



Memorandum

TO: Mayor Merkes, Council Members, and Fire Commissioners

FROM: Dan Schultz

DATE: 10-06-09

RE: Proposed Fire Station 36 project

On October 2, 2009 we received formal notification on the federal grant award from FEMA for the new construction of Menasha's Fire Station 36. There are guidelines that we need to follow for this construction to take place. The location and building plans are submitted and approved by FEMA and cannot be changed without jeopardizing the project. Minor changes will be made to the plans to update them to current building codes and get the LEED score of Silver integrated into the building (Green projects).

I have included portions of our narrative so you have insight on why the need is there for this facility and its location. The financial commitment from the City of Menasha is \$135,000 plus landscaping (grasses are included in the funding however decorative landscaping could not be included in the grant for funding). A set of original plans, in their current state, is included in this packet. Again, these plans will have minor changes for the LEED Silver and Code changes but will remain basically as you see them.

Total award that will be funded under the FEMA Station Construction Grant is **\$1,208,522.00**. Total project is predicted to be \$1,324,522.00 plus decorative landscaping (this project has to have all phases bid and could fluctuate based on bid environment at the time).

The grant process is part of the Federal Government's "stimulus" funds. I feel part of the reason we were awarded is that we are ground ready with the location (site) already owned by the City, we had plans basically ready to go, and can be digging in about two months from the time of acceptance from the City is made and the guidance package from FEMA is received and reviewed. I ask that you approve the "acceptance of the award" as you see it included in the packet, changes will cause problems and could risk us losing the award.

If you have any questions let me know.

Dan Schultz
Shift Commander
Grant Administrator/Project Manager
Neenah-Menasha Fire Rescue

Neenah Menasha Fire Rescue Station Construction Grant Overview:

Project Description:

Our current station concerns are two fold, for our Station 36, having issues that revolve around facility structural concerns and repair issues and station location and not meeting NFPA 1710, Chapter 4.

Problems with our current facility are lengthy since it was constructed in 1963 and is 46 years old. In 2002, a study was completed by an outside agency, Bray Associates Architects, Inc. to review of all of the City of Menasha buildings. In their report many things show that Station 36 is in need of repairs and those necessary repairs remain to date.

Evaluation of Structure and Systems shows that the station is not ADA compliant, as required for a public building. There is evidence of outside exterior wall movement in the apparatus area. The stairway that provides a second means of egress from the basement has a history of allowing water to leak into the basement with records and staining showing close to ½ foot of water. Flooding occurs anytime there is a heavy rain. Areas of the apparatus room are heavily soiled in diesel soot creating a health hazard concern. Exterior walls are concrete block with no additional insulation (very poor for Wisconsin winters). The roof needs to be replaced and has been patched multiple times to control water leaks. Current plumbing fixtures do not meet the Water Conservation Standards. The station only has one shower, one locker room, one main bathroom and one half bathroom. Our department has both male and female line firefighters, current practices restrict locating our female firefighter to that station due to lack of facilities. A new energy efficient hot water heater is recommended. The current furnace is 46 years old and the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) lists a life expectancy of air-cooled condensing units and gas fired duct furnaces as 15 years for its useful life. The furnace is an old cast iron model that requires replacement of refractory tiles to be periodically replaced it is unknown if this has ever occurred. As the firefighters say “the furnace is so big that we could cremate an elephant in it”. The ducts and water lines are wrapped in asbestos. It’s recommended that the ventilators in the apparatus room be converted from gravity to power vents. The gas fired make-up air units in the apparatus room presently operate from room thermostats, when units are off, no make-up air is being brought in, regardless of CO levels (this occurs for at least 6 months out of the year). Major health concerns from the previous two items. No GFCI type receptacles are located anywhere in the building. The kitchen, bathrooms, apparatus room, and basement are in need of these.

In recent years the City of Menasha has expanded through annexation into Calumet County, which now makes up 29% of the property under the City of Menasha’s jurisdiction. These annexations have created a major imbalance in response times throughout our community. It is causing citizens in this district to have emergency response time in excess of 13 minutes with an average of just over 9 minutes. Our records show that non-emergency response times average 14 minutes or about 64% more time then our emergency responses. The current location of this station has us in an uneasy position and unable to obtain NFPA 1710, Chapter 4 standards for a career department in the area of response times. Relocation of the station will shorten our time dramatically to an estimated 4.5 minutes emergency and 7 minutes non-emergency and will not jeopardize response time, beyond NFPA standards, to the area we would relocate from.

With station condition and response time issues relocation has been selected for a new station. The City of Menasha already owns this undeveloped property and the site has been selected on the corner of Manitowoc Road and Province Terrace in the City of Menasha. The site was selected because this location is on a major thoroughfare giving us easy access both north/south

and east/west. This location gets us farther east into the annexed area but not to the point of giving us problems back to our original home area. It helps us with a possible mutual aid agreement with the Town of Harrison that boards our community to the east and automatic aid with the City of Appleton. In the past we have been in discussions with a mutually staffed station or automatic aid agreement with the City of Appleton, our bordering community to the north and also a career department. This station location allows those discussions to proceed. Prior to this, our current location was too far away and provided very limited or no benefit to assist in a second in response unit.

