TECHNICAL PROPOSAL
City of Fayetteville, NC Gun Shot Detection Implementation and Installation

Prepared for:

City of Fayetteville, NC
433 Hay Street
Fayetteville, NC 28301

Due: Monday, Jan 31st, 2:00 pm EST

Prepared by:

The Digital Decision
7579 Venture Drive
Alexandria, Virginia 22315

ORIGINAL

CITY OF FAYETTEVILLE
Gun Shot Detection
Implementation &
Installation
BID PROPOSAL PACKAGE

The undersigned hereby proposes to furnish materials and perform the work for this project per the items listed herein in strict accordance with the Standard Specifications, contained in the documents for the consideration of prices quoted for the enclosed contract items.

THE CITY RESERVES THE RIGHT TO ELIMINATE OR ADD TO THIS CONTRACT.

ALL PRICES ARE TO INCLUDE NC SALES AND USE TAXES

This Bid Package is executed by:

Name Robert LeGrande II Title Founder and CEO

Company Name LeGrande Technical and Social Services dba "The Digital Decision"

Address 7579 Venture Drive, Alexandria, Virginia 22315

Email rlegrande@thedigitaldecision.com

Signature Robert LeGrande II Phone No. 703-344-1819

NC Sec of State ID: 2279793

License #C2021 271 01495 Bid Total $ $315,650 (Year 1)

Base Bid Total (Written) Three Hundred Fifteen Thousand, Six Hundred and Fifty Dollars

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ACKNOWLEDGEMENT OF ADDENDA

The Vendor has received, acknowledged, and used the following addenda in completing the Proposal. (Initial and Date as appropriate)

Addendum No. 1 RL Dated: 1/27/2022
Addendum No. 2 _____ Dated: _____
Addendum No. 3 _____ Dated: _____
Addendum No. 4 _____ Dated: _____

FAYETTEVILLE NC
AMERICA'S CAN DO CITY

PURCHASING

January 10, 2022

MEMO TO: Prospective Bidders

FROM: Kimberly Toon, Purchasing Manager

SUBJECT: **Addendum #1:** RFP – Gun Shot Detection & Installation

DUE DATE AND TIME: **January 31, 2022; 2:00 p.m.**

1. The Bid Documents are hereby modified per the attached Addendum #1 dated January 10, 2022. To include the following:

    a. **Changing the questions due date from January 10, 2022; 2:00 p.m. to January 14, 2022; 2:00 p.m.**

2. The foregoing changes shall be incorporated in the Bid Documents, and a copy of the Addendum #1, signed by the Bidder, must accompany the Bid to indicate the Bidder's familiarity with the changes.

Bidder Acknowledgement:

Bidder Name (Print): Robert LeGrande II

Bidder Signature: Robert LeGrande II

Date of Signature: January 27, 2022

January 31, 2022

Kimberly Toon
Purchasing Manager, Finance Department
City of Fayetteville
Purchasing Office
422 Hay Street
Fayetteville, NC 28301

Dear Ms. Toon,

On behalf of LeGrande Technical and Social Services, LLC, dba "The Digital Decision" (TDD), please accept our response to the City of Fayetteville, North Carolina (City) Request for Proposals (RFP) for Gun Shot Detection Implementation and Installation issued January 5, 2022.

TDD - registered MBE and SBA 8(a) firm founded in 2007 - is a premier public safety and public sector consultancy and solution integrator. TDD works with public agencies and private enterprises to deliver operational solutions from digital evidence management solutions to edge-based autonomous shot detection, to signals intelligence and sensor aggregation for advanced situational awareness. In all that we do, we strive to enhance public safety while improving public trust.

For this important project, TDD has teamed with EAGL Technology to provide City of Fayetteville with a solution that meets – and exceeds – the needs outlined in the RFP.

With our proposed solution, the City will have:

- ✓ Reliable and accurate state-of-the-art shot detection based on energy and waveform analysis,
- ✓ A cost-effective solution that is superior to competitors and easy to relocate as needed,
- ✓ Integration to existing systems & future solution capabilities, and
- ✓ A solid foundation of technology that is scalable and adaptable.

TDD appreciates your review of this proposal and would be honored to work on this critical public safety project. **Please note:** Dominic DeMark, TDD Sr. VP of Sales and Marketing, will serve as the point of contact for this project (ddemark@thedigitaldecision.com, (248) 914-3360).

Respectfully,

Robert LeGrande, II
CEO & Founder
LeGrande Technical and Social Services, LLC "dba" The Digital Decision
7579 Venture Drive, Alexandria, VA 22315
rlegrande@thedigitaldecision.com | (703) 344-1819

Table of Contents

1 Executive Summary

The Digital Decision (TDD) is pleased to provide this response to City of Fayetteville, North Carolina (City), Request for Proposal (RFP) for Gun Shot Detection Implementation & Installation issued January 5, 2022.

TDD, headquartered in Alexandria and registered MBE and SBS 8(a) firm, is a premier public safety consultancy and solution integration firm bringing together experts in their respective fields to provide a technologically advanced solution in support of the mission of the City and the Fayetteville Police Department. The solution TDD proposes is a technologically sound and advanced offering from our partner, EAGL Technology Inc. (EAGL). We are very proud and honored to present our solution to you.

For this important public safety project, TDD will serve as the main point of contact for the City. With a deep law enforcement background, our team understand the needs and challenges of law enforcement agencies and cities, big and small.

The solution provided in this proposal by TDD includes EAGL's patented DragonFly® Outdoor Sensor, which is fully wireless and designed to work in outdoor environments. The core of EAGL's sensor technology (developed by the Department of Energy) uses advanced algorithms to analyze firearm discharge event energy. The patented algorithmic analysis provides EAGL Technology with the best accuracy in the industry and filters out unwanted and costly false alarms. There is no human interface required with EAGL technology (i.e., all autonomous alerting).

