual insurance	combined	
XX	broad form property damage		
XX	independent contractors		
XX	personal injury	personal injury	

**AUTOMOBILE LIABILITY: MINIMUM \$200,000 per OCCURRENCE/\$300,000 AGGREGATE**

		bodily injury (each person)	
		bodily injury (each accident)	
XX	comprehensive form	property damage	
XX	owned		
XX	hired	bodily injury and property damage	
XX	non-owned	combined	

**REAL & PERSONAL PROPERTY**

—	comprehensive form	Consultant must show proof they have this coverage.	
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**EXCESS LIABILITY**

XX	umbrella form	bodily injury and property damage		
—	other than umbrella	combined	\$1,000,000.	\$1,000,000.

—	<b>PROFESSIONAL LIABILITY</b>	\$1,000,000.	\$1,000,000.
	* Policy to be written on a claims made basis		

The certification or proof of insurance must contain a provision for notification to the City, and the City's contracted law enforcement provider if applicable, thirty (30) days in advance of any material change in coverage or cancellation.

The successful Proposer shall furnish to the City the certification or proof of insurance required by the provisions set forth above, within ten (10) days after notification of award of contract.

## **5. Small Business Enterprise Program**

The Pompano Beach City Commission has established a voluntary Small Business Enterprise (SBE) Program to encourage and foster the participation of Small Business Enterprises in the central procurement activities of the City. The City of Pompano Beach is strongly committed to ensuring the participation of Small Business Enterprises (SBE's) as contractors and subcontractors for the procurement of goods and services. The definition of a SBE, for the purpose of the City's voluntary program, is taken from the State of Florida Statute 288.703(1).

As of the date of publication of this solicitation, a small business means an independently owned and operated business concern that employs 200 or fewer permanent full-time employees and that, together with its affiliates, has a net worth of not more than \$5 million or any firm based in Florida that has a Small Business Administration 8(a) certification. As applicable to sole proprietorships, the \$5 million net worth requirement shall include both personal and business investments.

The City encourages all firms to undertake good faith efforts to identify appropriate Small Business Enterprise partners. Sources of information on certified Small Business Enterprises include the Broward County Small Business Development Division, the State of Florida Office of Supplier Diversity, South Florida Water Management District, and other agencies throughout the State. The City includes links to these organizations from the City's website [www.mypompanobeach.org](http://www.mypompanobeach.org). Please indicate in your response if your firm is a certified Small Business Enterprise.

**The City has set a 5% voluntary Small Business Enterprise Goal for this project. SBE Forms are located at the end of this solicitation, and all firms responding must return a response of participation or non-participation in order to be considered for evaluation purposes.**

Please indicate in your response if your firm is a certified Small Business Enterprise, and include the completed "Good Faith Effort Report" form with your proposal. SBE forms are included at the end of this solicitation. Proposers should submit Exhibit A, detailing the list of SBE firms to be used on the proposed contract, and a completed Letter of Intent, Exhibit B, for all participating SBE firms. Submit Exhibit C listing SBE firms that were solicited but not selected. Submit Exhibit D explaining your firm's good faith efforts to include SBE firms on this contract.

**6. Local Business Program**

On March 23, 2010, the City Commission approved a Resolution establishing a Local Business Program, a policy to increase the participation of City of Pompano Beach businesses in the City's procurement process.

You can view the list of City businesses that have a current Business Tax Receipt on the City's website, and locate local firms that are available to perform the work required by the bid specifications. The business information, sorted by business use classification, is posted on the webpage for the Business Tax Receipt Division: [http://mypompanobeach.org/pages/department\\_directory/development\\_services/business\\_tax\\_receipt\\_division/pdfs/FAQ\\_sheet\\_BTR.pdf](http://mypompanobeach.org/pages/department_directory/development_services/business_tax_receipt_division/pdfs/FAQ_sheet_BTR.pdf)

**The City has set a 5% voluntary Local Business goal for this project. Local Business program forms are located at the end of this solicitation, and all firms responding must return a response of participation or non-participation in order to be considered for evaluation purposes.**

