

cityofnovi.org

Carlton Way Road Extension SP 09-34

Carlton Way Road Extension, SITE PLAN NUMBER 09-34

Consideration of the request of Carlton Forest II Condominium Association for Preliminary Site Plan approval. The subject property is located in Section 10, between 12 ½ Mile and Twelve Mile Roads and Dixon and Novi Roads in the RM-1, Low Density, Low-Rise Multiple-Family Residential District. The subject property is approximately 33 acres and the applicant is proposing to remove an emergency access gate at the north end of the development and extend the pavement and adjacent sidewalks of Carlton Way approximately 90 feet to 12 ½ Mile Road.

Required Action

Approve/deny the Preliminary Site Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	12/10/09	• Minor items to be addressed at time of Final Site Plan submittal
Traffic	Approval recommended	12/10/09	
Engineering	Approval recommended	12/10/09	• Minor items to be addressed at time of Final Site Plan submittal
Fire	Approval recommended	12/9/09	

Motions

Approval – Preliminary Site Plan

In the matter of Carlton Way Road Extension, SP 09-34, motion to **approve** the Preliminary Site Plan, subject to the following:

- a. The conditions and items listed in the staff and consultant review letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

for the following reasons...*(because it is otherwise in compliance with Article 6, Section 2400 and Article 25 of the Zoning Ordinance and all other applicable provisions of the Ordinance).*

Denial Preliminary Site Plan

In the matter of Carlton Way Road Extension, SP 09-34 motion to **deny** the Preliminary Site Plan, for the following reasons...*(because it is not in compliance with Section _____ of the Zoning Ordinance.)*

PLANNING REVIEW



cityofnovi.org

PLAN REVIEW CENTER REPORT

December 10, 2009

Planning Review

Carlton Way Road Extension

SP #09-34

Petitioner

Carlton Forest II Condominium Association

Review Type

Preliminary and Final Site Plan

Property Characteristics

- Site Location: South side of 12 ½ Mile Road between Novi Road and Dixon Road
- Site Size: Disturbed area less than one acre, total site 33 acres
- Zoning: RM-1, Low Density Multiple Family
- Surrounding Zoning: North and West: RA, Residential Acreage; East: RM-1, RA and OS-1, Office Service; South: OS-1 and RC, Regional Commercial
- Surrounding Land Uses: North and West: single family homes on large lots and vacant land; East: multiple family, vacant land and office; South: office and regional center
- School District: Novi Community Schools
- Proposed: Convert emergency access road to paved condominium entrance
- Plan Date: November 23, 2009

Project Summary

Located between Twelve Mile and 12 ½ Mile Roads and between Dixon and Novi Roads in Section 10, Carlton Forest Condominium, SP98-40A, received preliminary site plan approval from the Planning Commission on January 20, 1999. The 180 unit attached condominium project includes a private north to south road, Carlton Way, that links all of the condominium unit driveways with Twelve Mile and 12 ½ Mile Roads. All traffic from the site now must enter and exit from Carlton Way at Twelve Mile Road. The intersection at 12 ½ Mile Road is designed for emergency access only. The road surface at this intersection is gravel and includes a break away gate for emergency vehicle access. Access to 12 ½ Mile Road was restricted because an analysis of the road indicated that it was in poor condition and the City's Department of Public Works (DPW) recommended that the connection not be a regular access point.

In 2006, the City improved the surface of 12 ½ Mile Road with chip seal pavement. In 2007, the DPW withdrew its objection to a full time connection between Carlton Way and 12 ½ Mile Road.

At this time the applicant is proposing to remove the emergency access gate, pave the entrance to City standards, complete the connection of the sidewalks along Carlton Way to the 12 ½ Mile Road sidewalks and make minor landscaping improvements including installing a boulder retaining wall. Section 2516.1.a.(6) of the Zoning Ordinance requires "any plans for new public or private roads" to be approved by the Planning Commission.

Recommendation

The Planning Staff **recommends approval** of the Site Plan with minor corrections to be completed on the Stamping Set.

Comments:

The Preliminary Site Plan was reviewed under the general requirements of Article 25 of the Zoning Ordinance, and the sections of the ordinance, as noted. Please see the attached chart for information pertaining to Ordinance requirements. Applicable sections of the Zoning Ordinance and other regulatory documents are highlighted on the attached chart. Items underlined need to be addressed at the time of Stamping Set review:

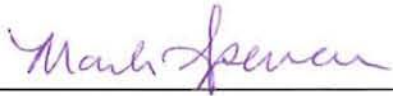
1. Corner Clearance (Section 2513) in order to have a safer intersection, no obstructions, including but not limited to fences, walls and landscaping, shall exceed the height of 2 feet from the established street grade in a triangular "clear view zone" area 25-foot from the point of the intersection of the rights-of-way of the roads. Private roads, although not located within a right-of-way must meet these same standards. The 25-foot clear vision zone is depicted in the wrong location on the Site Plan. Based on the elevations provided, it appears that the grade and proposed landscape wall exceeds the two foot maximum height from the road grade. The applicant is asked to place the corner clearance area lines in the correct location and demonstrate on the plan that the grades and walls meet the ordinance requirements (label road center and top of wall elevations etc.).

2. Other Issues

- **Pre-Construction Meeting** Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled. Contact Sarah Marconi for a sample checklist or to schedule a Pre-Construction Meeting at 248-347-0430 or smarchioni@cityofnovi.org.

3. Response Letters A letter from either the applicant or the applicant's representative addressing comments in this, and in the other review letters, is requested prior to the matter being reviewed by the Planning Commission. Additionally, a letter from the applicant is requested to be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above, and with any conditions of Planning Commission approval.

Please contact Mark Spencer at (248) 735-5607 or mspencer@cityofnovi.org with any questions or concerns.



Prepared by Mark Spencer, AICP, Planner

Attachment: Planning Review Chart

PLANNING REVIEW SUMMARY CHART

Review Date: 12/10/09
Project Name: Carlton Way Road Extension
Project Number: SP09-34 Preliminary and Final Site Plan
Plan Date: 11/23/09

Items in **Bold** need to be addressed by the applicant and/or the Planning Commission before approval of the Preliminary Site Plan. Underlined items need to be addressed on the Stamping Set.

Item	Required	Proposed	Meets Requirements ?	Comments
Master Plan	Multiple Family with PD1 Option	No change	Yes	
Zoning (Article 6)	RM-1	No change	Yes	
Exterior lighting (Section 2511)	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal	None	Yes	
Sidewalks (City Code Section 11-276(b))	A 5'-8' wide sidewalk shall be constructed along all arterial and collector roads except in industrial districts	Sidewalk connectivity provided	Yes	
Corner Clearance (2513)	Maintain a <u>25 foot corner clearance zone measured from the intersection of the right-of-way and one foot outside of sidewalk</u> (theoretical right-of-way) Plants and structures can not exceed two feet above road grade	Corner clearance lines incorrect - Retaining wall in corner clearance area appears to be 2.5 ft. foot above road grade at north end of wall - <u>Top of wall elevation not noted but assumed to be 972.0</u>	No	<u>Demonstrate on the plan that grades and walls meet requirements (label road center, top of wall etc.)</u> <u>Place corner clearance area line in correct location</u>
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Information provided	Yes	
	General layout and dimension of proposed physical improvements, showing the following: Location of all existing and proposed buildings, proposed building heights,	Information provided	Yes	

Item	Required	Proposed	Meets Requirements ?	Comments
	building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).			