The coverage area for this project was not provided in the RFP. After reviewing Fayetteville's Crime Mapping system, we determined the best way to ensure success is to identify the exact locations of the sensors after the contract is awarded and we meet with the police department for their input. This is possible based on the fact of EAGL sensors do no need to be hard wired in. Our pricing includes 150 sensors which typically covers an area of approximately one square mile. These sensors can be placed in multiple locations as determined with input from the City and the police department. They do not need to be placed all together covering a single area.

SHOT DETECTION AND PANIC BUTTONS FOR SCHOOLS:

As a part of this bid, TDD is including at no additional up-front cost, two (2) of the EAGL K-12 Packages, consisting of; four indoor shot detection sensors, one outdoor, and four panic buttons for each school (See Appendix A for details). The City of Fayetteville, in its discretion, can select any two schools in the city for the EAGL K-12 package to be installed. The annual subscription fees are included in the reoccurring costs provided in the Fee Proposal.

2 Profile

The Digital Decision (TDD) is pleased to provide this response to City of Fayetteville, North Carolina (City), Request for Proposal (RFP) for Gun Shot Detection Implementation & Installation issued January 5, 2022. Per the RFP, this proposal is organized into the following sections:

- Section 1: Cover Letter and Executive Summary (see previous)
- Section 2: Profile (this section)
- Section 3: Qualifications
- Section 4: List of Representative Projects
- Section 5: Project Management Approach / Project Methodologies
- Section 6: Financial Statements

Our understanding of the project is based on the RFP. We understand the City desires to acquire shot detection that augments the video surveillance solutions currently being implemented as part of the Violent Crime Initiative and to elevate situational awareness.

TDD is a premier public safety consultancy and solution integration firm bringing together experts in their respective fields to provide a technologically advanced solution in support of the mission of the City and the Fayetteville Police Department. The solution TDD proposes is a technologically sound and advanced offering combining the expertise of our partner, EAGL Technology Inc. (EAGL). We are very proud and honored to present our solution to you.

2.1 Company Backgrounds

Our team brings significant experience and expertise in security, public safety, consulting, and solution integration. It is always our goal to work ***with*** our clients and to put forth a solution that best addresses their needs.

For this important public safety project, TDD will serve as the main point of contact for the City. With a deep law enforcement background, our team understand the needs and challenges of law enforcement agencies and cities, big and small. TDD has relationships in place with our technology solution partner presented in this proposal. Collectively, we believe our combined solution not only meets the needs outlined in the RFP - but exceeds the expectations and provides a foundation that is scalable now, and in the future.

2.2 Company Profiles

The following sections provide a brief history of TDD and EAGL, our integrated solutions partner. We see ourselves as an extension of the City by working together to maximize the shot detection technology solution and foresee open lines of communication and transparency throughout this important project. It is our goal to work with you in support of your mission now, and in the future.

The Digital Decision

The Digital Decision (TDD) is a registered MBE and certified SBA 8(a) firm and a premier public safety and public sector consultancy and solution integrator. Founded in 2007 and headquartered in Alexandria, Virginia, TDD has a proven track record of working with states/counties/municipalities, public agencies, and private enterprises to enhance safety, security, and operations by leveraging Smart, Safe, Connected solutions and IoT capabilities.

TDD's exceptional capabilities and expertise for supporting mission success are unique and unparalleled in today's market. From advanced situational awareness to gunshot intelligence and edge-based alerting capabilities, to COVID-19 solutions geared toward safe entry into buildings, TDD's solution portfolio includes options that work with - and enhance - your existing infrastructure.

At our core, TDD's passion is to support and safeguard communities, drive Comprehensive Cross-Carrier Interoperability (C3i), and integrate technological solutions that enhance public safety while improving public trust. Relevant to this proposal, the TDD team of 20+ employees include public safety subject matter experts whose expertise is unmatched in the market and creates significant 'hands-on' benefit that will be leveraged for this project. These experts include:

- Former State Highway Patrol Colonels and Lt. Colonels (Arizona, Michigan, Nevada, Ohio)
- Former Chief of Police (Winter Park, Florida)
- Former Deputy Fire Chief (Columbus, Ohio)
- Former Chief Technology Officers (Washington DC and Illinois State Police)

TDD has a long-standing history of serving in the public safety and public sector markets and we currently serve as a Verizon's chief public safety consultant, a role we are proud to have held for the past 11 years.

Please note, TDD is currently registered to do business in the State of North Carolina and has submitted the Vendor Registration Form to the City. As previously noted, TDD holds MBE and SBA 8(a) certifications.

EAGL Technology

EAGL Technology was established in 2015 after acquiring gunshot ballistic science developed by the Department of Energy (DOE) Pacific Northwest National Laboratory (PNNL). EAGL has advanced this technology by creating a state-of-the-art gunshot detection and emergency notification system.

EAGL product lines use patented FireFly®, DragonFly® and BlueFly® ballistic sensor technology which can be integrated with existing CAD, dispatch, access control, video surveillance, intercom, notification, and public-address systems. With this technology development comes the expertise of over 100 years combined security experience.

EAGL Technology, Inc, now having 20+ employees, was originally founded with the express purpose of developing and bringing to market an accurate, affordable, and easily deployed technology that would save lives during random shooting incidents. The EAGL's open API technology makes integration with other platforms seamless and can be placed on a network or stand alone. The wireless IoT capabilities provide ease of use and programming, flexibility, and scalability in fixed or mobile commands, in vehicles or body worn applications. This technology can autonomously execute a series of preprogrammed responses including sending unlimited texts, emails alerting of an event as well as unlimited autonomous telephone calls and conferencing.

EAGL Technology is a Smart City Technology (SMT) and the only solution that can be used in numerous configurations such as for indoor, outdoor, and body worn gunshot detection, panic and pull stations, vehicular accident detection, flood detection, and so on, all on one platform.

EAGL is **DHS Safety Act Certified**. The figure below provides additional information related to EAGL.

Figure 1 – EAGL Technology

3 Qualifications

Our team's solution meets the items set forth in RFP, Section II, Scope of Services, and the following sections provide details.

