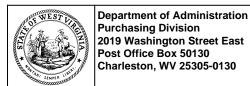


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





## State of West Virginia Solicitation Response

Proc Folder: 1658243

Solicitation Description: CEOI - Master Plan 2025 Camp Dawson Training Center

**Proc Type:** Central Purchase Order

 Solicitation Closes
 Solicitation Response
 Version

 2025-04-09 13:30
 SR 0603 ESR04092500000006097
 1

**VENDOR** 

VS0000048680 Garver, LLC

Solicitation Number: CEOI 0603 ADJ2500000020

Total Bid: 0 Response Date: 2025-04-09 Response Time: 11:58:35

Comments:

FOR INFORMATION CONTACT THE BUYER

David H Pauline 304-558-0067 david.h.pauline@wv.gov

Vendor Signature X

FEIN# DATE

All offers subject to all terms and conditions contained in this solicitation

 Date Printed:
 Apr 9, 2025
 Page: 1
 FORM ID: WV-PRC-SR-001 2020/05

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Master Plan 2025 Camp Dawson Training				0.00
	Center				

Comm Code	Manufacturer	Specification	Model #	
81101508				

#### **Commodity Line Comments:**

#### **Extended Description:**

Provide professional architectural and engineering design services per the attached documentation.

 Date Printed:
 Apr 9, 2025

 FORM ID:
 WV-PRC-SR-001 2020/05







Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

## State of West Virginia Centralized Expression of Interest

Proc Folder: 1658243 **Reason for Modification:** Doc Description: CEOI - Master Plan 2025 Camp Dawson Training Center **Proc Type:** Central Purchase Order **Date Issued Solicitation Closes Solicitation No** Version 2025-03-25 2025-04-09 CEOI 0603 ADJ2500000020 13:30

#### BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON WV 25305

US

#### VENDOR

Vendor Customer Code: VS0000048680

Vendor Name :Garver, LLC

Address: 4701 Northshore Drive

Street:

City: North Little Rock

State: AR Country: US Zip: 72118

Principal Contact: Wallace Smith, PE, CQM-C

Vendor Contact Phone: 501-537-3291 Extension:

#### FOR INFORMATION CONTACT THE BUYER

David H Pauline 304-558-0067

david.h.pauline@wv.gov

Vendor

Signature X 10 S/WV FEIN# 01-0733400 DATE 04/09/2025

All offers subject to all terms and conditions contained in this solicitation

Date Printed: Mar 25, 2025 Page: 1 FORM ID: WV-PRC-CEOI-002 2020/05





**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Wallace Smith, PE, CQM-C, Vice President/Director of Federal Services
(Address) 4701 Northshore Drive, North Little Rock, AR 72118
(Phone Number) / (Fax Number) 501-537-3291; 501-372-8042
(
(email address) WCSmith@GarverUSA.com

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf: that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Garver, LLC	
(Company)	-
W/S/m/V	
(Signature of Authorized Representative)	
Wallace Smith, PE, CQM-C, Vice President/Director of Federal Services	
(Printed Name and Title of Authorized Representative) (Date)	
501-537-3291; 501-372-8042	
(Phone Number) (Fax Number)	
WCSmith@GarverUSA.com	
	,

(Email Address)





9 April 2025



**David Pauline**Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

#### POINT OF CONTACT

Wallace Smith, PE, CQM-C 4701 Northshore Drive North Little Rock, AR 72118 501-537-3291 WCSmith@GarverUSA.com





**20**States

**56** Offices & over

**1,300** Employees

## Re: CEOI - Master Plan 2025 Camp Dawson Training Center / 0603 ADJ2500000020

Dear Mr. Pauline and Selection Committee Members:

Garver is pleased to submit our Expression of Interest for the Master Plan 2025 Camp Dawson Training Center in support of the West Virginia Army National Guard (WVARNG) Construction and Facilities Management Office. Our full service in-house Team has a combination of Master Planning and key Army National Guard experience, including providing innovative solutions and unwavering support for numerous DoD clients nationwide. This expertise provides our Team with the understanding of the Army National Guard (ARNG) and National Guard Bureau (NGB), as well as their respective requirements and processes.

As demonstrated in our Expression of Interest, the Garver Team has an impressive National Guard portfolio and key staff experience for every facility type and related infrastructure required for your training site. This experience includes training support infrastructure (life support), ranges, aviation, and base-wide utilities and infrastructure. Our in-house Team includes master planners, civil engineers, and architects, as well as subject matter experts in aviation, environmental, ranges, stormwater management, and sustainability. This broad knowledge base allows our Team to efficiently and effectively jump into your Master Plan without a learning curve to plan and document your vision for Camp Dawson.

With over 30 years of dedicated service to the National Guard, our Team has successfully delivered design and planning professional services exceeding one billion dollars in constructed value. We are eager to continue this strong partnership with the National Guard and ask that you select us for the Camp Dawson Training Center Master Plan. If you have questions or need additional information, please contact me at **501-537-3291** or **WCSmith@GarverUSA.com**. Thanks for your time and consideration.

Respectfully,

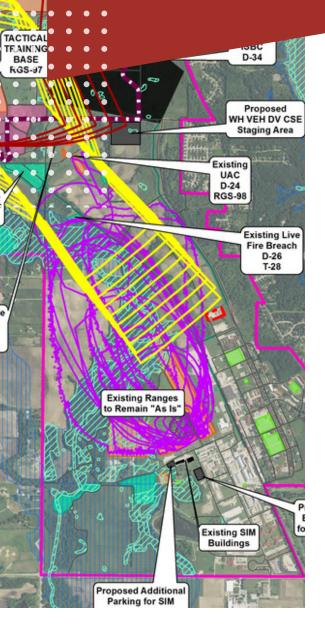
Garver

Wallace Smith, PE, CQM-C

Vice President/Director of Federal Services



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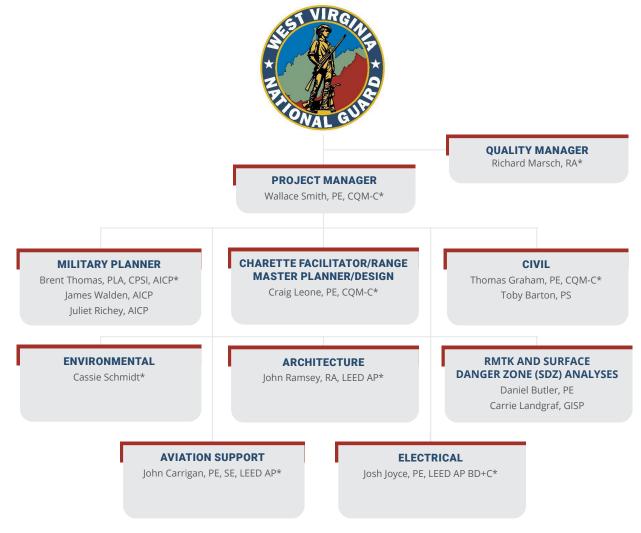
## **Staff Qualifications and Experience**

#### **Organizational Chart**

Garver has assembled a dedicated in-house team of experts that are uniquely qualified and organized to efficiently execute your Camp Dawson Training Center Master Plan. This Team includes staff with specialized experience in military planning; facility condition assessments, design, and planning; environmental planning; GIS analyses; roadways and infrastructure; as well as design and planning for ranges, airfields, and airspaces.

#### **Resumes of Key Staff**

In this section, we have provided resumes that detail the relevant experience and qualifications of our team members. Our Team features the professionals needed to meet each project phase—plus the support personnel available to make your project run smoothly.



<sup>\*</sup>Indicates key staff who have resumes on the following pages







#### **PROJECT MANAGER**

## Wallace Smith, PE, CQM-C

16 Years of Experience with Current Firm

#### **GARVER**

#### **EDUCATION**

BS in Civil Engineering

#### **REGISTRATION**

Professional Engineer: AR, SC, MS, TN

USACE Construction
Quality Control
Management (CQM-C)
Certification

Wallace Smith is a Vice President and the Director of Federal Services with 30+ years of experience. Drawing upon his extensive experience as a program and project manager on federal government projects. Wallace's responsibilities include directing the assignment of task order managers, as well as coordinating and guiding multi-discipline design teams for federal government and military clients. He also ensures project teams have access to the latest design guidance and directives from the client, while monitoring contract schedules, budgets, and deliverables. His project experience in programming, facility planning, master planning, design, and construction administration has been utilized serving a program manager for the Army National Guard, a, program manager for consecutive Nationwide National Guard Bureau IDIQ contracts; and a program manager for the USACE Mobile District for its Military Training Range Planning Program as well as and managing numerous IDIQ contracts for various federal government clients nationwide..

#### **EXPERIENCE** \*Project description contained in Section 5.

## \*TXARNG South Texas Training Center (STTC) Real Property Master Plan

McMullen County, TX

Project Manager

#### \*IAARNG Training Range Master Plan

Camp Dodge, IA

Project Manager

## \*OKARNG Camp Gruber Training Range Complex Master Plan Update

Camp Gruber, OK

Project Manager

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

Program Manager

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Fort Chaffee, AR

Project Manager

## \*Army/Air National Guard 20-Year Master Plan Update (188th Fighter Wing)

Fort Smith, AR

Project Manager

#### \*HIARNG Statewide Real Property Development Plan

Statewide, HI

Project Manager

## \*ARARNG Solar Photovoltaic (PV) Master Plan / Feasibility Studies

Camp Robinson and Fort Chaffee, AR

Project Manager

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Camp Robinson, AR

Project Manager

## \*ARANG, OKARNG, IAARNG Community Risk Assessments

Camp Robinson, Camp Dodge, Fort Chaffee, and Camp Gruber, USA

Project Manager







#### **QUALITY MANAGER**

## Richard Marsch, RA

Years of Experience with Current Firm

#### **GARVER**

#### **EDUCATION**

BA in Environmental Design

#### **REGISTRATION**

Registered Architect: CA

Richard Marsch will serve as the Quality Control Manager responsible for providing internal technical review (ITR) and ensuring quality control assurance. He provides more than three decades of program and project management experience for the National Guard, USACE, Air Force, and NAVFAC. Richard has worked on every major type of facility within the National Guard's inventory, including vertical and horizontal construction; pavements, roads, and airfields; aviation and vehicle maintenance support facilities; armories; barracks; weapons ranges; and access/entry control points. His recent experience includes leading the Air National and Army National Guard Program Management for the National Guard which included six A&E IDIQ contracts worth over \$250M in contract and \$1.5B+ in constructed value.

