



Windsor Heights Fire Dept.

1133 66th Street
Windsor Heights, Iowa 50324

Office: 515-279-9450

Fax: 515-279-7760

MEMO

To: Jeff Fiegenschuh, City Administrator
From: Christopher Cross, Fire Chief
CC: Mayor Jerry Sullivan, WH City Council
Date: August 30, 2013
Re: Repairs to traffic preemption system

Traffic signal preemption is a type of system that allows the normal operation of traffic lights to be preempted, often to assist emergency vehicles. The most common use of these systems is to manipulate traffic signals in the path of an emergency vehicle, stopping conflicting traffic to allow emergency vehicle right-of-way, to help reduce response times, and enhance traffic safety. Our system has lapsed into disrepair.

I feel it is imperative that we make repairs and regularly maintain our traffic preemption system. There are traffic preemption devices installed on the following intersections:

- 73rd Street and I-235
- 73rd Street and Buffalo Rd
- 73rd Street and University Ave.
- University Avenue and Hy-Vee Entrance
- 70th Street and University Ave
- 66th Street and University Ave

Of the intersections listed, approximately 50% of the intersections failed to operate (*see attached testing report and memo to public works*). As a result of the last pedestrian traffic fatality in the intersection of 70th Street and University, a concerted effort was undertaken to bring our intersections into ADA compliance and ensure their functionality to alleviate liability of the City and provide a safer environment for citizens. This effort needs to continue by maintaining our traffic preemption system.

In 2006, West Des Moines fire engine was involved in a crash that killed a 16 year old girl. The engine was responding to an incident, approached an intersection where their preemption system failed to actuate the light, resulting in the teen's death. (<http://www.firehouse.com/news/10503050/traffic-light-failed-in-fatal-crash-involving-iowa-fire-truck>)

The role of the Fire Chief is to lead and facilitate the community risk reduction process. Emergency response is one element in the risk reduction strategy. Not only is it a community risk for civilians, but also a significant risk to police and fire responders. In 2012, 81 firefighters were killed in action. 18.5% of those killed were killed needlessly while responding.

We can do our part to reduce the community risk if our equipment designed to protect citizens and responders is properly repaired and adequately maintained.

The Windsor Heights Fire Department's mission is to deliver excellent EMS and Fire service to the public through continuous training, rapid response, public education and fire prevention.



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MEMO

To: Jason VanAusdall, Public Works Director
From: Christopher Cross, Fire Chief
CC:
Date: June 3, 2013
Re: Preemption Testing Results

There are 6 intersections within the City of Windsor Heights that are equipped with the traffic preemption system. The intersections and preemption testing results are listed below.

- **73rd/University (N,S,E,W)**
 - Fail in all directions
- **73rd/Buffalo Road (N,W,E,W)**
 - Fail in all directions
- **73rd/I-235 WB on ramp (N,S)**
 - Functional in all directions. Control gained of signal in all directions with white light indicator.
- **University/66th (N,S,E,W)**
 - Fail in all directions
- **University/70th (N,S,E,W)**
 - Functional in all directions. Control gained of signal in all directions with white light indicator. **No indicator displayed when going South Bound on 70th Street.** Most likely a bulb needs to be replaced.
- **University/HyVee entrance (N,S,E,W)**
 - Functional in all directions. Control gained of signal in all directions with white light indicator.

The system was tested with the siren from the Fire Chief's command car with the siren on the "yelp" setting.

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Moving forward, I recommend that we begin to budget for the purchase and installation of a newer preemption technology using an LED light source emitter. 3M manufactures a product called the "Opticom" that would allow all police and fire vehicles to take control of the traffic signal using light rather than sound while responding to emergencies. Also, the public works vehicles (snow plows) could also be in the system as a secondary or non emergency user of the traffic preemption system. By installing emitters on the plows, it would allow your drivers to keep moving and not be slowed down by traffic signals. I am unsure on the cost of the system, but I think it would be worth investigating.



City of Windsor Heights Fire Department

Quarterly Traffic Signal Preemption Test

Traffic Signal Receiver Tests

Date: JUNE 2, 2013

| Intersection | North | | South | | East | | West | | Comments |
|---------------------------------|-------|---|-------|---|------|---|------|---|------------------------------|
| | Y | N | Y | N | Y | N | Y | N | |
| 73 rd /University | Y | N | Y | N | Y | N | Y | N | 0% |
| 73 rd /Buffalo | Y | N | Y | N | Y | N | Y | N | 0% |
| 73 rd /I-235 WB Ramp | Y | N | Y | N | | | | | 100% |
| University/66 th | Y | N | Y | N | Y | N | Y | N | EB Green & Light WB Light 0% |
| University/70 th | Y | N | Y | N | Y | N | Y | N | W-Green & Light 100% |
| University/HyVee | Y | N | Y | N | Y | N | Y | N | 100% |

REMOVED

Confirmation Light

Cross

0000 - 0045

Tests Conducted by:

EQUIPMENT LEASE

This Equipment Lease is made and entered into this 1st day of October, 2013, by and between General Traffic Controls, Inc. the lessor and referred to herein as General Traffic and the City of Windsor Heights, Iowa the lessee and referred to herein as Windsor Heights.

In consideration of the covenants set forth herein, the parties agree as follows:

SECTION ONE: LEASE. General Traffic hereby leases to Windsor Heights and Windsor Heights hereby leases from General Traffic 3 Emergency Preemption Phase Selectors and 2 Emergency Preempt Dual Horns.

