

# CITY of NOVI CITY COUNCIL

Agenda Item D February 8, 2016

**SUBJECT:** Approval of Traffic Control Orders 16-11 through 16-13 to prohibit parking along one-side of Quince, Tamara, and portions of Aspen in Orchard Hills Subdivision.

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

CITY MANAGER APPROVAL:

#### **BACKGROUND INFORMATION:**

Over the past year, Engineering staff received some complaints from residents in Orchard Hills Subdivision regarding on-street parking during events at Orchards Hills Elementary School. Specifically, there are some evening events that are well attended where the parents use of the adjacent streets for parking, which made the residents concerned that emergency vehicles would not be able to traverse these streets when parking was permitted on both sides of the street. The City's traffic consultant, URS/AECOM, observed two evening events at the schools and noted that vehicles were parking on both sides of the narrow streets adjacent to the school. The attached report recommends that parking be prohibited on one side of the streets adjacent to the school.

Engineering staff has provided the report to Novi Schools and to the Orchard Hills Homeowners Association and received positive feedback on this change.

Traffic control orders are required by the Uniform Traffic Code (adopted by Section 33-51 of the Novi Ordinance) to enforce traffic control signs that have been installed on public streets. The table below summarizes the traffic control orders that were prepared by the traffic engineer for consideration by City Council.

TCO No.	Description
16-11	No Parking along the south side of Tamara Drive between Orchard Hills School and Borchart
16-12	No Parking along the north side of Aspen Drive between Silvery Lane and Tamara
16-13	No Parking along the north and west side of Quince between Orchard Hills School and Ten Mile Road

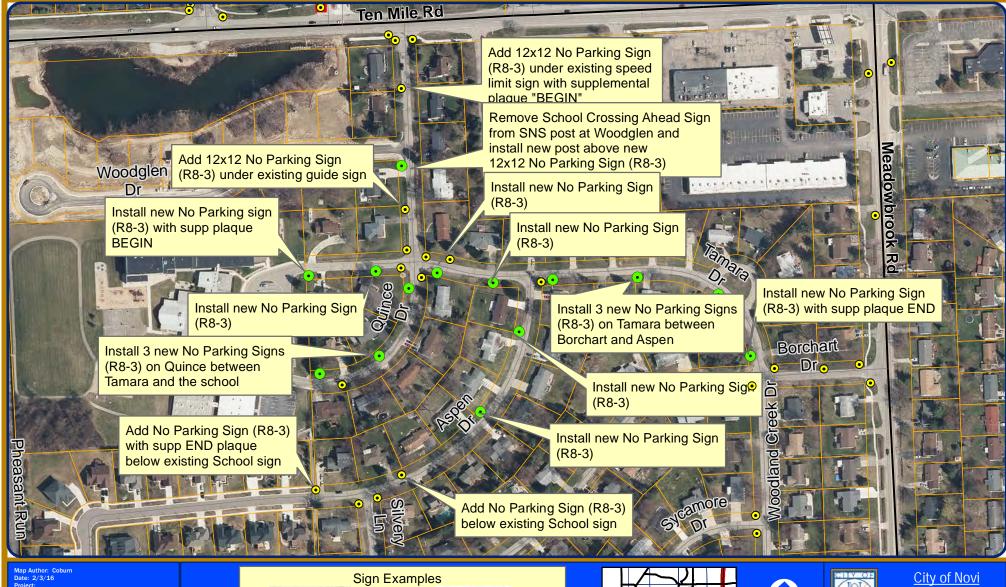
The installation plan for the no parking signs is attached. The proposed no parking signs will be 12" x 12" which is the smallest size for such a sign. The proposed signs will be installed on existing sign posts as much as possible to minimize visual impact.

**RECOMMENDED ACTION:** Approval of Traffic Control Orders 16-11 through 16-13 to prohibit parking in along one-side of Quince, Tamara, and portions of Aspen in Orchard Hills Subdivision.