The City of Pompano Beach is strongly committed to insuring the participation of City of Pompano Beach Businesses as contractors and subcontractors for the procurement of goods and services. Proposers are encouraged to participate in the City of Pompano Beach's voluntary Local Business Program by including, as part of their submittal package, the Local Business Participation Form, listing the local businesses that will be used on the contract, and the Letter of Intent Form from each local business that will participate in the contract. Proposers should utilize businesses that are physically located in the City of Pompano Beach with a current Business Tax Receipt. Proposers who are unable to meet the recommended voluntary goals should also provide the Local Business Unavailability Form, listing firms that were contacted but not available, and the Good Faith Effort Report describing the efforts made to include local business participation in the contract.

**7. Selection/Evaluation Process**

A Selection/Evaluation Committee will be appointed to select the most qualified firm. The Selection/Evaluation Committee will present their findings to the City Commission and, upon Commission approval, will negotiate a contract with the most qualified firm.

Proposals will be evaluated using the following criteria.

	<b><u>Criteria</u></b>	<b><u>Point Range</u></b>
1.	Ability to provide products and services as determined by qualifications, staff and financial stability	0-20
2.	Overall responsiveness to the RFP	0-10
3.	Proposed cost of products and services	0-20
4.	Quality of references	0-5

5.	Work plan and project deadline compliance	0-15
6.	System features and overall reliability	0-15
7.	Experience working on similar projects	0-15
	Total	0-100

The Committee has the option to use the above criteria for the initial ranking to short-list Proposers and to use an ordinal ranking system to score short-listed Proposers following presentations (if deemed necessary) with a score of “1” assigned to the short-listed Proposer deemed most qualified by the Committee.

Each firm should submit documentation that evidences the firm’s capability to provide the services required for the Committee’s review for short listing purposes. After an initial review of the Proposals, the City may invite Proposers for an interview to discuss the proposal and meet firm representatives, particularly key personnel who would be assigned to the project. Should interviews be deemed necessary, it is understood that the City shall incur no costs as a result of this interview, nor bear any obligation in further consideration of the submittal.

When more than three responses are received, the committee shall furnish the City Commission (for their approval) a listing, in ranked order, of no fewer than three firms deemed to be the most highly qualified to perform the service. If three or less firms respond to the RFP, the list will contain the ranking of all responses.

The City Commission has the authority to (including, but not limited to); approve the recommendation; reject the recommendation and direct staff to re-advertise the solicitation; or, review the responses themselves and/or request oral presentations and determine a ranking order that may be the same or different from what was originally presented to the City Commission.

**8. Hold Harmless and Indemnification**

Proposer covenants and agrees that it will indemnify and hold harmless the City and all of its officers, agents, and employees from any claim, loss, damage, cost, charge or expense arising out of any act, action, neglect or omission by the Proposer, whether direct or indirect, or whether to any person or property to which the City or said parties may be subject, except that neither the Proposer nor any of its subcontractors will be liable under this section for damages arising out of injury or damage to persons or property directly caused by or resulting from the sole negligence of the City or any of its officers, agents or employees.

**9. Retention of Records and Right to Access**

The selected firm shall maintain during the term of the contract all books of account, receipt invoices, reports and records in accordance with generally accepted accounting practices and standards. The form of all records and reports shall be subject to the approval of the City's Internal Auditor. Recommendation for changes, additions, or deletions by the City's Internal Auditor must be complied with by the selected firm. The City's Internal Auditor must be permitted during normal business hours to audit and examine the books of account, reports, and records relating to this contract. The selected firm shall maintain and make available such records and files for the duration of the contract and retain them until the expiration of three years after final payment under the contract.

**10. Communications**

No negotiations, decisions, or actions shall be initiated or executed by the firm as a result of any discussions with any City employee. Only those communications, which are in writing from the City, may be considered as a duly authorized expression on behalf of the City. In addition, only communications from firms that are signed and in writing will be recognized by the City as duly authorized expressions on behalf of firms.