Prepared by Mark Spencer, AICP (248) 735-5607

TRAFFIC REVIEW

December 10, 2009

Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Rd.
Novi, MI 48375



SUBJECT: Carlton Forest II, Carlton Way Drive Extension (SP#09-34)
Traffic Review of Final Site Plan

Dear Ms. McBeth:

At your request, we have reviewed the above and offer the following recommendation and supporting comments.

Recommendation

We recommend approval of the final site plan.

Project Description

What is the applicant proposing?

1. The applicant, Carlton Forest Phase II Condominium Association, proposes to extend the existing Carlton Way Drive north to connect with 12 ½ Mile Road, creating a second point of unrestricted public access to the development. Carlton Way Drive currently terminates approximately 100 feet south centerline of 12 ½ Mile Road, with a gravel emergency access connection from the terminus of Carlton Way Drive to 12 ½ Mile. There is an emergency access gate blocking public access from 12 ½ Mile Road to/from Carlton Way Drive. The existing gravel connection would be reconstructed as a paved and curbed local street, and the existing gate would be removed. The proposed connection would primarily benefit residents of the development who travel to and from the north via Novi Road; those trips could be made via the proposed connection, as opposed to having to navigate the turnarounds along the 12 Mile Road boulevard.

Traffic Study

Was a study submitted and was it acceptable?

2. An update to the traffic impact study for the development originally completed in November 1997 was submitted on behalf of the applicant. Birchler Arroyo has reviewed that study and deemed its methodology, findings, and conclusions acceptable. Our comments specific to the traffic study are contained in a separate review letter dated December 10, 2009.

Trip Generation

How much traffic would the proposed development generate?

3. The existing Carlton Forest development is, to our knowledge, fully built out and there are no plans for further expansion. No new traffic would be generated as a result of the proposed extension of Carlton Way Drive. However, existing Carlton Forest traffic would certainly be redistributed with the creation of a second point of access. Some site traffic would now use 12 ½ Mile Road and travel through the intersection of 12 ½ Mile and Novi Roads. See our traffic study review letter for further comments on how this redistribution of existing site traffic would affect the existing road network.

Vehicular Access Locations

Do the proposed driveway locations meet City spacing standards?

4. The proposed intersection of 12 ½ Mile Road and Carlton Way Drive meets all applicable City driveway spacing standards as defined by the City's Design and Construction Standards (DCS Figure IX.12 and Section 11.216(d)(1)e).

Vehicular Access Improvements

Will there be any improvements to the public road(s) at the proposed driveway(s)?

5. The sole proposed change/improvement to the existing development is the extension of Carlton Way Drive to 12 ½ Mile Road. Birchler Arroyo has reviewed the design of the extension and had found it to be consistent with all applicable City Design and Construction Standards with one exception. Existing Carlton Way Drive has a consistent width of 28 feet, measured back-to-back of curb, consistent with DCS Figure IX.1 for a Local Street. The proposed extension, specifically the east side of the proposed extension, widens out to 29.5 feet (back-to-back of curb) at the interior ends of the curb returns. We assume that this was done to create a 90-degree intersection with 12 ½ Mile Road, inasmuch as is possible given that road's non-linear path.
6. Consistent with the comments in our pre-application review letter (dated October 8, 2009), the approach of the proposed Carlton Way Drive extension has been designed in anticipation of a future 36-foot cross section for 12 ½ Mile Road. The applicant's engineer has correctly designed and located the curbs for the road extension so that they should not have to be replaced and when 12 ½ Mile Road is rebuilt as a curbed, 36-foot-wide collector (assuming no change in roadbed elevation in this area).
7. Based on DCS Figures IX.8 and IX.10, the extension of Carlton Way Drive warrants neither a right-turn lane on the south side of 12 ½ Mile Road nor a passing or center left-turn lane. The volumes of traffic anticipated to travel to and from 12 ½ Mile via the Carlton Way Drive extension are relatively small, and existing volumes on 12 ½ Mile are relatively light as well.

Pedestrian Access

Are pedestrians safely and reasonably accommodated?

8. The existing sidewalk along the Carlton Forest "frontage" on the south side of 12 ½ Mile Road is proposed to be extended across the proposed road extension. ADA-compliant ramps are proposed, and the existing sidewalks along both sides of the existing portion of Carlton Way Drive will be extended north to connect with the sidewalk along 12 ½ Mile Road.

Sincerely,
BIRCHLER ARROYO ASSOCIATES, INC.



Rodney L. Arroyo, AICP
Vice President



William A. Stimpson, P.E.
Director of Traffic Engineering

Traffic Impact Study Review

December 10, 2009

Barbara McBeth, AICP
Deputy Director of Community Development
City of Novi
45175 W. Ten Mile Rd.
Novi, MI 48375



SUBJECT: Carlton Forest Phase II (SP#09-34)
Review of Traffic Impact Study Update for Extension of Carlton Way Drive

Dear Ms. McBeth:

We have reviewed the above study update, prepared by Professional Engineering Associates, Inc. and dated 11-23-09, and offer the following recommendation and supporting comments.

The applicant was asked to update the development's 1997 traffic study in order to predict the impacts associated with the now-proposed extension of Carlton Way Drive to 12 ½ Mile Road. These impacts are of two kinds: (a) the additional daily traffic that would have to be carried by 12 ½ Mile Road's chip-seal pavement, and (b) the peak-hour impacts of additional site turning traffic at the intersection of 12 ½ Mile and Novi Road.

The previous traffic study analyzed the development's impacts on 12 Mile / Novi Road intersection. Since the proposed extension of Carlton Forest Drive will likely reduce the amount of site traffic traveling through that intersection, and since the intersection has been rebuilt with increased capacity, it was not included in the updated traffic study.

Recommendation

We find the methodology and findings of the traffic impact study update to be acceptable, and recommend that the study update be approved by the City. Please see our corresponding traffic review of the proposed site plan for the Carlton Way Drive extension.

Comments

- I. Study Area – The Carlton Forest condominium development is located on the north side of 12 Mile Road, west of Novi Road (Section 10). It is made up of 180 town-home condominium units. Existing access is via Carlton Way Drive, which traverses north-to-south and intersects with the north (westbound) side of the 12 Mile Road boulevard approximately a ¼ mile west of Novi Road. Carlton Way Drive currently ends a short distance south of 12 ½ Mile Road; there is a gated, gravel emergency-access connection between the northern terminus of Carlton Way Drive and 12 ½ Mile Road. 12 ½ Mile Road west of Novi Road is designated in the City's Thoroughfare Classification Map (Map 58 within the *2004 Master Plan for Land Use*) as a "Scenic Drive Road".

