# County of Sacramento

Department of General Services Contract and Purchasing Services Division

RFP #8494 Red Light Photo Enforcement System

Due July 27, 2018 at 4PM PST



## **Redflex Contact**

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# **ORIGINAL**



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Redflex Traffic Systems Inc.

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July 26, 2018

Jesse Rosario Senior Contract Services Officer 9660 Ecology Lane Sacramento, CA 95827

Dear Mr. Rosario and Esteemed Members of the Evaluation Committee:

In response to the County of Sacramento's (County) request for proposals, Redflex Traffic Systems, Inc. (Redflex) presents our proposal for a Red Light Photo Enforcement System. We are honored to have the opportunity to continue our partnership with the County in support of this important community safety program. For 10 years, Redflex and the County have worked together to improve County intersections and reduce red light running. We have implemented system upgrades to enforced approaches in the last 10 years and as a next step in our partnership, we will provide the County with Redflex's latest technology: Halo red light photo enforcement systems and Alcyon back office.

As we enter this next phase of our relationship, we will provide numerous upgrades to your program, specifically:

- Redflex's Halo Red Light System: Sacramento will be the first city in California to utilize our Halo photo enforcement systems. With advanced 3D HD radar, a LED flash, and low light and high-resolution cameras, the Halo system will accurately detect and clearly capture all violating vehicles.
- Accurate 3D HD Radar: Our radar is a state-of-the-art 3D HD radar solution that tracks up to 126 vehicles approximately 20 times per second within a 350-foot range. Our 3D HD radar tracks multiple vehicles going at the same rate of speed, in the same location, allowing the software to independently capture these simultaneous events. Other radars will detect the various violating vehicles as one vehicle and will miss the other violations. This can lead to hundreds of missed violations per month.
- Alcyon Back Office: The Alcyon platform provides a single means to manage camera systems, transfer data, review incidents, adjudicate violations, issue tickets and payment notices, manage appeals and provide violator services to view, contest, or pay a violation. The Alcyon Back Office allows for both pre-designed and user generated ad-hoc reporting at the click of a mouse. Whatever data you want or need, Alcyon has it.
- Streaming Video: Our 24/7 streaming HD video will allow the Sacramento Sheriff's and California Highway Patrol to have real-time access to the HD video cameras at each location. Law Enforcement can instantly access 60-days of historical video from each location without the delay of requesting it for post incident investigations.
- All-Inclusive Pricing: Our competitive pricing includes all photo enforcement hardware, software, dedicated Program Manager and Maintenance Technician, processing, printing, mailing, call center support, computer work stations, iPads, kiosks, expert witness testimony, and HD live streaming and archived video, and more. There are no hidden fees for our service to you.
- Sacramento County and California Experience: Redflex knows Sacramento County's needs and the solutions required to continue a successful program. We have successfully partnered with the County for the last 10 years and have been providing photo enforcement services in California for 20 years.

No one can surpass the technology and services we are offering. We are confident that our technology and experience in Sacramento County and other communities in California will demonstrate that Redflex is the most qualified vendor. We look forward to a continued collaboration with the County, the Sacramento County Sheriff's Department, and the California Highway Patrol in helping to make Sacramento County a safer community. Should you have any questions, please contact Ray Torrez at 916.284.9969 | rtorrez@redflex.com.

Kind Regards,

Michael Finn

Vice President, Redflex Traffic Systems, Inc.



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Appendix A: Certificate of Insurance

Portions of this proposal may contain proprietary and confidential information that is the sole property of Redflex Traffic Systems, Inc. This confidential and proprietary information shall not be duplicated, used or disclose in whole or in part for any purpose except in the procurement process. Release of proprietary and confidential information will place Redflex at a competitive disadvantage in future procurements. In the event that a third-party makes a request for disclosure, please notify Redflex upon receipt of the request so that we may participate in any disclosures discussions.



# Redflex's Background and Experience Redflex For a World on the Move



# Redflex's Background and Experience

# **About Redflex Traffic Systems, Inc.**

Redflex Traffic Systems, Inc. is a wholly owned subsidiary of Redflex Holdings Limited (collectively Redflex), an Australian holding company publicly traded on the Australian Stock Exchange ("ASX"), which owns and operates one of the world's largest network of digital speed and red light cameras. Redflex's predecessor in interest corporation was formed and initially incorporated in California in 1998 and in August 2002 was reincorporated in Delaware.

Redflex has been servicing photo enforcement programs across the world for over 25 years and in North America for over 20 years, making us one of the longest established photo enforcement service providers. Redflex has partnered with over 400 communities in that time, including various cities in California such as Bakersfield, Culver City, Citrus Heights, Fremont, Newark, and Ventura.

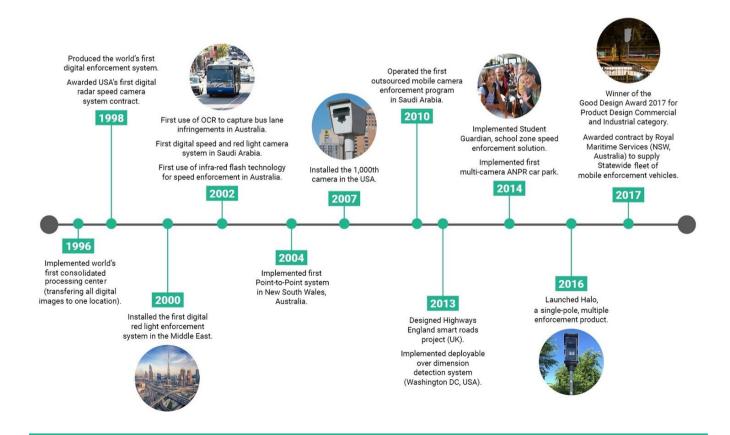
Redflex manufactures and delivers modern products on time and at the right price to our customers. Quality is inherent in every product, from concept stage to end-of-life. Redflex Traffic Systems Pty Ltd in Melbourne, Australia is certified against two (2) ISO standards and one (1) "Australia / New Zealand Standard":

- ISO9001 (2015) Quality Management Systems
- ISO14001 (2016) Environmental Management Systems
- AS/NZS4801 OHS Management Systems

## Applied Research and Development

Redflex continues to invest in designing and producing our own solutions. We work closely with selected suppliers to design hardware to meet our rigorous standards. This allows Redflex to evolve solutions with market requirements and customize solutions where needed and offer our clients the most customizable photo enforcement systems in the marketplace.

To provide all our customers with the latest technology, Redflex employs a team of engineering resources dedicated to the advancement of photo enforcement. Redflex stringently evaluates all aspects of its photo enforcement solutions to continuously improve system performance. This includes vehicle detection algorithms, image analysis, radar algorithms and analytics tools. The Halo red light enforcement product is a direct result of these efforts.







## **Acquisitions**

In July 1999, Redflex acquired substantially all assets of American Traffic Systems, Inc., which included photo enforcement contracts with the cities of Paradise Valley and Scottsdale, Arizona and Fort Collins, Colorado. American Traffic Systems, Inc. is a different entity than current Redflex competitor American Traffic Solutions, Inc./Verra Mobility.

In 2000, Redflex acquired Traffic Safety Systems (TSS), including several contracts across the Southern California region.

In 2004, Redflex purchased the intellectual property and assets of Poltech International Ltd which included a permanent maintenance facility in Sydney and NSW-based staff. Since being awarded the contract to maintain and service the 31 Poltech speed cameras in New South Wales, the business has grown almost ten-fold where Redflex currently maintains more than 280 digital camera enforcement systems.

In 2012, Redflex acquired SmartBus Live! to combine the industry-specific experience of SmartBus with the unparalleled photo enforcement experience of Redflex. The result is an industry leading program offering utilizing superior equipment and service that undisputedly improves driving behavior, increasing the safety of children loading and unloading from school buses.

## **Bi-Annual Accreditations**

To protect our clients' interests, Redflex subjects its entire operational process to an annual accreditation audit, which assures that the quality of our evidence packages continues to be held to the highest standards. Because the County's photo enforcement vendor will be hosting and processing highly sensitive data, the chosen vendor needs to demonstrate adequate controls and safeguards, which have been audited by an accredited third party. Redflex engages third party auditors to perform a SOC 1 Type 2 audit and a SOC 2 Type 2 audit. These audits are performed on a bi-annual basis.

A SOC 1 Type 2 audit is in accordance with the American Institute of Certified Public Accountants (AICPA) Statement on Standards for Attestation Engagements (SSAE) 16. For the last seven years Redflex has completed SOC 1 (or SAS 70 audits prior to 2011) audits and has received unqualified, favorable opinions indicating that financial and information technology control objectives were met and controls were suitably designed and operating effectively.

A SOC 2 Type 2 audit reports on controls at a service organization relevant to Trust Services criteria. Redflex completed a SOC 2 Type 2 audit in 2017 and received an unqualified opinion indicating that the trust services criteria were met and controls were suitably designed and operating effectively.

## Phoenix Chamber of Commerce - Exceptional Innovation Award

Redflex is the proud recipient of the 2017 Greater Phoenix Chamber of Commerce Impact Awards for Exceptional Innovator. The Greater Phoenix Chamber of Commerce recognized Redflex's continued spirit of developing innovative intelligent traffic solutions to help keep all our partner communities safer.



## **Good Design Australia Award**



The Redflex Halo system is unique in its use of a single enclosure to mount the key functional components of radar, flash and camera — all mounted to a single pole. This design provides easy installation and servicing while also reducing the environmental impact of the system. Previous camera systems required the flash unit and vehicle detection unit to be mounted separately on other poles. The innovative technology within Halo allows for a single, integrated unit.

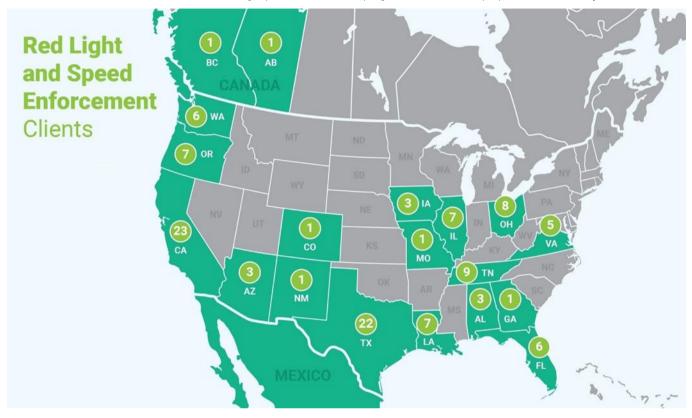
With this innovative new photo enforcement system, Redflex was awarded the 2017 Good Design Award for Product Design Commercial and Industrial category.





# **US Photo Experience**

Redflex has been successfully supplying, implementing, operating, and maintaining state-of-the-art photo enforcement programs across North America for over 20 years. We currently provide photo enforcement services to more than 100 clients throughout the United States; of those more than 95 communities have a red light photo enforcement program, similar to that proposed to the County of Sacramento.



Above is a breakdown of all Redflex red light and speed enforcement clients in North America

# California Experience

We are proud of our long-standing relationships with not only the City but with other various municipalities throughout California. Over the last 19 years our partnerships with California communities have reshaped and defined our company. Below is a list of red light programs that we currently support in California.

Bakersfield, CA	Elk Grove, CA	Menlo Park, CA	Sacramento County, CA	
Citrus Heights, CA	Encinitas, CA	Montebello, CA	San Leandro, CA	
Commerce, CA	Fremont, CA	MRCA, CA	San Mateo, CA	
Culver City, CA	Garden Grove, CA	Newark, CA	Solana Beach, CA	
Daly City, CA	Hawthorne, CA	Rancho Cordova, CA	Ventura, CA	
Del Mar, CA	Los Alamitos, CA	Redding, CA		





## **Program Management**

Our global experience implementing and operating programs is a result of the commitment and dedication of the most knowledgeable project team in the industry. To ensure rapid response time and quality control, Redflex will continue to provide a dedicated Program Manager and Field Technician.

Mr. Ray Torrez will remain the County's dedicated Program Manager as he has for the last 5 years. Mr. Torrez is well versed in the County's current contract and the Business Rules associated with the program. He understands the complexities of California photo enforcement law and keeps informed of any changes to legislation. Should any market place issues arise or State legislation change, he will proactively work with the County to discuss and incorporate changes while minimizing disruption to the County's program; whether that be developing custom reports, modifying notice templates or adding new functionality to stay compliant with California laws.

It is our understanding that Mr. Torrez may be retiring, but is dedicated to the County's program and will ensure a smooth transition to a new Program Manager. If Redflex is selected, we immediately will commence the hiring process for a new dedicated Program Manager, allowing for several months to hire and have overlap with Mr. Torrez before the end of the year, allowing for knowledge transfer and cross-training. The County is more than welcome to have input and/or participation in the interviewing and selection process of a new Program Manager, if desired. Both Mr. Tiedje and Mr. Carroll have substantial California and Sacramento County experience and will provide active oversight to ensure a smooth transition during the cross-training and beyond.

#### Ray Torrez | Dedicated Program Manager

Years of Experience: 40 Years with Redflex: 14

Region: Sacramento County

Education:

AA, Criminal Justice Bend Community College, Bend. WA Mr. Ray Torrez will continue to be the Project Manager for the County of Sacramento. Mr. Torrez was a police officer for the Fremont Police Department for over 26 years. His final assignment was managing the Information Technology Unit of the Police Department. Mr. Torrez lives in Sacramento County and will be continue to work out of the Sacramento County office. He has successfully managed the County's account for the past 10 years and will be the single point of contact for all matters relating to the program. Mr. Torrez will allocate 100% of his time as required to meet the needs of the County's program.



#### Contract Role and Responsibility

- Functioning as a coordinator between our staff and the County's staff.
- Working with the County's Project Manager to plan all Project activities and tasks.
- Meeting on-site with the County's Project Manager as frequently as deemed necessary by the County, at no additional cost to the County, to report on the status of the program and resolve outstanding issues.
- Acting as our point of contact for all matters relating to the project.
- Facilitating meetings between the County and Redflex, when scheduled or requested.
- Ensuring the County's Project Manager or designee receive necessary information through regular and called meetings, written documentation, and formal and informal communications.
- Will respond promptly when contacted by the County's Project Manager.

#### Darrin Henderson | Dedicated Maintenance Technician

Years of Experience: 12
Years with Redflex: 12

Region: Sacramento County

Certifications

Computer Network
Technician

Microsoft MCP

CompTIA A+

Mr. Darrin Henderson has been with Redflex since 2006 as a Maintenance Technician for Redflex's clients in Northern California. As part of the County's new program, Mr. Henderson will be Sacramento County's dedicated maintenance technician responsible for the maintenance and support of all of your systems. Mr. Henderson is familiar with the County's systems as he assisted with the installation of your red light cameras.



#### Contract Roles and Responsibilities

- Responsible for installation of new systems, repair and maintenance of all photo enforcement solutions
- Work closely with help desk personnel to identify and resolve customer-related technical issues
- Perform daily checks of enforcement systems to confirm operations and monitor all systems as equipment dictates
- Monitor and document the timely completion of preventative maintenance program





## Edward Tiedje | Director of U.S. Client Services

Years of Experience: 27 Years with Redflex: 12

BA Criminal Justice, Triton College

Education:

Mr. Tiedje served as a police officer for 15 years in the state of Illinois. He started his career with Redflex in January 2006 as an Expert Witness and has been promoted to several positions of increased responsibility. As National Client Services Director, he currently manages Client Services Managers across North America. Prior to this position, he was the Senior Implementation Specialist and was instrumental in implementing major projects such as the Arizona statewide DPS Project, City of Phoenix., and many others.



#### Contract Roles and Responsibilities

- Will ensure a smooth transition after Mr. Torrez's retirement
- Monitors performance of customer service efforts
- Monitors legislative changes

## Marc Carroll | Client Services Manager

Years of Experience: 15 Years with Redflex: 7 Education:

AA Science,

Yuba Community College

#### Certificates:

Commission on California Peace Officers Standards and Training

Mr. Carroll brings over 12 years of Northern California law enforcement experience, where he served as a Patrol Sergeant supervising over 25 police officers, reserve officers, cadets, and volunteers. Mr. Carroll began his career with Redflex in October 2011 and has served as the Account Representative for several clients in Northern California. He has been instrumental in coordinating a number of projects to ensure customer satisfaction including construction projects, maintenance oversight, client training, and business rules applications.



#### Contract Roles and Responsibilities

- Provide support to Mr. Torrez and the County's new Program Manager
- Project management, training, and program monitoring





## **Technical Solution Overview**

As a next step in our partnership with Sacramento County, we will provide the County with Redflex's latest technology: Halo red light photo enforcement systems and Alcyon back office.

The Halo system is the most recent advancement in enforcement technology in Redflex's product portfolio and will provide a high quality, high value solution for all the red light enforcement purposes that have been outlined the in RFP. Sacramento will be the first client in California to utilize our Halo photo enforcement systems. With advanced 3D HD radar, a LED flash, and low light and high-resolution cameras, the Halo system will accurately detect and clearly capture all violating vehicles.

The Alcyon platform provides a single means to manage camera systems, transfer data, review incidents, adjudicate violations, issue tickets and payment notices, manage appeals and provide violator services to view, contest, or pay a violation. The Alcyon Back Office allows for both pre-designed and user generated ad-hoc reporting at the click of a mouse.

Redflex's proposed offering will meet the minimum requirements outlined in Sacramento County's RFP specifications. These specifications and how our proposed system meets the requirements are detailed in **Section III - Specifications** of this response.

## Halo - Modern Red Light Photo Enforcement

Halo is the latest generation of traffic enforcement technology available from Redflex. Halo is the result of years of significant research and development effort to advance the technology used in the photo enforcement industry and bring it into a modern package suitable for a wide range of traffic enforcement scenarios. At its core, the Halo technology platform enables the following capability all from the same technology base.

- Red Light Enforcement
- Speed Enforcement
- Automated License Plate Read (ALPR) of every vehicle that passes your system (enabling hot-listing alerts)

These core capabilities are all integrated together, utilizing the same capture and detection technology, to provide a solid foundation for photo enforcement and vehicle monitoring no matter what the desired application. With the technology included in the Halo product, Redflex will be continuously building on this modern technology platform to deliver further capability with continual exceptional quality and delivery.

## Why Halo?

The Halo platform brings together a wide range of enhancements when compared to other technology currently available in the marketplace. Redflex has designed the Halo system to fix common issues found in other photo enforcement systems. These enhancements include:

## Imaging Technology

The imaging technology in Halo has been comprehensively upgraded to utilize the latest available technology in the market. This upgrade has allowed a simplification of site infrastructure, with the flash now being able to be brought into the same enclosure as the camera.

The camera capture devices deliver the following advantages:

- Extremely sensitive in low light conditions
- Extremely robust in challenging light conditions (sunrise, sunset)
- Rapid capture and transfer of images through high speed, industrial interfaces

## Flash Technology

Modern LED flash technology enables continuous rapid triggering to capture concurrent and sequential violating vehicles Low power requirements and minimal excess light will reduce power requirements as well as light pollution by a factor of x250.

## **Detection Capability**

Utilizing the latest 3D HD radar technology with proprietary Redflex-designed, data analysis algorithms, this technology provides the highest violation capture rates available.





## Reduced System Size

The Halo 2.0 product is the second generation of Redflex's Halo technology. This product has been designed with a refined focus to put only the relevant technology in the camera housing. By doing this, Redflex can deliver a single small and compact camera unit. For the configuration desired by the County, a face camera will be delivered in a similarly small and compact housing.

## **Halo Technology – System Overview**

Halo uses the latest technology in a range of different categories. Each camera system contains several key components to perform red light photo enforcement. Each of these pieces provide pivotal functionality necessary for seamless camera system operation.

- Camera Control Unit
- Enforcement Camera
- Halo Aux Face Camera
- System Flash
- Video Camera

- Radar Detection
- Signal Phase Detection
- Power and Communication
- Technical Deployment

A summary of the technology that goes into the Halo product is outlined below.

#### Camera Control Unit

The Redflex Halo enforcement system is architected around a specifically designed/purpose built industrial computer. This processing system provides a solid base for all traffic monitoring applications by incorporating key features first trialled in previous generations. Some of these key features include:

- System Watchdog This ensures that the system software is running as expected, if there is an unexpected issue the system will restart automatically.
- **Peripheral Power Cycling** The Halo software has been designed to determine if each individual part of the camera system is operating as expected if there is a failure the piece of equipment will be restarted to ensure uninterrupted operation.
- Raid HDD's System hard drive failure is undesirable when systems are remotely located. This configuration allows for self-recovery preventing previously experienced down time.