The Fire Station we would like to build is considered an “outlying” station for our department and is very modest in size and structure. The station is to house four career firefighters 24/7, with one front line apparatus (Engine 36), a “Shift Inspector’s” car, and our public education van. The total square footage of the project is 7,908 and will be built to the International Code Council (ICC) standards. The apparatus room will be 4,100 sq. ft. and the living area will be 3,808 sq. ft. There will be a two drive through bay apparatus room 38’ 4” x 80”, full living quarters to include kitchen, dining room, day room, captain’s office, exercise room, sleeping rooms (for both genders), Locker rooms and bathrooms (for both genders), mechanical room, storage room, washroom (laundry/decontamination room), and separate turn out gear room. In support to the standard electrical system, a 45 KW back-up generator will be provided. The building will be sprinklered in accordance to NFPA 1, Chapter 13, it will have a smoke/carbon monoxide detection system, and an existing vehicle extrication system, that meets NFPA 1500, Chapter 9, which will be removed from our current station and reused at the new facility (vehicle exhaust system).

The plans also call for a separate 24’ x 26’ detached outbuilding to be used for storage and supplies. This outbuilding will give us an area to house training aids, special operations supplies, and miscellaneous items that we currently do not have a storage area for. The detached storage building is something our other station’s do not currently have and would allow us to store summer and winter station maintenance equipment during there off use times of the year.

The total cost of the project will be \$1,324,522.00 (estimate), the pricing breaks down as follows:

General Conditions - \$143,668.00
Site Work - \$106,582.00
Concrete - \$110,377.00
Masonry - \$148,638.00
Metals - \$16,291.00
Woods and Plastics - \$142,827.00
Thermal and Moisture Protection – \$99,552.00
Doors and Windows - \$76,315.00
Finishes - \$91,931.00
Specialties - \$26,587.00
LEED Silver - \$27,600.00
Mechanical - \$122,772.00
Electrical - \$76,391.00
Anticipated Contractors fees - \$49,247.00
5% contingency (material cost fluxuations) - \$77,424.00
Vehicle Ventilation system relocation - \$8,320.00

Cost/Benefit:

The new station and location will provide many opportunities for firefighter and community safety. One of them will be the short response time, giving our firefighters a better opportunity to attack a fire at a small stage and size. This will increase the possibility of civilian survival and reduced property damage. This new station will decrease our response times to an average of 4.5 minutes which is half of our current average of 9 minutes to the east end of our community. With restructuring of the fire districts with fire station 35, we will get within NFPA 1710, Chapter 4 required response times throughout our communities.

The new location will allow a practical offer to neighboring communities for mutual aid and automatic aid with reduced response times being closer in proximity. In a period of being asked to do more with less we feel this is needed. Our services provided will stay the same since we are able to offer every aspect of firefighting/rescue/ems allowed within our area. This new station and location will allow us to offer these services more effectively and in a timely fashion.

If this fire station is not funded we will go on as we have over the last four years. It will continue to be placed on hold. We will have terrible response times at over 13 minutes for emergencies to the far east of the City of Menasha. This could be fatal on emergency medical calls, especially those dealing with PNB's (pulseless non-breather's). Fires will be allowed to magnify until the first engine has arrived. Our current fire station 36 will continue to be in constant repair and major upgrades to HVAC systems, roof, basement drainage, energy efficiencies (windows, doors, and insulation), and back-up power generators, with all this it will still be in the wrong area. But fixing up the station piecemeal style will be the only option for the city and these would not begin for many years under the current economic situation.