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Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Burke				
Council Member Casey				

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Council Member Markham				
Council Member Mutch				
Council Member Wrobel				

# Proposed No Parking Sign Placement Orchard Hills Subdivision













26300 Lee BeGole Drive Novi. MI 48375 cityofnovi.org

			Feet
)	90	180	360

## CITY OF NOVI TRAFFIC CONTROL ORDER

SPEED	DATE OF ORDER:	2/1/2016
X PARKING OTHER	CONTROL NUMBER:	16-11
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	By:Robert J. Gatt, M	

Maryanne Cornelius, Clerk

### CITY OF NOVI TRAFFIC CONTROL ORDER

SPEED	DATE OF ORDER:	2/1/2016
X PARKING OTHER	CONTROL NUMBER:	16-12
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ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>2/8/2016.</u>	By:Robert J. Gatt, M	Nayor
	By: Maryanne Corne	elius, Clerk

### CITY OF NOVI TRAFFIC CONTROL ORDER

SPEED	DATE OF ORDER:	2/1/2016
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ADOPTED AT THE REGULAR MEETING OF CITY COUNCIL ON <u>2/8/2016.</u>	By: Robert J. Gatt, <i>I</i>	Mayor
	By: Maryanne Corn	elius, Clerk

Memorandui	n Brian Coburn	Page 1
CC		
Subject	Orchard Hills Elementary Traffic Review	
	Matt Klawon, PE	
	Maureen Peters, PE	
From	Sterling Frazier, E.I.T.	
Date	November 23, 2015	

#### **INTRODUCTION**

The City of Novi received written correspondence from two residents regarding traffic operation concerns related to Orchard Hills Elementary School during normal school days and special events. Orchard Hills Elementary School is located within the Orchard Hills Subdivision at the southwest corner of Ten Mile Road and Meadowbrook Road. In 2013, the parking lots of the school were reconstructed to separate bus and parent traffic which changed the normal traffic patterns entering/exiting the site. Also, when special events are held at the school, parking along residential streets occurs along both sides of the roadway impairing traffic and access to residential property. The City subsequently contacted AECOM regarding these complaints and has requested that we review the stated concerns, conduct a field assessment and provide recommendations to the City.



Figure 1: Orchard Hills Elementary parking lot and adjacent roadways. Source: Google®

#### **Orchard Hills Elementary School**

The following is an overview of information obtained regarding Orchard Hills Elementary School:

- 68 parking spaces (min. 42 spaces required by City)
  - o 42 employee; 26 visitor
- 42 employees; 427 students (Kindergarten through 4<sup>th</sup> grade)
- 8:38 AM Start Time
- 3:30 PM Dismissal Time

#### **Orchard Hills Subdivision Roadways**

Roadways of the Orchard Hills subdivision provide two-way travel along a 20-foot wide pavement cross section; the exception being the 24-foot wide portions of Aspen Drive and Borchart Drive. Tamara Street and Quince Street provide vehicular access to the school parking lots with buses accessing the north parking lot via Tamara Street and parents/visitors accessing the south parking lot via Quince Street. Tamara Street is restricted to bus-only traffic from 8:00-9:00 AM and 3:00-4:00 PM during school days. The four-way stop-controlled intersection of Tamara Street at Quince Street is most affected by school traffic since all entering and exiting vehicles must pass through this intersection. Sight distances at the intersection of Tamara Street at Quince Street were found to be within City standards and the intersection approach widths were recorded as follows.

Street	Intersection Approach Widths (feet)
Eastbound Tamara Street	40
Westbound Tamara Street	30
Northbound Quince Street	30
Southbound Quince Street	35

Residents occasionally park vehicles along roadways throughout the neighborhood. In areas closer to the school, rocks and delineator posts are placed along the roadway in front of some residences to deter parked vehicles from encroaching onto turf adjacent to the roadway. The impact of these rocks and delineators is that parked vehicles further reduce the available roadway width when compared to vehicles parked in other areas where slight encroachment onto adjacent turf occurs.