System specifications are detailed in the following table.

#### PLEASE REFER TO EXHIBIT A OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

The processing unit is remotely accessible for system monitoring and is securely password protected. All incidents captured will be electronically signed and stored locally on this processing unit before being electronically transferred and validated for adjudication.

#### **Enforcement Camera**

The Redflex Halo system is designed with an industrial-grade 12MP camera, which has shown to be a significant step forward in image capture technology from the County's current system. The camera provides clear and sharp images in all light conditions, including extreme lighting conditions such as sunrise and sunset. The industrial grade rating allows for reliable operation in a wide array of temperature environments, as well as rapid image transfer from the camera to the processing PC.

This camera has been selected to operate in conjunction with the enforcement-tailored LED flash, allowing for optimal imaging performance across all deployments.





#### County of Sacramento, California

Red Light Photo Enforcement System



The key benefits that this combination will provide are as follows.

- Reliable imaging performance in all lighting conditions, including Day/Night/Sunrise/Sunset/Heavy Rain
- Crisp and sharp imaging, from both visible and infrared (IR) light
- No focus transition between visible and (IR) imaging
- No lens adjustments required
- Higher dynamic range than all other technology on the market allowing for inline flash placement
- No mechanical shutter greatly increasing camera lifecycle

Redflex has also developed and optimised industry leading enhancement algorithms to make the captured detail clearer for adjudication and processing purposes.

## **Automated Imaging Optimization**

Redflex's Halo system utilises advanced imaging capabilities to deliver reliably clear imaging in all light and weather conditions. In addition to utilising the latest camera and flash technology the Halo system. Analyses the amount of light available and the optimal camera and flash settings are then configured for optimal performance.

## Single Time Source

Patented Redflex technology ensures the highest quality and integrity in image capture allowing for the use of multiple camera sensors without fear of compromising evidence security. In the Halo system different cameras can be used to capture different detail in the violation. The images that can be captured at precisely the same time are:

- Image Scene (views an overview of the whole intersection clearly showing the vehicle position with the traffic lights in view)
- Image Detailed (view focuses in on the vehicles, clearly showing the vehicle and the license plate of the offending vehicle, one or more detailed cameras can be used at each enforcement location)

All of these cameras are synchronized by highly accurate hardware triggering ensuring that the images are captured simultaneously. The captured time of each image is displayed as part of the image data bar.

Additionality a face camera will be used for capturing an image of the vehicles driver, this camera will be set to take images at a time where drivers from all vehicles can be clearly captured (after violators are in the intersection but before turning vehicles turn the corner).

All Redflex camera systems have their time synchronized to centralized time sources (Any NTP server can be used) to ensure accurate time of capture for every violation and detection.

## System Flash

Redflex's LED flash is a quick, controlled, and targeted pulse of light that does not disorient drivers. This provides just the right amount of light to accurately and clearly capture images of violating vehicles. The system can operate with either visible or infrared light which can be selected at the preference of the County and depending on its use (i.e. IR for ALPR applications). For the traffic enforcement scenario described Redflex recommends a visible LED flash be used.

One of the most common complaints about photo enforcement systems is the bright "flood light" flashes that most systems use. Redflex listened to these complaints and designed a modern LED flash, which operates on significantly less power and provides the light where it is needed. Traditional flashes produce large amounts of light that is spread to cover an entire intersection, causing additional light pollution and flashing drivers all around the intersection.





#### Video Camera

Video capture is delivered with an industrial-grade 2MP camera. The high definition video provides additional evidence and provides context to captured violations. In a typical Redflex configuration video is captured 6 seconds before and 6 seconds after the captured red light violation.

The below is an image sample from one of these cameras.



#### **Radar Detection**

The Halo system includes a 3D HD radar as its vehicle detection device. This radar produces highly accurate speed readings, angle and distance of all targets received. The radar is enhanced with proprietary Redflex algorithms that allows our system to detect and track vehicles quicker and more accurately than other radar providers. At any moment, this Halo radar can track 126 objects simultaneously with reliable lane discrimination allowing for robust and red light enforcement while leading the industry in rates of violation detection.

The 3D HD radar provides a capability advancement from other radar-based technologies as it allows our system to track multiple vehicles going at the same rate of speed, in the same location, allowing the system to independently capture these simultaneous events. Other radars will see the various violating vehicles as one vehicle and will miss the second violation. This can lead to hundreds of missed violations a month.

Our 3D HD radar is also rigorously tested and meets all local certification requirements to ensure that our photo enforcement system accurately detect violating vehicles in all weather conditions. Redflex's Halo radar is the most advanced radar in the marketplace.

The below image shows the distinction in information that can be gathered and used by the Halo system using the 3DHD radar when compared to simpler 2D or standard technologies.



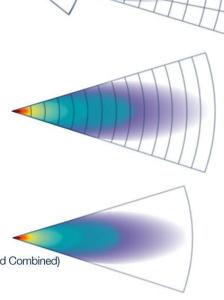


## 3DHD

- · Separation in Speed
- · Separation in Range
- · Separation in Angle
- · High Speed Modulation
- · Adaptive Beams

## 2DHD

- · Separation in Speed
- · Separation in Range
- · High Speed Modulation



## STANDARD TECHNOLOGY

- · Separation in Frequency (Range + Speed Combined)
- · Slow Speed Modulation

#### **Redflex Superior Radar Algorithm**

To ensure quality, Redflex camera systems utilize proprietary radar algorithms that have been refined for use in red light enforcement. While other vendors provide radar solutions, their product may be a standard, off-the-shelf unit which is not designed for reliable red light enforcement but rather standard traffic management detection.

This proprietary algorithm provides enhanced accuracy of vehicle detection and is able to effectively filter out unwanted vehicle returns that have been inaccurately detected by the radar device, off the shelf radar detection that is used by other manufacturers will still contain these false readings that Redflex has been able to remove.

## Signal Phase Detection

Unlike our competitors, the Redflex system monitors all nine traffic phases, including any combination of left turn, right turn, and straight-through signals. Redflex will work with the County to identify which signal phases need to be monitored based on County needs and State Statute allowances. Redflex equipment provides a reliable signal phase detection method that is isolated from the signal controller.

For those applications in which our client desires a direct non-intrusive method of signal phase detection from the controller, Redflex will provide a Traffic Light Interface Module (TLIM). The TLIM is placed in the junction box closest to the controller that has access to the signal field wiring. A clamp style inductive coil will be placed on each phase to be monitored. The TLIM will be powered by the Redflex system via 12VDC through a CAT 5e cable direct connection to the field output with 5-amp inline fuse and opto-isolators mounted in our equipment for isolation.

## **Power and Communication**

This system will require power at each camera location, communications will be provided through a connected 3G modem.





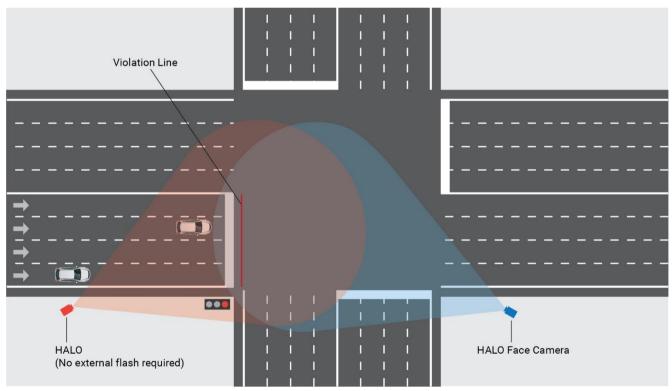
## Halo Aux - Face Camera

The 24MP face camera will provide crisp and clear high-resolution imaging from a single camera source. Like the Halo enforcement unit, the face camera will utilize LED illumination, housed within the same enclosure, to provide clear imaging during the day and the night.



## **Technical Deployment**

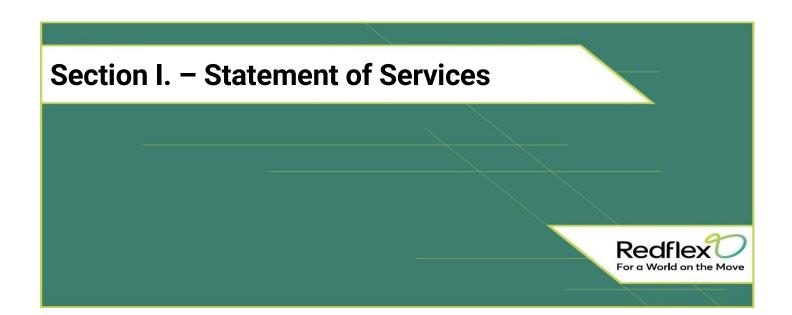
To show the County how the proposed Redflex Halo system would be deployed. The following sample site layout has been provided for the County to review. The Halo system can enforce across six lanes of traffic. With most of the County's enforced intersections 4 lanes, the below diagram shows the proposed Redflex equipment in relation to a 4 lane intersection.



# **Warranty**

Redflex equipment is designed to be operational 24/7/365. Barring knockdowns, vandalism and unforeseen acts of nature, our equipment will be functional over 98% of the year; including downtime for scheduled system maintenance. As we have done for the last 10 years, Redflex will continue to warranty the system for the life of the contract. Redflex will also continue to be responsible for the maintenance and upkeep of the red-light photo enforcement equipment throughout the life of the contract.







## Section I. - Statement of Services

Redflex is honored to have the opportunity to continue to work with the County of Sacramento in support of improving and possibly expanding your red light photo enforcement program. Redflex will continue to provide the County with a complete, turn-key photo enforcement solution that includes all equipment, infrastructure, maintenance, payment processing, customer call center, support, reporting, mailing and web-enabled citation authorization services.

We have included a brief description of our ability to meet the County's needs for each of the following service functions requested in the County's RFP.

# **Site Survey**

Upon contract award, Redflex is committed to work with the County and all stakeholders to identify 15 additional candidate intersections that would benefit from photo enforcement. Locations will be determined by monitoring and assessing frequency of red light violations and collisions. Redflex is prepared to offer the County the following services in our evaluation of locations:

- Provide up to three (3) video validation sessions for each prospective or existing conversion site selection
- Video validation sessions will record the vehicle traffic at a specific approach for 16 24 hours and include an analysis which lists the number of vehicles clearly running the signal at 0.1, 0.2, 0.3 seconds and above for all lanes intended to be monitored.
- Include a traffic count for all lanes intended to be monitored.
- Provide any available crash data from Caltrans and the CHP to further support the selection intersections.

## Camera Site and Installation and Removal

As we did during the installation of the County's current red light systems, Redflex will work closely with the County to determine the mutually agreed upon approaches. After selection of enforcement sites, Redflex will begin the process of preparing and deploying red light enforcement equipment. Redflex will be responsible for all permit acquisition and associated fees, site design, construction, installation and maintenance of the equipment. We have provided a detailed timeline under **Section IV – Additional Requirements**, which outlines our intended approach and vital process information. This timeline will demonstrate how closely our two teams will work together throughout the installation process.

## **Caltrans Experience**



Throughout the program expansion process, Redflex will take responsibility to apply and obtain permits prior to installing any hardware or equipment within the right-of-way, modifying any City, County or State-owned facility, or performing any sidewalk, shoulder or lane closure. Redflex has direct experience

working with California Department of Transportation (Caltrans) and their permitting processes, should the need arise during this program. We recognize the complexities of strict compliance and adherence to the California Vehicle Code and the unique requirements encountered in working with Caltrans. Our extensive experience in successfully interfacing with Caltrans districts state-wide includes Caltrans Districts 3, 4, 7, 8 and 10. Our experience will prove invaluable for a quick program implementation.

We take pride in the relationships that we have created both past and present. We learned invaluable lessons from each program and that knowledge made our company and team stronger and better prepared to serve others.

## **End of Program Equipment Removal**

Upon the end of the program, Redflex shall remove all Redflex equipment and materials installed including but not limited to housings, poles and camera systems, and shall restore the designated intersection approaches to substantially the same condition that the approaches were in immediately prior to any contract; provided however, that Redflex's financial obligation under this provision shall not exceed \$7,100 in the aggregate for any approach. The professional removal will be at the highest standards. Once the equipment is removed all components are sent to Redflex headquarters in the US and disposed of following Environmental Protection Agency (EPA) guidelines. All equipment will be removed no later than 60 days from the termination of the contract, pending any permits.

## Service and Maintenance

The servicing and maintenance of the red light enforcement equipment will be the exclusive responsibility of Redflex. In order to achieve outstanding performance metrics for the County, Redflex will continue to provide one (1) dedicated local Program Manager and one (1) dedicated Field Maintenance Technician, with no ancillary duties, who will be fully committed in their support of the County and your program. Initial response by maintenance staff to any equipment malfunctions will occur within two (2)-hours of discovery of the malfunction, with repairs being completed within 24-hours. The County will be immediately notified upon the detection of any equipment malfunction and will receive disposition information upon completion of the repair(s).





# **Data and Statistical Reporting**



As a continuation of our partnership with the County, Redflex is proposing upgrading your program to our latest back office, Alcyon. The Alcyon Back Office includes a robust reporting system with comprehensive data analytics and reporting capabilities. Utilizing our web-based interface, County personnel will be able to access extensive mission-critical information. Custom and ad-hoc reports can now be user generated,

without the need to contact Redflex. Statistical Reporting will be accessible 24/7 using near real-time program statistics or provided monthly to all program stakeholders.

The Alcyon reports will include, at a minimum, the following:

PLEASE REFER TO EXHIBIT B OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

Below is a sample report displaying program statistics; one optional report Redflex can provide. Once Redflex customizes the Alcyon Back Office and reports to meet the County's needs, this report may look different from the example provided.

PLEASE REFER TO EXHIBIT C OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

## **Redflex's Program Dashboard**

Redflex has developed an on-demand dashboard to give the County the data and information you need to defend the program and show progress toward the program goals. Below the County will see an example of what your dashboard will look like. This dashboard can be customized to fit your exact needs, meaning that if there is a list of reports that are most important to you, they can be loaded to this dashboard for easy viewing, 24/7. These reports will allow the County to see how their program is doing at a glance, without having to request any reports from Redflex.

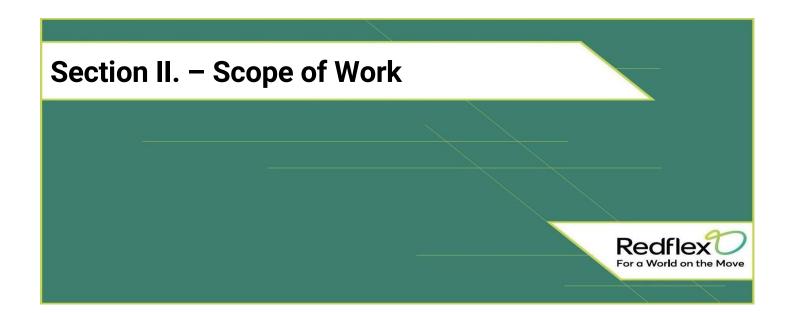
PLEASE REFER TO EXHIBIT D OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

User created dashboards ensure you are always informed of critical metrics, enabling better business decisions and outcomes

PLEASE REFER TO EXHIBIT E OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

Complete BI & report creation tools give you meaningful insight to your entire operation







# Section II. - Scope of Work

As we move on to the next phase of our partnership with the County, Redflex is prepared to provide upgraded red light enforcement technology and a full turn-key photo enforcement program. Our proposed program includes all applicable hardware, software, installation, maintenance, operation, and processing services.

After working with the County for over 10 years, our goal is to maintain your existing photo enforcement equipment to ensure there is no disruption in the program, so that the City can continue to capture violating driver's that put others in danger, and to continue to upgrade your program to provide you with the most advanced photo enforcement program possible.

As we move into the next phase of our relationship, Redflex will refresh the City's entire photo enforcement program, providing new hardware and back office software. These upgrades will provide the City with the most advanced photo enforcement program in the state of California.

Redflex is the only vendor who can continue to operate your existing red-light photo enforcement sites with no downtime at the beginning of the new contract. As we replace cameras with upgraded technology, we expect minimal system downtime during the transition. This is something that other vendors cannot say.

Should the County choose to expand their program to additional intersections with high instances of red light running, Redflex will perform the following steps to ensure that your program continues to accurately capture vehicles that choose to run red lights.

# **Site Selection and Intersection Analysis**

Our process for determining new enforcement sites begins with an intersection selection analysis. The results of the survey will support both the intersection and approach selection for the County and will serve as a baseline for program metrics.

Redflex will work with the County in the intersection selection process, including establishing baseline counts of red light violators at Cityapproved candidate intersections. As part of the analysis, Redflex will survey an initial set of selected intersections. We will also acquire crash data from Caltrans and the CHP to further support the selection process. This phase is designed to help Redflex and the County identify which intersections warrant the installation of a red light camera solution and to ensure that the County's public safety needs are addressed during the video survey process.

PLEASE REFER TO EXHIBIT F OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

# Site Design, Construction and Installation Activities

## **Approach Site Design**

After selection of enforcement sites, Redflex will begin the design process. Redflex will meet with our subcontractor partner(s) and the County for a site survey to determine the best placement of the enforcement equipment. Each system's installation will be carefully planned and executed in order to maximize the number of potential violations to be captured while minimizing potential obstructions. Factors that will be considered when selecting equipment locations include: evaluations of ADA clearances, proximity to existing traffic cabinets, possible blockages, existing surroundings such as bus stops, driveways and alleyways, road conditions and preceding intersections that would affect typical driver behavior. During this meeting, we will observe traffic flows, monitoring and assessing frequency of red light violations and collisions.

At that time checks are made to confirm existing conduits will support conductors required for photo enforcement or plans are made for providing additional conduit. Utility details, communications, and other information will also be gathered from appropriate departments/companies. This will become the foundation for our AutoCAD site drawings.

All design plans will be reviewed and agreed upon prior to submitting the permit request. Redflex will be responsible for all permit acquisition and associated fees, site design, construction, installation and maintenance of the equipment.

Redflex's Project Team will work closely with the County, Caltrans, local law enforcement, court and other agencies to ensure the system meets or exceeds the goals and requirements of the County. Redflex will ensure that we meet traffic control requirements for the survey, testing, or design for field activities that interfere with traffic operations within existing roadways or parking areas, also ensuring that traffic control operations will be presented in accordance with the Manual Uniform Traffic Control Devices as well as the American Traffic Safety Services Association's guide for work areas. All installed equipment will be in compliance with Caltrans regulations.

## **Construction and Installation Activities**

Throughout all of the construction and installation activities, the Redflex Construction and Client Services teams will be actively involved in tasks and provide oversight with subcontractor efforts. Initial system configuration will be setup to meet all of the County's requirements, however system configuration can be reassessed and modified throughout the life of the program, as the City desires. Our proven construction process is as follows:





- Permitting and locates Submit the intersection design packet for County, County and/or DOT approval, as required. Redflex will
  work closely with the team to address questions in order for permits to be issued. Locates will be established upon permitting
  and prior to construction.
- Coordination meet Prior to breaking ground, we will walk through each approach to identify (mark out) the placement of equipment.
- **Breaking ground** We will remove the needed sections of sidewalk, parkway and/or alley to allow directional boring and forming of the foundations required to support the enforcement infrastructure.
- Equipment & conductor install Equipment is placed on the newly poured foundations. We will then put conductors (wires) in place for communication (Cat 5), power and grounding of each site.
- Power & phasing County personnel/engineers and Redflex will meet on site to hook up the power and inline fuses to obtain the phasing.
- Restoration The intersection is placed back into its original state, sidewalks are re-poured and parkways are restored as needed.
   This can include sod or new top soil and grass seed.
- Installation of enforcement equipment Redflex technicians complete the install process. Cameras and computers are installed, alignments and configuration is completed, and operations are established.
- Installation of signage Advanced warning signs will be installed prior to each active enforcement location.

## **Site Testing and Program Activation**

Following installation, each enforcement system will complete a 3-day performance test to ensure the system is working appropriately and meets the County's satisfaction prior to active enforcement. All violation detection and capture processes and protocols are thoroughly tested and validated prior to the systems becoming operational. These testing procedures include all hardware (e.g. camera units, detection devices, and interfaces), software and service components (e.g. file transfers, public awareness) of the program.

Precise testing protocols ensure that the maximum number of violations are being captured and have been empirically tested and proven to enable the industry's leading citation issuance rates. All testing results will be documented and presented to the County Engineer.