**EXPERIENCE** \*Project description contained in Section 5.

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

**Quality Manager** 

#### **NMARNG A-E Services Statewide IDIQ Contract**

Statewide, NM

**Quality Manager** 

#### **National Guard Bureau Readiness Center Transformation Master Plan**

Nationwide, USA

Program and Quality Manager

#### **AKARNG Statewide Real Property Development Plan**

Statewide, AK

Program and Quality Manager

#### **HIARNG Statewide Real Property Development Plan**

Statewide, HI

Program and Quality Manager

#### **CAARNG Base-wide Utility Master Plan**

Camp Roberts, CA

Program and Quality Manager

#### **LAARNG Hurricane Katrina Recovery Program**

Statewide, LA

Program and Quality Manager







#### **MILITARY PLANNER**

## **Brent Thomas, PLA, CPSI, AICP**

Years of Experience with Current Firm

#### **GARVER**

#### **EDUCATION**

BA in Landscape Architecture

#### **REGISTRATION**

Professional Landscape Architect: AR, KS, LA

Certified Playground Safety Inspector

American Institute of **Certified Planners** 

Brent Thomas is a planner and project manager with 27 years of experience. Brent is passionate about projects that enhance communities through sound planning and quality design. Always looking for ways to better the communities in which he works, Brent enjoys bridging the technical realm of engineering with the physical realm that affects how Users interact with and see a project — a positive combination of art and science. With past projects in Kansas, Colorado, and Texas, his experience includes education, retail, office, and medical site planning; land planning; streetscapes; park and recreation facilities; bicycle planning and design; and wayfinding and graphic design. Brent combines his artistic skills with his knowledge of human activity and the natural environment and provides landscape design creating natural and built environments that are aesthetically pleasing as well as practical, in both urban and rural areas. He also coordinates the arrangement of existing and proposed land features and structures.

**EXPERIENCE** \*Project description contained in Section 5.

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

**Project Manager** 

#### **IAARNG Camp Dodge Construct Training Ranges Master Plan Update**

#### Johnston, IA

Planner responsible for the update of the Iowa Army National Guard (IAARNG) Training Ranges Master Plan (TRMP), including assessing existing conditions and conducting stakeholder meetings. The scope included updating the Camp Dodge installation/base development plan to reflect potential acquisition of the Miller Land; completing a 10% design of a TC 25-8 based Infantry Squad Battle Course (ISBC) range using either MILES or Simulation (plastic) rounds in "Infantry Land" area as defined by the TRMP; and completing a 10% design of a TC 25-8 based Convoy Live Fire (CLF) range using either MILES or Simulation (plastic) rounds in the northern part of the training area as defined by TRMP.

#### McConnell AFB New Combat Arms Facility

#### Sedgwick County, KS

Planner for the design of a new indoor firing range. Design features low water use plantings at locations near building entries, screening landscaping near visible utility equipment, and placement of trees to block winds and provide longterm shade around the building.

#### **Exploration Place Facility Master Plan**

#### Wichita, KS

Planner for a master plan re-visioning the 20-acre riverfront site of Wichita's science and discovery center to incorporate more interactive spaces, a destination playground, revenue opportunities, and improved outdoor gathering areas. Sitespecific elements included enhancing its riverfront location, neighborhood connectivity, and creative placemaking for play, learning, and socializing.







#### CHARRETTE FACILITATOR/RANGE MASTER PLANNER/DESIGN

#### Craig Leone, PE, CQM-C

17 Years of Experience with Current Firm

#### **GARVER**

#### **EDUCATION**

BS in Civil Engineering

#### REGISTRATION

Professional Engineer: AL, AR, CO, FL, HI, LA, MI, NM, TX

USACE Construction Quality Control Management (CQM-C) Certification Craig Leone is a project manager with 28 years of experience. His civil design experience includes site design, site planning, roadway design, including horizontal and vertical geometry, grading and drainage, stormwater management, master planning, military training ranges, parks, trails, subdivisions, water supply and distribution, wastewater collection, specifications, quantity development, and cost-estimating. Craig is responsible for leading civil design teams, as well as multi-discipline design teams, for numerous National Guard, municipal, local and state government, and military projects around the Country and U.S. Territories. Additional responsibilities have included quality control for project planning and design, client interfacing, budget management, project scoping, team coordination, invoicing, facilitating project planning conceptual design charrette meetings, design reviews, and public meetings.

#### **EXPERIENCE** \*Project description contained in Section 5.

#### \*IAARNG Training Range Master Plan

Camp Dodge, IA

Charrette Facilitator and Range Master Planner/Design

## \*OKARNG Camp Gruber Training Range Complex Master Plan Update

Camp Gruber, OK

Charrette Facilitator and Range Master Planner/Design

#### \*TXARNG South Texas Training Center (STTC) Real Property Master Plan

McMullen County, TX

Charrette Facilitator and Range Master Planner/Design

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

Charrette Facilitator and Range Master Planner/Design

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Fort Chaffee, AR

Charrette Facilitator and Range Master Planner/Design

#### \*HIARNG Statewide Real Property Development Plan

Statewide, HI

Charrette Facilitator and Range Master Planner/Design

## \*ARARNG Solar Photovoltaic (PV) Master Plan / Feasibility Studies

Camp Robinson and Fort Chaffee, AR

Charrette Facilitator and Range Master Planner/Design

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Camp Robinson, AR

Charrette Facilitator and Range Master Planner/Design

## \*Army/Air National Guard 20-Year Master Plan Update (188th Fighter Wing)

Fort Smith, AR

Charrette Facilitator and Range Master Planner/Design

## \*ARANG, OKARNG, IAARNG Community Risk Assessments

Camp Robinson, Camp Dodge, Fort Chaffee, and Camp Gruber, USA Charrette Facilitator and Range Master Planner/Design







CIVIL

#### Thomas Graham, PE, CQM-C

Years of Experience with Current Firm

#### **S** GARVER

#### **EDUCATION**

BS in Civil Engineering

#### REGISTRATION

Professional Engineer: AR, GA, KS, KY, MO, OK, TX

USACE Construction Quality Control Management (CQM-C) Certification Thomas Graham is a Civil Engineer with 30+ years of experience. For this contract, Thomas will be responsible and accountable for needed site and civil design as well as necessary site, utility, and erosion control design. Thomas is experienced at leading civil design teams for a wide variety of facilities, office buildings, vehicle maintenance facilities, visual and performing arts centers, historic buildings, and parking facilities. In addition to providing site utility layouts and relocations, Thomas is well versed in H&H analysis and design for local, rural, and state roadways. He has also provided construction administration and field observation duties on projects throughout his career.

#### EXPERIENCE

\*Project description contained in Section 5.

#### \*IAARNG Training Range Master Plan

Camp Dodge, IA Civil Engineer

## \*OKARNG Camp Gruber Training Range Complex Master Plan Update

Camp Gruber, OK
Civil Engineer

## \*TXARNG South Texas Training Center (STTC) Real Property Master Plan

McMullen County, TX
Civil Engineer

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM Civil Engineer

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Fort Chaffee, AR Civil Engineer

#### \*HIARNG Statewide Real Property Development Plan

*Statewide, HI*Civil Engineer

## \*Army/Air National Guard 20-Year Master Plan Update (188th Fighter Wing)

Fort Smith, AR
Civil Engineer

## \*ARARNG Solar Photovoltaic (PV) Master Plan / Feasibility Studies

Camp Robinson and Fort Chaffee, AR
Civil Engineer

## \*ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Camp Robinson, AR Civil Engineer

## \*ARANG, OKARNG, IAARNG Community Risk Assessments

Camp Robinson, Camp Dodge, Fort Chaffee, and Camp Gruber, USA Civil Engineer







#### **ENVIRONMENTAL**

#### **Cassie Schmidt**

Years of Experience with **Current Firm** 

#### **GARVER**

#### **EDUCATION**

MS in Biology;

BS in Zoology

#### **REGISTRATION**

Federal Fish & Wildlife Permit

Cassie Schmidt is an Environmental Scientist with 12 years of environmental data collection and assessment experience. She has knowledge of local, state, and federal environmental regulations and guidelines. Her experience includes preparing NEPA documents, conducting Phase I and II Environmental Site Assessments; completing alternative analyses and functions and services assessments to satisfy Section 404 permitting requirements; and designing and drafting wetland and stream mitigation plans. Her responsibilities include co-authoring NEPA documents (Environmental Impact Statements, Environmental Information Documents, Environmental Assessments, and Categorical Exclusions); conducting wetland and stream delineations and other environmental field investigations; preparing Section 404 permitting applications for Nationwide and Individual Permits, performing Initial Site Assessments for hazardous materials; preparing biological evaluations for threatened and endangered species and for jurisdictional waters and wetlands; and preparing spill prevention control and countermeasure plans, stormwater pollution prevention plans, and sediment control plans.

**EXPERIENCE** \*Project description contained in Section 5.

#### \*Redstone Arsenal Wetlands Inventory and Management Plan

Huntsville, AL

**Environmental Scientist** 

#### **MDOT East North Street PEL Study**

#### Harrison, MS

Environmental Scientist responsible for creating the environmental constraints report and mapping for three approximately two mile initial concepts within the project area. The following environmental constraints were evaluated: residences and businesses, coastal management zones, wetlands and streams, T&E species, hazardous sites, El, floodplains, and historic properties.