The TDD proposal is no ordinary shot detection solution. It is a combination of best-in-class capabilities that will transcend Fayetteville's positive policing capabilities and not only provide significantly enhanced situational awareness, but also a solid technological foundation to build upon.

With our solution, the City gains superior gunshot detection technology with centralized management for all gunshot detection devices and simple and open data Application Programming Interface (API) with video management systems and computer aided dispatch systems. Our solution also includes the ability to add indoor and body-worn shot detection if requested in the future.

There is no human interface required with EAGL technology (i.e., all autonomous alerting) and the City owns the data. EAGL gunshot detection technology is not an antiquated, wired, acoustic-based technology. EAGL uses new patented technology, developed by the DOE PNNL, and passive sensors. There are no audio recordings or use of "hot" mics making it superior to all competitors in the industry. Since there are no open microphones, citizen concerns about civil liberty violations are eliminated.

3.1 Details of the EAGL Gun Shot Detection Solution

The proposed solution includes EAGL's patented DragonFly® Outdoor Sensor, which is fully wireless and designed to work in outdoor environments. The core of EAGL's sensor technology (developed by the Department of Energy) uses advanced algorithms to analyze firearm discharge event energy. The patented algorithmic analysis provides EAGL Technology with the best accuracy in the industry and filters out unwanted and costly false alarms. The sensors are small in size and are located close to street level, so shots are not missed including from 0.22 caliber.

Figure 2 – EAGL DragonFly Sensor

When the DragonFly is configured for gunshot detection it uses **ballistic energy to detect and verify a potential gunshot directly in the DragonFly sensor**. ***No audio detection or audio-matching techniques are used.*** Once the sensor determines the event to be a gunshot it passes a specific portion of the **digitized waveform data** to the EAGL System which then **re-verifies** and performs further analysis on the detection event using a multi-step process (see figure below).

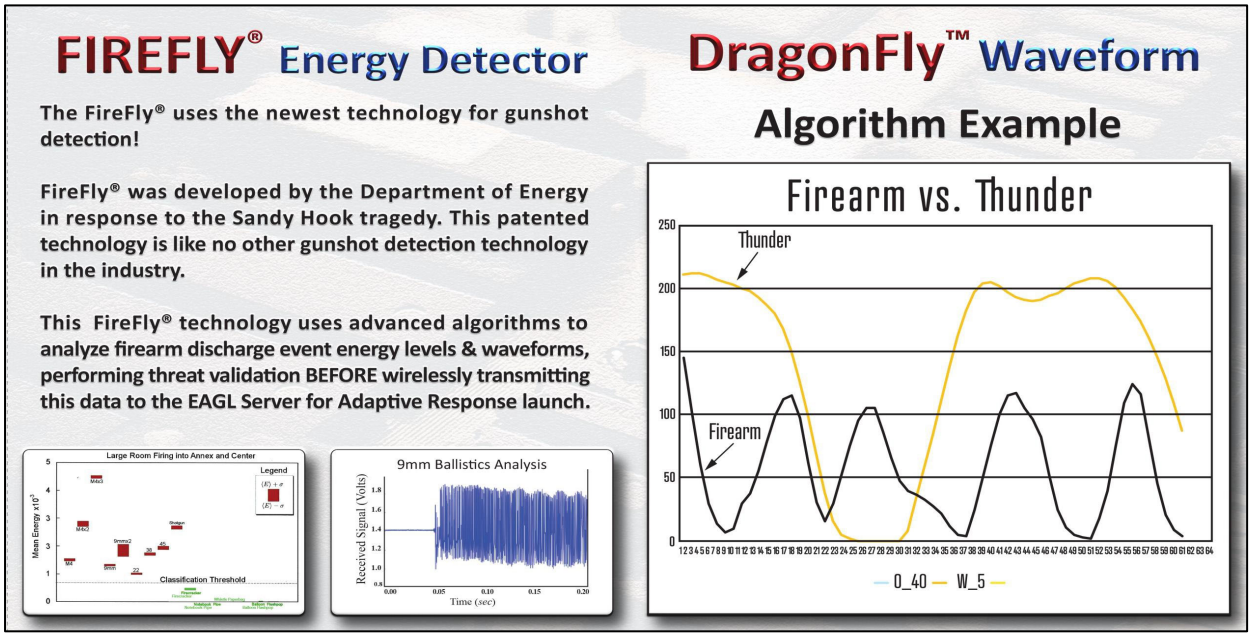


Figure 3 – EAGL Energy Detector and Waveform

By using Six Sigma methodology, the EAGL System architecture is designed to prevent false positives from occurring. The EAGL System is the ONLY system offering wireless sensors including FireFly® (indoor), DragonFly® (outdoor), and BlueFly® (body worn) specifically designed to operate in BOTH indoor and outdoor environments.

This unique approach for detecting gunshots gives the sensor the highest accuracy for every environment.

ADDITIONAL ITEMS TO CONSIDER

- ✓ The project includes 150 sensors which will cover an area of approximately one square mile ubiquitously. These sensors can be placed in multiple locations as determined with input from the City and the police department. They do not need to be placed all together covering a single area. See Section 3.6 for additional shot detection and panic buttons for schools that are included in this proposal.
- ✓ Our solution is easily scalable to cover a larger or smaller geographic footprint as needed.
- ✓ Installation will be completed by a third party (TBD) with TDD oversight.
- ✓ Depending on the deployment area, we anticipate the need for at least three visits, including and initial site walk.
- ✓ With our solution, the City owns the data. This means Fayetteville Police Department can decide what to do with the data. There should not be a need for expert witness costs

- ✓ The gunshot detection technology is energy/waveform-based technology and not acoustic and does not rely on human interpretation or the use of "hot" mics. Eliminating all citizen civil liberty concerns.
- ✓ The recurring cost for gunshot detection compared to competitors is extremely low. In addition, since EAGL sensors are not hard wired in, moving them to address changes in crime patterns is easy and inexpensive.
- ✓ Solution has four levels of user levels: viewer, user, administrator, integrator. There is no limit to number of users.
- ✓ Available configuration options include on-premise server, a cloud based solution, or Software as a Service (SaaS) solutions. For this project we propose a cloud based Saas configuration where the solution is deployed within an existing cloud platform. EAGL is cloud agnostic and can be run on any platform.
- ✓ Infrastructure needed depends on the solution. With IoT sensors and cloud, then no infrastructure is needed! The wireless sensors are self-contained.