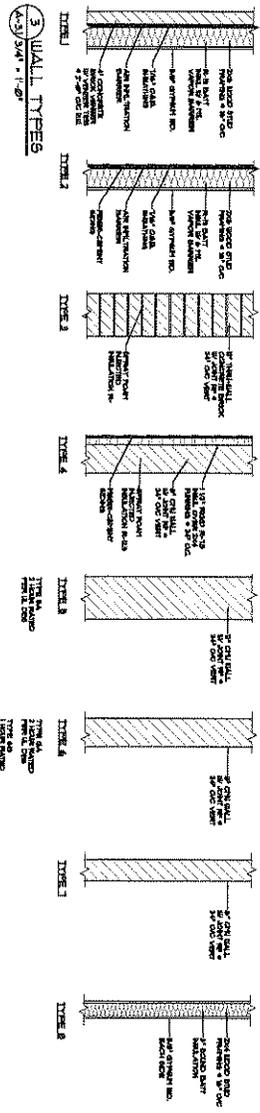
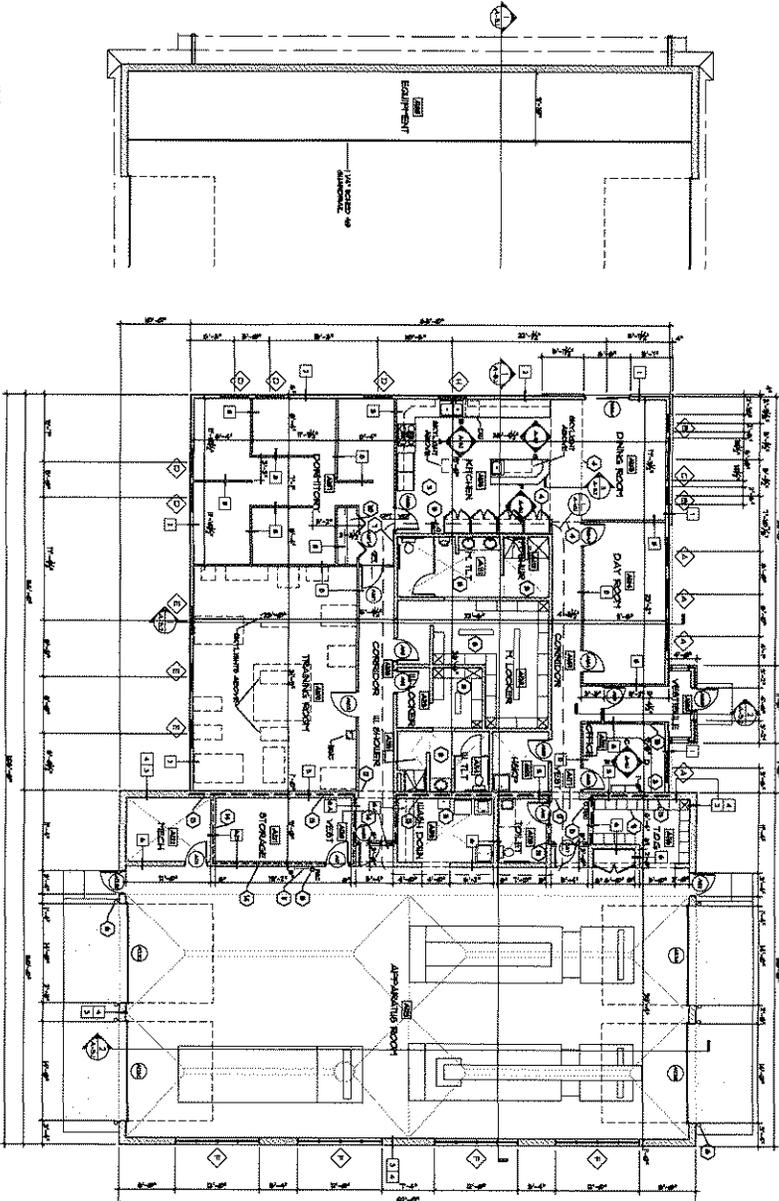
This new station would be Leadership in Energy and Environmental Design (LEED) Silver certified as a "green" facility and a construction waste management project, including regional and recycled materials, will be used whenever possible. Energy efficient heating and cooling systems, building construction and water efficient fixtures will be used. There will be an Indoor Air Quality (IAQ) plan and other indoor environmental credits sought.

Statement of Effect:

This new station and its location will provide distributed services more equally throughout our two Cities and its population. It will provide adjustments to response jurisdictions for better coverage and the addition of possibly more resources from automatic/mutual aid agreements.

The new location will mean shorter response times which will give citizens better chances of survival and control fires at lesser incipient stages. The new station and its location does not change our fire response, equipment responding, or personnel. It is simply recognition from our studies to provide better services to the community and an area in need of faster response times.

If you put yourself in the shoes of our firefighters, how good of a chance would you feel you have when a call comes in for a Pulseless-non-breather that is in cardiac arrest and you have a 9-minute response? And with everything you have heard in your medical training, that the brain starts to die 4 to 6 minutes, bringing that patient back with a 9-minute response, or longer, is diminishing fast. This new station and its new location gives our firefighters and the patient a chance!



- GENERAL PLANNING NOTES**
1. REFER TO ALL RELATED MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR COMPLETE INFORMATION.
 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL BUILDING CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 3. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 4. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL MECHANICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 5. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL PLUMBING CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 6. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL STRUCTURAL CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL FIRE CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 8. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL SAFETY CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 9. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL HEALTH CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 10. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ENVIRONMENTAL CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 11. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ENERGY CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 12. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL TRANSPORTATION CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 13. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL COMMUNICATIONS CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 14. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL CONSTRUCTION CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 15. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL FIRE PROTECTION CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 16. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL SAFETY AND HEALTH CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 17. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 18. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ENERGY EFFICIENCY CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 19. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL TRANSPORTATION SAFETY CODE AND ALL APPLICABLE LOCAL ORDINANCES.
 20. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL COMMUNICATIONS AND INFORMATION TECHNOLOGY CODE AND ALL APPLICABLE LOCAL ORDINANCES.

PRELIMINARY
FOR INFORMATION ONLY

DATE	2/28/20
SCALE	1/8" = 1'-0"
PROJECT NUMBER	220-000
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PROJECT NUMBER	220-000

**NEW FIRE STATION #36
NEENAH - MENASHA FIRE RESCUE**
MANITOWOC ROAD AND PROVINCE TERRACE
MENASHA, WISCONSIN

DRAWN BY	CHECKED	APPROVED	REVISION	
			NO.	DATE
SAZ				

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