**11. No Discrimination**

There shall be no discrimination as to race, sex, color, age, religion, or national origin in the operations conducted under any contract with the City.

**12. Independent Contractor**

The selected firm will conduct business as an independent contractor under the terms of this contract. Personnel services provided by the firm shall be by employees of the firm and subject to supervision by the firm, and not as officers, employees, or agents of the City. Personnel policies, tax responsibilities, social security and health insurance, employee benefits, purchasing policies and other similar administrative procedures applicable to services rendered under this agreement shall be those of the firm.

**13. Staff Assignment**

The City of Pompano Beach reserves the right to approve or reject, for any reasons, Proposer's staff assigned to this project at any time. Background checks may be required.

**14. Contract Terms**

The contract resulting from this RFP shall include, but not be limited to the following terms:

The contract shall include as a minimum, the entirety of this RFP document, together with the successful Proposer's proposal. Contract shall be prepared by the City of Pompano Beach City Attorney.

If the City of Pompano Beach defends any claim, demand, cause of action, or lawsuit arising out of any act, action, negligent acts or negligent omissions, or willful misconduct of the contractor, its employees, agents or servants during the performance of the contract, whether directly or indirectly, contractor agrees to reimburse the City of Pompano Beach for all expenses, attorney's fees, and court costs incurred in defending such claim, cause of action or lawsuit.

**15. Waiver**

It is agreed that no waiver or modification of the contract resulting from this RFP, or of any covenant, condition or limitation contained in it shall be valid unless it is in writing and duly executed by the party to be charged with it, and that no evidence of any waiver or modification shall be offered or received in evidence in any proceeding, arbitration, or litigation between the parties arising out of or affecting this contract, or the right or obligations of any party under it, unless such waiver or modification is in writing, duly executed as above. The parties agree that the provisions of this paragraph may not be waived except by a duly executed writing.

**16. Survivorship Rights**

This contract resulting from this RFP shall be binding on and inure to the benefit of the respective parties and their executors, administrators, heirs, personal representative, successors and assigns.

**17. Termination**

The contract resulting from this RFP may be terminated by the City of Pompano Beach without cause upon providing contractor with a least sixty (60) days prior written notice.

Should either party fail to perform any of its obligations under the contract resulting from this RFP for a period of thirty (30) days after receipt of written notice of such failure, the non-defaulting part will have the right to terminate the contract immediately upon delivery of written notice to the defaulting part of its election to do so. The foregoing rights of termination are in addition to any other rights and remedies that such party may have.

**18. Manner of Performance**

Proposer agrees to perform its duties and obligations under the contract resulting from this RFP in a professional manner and in accordance with all applicable local, federal and state laws, rules and regulations.

Proposer agrees that the services provided under the contract resulting from this RFP shall be provided by employees that are educated, trained and experienced, certified and licensed in all areas encompassed within their designated duties. Proposer agrees to furnish the City of Pompano Beach with all documentation, certification, authorization, license, permit, or registration currently required by applicable laws or rules and regulations. Proposer further certifies that it and its employees are now in and will maintain good standing with such governmental agencies and that it and its employees will keep all license, permits, registration, authorization or certification required by applicable laws or regulations in full force and effect during the term of this contract. Failure of Proposer to comply with this paragraph shall constitute a material breach of contract.

**19. Acceptance Period**

Proposals submitted in response to this RFP must be valid for a period no less than one hundred twenty (120) days from the closing date of this solicitation.

**20. RFP Conditions and Provisions**

The completed and signed proposal (together with all required attachments) must be returned to City on or before the time and date stated herein. All Proposers, by submission of a proposal, shall agree to comply with all of the conditions, requirements and instructions of this RFP as stated or implied herein. All proposals and supporting materials submitted will become the property of the City.

Any alteration, erasure, or interlineations by the Proposer in this RFP shall constitute cause for rejection. Exceptions or deviations to this proposal may not be added after the submittal date.

All Proposers are required to provide all information requested in this RFP. Failure to do so may result in disqualification of the proposal.

The City reserves the right to postpone or cancel this RFP, or reject all proposals, if in its sole discretion it deems it to be in the best interest of the City to do so.