EAGL GUNSHOT DETECTION – KEY FEATURES

1. System is completely wireless
2. Detection range of 150-foot radius from the sensor
3. System will report within seconds of an event
4. Daily self-test and heartbeat signals
5. Two level authentications to insure zero false alarms, Energy level and waveform analysis
6. Caliber type detection, i.e., shotgun, handgun, rifle
7. Battery/solar operated battery life of 9 years. Free batteries supplied from factory with up-to-date licensing
8. Very long RF range – 433 MHz
9. Easy to install and move to a new location
10. Full camera integration
11. The EAGL system includes at no extra charge:
    a. Mass notification capability
    b. Integration with any mass notification systems
    c. Integrating with any VMS systems
    d. Automatic 911 call within seconds of event
    e. Autonomous Text, email, and phone notification
    f. Live video streaming from the location to any mobile device
    g. Very easy to expand
    h. EAGL indoor sensors can be easily added and integrated with minimal cost
    i. Five-year warranty on the server and three years warranty on all devices

Nationally Recognized Detection!

*EAGL Technology has been awarded **ASTORS Platinum Award** Four Years Running for Live Fire Demonstration, The Challenge of Protecting Schools, Live Fire EAGL Outdoor Demonstration, and Live Fire EAGL Indoor Demonstration.*

American Security Today's comprehensive Annual Homeland Security Awards Program is organized to recognize the most distinguished vendors of physical, IT, port security, law enforcement, and first responders, in acknowledgment of their outstanding efforts to 'Keep our Nation Secure, One City at a Time.'

Below is a table outlining EAGL components along with descriptions:

Table 1.0 – EAGL Components and Descriptions

EAGL COMPONENT	DESCRIPTION
EAGL DragonFly IoT Non-Standard Battery Operated	Wireless, self-powered device with the choice of RF or LTE communication. The battery shall be rated for 7+-year operation life (with solar charging capability) for either communication path. The RF communication path is the 433MHz frequency band. The LTE communication option shall be low-power, low-data 4G LTE cell radio technology. The sensor shall determine the energy level of the acoustic event through algorithmic analysis of the waveform. If the resulting number representing energy level falls above the baseline threshold number, then the event is considered a threat (or gunshot). Any number below the baseline threshold shall be considered a non-threat. The degree of separation between threat and non-threat by this algorithm shall be classified Six Sigma. This means, statistically, there is a 99.99966% chance that the alarm is due to an actual gunshot The second step of validation shall be further analysis of the waveform. The result shall determine the weapon type – handgun, shotgun, or rifle. Once determination is made, the system enters the alarm state The sensor shall be mounted at, or close to, an elevation of 20 feet. Detection range shall be a 150 ft radius from the sensor, or approximately 70,685 ft^2 continuous spherical area.
SENSOR SUPERVISION	Any wireless sensor, duress button or panic (Pull) station shall have supervision capability. Per a determined schedule (e.g., once a day), the sensor shall conduct a self-test of its systems and report the results to the server. The server shall consider this communication a heartbeat signal affirming the presence and health of the device.
SENSOR TESTING	The sensor shall be capable of entering a test mode by command of the server in which the sensor can be tested by a hand-held testing device that produces non-audible noise. This feature allows full functional testing of the sensor and system without causing disturbance with loud gunshots or blanks.
MANUFACTURER	EAGL Technology, Inc. NO SUBSTITUTIONS.

Source: EAGL Specification 2.0.2 July 2021

3.2 Measurement of Success

By using Six Sigma methodology, the EAGL System architecture is designed to achieve mission success and to prevent false positives from occurring. EAGL Technology uses energy levels and advanced wave form analytics to confirm shots fired that is 99.999999% accurate. All systems are programmed at the factory and bench tested before shipment.

In the event of a rare false-positive, EAGL Technology uses an advanced filter system that allows for updating the filters to include false-positive events that have identifiable characteristics to avoid future nuisance.

3.3 Integration with Fayetteville Police Department

Integration is in EAGL's DNA and achieved through an open RESTful API and analog relate inputs/outputs. EAGL can integrate with any system that utilizes an open API.