A non-motorized pathway is located on the south side of the school creating access between the school property and the Aspen Drive/Borchart Drive area. Sidewalks are also present along the newer sections of Aspen Drive, Borchart Drive and Dunston Road.

#### **EXISTING OPERATIONS**

Field observations were made on two separate days to observe both normal daily operations and special operations at Orchard Hills Elementary School. Normal daily operations were observed on May 7, 2015 focusing on traffic circulation and vehicle queuing. Special event operations were made during the Orchard Hills Elementary School Open House on September 2, 2015 focusing on traffic circulation, parking and site obstructions.

#### Normal Daily Operation Observations - May 7, 2015

#### **AM Drop-Off Conditions**

At 8:15 AM, the northern parking lot was at capacity while the southern parking lot was 85 percent full. Roughly 15 minutes before classes started, the queue for parents dropping off students began to develop. Buses began dropping off students at 8:25 AM. There were only a maximum of five school buses at any point within the north loop of the school parking lot. The parent drop-off queue never

exceeded beyond the boundaries of school property. It was noted that the queue was sporadic and dissipated shortly after classes began.

#### PM Pick-Up Conditions

Nearly 30 minutes before classes let out there were three vehicles in the student pick-up line queue and the remaining non-staff parking spaces were occupied by waiting parents. Fifteen minutes later, the queue was throughout the entire parking lot, which resulted in existing parked vehicles becoming trapped due to the vehicles queuing behind them. The length of this vehicle queue extended along Quince Street and grew roughly 150 feet every five minutes. When classes were dismissed at 3:30 PM, the vehicle queue had almost reached the intersection of Quince Street and Tamara Street, blocking two residential driveways in the process.

#### Special Event Operations - September 2, 2015

The special event was the Orchard Hills Elementary Open House and Ice Cream Social which started at 6:00 PM. At 5:40 PM, both parking lots were near capacity and within 10 minutes both lots were at capacity and vehicles began parking on both sides of Quince Street and Tamara Street. Parking along these roadways resulted in a very narrow travel lane only wide enough for one-way travel. At 6:00 PM, every street as far as Aspen Drive had vehicles parked on both sides of the roadway resulting in a single travel lane of approximately nine feet in width. Streets such as Quince Street, Tamara Street and Aspen Drive have horizontal curves and when parking on both sides of the street occurs operational sight distances are significantly obscured by the parked vehicles. Several vehicles parked were noted to be in apparent violation of Sec. 33-502.a.6-7 of the City Code of Ordinances with regards to parking near intersections and Sec. 33-501.a with regards to parking in a manner that obstructs the roadway. Figure 2 depicts the general extents of where parking on both sides of roadways was observed during the special event.



Figure 2: Streets shaded yellow indicate where on-street parking was present on both sides of the roadway during the September 2 Open House. Source: Google®

#### SUMMARY

Normal roadway and parking operations in the Orchard Hills Subdivision does include some sporadic on-street parking which requires motorists to pause and wait for an oncoming vehicle to pass before navigating around a parked vehicle. Observation of normal school operations in the afternoon time period found that moving vehicle queues developed along Quince Street momentarily blocking some residential driveways but they were quick to dissipate. Primary concerns from our observation were related to special event attendee parking along both sides of roadways which limited, and in some cases blocked, vehicle access to both residences and school property. The roadway blockages are of concern as emergency vehicle access to properties is impaired at these times which may result in loss of life and delayed response times in case of an emergency.

