AUTOMATED GATE ACCESS PROJECT PLAN

Chief David Conklin

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TUXEDO PARK POLICE DEPARTMENT

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**David Conklin
Chief of Police**

<u>AUTOMATED GATE ACCESS</u>

With the goal of increasing efficiency, expediting entry and strengthening security at our gates, we have explored several different options of automated gate access technology. With the automated gate access system, residents and authorized visitors can benefit from hassle free entry into Tuxedo Park. We have conducted extensive research and online demos of the technology that is available for automatic gate opening systems and found two different types of technology used; RFID and ALPR.

Radio Frequency Identification (RFID) Tags or Transponders Technology
RFID technology is fairly simple, a proximity reader reads an issued RFID tag and the gate opens. A resident would be issued a tag that they would place in their vehicle and as they approach the RFID reader, the tag and the reader would communicate with each other and automatically open the gate.

Automatic License Plate Recognition (ALPR) Technology
The other technology that is available is ALPR. This system operates by entering an authorized license plate number into a database and anytime that vehicle approaches the gate, it automatically opens the gate.

<u>Costs:</u>
Written quotes were received by the following companies/vendors:

1. Ketcham Fencing- RFID Technology
    - $14,676 for Main Gate
    - $11,814 for South Gate
    - $22,820 Window Stickers (2,000 stickers)
      Total: $49,310

2. Secure Tech Systems – RFID Technology with expandable features (TEKWav)
    - $12,820 for Main Gate
    - $11,450 for South Gate
    - $23,000 Window Stickers (2,000)
      Total: $47,270

3. Advanced Video Systems (AVS) – RFID Technology
    - $20,000 Main Gate
    - $20,000 South Gate
    - $22,000 Tags
      Total: $62,000

4. **Safe Passage Solutions LLC** – License Plate Reader (ALPR) Technology
   - $13,938 Labor and equipment for Main and South Gates
   - $6,000 Safe Passage Services
   - No Tags
   - Total: $19,938
   - Monthly fee of $500 for unlimited support, updates and cloud storage
   - Pricing is based on the amount of homes in the village, not the amount of vehicles. Safe Passage Solutions added 100 additional homes to the 330 that we gave them as a safety net.

The Board originally approved RIFD Technology from TEKWave

At the September BOT Meeting the Board approved using this system from TEKWave installed by the company SecureTech Systems. However, because of the advanced technology, available features and costs, we have decided to use Safe Passage Solutions LLC and their Automatic License Plate Recognition technology for our needs.

Recently, the Mayor has asked the Board to change their support for TEKWave to SafePassage allowing the Mayor and I to proceed with the installation now. The Mayor will resolve to make the change of vendors at the October meeting.

Safe Passage Solutions Company Profile

Safe Passage Solutions is based in Orlando, Florida. They have been in the software and IT industry for over 40 years. Their technology also has a built-in resident management system which is a cell phone App and/or a website where they can log in and pre-register guests and visitors into the database. When that guest arrives at the gate the gate will automatically open and the resident is sent a text message that their guest has arrived at the gate. This can be done for frequent or even one-time visitors.

See their company website profile below:

The team at Safe Passage Solutions is focused on providing an easy to use seamless visitor access control system that is affordable. We bring an inordinate level of expertise to the table, which includes Microsoft Certifications and over 40 years of active experience in the industry of programming that spans many different programmatic languages and tools. Today, with the ever-changing evolution and demands of technology needs our team continues to stay abreast of the different trends, needs and problems that arise as new products are delivered by folks like Apple and Microsoft. And as a testament to our implementation of technology we have been able to utilize some of the most up-to date proven technologies currently available on the market thereby arming ourselves with some of the best security methodologies, while enjoying amazing transactional speed in our applications. One of our most compelling benefits…for our clients is our utilization of the 'Cloud'. As part of a changing I.T Industry many companies have started to turn to the 'Cloud' for storage rather than hiring more IT staff to run, maintain and monitor on site servers. As a result of this 'Cloud' implementation, we have been able to cut out an entire layer of I.T Staff allowing us to have the competitive rates we currently have. Allow us to become your visitor access control software provider!