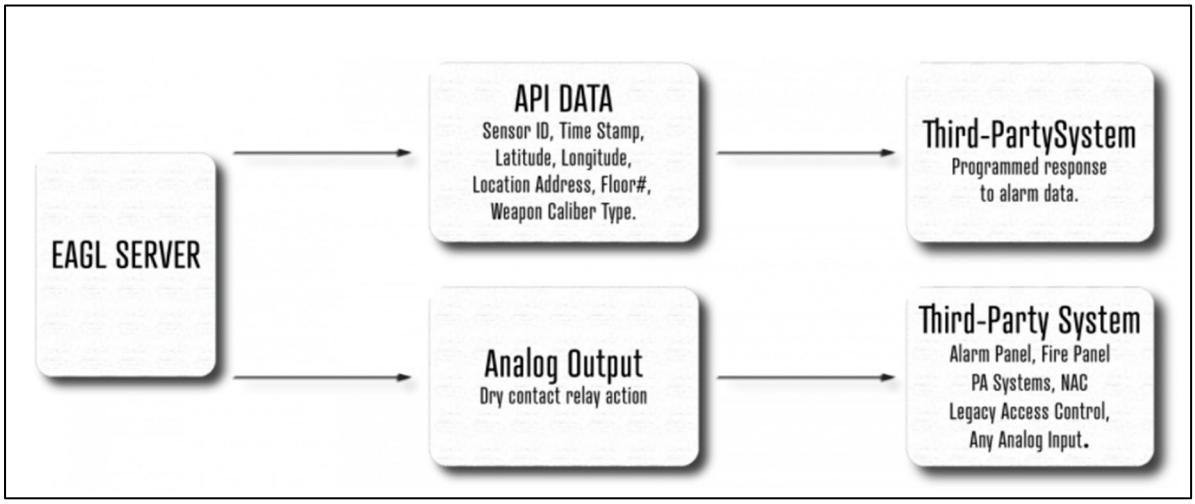


Figure 4 – EAGL Integrations

If a 3rd-party system does not utilize an open API, EAGL can investigate developing against the product's SDK if it is available. Once the 3rd-party system is identified, EAGL engineers will work with the 3rd party product and develop, test, and deploy API connectivity with the client's local 3rd-party system. Integration may require assistance from the service custodian of the 3rd-party system at additional cost.

3.4 Notification Process

The notification process as a gunshot is detected depends on the communication path. If the notification is being sent software-to-software, then notification will occur within 4 seconds of the gunshot. Email notifications usually arrive within 5 seconds and texts arrive within 10 seconds, though this is carrier-dependent, and time (in seconds) can vary.

Figure 5 – EAGL Options

Just as response needs differ from site to site, so do the response needs within a site. Customize your response actions by groups of – or even individual – sensors with EAGL's Adaptive Response architecture. Customized notifications, doors locked, relay actions, messaging, and more. The Adaptive Response architecture ensures that the maximum response benefits of an automated gunshot detection system are achieved. Configure groups of sensors, or even individual sensors, to respond specifically to your security plan requirements.

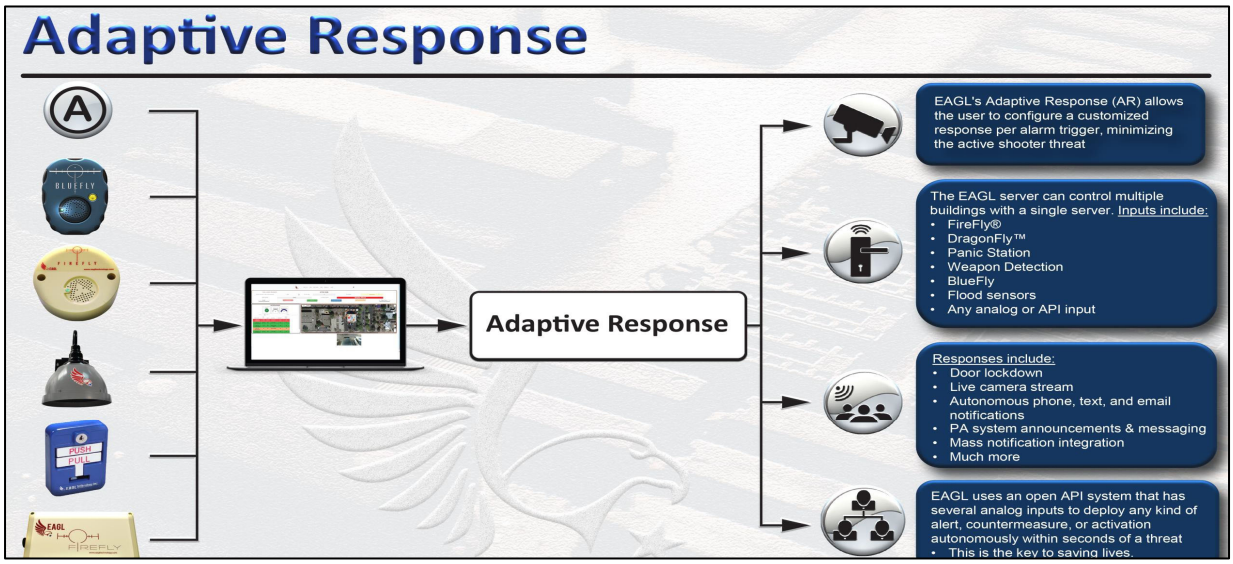


Figure 6 – EAGL Adaptive Response

3.5 System Upgrades and Unexpected Downtime

EAGL performs critical updates and patches in coordination with the integrator and the site. By setting up temporary remote access to the product, EAGL tech support can perform the update.

EAGL provides tech support for and at the integrator's request (in this case, TDD). End-user will provide support requests to the integrator through integrator-provided channels and

agreements. The integrator will then request support from EAGL through phone or email request. EAGL technical support is available 8-5 MST, Monday – Friday.

3.6 Shot Detection and Panic Buttons for Schools

As a part of this bid, TDD is including at no additional up-front cost, two (2) of the EAGL K-12 Packages, consisting of; four indoor shot detection sensors, one outdoor, and four panic buttons for each school (See Appendix A for details). The City of Fayetteville, in its discretion, can select any two schools in the city for the EAGL K-12 package to be installed. The annual subscription fees are included in the reoccurring costs provided in the Fee Proposal.

3.7 Staffing and Organizational/Staff Experience

The following section provides a brief overview of the individuals assigned to manage projects and perform the work. Table 2.0 provides a list of personnel.

Please note: TDD is an authorized reseller of EAGL Technology. EAGL personnel will play an integral part of this project; however, communication between the City and EAGL will filter through TDD as the technology integrator. As such, EAGL personnel are not listed in this section.

