

**DEPARTMENT OF MILITARY AFFAIRS**

**REQUEST FOR ARCHITECTURAL & ENGINEERING  
DESIGN SERVICES**

**Appleton Army National Guard Readiness Center Addition and Renovation**

**Appleton, WI**

**Project No. 18G1J**

**November 2018**

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## **Request Statement**

This is a request for design services for the Appleton Readiness Center Addition and Renovation project from design through construction administration services as indicated in the DFDM “Policy and Procedure Manual for Architects/Engineers and Consultants.”

## **Background**

The Appleton Army National Guard Readiness Center is currently located at 2801 West 2<sup>nd</sup> Street, Appleton, Wisconsin, in a masonry building constructed in 1968 on 13 acres of State-owned land. Subsequent to original construction, a building addition to the east was constructed. The facility currently provides only 53% of the space authorized per NG Pam 415-12. The existing facility consists of approximately 28,079 GSF total readiness center space, which is inadequate to meet the training needs of the units housed in this facility. Current setbacks do not meet updated Anti-Terrorism Force Protection (AT/FP) requirements, and military vehicle parking and facilities are inadequate.

## **Purpose and Scope of Project**

The project includes planning and the construction of a 25,006 GSF addition and alteration of 28,079 GSF existing space. All plumbing, heating, ventilation, air conditioning, and electrical systems are to be modernized and will require replacement of all primary equipment and service entrances. Reconfigured parking areas (POV), access roads, sidewalks, and utilities will be provided. The project will resolve AT/FP, Americans with Disabilities Act (ADA), and building code issues.

The end result, following design and construction, will be a readiness center that provides site amenities, training/classroom, administrative, storage, maintenance, toilet/shower, and locker room space per NG Pam 415-12, to ensure the readiness of the 2<sup>nd</sup> Battalion, 127<sup>th</sup> Infantry housed at Appleton.

**Architecture and Structure:** The new building addition will be constructed with concrete masonry unit (CMU) backup walls and brick exterior veneer, low slope membrane roof with single-ply membrane roofing, and concrete slab on grade floors. Due to uneven settlement of the building addition to the east of original construction, alterations must include significant repairs to address numerous façade and floor slab cracks. This has also affected the drill hall roof structure which will require evaluation and remediation. Soil borings will be necessary to determine hydrology issues with the existing structure.

**Heating, Ventilation and Air Conditioning (HVAC):** Existing and new offices, classrooms, and other spaces requiring air conditioning will be heated and cooled. Ventilation intake louvers for the mechanical system will be located at roof level to conform to AT/FP requirements. New high-efficiency gas-fired hot water boilers will be installed to generate hot water to heat the drill hall and serve as supplemental heat to exterior offices and classrooms. New exhaust systems for the toilet rooms, lockers, kitchen, and drill hall will be provided.

**HVAC Controls:** Due to the intermittent nature of readiness center occupancy, the HVAC systems will be highly controllable to allow the system to reduce energy consumption when not in use. A new DDC controls system would be installed to control and monitor all new devices.

The controls of existing-to-remain equipment would be replaced to integrate this equipment with the new controls system.

**Plumbing Systems:** The new plumbing systems will consist of gas-fired hot water heaters, domestic water supply, water softening equipment, sanitary and storm sewer. The new systems will be extended to connect to new and existing fixtures and equipment.

**Fire Suppression:** The renovated readiness center will be fully sprinkled. The fire protection system will meet all UFC, state, and local code requirements.

**Electrical Service:** The building is served by 800 ampere, 208Y/120 Volt, 3 Phase, 4 wire electrical service from a utility owned pad-mounted transformer. The meter /current transformer cabinet is located on the exterior of the southeast corner of the building. The service terminates in a Main Distribution Panel located in the main boiler room.

**Renovation – Electrical:** The existing electrical service entrance location will be affected by the new addition. It is anticipated that a larger service will need to be installed to accommodate the building's increased overall square footage.

**Existing Lighting System:** Most of the interior lighting is with fluorescent fixtures with T8 and electronic ballasts. There are several incandescent downlights located in the Distance learning classroom. Spaces are typically controlled by manual switch with occupancy sensor located in space to provide automatic shut-off of lighting. Several spaces have multi-level lighting control as well. Emergency lighting is provided via emergency battery lighting units.

**Existing Conditions – Special Systems:** No Fire Alarm or Detection System exists. The existing paging system through the building is via the phone system. Drill Hall has a dedicated paging system. There is a communications room located in the northeastern part of the building in an equipment room adjacent to the Distance Learning classroom. Communication drops are located throughout the facility in addition to wireless access points. ESS and Telecom issues will be updated throughout the facility per the UFC and Department of Military Affairs requirements.

