



# CITY of NOVI CITY COUNCIL

**Agenda Item I**  
**November 25, 2013**

**SUBJECT:** Approval of traffic control orders 13-47 through 13-52 for traffic control signs within Broadmoor Park subdivision.

**SUBMITTING DEPARTMENT:** Department of Public Services, Engineering Division

**CITY MANAGER APPROVAL:** 

**BACKGROUND INFORMATION:**

The existing signage within Broadmoor Park Subdivision has been reviewed as part of a multi-year plan to replace all traffic control signs throughout the City to meet new federal requirements, which pertain to the visibility of traffic signs and more specifically the color, size, and retroreflectivity of the sign. Retroreflectivity is the ability of a surface to return light back from its sources (i.e., signs and pavement markings reflecting light from the headlights back to the driver's eye). The FY13-14 budget includes \$20,000 for the purchase of sign materials for the annual sign replacement program.

An inspection by City staff noted that many of the traffic signs in Broadmoor Park have very low retroreflectivity and that some locations lack any stop or yield signs to assign the right-of-way at the intersections. Additionally, there are several existing stop or yield signs in place that do not have traffic control orders on file. Traffic control orders are required under the Uniform Traffic Code to enforce traffic control signs that have been installed. The following table summarizes the traffic control orders (TCO) for the new and replacement stop and yield signs that are to be installed based on the intersection study completed by the City's traffic consultant, Clearzoning (see attached report):

TCO No.	Description
13-47	Southbound Trafalgar to yield at Baker St
13-48	Westbound Baker to stop at Beck Road
13-49	One-way traffic (northbound only) on Tottenham
13-50	Westbound Tottenham to stop at Beck Road
13-51	Northbound Broadmoor Park Blvd to stop at Ten Mile Road
13-52	Eastbound Northumberland Street to yield at Argyle Street

The Homeowners Association has been notified of the pending sign replacement work. The installation of the new traffic control signs will be scheduled and completed using DPS Field Operations staff in the next several months.

**RECOMMENDED ACTION:** Approval of traffic control orders 13-47 through 13-52 for traffic control signs within Broadmoor Park subdivision.