#### **ARDOT Highway 67 - Highway 51**

#### Arkadelphia, AR

Environmental Scientist responsible for drafting the Environmental Assessment. Project responsibilities also included preparing the technical reports for the visual impact assessment, wetland and stream impacts, protected species impacts, and indirect and cumulative impacts; coauthoring the technical report for the traffic noise impacts; conducting quality assurance reviews; assisting with public meetings and agency coordination; and participating in the public hearing.







#### ARCHITECTURE

## John Ramsey, RA, LEED AP

Years of Experience with **Current Firm** 

#### **GARVER**

#### **EDUCATION**

BA in Architecture

#### **REGISTRATION**

Registered Architect: AR, MO

**LEED Accredited** Professional

John Ramsey is an Architect with 41 years of experience. John has performed project management and production, cost estimating, QA/QC, project budget review and control, specification preparation, and construction documents; and he is knowledgeable in sustainable design techniques, applications, and construction codes. John has broad design experience with both public and private sector municipal and commercial building types including retail, office building, medical, hospitality, vehicle maintenance facilities, recreational facilities, airport terminal buildings, and aircraft hangars. John is responsible for the architectural design and coordinates the architectural design with the various supporting design disciplines, which include interiors, structural, mechanical, plumbing, electrical, fire protection, civil, and landscape architecture design for facilities projects, and needed permitting throughout the various design phases. John is also a LEED Accredited Professional.

**EXPERIENCE** \*Project description contained in Section 5.

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

Architect

#### \*HIARNG Statewide Real Property Development Plan

Statewide, HI

Architect

#### \*TXARNG South Texas Training Center (STTC) Real **Property Master Plan**

McMullen County, TX

Architect

#### **ARARNG Camp Robinson New Multi-Purpose Machine Gun Range**

North Little Rock, AR

Architect responsible for architectural design of the new interior building components and infrastructure which were designed IAW the latest building code requirements. Provided planning and design services for a new 5-lane MPMG range and associated 3,100-SF ROCA, including a control tower, an ops/storage building, an ammunition breakdown building, latrines, bleacher, and mess shelter. Designed IAW U.S. Army TC 25-8 and to a minimum life of 50 years IAW UFC 1-200-02. Size: 250-acre site with 5- lane range.

#### TXARNG New Laredo Readiness Center, Field **Maintenance Shop, and Weapons Training Simulator**

Laredo, TX

Architect responsible for architectural design of the new interior building components and infrastructure. Provided planning and design services for a new 36,125-SF Army National Guard Readiness Center complex, including an 19,415-SF field maintenance shop, a 2,260-SF weapons training simulator building, and 20,000+ square yards of parking. Designed to a minimum life of 50 years IAW UFC 1-200-02 and UFC 3-101-01, as well as IAW AT/FP requirements of UFC 4-010-01.

#### MSARNG Camp Shelby New Automated Multi-Purpose **Machine Gun Range**

Hattiesburg, MS

Architect responsible for architectural design of the new interior building components and infrastructure. Provided planning and design services for a new 10-lane MPMG range that includes a 2-lane heavy sniper qualification range and an associated 4,000-SF ROCA. Designed IAW U.S. Army TC 25-8 and UFC 3-101-01, as well as to a minimum life of 50 years IAW UFC 1-200-02. Size: 66-acre site with 10-lane range.







#### AIRFIELD SUPPORT

#### John Carrigan PE, SE, LEED AP

Years of Experience with Current Firm

#### **S** GARVER

#### **EDUCATION**

BS iin Civil Engineering

#### REGISTRATION

Professional Engineer: CO, GA, FL, MI

Structural Engineer: UT, IL

LEED Accredited Professional

John Carrigan is the South Florida Aviation Leader on Garver's Aviation Team with 24 years of experience in the aviation industry. He has spent his entire professional career developing aviation infrastructure through innovative designs and solutions across the country and globe. His experience includes project management, engineering design, planning, permitting, construction administration, and inspection services for a wide range of airport facility projects. John has developed a reputation as a trusted advisor to airports in Florida and across the country, having worked on projects that include runways, taxiways, airport terminal renovations and expansions, corporate hangar facilities, multi-story parking garages, airfield drainage systems, and structural investigations and repairs. John is also committed to the betterment of the industry in his position as Board Member-at-Large for the Southeast Chapter of the American Association of Airport Executives (AAAE).

#### **EXPERIENCE**

#### Killeen Regional Airport MAP Hangar

#### Killeen, TX

Civil Engineer responsible for conducting constructability review for design of a corporate hangar at this joint-use facility with roughly 2,000 SF of office space and 8,000 SF of hangar space.

#### Killeen Regional Airport Taxiway E Relocation

#### Killeen, TX

Civil Engineer responsible for reviewing structural details for the structure modifications. Project included relocating the taxiway and installing new lighting.

## Miami-Dade County Airport Authority Building Recertifications

#### Miami, FL

Project Manager and Structural Engineer responsible for coordinating on-site inspection of existing conditions, review of documentation compiled by previous consultants, and design of repairs to address electrical and structural deficiencies for multiple facilities. Led recertifications for an MRO hangar, employee parking garage, terminal APM motor facility, vehicle maintenance facility, and other airport support facilities.

## Dallas Fort Worth International Airport ARFF Facility Design-Build

#### Dallas, TX

Structural Engineer responsible for design oversight and review of civil/site structures and overall facility elements of the design-build ARFF Station.

## Dallas Fort Worth International Airport Terminal F Design-Build

#### Dallas, TX

Structural Engineer responsible for design oversight and review of civil/site structures and overall facility elements of the design-build Terminal F.

#### **Toledo Express Airport West End BAK Repair**

#### Toledo, OH

Structural Engineer responsible for designing the concrete elements of the BAK pits and system. Project included design of aircraft arresting system for F-16 fighter jets at this joint-use facility as well as relocation of USACE-delineated relatively permanent waterway, installation of new airfield signs and access drives, and runway safety area grading.







#### ELECTRICAL

## Josh Joyce, PE, LEED AP BD+C

Years of Experience with Current Firm

#### **GARVER**

#### **EDUCATION**

BS in Electrical Engineering

#### **REGISTRATION**

Professional Engineer: AL, AR, FL, HI, IL, IN, KS, KY, LA, MO, MS, NM, OK, PA, TN, TX, VA

LEED Accredited
Professional (BD+C)

Josh Joyce is an Electrical Engineer on Garver's Buildings Team with 21 years of experience. Josh has specialized experience in lighting systems, lightning protection and grounding systems, power distribution systems, emergency power generation systems, fire alarm, security, and communications systems design. He also has experience evaluating electrical needs through energy analyses and audits, and he is experienced in contracting, project and construction administration, facility condition assessment, and the design of energy-efficient, highly sustainable building systems. Josh has extensive previous experience designing electrical systems for federal and military projects, including new facility construction, renovations and repairs, maintenance, feasibility assessments, charrettes, and preparation of design-build Requests for Proposal.

#### EXPERIENCE

\*Project description contained in Section 5.

#### \*NMARNG Statewide Real Property Development Plan

Statewide, NM

**Electrical Engineer** 

#### \*HIARNG Statewide Real Property Development Plan

Statewide, HI

**Electrical Engineer** 

## \*TXARNG South Texas Training Center (STTC) Real Property Master Plan

McMullen County, TX

**Electrical Engineer** 

## MSARNG Camp Shelby New Automated Multi-Purpose Machine Gun Range

#### Camp Shelby, MS

Electrical Engineer for the new MPMG Range at Camp Shelby that includes a 10-lane MPMG range, one Heavy Sniper Qualification range, and an associated Range Operations and Control Area (ROCA). The electrical design included new medium voltage primary electrical service to the site and distribution into the range, lighting for support facilities, power for support facilities, and power distribution to all down range target emplacements. Project required close coordination with on-site personnel and the USACE Huntsville District, Range and Training Land Program Mandatory Center of Expertise

#### TXARNG, New Laredo Readiness Center, Field Maintenance Shop, and Weapons Training Simulator

#### Laredo, TX

Electrical Engineer responsible for planning and design services for a new 36,125-SF Army National Guard Readiness Center complex, including an 19,415-SF field maintenance shop, a 2,260-SF weapons training simulator building, and 20,000+ square yards of parking. Designed to a minimum life of 50 years IAW UFC 1-200-02 and UFC 3-101-01, as well as IAW AT/FP requirements of UFC 4-010-01.

#### **ARARNG Range Support Facilities**

#### Camp Robinson, AR

Electrical Engineer for new range support facilities at the Hand Grenade Qualification and Known Distance (KD) Ranges for the ARARNG. The support facilities are composed of nine structures: range control tower at the KD range, as well as an ammo breakdown building, latrine, enclosed bleachers, and covered mess at both ranges. The electrical design included bringing new underground electrical primary to each site, site lighting, and power distribution. Responsibilities included providing design phase drawings to make certain the electrical design addressed and satisfied the Owner's programming needs and applicable design codes and standards.





## References

Garver focuses on providing long-lasting infrastructure, meeting budgets, and finishing projects on time. We recognize that our reputation is not based on what we say about ourselves but on what our clients and peers say about us.

Please contact the following references regarding projects of similar scope to hear firsthand about our Team's unwavering commitment to our clients and their projects.

#### References

#### **Texas Army National Guard**

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#### **Iowa Army National Guard**

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## **Staff Certifications**

The matrix below is an overview of our key staffs experience and qualifications, including education and registrations/certifications. Lead Military Planner Brent Thomas, PLA, CPSI, AICP is an American Institute of Certified Planners (AICP) certified professional. A copy of his AICP certificate is attached on the following page. In addition to Brent, Garver has nine additional AICP-certified professionals available to provide support for this project. See Section 1: Staff Qualifications and Experience for additional information regarding our key staff.