### **Occupants and Activities**

Recruiting and Retention Battalion personnel (3) and the 2<sup>nd</sup> Battalion, 127<sup>th</sup> Infantry (172) occupy space in this Readiness Center. 18 personnel occupy the building Monday through Friday, 0800 to 1630 and 154 personnel are part-time, Guard/Reserve personnel conducting training (drills) at the facility one weekend per month, typically Friday night through Sunday. Activities include training, administration, physical fitness, supply storage, and maintenance of vehicles.

## Readiness Center

	Required	Unit of Measure
A. Schedule I Common Use Areas		
1. Assembly Hall	5,400	SF
2. Classrooms	2,750	SF
3. Learning Center	500	SF
4. Multi-Purpose Training Area	1,500	SF
5. Kitchen	800	SF
6. Break / Vending	400	SF
7. Toilets	1,430	SF
8. Showers	480	SF
9. Flammable Materials Storage	100	SF
10. Lactation Area	80	SF
11. Family Readiness Office	250	SF
12. RAPIDS Office	150	SF
13. Retention Office	110	SF
14. Table/Chair Storage	300	SF
15. Physical Fitness	700	SF
16. Controlled Waste Handling Facility (CWHF)	300	SF
B. Schedule II Unit and Special Space Allowances		
1. Administrative - Basic Space	1,200	SF
2. Administrative - General Space	7,080	SF
3. Battalion Headquarters and Headquarters (HHC or HHD)	1,500	SF
4. Arms Vaults	600	SF
5. Heated Storage Space	3,700	SF
6. Unheated storage space	980	SF
7. Locker Room Space	3,350	SF
8. Special Functions - Medical Section	400	SF
9. Special Functions - GPTB Work-bays	3,168	SF
Total Net Readiness Center Space	37,228	SF
Maintenance and Storage (3% of Total Net Area)	1,117	SF
Mechanical/Electrical Room (5% of Total Net Area)	1,862	SF
Telecom/IT (1% of Total Net Area)	373	SF
Circulation Allowance (15% or 22% of Total Net Area)	8,928	SF
Structural Allowance (10% of Total Net Area)	4,951	SF
Total Gross Readiness Center Space	54,459	SF

### Common Supporting Items

	Required	Unit of Measure
1. Service and Access Aprons – Work-bay Access	214	SY
2. Service and Access Aprons - Drill Hall Access	300	SY
3. Flexible Pavement - Privately owned vehicle (POV) parking	5,530	SY
4. Access Road and Entrance Throat	3,556	SY
5. Sidewalks	908	SY

### **Site Development and Utility Services**

1. Site/Existing Conditions: Located on a 13-acre site within the City of Appleton, the site consist of three structures. The primary structure is single story Readiness Center located on the north central end of the site. The remaining two structures include masonry vehicle storage building to the south and a pre-engineered general-purpose storage building to the southeast. Additional supporting features include two Privately Owned Vehicle (POV) parking lots, one on each side of the Readiness Center, a fenced in Government Owned Vehicle parking lot with concrete spill containment, and a concrete vehicle loading ramp. The remainder of the site is either lawn or undeveloped landscape.
2. Existing Utilities: All utilities are commercially or municipally provided.

### **Special Considerations**

The budget and schedule are contingent on approval, availability, and timing of receipt of funds. The planning of the project is anticipated to begin in FY18; however, it will be executed against the complete addition/alteration project authorized for bidding in FY21. As such, the construction cost has been escalated to FY21 at 3.0% per year to reflect an accurate basis for the project costs.

### **Budget**

	<b>Federal</b>	<b>State</b>	<b>Total</b>
Construction	\$ 10,600,000	\$ 4,653,000	\$ 15,253,000
Contingency (Fed 5% regulatory)	\$ 530,000	\$ 995,000	\$ 1,525,000
A/E Fees (Design)	\$ 1,060,000	\$ 465,000	\$ 1,525,000
DFD (Fed 3% regulatory)	\$ 350,000	\$ 321,000	\$ 671,000
Commissioning (Fed 0.6% reg.)	\$ 64,000	\$ 89,000	\$ 153,000
Equipment	\$ 742,000	\$ 326,000	\$ 1,068,000
Arts	\$ 0	\$ 39,000	\$ 39,000
<b>TOTAL project costs</b>	<b>\$ 13,346,000</b>	<b>\$ 6,888,000</b>	<b>\$ 20,234,000</b>

### **Schedule**

Program Approval:	July 2017
A/E Selection:	January 2019
Design Report Completion:	October 2019
Bid Opening:	October 2020
Construction Start:	March 2021
Substantial Completion:	November 2022
Final Completion:	March 2023