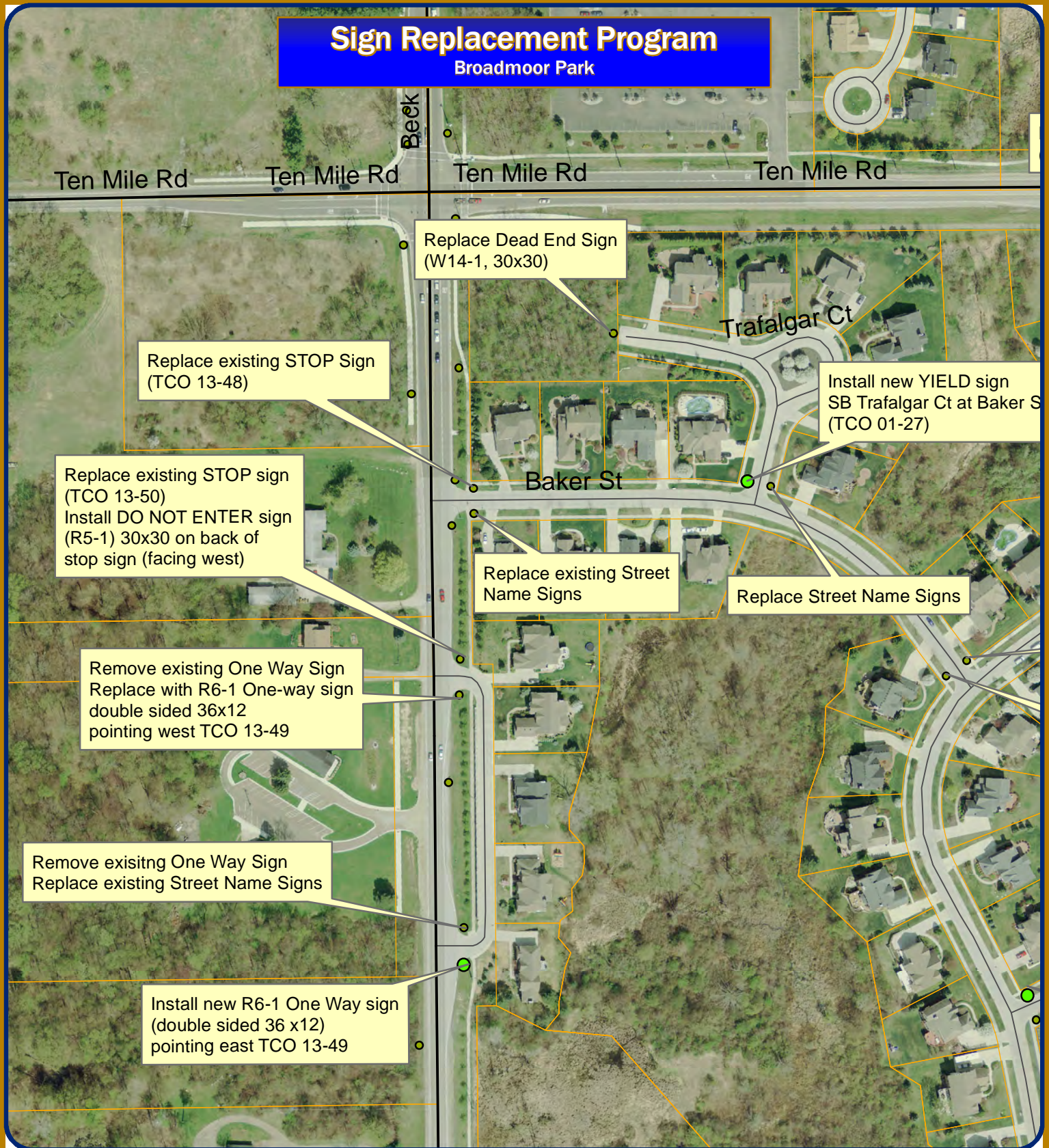
	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Markham				
Council Member Mutch				
Council Member Wrobel				



# Sign Replacement Program

Broadmoor Park



Map Author: Coburn  
 Date: 11/14/13  
 Project:  
 Version #:

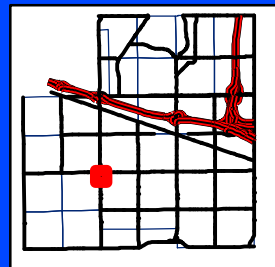
Amended By:  
 Date:  
 Department:

**MAP INTERPRETATION NOTICE**

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

**Map Legend**

- Proposed Signs
- Existing Signs



**City of Novi**

Engineering Division  
 Department of Public Services  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
 cityofnovi.org



1 inch = 197 feet





# Sign Replacement Program

Broadmoor Park



Map Author: Coburn  
 Date: 11/14/13  
 Project:  
 Version #:

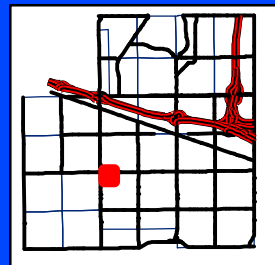
Amended By:  
 Date:  
 Department:

**MAP INTERPRETATION NOTICE**

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 232 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

**Map Legend**

- Proposed Signs
- Existing Signs



**City of Novi**  
 Engineering Division  
 Department of Public Services  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
 cityofnovi.org



1 inch = 197 feet





# Sign Replacement Program

Broadmoor Park



Map Author: Coburn  
 Date: 11/14/13  
 Project:  
 Version #:

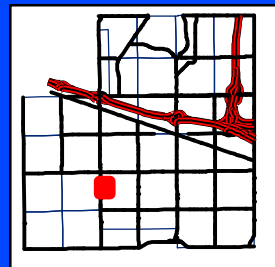
Amended By:  
 Date:  
 Department:

