

PROJECT NARRATIVE

For:

Design to Relocate Grounds and Transportation Canandaigua VAMC

Prepared For:

**Department of Veterans Affairs
VA Western New York Healthcare System
Canandaigua VA Medical Center
400 Fort Hill Avenue
Canandaigua, NY 14424**

May 14, 2018

VA CONTRACT NO. VA242-17-C-0132

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	3
2.0	GENERAL SCOPE	3
3.0	APPLICABLE CODES AND STANDARDS.....	3
3.1	DEPARTMENT OF VA STANDARDS	3
3.2	AIR-CONDITIONING AND REFRIGERATION INSTITUTE (ARI).....	3
3.3	AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS (ASHRAE) ...	4
3.4	NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)	4
3.5	UNDERWRITERS LABORATORIES, INC. (UL).....	4
4.0	EXISTING CONDITIONS.....	4
5.0	DISCIPLINE NARRATIVES.....	5
5.1	SITE CIVIL	5
5.2	ARCHITECTURAL AND INTERIOR DESIGN	5
5.3	PLUMBING	6
5.4	MECHANICAL.....	7
5.5	ELECTRICAL	8
5.6	STRUCTURAL.....	8
6.0	ESTIMATE OF CONSTRUCTION COSTS	9

1.0 EXECUTIVE SUMMARY

The Canandaigua VAMC Grounds and Transportation Departments currently occupies an estimated 2,300 sq ft of Building 16, including 550 sq ft of office space and three garage bays totaling 1,750 sq ft. It is the desire of the Canandaigua VAMC to relocate the Grounds and Transportation Departments into an existing structure located on the VA Campus. Building 201 (B201) is a pre-engineered steel structure constructed approximately 5 years ago. It currently consists of three garage bays totaling 3,220 sq ft. In preparation for the relocation of Grounds and Transportation, building 201 will be renovated to accommodate the programmatic needs of the departments as well as being expanded to include a 950 sq ft office.

During this submission, construction documents are issued for bidding purposes.

2.0 GENERAL SCOPE

The general scope of this project is to renovate Building 201 to accommodate the relocation of the Grounds and Transportation Departments. A plan has been developed for renovation and expansion of the building. RJR Engineering, P.C., with the assistance of MJ Engineering and Land Surveying, P.C., has conferred with the Medical Center staff to determine a conceptual building layout for review and development into a complete design package.

Key goals of the project are to provide the Grounds and Transportation Departments with a facility that meets all of their programmatic needs while adhering to project budgetary limits and space constraints. The existing building is to be modified to include a vehicle lift, storage mezzanine, and floor drains within the east garage bay. The western bays will have insulation and heat incorporated into the space to allow for freeze protection within the area. An addition to the east side of the building will be added for office space. Office space is to include offices, a foyer with vehicle sign-out area, kitchen/break room, locker room with shower area, file storage, and a restroom.

3.0 APPLICABLE CODES AND STANDARDS

3.1 Department of VA Standards

Architectural Design Manual – August 2014

HVAC Design Manual – March 2011

PG-18-14: Room Finishes, Door, & Hardware Schedule – March 2010

PG-18-10: Design Manuals

3.2 Air-Conditioning and Refrigeration Institute (ARI)

520 Performance Rating of Positive Displacement Condensing Units (2004)

3.3 American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)

Standard 90.1-2016 Energy Standard for Buildings, Except Low Rise Residential Buildings.

3.4 National Fire Protection Association (NFPA)

13 Standard for the Installation of Sprinkler Systems (2016)

70 National Electric Code (2014)

72 National Fire Alarm and Signaling Code (2016)

101 Life Safety Code (2015)

58 Liquefied Petroleum Gas Code (2014)

3.5 Underwriters Laboratories, Inc. (UL)

207-08(R2014) Refrigerant-Containing Components and Accessories, Nonelectrical

1598-03(R2012) Luminaires

4.0 EXISTING CONDITIONS

201 Building 201 at the Canandaigua VAMC was constructed approximately five years ago as a facility for cold storage as well as auxiliary fire truck parking. The building is a pre-engineered steel structure approximately 40 feet by 80 feet with an interior clear height of approximately 18 feet, divided into two rooms. The west end encompasses two garage bays. The east room includes a single garage bay and is separated from the remainder of the building by a 1-hour fire wall.