2. Proposed Change to Site Access – The Applicant proposes to extend the paved portion of Carlton Way Drive to 12 ½ Mile Road, removing the emergency-access gate and creating a second point of public access for the Carlton Forest development. This change can be expected to divert a significant portion of site traffic to and from 12 ½ Mile Road and its intersection with Novi Road.
3. Previous Traffic Impact Study – A full traffic impact study for Carlton Forest was prepared in November 1997. That study assumed the development's sole point of access would be on 12 Mile Road. The study also assumed 191 dwelling units, but only 180 were ultimately built. Birchler Arroyo recommended in our pre-application review letter (dated October 8, 2009) that the 1997 study be updated to revise the trip distribution model and trip generation forecast, and then determine impacts of diverted site traffic on both 12 ½ Mile Road and the 12 ½ Mile / Novi Road intersection.
4. Trip Generation – The 1997 study assumed 191 units, which were forecast to generate 1,129 daily trips, including 85 in the morning peak hour and 106 in the evening peak hour. The revised study correctly estimates that the 180 existing units likely generate about 83 morning peak-hour trips and about 97 evening peak-hour trips. Though not included in the PEA study, we estimate that the 180-unit development generates about 1,073 daily trips.
5. Trip Distribution – A number of changes to the regional transportation network have occurred since 1997 which likely have changed the trip distribution pattern assumed in the original traffic study. Most notably, 12 Mile Road in the area was reconstructed as a four-lane boulevard, M-5 was extended from 12 Mile Road north to Pontiac Trail, and a single-point urban interchange was built at I-96 and Beck Road. To determine the directionality of site traffic based on these changes, PEA obtained and analyzed current 24-hour traffic volumes at the intersection of 12 Mile and Novi Road.

The distribution of site traffic would also be affected by the extension of Carlton Way Drive to 12 ½ Mile Road. Many site residents traveling to the north, for example, would likely prefer to make the direct left turn from eastbound 12 ½ Mile Road onto northbound Novi Road, as opposed to having to twice use the turnarounds within the 12 Mile boulevard and twice travelling through the signalized intersection of 12 Mile and Novi Road, as they are currently required to do. The revised study assumes that the following percentages of site traffic would use 12 ½ Mile Road:

- 100% going to north and 75% coming from north
- 50% going to south and 50% coming from the south
- 0% going to east and 25% coming from east
- 0% going to and coming from west.

Birchler Arroyo deems the revised trip distribution model acceptable.

6. Addition of Site Traffic to 12 ½ Mile Road – 12 ½ Mile Road is currently paved with what City Engineering has called a “chip seal,” which is a relatively thin layer of coarse pavement. The road is narrow and uncurbed, with little to no shoulder. The road is patched in several locations, most noticeably near its intersection with Novi Road. It is classified in the City's Thoroughfare Plan as a “Scenic Drive Road”. Based on the revised trip generation forecast and revised trip distribution model (discussed above), 15 new trips would be added to 12 ½

Mile Road east of the proposed new access point during the AM peak hour and 27 new trips would be added during the PM peak hour. Although not forecasted within the PEA study, we estimate that about 300 new trips would be added to 12 ½ Mile Road over the course of a typical weekday (based on the site's 1,073 estimated total daily trips being 11.1 times the 97 estimated total PM peak-hour trips).

It is worth noting that 12 ½ Mile Road is not designed, constructed, or maintained to a standard that can readily accommodate the additional traffic that continued development in the vicinity of Carlton Forest will create. Several developments have been approved but not built along 12 ½ Mile east of Carlton Forest (e.g., Bollingbrook Estates). The Liberty Park development on the north side of 12 Mile has access to 12 ½ Mile via Dixon Road (also classified as a "Scenic Drive Road"), and will continue to add traffic to 12 ½ Mile as lots toward the north end of that site develop. At some point in the relatively near future, 12 ½ Mile Road's functional classification and planned design should be re-evaluated consistent with the planned and approved development and anticipated increases in traffic.

7. Level of Service Results at Novi Road and 12 ½ Mile Road – PEA conducted level of service analyses for AM and PM peak-hour traffic at the 12 ½ Mile and Novi Road intersection, based on existing traffic volumes combined with traffic expected to use the access created by the Carlton Way Drive extension. Existing traffic counts at the 12 Mile and Novi Road (obtained from RCOC) were used to infer the through volumes at 12 ½ Mile and Novi Road, and the turning volumes at the intersection were counted manually by PEA staff.

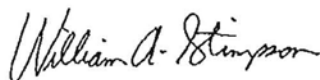
Existing minor-movement levels of service (LOS) were found to be good during both peak hours, with the longest current delay being for turns from 12 ½ Mile onto Novi Road (average delay of 10.4 seconds per vehicle in the morning and 10.5 seconds per vehicle in the evening, both LOS B). Those existing delays would be only minimally increased by traffic turning toward and from Carlton Forest (to 11.0 and 11.1 seconds per vehicle, respectively). Left turns from northbound Novi Road onto westbound 12 ½ Mile Road would also be only minimally impacted in the peak hours. Birchler Arroyo is satisfied with the study update's methodology and level of service results.

8. Mitigation – The study does not identify the need for any mitigation related to extending Carlton Way Drive to 12 ½ Mile Road. Birchler Arroyo concurs with this determination. It is possible, however, that as the other properties in the vicinity of Carlton Forest are developed in the future, 12 ½ Mile Road will have to be improved (e.g., reconstructed as residential collector with a modern pavement).

Sincerely,
BIRCHLER ARROYO ASSOCIATES, INC.



Rodney L. Arroyo, AICP
Vice President



William A. Stimpson, P.E.
Director of Traffic Engineering

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

December 10, 2009

Engineering Review

Carlton Forrest II – 12 ½ Mile Approach
SP09-34

Petitioner

Carlton Forrest II Home Owners Association

Review Type

Final Site Plan

Property Characteristics

- Site Location: Carlton Way and 12 ½ Mile Road
- Site Size: 14 acres
- Plan Date: November 23, 2009

Project Summary

- The project consists of paving the emergency access approach on Carlton Way from 12 ½ Mile Road. The approach would include an acceleration and deceleration taper along with a sidewalk connection from Carlton Way to 12 ½ Mile Road.

Recommendation

Approval of the Final Site Plan is recommended, with items to be addressed at Stamping Set submittal.

Comments:

The Final Site Plan meets the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance and the Engineering Design Manual with the following exceptions, which can be addressed at Stamping Set submittal:

General

1. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
2. Provide the City's standard detail sheets for storm sewer (1 Sheet-6/15/98) and paving (1 Sheet-12/15/00) at the time of the Stamping Set submittal.
3. Be sure to keep all relocated trees as far off the pavement and out of the crash zone as possible. Add a note to the plan.
4. Submit a revised construction cost estimate with updated quantities and showing a difference between right-of-way paving and private paving.

Storm Sewer

5. HDPE is not currently an approved material for construction. All storm sewer conveying storm water shall be a minimum of 12-inches in diameter and made of reinforced concrete pipe (CL IV minimum). All manholes shall be concrete and meet the City of Novi standards as well.
6. A siphoned pipe is not permitted. In order to drain the water east of the approach, add a substantial cross section of washed stone and sand at the low point of the ditch for access flow.

Paving & Grading

7. Show the butt joint connection detail from the taper lane to the existing pavement on the plan.
8. All sidewalks within the City of Novi right-of-way shall have the new City standard cross-section of 4-inches of concrete over 6-inches of 21AA aggregate over a compacted sub base. Please show this cross-section on the plan and label sidewalk to be installed with this section.
9. Curb within the City of Novi right-of-way shall be 6-inch MDOT C-4. The current plan shows B-2. Please revise the detail.

The following must be submitted with the Stamping Set:

(Please note that all documents must be submitted together as a package with the Stamping Set submittal. Partial submittals will not be accepted).

10. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. **Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.**
11. A revised itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. ***The***

estimate must be itemized for each utility (water, sanitary, storm sewer), on-site paving (square footage), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).