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Name	Highest Level of Education	Registrations/ Certifications	Army Natio	DoD/Federa	Master Pla	Condition A	Cost Estima
Wallace Smith	BS, Civil Engineering	PE, CQM-C	•	•	•	•	•
Richard Marsch	BA, Environmental Design	RA	•	•	•	•	•
Brent Thomas	BA, Landscape Architecture	PLA, CPSI, AICP	•	•	•	•	•
James Walden	MA, Public Administration	AICP	•	•	•	•	•
Juliet Richey	BA, Landscape Architecture	AICP	•	•	•	•	•
Craig Leone	BS, Civil Engineering	PE, CQM-C	•	•	•	•	•
Thomas Graham	BS, Civil Engineering	PE, CQM-C	•	•	•	•	•
Cassie Schmidt	MS, Biology	_	•	•	•	•	•
John Ramsey	BA, Architecture	RA, LEED AP	•	•	•	•	•
Daniel Butler	BS, Civil Engineering	PE	•	•	•	•	•
John Carrigan	BS, Civil Engineering	PE, SE, LEED AP	•	•	•	•	•
Josh Joyce	BS, Electrical Engineering	PE, LEED AP BD+C	•	•	•	•	•
Carrie Landgraf	MS, Geography-Natural Resource Management	GISP	•	•	•	•	•
Toby Barton	AS, Surveying	PS	•	•	•	•	•





**Summary of Qualifications** 

nning (NGR/AR 210-20)

ssessments

al Requirements

inal Guard







This certificate hereby qualifies

#### **Brent Thomas**

as a member with all the benefits of a Certified Planner and a commitment to the AICP Code of Ethics and Professional Conduct.

Certified Planner Number:

36295

Chief Executive Director

President



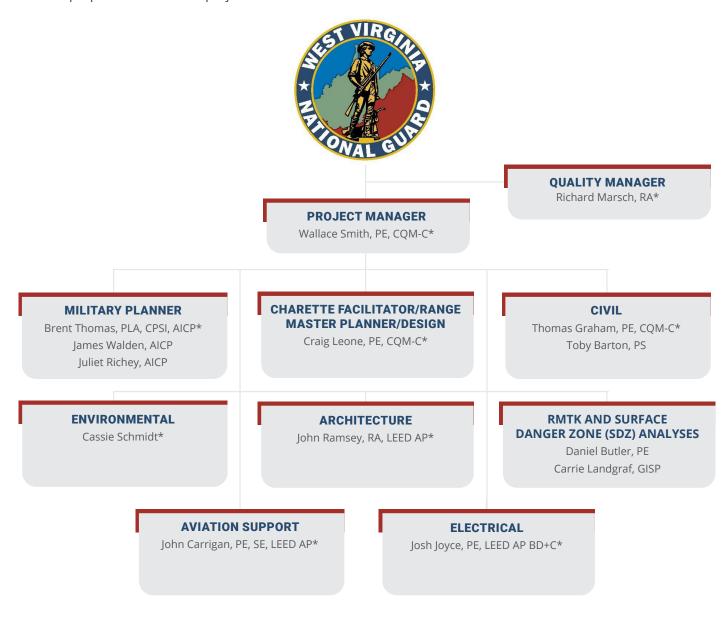
Creating Great Communities for All

Verify: www.youracclaim.com/

STAFF CERTIFICATIONS

## **Staffing Plan**

Structured for success, the Garver Team's Staffing Plan allows us to adapt and manage our staff to secure project completion. To provide WVARNG with the right resources needed to meet expectations, our Team's staffing plan includes a combination of staff with specialized experience in military planning; facility condition assessments, design, and planning; environmental planning; GIS analyses; roadways and infrastructure; as well as design and planning for ranges, airfields, and airspaces. This same team has worked together on all of the relevant projects shown in this submittal and are available for this master planning effort. The organizational chart below graphically shows our proposed staff for this project.







## **Past Projects**

Garver sits in the Top 100 of the *Engineering News-Record's* prestigious Top 500 Design Firms list. Established in 1919, Garver provides in-house multidiscipline design teams with civil, structural, and MEP/FP engineering; as well as master planning, environmental,, cost estimating, surveying, and construction management expertise all under one roof. This Team has extensive federal and military project experience, backed by individuals who routinely work together and are knowledgeable in the criteria that shape A-E military design and construction practices. With over 1,400 staff and 58 offices located throughout the United States, Garver has the broad design expertise to successfully execute any projects in support of the federal government, the Department of Defense, and specifically the National Guard. Army National Guard (ARNG).

Our Team offers in-depth knowledge and experience with codes and regulations utilized by the National Guard, including ARs/AFRs, ARNG PAM/NG PAMs, ETLs, UFCs, and specifically NGR 210-20. This specific NGB expertise combined with our extensive experienced in Master Planning for the National Guard makes us uniquely qualified to execute your Master Plan for the Camp Dawson Training Center.

Within the past 3 years alone, Garver has completed more than 120 military task orders totaling nearly \$424 million through

design-build and design-bid-build delivery methods. Our Team has provided over 12 million square feet of BUILDER condition assessments for the ARNG. In addition to our extensive experience delivering professional services to the federal government, Garver has been working with numerous military departments nationally delivering every service type for almost every facility type in the National Guard inventory. This experience dates back more than three decades. Garver currently holds separate Department of Military Affairs State IDIQ / On-call type contracts supporting the Army National Guard in AR, KS, IA, MS, NM, OK, TX, and FL. As a subconsultant, we also support NGB contracts for the Nationwide Vertical and Horizontal IDIQs as well as HI and Guam. **See brief descriptions of our past projects on the following pages.** 





Years in Business

1,300+

**Employees Companywide** 

#98

**ENR** Ranking

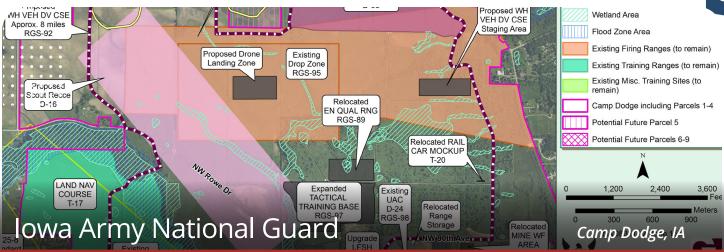




	Summary of Qualifications					
Project Name and Location	Army National Guard	DoD/Federal Requirements	Master Planning (NGR/AR 210-20)	Condition Assessments	Cost Estimating	Short and Long Term Planning/ Forecast
IAARNG Training Range Master Plan Camp Dodge, IA	•	•	•	•	•	•
OKARNG Camp Gruber Training Range Complex Master Plan Update Camp Gruber, OK	•	•	•	•	•	•
TXARNG South Texas Training Center (STTC) Real Property Master Plan  McMullen County, TX	•	•	•	•	•	•
NMARNG Statewide Real Property Development Plan Statewide, NM	•	•	•	•	•	•
HIARNG Statewide Real Property Development Plan Statewide, HI	•	•	•	•	•	•
ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment Fort Chaffee, AR	•	•	•	•	•	•
ARARNG Executive Level 20-Year Master Plan and Long-Range Facilities Assessment Camp Robinson, AR	•	•	•	•	•	•
Army/Air National Guard 20-Year Master Plan Update (188th Fighter Wing) Fort Smith, AR	•	•	•	•	•	•
ARARNG Solar Photovoltaic (PV) Master Plan / Feasibility Studies Camp Robinson and Fort Chaffee, AR	•	•	•	•	•	•
Redstone Arsenal Transportation Master Plan Huntsville, AL		•	•	•	•	•
Redstone Arsenal Wetlands Inventory and Management Plan Huntsville, AL		•	•		•	•
Fort Jackson Central Energy Plant (CEP) Master Plan Fort Jackson, SC		•	•	•	•	•
188th Wing / Fort Smith Stormwater Master Plan Ebbing Field, Fort Smith, AR	•	•	•	•	•	•
OKARNG Army Fire & Emergency Services Plan Camp Gruber, OK	•	•	•	•	•	•
ARARNG Camp Robinson Army Fire & Emergency Services Plan Camp Robinson, AR	•	•	•	•	•	•
ARARNG Fort Chaffee Army Fire & Emergency Services Plan Fort Chaffee, AR	•	•	•	•	•	•
IAARNG Army Fire & Emergency Services Plan Camp Dodge, IA	•	•	•	•	•	•







#### **IAARNG Training Range Master Plan**

Garver provided the development of a Camp Dodge Training Range Master Plan (TRMP) update for the Iowa Army National Guard (IAARNG), as required by Army Regulation (AR) 350-19, The Sustainable Range Program, and supports additional Army doctrine such as AR 210-20, Real Property Master Planning for Army Installations, and AR 200-1, Environmental Protection and Enhancement. The goal of this Master Plan update was to "maximize the capability, availability, and accessibility of ranges and training lands to support doctrinal requirements, mobilization, and deployments under normal and surge conditions." Our master plan provided the necessary information and documentation that the ranges within an installation have the ability to meet the training requirements of weapon systems, and that there are facilities and infrastructure available to provide safe operations. Through the charrette process our team identified the needs, goals, constraints, growth, and other information vital to the TRMP. Multiple range concepts were developed to include the number and types of ranges, Surface Danger Zones (SDZs), and impact areas. The final master plan included a long-range Capitol Investment Strategy plan.

There are a number of entities that utilize training facilities at Camp Dodge. Camp Dodge provides training opportunities for the Iowa Army National Guard (IAARNG) and Iowa Air National Guard (IAANG), other Active and Reserve Component units, Iowa Law Enforcement Academy, Counter Drug enforcement, Department of Public Safety as well as other state and Iocal organizations. These entities were considered when developing the Master Plan update to maintain IAARNGs relationships with these other agencies as well as expand opportunities to collaborate with other state and civil organizations in the future.

The TRMP included planning IAARNG live fire and non-live fire training ranges, support facilities, and utilities, and the master plan incorporated planning needs through the fiscal year (FY) 2065.

