





# 111 12<sup>a</sup> Street North, Moorhead, MN 56560 (218) 299-5298 Fax: (218) 299-5072 DD/ITY: 711 www.cityofmoorhead.com

September 15<sup>th</sup>, 2016

Dear area residents and property owners,

As you are probably aware, several homes in a two square block area north of the existing Clay County Courthouse and Law Enforcement Center are being cleared for redevelopment. Most of the properties are being demolished conventionally by heavy construction equipment. Four of these properties, however, will be utilized for fire investigation training. We would like to communicate to you what will take place, when it will happen, and what the impacts may result in the area.

The Moorhead Fire Department has entered into a partnership with the demolition contractor so that we may gain valuable training for our crews prior to the buildings being demolished. You may have already noticed fire crews training in some of the houses; practicing fire incident setups with trucks and hoses, practicing forcible entry training when properties are locked, and cutting ventilation holes in roofs as we at times have to do in order to release trapped smoke and fire gases when extinguishing a real fire.

We expect to conduct periodic training of this nature through mid-October. You will notice noise from our power tools and on rare occasion, temporary street closures along 10<sup>th</sup> Street North or 10<sup>th</sup> Avenue North for an hour or two at a time. Structures may be left with holes in roofs or windows, but we will secure all buildings at ground level any time we finish training, provided other workers do not need continued access to the buildings when we leave.

The Moorhead Fire Department has also partnered with Minnesota fire investigation experts to provide fire and arson investigation training and fire investigator certification for fire investigators in our region and across the state. This will occur beginning Monday, September 26<sup>th</sup> and will involve live burn training in four houses along 9<sup>th</sup> Avenue North as indicated in figure 1. Buildings in the blue shaded areas are being demolished conventionally. Those in the red shaded area will be used for fire investigation training, then completely burned to complete our training. This will occur over several days. The buildings we selected, and the schedule we established was intended to minimize the impact to residents, students and employees working in the area.

Our activities will occur in four phases: "Burn to Learn" training, Certification preparation, Certification testing, and training structure burn down.

# Phase 1 – Burn to Burn

The "Burn to Learn" training is designed to provide the student with a detailed understanding of fire dynamics, fire testing, and the combustion reactions of various materials encountered by fire and arson investigators. Numerous field demonstrations will allow students to observe a variety of combustion scenarios and gain practical experience that will help them on the fire scene and in the courtroom. This course will conduct live test burns that explore: fire-safe cigarettes; cigarettes starting potted plants on fire; spontaneous combustion of linseed oil and stains; flammable liquid pour patterns; aerosol can behavior when attacked by fire; gasoline and cigarettes, lighter behavior when attacked by fire; toaster and coffee maker fires; cellulose insulation fires; and more.



Figure 1 – Area Overview

This training will begin on Monday, September 26<sup>th</sup>, at approximately 8am. Lecture and small demonstrations will occur until about 1pm. From 1pm until 5pm, small fires will be set and extinguished periodically in the three adjacent houses at 1002, 1006, and 1010 9<sup>th</sup> Ave North. Only small to moderate amounts of smoke will be produced from these fires, and only for short periods of time. If a person were to observe these activities from 1-5pm, they would likely describe the events as mostly unexciting. Here participants are spending most of their time constructing various scenarios and observing them after a small fire has occurred in a single room of the house. We expect the small amount of smoke to rise rapidly and not impact people at ground level that are more than 200 feet away from the houses. Slight odors of wood burning may be periodically observed as if someone in the neighborhood had a small fire they occasionally ignited in a small recreational burn device like you may buy from many local retailers for use in your back yard. Winds are generally out of the West this time of year. We will be continually monitoring weather conditions and making adjustments as needed even during the training event. 9<sup>th</sup> Ave N will be closed during the training.

Live Burn – Area Notification – September 15<sup>th</sup>, 2016

This live burn training will commence again at 9am on Tuesday, September 27<sup>th</sup>, finishing at 2pm. The training will continue without live burn exercises until 4pm. 9<sup>th</sup> Ave N will be closed during the training.