Safe Passage Solutions partners with vendors for installation of their equipment and software. The company that services this area is Rockland Security which is based out of Spring Valley, NY. Their Company Profile is as follows:

Rockland Security and Surveillance (Sub-Contractor of Safe Passage Solutions)
At Rockland Security and Surveillance, we have the proven and tested skills to identify, install and deploy a wide array of security technologies. We are proud of our capability to integrate these security technologies into a system designed specifically for your need that's affordable, reliable and easy to maintain. Our technical security professionals are experienced in installing alarm, security camera and sound/motion detection systems in large facilities such as factory's and commercial facilities. Most of our staff has military intelligence backgrounds that make a key difference when designing your security/surveillance system.

Functionality of the Automatic License Plate Recognition
The Safe Passage Solutions system operates by a camera reading a license plate and communicates with a database. If the license plate is in the database as an approved entry, the gate opens. The database retains information of the date and time the vehicle entered so the police department can obtain that information through reports. Once the vehicle is entered into the system, it will have access to both the Main and South Gates.

* The vendor will be updating the system between now and the end of January 2022 that will allow us to control access between the Main and South Gates as well as set times that a certain license plate may enter. Example: A landscaping contractor would be given main gate access Monday-Friday between 8:00 am-4:00pm that is consistent with the village code of noise bearing work days and times.

Main Gate Equipment
A License Plate Recognition camera will be mounted between 20-35 feet from the booth and between 3-10 feet in height (We have specified the lowest height as possible). In order for this to work while maintaining pristine aesthetics at the main gate, it is necessary to install a median approximately 20 feet from the booth. The ALPR camera will be mounted to a pole approximately 3 feet high and the surrounding area of the median will have shrubbery that will hide the pole from view, giving this area a pleasing appearance.

* These cameras have infra-red technology and most times do not require additional lighting to work at night. In rare cases, a light may have to be installed

South Gate Equipment
The ALPR camera will be mounted to a pole approximately 20 feet from the South Gate and approximately 3-4 feet high. This pole would be on the side of the road next to an existing sign post.

Resident Access
The database is cloud based through a cell phone APP or website. Village residents must go into the App or website and create an account. For those residents who do not have a cell phone or computer or need assistance creating an account, the police department can do it for them.

Once the resident has an account and the police department enters them into the system, the gate will open automatically when their vehicle approaches the gate (main gate and South gate access).

Visitor Management System
This feature is optional and has many benefits including the residents would have the capability of allowing access to guests, employees and vendors by going into their account and adding that person's information, thus giving them access. This can be done as a one-time entry, continuous entry or for a temporary entry such as one week or two weeks, etc... Once the person is entered into the system and they come to the gate, the gate will open automatically and the resident can if they choose, receive a text that their guest has arrived.

Redundancy
The police officer in the booth will be able to open and close the gate as needed in case of system failure or other unforeseen problem.

Emergency Vehicles
In the event of a fire call, medical call or other type of emergency, the police officer in the booth would open the gate to allow those vehicles entry as they do now.

Proposed Plan:

Goal:
- Sign Contract to purchase and Install Safe Passage Solutions LPR Technology for a total of $19,938 as soon as possible.

Timeline:
- Installation of equipment at both gates on or before November 15, 2021.
- Disseminate data sheets to residents through Mayor's Message and Water Billing in Mid-October to advise them of new procedure with instructions on how to create an account.
- Collect data sheets and payment and enter residents and authorized guests into the Safe Passage Database.
- Launch by December 1, 2021 and continue to add residents and authorized guests as they enroll.
- All residents and authorized guests entered into system by mid-November.
- Residents will have continuous access to add visitors, vendors and contractors.

Vehicle Processing Fees
All Rates are One Time Fees through their experation date.

Residents & Non-resident Property owners – No experation as long as land owner

First two resident vehicles - $29.95 - License Plate registration required
All remaining resident vehicles in same household - $15.95 - License Plate registration required
Reletives -$15.95 - License Plate registration required

Domestics - $15.95 - License Plate registration required
Vendors/Contractors – License Plate registration required at no charge.

TPS - Annual
Parents – $39.95 - License Plate registration required
Domestics – $15.95 - License Plate registration required
Faculty & Employees – $15.95 - License Plate registration required
One-off pick ups - License Plate registration required at no charge.
Car services - License Plate registration required at no charge.