The following must be addressed prior to construction:

12. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application required). A grading permit fee in the amount of \$143.75 must be paid to the City Treasurer's Office.
13. Material certifications must be submitted to Spalding DeDecker for review prior to the construction of any utilities on the site. Contact Ted Meadows at 248-844-5400 for more information.
14. Construction inspection fees in the amount of \$TBD must be paid to the City Treasurer's Office.
15. A street sign financial guarantee in the amount of \$400 (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office. Signs must be installed in accordance with MMUTCD standards.
16. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.
17. A permit for work within the right-of-way must be obtained from the City of Novi. The application is available from the City Engineering Department or on the City website and may be filed once the Final Site Plan has been submitted. Please contact the Engineering Department at 248-347-0454 for further information. Only submit the cover sheet, standard details and plan sheets applicable to the permit.

The following must be addressed prior to issuance of a Temporary Certificate of Occupancy approval for the development:

18. The amount of the incomplete site work performance guarantee for this development at this time is \$TBD (equal to 1.5 times the amount required to complete the site improvements, excluding the storm water facilities) as specified in the Performance Guarantee Ordinance. This guarantee will be posted prior to TCO, at which time it may be reduced based on percentage of construction completed.
19. All easements and agreements referenced above must be executed, notarized and approved by the City Attorney and City Engineer.
20. Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.
21. Submit to the Engineering Department, Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties

and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.

Prior to preparing stamping sets, the Applicant is advised to provide any revised sheets directly to the Engineering Department for an informal review and approval.

Please contact Lindon Ivezaj at (248) 735-5694 with any questions.



cc: Ben Croy, Engineering
Brian Coburn, Engineering
Kristen Kapelanski, Community Development Department
Tina Glenn, Water & Sewer Dept.
Sheila Weber, Treasurer's
T. Meadows, B. Hanson, T. Reynolds; Spalding DeDecker

FIRE REVIEW



CITY COUNCIL

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December 9, 2009

TO: Barbara McBeth, Deputy Director of Community Development, City of Novi

RE: Carlton Forest II

SP#: 09-34, Revised Final Site Plan

Project Description:

Make improvements and modifications to the Emergency Secondary Access Drive on the north side of the complex at 12 ½ Mile Rd. including removing the gate and making this a full access drive to city specifications.

Comments:

None

Recommendation:

Recommended for Approval.

Sincerely,

Michael W. Evans
Fire Marshal

cc: file

Novi Fire Department
42975 Grand River Ave.
Novi, Michigan 48375
248.349-2162
248.349-1724 fax

cityofnovi.org

Traffic Impact Study



PROFESSIONAL ENGINEERING ASSOCIATES, INC.
CIVIL ENGINEERS / LAND SURVEYORS / LANDSCAPE ARCHITECTS
2430 Rochester Court, Suite 100, Troy, MI 48083-1872
P : (248) 689-9090 www.peainc.com F : (248) 689-1044

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TECHNICAL MEMORANDUM

VIA EMAIL

To: Mr. Sunny Ammavajjala
Carlton Forest II Condominium Association

From: Mr. Michael J. Labadie, P.E.
Timothy J. Likens

Date: November 23, 2009

Subject: Carlton Forest Condominium Development
Traffic Impact Study Update
PEA Job # 2009-227-00T

Introduction

The Carlton Forest Condominium Development is located on Carlton Way Drive between 12 Mile Road and 12 ½ Mile Road, approximately ¼ mile west of Novi Road in the City of Novi, Michigan. The condominium development has 180 units (75 in Phase I and 105 in Phase II). Site access is currently provided via a single driveway at 12 Mile Road and a gated emergency access only connection to 12 ½ Mile Road. The Carlton Forest II Condominium Association is seeking the removal of the emergency only gate and provision of full access to 12 ½ Mile Road.

A Traffic Impact Study (TIS) for Carlton Forest was completed in 1997 by McNamee, Porter, and Seeley, Inc. (MPS). This traffic study assumed all traffic would access the site via 12 Mile Road. More recently, 12 ½ Mile Road, and its southern extension Dixon Road, have been paved and other developments granted access to this roadway. Currently another condominium site, the Pulte townhouse development, and a bank have access to 12 ½ Mile / Dixon Road.

Professional Engineering Associates, Inc. (PEA) has completed a traffic impact analysis to identify the traffic impacts, if any, related to the provision of access to 12 ½ Mile Road for the Carlton Forest Development. The scope of this study was developed in consultation with the City's traffic consultant, Birchler Arroyo Associates, Inc. (BA).

Analysis

The 1997 TIS assumed 191 units would be constructed in the Carlton Forest Development. Currently, the site is built out with a total of 180 units. With a decreased number of units, the construction of a boulevard section on 12 Mile Road, and a reduction in trips on 12 Mile Road with the provision of access to 12 ½ Mile Road, PEA and BA agreed that the traffic impacts at

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Florida Office 10471 Six Mile Cypress Parkway, Suite 405, Fort Myers, FL 33966 · (239) 217-6059 · Fax (239) 217-6124
Howell Office 2900 E. Grand River Avenue, Howell, MI 48843 · (517) 546-8583 · Fax (517) 546-8973

· Municipal Engineering · Traffic Engineering · Asset Management · Sustainable Design · Geotechnical Engineering · Site Development · Wetland Services ·

the intersections on 12 Mile Road would be negligible or reduced. Therefore, the analysis for this study is focused on the intersection of 12 ½ Mile Road and Novi Road and the traffic volumes that would utilize 12 ½ Mile Road.

Trip Generation and Distribution

The number of AM and PM peak hour trips that are generated by the development were estimated based on the rates and equations published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 8th Edition*, as shown in Table 1.

**Table 1
Site Trip Generation ¹**

Land Use	ITE Code	Amount	Units	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Condominium	230	180	Units	14	69	83	65	32	97

1. Trip generation based on the Institute of Transportation Engineers' *Trip Generation*, 8th Edition.

In order to determine the existing trip distribution patterns for these site-generated trips, peak period traffic volumes were obtained from the Road Commission for Oakland County (RCOC) at the intersection of 12 Mile Road and Novi Road. Traffic volumes were obtained for three typical non-holiday weekdays in November, 2009. The AM and PM peak hours were identified and existing traffic distributions in the site vicinity were calculated, as shown in Table 2.

**Table 2
Existing Traffic Patterns - 12 Mile Road and Novi Road**

AM PEAK HOUR						PM PEAK HOUR				
<i>FROM</i>						West	East	South	North	TOTAL
Volume	West	East	South	North	TOTAL	997	1389	658	414	3458
Percent	58%	14%	14%	14%	100%	29%	40%	19%	12%	100%
<i>TO</i>						East	West	North	South	TOTAL
Volume	East	West	North	South	TOTAL	904	1274	598	682	3458
Percent	60%	14%	8%	18%	100%	26%	37%	17%	20%	100%

In addition to calculating existing traffic patterns in the site vicinity, PEA identified changes to existing site traffic patterns that would result from the provision of access to 12 ½ Mile Road. In consultation with BA, PEA estimated that the percentages of site-generated traffic by direction shown in Table 3 would utilize 12 ½ Mile Road to access the site. These percentages were based on direction of travel and the locations of crossovers and traffic signals on 12 Mile Road that may impede direct access to the site via 12 Mile Road.

Table 3
Estimated Percentage of Site Traffic to Utilize 12 1/2 Mile Road

Direction	TO	FROM
East	0%	25%
West	0%	0%
North	100%	75%
South	50%	50%

The AM and PM site-generated traffic volumes shown in Table 1 were assigned to 12 1/2 Mile Road and the intersection of 12 1/2 Mile Road and Novi Road based on the existing traffic distributions shown in Table 2 and the estimated changes in traffic patterns shown in Table 3.

