

# Fire Station Planning Task Force

## September 7, 2017

- Committee members
    - Council Member Douglas Happel
    - Council Member Jessica Olson
    - Citizen Member Adam Hatfield
    - Citizen Member Steven McConaghy
    - Director of Planning & Development Jason Gilman
    - Police Chief Ron Tischer
    - Fire Chief Ken Gilliam
-

# Fire Station Planning Task Force

## September 7, 2017

- In 2016 Five Bugles Design was hired to complete a detailed fire station needs assessment
  - Report delivered to La Crosse Common Council on April 11, 2017
  - Overview of City of La Crosse Fire Stations
-

# Objectives of the Study

- Verify Station Size, Date of Construction, Station Site Dimensions
- Improvements Needed for Current Code Compliance
- Immediate Health and Safety Issues
- Space Needs Analysis
- Opinion of Probable Costs

# Study Methodology

## Interactive Space Needs Programming

Proprietary Fire Station Software Provides:

- Inclusive space needs recommendations
- Assess existing building limitations and current condition
- Options and recommendations for corrective actions
- Evaluate ADA Compliance
- Identify health, safety, and security deficiencies

# Fire Station #1



- Constructed in 1967
- Total Existing Area: 15,700 SF plus 8,900 SF Basement
- Station #1 is located at 726 5<sup>th</sup> Avenue South

# Fire Station #1 Deficiencies

- Severe Site Limitations
  - Non Compliant with ADA
  - Non Compliant with Energy Code
  - Lack of Programmed Space
  - Lack of Functionality – Gender Equity
  - Lack of Fully Functional Encapsulated Exhaust
  - Lack of Adequate Decontamination
-

# Recommendations – Fire Station #1

- It is our recommendation the City begin planning for a replacement Central Fire Station.
  - We recommend the City correct existing health safety issues concerning the lack of a complete apparatus exhaust system and adequate decontamination areas. Installation of an encapsulated exhaust system.
-



Opinion of  
Probable  
Construction Costs

City of  
La Crosse  
Fire Station #1  
Replacement

PROJECT: City of La Crosse Fire Station #1 Replacement  
LOCATION: La Crosse, WI  
PHASE: Study Estimate

Anticipated Construction Costs	Estimated Construction Cost		\$7,150,290
	Bidding Contingency	5%	\$357,515
	Probable Construction Cost		\$7,507,805
	Construction Contingency	5%	\$375,390
	<b>Total Construction Cost</b>		
	Not Including Site Acquisition Cost		\$7,883,195

ADDITIONAL (SOFT) COSTS / REIMBURSABLES	<b>Soft Cost</b>		\$630,655
	Architecture/Engineering Fee @ 8%		
	<b>Possible Additional Services (Should LEED Certification be desired)</b>		
	Sustainable Design (LEED)		\$37,000
	Commissioning		\$20,000
	Technology		\$8,000
	<b>TOTAL - ADDITIONAL SERVICES</b>		\$65,000
	<b>Reimbursables (estimated)</b>		
	PRINTING - EXISTING DOCUMENTS		
	PRINTING - REVIEW DOCUMENTS		\$3,500
	PRINTING - BID DOCUMENTS		\$9,000
	PROJECT WEBSITE (dfm)		\$3,000
	POSTAGE / UPS		
	SITE SURVEY (Topo & Historical)		\$8,500
	SOIL TESTING		\$5,000
	CONSTRUCTION TESTING		\$15,000
	LEED Certification Fees		\$6,500
	<b>TOTAL - REIMBURSABLES</b>		\$50,500
	<b>Other Project Costs</b>		
	LAND ACQUISITION		
	External SITE Costs		\$15,000
	INTERIOR SIGNAGE & GRAPHICS		
	*TECH., TELECOM, SECURITY		\$85,000
	*FURNITURE & EQUIP		\$145,000
	Programming		
	OTHER		
	<b>TOTAL OTHER COSTS</b>		\$245,000
	<b>TOTAL ADDITIONAL COSTS</b>		\$926,155