**MAP INTERPRETATION NOTICE**

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

**Map Legend**

- Proposed Signs
- Existing Signs



**City of Novi**  
 Engineering Division  
 Department of Public Services  
 26300 Lee BeGole Drive  
 Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)



1 inch = 197 feet





**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

_____	SPEED	DATE OF ORDER:	<u>11/15/2013</u>
_____	PARKING		
<u>X</u>	OTHER	CONTROL NUMBER:	<u>13-47</u>

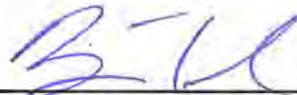
PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**TRAFALGAR COURT**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**SOUTHBOUND TRAFALGAR TO YIELD AT BAKER ST**



\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer  
Dated: 11/15/2013

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-47 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**SOUTHBOUND TRAFALGAR TO YIELD AT BAKER ST**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk

**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

\_\_\_\_\_ SPEED  
\_\_\_\_\_ PARKING  
  X   OTHER

DATE OF ORDER: 11/15/2013

CONTROL NUMBER: 13-48

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN,

**BAKER STREET**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE STOP SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**WESTBOUND BAKER TO STOP AT BECK ROAD**



\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer

Dated: 11/15/2013

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-48 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**WESTBOUND BAKER TO STOP AT BECK ROAD**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk

**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

\_\_\_\_\_ SPEED  
\_\_\_\_\_ PARKING  
  X   OTHER

DATE OF ORDER: 11/15/2013

CONTROL NUMBER: 13-49

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**TOTTENHAM**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE ONE-WAY SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**ONE-WAY TRAFFIC (NORTHBOUND ONLY) ON TOTTENHAM**



\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer

Dated: 11/15/2013

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-49 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**ONE-WAY TRAFFIC (NORTHBOUND ONLY) ON TOTTENHAM**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk

**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

\_\_\_\_ SPEED  
\_\_\_\_ PARKING  
  X   OTHER

DATE OF ORDER:   11/15/2013    
CONTROL NUMBER:   13-50  

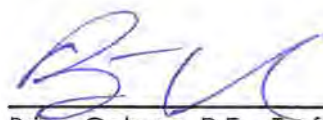
PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**TOTTENHAM**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE STOP SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**WESTBOUND TOTTENHAM TO STOP AT BECK ROAD**

  
\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer  
Dated:   11/15/2013  

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-50 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID.

**WESTBOUND TOTTENHAM TO STOP AT BECK ROAD**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk



**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

\_\_\_\_\_ SPEED  
\_\_\_\_\_ PARKING  
  X   OTHER

DATE OF ORDER: 11/15/2013

CONTROL NUMBER: 13-51

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**BROADMOOR PARK BLVD**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE STOP SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**NORTHBOUND BROADMOOR PARK BLVD TO STOP AT TEN MILE ROAD**



\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer

Dated: 11/15/2013

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-51 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**NORTHBOUND BROADMOOR PARK BLVD TO STOP AT TEN MILE ROAD**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk

**CITY OF NOVI  
TRAFFIC CONTROL ORDER**

\_\_\_\_\_ SPEED  
\_\_\_\_\_ PARKING  
  X   OTHER

DATE OF ORDER: 11/15/2013

CONTROL NUMBER: 13-52

PURSUANT TO CHAPTER NO. 33 OF THE CODE OF ORDINANCES OF THE CITY OF NOVI, MICHIGAN, SAME BEING THE UNIFORM TRAFFIC CODE FOR CITIES, TOWNSHIPS AND VILLAGES OF MICHIGAN AND IN THE INTEREST OF PUBLIC SAFETY AND CONVENIENCE THE FOLLOWING TRAFFIC CONTROL ORDER IS HEREBY ISSUED BY BRIAN COBURN, ENGINEERING MANAGER, DULY AUTHORIZED AS TRAFFIC ENGINEER, BY SEC. 33-51 OF THE AFORESAID CHAPTER.