This testing process also allows for a baseline to be established of driving behavior (the volume of violators during the testing phase sets the startup average). The standards for an approach to "go-live" is typically set at a minimum of 90 percent quality images and 100 percent uptime during the 3-day test process. Upon approval from the County, the approach is activated and enforcement begins after a 30-day warning period.

## **Preparing for System Go-Live**

As the system installation efforts are underway, in parallel the Program Manager will be working with the County to focus on deployment planning, developing a marketing and public awareness campaign, and training of the identified County, Court and Law Enforcement staff. Our rollout of these efforts will coincide with the completion of the approach installation and 3-day test.

# **Violation Processing**

To ensure all evidence is accurate and of the highest quality, and to reduce the need for the Sacramento County Sheriff's Department and California Highway Patrol resources needed for violation review, each potential violation is subjected to multiple levels of verification and quality control prior to law enforcement review. Redflex does not make any decision on issuing citations; the police determine who does and does not get a citation. Redflex will continue to send all capture images to the County for Law Enforcement review.

If the police determine that a violation occurred, they approve the incident to be issued as a citation. The citation is then printed with all of the images from the working copy embedded on the citation and mailed to the registered owners address. The following graphic visually represents a sample incident process from incident occurrence to court hearing.

Our Alcyon Back Office application is compatible with Apple iOS, Internet Explorer 9.0 and higher, Chrome, Firefox, and Safari. County personnel will be able to access our applications using iPads, iPhones, Android tablets, laptops and desktops; providing highly desirable end user flexibility. No software will need to be installed on County computers.





## Incident



An incident is captured, recorded, and encrypted. Each incident file contains multiple still images, video, and data pertaining to the traffic infraction.



#### Data Transfer

The encrypted incident data is

automatically to the Redflex

Processing Center for review.

transferred securely and



# 3-Tier Redflex Processing



#### Police Authorization

1st Reviewer (Phase 1) confirms a incident has occurred using Countyspecific violation criteria and extracts license plate information.

2<sup>nd</sup> Reviewer (Phase 2) verifies an DMV match and ensures screening guidelines were met in Phase 1.

3<sup>rd</sup> Reviewer (Phase 3) provides final quality control and review ensuring that all criteria is met in Phase 1 and Law Enforcement reviews the incidents that made it through the 3-tiered evaluation process. The officer will make the final decision to approve or reject the incident.





#### Scheduling a Hearing



If the violator chooses to dispute the violation detailed instructions are included on the citation explaining how to schedule a hearing.



## Paying the Fine/ Disputing the



pay their fine by mail, internet, (photonotice.com), by phone (Redflex Call Center), or make a walk-in payment at one of our partner's 38,000 retail locations. The violator also has the option to dispute the violation.



#### Violator Inquiries





#### Printing and Mailing Citations

Police-approved violations are immediately queued for printing and mailing by the Redflex Print Center.





## Verification Review Phase 1

In the Verification Review Phase 1 phase, a trained Redflex associate will extract the original "raw" images, video and violation data and commence the review process, which includes:

- Reviewing of all the photographic evidence, including:
  - Multiple high-resolution still images
  - Full-motion video (For HH Systems Video captured by the system)
- Confirming that a prosecutable violation has occurred that meets the criteria developed by the PD
- Zooming/cropping images, lightening or darkening for clarity
- Extracting (using OCR) or manually entering the license plate information
- The image clarity, including:
  - A clear and unobstructed license plate
  - Violation information, such as location and date

## National Law Enforcement Telecommunication System (NLETS)



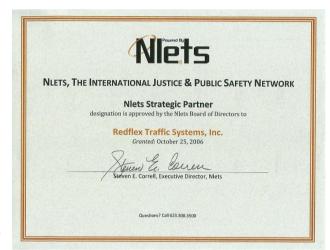
directly

from

Redflex is set up to automatically obtain the majority of vehicle registration and driver's license the National Law Enforcement Telecommunication System (NLETS), which provides real-time DMV information for all 50 states. This strategic partnership allows Redflex to get the most up-to-date and accurate information available. Redflex takes full responsibility for obtaining ownership information with no assistance required of the County.

If multiple registration data is returned to Redflex, the incident is sent to a specialist, who will review all available information including rear license plates, vehicle make, model and year. Once all information is reviewed, the trained specialist will make the proper determination of the appropriate registration information to use.

In the event that a citation is returned due to an incorrect address, Redflex can perform skip trace services using LexisNexis® Accurint® or a similar service. LexisNexis® Accurint® is an additional motor vehicle



registration look up service that provides Redflex direct access to public records in order to obtain an alternate address that is not listed with a DMV. When a program is initially defined, the County can determine if they would elect to have Redflex research an alternate address for those citations that are returned or if that would be handled by the local law enforcement. As the Redflex systems are highly customizable, this is another service that we make available to our clients.

## Verification Review Phase 2

In Verification Review Phase 2, a trained specialist will complete the following steps:

- Review the photo and video evidence clarity and meets violation processing criteria as defined by the Business Rules
- Verify owner information including vehicle make/model
- Match against the screening guidelines developed by the police

The process is fully automated between Phase 1 and 2 and eliminates the physical data entry process.

## Verification Review Phase 3

Upon completion of Phase 2, Redflex provides one additional level of review, Verification Review Phase 3. This final review and confirmation ensures that the initial two reviews adhered to the County-approved guidelines and processes as depicted in the Business Rules. Once the incident passes through Phase 3, it is forwarded to the police for final review and authorization.

All violations that are rejected at any phase of the three-step review process are reviewed daily by a Redflex analyst. The Redflex analyst is responsible for correcting any mistakes that are identified and then providing feedback to the processing team. The shift supervisors will provide ongoing training to the processors, thus adding an additional, continuous improvement phase to our processing. All incidents, whether approved or rejected are made available to the County for review.





## **Police Department Approval**

Redflex electronically stores and makes available all still images, digital video files, and associated incident and registered owner data for police review. Access to this module is completely secure, using robust user management and internet security protocols. The approval application is a web based application that can be accessed using any computer with internet capability and does not require any additional software to be installed. Once an officer is logged into the application, they can see all violations waiting for review.

Upon login to the application, an inbox will appear containing all violations, sorted by date, that have passed Phase 3 review; have matching and accurate driver's license detail; and have met the specific screening guidelines and business rules developed specifically for the County. All violations in the inbox are available for review, rejection or final authorization. Choosing one of the violations in the inbox will pull up all the violation images and specific violation details for easy and prompt review.

Once the authorized public safety official clicks on the specific violation in the inbox a fast-loading, informative and intuitive violation review screen will appear. In approximately 30 seconds, the officer can review all the incident images, 12-second video and data and make an informed assessment to determine if a "violation notice" should be authorized, printed and mailed by Redflex. They will also have the ability to change the license plate images if there is a better one available.

## **Accept or Reject**

Law Enforcement personnel shall make the final review of each incident and make a decision whether it meets the County's criteria to issue a citation. If the established criteria are not met, the system permits the Officer to choose from a list of defined explanation codes for rejection.

#### Accept



Upon accepting an incident, the system will require one confirmation click. This extra step was implemented as a failsafe to eliminate errors and confirm the Officer's decision.

#### Reject



Upon rejecting an incident, if the incident is deemed "non-prosecutable", the user will select a rejection reason. This failsafe step was added to allow the police and Redflex to track, trend, and remedy any possible oversight issues with the program, including training or maintenance needs. Data on rejected incidents will be available for police review immediately after it has been rejected.

## **Printing and Mailing**

Upon "acceptance" of a violation, the system automatically queues the information and violation images for citation notice generation, printing and mailing.

Redflex will mail police-approved citations with a return envelope by first class mail and will bear the cost of postage. Each notice will display a digital signature of the officer who authorized the citation and will be printed on high quality, perforated paper – allowing for ease of response by violators.

Currently, Redflex takes less than 5 days to capture an incident, process it through the three-tiered review and provide to the police for their review. Once the violation is approved by the police, notices are typically printed and mailed in less than a day. Most notices are printed the same day the police approve the violation, depending upon the time the approval is obtained.

Redflex is unique in the industry by having in-house printing and mailing, as other vendors typically outsource this service. We insist on having both of these processes in-house to maintain a strict chain of evidence, quality control and protect the confidentiality of your citizens.

## **Online Violator Viewing**

While County and Court staff will have the ability to view all captured violation online via the Alcyon Back Office, the general public is also able to view their citations online via Photonotce.com. Photonotice.com is a Redflex developed and maintained secure website which provides customer support to address citizens' concerns, while allowing for viewing of violation images and the violation video clip and for payment of the citation. The website is typically printed on the citation for ease of accessibility for the violator. This web based application can be accessed by violators 24/7 from any internet connected computer.

The violator will be able to submit a payment through this website or schedule a court hearing. Any payment received will be directed to the court system or into a lockbox account maintained by our company.







# **Expert Witness Testimony**

Redflex has and will continue to provide ongoing expert testimony, as reasonably necessary, at contested court hearings. Sarah Rutherford and Lucia Harrod, the Expert Witnesses for the County of Sacramento, will continue to testify to the theory, operation, and functionality capabilities of the red light camera systems.

In addition to monthly system certification, Redflex documents all maintenance records through an internal application. This reporting tool logs every maintenance and repair issue, request and activity. A complete maintenance history can also be provided for any court proceeding for each intersection approach.

Throughout the term of this agreement, Redflex shall provide system training to police personnel as often as reasonably necessary to allow such personnel to act as expert witnesses on behalf of the County with respect to the program.

# **Kiosks for Public Review and Payment**

Redflex will continue to provide the County with a kiosk capable of allowing violators to review violation images and video, at both the Sacramento County Sheriff's Office and at the Sacramento County Court House. Should the County decide to change the locations of these kiosk, Redflex will assist with their relocation.

# **On-Demand and Custom Program Reporting**

Our program provides a complete reporting package with various reports to track the effectiveness of your photo enforcement program. The County will be able to access extensive data and information gathered by all Redflex systems in your community. Reporting will be SB1303 compliant and per County requirements and each report can be easily accessed on-line via a web-based application 24/7 by designated County personnel. Reports are easily searchable and information can be effectively downloaded in various Microsoft formats. Most of these reports are provided in "real-time."

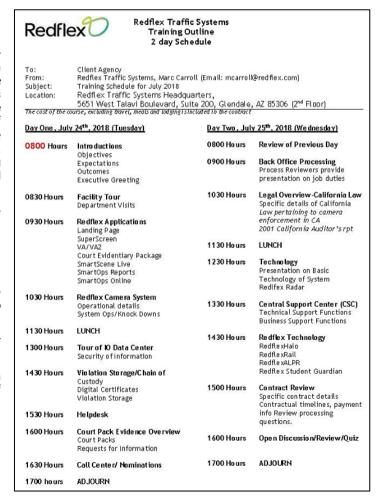
# **Training Law Enforcement**

Our proposed implementation schedule includes a one to twoday training for law enforcement during the implementation period to ensure all appropriate County officials are knowledgeable with our proposed photo enforcement systems and back office software. Training includes topics such as the capabilities of the Redflex web applications, the technology of the automated red light camera systems, violation data storage and security, legal overview and current events in California, and functionality of Redflex departments. This initial training will also help in determining if any customizations are required to be programmed before the program is live.

After the initial training, Redflex will continue to provide the County with an annual and can include the following:

- Field Service Technician training
- Any legal updates and pending legislation updates
- Discussion and update on the latest photo enforcement technology and proposed changes to the County's systems
- Individualized training on any pressing issues or concerns

To accommodate Sacramento's training needs, Redflex has a California Police Trainer located approx. one (1) hour North of Sacramento.







# **Computers for the Processing of Citations**

Redflex will provide the County with six (6) new workstations, meeting all specifications outlined in the RFP, at the County offices. We will update and replace these workstations every three (3) years to ensure that the County has the most up-to-date technology available.

# **Onsite Maintenance and Inspection Logs**

Below we have provided a sample record logs that Redflex uses through system inspections and maintenance. Please note that the first maintenance record is a sample of the log file that has been customized specifically to meet the requests of Sacramento County.

Sacramento Metro Monthly Maintenance Record				
Technician Name Intersection				
Date Time - Start End:				
Task List				·
Checks Performed	Main	Face	Auxiliary	Auxiliar
Visual Inspection of: Loops, cabinets (inside and out), poles enclosures.				
Date/Time Check - Verify data:				
Verify Communications - Is the VPN functioning? Is the broadband Communications Operating?				
Verify Signal Phase				
Verify Vehicle Detection				
Perform Next Vehicle - All Lanes				
Is the enforcement system functioning properly?	No. of Concession, Name of			
Remarks - make comments on any other issues found				
Please fill out the information in the space below. By signing this document, you acknowledge that you performed the the remote checks at the time and date specified on this form, and that failure the or forgoing any portion of this from will result in disciplinary action, up to and including termination	o perform any di	uty assigned o	n this documer	nt
I hereby attest that the foregoing information is true and correct.				
Signature of Technician Employee Number Printed Name:				
Signature of Officer Badge Number Printed Name:				
Officer Available Yes NO			PM SAC v1.4	









# Section III. - Specifications

Redflex meets or exceeds all the County's minimum requirements provided in the County's RFP. To provide Sacramento County with a general understanding of the technology offering being proposed a Technical Solution Overview has been supplied in a previous section. Throughout Section III, we outline how our proposed system will meet each of the specified system requirements.

1.0 The vendor must be able to deploy dual photo automated Red Light Camera equipment in accordance with the following standards.

Redflex is prepared to deploy an updated automated red light camera photo enforcement program in accordance with the following standards, set forth by the County of Sacramento

1.1 The system must utilize high resolution digital cameras and HD video cameras with real time viewing capability. The proposer shall archive all events in HD quality video for a period of thirty (30) days and shall be exportable to the County, at the County's request. The system shall capture a set of four images of the violation, as well as a video clip which captures the signal light cycling through all phases and the violator committing the violation. The still images will be as follows: (1) The first image shall clearly show the scene from the rear, a clear view of the vehicle behind the limit line prior to committing the violation, and the signal head displaying a red light was red; (2) the second image shall clearly show the scene from the rear and the violator vehicle inside the intersection and show the traffic signal is still red. The license plate number and details must be clearly visible in photos 1 or 2; (3) the third image will show a clear photo of the driver of the vehicle; and (4) the fourth image will clearly show either the front or rear license plate. The license plate number and details must be clearly visible in image four. A separate close-up image of the plate may be verified through extraction of one of the two rear views or the driver photo and the redaction of any visible passengers.

The proposed Redflex Halo system will meet and exceed the imaging requirements specified by Sacramento County.

# **Imaging Technology**

Redflex's ensures high quality industrial standards are achieved in each of its systems through the use of high quality components. To ensure that the best imaging is achieved, there are multiple aspects that need to be considered when bringing together this system. The main influences in quality are:

- Camera Technology The camera technology is the core if the capture devices for all traffic cameras.
  - Redflex leverages cameras that utilize Sony Pregius image sensors, largely considered to be the highest quality for traffic monitoring.
- Camera Lens Selection A poor quality lens can lead to images being blurry regardless of resolution.
  - Redflex has researched and assessed a whole range of lenses to determine the most suitable for high quality traffic imaging.

Redflex Halo uses 12MP cameras with 12MP-rated lenses to ensure optimal imaging. When the intersection is large, multiple 12MP cameras are deployed to ensure an appropriate resolution to capture all details. These cameras are placed side by side and cover the intersection to an equivalent resolution of 48MP, in this arrangement an additional overview camera will be used to ensure the full intersection is covered including the traffic light signal in addition to the relevant vehicle detail. Redflex's patented technology ensures simultaneous image capture across these cameras, providing the best possible image clarity.

#### License Plate Covers

License plate covers can be a deliberate attempt to avoid prosecution from traffic enforcement cameras. Redflex's technology has been proven to reduce the effects of license plate covers, prism covers and photo sprays (photo blocker) these have been tested and proven by the popular television show, Mythbusters. These photo blockers try to obstruct pictures of license plates by distorting images taken at an angle or removing the reflective properties of the license plate. The Redflex system utilizes high megapixel, industrial-grade cameras to take pictures of license plates further down the road instead of taking pictures at an angle.

## Concurrent and Rapid Sequential Incident Capture

The LED flash and industrial cameras used in the Halo enforcement system enable rapid and continuous image capture across all lanes. This capability ensures that regardless of how quickly two violations occur or how many there are at a time all are captured with images that are appropriate to ensure a prosecutable violation package is produced.

Where violations are captured simultaneously then the same images can also be used across multiple offences, this feature is known as image sharing and has been a long-standing feature in Redflex's enforcement technology.

PLEASE REFER TO EXHIBIT G OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.





# **Incident Image Configuration**

Each red light photo enforcement system will capture the following images and video:

- Scene A: captures the vehicle prior to the stop bar as the light is red
- Scene B: captures the vehicle in the intersection as the light is red
- Plate Image: provides a clear, zoomed in image of the vehicle's rear license plate
- Face Image: captures a clear, zoomed in image of the driver of the violating vehicle
- HD Video: which provides a 12-second video clip, captured at 30 fps

When the radar detects a vehicle's speed above a pre-determined threshold, the camera system is triggered. The Scene A image will show the vehicle behind the stop bar with the traffic signal red phase visible. The Plate and Scene B images are simultaneously captured when the vehicle has proceeded through the Detection Zone.

All images will be captured from the rear so that an image of the violator's license plate is captured along with the signal head showing that the light was red during the infraction.

# **HD Live Streaming and Instant Archived Video Access**

High definition (HD) live streaming video is a great tool for law enforcement to monitor photo enforced intersections. The City will access the live streaming HD video from each intersection through a secure URL/web address. The screenshot below is a preview of what your live streaming video application will look like.

The County will be upgraded to 60 days of archived video, recalled on demand and utilized by anyone with approved access utilizing a secure URL/web address. Users will also have the capability to export a video clip and store it locally. This tool is commonly utilized for traffic management and accident recreation purposes, and also as an investigatory aid for non-traffic related matters. Below are a few examples:

- Video archives were used in a high-profile case to help identify the killer of a young female student that went missing.
  Detectives used this tool to find video of a truck following the student near a public location. They could retrieve video from earlier in the day of the truck at a Redflex approach based on unique features with the truck. The license plate was pulled and the driver's identity was confirmed along with other tips and evidence.
- Redflex video aided to identify a suspect who had fled the scene after driving over and killing a retired police officer who was serving as a crossing guard at the intersection. I
- A motorcycle and truck were involved in a fatal accident where the driver of the motorcycle was killed. The original findings
  were that the driver of the truck was at fault, however, based on Redflex video, it was determined that the motorcycle was
  speeding and at fault in the accident.

PLEASE REFER TO EXHIBIT H OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.





- 1.2 The image sets must contain the following information:
  - 1. Sequential numbering of events.
  - 2. Amber light time must be measured in real time, and recorded on one of the violation images. A pre- programmed amber light time on violation images WILL NOT be acceptable.
  - 3. Data information must be gathered at the same time as the photo and or video. (Data: items 4, 5, 6, and 7 below)
  - 4. Location information.
  - 5. The day, month and year of the violation.
  - 6. The time of the violation in hours, minutes and seconds per Pacific Standard Times.
  - 7. The amount of time that has elapsed since the light turned red, measurable in hundredths of a second.
  - 8. Imprint all the information/data along the bottom or top edge of the image-such data shall not obstruct the violation image.
  - 9. Color digital images are required.
  - 10. The system shall not round times up or down, but shall truncate to the hundredths of a second.

Redflex systems are highly configurable and can be configured to meet the image set and data requirements outlined.

Redflex provides images with a multitude of information. Each of the high-resolution, digital, full-color images of the violation produced at the point of capture includes an encrypted data bar "stamped" with violation information on a 256-character field that can be customized to suit the County's specific preferences and requirements. These elements cannot be manipulated by Redflex or any other user. Your current data bar elements include the following:

- Elapsed time since red light, to 1/100th of a second
- Amber phase duration to 1/100th of a second
- Name of location where violation occurred
- Unique violation identifier/camera ID
- Violation date: day of the week, day, month and year
- Clear display of rear license plate
- The time of the violation in hours, minutes, and seconds
- Direction of travel and lane number
- Posted speed limit and vehicle speed
- Frame sequence number

## PLEASE REFER TO EXHIBIT I OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.

1.3 Proposers shall submit four example sets of violation photos (one before the limit line and one after the limit line, front and rear-face and plate shots) and associated violation video, under the following conditions: (1) daytime - fair conditions, (2) daytime - rain or fog, (3) nighttime - fair conditions, and (4) nighttime, rain or fog.