**\*Technology (Provided by Owner)**

Network, Comp, Phone  
Video Surveillance In Construction  
AV Equipment In Construction  
Alerting Wiring In Construction  
Alerting  
Radio

**\*Furniture & Equipment (Provided by Owner)**

Furniture  
Gear Lockers  
Plymovent  
SCBA Comp & Fill  
Extractor

**TOTAL PROJECT COST (Not Including Site Acquisition) \$8,809,349**



# Fire Station #2



- Constructed in 1956
- Total Existing Area: 8,163 SF
- Total Program Space Requirement 20,944 SF
- Station #2 is located at 626 Monitor Street

# Fire Station #2 - Deficiencies

- Lack of Programmed Space 20,144 SF vs 8,163 SF
- Site Limitations Including Floodplain Locations
- Non Compliant with ADA
- Non Compliant with Energy Code
- Lack of Functionality
  - Gender Equity
  - Lack of Apparatus Space
  - Training Areas
  - Fitness Area
  - Overhead Door Size not Adequate
  - Dormitory Area Antiquated
  - Storage Insufficient



# Fire Station #2 - Immediate Concerns

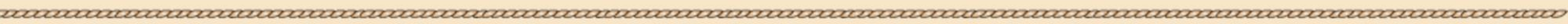
- Lack of Adequate Decontamination
- Blood Borne Pathogens



# **Fire Station #2 - Recommendations**

- Long term, it is our recommendation the City begin planning for a replacement Fire Station.

## **Recommendations for Immediate Concerns:**

- Installation of adequate decontamination areas, including blood borne pathogens
  - Creation of suitable medical storage areas
  - Installation of on-site washer/dryers
- 



Opinion of  
Probable  
Construction Costs

City of  
La Crosse  
Fire Station #2  
Replacement

PROJECT: City of La Crosse Fire Station #2 Replacement  
LOCATION: La Crosse, WI  
PHASE: Study Estimate

Anticipated Construction Costs	Estimated Construction Cost		\$4,398,240
	Bidding Contingency	5%	\$219,912
	Probable Construction Cost		\$4,618,152
	Construction Contingency	5%	\$230,908
	<b>Total Construction Cost</b>		
	Not Including Site Acquisition Cost		\$4,849,060

ADDITIONAL (SOFT) COSTS / REIMBURSABLES	<b>Soft Cost</b>		\$387,925
	Architecture/Engineering Fee @ 8%		
	<b>Possible Additional Services</b>		
	(Should LEED Certification be desired)		
	Sustainable Design (LEED)		\$37,000
	Commissioning		\$20,000
	Technology		\$8,000
	TOTAL - ADDITIONAL SERVICES		\$65,000
	<b>Reimbursables (estimated)</b>		
	PRINTING - EXISTING DOCUMENTS		
	PRINTING - REVIEW DOCUMENTS		\$3,500
	PRINTING - BID DOCUMENTS		\$9,000
	PROJECT WEBSITE (dfm)		\$3,000
	POSTAGE / UPS		
	SITE SURVEY (Topo & Historical)		\$8,500
	SOIL TESTING		\$5,000
	CONSTRUCTION TESTING		\$15,000
	LEED Certification Fees		\$6,500
	<b>TOTAL - REIMBURSABLES</b>		\$50,500
	<b>Other Project Costs</b>		
	LAND ACQUISITION		
	External SITE Costs		\$15,000
	INTERIOR SIGNAGE & GRAPHICS		
	*TECH., TELECOM, SECURITY		\$85,000
	*FURNITURE & EQUIP		\$145,000
	Programming		
	OTHER		
	TOTAL OTHER COSTS		\$245,000
	<b>TOTAL ADDITIONAL COSTS</b>		\$683,425

**TOTAL PROJECT COST**

**\$5,532,485**

**\*Technology (Provided by Owner)**

Network, Comp, Phone  
Video Surveillance In Construction  
AV Equipment In Construction  
Alerting Wiring In Construction  
Alerting  
Radio