#### **CONTACT**

COL John Perkins 515-252-4316

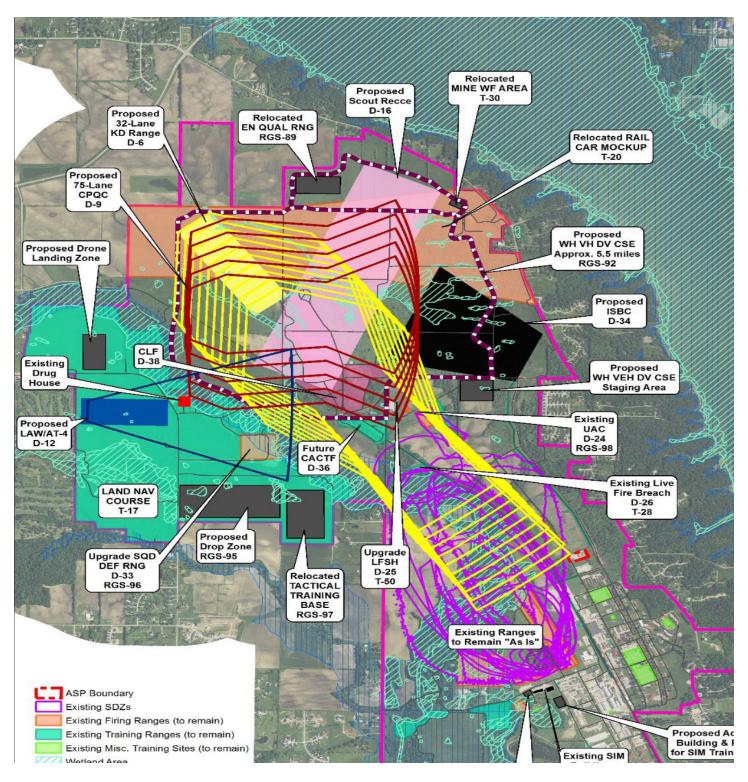
#### PROJECT RELEVANCE

Army National Guard
Master Planning
Visioning
NGR 210-20
UFCS
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ATFP
Infrastructure
Condition Assessments
Range Design / Planning
CIP





The existing and new training and ranges at the base included: live fire ranges; Live Fire Shoot House (LFSH); Crew Served Weapons Qualification Range to support M2, M240, M249AR/LMG, and MK-19; an Unmanned Aerial Vehicle (UAV) training range and convoy route; Military Operations in Urban Terrain (MOUT); additional simulator (SIM) training facilities and infrastructure to support additional mobile trainers; additional life support facilities and parking; increased crew served weapons, unstablized gunnery, convoy live fire, and base defense live fire training areas; improved road network to simulate improvised explosive devices (IEDs); convoy training; portable medical obstacle course and a landing zone to simulate medevac loading.







#### Camp Gruber Training Range Complex Master Plan Update

Due to Garver's key team members and their experience at Camp Gruber and our team's range expertise, Garver was hired as a subconsultant to provide the key leadership and range experts to lead the Camp Gruber's training range masterplan update. The objective of this project was to determine the potential training density at Camp Gruber and current capability of training and supporting facilities. Garver provided the analysis of a potential increase in training activities at Camp Gruber based upon its updated Camp Gruber Master Plan proposed student load. The existing Master Plan was updated and modified to reflect additional training and support facilities required to support the increase in training.

Garver organized, lead, and facilitated an on-site planning charrette with the users. The charrette identified training and support shortfalls, identified current and future training requirements, determined the required facilities and provided conceptual plans for future development. The weeklong charrette was led by our Garver team that included a project manager, planner, architect, mechanical, electrical, civil engineers and GIS support.

Garver provided GIS and related services to help determine the potential training range density at Camp Gruber, the current capability of training and supporting facilities, and the preferred layout and locations for the addition of new training ranges and support facilities required to support the desired increase in training capacity, particularly the addition of a new Combat Pistol Qualification Course (CPQC) and new Infantry Squad Battle Course (ISBC). Garver validated the Courses of Action (COAs), including the proposed layouts, orientations, and Surface Danger Zones (SDZs). Garver then updated these items and developed the layouts, location, SDZs, Line of Sight (LOS) analyses, and viewshed analyses for the preferred COAs for the CPQC and ISBC ranges per U.S. Army TC 25-8 and OKARNG requirements.

#### **CONTACT**

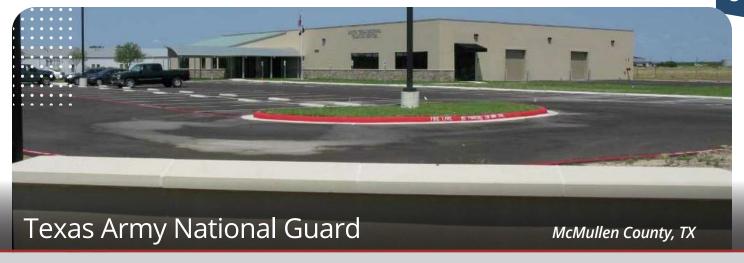
LTC Cory Newcomb 405-228-5647

#### PROJECT RELEVANCE

Army National Guard
Master Planning
Visioning
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#### TXARNG South Texas Training Center (STTC) Real Property Master Plan

Gaver's key staff led the RPMP Master Planning development for the TXARNG while working for another firm (SAIC). This Garver team was responsible for the development and execution of the RPMP through completion. The RPMP included approximately 23,000 acres determine requirements to transform STTC into an Operational Readiness Training Center for a Brigade-level Combat Team (BCT). The plan included all of the necessary facilities, infrastructure and training ranges necessary to meet mission requirements. The process included:

- The initial kickoff meeting to determine priorities, assess available resources, and confirm a strategy and work plan for the BCT development.
- Visioning and The Adjutant General (TAG) Narrative Development and Vision Planning for the STTC overall site.
- Analysis of Site Locations and Conditions including best use of the properties for currently planned training ranges.
- Range Complex Master Planning (RCMP)
- Development of Site Master Plan Concepts
- Installation Geospatial Information and Systems (IGI&S)
- Assessment of Environmental Requirements

The analysis included existing site facilities and infrastructure and new BCT facilities including:

- · HQ/Administrative facilities for a BCT-level event
- · BN level maintenance facilities
- · Dining facilities
- Physical fitness facilities
- Troop Medical Clinic/Physical Exam Center
- General Instruction and Simulations buildings
- Auditorium/Chapel
- Billeting for a minimum of 3,500 BCT personnel and 500 support personnel
- UTES facility
- Support facilities
- ASP

#### **CONTACT**

COL Zeb Miller 512-782-5391

#### **PROJECT RELEVANCE**

Army National Guard
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Condition Assessments
Range Design / Planning
CIP





The planed Live Fire ranges and overlays with SDZ included:

- Scout Recce Gunnery Complex
- Infantry Platoon Battle Course
- Infantry Squad Battle Course
- · Convoy Live Fire
- · Combat Pistol Qualification Course
- 10/25 Meter Range
- · Known Distance Range
- Modified Record Fire Range (MRF)
- Multi-Purpose Machine Gun Range (MPMG)
- Grenade Launcher Range (M203)
- · Hand Grenade Familiarization Range
- Live Fire Shoot House
- Urban Assault Course
- Combined Army Collective Training Facility
- Live Fire Breach Facility
- · Light Demolition Range
- · Non-Standard Convoy Live Fire Exercise Lane
- 10/25 Meter Range (Secondary)
- Combat Pistol Qualification Course (Secondary)
- Modified Record Fire Range (Secondary)

#### **Associated Range Operations and Control Facilities**

- Standard SAROCA Facilities
- Replace: Instrumented ROC Tower with ROC Tower with two floors
- Replace: Instrumented Range, AAR Building with AAR Building, Small
- Exclude: Vehicle Instrumentation Dock

#### Planned Training Facilities (Non-live Fire)

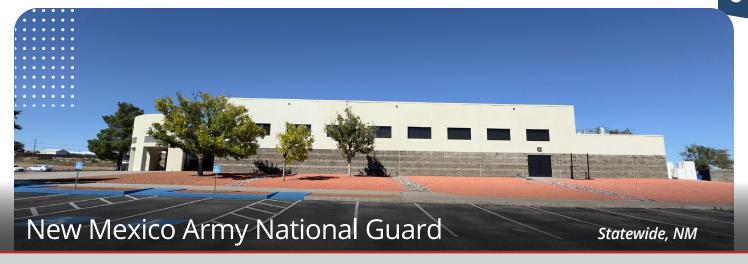
- Air Assault Course
- · Land Navigation Course
- · Confidence/Obstacle Course
- Simulation Buildings (EST 2,000, VCOT, Door Gunner Simulator, and Call for Fire Trainer)
- · Drop Zones and Landing Zones
- NBC Chamber
- HEAT Trainer

Proposed end state for the STTC – Maneuver Center of Excellence for the TXARNG to support ongoing missions and support one BCT and training support personnel including IN BN force-on-force & Maneuver live-fire ranges including:

- Classified as Maneuver Training Center, Heavy
- · Support aviation live-fire training
- UH60/CH47 Door Gunnery/ AH64 30 millimeter Gunnery.
- · UAV flight operations.
- Forward SDCA Staging Area for Coastal Bend of Texas







#### NMARNG Statewide Real Property Development Plan

Garver is providing a Statewide Real Property Development Plan (RPDP) for the New Mexico Army National Guard assets across the State in accordance with Army policy outlined in NGR, UFC 210-20, NGR 415s and other relevant requirements. This includes an assessment of the existing conditions of real property assets throughout the State, evaluate expansion potential to accommodate future mission needs by performing Development Capacity Analysis, and establish a strategic development plan for the long-term management of critical facilities over the next 25 years.