ISSUANCE OF THIS TRAFFIC CONTROL ORDER WAS PRECEDED BY STUDY AND INVESTIGATION OF TRAFFIC CONDITIONS ON THE FOLLOWING PUBLIC ROAD OR ROADS IN THE CITY OF NOVI, MICHIGAN.

**NORTHUMBERLAND STREET**

AND AFTER SAID INVESTIGATION, IT IS HEREBY ORDERED AND DIRECTED THAT THE DEPARTMENT OF PUBLIC SERVICES ERECT AND MAINTAIN THE YIELD SIGN (S) IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS REQUIRED BY SEC. 33-51 OF THE AFORESAID CHAPTER, SAID SIGNS TO GIVE NOTICE OF THE FOLLOWING DETERMINATION:

**EASTBOUND NORTHUMBERLAND STREET TO YIELD AT ARGYLE STREET**



\_\_\_\_\_  
Brian Coburn, P.E. - Traffic Engineer

Dated: 11/15/2013

**APPROVED BY CITY COUNCIL**

TRAFFIC CONTROL ORDER NUMBER 13-52 HAVING BEEN PRESENTED TO THE COUNCIL OF THE CITY OF NOVI, MICHIGAN FOR STUDY AND APPROVAL, IS HEREBY APPROVED AND IT IS HEREBY ORDERED AND DIRECTED THAT THIS ORDER BE FILED IN THE OFFICE OF THE CITY CLERK AND A COPY THEROF IN THE OFFICE OF THE CHIEF OF POLICE OF SAID CITY.

IT IS FURTHER ORDERED AND DIRECTED THAT THIS ORDER SHALL BECOME EFFECTIVE UPON BEING FILED WITH THE CLERK AND UPON ERECTION OF ADEQUATE SIGNS GIVING NOTICE OF THE EXISTENCE OF AFORESAID,

**EASTBOUND NORTHUMBERLAND STREET TO YIELD AT ARGYLE STREET**

ADOPTED AT THE REGULAR MEETING OF  
CITY COUNCIL ON 11/25/2013.

By: \_\_\_\_\_  
Robert J. Gatt, Mayor

By: \_\_\_\_\_  
Maryanne Cornelius, Clerk



**MEMORANDUM**

DATE: October 29, 2013

TO: Brian T. Coburn, P.E.  
Engineering Manager, City of Novi

FROM: Rodney L. Arroyo, AICP, President  
William A. Stimpson, P.E., Director of Traffic Engineering

**SUBJECT: Traffic Sign Review for a Portion of Broadmoor Park Subdivision**

We have evaluated the three intersections identified in your request of October 10, 2013 to determine the appropriate form of right-of-way control sign (YIELD or STOP) based on existing conditions, RCOC methodology, and engineering judgment. The three subject intersections are marked in Figure 1. Our recommendations are listed below and further summarized in Table 1, followed by a discussion of the methodology followed, location-specific results, and photos.