**\*Furniture & Equipment (Provided by Owner)**

Furniture  
Gear Lockers  
Plymovent  
SCBA Comp & Fill  
Extractor



# Fire Station #3



- Constructed in 1967
- Total Existing Area: 7,807 SF
- Station #3 is located at 1710 Losey Boulevard South

# Fire Station #3 – Deficiencies

- Lack of Programmed Space 20,144 SF Program vs 7,807 SF Existing
- Severe Site Limitations
- Non Compliant with ADA
- Non Compliant with Energy Code
- Lack of Functionality
  - Gender Equity
  - Dormitory
  - Overhead Door Size
  - Lack of Training
  - Lack of Fitness
  - Apparatus Bay



# Fire Station #3 - Immediate Concerns

- Lack of Fully Functional Encapsulated Exhaust
- Lack of Adequate Decontamination
- Blood Borne Pathogens

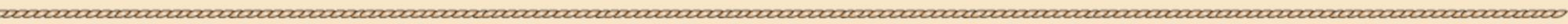




# **Fire Station #3 – Recommendations**

- Long term, it is our recommendation the City begin planning for a replacement Fire Station.

## **Recommendations for Immediate Concerns:**

- Installation of adequate decontamination areas, including blood borne pathogens
  - Installation of complete encapsulated exhaust system
  - Creation of suitable medical storage areas
  - Installation of on-site washer/dryers
- 



## Opinion of Probable Construction Costs

## City of La Crosse Fire Station #3 Replacement

PROJECT: City of La Crosse Fire Station #3 Replacement  
LOCATION: La Crosse, WI  
PHASE: Study Estimate

<b>Anticipated Construction Costs</b>	Estimated Construction Cost		\$4,398,870
	Bidding Contingency	5%	\$219,944
	Probable Construction Cost		\$4,618,814
	Construction Contingency	5%	\$230,941
	<b>Total Construction Cost</b>		
	Not Including Site Acquisition Cost		\$4,849,754

<b>ADDITIONAL (SOFT) COSTS / REIMBURSABLES</b>	<b>Soft Cost</b>		\$405,575
	Architecture/Engineering Fee @ 8%		
	<b>Possible Additional Services (Should LEED Certification be desired)</b>		
	Sustainable Design (LEED)		\$37,000
	Commissioning		\$20,000
	Technology		\$8,000
	<b>TOTAL - ADDITIONAL SERVICES</b>		\$65,000
	<b>Reimbursables (estimated)</b>		
	PRINTING - EXISTING DOCUMENTS		
	PRINTING - REVIEW DOCUMENTS		\$3,500
	PRINTING - BID DOCUMENTS		\$9,000
	PROJECT WEBSITE (dfm)		\$3,000
	POSTAGE / UPS		
	SITE SURVEY (Topo & Historical)		\$8,500
	SOIL TESTING		\$5,000
	CONSTRUCTION TESTING		\$15,000
	LEED Certification Fees		\$6,500
	<b>TOTAL - REIMBURSABLES</b>		\$50,500
	<b>Other Project Costs</b>		
	LAND ACQUISITION		
	External SITE Costs		\$15,000
	INTERIOR SIGNAGE & GRAPHICS		
	*TECH., TELECOM, SECURITY		\$85,000
	*FURNITURE & EQUIP		\$145,000
	Programming		
	OTHER		
	<b>TOTAL OTHER COSTS</b>		\$245,000
	<b>TOTAL ADDITIONAL COSTS</b>		\$701,075

**TOTAL PROJECT COST** **\$5,550,829**

### \*Technology (Provided by Owner)

Network, Comp, Phone  
Video Surveillance In Construction  
AV Equipment In Construction  
Alerting Wiring In Construction  
Alerting  
Radio