The plan will provide detailed site analysis, future development plans, facility conditions, facility allowances and requirements that results in a specific program of sustainment, restoration, modernization, demolition, and construction. The plan addresses aspects of environmental, land use, transportation, and infrastructure conditions as the relate to each subject area. The plan includes a site concept to include utilities, site layout, special requirements, phase for design and construction, and cost estimates for each site.

The plan incorporates information from RPLANS, including the Tabulation of existing facilities vice requirements for each site. The Plan includes generating an Architectural Theme Study to generate architectural input that is in concert with adjacent structures and Installation Design Guidance or local jurisdictional requirements.

Phase 1 of the RPDP includes priority sites located in Las Cruces, Rio Rancho and Santa Fe (Training Site/HQ & AASF).

Phase 2 will include the remainder of asset locations in Alamogordo, Albuquerque, Belen, Clovis, Farmington, Las Vegas, Roswell, Springer, and Taos.

#### **CONTACT**

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#### **PROJECT RELEVANCE**

Army National Guard
Master Planning
Visioning
NGR 210-20
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Condition Assessments
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CIP







The purpose of the effort was to prepare a comprehensive RPDP for the NMARNG to reflect the strategic vision for its statewide facilities, and to assist in the implementation of the strategic vision through the provision of modern and efficient facilities. The general process for all of the facilities and locations listed above included a kickoff meeting to determine priorities, assess available resources, and confirm a strategy and work plan for visiting every site across the state. Based on this strategy session, our team provided detailed schedules, work plans, procedures, policies, and all other relevant documentation to support successful contract completion for the 12-month period of performance.

The NMARNG Adjutant General's (TAG's) strategy for meeting the challenges of operating under changing paradigms. These paradigms include antiterrorism/force protection (AT/FP); reduced manpower and resources; executing base realignments and transformation of Army units; and minimized base operations support (BOS) costs. The TAG vision also includes the Installation Sustainability Program and Sustainable Range Program venues to identify and accomplish long-term goals that ensure future mission accomplishment with the least impact on the State and its communities.





#### HIARNG Statewide Real Property Development Plan

Gaver's key staff lead the RPDP Master Planning development for the HIARNG while working for another firm (SAIC). This Garver team was responsible for the initial development and execution of the RPDP effort to approximately 80% complete level. This RPDP effort included four key elements: Long Range Component (5-25 years), Short Range Component (less than 5 years), Real Property Environmental Overlays, and a Capital Investment Strategy which included both federal and state entities associated with the HIARNG mission. The Statewide plan included the following 5 remote islands and installation locations:

#### Kalaeloa (Kapolei) Site Complex

- Island of Oahu Honolulu, Wahiawa, Waiawa and Waimanalo.
- · Island of Hawaii Hilo (KMR) and Kealakekua
- Island of Kauai Hanapepe, Kapaa and Kekaha
- Island of Maui Puunene and Ukumehame
- Island of Molokai Kaunakakai

The purpose of the effort was to prepare a comprehensive RPDP for the HIARNG to reflect the strategic vision for its statewide facilities, and to assist in the implementation of the strategic vision through the provision of modern and efficient facilities. The general process for all of the facilities and locations listed above included the following per the appropriate guidance provided in the NGR 210-20, UFCs, NGR 415s and other relevant requirements.

 The initial kickoff meeting to determine priorities, assess available resources, and confirm a strategy and work plan for visiting every site across the state. Based on this strategy session, our team provided detailed schedules, work plans, procedures,

#### CONTACT

**POC** Retired

#### **PROJECT RELEVANCE**

Army National Guard
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CIP







policies, and all other relevant documentation to support successful contract completion for the 14-month period of performance.

- Visioning and The Adjutant General (TAG) Narrative Development
- Analysis of Site Locations and Conditions
- · Review and Update the RPLANS Requirements
- Range Complex Master Planning (RCMP)
- Development of Site Master Plan Concepts
- Facility Management Decision System
- · Installation Design Guide
- Installation Geospatial Information and Systems (IGI&S)
- Assessment of Environmental Requirements
- Investment Strategy and Master Planning Integration

The final RPDP produce a long-range, integrated planning that identified facility shortfalls and excesses; develop alternatives (use of other existing, local facilities, rehabilitation, addition/alteration or new construction) to support current and future missions developed as part of the future mission goals; develop alternative uses for underutilized facilities to support current and future missions; establish a framework for the CIP plan prioritizing projects and managing limited State and Federal resources; assisted in the development of the military construction program (both MILCON and SRM) by comparing existing real property assets to requirements; identified activities and actions that may have environmental impacts early in the project development phases.





#### Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Gaver's key staff lead the Master Planning development for the ARARNG while working for another firm (SAIC). This Garver Team was responsible for the development and execution Planning and assessment effort. The Facilities Assessment and Master Plan identified the size, location, condition, and use of all existing facilities and identified all facilities and infrastructure for future mission requirements, needs, and improvements, both planned and anticipated. The plan included the necessary roadway and utility improvements required to meet mission growth. The Master Plan provided a long-range (20-year growth) development plan and a short-range (5-year growth) development plan.

Master Planning process began with a Visioning Session to capture the The Adjutant Generals (TAG) vision for the future of the base. The then conducted a 5 day charrette / interview process with the various user groups throughout Fort Chaffee. These interviews provided detailed information pertaining to current facilities, planned facilities, and future needs. Information provided in these interviews helped to establish current and future land-use maps, planned structures and utilities, and existing facilities, infrastructure, and installation conditions. The final Master Plan document included a written report capturing the TAGS vision, users current facility operations and needs, a 3D model of Camp Robinson, including current and future structures, roadways, and utilities, GIS data information, and plan drawings in AutoCAD format, and a comprehensive 20 year growth plan.

As part of this project, 15 survey control monuments were installed throughout Fort Chaffee. These monuments were utilized for future construction on base. Previous to these monuments, all vertical and horizontal control for construction was based on assumed locations and elevations. These control monuments will allow future construction to be tied to a real-world survey system. Due to the Garver staff's previous experience developing the Executive Level 20-Year Master Plan and Long-Range Facilities Assessment described above, Garver was subsequently hired to provide the 20-Year Master Plan and Long-Range Facilities Assessment Master Plan update for the ARANG utilizing the same approach and methodology.

#### **CONTACT**

Gib Richardson 501-212-5850

#### **PROJECT RELEVANCE**

Army National Guard
Master Planning
Visioning
NGR 210-20
UFCS
NG PAMS
ATFP
Infrastructure
Condition Assessments
Range Design / Planning







#### Executive Level 20-Year Master Plan and Long-Range Facilities Assessment

Gaver's key staff lead the Master Planning development for the ARARNG while working for another firm (SAIC). This Garver Team was responsible for the development and execution Planning and assessment effort. The Facilities Assessment and Master Plan identified the size, location, condition, and use of all existing facilities and identified all facilities and infrastructure for future mission requirements, needs, and improvements, both planned and anticipated. The plan included the necessary roadway and utility improvements required to meet mission growth. The Master Plan provided a long-range (20-year growth) development plan and a short-range (5-year growth) development plan.

Master Planning process began with a Visioning Session to capture the The Adjutant Generals (TAG) vision for the future of the base. The then conducted a 5 day charrette / interview process with the various user groups throughout Camp Robinson. These interviews provided detailed information pertaining to current facilities, planned facilities, and future needs. Information provided in these interviews helped to establish current and future land-use maps, planned structures and utilities, and existing facilities, infrastructure, and installation conditions. The final Master Plan document included a written report capturing the TAGS vision, users current facility operations and needs, a 3D model of Camp Robinson, including current and future structures, roadways, and utilities, GIS data information, and plan drawings in AutoCAD format, and a comprehensive 20 year growth plan.

As part of this project, 15 survey control monuments were installed throughout Camp Robinson. These monuments were utilized for future construction on base. Previous to these monuments, all vertical and horizontal control for construction was based on assumed locations and elevations. These control monuments will allow future construction to be tied to a real-world survey system. Due to the Garver staff's previous experience developing the Executive Level 20-Year Master Plan and Long-Range Facilities Assessment described above, Garver was subsequently hired to provide the 20-Year Master Plan and Long-Range Facilities Assessment Master Plan update for the ARANG utilizing the same approach and methodology.

#### **CONTACT**

Gib Richardson 501-212-5850

#### **PROJECT RELEVANCE**

Army National Guard
Master Planning
Visioning
NGR 210-20
UFCS
NG PAMS
ATFP
Infrastructure
Condition Assessments
Range Design / Planning







#### Army/Air National Guard 20-Year Master Plan Update (188th Fighter Wing)

Gaver's key staff lead the RPMP Master Planning development for the ARNG while working for another firm (SAIC). This Garver team was responsible for the development and execution of the RPMP through completion. The approach for Fort Smith was to update, understand and plan for efficiency based on Adjacency of Functions. The goals established included:

- Consolidation
- Improved Security
- Improved Circulation
- Maximum Input and Participation of End Users
- Unify Base Image
- Improve Proximity of Buildings

The 188th Fighter Wing spent many years building conservatively and approaching future development as economically as possible. However, some needed improvements were never addressed because of a lack of funding or space. Because of changes in requirements and the acquisition of an additional 25 acres, there was an opportunity to make bold moves. An updated concept for the master plan was developed which created a very logical efficient and cohesive base. The master plan concept organized facilities based on the natural hierarchy of security needs and required proximity to the ramp. The ramp is the most mission critical area on base and should be the most protected. The ramp is where mission related activities take place and the aircraft are the focal point of the activity. Therefore, the ramp was the epicenter of the master plan design. The remaining zones were organized around the ramp as concentric layers.

#### **CONTACT**

Captain Joseph David Harrison Retired

#### PROJECT RELEVANCE

Air National Guard
Master Planning
Visioning
NGR 210-20
UFCS
NG PAMS
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Infrastructure
Condition Assessments
CIP





#### Redstone Arsenal Wetlands Inventory and Management Plan

Garver has provided wetland planning level survey analysis, field determinations, and wetland delineations in accordance with the United States Corps of Engineers (USACE) 1987 Wetland Delineation Manual for approximately 20,800 acres (ac) of the 38,100-acre arsenal in support of the Integrated Natural Resources Management Plan (INRMP).