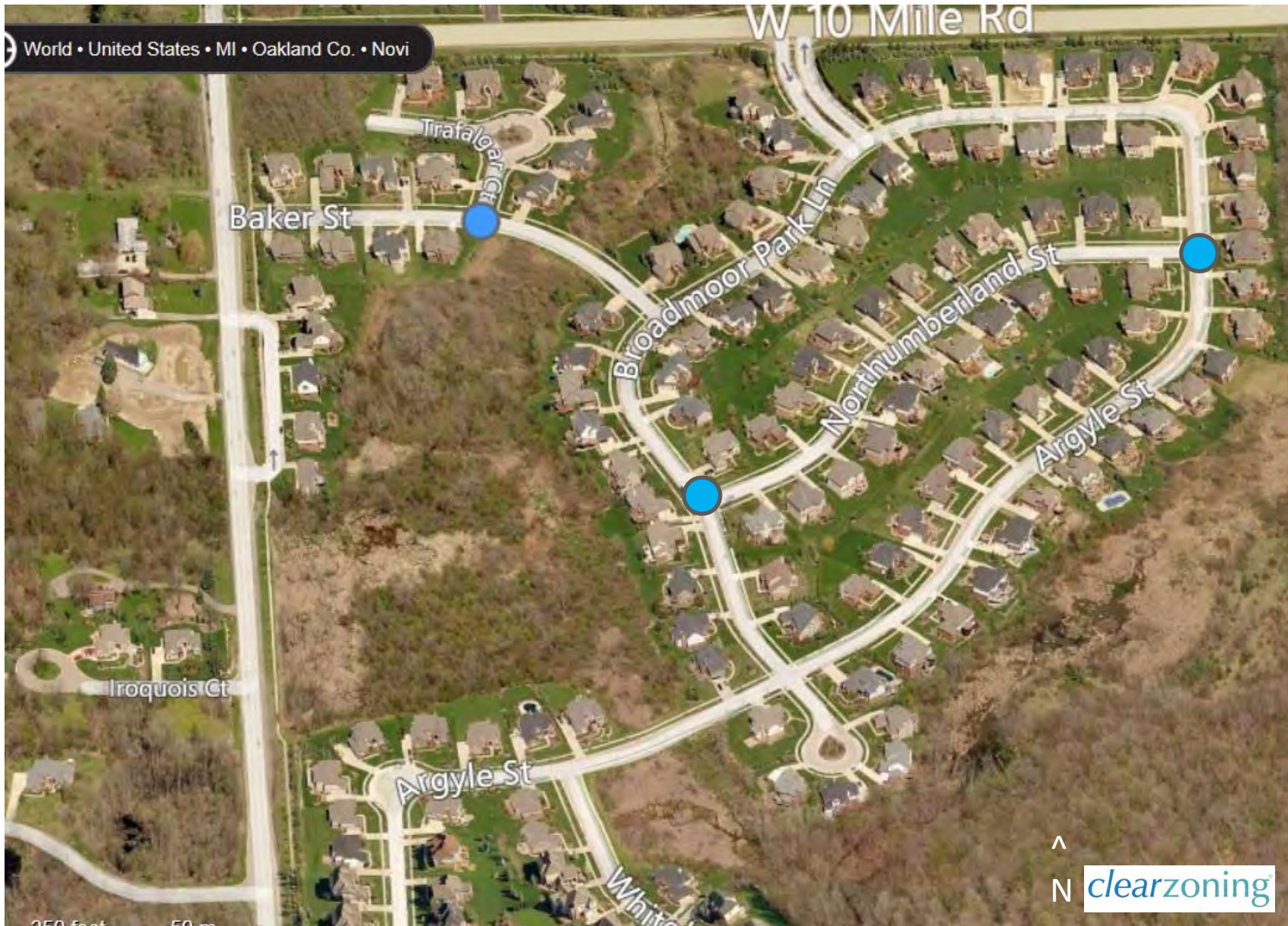
**Recommendations**

1. The southbound Trafalgar Court approach to Baker Street should be equipped with a YIELD sign.
2. The westbound Northumberland Street approach to Broadmoor Park Lane should be equipped with a YIELD sign.
3. The eastbound Northumberland Street approach to Argyle Street should be equipped with a YIELD sign.

**Table 1. Broadmoor Park Right-of-Way Control Signs: Summary of Findings (10-29-13)<sup>1</sup>**

Intersection	Figure	Existing Sign	Con-trolling Corner	Critical Speed (mph)	Warranted Signs			Comments
					None	YIELD	STOP	
Baker St & Trafalgar Ct	2	None	NE	18		X		Shrubs along driveway south of tree limit sight line across the corner.
Northumberland St & Broadmoor Park Ln	3	None	SE	24		X		Red shrub and large evergreen tree to its left limit corner visibility.
Northumberland St & Argyle St	4	None	NW	20		X		Shrubs on large landscape mound limit sight line across the corner.