Tuxedo Club - Annual
Members – $39.95
Employees – $15.95
Member Guests - License Plate registration required at no charge. Members responsible.
Large event guests - License Plate registration optional at no charge. Club staff responsible.

Other
All Vendors and contractors - License Plate registration required at no charge. Residents & Non-resident Property owners responsible.

Payment Methods
Pay online by credit card on the Village Website
Pay by check at the Police Station or Village Office
Cash is not accepted

New System - Operating Costs and Revenues
Operating costs $500 per month includes support and data storage.

Estimated revenues expected with the new system would be:

Residents 2 vehicles @ $29.95 = 600 vehicles=$17,970
Non-Residents 230 @$15.95=$3,668.50
TPS Employees 40 @ $15.95=$638 (A lump Sum Payment is an Option)
TPS Parents 150 @ $39.95=$5,992.50 (A lump Sum Payment is an Option)
Club employees 25 @$15.95=$398.75 (A lump Sum Payment is an Option)
Club members 380 @$39.95=$15,181 (A lump Sum Payment is an Option)
Estimated Total Revenue > $43,848.75

Current Operating Costs and Revenues with Tags and Tag Holder Plates

Current Vehicle Access and associated costs:

The Police Department purchases metal tag holder plates and stickers from Police budget
- Metal plate $5.00 each
- Stickers $3.93 each

Residents are issued the metal tag holder plates and sticker free of charge.
Non-Residents pay $90 for the metal plate and sticker.

Tags Issued:
> Resident Tags issued since 2017 (Last time resident stickers were changed).
> - 1200 Resident tags issued
> - 233 Non-Resident tags issued

Tuxedo Club:
- There are 380 Tuxedo Club members who are non-residents
- 155 tags were sold to Tuxedo Club Members, only (41%)

Tuxedo Park School:
- Approximately 40 Staff and 152 students
- 55 Tags were sold, only (28%)

Total Revenue from Non-Resident Tag sales: **$17,770**

Village Police Department Budget

Currently, the operating cost for tags and metal tag holder plates is expensed from the Police Department budget and the revenues are picked up in the General Fund.

When we switch to the new **Automatic License Plate Recognition (ALPR) Technology from SafePassage** the revenue from processing fees will go to the Police Department instead of the General Fund. The annual expenses will be appropriated from the General Fund.

The revenues will be earmarked for the security and safety of the Park and our present and future gates. The Mayor intends to raise potential of a north and west gate for future debate.

References

I attempted to contact three references that Safe Passage Solutions provided and I described the layout of our community and the priority of Security. Two of the references got back to me. The sum and substance of the conversations are as follows:

Ayala Slann
Ms. Slann is currently the property manager for several communities located in and around Fort Lauderdale, Florida. Her largest community is Imagination Farms which is a gated community of approximately 430 homes and a clubhouse. Ms. Ayala stated that in her experience she has used the decal system (Tags), the RFID system and the APLR system with Safe Passage Solutions. She said that Safe Passage Solutions customer service is second to none, they work together to make the system work best to fit their needs and she is very happy and satisfied with their product.

Carlos Verde
Mr. Verde is the President of the Marbella Community Home Owners Association located in Miami, Florida, a gated community of 350 homes. Mr. Verde stated that he has been using Safe Passage Solutions for several years first starting with the RFID system which he does not recommend using the RFID technology because of some issues

that it created. When Safe Passage Solutions began using APLR technology he switched to that and has been extremely happy with it. Mr. Verde said that the customer service that Safe Passage has is the best he has ever seen anywhere. He said that he highly recommends that we use the APLR Technology for our needs.

Conclusion

The Safe Passage Solutions technology fits our needs to better control access into Tuxedo Park. This system will provide efficiency and will provide another layer of security and control of access. Past issues of people not returning vehicle tags or switching tags between vehicles will be no longer be an issue. Security will be enhanced as the gate will only open to authorized vehicles who are registered in the database. Vehicles that are not registered will be pulled off to the side allowing the police officer to exit the booth and properly vet the person without having residents to sit at the gate waiting for it to open. In addition, we will have a recorded log of the exact date and time a vehicle entered Tuxedo Park and from which point of entry.