Redflex prides itself on capturing the highest quality images in the industry. Redflex has invested numerous resources in manufacturing our own technology and working closely with major camera manufacturers to customize their technology to our specifications. While we have been able to provide the County with high quality violation images, our next generation Halo system features upgraded cameras to capture high resolution images both during the day and at night.









A flash drive containing examples of all requested violation photos and videos recorded in various weather and lighting conditions has been submitted to the County, to the attention of Mr. Jesse Rosario, Senior Contract Services Officer. Redflex did not include images collected from our Sacramento enforcement program in order to provide the County additional examples of our system quality.





1.4 From point of data capture, all photos and accompanying video sequences shall be stored and transmitted securely must be capable of secure storage and transmission. The proposer shall maintain a chain of custody for all evidence. Proposers shall briefly describe their approach to maintaining security of evidence and demonstrate security of evidence has been accepted as reliable and credible in California courts. The proposer shall make all events, including all rejects (including non-violations) in the processing database readily accessible to the County for secondary review and audit. Proposer shall provide specific and detailed information on how their database allows for secondary review and audit of all camera events.

The Redflex solution was designed to maintain a secure chain of evidence from the initial capture point on each red-light camera all the way through to storage within the back-office systems. The system does not require data, images, or video to be physically or electronically transferred between different vendors and/or agencies. All incident data, images and video once transferred from the cameras remain in a database at the Redflex headquarters facility, resulting in a preserved and secure chain of custody.

# **Camera System and Transfer**

Each violation file (also known as an incident file) is a single self-contained file that is a package containing all the images, video and metadata related to a vehicle incident (e.g. a red light offence).

In the packaging process performed by Redflex's detection and capture software, violation files are digitally signed and encrypted before being saved to the any of the system drives. Encryption guarantees privacy and digital signature guarantees integrity.

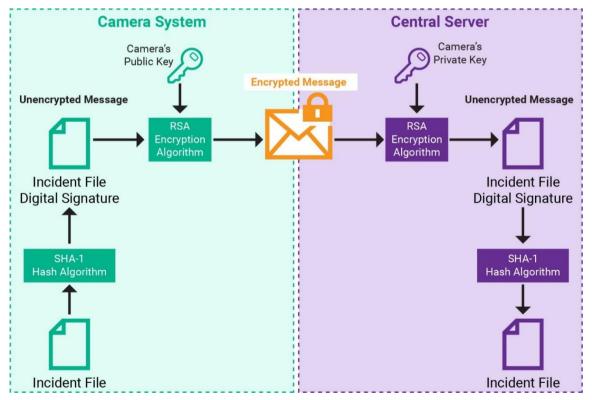
When encryption is enabled the system applies the SHA-1 (or SHA-2) algorithm to the whole file. The results of the algorithm(s) are signed using digital certificate technology and the results are appended to the file. Both the encryption and the signing ensure that.

- The file will not be able to be viewed without the decryption key
- Any file modifications will be detected

The encryption key is kept on the camera and its decryption pair is stored at the back office Importer point. On the camera, the enforcement file is encrypted using a randomly generated session key, using AES algorithms. The session key is then encrypted with the encryption key on the camera.

The decryption key is kept at the viewing/import ends. It is used to decrypt the session key which is then used to decrypt the incident file using the algorithm used by the camera.

This strategy guarantees that the infringements cannot be viewed on site even if the hard disk is stolen as the decryption key is not on the system.







# **Back Office System Accessibility**

The Redflex application suite is comprised of web based applications, all which are accessible from any computer with internet access. Our applications allow for unlimited simultaneous users without degradation of service. Applications allow for multiple users to simultaneously view a single citation. The system includes a security and audit function that allows for the tracking of access, data entry and amending of citations.

## Reliable, Accurate and Secure Capture of Violation Images

Redflex has taken the utmost care to ensure the security of the equipment and evidence contained within. We take a layered security approach to protect the system from the possibility of manipulation from outside sources. The cameras are designed to be in an optimal position to record only violation images in order to protect the privacy of the public.

## Telecommunications Infrastructure

Redflex's software, the primary software used in Redflex's enforcement systems, has many features which allow Redflex to meet the security demands of the County. Our photo enforcement system is configured to encrypt all information and images associated with an incident beginning at the time of capture with a digital signature to provide authentication, authenticity and integrity to the incidents captured. Our photo enforcement system is configured to encode all of the data, images, and video associated with an incident into a single file incident package. Within the incident package, each data element, image, and video is digitally signed, as is the entire package. The individual elements and the entire package are signed using different hash standards. Cryptographic hash values are sometimes called (digital) fingerprints.

Once completed, the incident package is written to the camera system computer where an FTP-like file transfer system monitors for new incidents and transmits the incident data package to the Redflex data center in near real time. This file transfer occurs through an encrypted Virtual Private Network (VPN) tunnel that is maintained between the enforcement site and the Redflex data center, securing the transmission of all incident evidence and data between the two points.

Once the data arrives at the Redflex data center, it is imported into the Redflex processing system. During this import, the incident data is validated against business logic and enforcement criteria. Each import transaction is recorded, processed, authenticated, and archived. During the import process, the meta data associated with the incident is stored in a database. All images and video are stored on multiple storage arrays, and the original incident file is stored in the Archive. Redflex utilizes an Archive storage technology that exceeds the strictest regulatory requirements as it is a write-once, read many (WORM) storage device.

The combination of these controls ensures that the entire process, from point of capture through archive, is secured with the utmost of integrity. The process results in a vertically integrated solution with safeguards throughout the entire lifecycle of the enforcement process.

## **Secure Data Storage**

All data is securely transferred from the enforcement systems to the Redflex data center. The data center is very complex and rivals a small ISP in connectivity and capacity. Redflex uses state-of-the-art enterprise equipment by such providers as APC, Cisco, Juniper, EMC, Compellent, EqualLogic, and Dell to ensure data integrity and uptime. The Redflex data center is protected by redundant cooling, UPS, a generator backup, and utilizes an efficient data center design.

Within the facility, only a core group of individuals has access to the data center including IT management, system administrators and network administrators. Access may also be granted for someone with an identified need for physical access only upon completion of a "10 print" fingerprint clearance and NLETs background check.

Physically, data storage is protected by a multi-layer system of physical barriers to entry. The primary data center is monitored 24x7 by multiple cameras monitoring



every point of entry and egress to the facility. There are also cameras monitoring the entry and egress points to the Data Center itself. Access is controlled via card-key access assignments, and only pre-cleared personnel can open facility doors leading into the Data Center. The secondary (off-site), backup Data Center is protected by similar measures, as well as a professional security guard and an even more limited entry list than the primary data center. Additionally, the secondary data center is protected by a private cage enclosure, to which only Redflex authorized employees have access.

Data is protected through a layered security approach which includes multiple vendor firewalls, IPS, and a SIEM product. Redflex constantly monitors for potential security threats and utilizes several different data storage protection and preservation technologies, including disk-





to-disk backup solutions, high spindle-count RAID array designs, multi-tier storage allocation, and off-site back-up and replication, as well as at-rest encryption of all personally identifying information (PII). Access to data is limited according to tightly monitored and controlled electronic policy implementation. Internal users are only granted access to data based on job responsibility and role and access may be limited based on the user's ability to pass the necessary background checks.

The Redflex data center and co-location data center are connected by a high-speed private connection. Redflex owns all the hardware at the co-location site. By using this methodology, Redflex is able to implement technology and solutions that will minimize recovery time and restore windows. This also allows Redflex to minimize if not eliminate the potential for lost data. In the event of a disaster at the processing site, Redflex's real-time data replication environment allows for a much faster and more reliable data recovery than in a standard tape backup environment.

With the use of real-time data replication, there is no nightly backup window or nightly backup delay. Since all the production systems are backed up to disk arrays, times are significantly faster (compared to tape recovery), as multiple recoveries can take place simultaneously, if necessary.

Redflex will store violation data for the County based upon the legal retention policies imposed by the state and agency. The Program Manager will work with the team to identify the rules of the program, defining data retention and archiving policies.

#### **Two-Factor Authentication**

Redflex has also implemented another layer of security to help keep data secure. Two-Factor Authentication provides an additional layer of security when logging in or preforming transactions online. This improved security measure has been rolled out for all Redflex client account users. Redflex will provide Sacramento County a set of tokens, similar to a key fob, to be used in addition to their passwords when logging on to the system. This ensures that if a password is stolen, the person who stole the password will not be able to access your account because they will not have your token, and vice versa.



## **California Courts Approval**

The California Courts have ruled that Redflex's chain of custody as reliable and credible in thousands of cases throughout the state inclusive of the County of Sacramento. We have never had any challenge of the chain of custody upheld in any of the California courts. The digital encryption keys used as well as the secured transmission of the images, video and all data which is verified for each piece of every file has been proven as credible and reliable by the California courts. Redflex has never had any of our evidence disallowed due to an issue with the chain of custody of the evidence from our systems in California.

1.5 At the County's request, the proposer shall produce an evidence package within five (5) business days of request. The evidence package shall consist of all photographic and video evidence of the citation. Proposer will provide all media storage devices for said evidence. Proposer shall pay liquidated damages payable to the County for failure to provide evidence package within the five (5) business day requirement e.g. the County will be credited \$150 for each court package shipped more than five (5) days and if the vendor is unable to meet the service commitment for pre-processed images for reasons within their control, the County will be credited \$30 for each pre-processed image that has a delivery date exceeding five (5) days.

Redflex will continue to provide the County with a complete evidence package within five (5) business days of your request. Typical evidentiary packages include a copy of the citation/notice that was sent to the violator, a copy for the original images of the violation incident (un-zoomed and un-cropped), maintenance records (if necessary or upon request), the original 12 second video (if necessary), and a Declaration of Technology that explains how the system works and safeguards in place to ensure security of the data and information.

Redflex also provides our clients the option to generate court evidentiary packages themselves. The Court Evidentiary Package (CEP) Application can be accessed through a secured Web based portal at the jurisdiction's convenience, 24/7. Access to the application is granted when an approved user name and password is entered. The CEP Application, which is both user-friendly and intuitive, provides a comprehensive set of documents that supports a burden of proof by providing sufficient evidence that a traffic violation occurred, including; violation images, the violation video, a copy of the citation, and other supporting documentation, such as the Certificate of Correct Functioning.

Redflex agrees to the County's liquidated damages requirement and will ensure that all evidentiary packages are delivered on time to the appropriate County personnel.







1.6 Camera enclosures must be tamperproof and waterproof to ensure 100% clear images. Camera enclosures must be as small as possible and use as little power as possible. Self-contained systems not requiring a separate roadside enclosure are preferred. State the size of the camera system enclosure and the normal power draw of the system. Camera enclosures must be designed in such a fashion that maintenance, and other operations can be accomplished easily and quickly without creating a public safety hazard. Explain typical maintenance procedures. Proposer shall state installation and construction times for a camera system.

## **Halo Enclosure**

Redflex enclosures are tamper-, vandal-, and weather-resistant lockable housings. The camera housing units are designed to preserve the overall effectiveness of the program's operation and to protect the Redflex camera units from extreme weather conditions (designed for IP66 rating) and vandalism, ensuring minimal "downtime" and easy maintenance.

Each Redflex housing and pole system is professionally engineered and built to industrial standards. The Halo system being proposed is a small camera unit that is no more than the following dimensions.

## Length = 11", Width = 10", Height = 15.5"

The face camera unit that is also required for this system will be housed in the same enclosure.

The Halo system is designed as a low power single unit, using minimal power at sites. The largest improvement in utility requirements has been introduced from the transition from a Xenon-based flash to an LED-based flash. Xenon flash systems have a large peak power draw when they recharge, this can put extra strain on available power infrastructure. The Halo system has an average power usage of 75W with 120W being drawn when operating in high capture and processing conditions.



# **System Maintenance**

Redflex's maintenance team has one goal in mind: to provide our clients with the most advanced photo enforcement systems in the industry with little to no system downtime. To accomplish this goal, Redflex offers a three-pronged maintenance approach to ensure minimal system downtime: 1) daily remote, 2) preventative and on-site maintenance, and 3) emergency repair. This combination ensures correct functionality, high yields and the most stringent assurances on the levels of legal defensibility.

No matter what time anyone from the County calls our Customer Service Center, a US-based Redflex representative will be there to pick up the phone and document the issue. Once the issue is documented, a work order will be generated for maintenance to begin and to have the system up and running within 24 hours. The County can be confident that they have a team of dedicated maintenance personnel available to assist with any issue, 24/7/365.

All photo enforcement equipment maintenance will be the responsibility of Redflex; no involvement will be required by the County. Redflex will be responsible for daily verification of each site's operational status and will immediately notify the County upon detection of any camera or system malfunction.

## **Daily Remote Maintenance**

Essential daily maintenance and support activities will be provided by a local field technician and the Redflex Customer Service Center (CSC). This includes daily remote diagnostic systems check which serve to ensure correct functionality, to establish the highest yields and to guarantee the most stringent assurances on the levels of legal defensibility.

Daily remote diagnostic checks include image quality assessments and system performance analysis. Remote fault diagnosis and resolution is available for a wide variety of system performance issues. Those issues unable to be resolved remotely via the CSC will be serviced by our local field technician.

The CSC utilizes numerous proprietary tools, methods and resources for identifying and resolving any issue that may arise throughout the life of a photo enforcement program. All Redflex photo enforcement systems have been designed to automatically notify appropriate personnel of systems failures. Below is an overview of some of the tools our Redflex local field technicians and CSC use to identify system issues as quickly as possible to maximize system uptime.

#### **SMARTview Plus™**

SMARTview Plus™ is a proprietary tool we use to review recent images from all violations at an approach, and to review the images that are being produced in near real-time. The images become available as soon as they are imported into Redflex's Central Server, prior to processing.





The CSC uses this tool to perform daily image analysis and proactively catch and resolve any image quality, camera or computer issues in an effort to reduce the number of incidents affected. Issues may include flashes not firing, constant flash firing, plate image outside of the frame, incident video unattached, pixilation or distortion of the images, and vandalism.

#### **Daily Variance Reports (DVR)**

We use Daily Variance Reports (DVR) to proactively identify sites that have not reported in the past 12 hours. These reports show the time of the most recently recorded incidents and the average number of incidents over the past three months and past 12 months. If a variance exists +/- 10%, then we can conduct an operational check to explore and resolve the issue.

While reviewing images, our maintenance team looks for issues that could cause a violation to be rejected, as well as the date and time of the last incident. If an issue is found, we can resolve the problem remotely from the CSC or assign a maintenance technician to investigate.

#### **Digital Camera Management System (DCMS)**

DCMS is a system for remotely monitoring cameras and environmental alarms. When a failure is detected at an approach, a list of some 46 alarms will notify both your local field technician and the CSC, ranging from brightness level, hardware failure, certificate expiration, traffic light failure and much more. The alarms span five levels of severity – Minimal, Medium, Serious, Critical and Severe – allowing us to better gauge and allocate maintenance resources. Once a failure is acknowledged, a CSC team member will investigate and the alarm will be removed so other users monitoring the same dashboard can address other problems as they are presented. Once the issue has been resolved, DCMS will clear the alarm automatically.

#### Inventory/Asset Tracking System

Redflex utilizes an Enterprise Resource Planning (ERP) system that greatly enhances our ability to proactively maintain enforcement systems.

The ERP system allows for tracking "mean time to failure." The software features Quality Management Functionality offering full integration for managing quality processes and nonconformance's, including the ability to track parts that are returned from the field for repair. Using this information, we can analyze the product service life and failure rate to determine mean-time-between-failures.

Once Quality Management has identified a part has a high failure rate, the system will inform Redflex where the part is located in the field. The ERP will then create Service Orders and your local field technician will replace the parts before they result in downtime for a site.

#### **Preventative & On-Site Maintenance**

This phase of the maintenance program is based on a strict regimen of various strategic checks. These steps, along with the immediate response to problems as they arise, are pivotal to both system uptime and increased issuance rates. During this process your local field technicians will conduct image quality assessments, system performance and statistical analysis of the equipment.

A maintenance log will be completed by your dedicated local field technician during Redflex's scheduled maintenance. This maintenance includes both system checks and a physical inspection. To ensure that the system is running at peak performance and that all hardware and software is functioning properly, a thorough system check is performed.

Service orders are automatically generated on a regular basis for each site to ensure maintenance inspections are performed. While on site, maintenance technicians complete a form indicating which items have been checked. The on-site checks are detailed in the Preventative Maintenance Check List, including review of the following items:

- Cleaning the camera enclosure glass
- Verify that all signage is in place
- Inspecting the enclosure for signs of leaks, wear and/or damage
- Inspecting cables, connectors and hardware for signs of wear or damage
- Inspecting poles, bases and enclosures for signs of damage and to ensure proper alignment
- Inspecting detection devices for signs of wear or damage
- Testing enclosure safety devices for proper operation to ensure safe working conditions for maintenance personnel and the public
  to operating voltages

These maintenance forms are stored electronically and are available upon request. When a situation arises, Redflex will begin initial maintenance work as quickly as possible and keep the County informed of our action plan.

#### **Emergency Repair and Knockdowns**

Major issues and knockdowns will have an agreed resolution plan, to be approved by the appropriate County personnel. These types of issues typically require the use of a subcontractor due to their severity, but it is Redflex's commitment to work with the utmost speed to have the site or the vehicle functional as soon as possible. Redflex will keep the necessary departments aware of the equipment status. The appropriate departments will be given notice of the damaged equipment and updates on the status of the rebuild.





In the event of a knockdown or main power failure, our system will retain all recent violations captured that were pending transfer. Once power is restored, all captured violations will automatically be transferred to our data center for processing.

#### **Installation and Construction Times**

Halo is a single-enclosure, one-pole system that minimizes infrastructure connections and construction time. Halo's one-pole installation takes much less time and effort than installing separate camera, flash and detection devices.

Based on our experience with the County and installing systems throughout California, we anticipate that each system will take six (6) weeks to install and configure after permits are granted.

For more information on the program milestones and steps required to install our photo enforcement systems, a complete schedule can be found in **Section IV. 3.0**.

1.7 The proposer shall be able to utilize a range of detection technologies, including standard embedded sensors, radar, standard induction loop, or video detection technology. Proposer shall specify method of detection and camera activation.

Redflex has broad experience in multiple detection technology, including inductive loops, piezo sensors, flush-mounted sensors (FMS), video loops and radar. Having implemented programs in more than 400 jurisdictions in the United States, we have a strong understanding of the advantages of each method of detection.

While there are various benefits to each option, for the County's program, we are proposing our 3D HD radar technology as we understand it to be best technology for use in Sacramento County. It is important to note that while they are not included in this proposal existing loop technology installed at Sacramento can continue to be used with the proposed system if required by the county.

Detail on Redflex's 3D HD detection and the proprietary algorithms that ensure reliable, quality detections for violations can be found in the provided **Technical Solution Overview**.

1.8 If requested by the County, the newly selected vendor must be capable of integrating into its back office processing database, images, video and data from the current vendor for all open citations for the past 5 years. If a new vendor is awarded this contract, such new vendor will assume responsibility for supporting all previously issued citations to include all applicable customer service and court support to the extent requested by the County. The proposer will also make available all data, images and video in a usable format to the incoming vendor at the end or termination of this contract, as the outgoing vendor.

Should the County choose to select a new vendor as your photo enforcement provider, Redflex will work with the vendor and the County to transfer all the last 5 years' worth of images, video, and data from our system to the new vendor's. Redflex will do our part to ensure a smooth transition to a new vendor.

2.0 The proposer must be able to provide a strong, fully web enabled and fully secure citation processing system that includes data processing, prompt delivery of all data to the Sacramento County Sheriff's Department for violation review and citation authorization. The proposer's system must be Apple compatible as the County utilizes Apple products and operating systems (iPads and iPhones, iOS) to routinely access the system from remote locations. Proposer must provide maintenance of secure Internet-based violation viewing system.

#### **Alcyon Back-Office Solution**

Redflex is able to provide an enhanced citation processing system when compared to the County of Sacramento's current program, our newly-developed Alcyon back office solution provides the County with a suite of features, applications, and reporting functionality that allow the County and law enforcement to manage your photo enforcement program by accessing enforced intersection in real-time, managing citation authorization and violations, evidentiary information for court use and program reporting all through one source.