Table 2.0: Company, Role, and Personnel

Company	Role in Project	Personnel	Title
TDD	Primary Contact for the City/Fayetteville PD Program Management EAGL Technology Authorized Reseller Installation (via third party)	Dominic DeMark	Sr. VP Sales and Marketing, Main POC
		Sharon LeGrande	CFO/COO
		Lt. Col. Thomas Sands (ret)	Public Safety SME
		Karmen Griffith	Operations Manager
		Rozzel LeGrande	Team Support

The following represents the proposal organizational chart for this project:

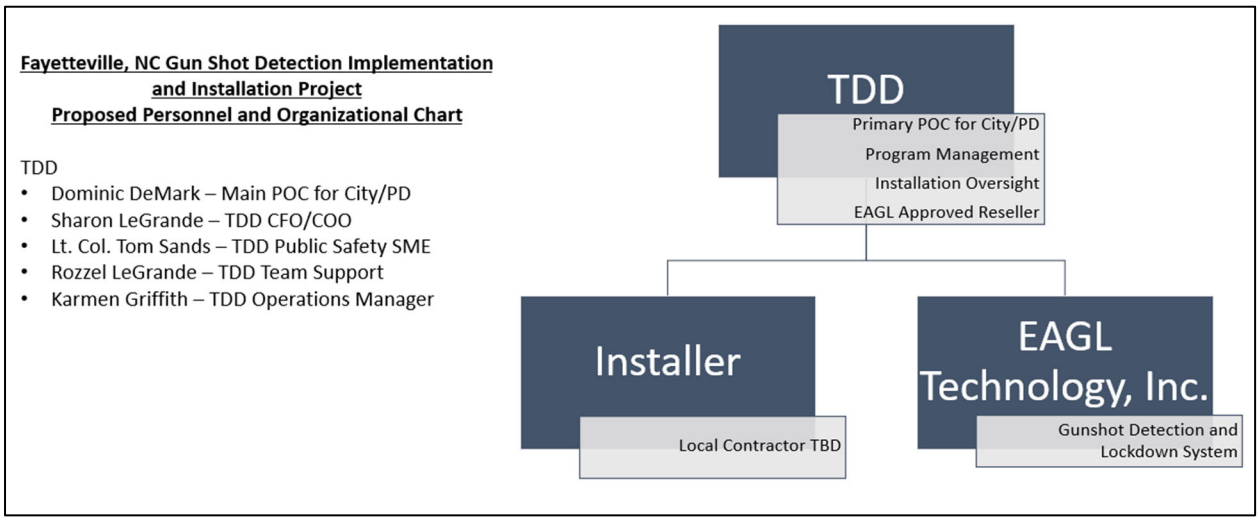


Figure 7 – Proposed Personnel and Organizational Chart

Brief biographies for proposed personnel are provided below:

DOMINIC DEMARK, TDD Sr. VP Of Sales and Marketing, will serve as the Primary Point of Contact (POC) for this project.

Dominic is a successful, results-driven business executive with over 25 years in sales leadership, business development and strategy and operations that drive incremental revenue and bottom-line growth. A technology veteran, Dominic has had a successful career with leading global organizations including Amphenol, Verizon, AirTouch, and Cellular One where he had positive impacts on sales strategies, execution, and revenue generation. Throughout his career, DeMark has held various positions of increasing responsibility across business sales, technology, operations and marketing functions. He has been a trusted advisor, mentor, facilitator, and team member and is credited with developing and running Verizon's Public Safety practice and their best-in-class Business Solution Alliance partner program.

Dominic earned a BS in Business, Marketing and Computer Science from Oakland University in Rochester, Michigan. Dominic is certified by EAGL.

SHARON LEGRANDE, TDD CFO/COO, will provide oversight and strategic financial/operational support.

Sharon is a versatile and resourceful management professional with over 20 years of experience in program administration. She has proven excellent abilities in financial management, operations, and project leadership. Sharon serves as the current CFO/COO for The Digital Decision where she continues to guide the company's financial and operation success and has successfully managed the business through four years of audits.

Throughout her career, Sharon has held various positions of increasing responsibility across the public service sector including non-profits and for-profit businesses; heading up departments that are vital to business operations of each. In each area, she has found success maintaining program funding year over year and managing projects with successful measurable outcomes.

Sharon holds an MSW with a concentration in Public Administration from Syracuse University in Syracuse, New York.

LT. COL. THOMAS SANDS (RET), Public Safety Subject Matter Expert (SME), will provide strategic oversight.

Prior to entering the public sector, Lt. Col. Sands (Ret.) served as a Deputy Director of the Michigan State Police and commanded the Field Support Bureau. He was responsible for the effective management of major portions of the department and assisted the Director with policy formulation, strategic planning, and determining the course of direction for the agency. He provided executive direction and leadership in the areas of emergency management, homeland security, forensic science, traffic safety, and state 911 administration, regulation, and public safety communication interoperability. Prior to this position he commanded the Field Services Bureau providing executive direction and leadership to over 1,800 enlisted and civilian employees assigned to the department's seven districts, 30 posts, 22 multi-jurisdictional task forces and numerous special investigative teams.

Lt. Col. Sands (Ret.) is a graduate of the FBI National Academy and has a Bachelor of Science degree in Public Administration from Central Michigan University.

KARMEN GRIFFITH, TDD Operations Manager, will provide strategic operational project support.

Karmen has 20 years of consulting experience, primarily in the environmental and sustainability fields. She has a successful history supporting government and private sector clients. She has proven excellent abilities in leadership, program and project management, technical writing, compliance, and operations. She has considerable experience with multi-disciplinary teams involving projects in a broad array of fields. Her experience includes working with small and large private/public sector clients and federal/state government entities including the US Environmental Protection Agency, US Army Pueblo Chemical Depot, and the Colorado Department of Public Health and Environment.

Karmen holds a Master of Science degree in Environmental Policy and Management (Energy/Sustainability focus) from the University of Denver and a Bachelor of Science degree in Environmental Health from Ohio University.

ROZZEL LEGRANDE, TDD Installation Manager, will provide overall project support.

Rozzel has eight years of experience and is trained in installation and portal management on the Intelligent Platform system. He currently serves as Project Lead for TDD's Clark Atlanta University project, where all the solutions presented in this proposal are currently in place. In past years, Rozzel supported TDD on several projects as an intern, research assistant, project liaison, business analyst and is an essential part of the company's activities. He participated in the architectural design and creation of TDD's first website, conducted education and outreach calls to stakeholders on various projects, completed software and application testing of TDD's Requirements Checklist Portal for state review and adoption, and researched SMART Fairfax County Initiative and creation of The SMART Fairfax County Presentation material.