In order to determine the impacts on existing traffic operations at the intersection of 12 1/2 Mile Road and Novi Road, existing AM and PM peak hour turning movement counts were conducted on Tuesday, November 17, 2009. These counts indicate that **11 vehicles** currently turn onto Novi Road and **6 vehicles** currently turn onto 12 1/2 Mile Road at this intersection during the AM peak hour. During the PM peak hour, **7 vehicles** currently turn onto Novi Road and **12 vehicles** currently turn onto 12 1/2 Mile Road at this intersection.

With the provision of site access via 12 1/2 Mile Road, PEA has estimated that an additional **12 vehicles** will turn onto Novi Road and **3 vehicles** will turn onto 12 1/2 Mile Road at this intersection during the AM peak hour. During the PM peak hour, an additional **8 vehicles** will turn onto Novi Road and **19 vehicles** will turn onto 12 1/2 Mile Road at this intersection. These relatively low hourly traffic volumes would not significantly impact the existing traffic operations of 12 1/2 Mile Road. The existing, estimated site-generated and future traffic volumes at this intersection are shown on Figure 1, which is attached to this memo.

Intersection Operations

The existing and future operations of the intersection of 12 1/2 Mile Road and Novi Road were calculated based on existing intersection geometry and traffic control, existing traffic volumes, and the additional site traffic volumes identified above. Level of Service (LOS) and average vehicle delay were calculated based on the methodologies published in the *Highway Capacity Manual* using Synchro, Version 7 software. The results of this analysis are summarized in Table 4, and detailed printouts are attached to this memo.

Table 4
Intersection Level of Service and Average Delay (seconds per vehicle)
12 1/2 Mile Road and Novi Road

Movement	AM Peak Hour				PM Peak Hour			
	Existing LOS	Delay	Future LOS	Delay	Existing LOS	Delay	Future LOS	Delay
EB	B	10.4	B	11.0	B	10.5	B	11.1
NB Left Turn	A	8.2	A	8.4	A	8.0	A	8.3

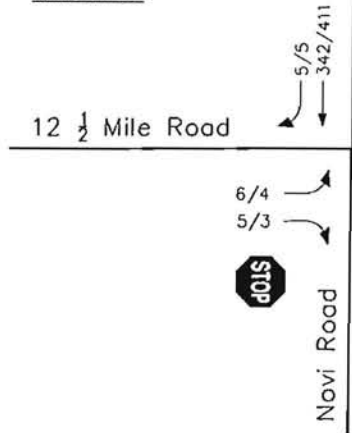
Conclusions

With provision of access to 12 ½ Mile Road for the Carlton Forest Development, approximately 15 vehicles would utilize this access during the AM peak hour, and 27 vehicles would utilize this access during the PM peak hour. These additional traffic volumes would have a negligible impact on the intersection of 12 ½ Mile Road and Novi Road. Furthermore, given the existing access granted for other residential and commercial developments on 12 ½ Mile Road / Dixon Road, these traffic volumes are relatively insignificant and would not impact the existing traffic operations of 12 ½ Mile Road.

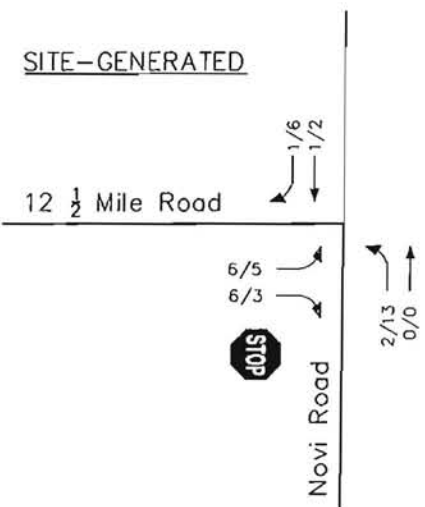
Based on the analysis and results of this study, PEA recommends that the City of Novi allow full access to 12 ½ Mile Road for the Carlton Forest Condominium Development. Any questions related to this study should be addressed to Professional Engineering Associates, Inc.



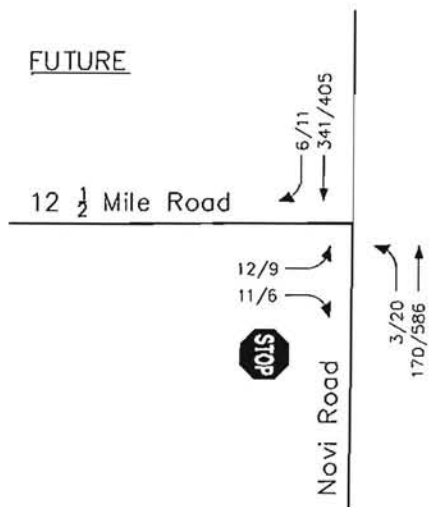
EXISTING



SITE-GENERATED



FUTURE



LEGEND

AM. PEAK HOUR
PM. PEAK HOUR
000/000

NOTE: DRAWING NOT TO SCALE

No.	By	Date	Description	Date
CARLTON FOREST II ASSOCIATION Landarc Property Management 2391 Pontiac Road - Auburn Hills, MI 48326 FIGURE 1 - TRAFFIC VOLUMES TRAFFIC IMPACT STUDY UPDATE Carlton Forest Condominium Development CITY OF NOVI, MI				
DES.	T.J.L.	SUR. NA	SCALE NTS	JOB NO. 2009-227
DH.	T.J.L.	P.M. MJL	DATE 11-23-2009	DWG. NO. 1











PEA

PROFESSIONAL
ENGINEERING
ASSOCIATES

2430 Rochester Ct. Suite 109
Troy, MI 48063-1872
(248) 689-8090











HCM Unsignalized Intersection Capacity Analysis
 1: 12 1/2 Mile Road & Novi Road

Existing
 AM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	5	1	176	342	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.81	0.81
Hourly flow rate (vph)	7	5	1	185	422	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage (veh)				2	2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520	214	428			
vC1, stage 1 conf vol	425					
vC2, stage 2 conf vol	95					
vCu, unblocked vol	520	214	428			
IC, single (s)	6.8	6.9	4.1			
IC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	99	100			
cM capacity (veh/h)	602	791	1127			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	12	1	93	93	281	147
Volume Left	7	1	0	0	0	0
Volume Right	5	0	0	0	0	6
cSH	675	1127	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.05	0.05	0.17	0.09
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	10.4	8.2	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	10.4	0.0			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			19.1%		ICU Level of Service	A
Analysis Period (min)			15			











HCM Unsignalized Intersection Capacity Analysis
 1: 12 1/2 Mile Road & Novi Road

Existing
 PM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	4	3	7	591	342	5
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	4	3	7	622	360	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage (veh)				2	2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	688	183	365			
vC1, stage 1 conf vol	363					
vC2, stage 2 conf vol	326					
vCu, unblocked vol	688	183	365			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	99			
cM capacity (veh/h)	570	829	1190			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	8	7	311	311	240	125
Volume Left	4	7	0	0	0	0
Volume Right	3	0	0	0	0	5
cSH	658	1190	1700	1700	1700	1700
Volume to Capacity	0.01	0.01	0.18	0.18	0.14	0.07
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	10.5	8.0	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	10.5	0.1			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			25.5%	ICU Level of Service		A
Analysis Period (min)			15			