### \*Furniture & Equipment (Provided by Owner)

Furniture  
Gear Lockers  
Plymovent  
SCBA Comp & Fill  
Extractor

# Fire Station #4



- Constructed in 1940
- Total Existing Area: 7,807 SF
- Station #4 is located at 906 Gillette Street

# Fire Station #4 - Deficiencies

- Lack of Space 14,924 SF Programmed vs 7,807 SF Existing
- Non Compliant with ADA
- Non Compliant with Energy Code
- Lack of Programmed Space
- Lack of Functionality
  - Gender Equity
  - Lack of Apparatus Space
  - Training Areas
  - Fitness Area
  - Overhead Door Size not Adequate
  - Dormitory Area Antiquated
  - Storage Insufficient



# Fire Station #4 - Immediate Concerns

- Lack of Fully Functional Encapsulated Exhaust
- Lack of Adequate Decontamination
- Blood Borne Pathogens



# **Recommendations – Fire Station #4**

- Long term, it is our recommendation the City begin planning for a replacement Fire Station.

## **Recommendations for Immediate Concerns:**

- Installation of adequate decontamination areas, including blood borne pathogens
  - Installation of complete encapsulated exhaust system
  - Creation of suitable medical storage areas
  - Installation of on-site washer/dryers
-





## Opinion of Probable Construction Costs

## City of La Crosse Fire Station #4 Replacement

PROJECT: City of La Crosse Fire Station #4 Replacement  
LOCATION: La Crosse, WI  
PHASE: Study Estimate

<b>Anticipated Construction Costs</b>	Estimated Construction Cost @ \$210 SF (Smaller Size)	\$3,143,300
	Bidding Contingency 5%	\$157,165
	Probable Construction Cost	\$3,300,465
	Construction Contingency 5%	\$165,023
	<b>Total Construction Cost</b>	
	Not Including Site Acquisition Cost	\$3,465,488

<b>ADDITIONAL (SOFT) COSTS / REIMBURSABLES</b>	<b>Soft Cost</b>	\$277,239
	Architecture/Engineering Fee @ 8%	
	<b>Possible Additional Services (Should LEED Certification be desired)</b>	
	Sustainable Design (LEED)	\$37,000
	Commissioning	\$20,000
	Technology	\$8,000
	<b>TOTAL - ADDITIONAL SERVICES</b>	\$65,000
	<b>Reimbursables (estimated)</b>	
	PRINTING - EXISTING DOCUMENTS	
	PRINTING - REVIEW DOCUMENTS	\$3,500
	PRINTING - BID DOCUMENTS	\$9,000
	PROJECT WEBSITE (dfm)	\$3,000
	POSTAGE / UPS	
	SITE SURVEY (Topo & Historical)	\$8,500
	SOIL TESTING	\$5,000
	CONSTRUCTION TESTING	\$15,000
	LEED Certification Fees	\$6,500
	<b>TOTAL - REIMBURSABLES</b>	\$50,500
	<b>Other Project Costs</b>	
	LAND ACQUISITION	
	External SITE Costs	\$15,000
	INTERIOR SIGNAGE & GRAPHICS	
	*TECH., TELECOM, SECURITY	\$85,000
	*FURNITURE & EQUIP	\$145,000
	Programming	
	OTHER	
	<b>TOTAL OTHER COSTS</b>	\$245,000
	<b>TOTAL ADDITIONAL COSTS</b>	\$572,739

**TOTAL PROJECT COST \$4,038,227**

### \*Technology (Provided by Owner)

Network, Comp, Phone  
Video Surveillance In Construction  
AV Equipment In Construction  
Alerting Wiring In Construction  
Alerting  
Radio

### \*Furniture & Equipment (Provided by Owner)

Furniture  
Gear Lockers  
Plymovent  
SCBA Comp & Fill  
Extractor

# New Fire Stations - Proposed

- Site Selection in Progress
  - 2.5 Acre Site Optimal to Allow for
    - Drive Through Bays
    - Adequate Staff and Public Parking
    - Apparatus Bay Aprons to Allow for Exterior Vehicle Staging
    - On-site Training
  - Building Size of 14,924 SF Recommended
  - Single Story Masonry Stations Recommended
-