The objective of this project is to develop a unified inventory to identify the presence or absence of wetlands within approximately 8,000 ac of land on RSA, within an area of interest (Figure 2). The proposed work will consist of:

- Pre-fieldwork study of existing RSA GIS information related to wetland resources;
- Planning Level Survey of potential wetland areas for key indicators;
- Completion of USACE field survey documentation in representative or questionable wetlands and GIS mapping; and
- Compilation of final project reports, GIS files, and permanent project records.

Garver is under contract to complete another 5,500 ac of surveys in 2025 and anticipates completion of base-wide areas requiring surveys in 2026.

#### **CONTACT**

Tom Richardson 256-876-6102

#### PROJECT RELEVANCE

US Army Wetland delineation UFCs Infrastructure Condition Assessments





33

# ARARNG Solar Photovoltaic (PV) Master Plan / Feasibility Studies

#### **CONTACT**

Gibb Richardson 501-212-5850

#### **PROJECT RELEVANCE**

Army National Guard Master Planning Visioning UFCs NG PAMs Infrastructure Condition Assessments CIP



#### **CONTACT**

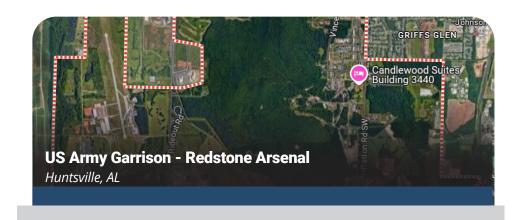
Kaela Hambly 256-882-7582

#### **PROJECT RELEVANCE**

Master Planning
Visioning
AR 210-20
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Condition Assessments
CIP



Garver provided solar photovoltaic (PV) feasibility studies for the cantonment areas at Camp Robinson and Fort Chaffee for the Arkansas Army National Guard (ARARNG). The studies identified six potential solar photovoltaic projects (two large sites, two medium sites, and two small sites) at both maneuver training centers, while prioritizing potential projects using existing structures and maximizing life cycle costs. The scope of work included a review of past, current, and projected energy usage; forecasted energy rates; GIS data; asbuilt drawings; and solar energy availability based on geographic location. This project was the Winner of the 2018 AR ACEC Engineering Excellence Award in Studies Research & Consulting Engineering Services.



Garver provided master planning services to help Fort Jackson understand the impacts on their energy infrastructure of the future MILCON growth at the base. The plan developed a holistic approach for overall installation heating and cooling plants, distribution system, interface with building, and building current demands. The plan determine future capacity of heating and cooling plants. Fort Jackson's current infrastructure includes four Central Energy Plants that provide heating and cooling throughout the installation. In total the energy plants provide 40% of the installation's cooling and 60% of the installation's heating with 13 boilers and 13 chillers. The plan analyzed four alternatives including: Complete decentralization; Future emphasis on decentralization; Future emphasis on centralization.





#### **MICC Fort Jackson**

#### **CONTACT**

Regina Givens 803-751-5166

#### **PROJECT RELEVANCE**

Master Planning
Visioning
AR 210-20
UFCs
ATFP
Infrastructure
Condition Assessments
CIP



#### CONTACT

Rodney Colson 479-573-5261

#### **PROJECT RELEVANCE**

Air National Guard
Master Planning
Visioning
NGR 210-20
UFCS
NG PAMS
ATFP
Infrastructure
Airfield
Condition Assessments
CIP



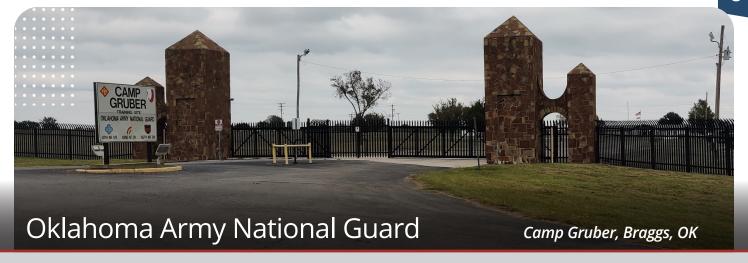
Garver provided master planning services to help Fort Jackson understand the impacts on their energy infrastructure of the future MILCON growth at the base. The plan developed a holistic approach for overall installation heating and cooling plants, distribution system, interface with building, and building current demands. The plan determine future capacity of heating and cooling plants. Fort Jackson's current infrastructure includes four Central Energy Plants that provide heating and cooling throughout the installation. In total the energy plants provide 40% of the installation's cooling and 60% of the installation's heating with 13 boilers and 13 chillers. The plan analyzed four alternatives including: Complete decentralization; Future emphasis on decentralization; Future emphasis on centralization.



Garver is providing a stormwater drainage masterplan within the Ebbing ANGB / and Fort Smith Regional Airport (KFSM). The plan will be considered watersheds upstream of the 188th and KSFM that contribute stormwater runoff to the study area. The plan includes both existing conditions and future development. A Capitol Improvement Plan (CIP) with a list of projects to address / mitigate all drainage issues was developed as part of the scope with associated cost estimates. The plan included hydrologic and hydraulic studies, conceptual sizing of drainage structure elements (roadways, bridges, culverts, open channels, inlets, and subsurface stormwater drainage systems. Garver provided the topographic and field survey effort.







#### **OKARNG Army Fire & Emergency Services Plan**

Garver provided a comprehensive analysis of the Fire & Emergency Services (F&ES) requirements for the 33,000 acre installation. This involved assessing the level of risk within the Camp Gruber Training Center community and weighing the risks associated with current and proposed alternative response capabilities. The Garver Team prepared the two-part Community Risk Assessment / Standard of Cover (CRA/SOC) report for Camp Gruber to summarize the results of the analysis.

The CRA was completed to identify firefighting requirements and determine the levels of risk in Camp Gruber's operational program by analyzing the administrative, managerial, and physical aspects of Camp Gruber's F&ES program per the Army Safety Center's Risk Management (RM) platform found in Army Regulation 385-10 (AR 385-10) and Department of the Army Pamphlet 385-30 (DA PAM 385-30). The CRA assessed Camp Gruber's F&ES mission in six major functional areas: 1) fire suppression – initial structural companies' response; 2) aggregate response times structure; 3) wildland urban interface; 4) HAZMAT; 5) technical rescue and confined space rescue; and 6) fire prevention. The CRA further explored options to make the F&ES program compliant with current Army requirements.





#### **CONTACT**

LTC Cory Newcomb 405-228-5647

#### PROJECT RELEVANCE







#### ARARNG Fort Chaffee Army Fire & Emergency Services Plan

Garver provided a comprehensive analysis of the Fire & Emergency Services (F&ES) requirements for the Fort Chaffee installation. This involved assessing the level of risk within the Fort Chaffee community and weighing the risks associated with current and proposed alternative response capabilities. The Garver Team prepared the two-part Community Risk Assessment / Standard of Cover (CRA/SOC) report for Camp Gruber to summarize the results of the analysis.

The CRA was completed to identify firefighting requirements and determine the levels of risk in Fort Chaffee's operational program by analyzing the administrative, managerial, and physical aspects of Fort Chaffee's F&ES program per the Army Safety Center's Risk Management (RM) platform found in Army Regulation 385-10 (AR 385-10) and Department of the Army Pamphlet 385-30 (DA PAM 385-30). The CRA assessed Fort Chaffee's F&ES mission in six major functional areas: 1) fire suppression – initial structural companies' response; 2) aggregate response times structure; 3) wildland urban interface; 4) HAZMAT; 5) technical rescue and confined space rescue; and 6) fire prevention. The CRA further explored options to make the F&ES program compliant with current Army requirements.





#### **CONTACT**

Gib Richardson 501-212-5850

#### PROJECT RELEVANCE



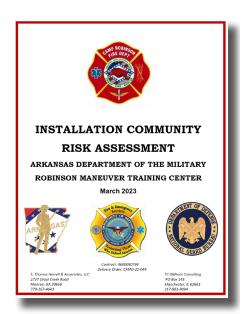


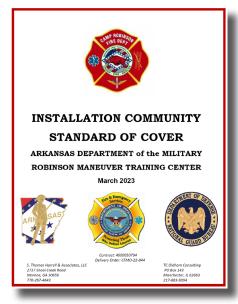


#### ARARNG Camp Robinson Army Fire & Emergency Services Plan

Garver provided a comprehensive analysis of the Fire & Emergency Services (F&ES) requirements for the Camp Robinson installation. This involved assessing the level of risk within the Camp Robinson community and weighing the risks associated with current and proposed alternative response capabilities. The Garver Team prepared the two-part Community Risk Assessment / Standard of Cover (CRA/SOC) report for Camp Robinson to summarize the results of the analysis.

The CRA was completed to identify firefighting requirements and determine the levels of risk in Camp Robinson's operational program by analyzing the administrative, managerial, and physical aspects of Camp Robinson's F&ES program per the Army Safety Center's Risk Management (RM) platform found in Army Regulation 385-10 (AR 385-10) and Department of the Army Pamphlet 385-30 (DA PAM 385-30). The CRA assessed Camp Robinson's F&ES mission in six major functional areas: 1) fire suppression – initial structural companies' response; 2) aggregate response times structure; 3) wildland urban interface; 4) HAZMAT; 5) technical rescue and confined space rescue; and 6) fire prevention. The CRA further explored options to make the F&ES program compliant with current Army requirements.