The City reserves the right to waive any technical or formal errors or omissions and to reject all proposals, or to award contract for the items herein, in part or whole, if it is determined to be in the best interests of the City to do so.

The City shall not be liable for any costs incurred by the Proposer in the preparation of proposals or for any work performed in connection therein.

**21. Standard Provisions**

a. Governing Law

Any agreement resulting from this RFP shall be governed by the laws of the State of Florida, and the venue for any legal action relating to such agreement will be in Broward County, Florida.

b. Conflict Of Interest

For purposes of determining any possible conflict of interest, each Proposer must disclose if any City employee is also an owner, corporate officer, or an employee of the firm. If any City employee is an owner, corporate officer, or an employee, the Proposer must file a statement with the Broward County Supervisor of Elections pursuant to § 112.313, Florida Statutes.

c. Drug Free Workplace

The selected firm(s) will be required to verify they will operate a "Drug Free Workplace" as set forth in Florida Statute, 287.087.

d. Public Entity Crimes

A person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Florida Statute, Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

e. Patent Fees, Royalties, And Licenses

If the selected Proposer requires or desires to use any design, trademark, device, material or process covered by letters of patent or copyright, the selected Proposer and his surety shall indemnify and hold harmless the City from any and all claims for infringement by reason of the use of any such patented design, device, trademark, copyright, material or process in connection with the work agreed to be performed and shall indemnify the City from any cost, expense, royalty or damage which the City may be obligated to pay by reason of any infringement at any time during or after completion of the work.

f. Permits

The selected Proposer shall be responsible for obtaining all permits, licenses, certifications, etc., required by federal, state, county, and municipal laws, regulations, codes, and ordinances for the performance of the work required in these specifications and to conform to the requirements of said legislation.

g. Familiarity With Laws

It is assumed the selected firm(s) will be familiar with all federal, state and local laws, ordinances, rules and regulations that may affect its services pursuant to this RFP. Ignorance on the part of the firm will in no way relieve the firm from responsibility.

h. Withdrawal Of Proposals

A firm may withdraw its proposal without prejudice no later than the advertised deadline for submission of proposals by written communication to the General Services Department, 1190 N.E. 3<sup>rd</sup> Avenue, Building C, Pompano Beach, Florida 33060.

i. Composition Of Project Team

Firms are required to commit that the principals and personnel named in the proposal will perform the services throughout the contractual term unless otherwise provided for by way of a negotiated contract or written amendment to same executed by both parties. No diversion or substitution of principals or personnel will be allowed unless a written request that sets forth the qualifications and experience of the proposed replacement(s) is submitted to and approved by the City in writing.

j. Variances

While the City allows Proposers to take variances to the RFP terms, conditions, and specifications, the material nature, number, and extent of variances taken will be considered in determining proposal responsiveness and in allocating proposal evaluation points.

k. Invoicing/Payment

All invoices should be sent to City of Pompano Beach, Accounts Payable, P.O. Box 1300, Pompano Beach, Florida, 33061. In accordance with Florida Statutes, Chapter 218, payment will be made within 45 days after receipt of a proper invoice.

**22. Questions and Communication**

All questions regarding the RFP are to be submitted in writing to the Purchasing Office, 1190 N.E. 3rd Avenue, Building C (Front), Pompano Beach, Florida 33060, fax (954) 786-4168, or email [purchasing@copbfl.com](mailto:purchasing@copbfl.com). All questions must include the inquiring firm's name, address, telephone number and RFP name and number. Questions must be received at least seven (7) calendar days before the scheduled solicitation opening. Oral and other interpretations or clarifications will be without legal effect. Any addendum necessary to answer questions will be posted to the City's website, and it is the Proposer's responsibility to obtain all addenda before submitting a response to the solicitation.

**23. Addenda**

The issuance of a written addendum is the only official method whereby interpretation, clarification, or additional information can be given. If any addenda are issued to this solicitation the City will attempt to notify all known prospective Proposers, however, it shall be the responsibility of each Proposer, prior to submitting their response, to contact the City Purchasing Office at (954) 786-4098 to determine if addenda were issued and to make such addenda a part of their proposal.