# **Phase 2 – Certification Preparation**

On Tuesday, September 27<sup>th</sup>, from 5pm to 7pm we will be preparing the house at 1020 9<sup>th</sup> Ave N for fire investigator certification testing the following day. This will involve building several single room fires that students will investigate after a fire has occurred. Again, most of our time will be spent preparing specific conditions in each room, with short periods of small fires occurring. This will also be largely uninteresting and the conditions will be the same as earlier in the day. The occasional small volumes of smoke should rise rapidly and again, not cause an impact more than 200 feet from the structure. We may need to detour traffic on 11<sup>th</sup> Street N at times, if smoke conditions warrant. This would occur either for the duration of the event or for short periods of time when two rooms rooms that face the street are burned, or if the burn activities in general prove distracting to drivers. You will notice detour signs preplaced ahead of time in the neighborhood for deployment if needed (see figure 2). 9<sup>th</sup> Ave will remain closed during this preparation.

# Phase 3 – Certification Exams

From 8am until about 2pm on Wednesday, September 28<sup>th</sup>, fire investigators from our area, and across the state will take certification exams that involve a written test and a practical investigation of a fire that occurred the night before in the home at 1020 9<sup>th</sup> Ave N. No live burn training will occur during this time and we will not close 9<sup>th</sup> Ave N, but it may remain closed for other area building demolition. There will be no noticeable impact during this time.

### **Phase 4 – Training Structure Burn Down**

The last phase of our training will involve a complete burn down of the four houses used for the previous training activities. The live burning will begin at 5pm on Wednesday, September 28<sup>th</sup> and continue until the four structures have burned into the basement which may last until 10pm. We choose this time frame to minimize the area impact as the majority of workers in the Family Service Center, Clay County Courthouse, and Law Enforcement Center will have left for the day, and most of the students and staff at Robert Asp Elementary should also be out of the building for the day.

Assuming winds are primarily out of the west, we will begin by a controlled burning of the home at 1002 9<sup>th</sup> Ave N. Once the fire has dissipated to a comfortable level, the next home to the east will be burned in a similar fashion. We anticipate the last house to be burned will be 1020 9<sup>th</sup> Ave N, which is adjacent to 11<sup>th</sup> St N. We estimate this final burning to begin at approximately 8pm and will necessitate the temporary closing of 11<sup>th</sup> St N. Traffic will be detoured as shown in figure 2 until about 10pm. Traffic may be detoured earlier if smoke conditions warrant or if the burn activities in general prove distracting to drivers.



Figure 2 – Burn Down Traffic Control Plan





Fire training ahead sign



Since there will be no neighboring homes or trees to protect during this last phase of training, the homes will be encouraged to burn hot and quickly to carry the smoke higher into the atmosphere which should lessen the impact for people in the neighborhood. Most people within two blocks will not notice smoke odors in their neighborhoods until later in the evening as wind conditions subside and a small volume of materials smolders in the basements. Because of the large buffer area of redevelopment land to the north, commercial property to the south, and school property to the east, we expect only slight odors of persistent smoke into the late evening hours to the east of the burn homes. No special protective actions should be required, but some residents may choose to close their windows that evening if they find any smoke odors objectionable.

All times are estimated, approximate, and subject to change based on weather, equipment, and other unexpected conditions.

### **Special Safety Issues**

Safety is our primary concern during live fire evolutions. You will notice our personnel proceeding slowly and methodically. In fact, the only dramatic scenes you will see is when the buildings are allowed to burn to the ground in a controlled manner. To provide for your health and safety, abatement contractors have tested for and removed all items containing listed quantities of mercury, asbestos, lead, and other chemicals and compounds as directed by the Minnesota Pollution Control Agency. Proper permits to conduct this live fire training have been received from the Minnesota Department of Natural Resources after reviewing the training plans for these activities. We will also be limiting how closely bystanders get to the fire scene; possibly up to a block away downwind. Visitors will likely be able to observe fire operations from the Clay County Courthouse parking lot.

If you have questions prior to the training days, you may give me a call at (218) 299-5439. On training days, you may call Dorene at (218) 299-5298. Please feel free to flag one of our staff down if you have questions or concerns during the training. We will do our best to talk to you if we can leave our current assignment safely. If you have concerns for the immediate safety of people or property, do not hesitate to call 911 and talk to an emergency dispatcher.

We look forward to the valuable training opportunity this will provide to our department and to fire investigators in the region. Please let us know if we can better serve you in the process.

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Jeff Wallin, Assistant Chief Moorhead Fire Department (218) 299-5439