#### **Incident History**

The Alcyon back office allows users to view the complete history of each captured incident. This includes obtaining information about the history of a given citation, and other functions (e.g., dismissals, fee waivers, nominations, etc.), or suspend activity on the account. The following sections provide an overview of this tool.

#### **Details**

The Details section will access violation, vehicle and registered owner details for the incident as well as violator call-in logs.

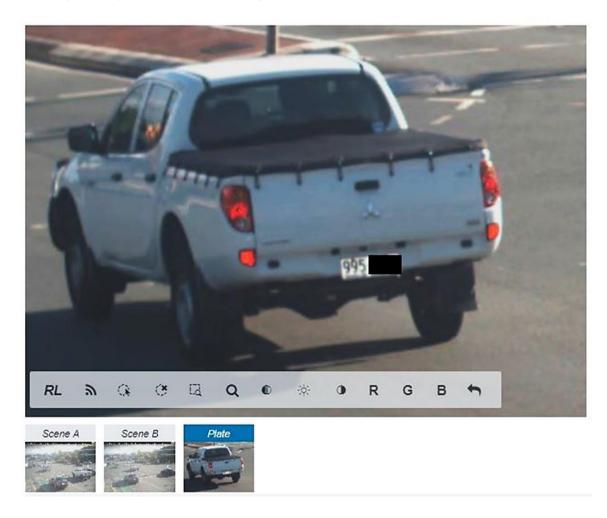
PLEASE REFER TO EXHIBIT J OF THE CONFIDENTIAL INFORMATION SECTION FOR THIS INFORMATION.





#### **Images**

The Images section provides access to all scene and license plate images and the video clip related to each incident. This includes the original raw image and the images that were modified during violation processing. This page also allows the user to download violation images for printing or mailing and to save the video locally to a PC, tablet or phone.



2.1 The proposer must be able to provide secure, internet-based, website viewing capability to members of the public who receive mailed citations and in support of Sheriff and Court operations. Proposers must describe in their written proposal their ability and experience to meet this requirement. The public must have the ability to view the citation, the photos and/or video of the violation on the website 24/7.

Redflex has developed Photonotice.com for the public to view their violation information if they receive a citation in the mail. Photonotice.com is a company developed and maintained secure website which provides customer support to address citizens' concerns, while allowing for viewing of violation images and the violation video clip and for payment of the citation. The website is typically printed on the citation for ease of accessibility for the violator. This web based application can be accessed by violators 24/7 from any internet connected computer. The violator will be able to submit a payment through this website or schedule a court hearing.

2.2 The proposer must provide an amber deviation warning system that is capable of notifying the County in the event there is a deviation from preset amber times, during any signal phasing, recorded at any approach.

Redflex is able to provide the County with notification of any instance of amber signal phase deviation, at any monitored approach.



# Section IV. – Additional Requirements Realizable For a World on the Move



#### Section IV. - Additional Requirements

1.0 The proposer must provide references from three (3) other cities, counties, or states to document successful deployment of vendor's proposed red light camera enforcement solution (submit RFP Appendix H). Proposers will demonstrate the ability to operate systems within the State of California. The references must be operating a fully outsourced program using the same or similar equipment and technology proposed herein. One reference should be from a city of a similar size to City and County of Sacramento. Proposers shall provide points of contact for each reference, together with the number of red light photo enforcement approaches deployed with the high resolution digital camera technology.

Below the County will find contact information for all our references. On the following pages we have provided additional information on the technology and services provided to each client.

#### **Culver City, California**



Sgt. William Browne 4040 Duquesne Ave. Culver City, CA 90232 P: 310.253.6120 E: William.browne@culvercity.org

#### Phoenix, Arizona



Lt. Patrick C. Hofmann 301 E. Union Hills Drive Phoenix, AZ 85024 P: 602.495.6701 E: Patrick.Hofmann@phoenix.gov

#### Pembroke Pines, Florida



Charles F. Dodge, City Manager 101000 Pines Blvd. Pembroke Pines, Florida 33025 P: 954.431.4884 E: cdodge@ppines.com

#### Northern Territory, Australia



Brendan Joyce, Senior Project Manager – Traffic Section Floor 2, Highway House, Palmerston Cct, Palmerston GPO Box 61, Palmerston, 0831 P: +61 8 8999 3442 E: brendan.joyce@nt.gov.au





# CULVER CITY, CALIFORNIA RED LIGHT PHOTO ENFORCEMENT



Redflex NK6 red light photo enforcement system.

# CASE

#### **CLIENT**

Culver City, CA

#### **CONTRACT**

Red Light Photo Enforcement

#### **PROGRAM OVERVIEW**

- REDFLEXred® systems
- 24MP Face Cameras
- Maintenance and Support
- Local Office for Citation Processing
- Printing and Mailing of Citations

#### **DATE OF CONTRACT**

From August 1999 to Present

According to the Insurance Institute for Highway Safety, 22 percent of all traffic accidents in the United States are caused by drivers running red lights. Every year, these accidents kill some 800 people and rack up an estimated \$7 billion dollars in property damage, medical bills, lost productivity and insurance hikes.

#### **PROGRAM**

Like many communities in California, there has been considerable commercial development throughout Culver City and the volume of vehicles that travel City roads has significantly increased. Culver City streets have become major regional thoroughfares on the West side of Los Angeles and are used by motorists attempting to avoid congested freeways in the area. To help combat dangerous driving, the Culver City Police Department decided that a red light camera program was needed.

In late 1999, Culver City selected Redflex to install and maintain red light photo cameras at some of the most dangerous intersections in the City and provide local violation review, printing, and mailing. Currently Redflex provides the City with 24 red light photo enforcement systems.

The 24 REDFLEXred® systems installed throughout Culver City take three (3) photos of each violation – a wide-angle shot of the vehicle before the stop bar, a shot of the vehicle in the intersection with the light red, and photo of the driver of the vehicle. From these photos, a close up of the vehicles license plate is extracted for vehicle identification. A 12-second video of the infraction is also included in the incident evidence package.

#### **CLIENT CONTACT**

**Sgt. William Browne** 4040 Duquesne Avenue Culver City, CA.90232

M: 310.253.6120

E: william.browne@culvercity.org

Case Study: CC CA (07/18) www.redflex.com



#### PHOENIX, ARIZONA

#### RED LIGHT & MOBILE SPEED ENFORCEMENT



Redflex NK6 red light photo enforcement system.

# **CASE STUDY**

#### **CLIENT**

Phoenix, AZ

#### CONTRACT

Red Light and Photo Speed Enforcement Program

#### **PROGRAM OVERVIEW**

- REDFLEXred® systems
- Mobile REDFLEXspeed® vans
- Maintenance and support of all equipment
- Printing and mailing of citations

#### **DATE OF CONTRACT**

From July 2009 to Present

Redflex and Phoenix have partnered together to deliver some of the most innovative photo enforcement systems in the industry.

#### **PROGRAM**

Phoenix is the fifth largest city in the United States with a population of over 1.6 million. The City of Phoenix Red Light and Mobile Speed Camera program was awarded to Redflex following a highly competitive procurement process.

In July 2009, the City of Phoenix Police Department chose to partner with Redflex to reduce the number of accidents and their severity. Currently, Redflex provides Phoenix with 12 red light enforcement systems with the City. Redflex also provides the City with eight fully equipped mobile enforcement units including bi-directional (dual direction) deployment technology. These vans are utilized throughout the City in school zones, as directed by the City of Phoenix. This is an all-inclusive program including equipment, installation, maintenance, processing, printing/mailing, customer service and expert witness support. On average, the program issues 3,200 violation notices per month.

Redflex provides eight mobile speed enforcement units to deployed in school zones throughout Phoenix. The mobile units provide speed enforcement from 7am – 4pm on weekdays. The monitored speed zone is reduced during 'bell times', and reverts back to normal speed during 'non-bell' times. The units are deployed for approx. 1600 hours each month.

4 years after Redflex installed photo enforcement systems, Phoenix realized a 37% decrease in citations issued at three (3) of their main intersections.

Case Study: PHXAZ (07/18) www.redflex.com



# PHOENIX, ARIZONA RED LIGHT & MOBILE SPEED ENFORCEMENT

#### **REDFLEX AND PHOENIX PARTNERSHIP**

#### How it works

As part of Redflex's partnership with the City of Phoenix, the City has allowed us to install new photo enforcement systems at a designated test site in parallel with active photo enforcement systems to test and refine our latest technology.

For over a year, Redflex has been testing our latest photo enforcement technology, the Halo system. Halo features the most sensitive cameras available and delivers exceptional low-light performance for night photography. A low power, high intensity LED flash provides targeted illumination on the object, without the stray light often resulting with Xenon units.

Halo uses 3D high-definition (3DHD) radar, coupled with stereoscopic secondary speed verification, to effectively cover up to six lanes of bi-directional traffic.

Being a truly one-pole solution, Halo is designed for quick and cost-effective installation, with minimal civil works needed.



Redflex's test site in Phoenix, AZ with our new Halo technology.





#### CLIENT CONTACT Lt. Patrick C. Hofmann

302 E. Union Hills Drive Phoenix. AZ 85024

M: 602.495.6701

E: Patrick.Hofmann@phoenix.gov

Case Study: PHXAZ (07/18) www.redflex.com



#### PEMBROKE PINES, FLORIDA RED LIGHT CAMERA PROGRAM





Redflex's Halo red light photo enforcement system.

# CASE

#### **CLIENT**

Pembroke Pines, FL

#### CONTRACT

Red Light Camera Program

#### **PROGRAM OVERVIEW**

- Redflex Halo red light systems
- Maintenance and support of all equipment
- Customized court scheduling system
- Printing and mailing of citations

#### **DATE OF CONTRACT**

From February 2017 to Present

Florida has the third highest number of fatalities linked to red light running in the nation. 344 red light running fatalities occurred in the state of Florida from 2011 through 2015.

#### PROGRAM INFORMATION

Redflex and the City of Pembroke Pines partnered in February 2017 to bring their red light photo enforcement program back after cameras went dark for over two (2) years. The City's overall goal is to increase the safety of City roadways for drivers, pedestrians, and other roadway users. To assist with their safety goals, Redflex has installed 8 red light photo enforcement systems at some of the City's most dangerous intersections.

Pembroke Pines was the first client to have Redflex's Halo system installed in North America. Halo is a single-enclosure, one-pole system that minimizes infrastructure connections and construction. The platform requires almost no onsite configuration and has no moving parts, reducing maintenance needed as onsite camera adjustments are not required. The City's systems also utilize High-definition 3D tracking radar, which accurately measures range, angle and speed of detected vehicles.

Another highlight of this program is our work with the City and the Broward County Courts. We collaborated with the courts and police to create a custom court hearing application for Pembroke Pines.

#### **CLIENT CONTACT**

Charles F. Dodge

City Manager

10100 Pines Boulevard Pembroke Pines, Florida 33025

**M:** 954.431.4884 **E:** cdodge@ppines.com

Case Study: PPFL (07/18) www.redflex.com



# NORTHERN TERRITORY GOVERNMENT

SPEED/RED-LIGHT ADJUDICATION SERVICES



Redflex bus enforcement system mounted on existing infrastructure.

# **CASE** STUDY

#### **CLIENT**

Department of Transport, Northern Territory Government

#### CONTRACT

Fixed and mobile speed/red-light camera adjudication services

#### **TECHNOLOGY SOLUTION**

Halo Fixed REDFLEXred™ radar REDFLEXspeed™ radar Radarcam™ REDFLEXIIPS™

#### **INSTALLATION, MAINTENANCE**

Redflex Traffic Systems Pty Ltd

**DATE OF CONTRACT** 

2007 to Present

Deployment of Halo Fixed, a one-pole, single-enclosure system for speed and red-light enforcement.

End-to-end outsourcing including a dedicated back-office and infringement processing center.

#### **PROGRAM**

Australia's Northern Territory (NT) occupies much of the center-north part of the mainland continent. Despite being sparsely populated, in 2006 government statistics reported that on average, the risk of being killed in a car crash in the NT was higher than in any other developed country.

The NT Government established the Road Safety Task Force in an effort to reduce the NT's devastating road toll, with the result that a comprehensive road safety package was approved.

The Task Force recommended a range of measures to improve road safety, with four key objectives:

- · Safer road network
- · Safer road users
- Safer vehicles
- · Effective emergency response.

As part of the strategy to create safer roads, the NT Government decided to implement automated digital enforcement technologies, including the installation of integrated speed and red-light cameras.

"Redflex is committed to providing the technology, customer service and experience needed to help global communities improve the safety of their roadways."



# NORTHERN TERRITORY GOVERNMENT

#### SPEED/RED-LIGHT ADJUDICATION SERVICES

#### HALO FIXED - A ONE-POLE, MULTI-FUNCTION SOLUTION

Redflex has deployed Halo Fixed in the NT, a single-enclosure, one-pole system, providing red-light and speed enforcement in one unit.

Being a truly one-pole solution, the Halo Fixed systems were installed in about half the time and with minimal disruptions (i.e. relatively minor civil works) compared to comparable systems using multiple poles and in-ground detection.

Halo Fixed will lead to lower total cost of ownership (TCO) for the NT Government due to:

- Above ground (radar) detection in the NT especially, road trains and heavy rain increase the maintenance requirements for in-ground detection methods (loops and piezos), meaning radar detection is a much more cost-effective method
- Advanced engineering there are no moving parts within the Halo Fixed system, which improves system reliability.

#### REDFLEX INFRINGEMENT OFFICE

REDFLEXIIPS™ image and infringement processing system, provides processing and infringement handling services for the Redflex Infringement Office.

The facility is able to process thousands of incidents per day, with a two-stage verification process in place before final adjudication by police. The facility sends violations and runs a call center during business hours.

Redflex works closely with the Fines Recovery Unit to manage the collection of fines and provide call center services when enquiries relate to payments. The Northern Territory Police audit a sample of incidents processed and conduct investigations when required.

#### **POSITIVE DRIVER BEHAVIOUR**

The first camera installed at Pinelands, Darwin, photographed an average of 203 red-light or speeding traffic offences each day when it was first installed in 2007.

By comparison, for 2018 there has been approximately 60 incidents per month recorded, reflecting a positive change in driver behavior.



Back-Office processing services office in Darwin, NT.

#### END-TO-END INFRINGEMENT PROCESSING

Redflex established a complete infringement processing service for the Northern Territory Government, managed under the Department of Infrastructure, Planning and Logistics group including:

- · Evaluation of captured incidents
- Owner information lookups and entry
- · Entry of confirmed incidents
- · Printing and mailing services
- · Re-nomination processing
- Initial point of contact for all enquiries
- Provision of evidence for court packages
- Payment processing services for credit cards.

#### CLIENT CONTACT

Brendan Joyce Senior Project Manager Floor 2, Highway House, Palmerston Cct, Palmerston GPO Box 61, Palmerston, 0831

P: +61 8 8999 3442

E: brendan.joyce@nt.gov.au



2.0 Proposer must clearly state if any of the "turnkey services" listed in Section II, Scope of Work, are subcontracted to a third party. This includes site design, installation and maintenance; processing and transmitting data via a secure website; legal access to the DMV database; and the ability to create and provide statistical reports to the Sacramento Sheriff's Department. Subcontracting is acceptable for design and construction, not for operation of the program.

All administrative services from the back office to violation processing and printing are conducted in-house in the US and are at no cost to the County. Redflex does not outsource to an independent third-party vendor, thus ensuring a secure chain of custody and on-time processing. While not expressly highlighted, our competition generally uses third-party agencies for key processes like software development, violation processing, printing/mailing and customer services.

The only service Redflex outsources to a third-party company is electrical underground work during the installation of new red light photo enforcement systems.

#### M&M Electric

M&M Electric Audrey Daugherty, President P: 916.929.0150 E: alynn@sacmmelectric.com



M&M Electric is a family-owned company established in 1967. They specialize in red light camera installation, street lights, traffic signals, highway lighting, ramp metering, CCTV cameras, and video detection. With a staff of approximately 50 employees, M&M has the capability and resources to assist with the County's red light system upgrades and any new enforcement locations requested by the County.

As a certified contractor registered with the State of California, they have completed projects throughout Sacramento and Northern California. M&M Electric assisted Redflex during the installation of the County's current red light system and they are our "go-to" vendor for any construction projects in Northern California.

M&M Electric will provide the manpower and capabilities for this program while Redflex will design the installation, provide oversight during the construction, and verify compliancy prior to each approach launch. M&M Electric will be the single sub-consultant who will be responsible for underground electrical work, above ground infrastructure and traffic control.

3.0 Project Timeline: Proposers will supply a detailed project timeline showing sequential and concurrent activities to be undertaken to result in a fully operational system.

Should the County choose to continue their partnership with Redflex, the County can be assured that there will be no system downtime or program interruption. A continuation of our program will ensure no interruption to this important public safety initiative that could occur with a new vendor. In most cases, programs take several months to over a year for vendor transition.

Redflex will begin the process to upgrade the County's red light systems with our Halo systems after the new contract has been signed. We anticipate that it will take six (6) weeks or less to install the new red light systems after permits are granted. We will M&M Electric as a subcontractor for the upgrades needed at each location. We will go live with the new Alcyon Back Office on January 1st, 2019.

On the following pages we have included a general implementation schedule for this project, based on the following assumptions:

- Only require minor changes to the business rules and processing rules. Back office development will begin after obtaining client sign-off.
- Estimate permit approval to be obtained with 2 weeks. As the permit request is for upgrades only, not a full system, we anticipate a shortened turnaround.
- Installations will occur in parallel to help expedite the implementation efforts

Since this is a continuation of an existing program, there will be no system downtime during the upgrade process. This is something that cannot be said by other vendors.





	Task Name ▼	Duration 7	Predecessor
1	Sacramento County - Red Light Photo Enforcement System		
2	△ Initiation		
3	County Selects Redflex and Awards Contract	0 days	
4	Redflex and County Commence Contract Negotiations & Execution of Contract	5 days	3
5	Program Kick-Off: Confirm Roadway Projects, Prioritize Implementation Rollout, Site Survey Planning, Schedule Training, Review of Business Rules and Processing Rules, Define Public Outreach Campaign	1 day	4
5	Provide Public Outreach Campaign (Throughout the Life of the Contract)		588
7	■ Planning		
8	Define Updates to Business Rules and Processing Rules - Obtain Client Sign-Off	3 days	5
9	Staffing	10 days	5
0	△ Execution		
11	Back Office Development, QA Testing and Deploy into Production	20 days	8
12			
13	Construction Design: Issue As-Built Designs, Prepare AutoCad Drawings, Internal Drawing Review, Final Drawing Review	10 days	5FS+1 day
L4	Obtain Permits: Approval for Construction Designs and Permits	20 days	13
15	Pre-Construction: Utility Locates, Mark System Locations, Discuss Install with Traffic Control	5 days	14
16	Construction: Perform Construction and Setup, CNST Gear Installation, Wiring, Site Restoration	20 days	15
17	Post Construction: Check Equipment Installation and Configuration, Warning Sign Verification	18 days	16SS+3 days
18	Perform 3-Day Site Acceptance Test: Authorization from City to Activate Systems at End of Test Period	15 days	17SS+1 day
19	Deployment of Upgraded Systems (Phased Roll-Out)	13 days	18SS+3 day:
20			
21	Conduct Video Surveys at Proposed Enforcement Locations	6 days	5FS+6 days
22	Compile Video Survey Results, Submit Results to City & Review Collected Data	23 days	21SS+5 days
23	Final Selection of Intersections and Approaches	2 days	22
24	△ Training		
25	Begin New Hire Cross-Training		9FS+10 days
26	Training - Application/Feature Updates, Refresher, Train New Team Members, Etc.	2 days	19SS-5 days
27	Ongoing Training (Throughout Program, As Needed)	26 days	
28			
29	Touch Points: Regular Touch Points and Report Reviews		<u>5SS</u>
30	△ Closing		
31	Internal Implementation Closing Steps: Final Documentation, Team Member Wrap-Up, Lessons Learned	3 days	19





4.0 Six Lanes of Enforcement: Describe the system's ability to accurately capture violations at approaches with up to six lanes in one direction, including possible left and right turning lanes.

As we have for 10 years, Redflex has and will continue to capture red light running violations at approaches up to six (6) lanes. We can accomplish this with our patented, multi-camera, multi-angle, multi-mode solution that incorporates the integrity of using a single central processor and time clock, in synchronized fashion. With our patents (US Patent Numbers 6,546,119; 6,919,823 and 6,240,217) of a multi-camera configuration, our solution provides integrated and encrypted, high-resolution still images and full-motion color video. This multi-mode configuration provides the richness, crispness and clarity that are combined with the industry's highest resolution still cameras and the benefit of situational awareness that is evident through full-motion video.