SECTION TWO: TERM. The term of this lease shall be for a period of three (3) years beginning when the equipment is delivered and installed and ending three years later.

SECTION THREE: RENT. In consideration for the leasing of property, Windsor Heights agrees to pay to General Traffic as rent for the property, the total sum of \$14,292.00, payable in annual installments of \$4,764.00, with the first payment of \$4,764.00 due on delivery and installation of the equipment and the succeeding two annual payments of \$4,764.00 each due on the same date of each year thereafter. Any payment past due shall bear interest at the rate of 12% per annum. All payments shall be made at the principal place of General Traffic or at such other place as shall be designated by written notice from General Traffic to Windsor Heights.

SECTION FOUR: WARRANTY. General Traffic does hereby warrant the entire preemption equipment shall be free from defects and workmanship and material for one (1) year from the date of delivery and installation. Any parts found to be defective shall, upon concurrence of the defect by General Traffic, be replaced free of charge.

SECTION FIVE: MAINTENANCE AND REPAIR. Windsor Heights agrees to keep the equipment in good repair and operating condition, allowing for reasonable wear and tear. Windsor Heights agrees to pay all expenses of maintaining and repairing the equipment, and to furnish necessary routine maintenance to keep it in peak operating condition. Expenses of repair shall include labor, materials, parts and similar items.

SECTION SIX: OPTION. Windsor Heights, if not in default in any obligation, is hereby granted the option to purchase the items of equipment leased herein on the expiration of the rental term, provided that Windsor Heights gives notice to General Traffic of its intention to exercise the option at least ninety (90) days prior to the expiration of the rental term. Should Windsor Heights exercise this option, all sums paid as rent hereunder shall be applied to the purchase price without any further consideration and General Traffic will transfer title to the items and equipment to Windsor Heights. The purchase price shall be the total sum of rental payments required by "Section Three: Rent".

SECTION SEVEN: RISK OF LOSS. Windsor Heights hereby assumes all risks of loss of and damage to the equipment from any cause, and agrees to return it to General Traffic in as good condition as when received, normal wear and tear excepted. No loss of, or damage to the equipment, shall impair any obligation of Windsor Heights under this lease, and all such obligations shall continue in full force and effect until otherwise discharged.

SECTION EIGHT: LIABILITY. Liability for injury, disability, and death of workmen and other persons caused by the operation, handling, or transportation of the equipment during the rental period shall be assumed by Windsor Heights, and Windsor Heights shall indemnify General Traffic against all such liability.

SECTION NINE: TAXES AND FEES. Windsor Heights shall pay all taxes, assessments, license and registration fees on said equipment during the term of this lease.

SECTION TEN: DEFAULT. The following events shall constitute a default:

- A. The nonpayment of Windsor Heights for a period of 30 days of any sum required hereunder to be paid.
- B. The nonperformance of Windsor Heights of any other covenant or condition of this lease which is not cured within 30 days after notice thereof from General Traffic.

On occurrence of either of the events defined above, General Traffic may exercise all rights provided by law, including self-help repossession.

SECTION ELEVEN: ATTORNEY'S FEES. In the event that any action is filed in relation to this lease, the unsuccessful party in the action shall pay to the successful party, in addition to all other sums that either party may be called on to pay, a reasonable sum for the successful party's attorney's fees.

SECTION TWELVE: NOTICES. Any notice to be given under this lease shall be mailed to the party to be notified at the address set forth herein, by registered or certified mail with postage prepaid, and shall be deemed given when so made.

IN WITNESS WHEREOF, the parties have executed this lease at Windsor Heights, Iowa the day and year first above written.

GENERAL TRAFFIC CONTROLS, Inc.

PO Box 1000
Spencer, Iowa 51301

BY: _____
President

ATTEST: _____

CITY OF WINDSOR HEIGHTS, IOWA

BY: _____
Mayor

ATTEST: _____
City Clerk

THE CITY OF WINDSOR HEIGHTS, IOWA

RESOLUTION 13-1066

**APPROVING THE EXECUTION OF A LEASE FOR EMERGENCY PREEMPTION
EQUIPMENT FOR THE FIRE DEPARTMENT**

IN THE NAME AND BY THE AUTHORITY OF THE CITY OF WINDSOR HEIGHTS, IOWA

WHEREAS, the City of Windsor Heights, Iowa strives to provide high-quality and well-built infrastructure to its residents and visitors; **AND**,

WHEREAS, the Fire Department has ongoing safety equipment needs; **AND**,

WHEREAS, the Fire Department is always looking for cost-effective ways to obtain safety equipment; **AND**,

WHEREAS, the items to be obtained by the Fire Department include Emergency Preemption Phase Selectors and Emergency Preempt Dual Horns; **AND**,

WHEREAS, there is \$4,764 budgeted in the Fire Department line item for these items and quotes were received, with the best and lowest cost options being selected; **AND**,

WHEREAS, the Fire Chief has determined that the preferred option is to lease the aforementioned equipment from General Traffic Controls, Inc. for a period of three years at a total cost of fourteen thousand two hundred ninety-two dollars (\$14,292.00); **AND**,

WHEREAS, the City wishes to keep the Fire Department outfitted with all necessary equipment to keep citizens safe; **AND**,

NOW THEREFORE BE IT RESOLVED by the City of Windsor Heights City Council in session this 21st day of October 2013, that it hereby approves the Mayor Pro Tem to execute, upon review of and approval by the City Attorney, a lease agreement with General Traffic for the lease of the aforementioned equipment.

Diana Willits, Mayor Pro Tem

Attest:

Jeff Fiegenschuh
City Administrator