**PROPOSAL SIGNATURE PAGE**  
**RFP H-28-13, LICENSE PLATE RECOGNITION SYSTEM AND/OR SECURITY CAMERAS**

To: The City of Pompano Beach, Florida

The below signed hereby agrees to furnish the proposed services under the terms stated subject to all instructions, terms, conditions, specifications, addenda, legal advertisement, and conditions contained in the RFP. I have read the RFP and all attachments, including the specifications, and fully understand what is required. By submitting this signed proposal, I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this proposal.

Proposal submitted by:

Name (printed) \_\_\_\_\_ Title \_\_\_\_\_

Company (Legal Registered) \_\_\_\_\_

Federal Tax Identification Number \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Addendum Acknowledgment - Proposer acknowledges that the following addenda have been received and are included in his/her proposal:

Addendum No. \_\_\_\_\_ Date Issued \_\_\_\_\_

Variances: State any variations to specifications, terms and conditions in the space provided below or reference in the space provided below all variances contained on other pages of RFP, attachments, or proposal pages. No variations or exceptions by the Proposer will be deemed to be part of the proposal submitted unless such variation or exception is listed and contained within the proposal documents and referenced in the space provided below. If no statement is contained in the below space, it is hereby implied that your proposal complies with the full scope of this RFP.

Variances: \_\_\_\_\_

## System Features Matrix

Using the following System Features Matrix, indicate if the proposed solution will support the feature listed and/or describe the proposed solution for the feature. Please explain if the feature is not fully supported in the solution proposed and provide pricing for the additional equipment/software/licensing necessary to fully support the feature. Some fields will require a brief explanation.

General System Requirements	Yes	No	Explanation/Notes
LPR software analytics and server to process video surveillance of license plates, check against locally downloaded databases, and automatically issue email alerts whenever a plate is flagged against a Be-On-Lookout (BOLO) list.			
High-quality standard multi-megapixel IP CCTV camera with wireless antenna, certified to work with the LPR software analytics utilizing H.264 image compression.			
Point-to-Multipoint wireless network in each of three Parks, total bandwidth of up to 200 Mbps per Park, operating in the 5.4 GHz range for transmission of images from each camera back to a central aggregation receiver in the Park.			
Point-to-Point wireless network from each Park to the Sheriff's tower, total bandwidth of up to 250 Mbps per Park, operating in the licensed 2.4-2.9 GHz range for transmission of License Plate and car image back to the Sheriff's Office for processing by the server-side software analytics.			
Network Video Recorder system, backed by a multi-terabyte RAID storage system using standards-based non-proprietary software			
Windows 2008 or later server. Server typically requires minimum dual core/quad core Intel process 2 GHz or higher, minimum 16 GB memory, 500 GB hard drive.			
Suite of software components that work together to provide system management, plate/alert monitoring, real-time LPR-based alerts, alert policy configuration, and user notification configuration. The software shall provide connectivity to NCIC, State Crime Data, and local customized hotlists.			
Capable of reading license plates at over 90% accuracy			
Supports license plates from all states			
Works with H.264, Mpeg4, or Mpeg video encoding and compression			
Capable of capturing LPR information when the speed of a car is between 0 and up to 50 mph			
License plate image between 80-300 pixels			

IP digital cameras providing real time video feed back to centralized location; all camera feeds are processed at centralized location; most LPR software analytics have been certified with specific IP camera models			
Support monochrome, grayscale, or color plates			
Read both alpha and numerical plates, including vanity plates			
Maximum distance of 120 feet from camera to car			
Maximum angle of 30 degrees			
I/O interfacing via RJ-45 ports			
User-friendly GUI for reporting and configuration			
Advanced search engine for retrieving data			
LPR software shall be able to compare the plate to multiple databases searching for matches; databases to be identified by Pompano Beach Sheriff's Office			
LPR system shall be able to identify specific camera, plate number, time/date stamp			
LPR system shall be able to retain captured plate data and an image of the car and plate in an integrated network video recorder			
LPR system software shall perform ambiguous searches (using character wildcards) to improve accuracy			
LPR system software shall issue an alert within milliseconds if a vehicle is suspect			
LPR system software shall feature multi-level alarm levels for prioritization, for example: Wants, Warrants, and Amber Alerts			
LPR system software shall operate with data from different sources			