Chapter 5 of "A Policy on Geometric Design of Highways and Streets" published by the American Association of State Highway Transportation Officials states that 12-foot travel lanes are ideal for residential streets where parking is permitted along both sides of the roadway. The average width of a passenger vehicle is 7-feet while delivery trucks and school buses are generally 8-feet in width. When passenger vehicles are parked along both sides of a 24-foot wide roadway, there remains a useable width of roadway of approximately 10-feet for vehicle travel. As previously stated, the width of existing roadways in the Orchard Hills subdivision are 20-feet wide on average and when passenger vehicles park along both sides of the roadway the remaining useable width of roadway becomes 6-feet if vehicles are not overlapping the edge of the roadway and/or encroaching on adjacent turf.

#### RECOMMENDATIONS

AECOM offers the following recommendations to begin the process of addressing the sources of these issues and concerns as raised by the area residents:

- Conduct a meeting between the City of Novi (Engineering, Fire and Police) and Orchard Hills
  Elementary representatives to discuss the issues occurring during special events resulting from
  attendee parking on neighborhood roadways. The following points of discussion should be
  included in this meeting.
  - o Summary of resident concerns and observed issues
  - Safety impacts to both residents and attendees at school events
  - Potential mitigation measures such as:
    - Alternate venues
    - Attendee shuttles from other parking facilities
    - Staggered event times
  - Routine notification to attendees for future events regarding:
    - Summary of safety concerns related to parking
    - Suggested parking practices and areas
    - Notice of enforcement for blocking access to school and residences

Parking restrictions are recommended to maintain a usable travel lane on roadways where problematic parking along both sides were observed during school events. The parking restrictions will maintain a usable travel lane for general traffic but more importantly allow emergency vehicle access to residences and school property during these events. The following parking restrictions are recommended based upon the existing roadway geometry and maintaining clearer lines of sight for motorists:

- Prohibit parking on one side of the roadway at all times as follows:
  - Western side of the Quince Street road/right-of-way from the Orchard Hills School property northward to 10 Mile Road

- Southern side of the Tamara Street road/right-of-way from the Orchard Hills School property eastward to Borchart Drive
- Western side of the Aspen Drive road/right-of-way from the Orchard Hills School nonmotorized pathway northward to Tamara Drive
- Additional restrictions may be necessary along other roadways in the Orchard Hills Subdivision should similar problems arise or persist.

The utilization of R8-3 signs, as shown below, are recommended to convey the parking restrictions at the aforementioned locations. Signing should be placed near the beginning of the restricted area and spaced sufficiently so one sign is visible to a motorist at all times within the restricted area. Where possible, signs should be placed on the lot lines between residential properties:



Figure 3 provides a general layout suggestion to convey the spacing and placement of the parking restriction signage. The final staking and ultimate placement of signing will need to consider various existing features such as landscaping, mailboxes, utilities and more.



Figure 3: Suggested initial placement for R8-3 signage. Source: Google®

If parking violations should occur with the installation of R8-3 signs, a "Tow-Away Zone" (R7-201P) plaque may be appended to any existing no parking sign. The addition of the plaque has been an effective method of reinforcing the parking regulations and improving public relations as it provides a more definitive warning to motorists.

Additionally, we offer the following to support enforcement by the City of Novi Police Department throughout the Orchard Hills Subdivision when special events occur at Orchard Hills Elementary resulting in improper parking. The following sections of the City of Novi Code of Ordinances may be referenced and applicable for use by officers, please note that non-related subsections/text are removed for brevity:

- Sec. 33-501. Parking in a manner that obstructs traffic; violation as civil infraction.
  - (a) A person shall not park any vehicle on a street in a manner that leaves an insufficient width of the roadway available for free movement of vehicular traffic.
- Sec. 33-502. Parking prohibited in specified places.
  - (a) A vehicle shall not be parked, except if necessary to avoid conflict with other traffic or in compliance with the law or the directions of a police officer or traffic-control device, in any of the following places:
    - (2) In front of a public or private driveway;
    - (3) Within an intersection;
    - (7) Within thirty (30) feet of the approach to a flashing beacon, stop sign, or traffic-control signal located at the side of a highway;
    - (22) On a street in such a way as to obstruct the delivery of mail to a rural mailbox by a carrier of the United States postal service.