HCM Unsignalized Intersection Capacity Analysis
 1: 12 1/2 Mile Road & Novi Road

Future with North Access
 AM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	11	3	170	405	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.81	0.81
Hourly flow rate (vph)	13	12	3	179	500	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage (veh)				2	2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	603	257	514			
vC1, stage 1 conf vol	507					
vC2, stage 2 conf vol	96					
vCu, unblocked vol	603	257	514			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
IF (s)	3.5	3.3	2.2			
p0 queue free %	98	98	100			
cM capacity (veh/h)	548	742	1048			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	25	3	89	89	333	180
Volume Left	13	3	0	0	0	0
Volume Right	12	0	0	0	0	14
cSH	626	1048	1700	1700	1700	1700
Volume to Capacity	0.04	0.00	0.05	0.05	0.20	0.11
Queue Length 95th (ft)	3	0	0	0	0	0
Control Delay (s)	11.0	8.4	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	11.0	0.1			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			21.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 1: 12 1/2 Mile Road & Novi Road

Future with North Access
 PM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	9	6	20	586	405	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	10	7	21	617	426	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				TWLTL	TWLTL	
Median storage (veh)				2	2	
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	783	219	438			
vC1, stage 1 conf vol	432					
vC2, stage 2 conf vol	351					
vCu, unblocked vol	783	219	438			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)	5.8					
IF (s)	3.5	3.3	2.2			
p0 queue free %	98	99	98			
cM capacity (veh/h)	525	785	1118			
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	16	21	308	308	284	154
Volume Left	10	21	0	0	0	0
Volume Right	7	0	0	0	0	12
cSH	605	1118	1700	1700	1700	1700
Volume to Capacity	0.03	0.02	0.18	0.18	0.17	0.09
Queue Length 95th (ft)	2	1	0	0	0	0
Control Delay (s)	11.1	8.3	0.0	0.0	0.0	0.0
Lane LOS	B	A				
Approach Delay (s)	11.1	0.3			0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			25.8%		ICU Level of Service	A
Analysis Period (min)			15			

APPLICANT RESPONSE LETTER

FAIRWAY ENGINEERING LLC

Land Development-Geotechnical-Structural
23965 Novi Road, Suite 140
Novi, MI 48375

December 19, 2009

Mr. Mark Spencer
CITY OF NOVI
Planning Department
45175 West 10 Mile Road
Novi, MI 48375

Re: Proposed Carlton Way Drive Extension
Carlton Forest II
12-1/2 Mile Road
Novi, Michigan

Dear Mr. Spencer:

Per your office comments in the review letter dated December 10, 2009, regarding the Carlton Way Drive extension and entrance modification, we have revised the plans. Following revisions were made to the attached plans per review comments.

PLANNING REVIEW

Item 1: The clear vision line is corrected per review comment. The area within clear zone is graded to have no obstruction 2 feet or higher.

WOODLAND REVIEW

A note is added to the detail sheet stating that the relocated trees should be warranted for two years from the date of relocation.

TRAFFIC ENGINEER'S REVIEW (PER OHM)

The plan was recommended for approval without any changes required.

ENGINEERING REVIEW

Item 1: Note is added to cover sheet and site plan sheet indicating that all work shall confirm to current City of Novi standards.

Item 2: City standard detail sheets for paving and storm sewer will be added to the final stamping sets. There is no storm sewer proposed in the revised plans. Road side ditches are designed to convey the storm water as it was in the existing condition.

Item 3: A note is added to relocate trees outside the crash zone and as far as possible from the pavement area.

Item 4: A revised cost estimate is prepared and attached with this letter. Cost estimate for work within ROW is separated.

Item 5: Storm sewer/culvert which was proposed in previous plan is eliminated.

Item 6: A washed stone backfill area is proposed at low point on easterly side per comment.

Item 7: A butt joint pavement detail is added to the site plan sheet per comment.

FAIRWAY ENGINEERING LLC

Land Development-Geotechnical-Structural
23965 Novi Road, Suite 140
Novi, MI 48375

Item 8: The revised sidewalk cross section with 6" 21AA crushed limestone is proposed for all sidewalks. The detail/cross section is shown on the site plan sheet.

Item 9: A MDOT C-4 curb is proposed in the ROW area as shown in the site plan.

Item 10: This letter is prepared to list all changes made to the plans per review letters.

Item 11: An itemized cost estimate is attached with this letter.

All remaining items (12 through 21) in the City's engineering review letter will be addressed prior to construction and TCO by HOA of Carlton Forest II.

All above changes were made by appropriate parties involved on the project in direct response to consultant comments and requests. We hope these changes meet with the approval of the interested parties. Thank you for your assistance on this project. Please call us if you any question or require additional information.

Sincerely,

FAIRWAY ENGINEERING LLC



Madhukar D. Mahajan, P.E.
President/Owner

FAIRWAY ENGINEERING I.L.C
 23965 NOVI ROAD, SUITE 140
 NOVI, MI 48375
 (248) 214-5913
 FAX : (248) 380-0201

20-Dec-09

**ESTIMATED QUANTITIES WITH
 ENGINEER'S ESTIMATED COST**

**CARLTON FOREST II
 NOVI, MICHIGAN**

NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
<i>WITHIN THE ROW OF 12-1/2 MILE ROAD</i>					
A	SOIL EROSION				\$4,387.00
1	CLEARING AND GRUBBING	LS	0.25 AC	\$1,000.00	\$1,000.00
2	CUT TO FILL, MASS GRADING	LS	1	\$2,500.00	\$2,500.00
3	SILT FENCE	LF	215	\$1.80	\$387.00
4	SEED AND MULCH	LS	1	\$500.00	\$500.00
B	PAVEMENT				\$22,672.50
5	ASPHALT PAVEMENT (5"THK W/12" MDOT 21AA)	SY	363	\$32.50	\$11,797.50
6	CRUSHED LIMESTONE 12" THICK-MDOT 21-AA	SY	438	\$10.00	\$4,380.00
7	HANDICAP RAMPS	EACH	2	\$100.00	\$200.00
8	C-4 CURB	LF	110	\$14.00	\$1,540.00
9	4" HIGH 24" WIDE MOUNTABLE CURB	LF	0	\$12.00	\$0.00
10	MDOT "M" OPENING	LF	100	\$14.00	\$1,400.00
11	SAW CUT EDGE OF EXISTING PAVEMENT	LF	294	\$2.50	\$735.00
12	8" THICK MDOT 21AA GRAVEL SHOULDER	SY	60	\$10.00	\$600.00
13	RELOCATE 6 TREES	EACH	6	\$200.00	\$1,200.00
14	4" CONCRETE SIDEWALK	SF	228	\$2.50	\$570.00
15	6" THICK MDOT 21AA LIMESTONE UNDER SIDEWALK	SY	25	\$10.00	\$250.00
GRAND TOTAL					\$27,059.50

NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
<i>OUTSIDE THE ROW OF 12-1/2 MILE ROAD</i>					
A	SOIL EROSION				\$2,200.00
16	CLEARING AND GRUBBING	LS	0.1 AC	\$500.00	\$500.00
17	CUT TO FILL, MASS GRADING	LS	1	\$1,200.00	\$1,200.00
18	SEED AND MULCH	LS	1	\$500.00	\$500.00
B	PAVEMENT				\$10,526.50
19	ASPHALT PAVEMENT (5"THK W/12" MDOT 21AA)	SY	143	\$32.50	\$4,647.50
20	CRUSHED LIMESTONE 12" THICK-MDOT 21-AA	SY	172	\$10.00	\$1,720.00
21	C-4 CURB	LF	20	\$14.00	\$280.00
22	4" HIGH 24" WIDE MOUNTABLE CURB	LF	87	\$12.00	\$1,044.00
23	SAW CUT EDGE OF EXISTING PAVEMENT	LF	24	\$2.50	\$60.00
24	4" CONCRETE SIDEWALK	SF	630	\$2.50	\$1,575.00
25	6" THICK MDOT 21AA LIMESTONE UNDER SIDEWALK	SY	70	\$10.00	\$700.00
26	BOULDER RETAINING/LANDSCAPE WALL	LF	25	\$20.00	\$500.00
GRAND TOTAL					\$12,726.50

**Planning Commission
Minutes
Excerpts
January 20, 1999**

**REGULAR MEETING OF THE NOVI PLANNING COMMISSION
WEDNESDAY, JANUARY 20, 1999 AT 7:30 P.M.
COUNCIL CHAMBERS - NOVI CIVIC CENTER - 45175 WEST TEN MILE ROAD
(248)-347-0475**

Meeting called to order at 7:32 p.m. by Chairperson Weddington

PRESENT: Members Canup, Capello, Churella, Csordas, Koneda, Mutch, Piccinini, Watza and Chairperson Weddington

ABSENT/EXCUSED: None

ALSO PRESENT: Planning/Traffic Consultant Rod Arroyo, Engineering Consultant David Bluhm, Assistant City Attorney Paul Weisberger, Landscape Architect Linda Lemke, Environmental Specialist Debbie Thor, Director of Planning & Community Development Jim Wahl, and Planning Assistant Kelly Schuler

3. CARLTON FOREST CONDOMINIUMS SP98-40A

Project is located in Section 10, between 12 Mile and 12 ½ Mile Roads, and Novi and Dixon Roads. The 33 acre-site is zoned Low Density Multiple-Family Residential District (RM-1) in the northern portion, while the southern portion is Office Service District (OS-1). Applicant is seeking Preliminary Site Plan approval and Woodland and Wetland Permit approvals.

Lorne Zalesin of Biltmore Properties introduced David Stollman also of Biltmore Properties, Mary Jukuri of JJR who will conduct the presentation, Dino Lekas of JJR and Jim Jones of MCS Associates, the engineer for the site.

Mary Jukuri gave a brief overview of the project. She stated Carlton Forest will be a low density multi-family residential community. It is approximately a 33 acre site located between 12 and 12½ Mile Roads, west of Novi Road. Approximately 28 acres of the property is zoned RM-1, the remaining portion is zoned OS-1. The property is under single ownership by Biltmore Properties who are also the developers of the project. Carlton Forest will be a residential community of homeowners. 180, 2 bedroom, 2 bath condominium units are proposed. Each will have its own 2 car attached garage with a private entry from the garage to the unit. Each will have its own laundry facility and its own patio, balcony or porch area and outdoor yard. The condominiums are predominantly brick façade with some upper siding areas. The parcel is very long and very narrow, the typical width is approximately 630', however, because of the significant wetlands areas on the east side of the site and factoring in the side yard setbacks, there are some areas of the site that pinch down to a 220' dimension. Therefore, there are some layout constraints regarding organizing the homes on the property. The site planning strategy has been to create a series of landscaped entrance courtyards throughout the project, orienting the homes in this way has allowed the majority of the units to have attached side entry garages so that either from an interior courtyard or along Carlton Way, you will not see a wall of garages. Carlton Way is the main access road through the site, it is a private drive. It will have street trees along both sides, it will have pedestrian lighting, landscaping and sidewalks, there are open spaces with seating areas and pads for benches. There are approximately 5.37 acres of wetlands on the site, there are two minor wetland impacts. One from the road crossing at the entrance and one to the other entrance wetland area due to road grading for the entrance boulevard. The required 25' wetland buffer are has been preserved adjacent to the wetland systems and a retention wall has been added at the southern part to reduce the amount of grading impacts in the wetland buffer area.

There are three woodlands on the site, predominantly in the northern part, that total approximately 3½ acres. About 1½ acres of woods are impacted to the lesser quality, light density woods on the eastern side of the site. There are no woodland impacts to the higher quality medium density woodland on the northwest corner of the property. The required number of replacement trees will be planted, they are proposed to be planted along the eastern edge and along the eastern wetland edge so as to supplement the existing wood lots that remain on that side. Two storm water detention basins are provided. Ms. Jukuri noted that Carlton Forest exceeds the minimum useable open space per unit that is required by the Ordinance and they are planting up to an additional 50 street trees and canopy trees than the required. Ms. Jukuri requested that the Planning Commission consider a waiver or variance on four items; 1) a waiver on the minimum 45 degree angle rule for sighting on three buildings, numbers 10, 12 and 21; 2) a waiver of the Ordinance requiring a screening berm between an RM-1 District and an OS-1 District. Ms. Jukuri stated because of the significant amount of wetlands in the OS-1 parcel, no office will ever be built, therefore, she requested a waiver to building a screening berm in that location; 3) a waiver for the landscape berm between the RM-1 District and the RA District. She felt that with the additional tree replacement plantings in the woodlands they would rather have that as the screening device; 4) a variance from the required 24' width for the inbound lanes only on the entrance boulevard. She was seeking to go from 24' to 18' to reduce the amount of wetland impact at the entrance. She stated they would still be able to provide emergency access and still have a passing lane within the 18' dimension.

Rod Arroyo, Planning and Traffic Consultant stated the property that fronts 12 Mile Road is zoned OS-1, the remainder is zoned RM-1. Consequently, because of the wetland located on the OS-1 property, the potential for development is very limited, all of the development related to structures for multiple family are on the RM-1 portion of the property. Mr. Arroyo did not recommend approval due to a number of outstanding issues that require waivers or variances. If they were to be granted, then he would be in a position to recommend approval. The RM-1 site has a net site of 24.8 acres, consequently it has enough net site area to support 180 units, which is the amount proposed. The RM-1 portion of the property contains 2.8 acres of wetlands. The applicant meets all of the required parking standards and the open space standards. As a part of the approval process, the applicant will be required to dedicate the appropriate R.O.W. to make up for the difference from the City's Thoroughfare Plan.

In regard to traffic, Mr. Arroyo stated a trip generation comparison has been provided. There is one point of full access which is off of Twelve Mile Road. There is an emergency access only connecting to 12½ Mile Road. Mr. Arroyo stated the Fire Department has indicated that they will support a gate over the entryway with a chain that can be cut with bolt cutters, provided that the access point is paved. He stated this is a new requirement that will be put into the Design and Construction Standards. He stated there will be a need to go to the City Council for the Design and Construction Standards waiver. Mr. Arroyo recommended approval of the Preliminary Site Plan subject to the waiver for the boulevard entrance with shifting the entrance to the east.