Rozzel holds a bachelor's degree from Virginia Commonwealth University in Richmond, Virginia in Business Information Technology. Rozzel is a certified EAGL installer.

4 List of Representative Projects

Collectively, our team has worked on – and/or is currently working on – several projects. TDD, as a public safety consultancy and solution integrator that has been in business since 2007, has long-standing relationships with clients including Verizon, Pennsylvania State Police, Fairfax County (VA), and the Michigan Public Safety Broadband Program. TDD has deep expertise in law enforcement and program management that we will leverage to ensure successful execution of this important project.

EAGL has been an industry leader in gunshot detection technology since 2015 and has performed similar projects over the years. List of clients include school districts in Massachusetts, Rhode Island, Virginia, and New Mexico. EAGL has also worked with municipalities and federal entities.

Most recently, TDD and EAGL, along with two additional solution partners (Blueforce Development and Wireless Guardian), completed installation including the EAGL gunshot detection technology on the campus of Clark Atlanta University in Atlanta, Georgia. The final phase of installation was complete in the Fall 2021 and the system is operational today.

Below are the two requested references, plus an additional reference for Clark Atlanta University:

Reference #1:

Project: Clark Atlanta University	Project Description: Shot Detection, Signals Intelligence, Centralized Command, COVID-19 solutions
Customer: Clark Atlanta University	Address: 223 James P. Brawley Dr. SW Atlanta, Georgia 30314
Customer Contact: Chief Debra Williams Associate VP and Chief of Police	Telephone and Email: 404-880-6412 dwilliams@cau.edu
Original Contract Value: $264,000	*Donation to University*
Final Contract Value: $264,000	*Donation to University*
Explanation of Variance: NA	
Start Date: January 2021	Completion Date: October 2021
Key Personnel: TDD	

Reference #2:

Project: City of Houston	Project Description: Gunshot Detection
Customer: City of Houston PD	Address: 1200 Travis Street, Houston TX
Customer Contact: Jack Hanagriff	Telephone and Email: 713-410-6906 Jack.Hanagriff@houstontx.gov
Original Contract Value: Ongoing	
Final Contract Value: Ongoing	
Explanation of Variance: Ongoing	
Start Date: Ongoing	Completion Date: Ongoing
Key Personnel: EAGL	

Reference #3:

Project: Cicero Police Department	Project Description: Gunshot Detection
Customer: Cicero Police Department	Address: 4901 W Cermak Road, Cicero IL
Customer Contact: Dominic Schullo	Telephone: 708-652-2130
Original Contract Value: NA	
Final Contract Value: NA	
Explanation of Variance: Completed pilot (9 sensors, performed well and detected 3 verified gunshots). Requested quote for larger area and funding pathway fell through.	
Start Date: NA	Completion Date: NA
Key Personnel: EAGL	

5 Project Management Approach / Project Methodologies

The sections below provide information related to project methodologies, approach, and timeline.

5.1 Project Methodologies

The standard approach and methodology employed for projects includes initiating, planning, executing, monitoring/controlling, and closing. The same approach will be utilized for this important project.

5.2 Project Approach

Our approach to this project depends highly upon collaboration with the City and the police department. The area of deployment, which was not provided in the RFP, is best determined with input from the City and police department. As such, the team is providing pricing for 150 sensors which typically covers an area equivalent to one square mile. As previously mentioned, they can be placed in multiple areas. In addition, see Section 3.6 for the Education Package for two schools.

The team will perform a review and assessment, including a strategic and performance analysis of current systems (e.g., video, etc..), to identify capability and potential gaps. This process allows our team to assess the existing system and structures/utility poles and build upon best practices to identify and fill gaps related to efficient deployment. It may be best, depending on the size of the deployment area, to complete the project in phases, depending on the needs of the City and the police department. As such, a phased strategy can be adjusted (as needed) to ensure the systems are operating in alignment within mission and goals set forth.

Specifically, our team will:

1. Examine the day-to-day activities of the systems related to both the operational use and technological support. This includes the existing camera system, existing shot detection systems, current IT support/helpdesk, etc.
2. Consider the ideal future state including upcoming projects, expected population increase, etc. and define goals and outcomes for this project to set the stage for that future state.
3. After consultation and a site walk with the City and the police department on the best locations for the system, a Network Architecture Plan will be completed to show the architectural design as it relates to the data network infrastructure, storage and communication methods.

Our approach for implementing a robust Gun Shot Detection Solution is to use the best-in-class technology (energy based) with ease of installation, API integration, and the best quality assurance in the industry.

By using Six Sigma methodology, the EAGL System architecture is designed to achieve mission success and to prevent false positives from occurring. EAGL Technology uses energy levels and advanced wave form analytics to confirm shots fired that is 99.999999% accurate. All systems are programmed at the factory and bench tested before shipment.

In the event of a rare false-positive, EAGL Technology uses an advanced filter system that allows for updating the filters to include false-positive events that have identifiable characteristics to avoid future nuisance.

No other manufacturer can match EAGL's accuracy rate or identify the specific calibers of the weapons fired so first responders know the addition risks if they are responding to a shots fired call involving a high-powered rifle.

Open lines of communications are key to project success and the team envisions regular and periodic updates provided to the City.

Also, as mentioned previously in Section 3.6, as a part of this bid, the City of Fayetteville can select any two schools in the city to receive at no additional up-front cost, EAGL's Basic K-12 Package (See Appendix A for details). The annual subscription fees are included in the reoccurring cost proposal. This package includes four indoor, one outdoor, and four panic buttons for each school.

5.3 Proposed Timeline and Work Breakdown Structure

The period of performance for this project was not detailed in the RFP. Please note that the proposed timeline presented is subject to change according to project specifics. Communication among all parties involved is critical to project success.