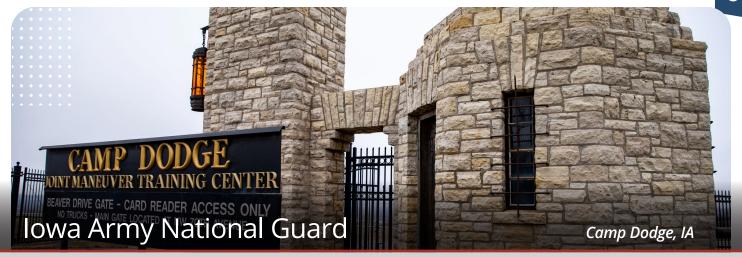
#### **CONTACT**

Gib Richardson 501-212-5850

#### **PROJECT RELEVANCE**





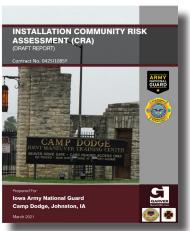


#### **IAARNG Army Fire & Emergency Services Plan**

Garver provided a comprehensive analysis of the Fire & Emergency Services (F&ES) requirements for the Camp Dodge installation. This involved assessing the level of risk within the Camp Dodge community and weighing the risks associated with current and proposed alternative response capabilities. The Garver Team prepared the two-part Community Risk Assessment / Standard of Cover (CRA/SOC) report for Camp Dodge to summarize the results of the analysis.

The CRA was completed to identify firefighting requirements and determine the levels of risk in Camp Dodge's operational program by analyzing the administrative, managerial, and physical aspects of Camp Dodge's F&ES program per the Army Safety Center's Risk Management (RM) platform found in Army Regulation 385-10 (AR 385-10) and Department of the Army Pamphlet 385-30 (DA PAM 385-30). The CRA assessed Camp Dodge's F&ES mission in six major functional areas: 1) fire suppression – initial structural companies' response; 2) aggregate response times structure; 3) wildland urban interface; 4) HAZMAT; 5) technical rescue and confined space rescue; and 6) fire prevention. The CRA further explored options to make the F&ES program compliant with current Army requirements.





#### **CONTACT**

COL John Perkins 515-252-4316

#### PROJECT RELEVANCE













# Other Relevant Army National Guard Projects

The following is a sample list of Army National Guard projects designed by Garver:

- Camp Shelby Automated New Multi-Purpose Machine Gun (MPMG) Training Range, Hattiesburg, MS (\$7.5M)
- CAARNG New Multi-Purpose Machine Gun (MPMG)
   Training Range, Camp Roberts, CA (\$11.5M)
- TXARNG Camp Swift Readiness Center Major Maintenance, Bastrop, TX (\$5.3M)
- TXARNG Camp Bowie Readiness Center Major Maintenance, Brownwood, TX (\$6.4M)
- TXARNG BN HQ / Field Maintenance Shop and Simulator, Loredo TX (\$65M)
- TXARNG AASF Addition and Renovation, Ft Worth TX (\$19M)
- TXARNG Multiple Range Site Power Upgrades, Statewide TX (\$4.2M)
- ARARNG New Fort Chaffee Readiness Center, Fort Smith, AR (\$13.8M)
- PRARNG Fort Buchanan Base Entrance New Access Control Point (ACP), San Juan, Puerto Rico (\$10M)
- NMARNG RTI Kitchen and Scullery Renovation (\$4M)
- NMARNG Belen Readiness Center Renovation, Belen NM (\$10M)
- NMARNG USPFO Renovation, Santa Fe, NM (\$5.5M)
- NMARNG AASF Apron and Airfield Gate Access, Santa Fe NM (\$1.1M)
- OKARNG Camp Gruber Training Center (CGTC) New Fire Station, Camp Gruber, OK (\$2.7M)
- OKARNG Ardmore Readiness Center, Ardmore, OK, (\$42M)

# Relevant National Guard Range Projects

The following is brief list of relevant range planning and design projects that Garver staff has developed for the Army National Guard:

- Modified Record Fire Ranges (MRFR) (15 Sites)
- Multi-Purpose Machine Gun Ranges (MPMG) (14 Sites)
- Urban Assault Courses (UAC) (13 Sites)
- Live Fire Shoot Houses (LFSH) (12 Sites)
- Combined Arms Collective Training Facilities (CACTF) (12 Sites)
- Combat Pistol Qualification Courses (CP/MPQC) (8 Sites)
- Qualification Training Ranges (QTR) (4 Sites)
- Infantry Squad Battle Courses (ISBC) (4 Sites)
- 25-Meter Zero Ranges (4 Sites)
- Convoy Live Fire Ranges (CLF) (4 Sites)
- DMPTR/Scout Recce (4 Sites)
- Sniper Ranges (4 Sites)
- Live Fire Breach Facility (LFBF) (3 Sites)
- MK-19 Range (2 Sites)
- SOF Qualification Training Range (QTR)
- Anti-Armor Tracking And Live Fire Range
- Digital Air-Ground Integration Range (DAGIR)





## **Project Management/Quality Control**

#### **Methodology and Management**

This effort includes preparing a comprehensive Master Plan to reflect the strategic vision for the training site while facilitating its implementation through modern and efficient facilities. The process includes all facilities, infrastructure, and training site locations identified, following guidance in the National Guard Regulations (NGR) 210-20, NGR 415s, Unified Facilities Criteria (UFCs), and other relevant requirements.

The initial project kickoff meeting will be held to determine priorities, assess available resources (data gathering approach), and confirm a strategy and work plan for visiting every site across the training center. Based on this strategy session, our Team will provide detailed schedules, work plans, procedures, policies, and all other relevant documentation to support successful contract completion for the period of performance. **Our process will include:** 

- Visioning/goal setting and The Adjutant General (TAG) narrative development
- Analysis of site locations and conditions
- · Review and updates to the plan requirements
- Development of site master plan concepts
- Facility and infrastructure management decision system
- Installation geospatial information and systems (IGI&S) assessment of environmental requirements
- Investment strategy and master planning integration
- Assembly of draft and final master plan

This same process was utilized for all Master Planning efforts identified in this package.

#### **Quality Control**

Garver has established quality assurance/quality control processes and procedures to maximize the quality of our services and products, allowing our Team to detect and prevent deficiencies early in the planning process. At the outset of the project after completion of the kickoff meeting, Garver will develop a specific Design Quality Control Plan (DQCP) to define the requirements for the project team. The DQCP will identify the project team members and the independent technical review (ITR) team, along with their assigned duties. It will also clearly identify the WVARNG project objectives and timeline as well as document all applicable design criteria, such as NGR 210-20, National Guard Pamphlet (NG PAM) 415, pertinent UFCs, and the Department of the Army Pamphlets and Regulations.

Garver's DQCP is a living reference document that establishes a clear path forward for the project and documents compliance with the project requirements. The Garver Team will implement ITRs, cross-discipline reviews, and peer/senior reviews before submitting each milestone package to the WVARNG.

Our Project Manager Wallace Smith, PE, CQM-C and QA/QC Manager Richard Marsch, RA will ensure the documents are complete for all planned activities and will monitor the various planning courses of action, drawings, backup documentation, comment incorporation (RFI tracking), and CIP estimates. The lead planners and engineers assigned to the project will perform quality control reviews for their respective scope and will oversee reviews at defined milestones, using discipline/scope checklists for consistency.





ITRs are a key component of our quality control process and in coordinating requirements between disciplines. Every submittal of every project we create, large or small, goes through an ITR, where personnel not directly involved in the project review the work of each discipline and the project as a whole. The ITR Team will focus not only on technical design and planning requirements for the project, but they will also review documents between scope items to make certain the entire Garver Team has properly coordinated the planning document, making sure the project as a whole is complete and meets the planning goals and requirements. Any deficiencies found will be formally documented and presented to our design team to be addressed.

Our QA/QC Manager Richard Marsch, RA will then be responsible for making sure all these items have been coordinated, completed and verified before the documents are released to the WVARNG. This process of review, documentation, and verification gives multiple layers of quality control and accountability for technical planning, design and coordination of the project, making sure you receive the best possible product. This process is proven and tested as evidenced by our superior Contractor Performance Assessment Reporting System (CPARS) and Past Performance Questionnaires (PPQ) ratings shown to the right.

## SUPERIOR PERFORMANCE EVALUATIONS ON RECENTLY COMPLETED DOD CONTRACTS

We recognize that our quality of work, compliance with performance schedules, project cost estimating control, and reputation is not based on what we say about ourselves but on what our clients and peers say about us. Garver's federal clients consistently rate us high on our completed projects, with our designs earning "Exceptional" or "Very Good" CPARS ratings for design excellence, innovation, and time savings. In fact, Garver has received industry-leading ratings of Exceptional and/or Very Good on 99% of all CPARS without any unsatisfactory or marginal ratings. See Table 1 to the right. This is a clear indication that we consistently deliver quality deliverables—on time and within budget. In addition to Garver's work as a prime A-E firm providing services to the federal government, Garver has a significant amount of work as the designer of record under design-build delivery to the federal government.

TABLE 1: 10 YEARS OF CPARS RATINGS					
CPARS Rating	Overall Percentage				
Exceptional	18.18%				
Very Good	81.82%				
Satisfactory	0%				
Marginal	0%				
Unsatisfactory	0%				

Over the last 10 years, Garver has received 63 PPQs. Of these ratings, 96.8% received "Exceptional" or "Very Good" ratings with no marginals or unsatisfactory ratings. See Table 2 below. This is a clear indication that we deliver quality, timely, and cost-management designs, resulting in highly satisfied end users. These high ratings can only be achieved by meeting or exceeding client's expectations and contract requirements.

TABLE 2: 10 YEARS OF PPQ RATINGS					
PPQ Rating	Overall Percentage				
Exceptional	58.73%				
Very Good	38.1%				
Satisfactory	3.17%				
Marginal	0%				
Unsatisfactory	0%				

**See Table 3 below.** Specifically for quality of work, cost control, and schedule, Garver has received the following ratings as percentage of Exceptional or Very Good as proof of our commitment to clients.

TABLE 3: QUALITY, COST AND SCHEDULE RATINGS						
Category	CPARS Rating	PPQ Rating				
Quality of Work	100%	93.6%				
Cost Control	100%	91.5%				
Schedule	90.9%	90.5%				