# Coburn, Brian

From: Sent: To: Cc: Subject:	Chris Pall <chrispall@gmail.com> Wednesday, January 20, 2016 9:38 AM Coburn, Brian jon@powerfuldesign.com; schaeferjack@ymail.com; Hayes, Rob; Linsey LaValley; kevin2brennan@gmail.com Re: Proposed No Parking Signs for Orchard Hills Sub</chrispall@gmail.com>
Please go ahead and take to good improvement.	nat to the council, I appreciate you soliciting for feedback, this should be a
On Wed, Jan 20, 2016 at 9:26	AM, Coburn, Brian < bcoburn@cityofnovi.org > wrote:
Good morning,	
	any additional feedback on this. If not, we can prepare this for City Council s would be installed after within a month or so following approval. I will be sure to
Brian	
From: Chris Pall [mailto:chrispalle Sent: Thursday, January 14, 201 To: Coburn, Brian Cc: jon@powerfuldesign.com; sch Subject: Re: Proposed No Parkin	6 8:45 AM  naeferjack@ymail.com; Hayes, Rob; Linsey LaValley; kevin2brennan@gmail.com
Jack/Jacquie,	
This sounds like the right plate they have anything to add.	an, happy to hear it. I've CC'd this for Kevin and Linsey (HOA VP) to see i

Thanks,

Brian/Rob: Jon has left the board, so you may remove him if you'd like.

Chris

On Thu, Jan 14, 2016 at 8:25 AM, Coburn, Brian < bcoburn@cityofnovi.org > wrote:

Good morning,

The City of Novi received several complaints about vehicles parking on both sides of the streets near Orchard Hills School during evening events. In response to these complaints, we asked our traffic consultant to review the situation and they have provided the attached report. The report confirms that the streets are too narrow to allow parking on both sides of the street and still provide enough space for emergency vehicles to get through. The report recommends that the City post no parking signs in the following locations:

- South side of Tamara between the school and Borchart
- West side of Quince from the school to Ten Mile Road
- West side of Aspen from the subdivision boundary with Orchard Hills West to Tamara

These locations reflect the locations where parking on both sides of the streets were observed during evening events.

We would like feedback from the Homeowners Association regarding this change prior to installation of the signs. Please let me know if you have any concerns and if you are able to share this with your residents via email. We would like all feedback from you by January 28, so we can prepare this for City Council Consideration on February 8.

Please feel free to email or call with any questions or concerns or send any of your residents my way for additional information.

Brian



**Brian Coburn, P.E.** | Engineering Senior Manager

Department of Public Services | City of Novi

Field Services Complex | 26300 Lee BeGole Drive | Novi, MI 48375

office: <u>248-735-5632</u> dept: <u>248-347-0454</u>

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Dear Mr. Hayes; My name is Sim Kalarage (41976 QUINCE) I think, well I know we need no parking signs, on the west side of guince do, and north side of tomara St. Cevery time the school has a function it Turns into a cluster - mess! Since the school re-designed the parking lot at Oschaol Hills Oleementory, They eleminated 40 or so parking spaces! so when they have they're functions the street is simply not passable, I told the supertindent they made they're parking lot safe, but made our road dangerous! I'm enclosing a letter that had at one time no parking signs down our street + Gamara, also a DUD. We meed This to stop before some one gets
killed I a we need your Druly James Karlavage PS. I ALSO THINK YOUR IN COMMUNCATION WITH MY NEIGHBOX CINDY, 41876 QUINCE, UR. 248-347-6786

SCHOOL ORCHARD. Hills ARROUND PARENT NO PARKING HAWD. I'M WOWDERING IF I 3269-648-342 JIM RAK AVACE of play w/cell phones) /AMAKA MADE SIGN NOT SOME THING HOLE LOOKING? UP ZO MIN AHEAD Sapis MEADOW BROOK