Opinion of  
Probable  
Construction Costs

City of  
La Crosse  
Fire Station #5  
New Construction

PROJECT: City of La Crosse Future Fire Station #5  
LOCATION: La Crosse, WI  
PHASE: Study Estimate

<b>Anticipated Construction Costs</b>	Estimated Construction Cost @ \$210 SF	\$3,143,300
	Bidding Contingency 5%	\$157,165
	Probable Construction Cost	\$3,300,465
	Construction Contingency 5%	\$165,023
	<b>Total Construction Cost</b>	
	Not Including Site Acquisition Cost	\$3,465,488

<b>ADDITIONAL (SOFT) COSTS / REIMBURSABLES</b>	<b>Soft Cost</b>	\$277,239
	Architecture/Engineering Fee @ 8%	
	<b>Possible Additional Services</b>	
	(Should LEED Certification be desired)	
	Sustainable Design (LEED)	\$37,000
	Commissioning	\$20,000
	Technology	\$8,000
	TOTAL - ADDITIONAL SERVICES	\$65,000
	<b>Reimbursables (estimated)</b>	
	PRINTING - EXISTING DOCUMENTS	
	PRINTING - REVIEW DOCUMENTS	\$3,500
	PRINTING - BID DOCUMENTS	\$9,000
	PROJECT WEBSITE (dfm)	\$3,000
	POSTAGE / UPS	
	SITE SURVEY (Topo & Historical)	\$8,500
	SOIL TESTING	\$5,000
	CONSTRUCTION TESTING	\$15,000
	LEED Certification Fees	\$6,500
	<b>TOTAL - REIMBURSABLES</b>	\$50,500
	<b>Other Project Costs</b>	
	LAND ACQUISITION	
	External SITE Costs	\$15,000
	INTERIOR SIGNAGE & GRAPHICS	
	*TECH., TELECOM, SECURITY	\$85,000
	*FURNITURE & EQUIP	\$145,000
	Programming	
	OTHER	
	TOTAL OTHER COSTS	\$245,000
	<b>TOTAL ADDITIONAL COSTS</b>	\$572,739

**TOTAL PROJECT COST**

**\$4,038,227**

**\*Technology (Provided by Owner)**

Network, Comp, Phone  
Video Surveillance In Construction  
AV Equipment In Construction  
Alerting Wiring In Construction  
Alerting  
Radio

**\*Furniture & Equipment (Provided by Owner)**

Furniture  
Gear Lockers  
Plymovent  
SCBA Comp & Fill  
Extractor

# SUMMARY

Due to the age, site limitations, non-compliance with ADA, non-compliance with energy codes, lack of programmed space, and lack of gender equity;

We recommend replacing stations in the following order:

Station 2

Station 4

Station 3

Station 1

After reviewing response data, it is recommended to construct new stations in the proper locations to address growing response time issues.

# Call Volume by Decade

<u>Year</u>	<u>Responses</u>	<u>Firefighters</u>
1960	849	93
1970	932	101
1980	1527	103
1990	2747	100
2000	3404	97
2010	5150	92
2016	5999	92

- \* Optimal fire station location analysis (2 maps)
  - \* Optimal five station map shows how close stations 1, 3, 4 are to current locations
  - \* Accreditation strategy for analyzing response data (2 maps)
    - Break the city into 47 planning zones and plot responses on map
    - Analyze number of times you meet your 90% for travel time
  - \* Response data supports a fifth station in SE part of town
    - Total number of priority response responses = 29,049
    - 498 calls in airport area < 2%
    - 551 calls in mall area = 2%
    - SE part of town had 4929 calls = 17%
    - Meet 90 percent goal in 8 more boxes – change from red or yellow to green
  - \* Fifth station needs to have additional apparatus and personnel or we create holes in our current coverage
-