<b>IP CCTV Camera Requirements</b>	Yes	No	Explanation/Notes
2-3 megapixel resolution, minimum 640x480			
8-10 frames per second (dependent upon coding, resolution, and stream configuration)			
H.264, Mpeg4, or Mpeg video encoding and compression			
Day/night capability with infrared illuminators			
Sensitivity down to 0.03 lux			
Megapixel lenses: All lenses shall be designed and tested to deliver optimal image quality for the camera. It shall be the responsibility of the LPR integrator to provide the most suitable lens to approximate the specified fields of vision as shown on the drawings			

Camera dome on a mounting platform with an external weatherproof aluminum casing enclosing the camera. All cameras shall be provided with integrated housing with heater and blower, complete with mounting hardware and brackets			
Housing selection shall best conform to the size and shape of the area to be monitored, and the accessibility of the equipment (special attention shall be given to the potential for vandalism and disabling the camera). Refer to drawings for plan view of camera location and coverage			
Port: RJ-45 connector for 100Base-TX Auto MDI/MDI-X for camera to be physically connected to a wireless subscriber unit			

<b>Point-to-Multipoint Base Station Requirements</b>	Yes	No	Explanation/Notes
Minimum bandwidth 100 Mbps asymmetric per Park; up to 250 Mbps desired for Community Park			
System shall operate at 5.4 GHz and shall not interfere with the City's existing Canopy system operating at 5.7 GHz. The system shall support multiband 4.9 to 6 GHz in the same unit			
System shall automatically switch across bands whenever it encounters interference, including any that may come from radar in the area. This switch will occur in such a way as to not impact or delay transmission of digital camera output			
OFDM, MIMO 2x2/diversity to enable near Line Of Sight (nLOS) and non Line Of Sight (NLOS) signal reception			
Support up to 32 subscriber unit radios simultaneously			
Dual polarized antenna			
AES 128 encryption			
Hardened to operate in harsh conditions			
Temperature -31F to 140F			

<b>Subscriber Unit Radios Requirements</b>	Yes	No	Explanation/Notes
PoE port for connectivity to high resolution fixed video cameras and LPR cameras			
Support transmission rates of 5, 10, 20, to 50 Mbps			
Small form factor MIMO subscriber units			
Minimum range 5 miles; long range up to 25 miles			
Hardened to operate in harsh conditions			
Ethernet interface 10/100BaseT			

<b>Backhaul Requirements</b>	Yes	No	Explanation/Notes
A high-capacity licensed (2.4-2.9 GHz range) Point-to-Point radio solution capable of delivering up to 200 Mbps per link			
2x2 MIMO technology and diversity to enable near Line Of Sight (nLOS) and non Line Of Sight (NLOS) signal reception			
OFDM modulation (BPSK, QPSK, 16-QAM, 64-QAM)			
System shall operate at licensed 2.4-2.9 GHz and shall not interfere with the City's existing Canopy system operating at 5.7 GHz. System shall not be impacted by wireless devices in homes/businesses			
System shall automatically switch across bands whenever it encounters interference, including any that may come from radar in the area. This switch will occur in such a way as to not impact or delay transmission of digital camera output.			
Outdoor Unit Base Station with integrated antenna			
Transmission power up to 25 dBm			
Long range up to 75 miles			
Indoor Unit supporting 6 ports, 10/100/1000BaseT			
Up to 200 Mbps net aggregate throughput per Park			
Maximum frame size 2048 bytes			
RJ-45 connector			
Comply with all Ethernet transport standards and able to seamlessly integrate with a backbone IP network			
Support multiband 4.8 to 6 GHz in the same unit			
Channel bandwidth from 5 MHz to 40 MHz			
Configurable maximum information rate			
AES 128 encryption			
Hardened to operate in harsh conditions			
Temperature -31F to 140F			