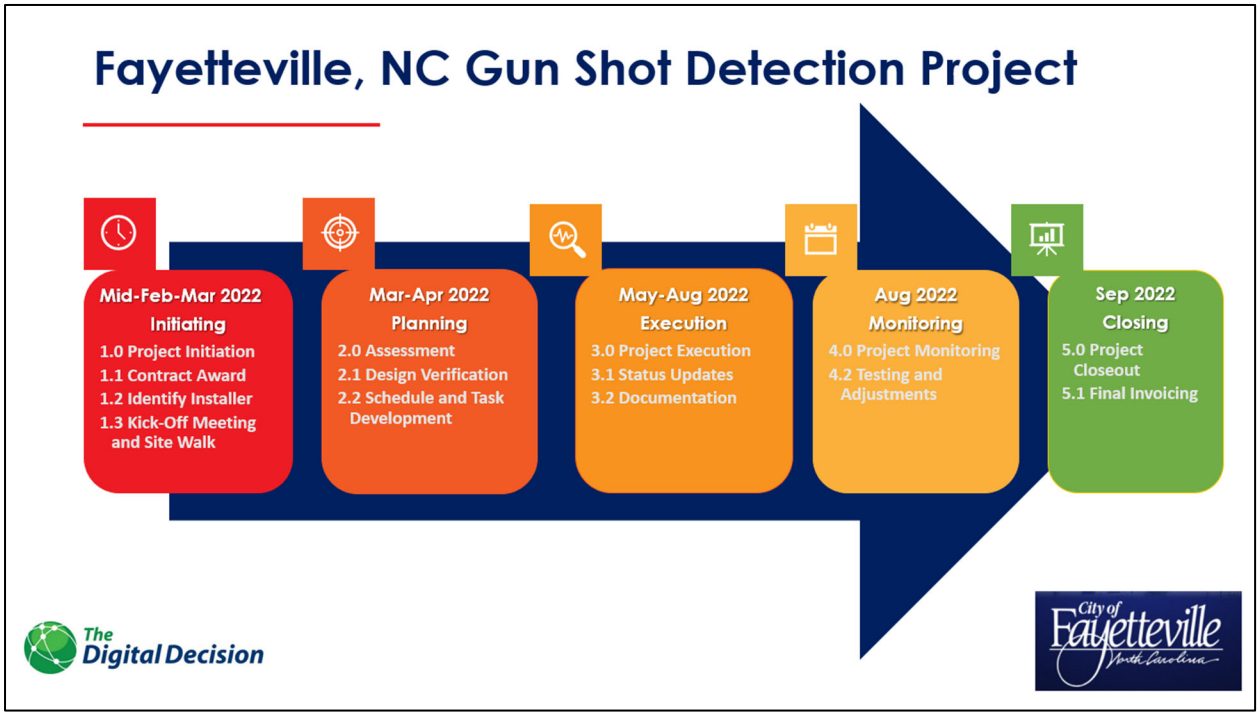


Figure 8 – Proposed Timeline and Work Breakdown Structure

6 Financial Statements

Should our team be short listed, TDD can provide Financial Statements if requested.

Appendix A – EAGL Education Worksheet K-12

K-12 Education Program*

EAGLK12

This BASIC package uses a cloud based server and includes the following site devices and functionality. Sensor information is transmitted / received via cloud server using EAGL gateway technology.

"Affordable cloud based gunshot detection and emergency management solution!"

Site Devices:

- 4 - Wireless Panic Stations
- 4 - Wireless FireFly® Indoor Sensors
- 1 - Wireless DragonFly™ Outdoor Sensor
- 2 - EAGL Gateways

EAGL Technology, Inc.

Functions / Services accessible via browser:

- ✓ Emergency Response Manager
- ✓ Adaptive Response Technology
- ✓ 3rd Party VMS Integration
- ✓ Email Notifications
- ✓ Voice Message
- ✓ Facility Map
- ✓ Text Alerts

All functions are available on a variety of multimedia devices such as mobile phones, tablets, or computers.

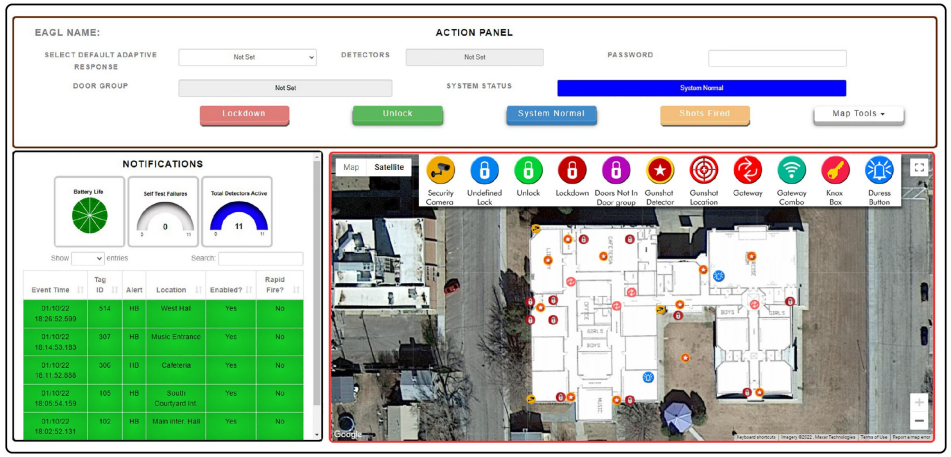
* Package requires 3 year contract

eagltechnology.com (877) 566-1700

EAGLK12

K-12 Education Program*

EAGL Graphic User Interface (GUI)



Available Options, K-12 Education Program*

Option(s) may require site device(s). For example, the EAGL-VOX device is needed for PA System integration functionality.

Optional Functions / Services:

- ✓ Video integration
- ✓ PA System integration
- ✓ Access Control / doors integration
- ✓ 911 PSAP (automatic police dispatch phone call)

* Package requires 3 year contract

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