The Redflex red light photo enforcement system provides a synchronized low-wattage flash illumination system that is triggered to go off in synchronization with the still camera's digital imaging in all light and weather conditions, ensuring effective full-color images, 24/7.

5.0 Environmental Impacts: The City/County prefers systems that utilize minimally obtrusive new poles to minimize impacts to curbside and streetscapes. Describe the ways in which your system minimizes its overall "intrusion" into the physical environment at and near selected intersections. The proposed system should be physically and operationally independent of the signal system operated by the City and County Departments of Transportation. The Vendor shall apply for an encroachment permit for, and prior to, installing any equipment or hardware within the right-of-way, modifying any City, County or State owned facility, or performing any sidewalk, shoulder or lane closure. Please provide a detailed list and description of all equipment deployed, together with physical dimensions for a single monitored approach of four traffic lanes. Attach photos of all required equipment from an existing active four lane intersection approach. Photos must include all poles, cabinets, housings and flash units that make up the entire system.

#### **Minimally Intrusive Design**

The Halo system was designed to accurately capture violating vehicles in the smallest enclosure possible, reducing the impact of streetscapes and allowing the system to blend into its surroundings. Redflex also designed the Halo system to utilize the same poles that are currently installed at enforced locations. With an enclosure size of  $11" L \times 10" W \times 15.5"$  H and a pole-mounted cabinet size of  $30" L \times 30" W \times 12"$  D (this is a maximum size and may be reduced when installed), the Halo system is small and compact to minimize its intrusion. Our system is completely separate from the signal system. For more information on this, please see the **Signal Phase Detection section** above.

To give the County an idea of what our systems will look like installed on your roadways, we have provided a rendering using a current approach. The photo below shows how well the equipment aesthetically blends into its surroundings.



Redflex will apply for all permits before starting any program upgrades or program expansion. Having installed over 20 systems throughout the County, we understand the requirements and resources needed to ensure this process is completed as quickly as possible.





#### **Halo Distributed**

Should the County desire to use existing intersection infrastructure, such as traffic poles and gantries, Redflex has designed Halo Distributed. Utilizing the same technology in our proposed Halo system, Halo Distributed is designed to be mounted to various poles across an intersection to enforce individual lanes.







3DHD Radar

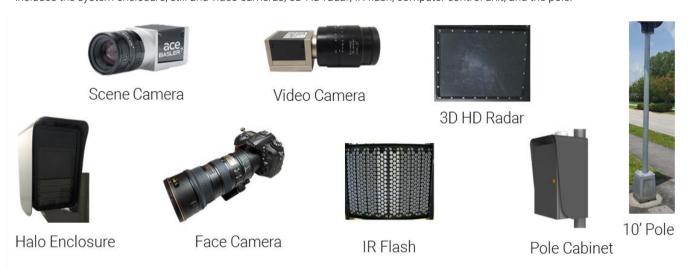
Powerful IR Flash

Sensitive Camera

Control Unit

#### **Required Equipment**

Below we have provided images of all of the key equipment needed for the Halo system to enforce a 4-lane intersection. Equipment needed includes the system enclosure, still and video cameras, 3D HD radar, IR flash, computer control unit, and the pole.



6.0 Factory Authorized Dealer: By submitting an offer, the Proposer certifies that it is a factory authorized dealer/distributor of all products proposed and is qualified and equipped to offer in-house service, maintenance, technical training assistance, and warranty services, including provision of spare parts and replacement units.

While other vendors in the industry is a factory authorized dealer, Redflex is the only vendor that manufactures our own equipment. We are equipped to offer all service, maintenance, training, warranty services, repair, and replacements on all products provided to the County. All of this is provided to the County at no additional cost.

# Appendix A – Certificate of Insurance Redflex For a World on the Move



#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/29/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

COVERACES	CERTIFICATE MUMBER, 4700470507	DEVICION NUI	MDED		
		INSURER F:			
		INSURER E: Employers Insurance Company of Wa	ausau 21458		
Glendale, AZ 85306		INSURER D: LM Insurance Corporation	33600		
Redflex Traffic Systems, Inc. 5651 W. Talavi Blvd., Suite 200		INSURER C: First Liberty Insurance Corporation	33588		
INSURED  Dodfloy Troffic Systems Inc.	REDFTRA-02	INSURER B: Westchester Surplus Lines Insurance	Co 10172		
		INSURER A: Liberty Insurance Corporation	42404		
Lafayette CA 94549		INSURER(S) AFFORDING COVERAGE	NAIC#		
3697 Mt. Diablo Blvd., Suite 300		E-MAIL ADDRESS: CertRequests@ajg.com			
Arthur J. Gallagher & Co. Insurance Brokerof California, In	c 111C #0726293	PHONE (A/C, No, Ext): 925-299-1112	FAX (A/C, No): 925-299-0328		
PRODUCER		CONTACT NAME: Certificate Department			
	<u> </u>				

#### COVERAGES CERTIFICATE NUMBER: 1739179527 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

	EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.								
INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s
D	Х	COMMERCIAL GENERAL LIABILITY	Υ	Υ	TB5-Z91-453980-038	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 1,000,000
		CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
	Х	\$25K BI/PD DED						MED EXP (Any one person)	\$ 10,000
								PERSONAL & ADV INJURY	\$ 1,000,000
	GEN	N'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	Х	POLICY PRO- LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000
	X	OTHER: CAP of \$25M							\$
С	AUT	OMOBILE LIABILITY	Υ	Υ	AS6-Z91-453980-028	4/1/2018	4/1/2019	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	Х	ANY AUTO						BODILY INJURY (Per person)	\$
		OWNED SCHEDULED AUTOS ONLY AUTOS						BODILY INJURY (Per accident)	\$
		HIRED NON-OWNED AUTOS ONLY AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
	Х	COMP/COLL X DED*: \$5,000						<- *HAPD Ded	\$
Α	Х	UMBRELLA LIAB X OCCUR			TH7-Z91-453980-048	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 5,000,000
		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$ 5,000,000
		DED RETENTION\$							\$
Е		RKERS COMPENSATION EMPLOYERS' LIABILITY		Υ	WCC-Z91-453980-078	4/1/2018	4/1/2019	X PER OTH- STATUTE ER	
	ANY	PROPRIETOR/PARTNER/EXECUTIVE ICER/MEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT	\$ 1,000,000
	(Mar	ndatory in NH)	,					E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	If yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
В	PRO	DFESSIONAL & CYBER LIABILITY			G27435075005	4/1/2018	4/1/2019	Each Claim Aggregate Retention- Each Claim	\$2,000,000 \$2,000,000 \$50,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RFP #8494

RE: Red Light Photo Enforcement System

ADDITIONĂL INSURED(S): The County of Sacramento, its officers, directors, officials, employees, and volunteers

CERTIFICATE HOLDER	CANCELLATION
County of Sacramento	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
9660 Ecology Lane Sacramento CA 95827	Robet Manne

AGENCY CUSTOMER ID:	
LOC #	



#### ADDITIONAL REMARKS SCHEDULE

Page

AGENCY		NAMED INSURED
POLICY NUMBER		
POLICE NUMBER		
CARRIER	NAIC CODE	
		EFFECTIVE DATE:

#### ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS	FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER:	FORM TITLE:

#### THIRD PARTY CRIME/FIDELITY COVERAGE:

Carrier: Travelers Casualty and Surety Co. of American (AM Best rated A++XV) NAIC #31194 Policy #105581296 - Effective 4/1/2018 - 4/1/2019 \*Limit \$500,000 Aggregate limit for Employee Theft of Client Property - Retention: \$50,000

#### PROPERTY COVERAGE:

Carrier: Liberty Mutual Fire Ins. Co. (AM Best rated A XV) NAIC #23035 Policy #YU2-Z91-453980-068 - Effective 4/1/2018 - 4/1/2019

- \*Blanket Personal Property Special Form: \$9,900,000| Installation Personal Property/Personal Property of Others: \$1,000,000| Transit: \$100,000
- \*Blanket Personal Property includes Personal Property of Others and Valuable Papers and Records
- \*Misc. Locations: \$2,000,000 per occurrence
- \*Mobile Equipment: \$100,000 (1) item \$1,000,000 any one occurrence

#### GENERAL LIABILITY:

Carrier: LM Insurance Corporation (AM Best rated A XV)

- \*Additional Insured if required by written contract per attached Form LC 20 58 01 17
- \*Coverage is Primary & Non-Contributory per attached Form LC 20 58 01 17
- \*Waiver of Subrogation if required by written contract per attached Form LC 04 43 01 17
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)

#### AUTOMOBILE LIABILITY:

Carrier: First Liberty Insurance Co. (AM Best rated A XV)

- \*Designated Insured if required by written contract per attached Form CA 20 48 10 13
- \*Coverage is Primary on owned autos only per policy form CA 00 01 10 13
- \*Waiver of Subrogation is required by written contact per attached Form CA 04 44 10 13
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)
- \*CA 99 48 10 13 and MSC90 Endorsements included.
- \*Medical Payments \$5,000 limit Subject to State Statutory Laws.

#### WORKERS COMPENSATION:

Carrier: Employers Insurance Company of Wausau (AM Best rated A XV)

- \*Waiver of Subrogation is required by written contract per attached Form WC 04 03 06 4/84 (California)
- \*Waiver of Subrogation is required by written contract per attached Form WC 00 03 13 4/84 (Other States)
- \*Waiver of Subrogation is required by written contract per attached Form WC 42 03 04 B (Texas)
- \*Notice of Cancellation if required by written contract per attached Form WM 99 20 75 11/1/2011

#### EXCESS LIABILITY:

Carrier: Liberty Insurance Company (AM Best rated A XV)

- \*Excess Liability policy follows the primary General Liability, Auto Liability & Employer Liability
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Coverage is Primary and Non-Contributory for Additional Insureds per attached Form LCU 99 04 11 10
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)

#### DOMESTIC TRANSIT:

Carrier: Liberty Mutual Insurance Company (AM Best rated A XV) NAIC #23043 Policy #SFOMC10043109 - Effective 4/1/2018 to 4/1/2019

Transit Limit: \$250,000

Policy Number: TH7-Z91-453980-048

Issued by: LIBERTY INSURANCE CORPORATION

Endorsement #: 21

End. Eff. Date: 04/01/2018

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

#### OTHER INSURANCE - ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

COMMERCIAL LIABILITY - UMBRELLA COVERAGE FORM

The following is added to definition 16. of SECTION V - DEFINITIONS:

"Other insurance" does not include insurance issued to or on behalf of an additional insured on this policy if you have agreed in writing that your umbrella or excess liability insurance will respond before any liability insurance policy issued to or on behalf of that additional insured, and we will not seek contribution from that insurance.

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

#### COMMERCIAL GENERAL LIABILITY ENHANCEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

#### COMMERCIAL GENERAL LIABILITY COVERAGE PART

#### Index of modified items:

ltem	1	Reason	ahlı	e Force
ILEIT	١.	REASON	aun	- 1 0166

- Item 2. Non-Owned Watercraft Extension
- Item 3. Damage To Premises Rented To You Expanded Coverage
- item 4. Bodily Injury To Co-Employees
- Item 5. Health Care Professionals As Insureds
- Item 6. Knowledge Of Occurrence Or Offense
- Item 7. Notice Of Occurrence Or Offense
- Item 8. Unintentional Failure To Disclose
- Item 9. Bodily Injury Redefined
- Item 10. Supplementary Payments Increased Limits
- Item 11. Property In Your Care, Custody Or Control
- Item 12. Mobile Equipment Redefined
- Item 13. Newly Formed Or Acquired Entities
- Item 14. Waiver Of Right Of Recovery By Written Contract Or Agreement
- Item 15. Contractual Liability Railroads

#### item 1. Reasonable Force

Exclusion a. of Section I - Coverage A - Bodily Injury And Property Damage Liability is replaced by the following:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

#### Item 2. Non-Owned Watercraft Extension

Paragraph (2) of Exclusion g. of Section I – Coverage A – Bodily Injury And Property Damage Liability is replaced by the following:

- (2) A watercraft you do not own that is:
  - (a) Less than 55 feet long; and
  - (b) Not being used to carry persons or property for a charge;

#### item 3. Damage To Premises Rented To You - Expanded Coverage

A. The final paragraph of 2. Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability is replaced by the following:

Exclusions c. through n. do not apply to damage by fire, lightning or explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in Section III – Limits Of Insurance.

- B. Paragraph 6. of Section III Limits Of Insurance is replaced by the following:
  - 6. Subject to Paragraph 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner.

The Damage To Premises Rented To You Limit is the greater of:

- a. \$300,000; or
- b. The Damage To Premises Rented To You Limit shown on the Declarations.
- C. Paragraph 9.a. of the definition of "insured contract" in Section V Definitions is replaced by the following:
  - a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
- D. The paragraph immediately following Paragraph (6) of Exclusion j. of Section I Coverage A Bodily Injury And Property Damage Liability is replaced by the following:

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire, lightning or explosion or subsequent damages resulting from such fire, lightning or explosion including water damage) to premises, including the contents of such premises, rented to you for a period of seven or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in Section III – Limits of Insurance.

#### Item 4. Bodily Injury To Co-Employees

A. Paragraph 2. of Section II – Who Is An Insured is amended to include:

Each of the following is also an insured:

Your "employees" (other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company)) or "volunteer workers" are insureds while in the course of their employment or while performing duties related to the conduct of your business with respect to "bodily injury":

- (1) To you;
- (2) To your partners or members (if you are a partnership or joint venture);
- (3) To your members (if you are a limited liability company); or
- (4) To a co-"employee" or "volunteer worker" while that co-"employee" or "volunteer worker" is either in the course of his or her employment by you or while performing duties related to the conduct of your business (including participation in any recreational activities sponsored by you).

Paragraph 2.a.(1)(a) of Section II – Who is An insured does not apply to "bodily injury" for which insurance is provided by this paragraph.

B. The insurance provided by this Item 4. for "bodily injury" to a co-"employee" or "volunteer worker" will not apply if the injured co-"employee's" or "volunteer worker's" sole remedy for such injury is provided under a workers' compensation law or any similar law.

#### C. Other Insurance

The insurance provided by this Item 4. is excess over any other valid and collectible insurance available to the insured, whether primary, excess, contingent or on any other basis.

#### Item 5. Health Care Professionals As Insureds

- A. Paragraph 2.a.(1)(d) of Section II Who Is An Insured is replaced by the following:
  - (d) Arising out of his or her providing or failure to provide professional health care services. However, any "employee" or "volunteer worker" of the Named Insured who is acting as a Good Samaritan in response to a public or medical emergency or who is a "designated health care provider" is an insured with respect to "bodily injury" and "personal and advertising injury" that:
    - (i) Arises out of the providing of or failure to provide professional health care services; and
    - (ii) Occurs in the course of and within the scope of such "employee's" or "volunteer worker's" employment by the Named Insured.
- B. With respect to "employees" and "volunteer workers" providing professional health care services, the following exclusions are added to Paragraph 2. Exclusions of Section I Coverage A Bodily Injury And Property Damage Liability and Paragraph 2. Exclusions of Section I Coverage B Personal And Advertising Injury Liability:

This insurance does not apply to:

- (1) Liability assumed under an "insured contract" or any other contract or agreement;
- (2) Liability arising out of the providing of professional health care services in violation of law;
- (3) Liability arising out of the providing of any professional health care services while in any degree under the influence of intoxicants or narcotics;
- (4) Liability arising out of any dishonest, fraudulent, malicious or knowingly wrongful act or failure to act; or
- (5) Punitive or exemplary damages, fines or penalties.
- C. The following definition is added to Section V Definitions:

"Designated health care provider" means any "employee" or "volunteer worker" of the Named Insured whose duties include providing professional health care services, including but not limited to doctors, nurses, emergency medical technicians or designated first aid personnel.

#### D. Other Insurance

The insurance provided by this Item 5. is excess over any other valid and collectible insurance available to the insured, whether primary, excess, contingent or on any other basis.

#### Item 6. Knowledge Of Occurrence Or Offense

Knowledge of an "occurrence" or offense by your agent, servant or "employee" will not in itself constitute knowledge by you unless your "executive officer" or "employee" designated by you to notify us of an "occurrence" or offense has knowledge of the "occurrence" or offense.

#### Item 7. Notice Of Occurrence Or Offense

For purposes of Paragraph 2.a. of Section IV – Commercial General Liability Conditions, you refers to your "executive officer" or "employee" that you have designated to give us notice.

#### Item 8. Unintentional Failure To Disclose

Unintentional failure of the Named Insured to disclose all hazards existing at the inception of this policy shall not be a basis for denial of any coverage afforded by this policy. However, you must report such an error or omission to us as soon as practicable after its discovery.

This provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.

#### Item 9. Bodily Injury Redefined

The definition of "bodily injury" in Section V - Definitions is replaced by the following:

"Bodily injury" means:

- Bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time;
   and
- b. Mental anguish, shock or humiliation arising out of injury as defined in Paragraph a. above. Mental anguish means any type of mental or emotional illness or distress.

#### Item 10. Supplementary Payments - Increased Limits

Paragraphs 1.b. and 1.d. of Section I - Supplementary Payments - Coverages A And B are replaced by the following:

- b. Up to \$3,000 for the cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
- d. All reasonable expenses incurred by the insured at our request to assist in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.

#### Item 11. Property In Your Care, Custody Or Control

- A. Paragraphs (3) and (4) of Exclusion j. of Section 1 Coverage A Bodily Injury And Property Damage Liability are deleted.
- B. Additional Exclusion

Coverage provided by this endorsement does not apply to "property damage" to property while in transit.

#### C. Limits of Insurance

Subject to Paragraphs 2., 3., and 5. of Section III – Limits Of Insurance, the most we will pay for insurance provided by Paragraph A. above is:

\$10,000 Each Occurrence Limit

\$75,000 Aggregate Limit

The Each Occurrence Limit for this coverage applies to all damages as a result of any one "occurrence" regardless of the number of persons or organizations who sustain damage because of that "occurrence".

The Aggregate Limit is the most we will pay for the sum of all damages under this Item 11.

#### D. Other Insurance

This insurance does not apply to any portion of a loss for which the insured has available any other valid and collectible insurance, whether primary, excess, contingent, or on any other basis, unless such other insurance was specifically purchased by the insured to apply in excess of this policy.

#### Item 12. Mobile Equipment Redefined

The definition of "mobile equipment" in Section V — Definitions is amended to include self-propelled vehicles with permanently attached equipment less than 1000 pounds gross vehicle weight that are primarily designed for:

- (1) Snow removal;
- (2) Road maintenance, but not construction or resurfacing; or
- (3) Street cleaning.

#### Item 13. Newly Formed Or Acquired Entities

- A. Paragraph 3. of Section II Who Is An Insured is replaced by the following:
  - 3. Any organization you newly acquire or form, other than a partnership or joint venture, and over which you maintain majority ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
    - a. Coverage under this provision is afforded only until:
      - (1) The 180th day after you acquire or form the organization;
      - (2) Separate coverage is purchased for the organization; or
      - (3) The end of the policy period

whichever is earlier:

- Section I Coverage A Bodily Injury And Property Damage Liability does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
- c. Section I Coverage B Personal And Advertising Injury Liability does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.
- B. The insurance afforded to any organization as a Named Insured under this Item 13. does not apply if a Broad Form Named Insured endorsement attached to this policy applies to that organization.

#### Item 14. Waiver Of Right Of Recovery By Written Contract Or Agreement

The following is added to Paragraph 8. Transfer Of Rights Of Recovery Against Others To Us of Section IV – Commercial General Liability Conditions:

We waive any right of recovery because of payments we make under this policy for injury or damage arising out of your ongoing operations or "your work" included in the "products-completed operations hazard" that we may have against any person or organization with whom you have agreed in a written contract or agreement to waive your rights of recovery but only if the "bodily injury" or "property damage" occurs, or offense giving rise to "personal and advertising injury" is committed subsequent to the execution of the written contract or agreement.

#### Item 15. Contractual Liability - Railroads

Paragraph 9. of Section V - Definitions is replaced by the following:

- 9. "Insured contract" means:
  - a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
  - b. A sidetrack agreement;
  - c. Any easement or license agreement;
  - d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
  - e. An elevator maintenance agreement;
  - f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. does not include that part of any contract or agreement:

- (1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
  - (a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
  - (b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage;
- (2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failing to render professional services, including those listed in Paragraph (1) above and supervisory, inspection, architectural or engineering activities.