Currently, only the east room is insulated and heated. Batt insulation is installed at the walls and roof, sandwiched between inner and outer layers of steel siding. The west bay is uninsulated with outer siding exposed to the interior of the building. Both rooms have a 3/4 inch plywood wainscoting to an elevation of 8 feet above finished floor. Ventilation consists of a louver and exhaust fan for each of the two rooms. The east room is also supplied with a single propane fired unit heater mounted along the north wall. 200 amp, 208 volt power is fed to the building from a pole directly to the North of the building. Water service to the building is supplied via a 1-inch diameter HDPE line that feeds two hose bibs and an eye wash station. A small hot water tank is in-line to provide tempered water at the eye wash station.

5.0 DISCIPLINE NARRATIVES

5.1 Site Civil

5.1.1 Existing Conditions

Current utility services to B201 include a 1-inch HDPE water line routed from the main site water loop located to the South of B201 and a 2.5-inch conduit routed from Utility Pole #335 located to the North of B201. Approximately half of the building's roof storm runoff is routed to a sand infiltration basin via PVC piping while the remainder drains to ground at the base of the downspouts. A concrete sidewalk and utility pad are located to the East of the building and each door on the South face of the building has a concrete pad extending to the asphalt parking lot.

5.1.2 Proposed Design

All Exterior concrete pads to the East of B201 will be removed to make way for construction of the office addition. New sidewalk and landing pads will be poured to service the main entrance at the South elevation of the office addition. Additionally, equipment pads will be poured to the north and east of the office for the installation of an AC condenser and relocated propane storage tank, respectively.

Stormwater from roof runoff will be routed to ground via downspouts. The existing roof drain pipe buried on the south elevation will be rerouted to the East where it will daylight to ground. A new roof drain line will be installed along the north elevation and discharge to the existing sand infiltration basin. A new roof drain line will also be installed along the west elevation and discharge to surface, down gradient from the building. All other downspouts will discharge to splash blocks. Sanitary waste from the B201 garage floor drain will be routed to an oil-water separator located adjacent to the asphalt parking lot to the South of B201 with sanitary waste piping from the office addition joining downstream of the separator. The combined sanitary waste will be routed to a pump station to the south of the separator and pumped to from there via force main to a tank located off the northwest corner of the existing building. This tank will be a 6,000 gallon fiberglass tank which is to be set on a concrete pad. The intent is for this to be a temporary measure until sanitary wastes can be directed to the wastewater treatment plant contingent upon the completion of other projects.

5.2 Architectural and Interior Design

5.2.1 Garage Modifications

The West Room of B201 will be insulated with a combination of batt insulation and blown in insulation to achieve a minimum R19 value. The interior of the

space will be finished with 26 gauge metal cladding to match the existing finish of the East Room.

5.2.2 Office Addition

This will be accomplished with an addition on the east side of the existing building utilizing an existing access door for circulation from the addition to the existing garage. The addition shall be located so the south face of the addition will be about 8' south of the south face of the existing building. This will maintain site storm water management items northeast of the existing building, without modification. The office addition shall be approximately 30'-0" by 31'-6". The eaves shall be about 12'-0" high to be in proportion to the existing building and to allow mechanical equipment to be placed in the attic space. The envelope of the office addition will be 4" insulated metal wall panels and insulated metal roof panels to match the existing building. The spaces within the addition have been configured to be similar to the preliminary plan provided by Rob Yannotti of the Grounds and Transportation Departments at the Canandaigua VA.

5.3 Plumbing

5.3.1 Existing Configuration

Water service enters the 201 building directly west of the East garage door. Equipment within the building included a double check valve assembly, an electric water heater, an eye wash station, and two hose bibs.

5.3.2 Proposed Design

Water service will be extended to the new office addition to service the fixtures within the break room, bathroom, and shower areas. A propane water heater will be located within the addition attic utility area to serve the new office addition. Water service will also be extended to hose bibs on each of the exterior walls of the existing 201 Building.

