December 9, 2019

From: Bernie Adams, System Integration Specialist

To: Pete Montano, Precision Technology Solutions

Subject: City of Hoboken LPR Integration to TIBA

**Overview:** There is a need for integration between the City of Hoboken on-street permit holders system and the TIBA SmartPark parking system. The integration will give the City the flexibility to allow the on-street permit holders to utilize the nearby garage for parking on those days where there is a snow event or other events where it is deemed necessary to eliminate on-street parking. At all other times, the on-street permit holders will not be allowed access to the garage.

On-street permit holders are required to register the license plate associated with their account. Access to the garage during a designated event will utilize the license plate number of the on-street permit holder for access. The City will periodically provide a flat file with the on-street Permit holder’s new or changed information. The flat file will be utilized to setup new license plates and to turn off (block) a license plate.

**Process:** LPR Interface Program will monitor a shared folder on the network/TIBA server. Whenever one or more files are found, the program will process the file(s) and appropriately: setup a new monthly in TIBA SmartPark, update the monthly or set the monthly to blocked. Once the file is processed, it will be moved to an archive folder. After processing and moving all files, the LPR Interface Program will purge any archive files that are older than 60 days.

All actions will be logged during processing. The operator will have the ability to view the contents of the logs for troubleshooting, research, etc.

The City of Hoboken will, periodically, check if any changes have been made to the on-street permit system. City will create a file of the latest changes and write or transfer the file to the shared folder so the data can be processed by the LPR Interface Program. The file can either contain just changes or can contain the entire on-street permit holder list.

All permit holders will be assigned to the same access profile in SmartPark and placed under a specific ‘Company’ in SmartPark. It is expected that the only method that will be utilized to add an on-street permit to the TIBA SmartPark system will be the LPR Interface Program. Manually adding on-street permits via the TIBA SmartPark server interface may cause issues with the LPR Interface Program processing.

Format of Interface File: It is expected that file created for the interface processing will be in a CSV format (Comma Separated Values). The contents of each row of the file will contain:

* \*License Plate (all formatting characters removed. I.E. dashes, spaces – must be unique)
* \*Unique Identifier of Parker
* Last Name
* First Name

December 9, 2019

* Expiry Date (default value 2030-12-31 if left blank)
* Status (active/inactive – default active if left blank) values to be determined

\* denotes required field

Sample data:

“5P1234”,”9876543”,”Adams”,”Bernie”,”2019-12-31”,”Active”

“76MSU79”,”1234567”,”Spindler”,”Ray”,”2020-01-31”,”Active”

“NY1234”,”4823024”,”Rogers”,”Zack”,””,”Inactive”

 “OB91843”,”1726354”,”Volpe”,”Dan”,””,”Active”

 “GOCATS”,”5995458”,”Adams”,”Paulette”,”2019-12-31”,”Active”

“XYZZY”,””,””,””,”2020-12-31”,”Active”

**Detailed Processing of Data:**

Any time a row is read from the flat file, the program first verifies that the data in the row is valid. If it is not valid, the row is rejected and a log file record is written detailing the issue and data values read.

Processing steps –

Check for new files

Open file and write log record with file name processing

Row is read from the flat file and rejected If:

License plate is blank

Expiry date is not blank and contains an invalid date

Status value is not blank and does not contain expected values for “Active” or “Inactive”

Program looks for License Plate in the Monthly ID field of SmartPark

If no match found in Smart Park

New monthly is inserted

* Default company and Access Profile
* License Plate stored in the Monthly ID field
* Unique ID stored in the Badge
* Name fields added in the first name and last name
* Car record added using the license plate. Model and Color left blank

Write Log record of new Monthly record

If match found for License Plate in Monthlies –

Reject row and write log if more than one monthly record found with License plate

Otherwise Process

* Update “MType” if no match to the Status value (Active = 2 Standard, Inactive = 0 Blocked)
* Update “valid to” if expiry date does not match and is equal or greater than current date
* If Changes found (Mtype or ValidTo)

Update the monthly in SmartPark

Write a log record of update

End of file processing:

File closed and moved to Archive folder

Log record is written to detail: Filename, rows processed, monthlies added, monthlies updated, monthlies blocked, monthlies unblocked

End of processing – check if there are archive files to delete

December 9, 2019

**Technical Details**:

Setup program/panel to define setup parameters -

TIBA – API Related

URL of SmartPark Server – Can default to 127.0.0.1 for application

Authorization User name and password

Facility Code

API User name and password

Terminal ID

Provider ID

SQL Server Connectivity (optional)

Instance name

SQL user name and password

Processing Setup Items

Select Default Company

Select Default Access Profile

Pass Back flag (True = ignore pass back)

Path to Shared Folder

Path to Archive Folder

Command buttons to test TIBA Server, API and SQL Server Connectivity

Processing program –

Ability to manually or automatically run

Processing Button

View Log Files Button

Proceed to Setup Button

No special reporting will be needed from this processing program other than the ability to view the software processing logs.

Programs Needed:

Setup program

Processing Program

Installation Package

Documentation

Remote Support

**Estimated Cost for Hoboken LPR interface: $3,850.00**

Includes 45 day warranty after initial install – Out of Scope Items will be estimated/billed separately

**QUOTE GOOD FOR 60 DAYS FROM THE DATE OF THIS DOCUMENT**

PO Number:

Accepted By – Precision Technology Solutions

Name/Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_