<sup>1</sup> Shaded row indicates that the existing sign (or lack thereof) should be changed.



Broadmoor Park Subdivision



## Criteria and Methodology

**Right-of-Way Control Signs** – The *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)* establishes guidelines and standards applicable (by law) to all public roads and streets in the State. The current (2011) edition of the manual has language relative to right-of-way control signs, summarized below.

Section 2B.04 – Right-of-Way at Intersections – first defines the general rule-of-the-road regarding vehicles approaching an intersection from different streets at “approximately the same time”: the driver of the vehicle on the left must yield to the driver of the vehicle on the right. The Manual then goes on to state that “the right-of-way can be modified at through streets or highways by placing YIELD signs or STOP signs on one or more approaches.” The following guidance is provided relative to such sign installations:

*“Engineering judgment should be used to establish intersection control. The following factors should be considered:*

- A. *Vehicular, bicycle, and pedestrian traffic volumes on all approaches;*
- B. *Number and angle of approaches;*
- C. *Approach speeds;*
- D. *Sight distance available on each approach; and*
- E. *Reported crash experience.”*

A standard unique to the Michigan Manual, also appearing in this section, is that:

*“YIELD or STOP signs shall not be used for speed control.”*

Section 2B.06 – STOP Sign Applications – presents additional pertinent guidance, similar to that previously appearing in Section 2B.05:

*“At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs...”*

Lastly relative to the MMUTCD, *“the use of STOP signs ... should be considered if engineering judgment indicates that a stop is always required because... a restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street...”*

National experience has found that drivers tend to disregard clearly unwarranted STOP signs and roll through them as if they were YIELD signs. Mid-block speeds have been found to actually increase with STOP sign installation, as drivers attempt to “make up for lost time.” Unwarranted STOP signs may also provide pedestrians (especially children) a false sense of security, in that they assume drivers will stop for a STOP sign when, in fact, they often do not.

Relative to the above criteria, the City of Novi has long applied the Road Commission for Oakland County’s recommended procedure for evaluating the issue of “restricted view.”

Measurements to corner sight obstructions are made, and a nomograph is applied to determine the Critical Approach Speed on the minor approach (typically, the “stem” of a tee intersection). A STOP sign is required for Critical Speeds below 10 mph and often considered for Critical Speeds in the range of 10-15 mph. Ordinarily, a YIELD sign is more appropriate for Critical Speeds above 15 mph.

### **Findings by Location**

**Baker and Trafalgar** – We originally inspected this intersection on October 11, 2000, but no signage was ever installed in response to that evaluation. The subdivision at the time was very new; landscaping was apparently minimal and the critical sight line on the northeast corner hinged on the house itself; and the Critical Approach Speed was found to exceed 30 mph. Now, however, as can be seen in Figure 2, there are some sizable shrubs along the driveway. The shrub closest to Baker Street that interrupts the driver-eye-height sight line results in a CAS of 18 mph, making a stronger case for installing on the Trafalgar approach the previously recommended YIELD sign.

**Northumberland and Broadmoor Park** – This intersection was also inspected in October 2000, and a YIELD sign was recommended on the Northumberland approach based on landscape-related sight restrictions on the southeast corner. Not surprisingly, these restrictions remain in place, and we are again recommending YIELD sign installation (CAS of 24 mph, based on the red bush in Figure 3).

**Northumberland and Argyle** – This intersection was not inspected in 2000 due to ongoing construction in the area. Current conditions are controlled by a landscape mound between the corner of the house and the intersection (Figure 4). The shrub in that mound that is closest to the intersection results in a CAS of 20 mph, indicating the need for a YIELD sign on the eastbound Northumberland approach.





**Figure 2. Looking SE Across Northeast Corner of Baker and Trafalgar**



**Figure 3. Looking SW Across SE Corner of Northumberland and Broadmoor Park**



**Figure 4. Looking NE Across NW Corner of Northumberland and Argyle**