Sewer service from the office addition will be located under slab and extend out the East wall of the building to a yard clean out. A floor trench drain will be added within the East garage bay with sanitary sewer piping installed below slab, flowing to an oil/water separator located outside, to the South of building 201.

The existing propane storage tank will be replaced with a larger unit located to the East of the office addition. Propane piping will be provided to reconnect to the existing system, as well as the new equipment.

5.4 Mechanical

5.4.1 Existing Equipment

5.4.1.1 West Room

The West Room of B201 currently contains a single 5 foot by 4 foot motorized intake louver and a corresponding 7,000 cfm sidewall exhaust fan to provide ventilation to the area.

5.4.1.2 East Room

The East Room of B201 contains a 3 foot by 3 foot motorized intake louver and corresponding 3,500 cfm sidewall exhaust fan to provide ventilation to the area in conjunction with two 20,000 cfm ceiling fans providing air circulation. It also has installed a 135,000 Btu propane fired unit heater to heat the space, located near the ceiling in the northwest corner of the room. The unit heater fuel source is a 500 gal liquid propane tank located in the yard to the east of B201.

5.4.2 Proposed Design

5.4.2.1 West Room

The existing equipment within the West Room will remain in service. Additionally, infrared propane-fueled radiant heaters will be installed to provide the necessary heat in the area to ensure minimum 45 degree temperatures can be achieved during winter months.

5.4.2.2 East Room

Existing equipment within the East Room will remain in service with minor modifications. The current louver will be relocated to the South wall of B201 to allow for the construction of the proposed office addition along the East wall.

Additional equipment that will be installed within the East room by the Grounds and Transportation Department includes a vehicle lift, air compressor, and vehicle exhaust systems all currently installed in B16.

5.4.2.3 Office Addition

The office addition will be provided with a split system heating and air conditioning unit, with propane fired burner, on a mezzanine level above the finished ceiling of the area. Forced air ducting will be installed above the ceiling with supply and return registers

installed in each of the rooms of the addition. The condensing unit serving the system will be located outside at grade.

An exhaust fan will be installed for the lavatory and locker/shower rooms.

5.5 Electrical

5.5.1 Existing Conditions

The current structure has lighting and power which will remain in place. There is one main power panel, PP-1, which will remain. The service to the building is sufficient to support the new office area.

5.5.2 Proposed Design

A new distribution panel will be installed to service new loads. New LED lighting will be installed in the office areas, including exit signs and outdoor luminaires. Manual light switches will be equipped with occupancy sensors to comply with energy codes. A disconnect will be provided to service engine block heaters.

In accordance with criteria found in Appendix L of NFPA 780 (2014), a lightning protection system has been provided for the new and existing portions of the structure.

A new fiber optic run will be installed to provide voice and data connectivity to the building from the existing campus systems. Data and communications outlets will be provided throughout the office areas. The VA has indicated that any necessary hardware (switches, routers, etc.) will be provided by the VA.

5.6 Structural

5.6.1 Garage Modifications

Within the East Room, much of the existing slab will be removed to accommodate the installation of foundations for a vehicle lift, floor drains, and foundations for a storage mezzanine. The mezzanine will be of steel construction, located in the northern third of the East room, allowing for additional storage as dictated by the Grounds and Transportation Departments' programmatic needs.

5.6.2 Office Addition

The office addition shall be approximately 30'-0" by 31'-6". The office addition shall be supported by a shallow reinforced concrete wall and strip footer around its perimeter. The structural steel framing shall be like that of a pre-engineered building. At about a 12'-0" height from top of slab, there will be an attic level

steel frame to accommodate mechanical equipment and/or ductwork. The exterior wall panels shall be supported by steel girts. The roofing system shall be supported by steel purlins. The south entrance to the addition shall consist of a reinforced concrete slab on grade.

6.0 ESTIMATE OF CONSTRUCTION COSTS

The construction cost for the scope of work detailed above is currently \$798,000.00 as indicated in the project construction cost estimate. .