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

#### COMMERCIAL GENERAL LIABILITY ADDITIONAL INSURED ENHANCEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

#### Index of modified items:

Item 1. Blanket Additional Insured Where Required By Written Agreement

Lessors of Leased Equipment
Managers or Lessors of Premises
Mortgagees, Assignees or Receivers
Owners, Lessees or Contractors
Architects, Engineers or Surveyors
Any Person or Organization

Item 2. Blanket Additional Insured - Grantor Of Permits

Item 3. Other Insurance Amendment

#### Item 1. Blanket Additional Insured Where Required By Written Agreement

Paragraph 2. of Section II – Who Is An Insured is amended to add the following:

Additional Insured by Written Agreement

The following are insureds under the policy when you have agreed in a written agreement to provide them coverage as additional insureds under your policy:

Lessors of Leased Equipment: The person(s) or organization(s) from whom you lease equipment, but only
with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in
whole or in part, by your maintenance, operation or use of equipment leased to you by such person(s) or
organization(s).

This insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

2. Managers or Lessors of Premises: Any manager(s) or lessor(s) of premises leased to you in which the written lease agreement obligates you to procure additional insured coverage.

The coverage afforded to the additional insured is limited to liability in connection with the ownership, maintenance or use of the premises leased to you and caused, in whole or in part, by some negligent act(s) or omission(s) of you, your "employees", your agents or your subcontractors. There is no coverage for the additional insured for liability arising out of the sole negligence of the additional insured or those acting on behalf of the additional insured, except as provided below.

If the written agreement obligates you to procure additional insured coverage for the additional insured's sole negligence, then the coverage for the additional insured shall conform to the agreement, but only if the applicable law would allow you to indemnify the additional insured for liability arising out of the additional insured's sole negligence.

This insurance does not apply to:

- a. Any "occurrence" which takes place after you cease to be a tenant in that premises or to lease that land;
- b. Structural alterations, new construction or demolition operations performed by or on behalf of that manager or lessor; or
- c. Any premises for which coverage is excluded by endorsement.
- 3. Mortgagees, Assignees or Receivers: Any person(s) or organization(s) with respect to their liability as mortgagee, assignee or receiver and arising out of your ownership, maintenance or use of the premises.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or on behalf of such person(s) or organization(s).

4. Owners, Lessees or Contractors: Any person(s) or organization(s) to whom you are obligated to procure additional insured coverage, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of your "employees", your agents, or your subcontractors, in the performance of your ongoing operations.

This insurance does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of "your work" included in the "products-completed operations hazard" unless you are required to provide such coverage for the additional insured by the written agreement, and then only for the period of time required by the written agreement and only for liability caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of your "employees", your agents, or your subcontractors.

There is no coverage for the additional insured for liability arising out of the sole negligence of the additional insured or those acting on behalf of the additional insured, except as provided below.

If the written agreement obligates you to procure additional insured coverage for the additional insured's sole negligence, then the coverage for the additional insured shall conform to the agreement, but only if the applicable law would allow you to indemnify the additional insured for liability arising out the additional insured's sole negligence.

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services.

- 5. Architects, Engineers or Surveyors: Any architect, engineer, or surveyor engaged by you but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of those acting on your behalf:
  - a. In connection with your premises; or
  - b. In the performance of your ongoing operations.

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or failure to render any professional services by or for you, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services by or for you.

- 6. Any Person or Organization Other Than a Joint Venture: Any person(s) or organization(s) (other than a joint venture of which you are a member) for whom you are obligated to procure additional insured coverage, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of those acting on your behalf:
  - a. In the performance of your ongoing operations; or
  - b. In connection with premises owned by or rented to you.

This insurance does not apply to:

- a. Any person(s) or organization(s) more specifically covered in Paragraphs 1 through 5 above;
- b. Any construction, renovation, demolition or installation operations performed by or on behalf of you, or those operating on your behalf; or
- c. Any person(s) or organization(s) whose profession, business or occupation is that of an architect, surveyor or engineer with respect to liability arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services, including:
  - (1) The preparing, approving or failing to prepare or approve, maps, drawings, opinions, reports, surveys, field orders, change orders, designs and specifications; or
  - (2) Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services by or on behalf of you, or those operating on your behalf.

The insurance afforded to any person(s) or organization(s) as an insured under this Item 1:

- 1. Applies to the extent permitted by law;
- 2. Applies only to the scope of coverage and the minimum limits of insurance required by the written agreement, but in no event exceeds either the scope of coverage or the limits of insurance provided by this policy;
- 3. Does not apply to any person(s) or organization(s) for any "bodily injury", "property damage" or "personal and advertising injury" if any other additional insured endorsement attached to this policy applies to such person(s) or organization(s) with regard to the "bodily injury", "property damage" or "personal and advertising injury";
- 4. Applies only if the "bodily injury" or "property damage" occurs, or the offense giving rise to the "personal and advertising injury" is committed, subsequent to the execution of the written agreement; and
- 5. Applies only if the written agreement is in effect at the time the "bodily injury" or "property damage" occurs, or at the time the offense giving rise to the "personal and advertising injury" is committed.

#### Item 2. Blanket Additional Insured - Grantor Of Permits

Paragraph 2. of Section II - Who Is An Insured is amended to add the following:

Any state, municipality or political subdivision that has issued you a permit in connection with any operations performed by you or on your behalf, or in connection with premises you own, rent or control, and to which this insurance applies, but only to the extent that you are required to provide additional insured status to the state, municipality or political subdivision as a condition of receiving and maintaining the permit. Such state, municipality or political subdivision that has issued you a permit is an insured only with respect to their liability as grantor of such permit to you.

However, with respect to the state, municipality or political subdivision:

- 1. Coverage will be no broader than required; and
- 2. Limits of insurance will not exceed the minimum limits of insurance required as a condition for receiving or maintaining the permit;

but neither the scope of coverage nor the limits of insurance will exceed those provided by this policy.

This insurance does not apply to:

- 1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state, municipality or political subdivision;
- 2. Any "bodily injury" or "property damage" included within the "products-completed operations hazard", except when required by written agreement initiated prior to loss; or
- 3. "Bodily injury", "property damage" or "personal and advertising injury", unless negligently caused, in whole or in part, by you or those acting on your behalf.

#### Item 3. Other Insurance Amendment

If you are obligated under a written agreement to provide liability insurance on a primary, excess, contingent, or any other basis for any person(s) or organization(s) that qualifies as an additional insured on this policy, this policy will apply solely on the basis required by such written agreement and Paragraph 4. Other Insurance of Section IV – Commercial General Liability Conditions will not apply. Where the applicable written agreement does not specify on what basis the liability insurance will apply, the provisions of Paragraph 4. Other Insurance of Section IV – Commercial General Liability Conditions will apply. However, this insurance is excess over any other insurance available to the additional insured for which it is also covered as an additional insured by attachment of an endorsement to another policy providing coverage for the same "occurrence", claim or "suit".

#### POLICY NUMBER: TB5-Z91-453980-038,TH7-Z91-453980-048, AS6Z91453980028

Issued by LM Insurance Corporation, Liberty Insurance Corporation

#### THIS ENDORSEMENT CHANGES THE POLICY PLEASE READ IT CAREFULLY.

#### NOTICE OF CANCELLATION TO THIRD PARTIES

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART
MOTOR CARRIER COVERAGE PART
GARAGE COVERAGE PART
TRUCKERS COVERAGE PART
EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
COMMERCIAL LIABILITY – UMBRELLA COVERAGE FORM

Schedule					
Name of Other Person(s) / Organization(s):	Email Address or mailing address:	Number Days Notice:			
PER SCHEDULE ON FILE WITH	PER SCHEDULE ON FILE WITH	30			
THE COMPANY	THE COMPANY				

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

POLICY NUMBER: AS6Z91453980028 COMMERCIAL AUTO
CA 20 48 10 13

#### THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

### DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

#### **SCHEDULE**

#### Name Of Person(s) Or Organization(s):

Blanket as required by written contract.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph A.1. of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

### WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

#### **SCHEDULE**

Name(s) Of Person(s) Or Organization(s):
Any person or organization for whom you perform work under a written contract if the contract requires you to obtain this agreement from us, but only if the contract is executed prior to the injury or damage occurring.

Premium: \$ Incl

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The Transfer Of Rights Of Recovery Against Others To Us condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# FOR COVERED AUTOS – BUSINESS AUTO AND MOTOR CARRIER COVERAGE FORMS

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

- A. Covered Autos Liability Coverage is changed as follows:
  - Paragraph a. of the Pollution Exclusion applies only to liability assumed under a contract or agreement.
  - 2. With respect to the coverage afforded by Paragraph A.1. above, Exclusion B.6. Care, Custody Or Control does not apply.

#### B. Changes In Definitions

For the purposes of this endorsement, Paragraph D. of the Definitions Section is replaced by the following:

- D. "Covered pollution cost or expense" means any cost or expense arising out of:
  - Any request, demand, order or statutory or regulatory requirement that any "insured" or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants"; or
  - 2. Any claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to or assessing the effects of "pollutants".

"Covered pollution cost or expense" does not include any cost or expense arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

- a. Before the "pollutants" or any property in which the "pollutants" are contained are moved from the place where they are accepted by the "insured" for movement into or onto the covered "auto"; or
- b. After the "pollutants" or any property in which the "pollutants" are contained are moved from the covered "auto" to the place where they are finally delivered, disposed of or abandoned by the "insured".

Paragraphs a. and b. above do not apply to "accidents" that occur away from premises owned by or rented to an "insured" with respect to "pollutants" not in or upon a covered "auto" if:

- (1) The "pollutants" or any property in which the "pollutants" are contained are upset, overturned or damaged as a result of the maintenance or use of a covered "auto"; and
- (2) The discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused directly by such upset, overturn or damage.

Premium: INCL

% of Premium:

Class Code: 7971

#### WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Any person or organization for whom the Named Insured has agreed by written contract to furnish a waiver provided you excuted the contract before the loss.

Issued by: Employers Insurance Company of Wausau

For attachment to Policy No WCC-Z91-453980-078 Effective Date: 04/01/2018

Premium \$

Issued to: Redflex Traffic Systems, Inc.

#### TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

Schedule

- ( )Specific Waiver
   Name of person or organization
  - ( X ) Blanket Waiver

    Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.
- 2. Operations:
- 3. Premium:

The premium charge for this endorsement shall be percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium:

Issued by Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078 ' Effective Date: 04/01/2018

Premium \$

Issued to Redflex Traffic Systems, Inc.

#### NOTICE OF CANCELLATION TO THIRD PARTIES

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule below. We will send notice to the email or mailing address listed below at least 10 days, or the number of days listed below, if any, before cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

#### Schedule

Name of Other Person(s) / Organization(s):

Email Address or mailing address:

**Number Days Notice:** 

30

Per schedule on file with company

All other terms and conditions of this policy remain unchanged.

Issued by Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078

Effective Date 04/01/2018

Premium \$

Issued to Redflex Traffic Systems Inc.

WC 99 20 75 Ed. 12/01/2016 © 2016 Liberty Mutual Insurance

Page 1 of 1

# WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT – CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be % of the California workers' compensation premium otherwise due on such remuneration.

# Schedule

Person or Organization

Job Description

ANY PERSON OR ORGANIZATION FOR WHOM THE NAMED INSURED HAS AGREED BY WRITTEN CONTRACT TO FURNISH A WAIVER PROVIDED YOU EXECUTED THE CONTRACT PRIOR TO THE LOSS

AS REQUIRED BY WRITTEN CONTRACT

Premium \$

Issued by | Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078 Effective Date: 04/01/2018

Issued to Redflex Traffic Systems, Inc.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 6/29/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

COVERACES	CERTIFICATE MUMBER, 4700470507	DEVICION NUI	MDED		
		INSURER F:			
		INSURER E: Employers Insurance Company of Wa	ausau 21458		
Glendale, AZ 85306		INSURER D: LM Insurance Corporation	33600		
Redflex Traffic Systems, Inc. 5651 W. Talavi Blvd., Suite 200		INSURER C: First Liberty Insurance Corporation	33588		
INSURED  Dodfloy Troffic Systems Inc.	REDFTRA-02	INSURER B: Westchester Surplus Lines Insurance	Co 10172		
		INSURER A: Liberty Insurance Corporation	42404		
Lafayette CA 94549		INSURER(S) AFFORDING COVERAGE	NAIC#		
3697 Mt. Diablo Blvd., Suite 300		E-MAIL ADDRESS: CertRequests@ajg.com			
Arthur J. Gallagher & Co. Insurance Brokerof California, In		PHONE (A/C, No, Ext): 925-299-1112	FAX (A/C, No): 925-299-0328		
PRODUCER		CONTACT NAME: Certificate Department			
	<u> </u>				

# COVERAGES CERTIFICATE NUMBER: 1739179527 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

	EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.								
INSR LTR		TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s
D	Х	COMMERCIAL GENERAL LIABILITY	Υ	Υ	TB5-Z91-453980-038	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 1,000,000
		CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
	Х	\$25K BI/PD DED						MED EXP (Any one person)	\$ 10,000
								PERSONAL & ADV INJURY	\$ 1,000,000
	GEN	N'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	Х	POLICY PRO- LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000
	X	OTHER: CAP of \$25M							\$
С	AUT	OMOBILE LIABILITY	Υ	Y	AS6-Z91-453980-028	4/1/2018	4/1/2019	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
	Х	ANY AUTO						BODILY INJURY (Per person)	\$
		OWNED SCHEDULED AUTOS ONLY AUTOS						BODILY INJURY (Per accident)	\$
		HIRED NON-OWNED AUTOS ONLY AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
	Х	COMP/COLL X DED*: \$5,000						<- *HAPD Ded	\$
Α	Х	UMBRELLA LIAB X OCCUR			TH7-Z91-453980-048	4/1/2018	4/1/2019	EACH OCCURRENCE	\$ 5,000,000
		EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$ 5,000,000
		DED RETENTION\$							\$
Е		RKERS COMPENSATION EMPLOYERS' LIABILITY		Υ	WCC-Z91-453980-078	4/1/2018	4/1/2019	X PER OTH- STATUTE ER	
	ANY	PROPRIETOR/PARTNER/EXECUTIVE ICER/MEMBER EXCLUDED?	N/A					E.L. EACH ACCIDENT	\$ 1,000,000
	(Mar	ndatory in NH)	,					E.L. DISEASE - EA EMPLOYEE	\$ 1,000,000
	If yes	s, describe under CRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
В	PRO	DFESSIONAL & CYBER LIABILITY			G27435075005	4/1/2018	4/1/2019	Each Claim Aggregate Retention- Each Claim	\$2,000,000 \$2,000,000 \$50,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RFP #8494

RE: Red Light Photo Enforcement System

ADDITIONĂL INSURED(S): The County of Sacramento, its officers, directors, officials, employees, and volunteers

CERTIFICATE HOLDER	CANCELLATION
County of Sacramento	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
9660 Ecology Lane Sacramento CA 95827	Robet Manne

AGENCY CUSTOMER ID:	
LOC #	



# ADDITIONAL REMARKS SCHEDULE

Page of

AGENCY		NAMED INSURED
POLICY NUMBER		
CARRIER	NAIC CODE	
		EFFECTIVE DATE:

#### ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS	FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER:	FORM TITLE:

# THIRD PARTY CRIME/FIDELITY COVERAGE:

Carrier: Travelers Casualty and Surety Co. of American (AM Best rated A++XV) NAIC #31194 Policy #105581296 - Effective 4/1/2018 - 4/1/2019 \*Limit \$500,000 Aggregate limit for Employee Theft of Client Property - Retention: \$50,000

# PROPERTY COVERAGE:

Carrier: Liberty Mutual Fire Ins. Co. (AM Best rated A XV) NAIC #23035 Policy #YU2-Z91-453980-068 - Effective 4/1/2018 - 4/1/2019

- \*Blanket Personal Property Special Form: \$9,900,000| Installation Personal Property/Personal Property of Others: \$1,000,000| Transit: \$100,000
- \*Blanket Personal Property includes Personal Property of Others and Valuable Papers and Records
- \*Misc. Locations: \$2,000,000 per occurrence
- \*Mobile Equipment: \$100,000 (1) item \$1,000,000 any one occurrence

#### GENERAL LIABILITY:

Carrier: LM Insurance Corporation (AM Best rated A XV)

- \*Additional Insured if required by written contract per attached Form LC 20 58 01 17
- \*Coverage is Primary & Non-Contributory per attached Form LC 20 58 01 17
- \*Waiver of Subrogation if required by written contract per attached Form LC 04 43 01 17
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)

# AUTOMOBILE LIABILITY:

Carrier: First Liberty Insurance Co. (AM Best rated A XV)

- \*Designated Insured if required by written contract per attached Form CA 20 48 10 13
- \*Coverage is Primary on owned autos only per policy form CA 00 01 10 13
- \*Waiver of Subrogation is required by written contact per attached Form CA 04 44 10 13
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)
- \*CA 99 48 10 13 and MSC90 Endorsements included.
- \*Medical Payments \$5,000 limit Subject to State Statutory Laws.

## WORKERS COMPENSATION:

Carrier: Employers Insurance Company of Wausau (AM Best rated A XV)

- \*Waiver of Subrogation is required by written contract per attached Form WC 04 03 06 4/84 (California)
- \*Waiver of Subrogation is required by written contract per attached Form WC 00 03 13 4/84 (Other States)
- \*Waiver of Subrogation is required by written contract per attached Form WC 42 03 04 B (Texas)
- \*Notice of Cancellation if required by written contract per attached Form WM 99 20 75 11/1/2011

## EXCESS LIABILITY:

Carrier: Liberty Insurance Company (AM Best rated A XV)

- \*Excess Liability policy follows the primary General Liability, Auto Liability & Employer Liability
- \*Notice of Cancellation if required by written contract per attached Form LIM 99 01 05 11
- \*Coverage is Primary and Non-Contributory for Additional Insureds per attached Form LCU 99 04 11 10
- \*Separation of Insureds applies per policy form (Severability of Interest/Cross Liability Clause)

# DOMESTIC TRANSIT:

Carrier: Liberty Mutual Insurance Company (AM Best rated A XV) NAIC #23043 Policy #SFOMC10043109 - Effective 4/1/2018 to 4/1/2019 Transit Limit: \$250.000

Policy Number: TH7-Z91-453980-048

Issued by: LIBERTY INSURANCE CORPORATION

Endorsement #: 21

End. Eff. Date: 04/01/2018

# THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# OTHER INSURANCE - ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

COMMERCIAL LIABILITY - UMBRELLA COVERAGE FORM

The following is added to definition 16. of SECTION V - DEFINITIONS:

"Other insurance" does not include insurance issued to or on behalf of an additional insured on this policy if you have agreed in writing that your umbrella or excess liability insurance will respond before any liability insurance policy issued to or on behalf of that additional insured, and we will not seek contribution from that insurance.

# THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# COMMERCIAL GENERAL LIABILITY ENHANCEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

# COMMERCIAL GENERAL LIABILITY COVERAGE PART

# Index of modified items:

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- Item 2. Non-Owned Watercraft Extension
- Item 3. Damage To Premises Rented To You Expanded Coverage
- item 4. Bodily Injury To Co-Employees
- Item 5. Health Care Professionals As Insureds
- Item 6. Knowledge Of Occurrence Or Offense
- Item 7. Notice Of Occurrence Or Offense
- Item 8. Unintentional Failure To Disclose
- Item 9. Bodily Injury Redefined
- Item 10. Supplementary Payments Increased Limits
- Item 11. Property In Your Care, Custody Or Control
- Item 12. Mobile Equipment Redefined
- Item 13. Newly Formed Or Acquired Entities
- Item 14. Waiver Of Right Of Recovery By Written Contract Or Agreement
- Item 15. Contractual Liability Railroads

# item 1. Reasonable Force

Exclusion a. of Section I - Coverage A - Bodily Injury And Property Damage Liability is replaced by the following:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

# Item 2. Non-Owned Watercraft Extension

Paragraph (2) of Exclusion g. of Section I – Coverage A – Bodily Injury And Property Damage Liability is replaced by the following:

- (2) A watercraft you do not own that is:
  - (a) Less than 55 feet long; and
  - (b) Not being used to carry persons or property for a charge;

# item 3. Damage To Premises Rented To You - Expanded Coverage

A. The final paragraph of 2. Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability is replaced by the following:

Exclusions c. through n. do not apply to damage by fire, lightning or explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in Section III – Limits Of Insurance.