<b>Database Field/Flags Requirements</b>	Yes	No	Explanation/Notes
Stolen vehicles; lost or stolen plates			
Wanted for an AMBER/Silver alerts			
Expired registration			
Expired insurance			
Wanted as "persons of Interest" for any investigation			
Vehicles associated with wanted felons, parolees, etc.			
Any locally created databases(hit and run vehicles, sex offenders, arsonists, drug trafficking, parking tickets, etc.)			
Suspended driver's license			

Outstanding criminal warrant			
Outstanding municipal taxes or other fines and fees			
Wanted for any other Law Enforcement or government purpose			

<b>Video Storage Requirements</b>	Yes	No	Explanation/Notes
Network Video Recorders (NVR) shall be utilized to record and manage the IP video streams			
Video Management System (DVMS) will provide high resolution digital video recording and monitoring capabilities.			
DVMS/NVR system shall be NICE NiceVision Net 2.5 or approved equal			
The initial LPR system deployment of 11 cameras will require approximately 4 TB of data storage for 10 days. Subsequent deployment of up to 50 cameras will require approximately 24 TB of data storage for 10 days.			
Following the 10-day storage, the Sherriff's Office shall be able to automatically download images for longer term storage, as desired.			
Separate RAID5 servers with four hot-spare drives, each storing up to 6 TB of data and video, which shall provide a disk capacity for 24 TB of storage.			
One 19 inch x 72 inch x 36 inch rack with 120 VAC and 30 amp power for the system server and storage.			
Network Video Recorder (NVR) shall be modular in design allowing for ease of scalability.			
The NVR shall employ a digital video data transmission/recording solution with the ability to interconnect with an IP network.			
Video streams shall be delivered by remote cameras transmitted via a wireless radio network and shall be recorded upon detection of motion.			

<b>Power Box for Hard Wired Cameras Requirements</b>	Yes	No	Explanation/Notes
Low-profile, durable NEMA 4 enclosure			
Meet IP66 standards to prevent the induction of minute particles			
Pole mount option and clips			
Switch-selectable power input 120 VAC or 240 VAC, 50/60 Hz			
4-6 amps of power at 12 VDC			
Complements outdoor camera housings			
Designed for direct conduit connections			
Includes video and power surge protection			

<b>Solar Power Camera Requirements</b>	Yes	No	Explanation/Notes
Integrated solar panels			
Same requirements as the IP cameras in the matrix preceding called "IP CCTV Camera Requirements"			

CITY OF POMPANO BEACH, FLORIDA  
 SMALL BUSINESS ENTERPRISE  
 PARTICIPATION FORM

RPF Number & Title: \_\_\_\_\_

Proposer's Name: \_\_\_\_\_

<u>Name of Firm</u>	<u>Contact Person, Telephone</u>	<u>Type of Work to be Performed</u>	<u>Contract Amount</u>

***(PROPOSER SHOULD INCLUDE CERTIFICATES FOR ANY FIRMS LISTED ON THIS PAGE)***

FOR CITY USE ONLY

Total Contract Amount \_\_\_\_\_

Total SBE Contract Amount \_\_\_\_\_

Are documents requested submitted accordingly

\_\_\_ YES \_\_\_ NO

SBE EXHIBIT "A"

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

RFP Number \_\_\_\_\_

TO: \_\_\_\_\_  
(Name of Prime or General Proposer)

The undersigned intends to perform subcontracting work in connection with the above contract as (check below)

\_\_\_\_\_ an individual \_\_\_\_\_ a corporation  
\_\_\_\_\_ a partnership \_\_\_\_\_ a joint venture

The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

at the following price: \_\_\_\_\_

\_\_\_\_\_  
(Date) \_\_\_\_\_ (Name of SBE Contractor)

(address): \_\_\_\_\_  
\_\_\_\_\_

BY: \_\_\_\_\_

SBE EXHIBIT "B"

SMALL BUSINESS ENTERPRISE (SBE)  
UNAVAILABILITY FORM

RFP # \_\_\_\_\_

I, \_\_\_\_\_  
(Name and Title)

of \_\_\_\_\_, certify that on the \_\_\_\_\_ day of

\_\_\_\_\_, \_\_\_\_\_, I invited the following SBE CONTRACTOR(s) to bid work items to be performed in the City of Pompano Beach:

SBE Contractor Name, Address	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials/Labor, Labor Only, etc.)