- B. Paragraph 6. of Section III Limits Of Insurance is replaced by the following:
  - 6. Subject to Paragraph 5. above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage A for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner.

The Damage To Premises Rented To You Limit is the greater of:

- a. \$300,000; or
- b. The Damage To Premises Rented To You Limit shown on the Declarations.
- C. Paragraph 9.a. of the definition of "insured contract" in Section V Definitions is replaced by the following:
  - a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
- D. The paragraph immediately following Paragraph (6) of Exclusion j. of Section I Coverage A Bodily Injury And Property Damage Liability is replaced by the following:

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire, lightning or explosion or subsequent damages resulting from such fire, lightning or explosion including water damage) to premises, including the contents of such premises, rented to you for a period of seven or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in Section III – Limits of Insurance.

# Item 4. Bodily Injury To Co-Employees

A. Paragraph 2. of Section II – Who Is An Insured is amended to include:

Each of the following is also an insured:

Your "employees" (other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company)) or "volunteer workers" are insureds while in the course of their employment or while performing duties related to the conduct of your business with respect to "bodily injury":

- (1) To you;
- (2) To your partners or members (if you are a partnership or joint venture);
- (3) To your members (if you are a limited liability company); or
- (4) To a co-"employee" or "volunteer worker" while that co-"employee" or "volunteer worker" is either in the course of his or her employment by you or while performing duties related to the conduct of your business (including participation in any recreational activities sponsored by you).

Paragraph 2.a.(1)(a) of Section II – Who is An insured does not apply to "bodily injury" for which insurance is provided by this paragraph.

B. The insurance provided by this Item 4. for "bodily injury" to a co-"employee" or "volunteer worker" will not apply if the injured co-"employee's" or "volunteer worker's" sole remedy for such injury is provided under a workers' compensation law or any similar law.

# C. Other Insurance

The insurance provided by this Item 4. is excess over any other valid and collectible insurance available to the insured, whether primary, excess, contingent or on any other basis.

# Item 5. Health Care Professionals As Insureds

- A. Paragraph 2.a.(1)(d) of Section II Who Is An Insured is replaced by the following:
  - (d) Arising out of his or her providing or failure to provide professional health care services. However, any "employee" or "volunteer worker" of the Named Insured who is acting as a Good Samaritan in response to a public or medical emergency or who is a "designated health care provider" is an insured with respect to "bodily injury" and "personal and advertising injury" that:
    - (i) Arises out of the providing of or failure to provide professional health care services; and
    - (ii) Occurs in the course of and within the scope of such "employee's" or "volunteer worker's" employment by the Named Insured.
- B. With respect to "employees" and "volunteer workers" providing professional health care services, the following exclusions are added to Paragraph 2. Exclusions of Section I Coverage A Bodily Injury And Property Damage Liability and Paragraph 2. Exclusions of Section I Coverage B Personal And Advertising Injury Liability:

This insurance does not apply to:

- (1) Liability assumed under an "insured contract" or any other contract or agreement;
- (2) Liability arising out of the providing of professional health care services in violation of law;
- (3) Liability arising out of the providing of any professional health care services while in any degree under the influence of intoxicants or narcotics;
- (4) Liability arising out of any dishonest, fraudulent, malicious or knowingly wrongful act or failure to act; or
- (5) Punitive or exemplary damages, fines or penalties.
- C. The following definition is added to Section V Definitions:

"Designated health care provider" means any "employee" or "volunteer worker" of the Named Insured whose duties include providing professional health care services, including but not limited to doctors, nurses, emergency medical technicians or designated first aid personnel.

# D. Other Insurance

The insurance provided by this Item 5. is excess over any other valid and collectible insurance available to the insured, whether primary, excess, contingent or on any other basis.

# Item 6. Knowledge Of Occurrence Or Offense

Knowledge of an "occurrence" or offense by your agent, servant or "employee" will not in itself constitute knowledge by you unless your "executive officer" or "employee" designated by you to notify us of an "occurrence" or offense has knowledge of the "occurrence" or offense.

## Item 7. Notice Of Occurrence Or Offense

For purposes of Paragraph 2.a. of Section IV – Commercial General Liability Conditions, you refers to your "executive officer" or "employee" that you have designated to give us notice.

# Item 8. Unintentional Failure To Disclose

Unintentional failure of the Named Insured to disclose all hazards existing at the inception of this policy shall not be a basis for denial of any coverage afforded by this policy. However, you must report such an error or omission to us as soon as practicable after its discovery.

This provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.

# Item 9. Bodily Injury Redefined

The definition of "bodily injury" in Section V - Definitions is replaced by the following:

"Bodily injury" means:

- Bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time;
   and
- b. Mental anguish, shock or humiliation arising out of injury as defined in Paragraph a. above. Mental anguish means any type of mental or emotional illness or distress.

# Item 10. Supplementary Payments - Increased Limits

Paragraphs 1.b. and 1.d. of Section I - Supplementary Payments - Coverages A And B are replaced by the following:

- b. Up to \$3,000 for the cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
- d. All reasonable expenses incurred by the insured at our request to assist in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$500 a day because of time off from work.

# Item 11. Property In Your Care, Custody Or Control

- A. Paragraphs (3) and (4) of Exclusion j. of Section 1 Coverage A Bodily Injury And Property Damage Liability are deleted.
- B. Additional Exclusion

Coverage provided by this endorsement does not apply to "property damage" to property while in transit.

# C. Limits of Insurance

Subject to Paragraphs 2., 3., and 5. of Section III – Limits Of Insurance, the most we will pay for insurance provided by Paragraph A. above is:

\$10,000 Each Occurrence Limit

\$75,000 Aggregate Limit

The Each Occurrence Limit for this coverage applies to all damages as a result of any one "occurrence" regardless of the number of persons or organizations who sustain damage because of that "occurrence".

The Aggregate Limit is the most we will pay for the sum of all damages under this Item 11.

# D. Other Insurance

This insurance does not apply to any portion of a loss for which the insured has available any other valid and collectible insurance, whether primary, excess, contingent, or on any other basis, unless such other insurance was specifically purchased by the insured to apply in excess of this policy.

# Item 12. Mobile Equipment Redefined

The definition of "mobile equipment" in Section V — Definitions is amended to include self-propelled vehicles with permanently attached equipment less than 1000 pounds gross vehicle weight that are primarily designed for:

- (1) Snow removal;
- (2) Road maintenance, but not construction or resurfacing; or
- (3) Street cleaning.

# Item 13. Newly Formed Or Acquired Entities

- A. Paragraph 3. of Section II Who Is An Insured is replaced by the following:
  - 3. Any organization you newly acquire or form, other than a partnership or joint venture, and over which you maintain majority ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
    - a. Coverage under this provision is afforded only until:
      - (1) The 180th day after you acquire or form the organization;
      - (2) Separate coverage is purchased for the organization; or
      - (3) The end of the policy period

whichever is earlier:

- Section I Coverage A Bodily Injury And Property Damage Liability does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
- c. Section I Coverage B Personal And Advertising Injury Liability does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.
- B. The insurance afforded to any organization as a Named Insured under this Item 13. does not apply if a Broad Form Named Insured endorsement attached to this policy applies to that organization.

# Item 14. Waiver Of Right Of Recovery By Written Contract Or Agreement

The following is added to Paragraph 8. Transfer Of Rights Of Recovery Against Others To Us of Section IV – Commercial General Liability Conditions:

We waive any right of recovery because of payments we make under this policy for injury or damage arising out of your ongoing operations or "your work" included in the "products-completed operations hazard" that we may have against any person or organization with whom you have agreed in a written contract or agreement to waive your rights of recovery but only if the "bodily injury" or "property damage" occurs, or offense giving rise to "personal and advertising injury" is committed subsequent to the execution of the written contract or agreement.

# Item 15. Contractual Liability - Railroads

Paragraph 9. of Section V - Definitions is replaced by the following:

- 9. "Insured contract" means:
  - a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion or subsequent damages resulting from such fire, lightning or explosion including water damage to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";
  - b. A sidetrack agreement;
  - c. Any easement or license agreement;
  - d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;
  - e. An elevator maintenance agreement;
  - f. That part of any other contract or agreement pertaining to your business (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. does not include that part of any contract or agreement:

- (1) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:
  - (a) Preparing, approving or failing to prepare or approve maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
  - (b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage;
- (2) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failing to render professional services, including those listed in Paragraph (1) above and supervisory, inspection, architectural or engineering activities.

# THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# COMMERCIAL GENERAL LIABILITY ADDITIONAL INSURED ENHANCEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

# Index of modified items:

Item 1. Blanket Additional Insured Where Required By Written Agreement

Lessors of Leased Equipment
Managers or Lessors of Premises
Mortgagees, Assignees or Receivers
Owners, Lessees or Contractors
Architects, Engineers or Surveyors
Any Person or Organization

Item 2. Blanket Additional Insured - Grantor Of Permits

Item 3. Other Insurance Amendment

# Item 1. Blanket Additional Insured Where Required By Written Agreement

Paragraph 2. of Section II – Who Is An Insured is amended to add the following:

Additional Insured by Written Agreement

The following are insureds under the policy when you have agreed in a written agreement to provide them coverage as additional insureds under your policy:

Lessors of Leased Equipment: The person(s) or organization(s) from whom you lease equipment, but only
with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in
whole or in part, by your maintenance, operation or use of equipment leased to you by such person(s) or
organization(s).

This insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

2. Managers or Lessors of Premises: Any manager(s) or lessor(s) of premises leased to you in which the written lease agreement obligates you to procure additional insured coverage.

The coverage afforded to the additional insured is limited to liability in connection with the ownership, maintenance or use of the premises leased to you and caused, in whole or in part, by some negligent act(s) or omission(s) of you, your "employees", your agents or your subcontractors. There is no coverage for the additional insured for liability arising out of the sole negligence of the additional insured or those acting on behalf of the additional insured, except as provided below.

If the written agreement obligates you to procure additional insured coverage for the additional insured's sole negligence, then the coverage for the additional insured shall conform to the agreement, but only if the applicable law would allow you to indemnify the additional insured for liability arising out of the additional insured's sole negligence.

This insurance does not apply to:

- a. Any "occurrence" which takes place after you cease to be a tenant in that premises or to lease that land;
- b. Structural alterations, new construction or demolition operations performed by or on behalf of that manager or lessor; or
- c. Any premises for which coverage is excluded by endorsement.
- 3. Mortgagees, Assignees or Receivers: Any person(s) or organization(s) with respect to their liability as mortgagee, assignee or receiver and arising out of your ownership, maintenance or use of the premises.

This insurance does not apply to structural alterations, new construction and demolition operations performed by or on behalf of such person(s) or organization(s).

4. Owners, Lessees or Contractors: Any person(s) or organization(s) to whom you are obligated to procure additional insured coverage, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of your "employees", your agents, or your subcontractors, in the performance of your ongoing operations.

This insurance does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of "your work" included in the "products-completed operations hazard" unless you are required to provide such coverage for the additional insured by the written agreement, and then only for the period of time required by the written agreement and only for liability caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of your "employees", your agents, or your subcontractors.

There is no coverage for the additional insured for liability arising out of the sole negligence of the additional insured or those acting on behalf of the additional insured, except as provided below.

If the written agreement obligates you to procure additional insured coverage for the additional insured's sole negligence, then the coverage for the additional insured shall conform to the agreement, but only if the applicable law would allow you to indemnify the additional insured for liability arising out the additional insured's sole negligence.

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services.

- 5. Architects, Engineers or Surveyors: Any architect, engineer, or surveyor engaged by you but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of those acting on your behalf:
  - a. In connection with your premises; or
  - b. In the performance of your ongoing operations.

This insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or failure to render any professional services by or for you, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services by or for you.

- 6. Any Person or Organization Other Than a Joint Venture: Any person(s) or organization(s) (other than a joint venture of which you are a member) for whom you are obligated to procure additional insured coverage, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your act(s) or omission(s) or the act(s) or omission(s) of those acting on your behalf:
  - a. In the performance of your ongoing operations; or
  - b. In connection with premises owned by or rented to you.

This insurance does not apply to:

- a. Any person(s) or organization(s) more specifically covered in Paragraphs 1 through 5 above;
- b. Any construction, renovation, demolition or installation operations performed by or on behalf of you, or those operating on your behalf; or
- c. Any person(s) or organization(s) whose profession, business or occupation is that of an architect, surveyor or engineer with respect to liability arising out of the rendering of, or failure to render, any professional architectural, engineering or surveying services, including:
  - (1) The preparing, approving or failing to prepare or approve, maps, drawings, opinions, reports, surveys, field orders, change orders, designs and specifications; or
  - (2) Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or failure to render any professional services by or on behalf of you, or those operating on your behalf.

The insurance afforded to any person(s) or organization(s) as an insured under this Item 1:

- 1. Applies to the extent permitted by law;
- 2. Applies only to the scope of coverage and the minimum limits of insurance required by the written agreement, but in no event exceeds either the scope of coverage or the limits of insurance provided by this policy;
- 3. Does not apply to any person(s) or organization(s) for any "bodily injury", "property damage" or "personal and advertising injury" if any other additional insured endorsement attached to this policy applies to such person(s) or organization(s) with regard to the "bodily injury", "property damage" or "personal and advertising injury";
- 4. Applies only if the "bodily injury" or "property damage" occurs, or the offense giving rise to the "personal and advertising injury" is committed, subsequent to the execution of the written agreement; and
- 5. Applies only if the written agreement is in effect at the time the "bodily injury" or "property damage" occurs, or at the time the offense giving rise to the "personal and advertising injury" is committed.

## Item 2. Blanket Additional Insured - Grantor Of Permits

Paragraph 2. of Section II - Who Is An Insured is amended to add the following:

Any state, municipality or political subdivision that has issued you a permit in connection with any operations performed by you or on your behalf, or in connection with premises you own, rent or control, and to which this insurance applies, but only to the extent that you are required to provide additional insured status to the state, municipality or political subdivision as a condition of receiving and maintaining the permit. Such state, municipality or political subdivision that has issued you a permit is an insured only with respect to their liability as grantor of such permit to you.

However, with respect to the state, municipality or political subdivision:

- 1. Coverage will be no broader than required; and
- 2. Limits of insurance will not exceed the minimum limits of insurance required as a condition for receiving or maintaining the permit;

but neither the scope of coverage nor the limits of insurance will exceed those provided by this policy.

This insurance does not apply to:

- 1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the state, municipality or political subdivision;
- 2. Any "bodily injury" or "property damage" included within the "products-completed operations hazard", except when required by written agreement initiated prior to loss; or
- 3. "Bodily injury", "property damage" or "personal and advertising injury", unless negligently caused, in whole or in part, by you or those acting on your behalf.

# Item 3. Other Insurance Amendment

If you are obligated under a written agreement to provide liability insurance on a primary, excess, contingent, or any other basis for any person(s) or organization(s) that qualifies as an additional insured on this policy, this policy will apply solely on the basis required by such written agreement and Paragraph 4. Other Insurance of Section IV – Commercial General Liability Conditions will not apply. Where the applicable written agreement does not specify on what basis the liability insurance will apply, the provisions of Paragraph 4. Other Insurance of Section IV – Commercial General Liability Conditions will apply. However, this insurance is excess over any other insurance available to the additional insured for which it is also covered as an additional insured by attachment of an endorsement to another policy providing coverage for the same "occurrence", claim or "suit".

# POLICY NUMBER: TB5-Z91-453980-038,TH7-Z91-453980-048, AS6Z91453980028

Issued by LM Insurance Corporation, Liberty Insurance Corporation

## THIS ENDORSEMENT CHANGES THE POLICY PLEASE READ IT CAREFULLY.

# NOTICE OF CANCELLATION TO THIRD PARTIES

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART
MOTOR CARRIER COVERAGE PART
GARAGE COVERAGE PART
TRUCKERS COVERAGE PART
EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
COMMERCIAL LIABILITY – UMBRELLA COVERAGE FORM

Schedule					
Name of Other Person(s) / Organization(s):	Email Address or mailing address:	Number Days Notice:			
PER SCHEDULE ON FILE WITH	PER SCHEDULE ON FILE WITH	30			
THE COMPANY	THE COMPANY				

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

POLICY NUMBER: AS6Z91453980028 COMMERCIAL AUTO
CA 20 48 10 13

# THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

# **SCHEDULE**

# Name Of Person(s) Or Organization(s):

Blanket as required by written contract.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph A.1. of Section II – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph D.2. of Section I – Covered Autos Coverages of the Auto Dealers Coverage Form.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

# **SCHEDULE**

Name(s) Of Person(s) Or Organization(s):
Any person or organization for whom you perform work under a written contract if the contract requires you to obtain this agreement from us, but only if the contract is executed prior to the injury or damage occurring.

Premium: \$ Incl

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The Transfer Of Rights Of Recovery Against Others To Us condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

# FOR COVERED AUTOS – BUSINESS AUTO AND MOTOR CARRIER COVERAGE FORMS

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

- A. Covered Autos Liability Coverage is changed as follows:
  - Paragraph a. of the Pollution Exclusion applies only to liability assumed under a contract or agreement.
  - 2. With respect to the coverage afforded by Paragraph A.1. above, Exclusion B.6. Care, Custody Or Control does not apply.

# B. Changes In Definitions

For the purposes of this endorsement, Paragraph D. of the Definitions Section is replaced by the following:

- D. "Covered pollution cost or expense" means any cost or expense arising out of:
  - Any request, demand, order or statutory or regulatory requirement that any "insured" or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of "pollutants"; or
  - 2. Any claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to or assessing the effects of "pollutants".

"Covered pollution cost or expense" does not include any cost or expense arising out of the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants":

- a. Before the "pollutants" or any property in which the "pollutants" are contained are moved from the place where they are accepted by the "insured" for movement into or onto the covered "auto"; or
- b. After the "pollutants" or any property in which the "pollutants" are contained are moved from the covered "auto" to the place where they are finally delivered, disposed of or abandoned by the "insured".

Paragraphs a. and b. above do not apply to "accidents" that occur away from premises owned by or rented to an "insured" with respect to "pollutants" not in or upon a covered "auto" if:

- (1) The "pollutants" or any property in which the "pollutants" are contained are upset, overturned or damaged as a result of the maintenance or use of a covered "auto"; and
- (2) The discharge, dispersal, seepage, migration, release or escape of the "pollutants" is caused directly by such upset, overturn or damage.

Premium: INCL

% of Premium:

Class Code: 7971

# WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Any person or organization for whom the Named Insured has agreed by written contract to furnish a waiver provided you excuted the contract before the loss.

Issued by: Employers Insurance Company of Wausau

For attachment to Policy No WCC-Z91-453980-078 Effective Date: 04/01/2018

Premium \$

Issued to: Redflex Traffic Systems, Inc.

# TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

Schedule

- ( )Specific Waiver
   Name of person or organization
  - ( X ) Blanket Waiver

    Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.
- 2. Operations:
- 3. Premium:

The premium charge for this endorsement shall be percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium:

Issued by Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078 ' Effective Date: 04/01/2018

Premium \$

Issued to Redflex Traffic Systems, Inc.

# NOTICE OF CANCELLATION TO THIRD PARTIES

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule below. We will send notice to the email or mailing address listed below at least 10 days, or the number of days listed below, if any, before cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

# Schedule

Name of Other Person(s) / Organization(s):

Email Address or mailing address:

**Number Days Notice:** 

Per schedule on file with company

30

All other terms and conditions of this policy remain unchanged.

Issued by

Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078

Effective Date 04/01/2018

Premium \$

Issued to Redflex Traffic Systems Inc.

WC 99 20 75 Ed. 12/01/2016 © 2016 Liberty Mutual Insurance

Page 1 of 1

# WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT – CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be % of the California workers' compensation premium otherwise due on such remuneration.

# Schedule

Person or Organization

Job Description

ANY PERSON OR ORGANIZATION FOR WHOM THE NAMED INSURED HAS AGREED BY WRITTEN CONTRACT TO FURNISH A WAIVER PROVIDED YOU EXECUTED THE CONTRACT PRIOR TO THE LOSS

AS REQUIRED BY WRITTEN CONTRACT

Premium \$

Issued by | Employers Insurance Company of Wausau

For attachment to Policy No. WCC-Z91-453980-078 Effective Date: 04/01/2018

Issued to Redflex Traffic Systems, Inc.

# Redflex For a world on the move