Said SBE CONTRACTOR(s):

\_\_\_ Did not bid in response to the invitation

\_\_\_ Submitted a bid which was not the low responsible bid

\_\_\_ Other: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Attach additional documents as available.

SBE EXHIBIT "C"

GOOD FAITH EFFORT REPORT

RFP # \_\_\_\_\_

1. What portions of the contract have you identified as SBE opportunities?


2. Did you provide adequate information to identified SBE? Please comment on how you provided this information.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Did you send written notices to SBEs?

Yes                       No

If yes, please include copy of the notice and the list of individuals who were forwarded copies of the notices.

4. Did you advertise in local publications?

Yes                       No

If yes, please attach copies of the ads, including name and dates of publication.

5. Did you contact any organizations with large constituents of SBE members for possible sub-contractors? Please attach list of resource organizations used.

6. What type of efforts did you make to assist SBEs in contracting with you ?

\_\_\_\_\_

\_\_\_\_\_

7. List the SBEs you will utilize and subcontract amount.

_____	\$ _____
_____	\$ _____
_____	\$ _____

8. Other comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Note: Please attach the unavailability letters with this report.

SBE EXHIBIT "D"



LOCAL BUSINESS  
LETTER OF INTENT TO PERFORM AS A LOCAL SUBCONTRACTOR

RFP Number \_\_\_\_\_

TO: \_\_\_\_\_  
(Name of Prime or General Bidder)

The undersigned City of Pompano Beach business intends to perform subcontracting work in connection with the above contract as (check below)

\_\_\_\_\_ an individual \_\_\_\_\_ a corporation

\_\_\_\_\_ a partnership \_\_\_\_\_ a joint venture

The undersigned is prepared to perform the following work in connection with the above Contract, as hereafter described in detail:

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at the following price: \_\_\_\_\_

\_\_\_\_\_  
(Date) (Name of Local Business Contractor)

(address): \_\_\_\_\_

BY: \_\_\_\_\_

LOCAL BUSINESS EXHIBIT "B"

LOCAL BUSINESS  
UNAVAILABILITY FORM

RFP # \_\_\_\_\_

I, \_\_\_\_\_  
(Name and Title)

of \_\_\_\_\_, certify that on the \_\_\_\_\_ day of

\_\_\_\_\_, \_\_\_\_\_, I invited the following LOCAL BUSINESSES to bid work items to be performed in the City of Pompano Beach:

Business Name, Address	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials/Labor, Labor Only, etc.)

Said Local Businesses:

\_\_\_ Did not bid in response to the invitation

\_\_\_ Submitted a bid which was not the low responsible bid

\_\_\_ Other: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Note: Attach additional documents as available.

LOCAL BUSINESS EXHIBIT "C"

GOOD FAITH EFFORT REPORT  
LOCAL BUSINESS PARTICIPATION

RFP # \_\_\_\_\_

1. What portions of the contract have you identified as Local Business opportunities?

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2. Did you provide adequate information to identified Local Businesses? Please comment on how you provided this information.

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3. Did you send written notices to Local Businesses?

Yes     No

If yes, please include copy of the notice and the list of individuals who were forwarded copies of the notices.

4. Did you advertise in local publications?

Yes     No

If yes, please attach copies of the ads, including name and dates of publication.

5. What type of efforts did you make to assist Local Businesses in contracting with you ?

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7. List the Local Businesses you will utilize and subcontract amount.

_____	\$ _____
_____	\$ _____
_____	\$ _____

8. Other comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

LOCAL BUSINESS EXHIBIT "D"