David Bluhm, Engineering Consultant stated a public water extension is being proposed through the site with connections to 12 Mile and 12½ Mile Road to form a loop system. The sanitary sewer will be extended into the site along the roadway network from 12 Mile Road, extending all the way to the northern units and serving the entire site. The applicant proposes a private drive through the main part of the site. The private drive will be designed to public standards, it will be required to be 28' in width, back to back curbed and meet all public standards. The applicant proposes storm sewer to pick up storm drainage. Two detention basins are proposed on site. The storm water basin will be constructed with temporary sedimentation controls and permanent water quality controls. The detention basin will then outlet to the large wetland complex, it will then outlet along an existing ditch along the eastern edge of the site and cross the roadway and connect to the wetland area at the southern part of the site. From that point, the stormwater outlets across 12 Mile Road and into the enclosed system in the West Oaks II development. The second basin is located at the southern end of the site. The outlet point is the southern wetland

area and then ultimately off site to the south. Mr. Bluhm supported the variance to the width of the driveway, he felt it was a good addition as well as looking to shift the approach to the east to minimize the curvature. As this is a two phase project, he would like to see the applicant extend the main water main to 12½ Mile Road to form a loop system with the first phase. Mr. Bluhm felt the plan demonstrated engineering feasibility and recommended approval.

Linda Lemke, Landscape Architect recommended approval of both the conceptual landscape plan and the woodlands plan. She stated the woodlands are found along the eastern property line, the highest quality is found in one corner, the remainder of the woodlands areas are more of a lower quality wooded wetland area. The woodlands continue off site to the west and to the east. It is connected to the core reserve areas which increases the value. The areas to be removed are lower in quality. Ms. Lemke did not recommend the sidewalk along 12½ Mile Road as no walk is proposed for the Society Hill development to the east. Ms. Lemke was not in favor of a stub street to the east due to the woodlands located in that area. There are a number of items that need to be submitted for Final review. She stated she needed to look at replacement tree locations and they could not be used for the landscape requirements.

In regard to landscaping, there are a number of waivers that the Planning Commission needs to provide. They are all very similar because they are saving regulated woodlands and are not putting in a berm. Ms. Lemke recommended that the Commission grant the waivers with the provision that additional evergreen plantings will be provided to provide more opacity. The remainder of the items can be provided at the time of Final.

Debbie Thor, Environmental Specialist stated there were approximately 5.38 acres of wetlands on the site. There is a large wetland system to the northeast that follows through a channelized area flowing south into another large wetland area. The wetland has open water in the center with large dead trees and scrub shrub. There are a couple of open water pockets within the area that are bordered by emergent vegetation with scrub shrub and forested vegetation surrounding that. The system is considered high quality. There is a small wetland pocket to the southeast that is not considered a part of this system. The impacts proposed are wetland fill in the amount of 435 cubic yards, which is equal to 0.17 acres, for the construction of Carlton Way. Two equalization pipes to facilitate the existing drainage patterns. There are two storm water outfalls from the proposed detention basins to the large wetland system and a third storm water outfall that catches directly to catch basins on Carlton Way and discharges it to a large wetland system on the southwest side. There is a small amount of wetland buffer disturbance proposed for the retaining wall. Ms. Thor recommended approval conditioned upon the five comments listed in her letter being addressed at the time of Final.

Chairperson Weddington announced she has received a letter from Michael W. Evans, Fire Marshal for the City of Novi Fire Department which states that the above plan has been reviewed and approval is recommended with the following items being corrected on the next plan submittal; 1) the proposed hydrant locations are not approved. The applicant shall contact the Fire Marshal's office to discuss the proper hydrant locations.

Chairperson Weddington announced it was a Public Hearing and opened the Matter to the Public.

Debbie Bundoff, expressed concerns against the east property line where running water currently exists. She was hopeful that the applicant would stick to the buffering of that area since it is a major part of the water flow for the area. She also expressed concern with the SAD 94 contract running through the area to service adjacent parcels to the site. She stated there were currently sewer tap stubs to the adjacent parcels and did not get put into the adjacent properties that the contract includes. She expressed concern with what would happen to the stubs and how far the road system is to it. She was disappointed in the amount of buffering between her farm and the proposed multiple housing. In regard to density, she asked if the applicant is utilizing the entire site for their density. She asked if the OS-1 property was calculated into the density or did it only

include the RM-1 property? She had great concern regarding the trees and wetlands for the site. She was hopeful that the applicant was careful in the wetland ditch during construction.

In regard to the question regarding density, Mr. Arroyo clarified that the 24.8 acres of the net site area was looking at the RM-1 property on its own.

Mr. Bluhm stated the sewer was previously constructed part way up the southern part of the site, he stated the applicant would be tying into it. He stated he has been working with the engineer for the site and would continue through the Final Site Plan to provide stubs where they are needed.

In regard to screening, Ms. Lemke stated the plans shown tonight are conceptual and she would be looking for the applicant to increase the amount of screening at the time of Final.

Chairperson Weddington asked if anyone else would like to address the Commission, seeing no one she closed the Public Hearing and turned the Matter over to the Commission for Discussion.

DISCUSSION

In regard to the boulevard along Twelve Mile Road, Member Mutch asked Mr. Arroyo when the boulevard goes in, what R.O.W. would be required?

Mr. Arroyo stated the planned R.O.W. for Twelve Mile Road would be 90' from the center line versus 60' and the applicant will need to show it on the Final.

Member Mutch asked Mr. Bluhm if Carlton Way was required to be built to public street standards?

Mr. Bluhm answered, yes.

Member Mutch stated the turns in the road seemed to be fairly wide, he asked if it was allowable under the standards?

Mr. Bluhm answered, yes. He clarified that they are actually considered eyebrows under the design standards.

Member Mutch asked if the distance between the curb and the sidewalk provided for a wide enough width of grass?

Mr. Bluhm answered, yes. He stated he would be asking for 5' to be shown at the time of Final, The minimum standard is 5'.

Member Mutch asked if Society Hill was required to provide a sidewalk?

Mr. Arroyo stated he was currently reviewing the Final Site Plan for Society Hill, however, he has not finished the review, therefore, he could not remember. He clarified that it is required by Ordinance and in order to get it waived, they would have to go to City Council for a Design and Construction Standards waiver. Giving the proximity of the site to the City park, he questioned if a sidewalk might be in order, giving the fact that people could potentially be walking to the park. He thought it should be explored in more detail.

Member Mutch asked if the sidewalk were to stay, would it be possible within the R.O.W. to save more trees? He asked how big of an impact it was?

Ms. Lemke stated it was a pretty considerable impact, however, it could be maneuvered around trees.

Member Mutch stated he would hate to see the sidewalk waived as he was thinking about the connection to the Novi Road bikepath and potential access to the City park. Regarding the internal sidewalk connections, he asked how many units have direct access to the main sidewalk?

Mr. Zalesin could not give an exact number.

Member Mutch asked if there was any reason that the applicant could not provide sidewalk access from all of the units to the main sidewalks through the site?

In regard to the sidewalk at 12½ Mile Road, Mr. Zalesin stated based on the tree survey, he thought it would need to be staked in the field to minimize impact.

Mr. Zalesin addressed the sidewalk issue. He stated they have tried to provide some private space in the courtyards, therefore they provided the sidewalks from the front door to hopefully discourage people from cutting through the area.

Member Mutch understood the point of privacy, however, he thought that knowing that there would be an amenity at the north end of the site, a lot of the residents would be cut off from direct access to it.

Member Koneda asked about Ms. Lemke's comment on the deletion of the stub road, he stated it was not shown on the plans and asked if the Commission needed to discuss the stub road?

Mr. Zalesin stated the stub road was originally in the first submittal, after various Consultant reviews, it was decided that there would have been a great deal of wetland and woodland impacts, therefore, it was removed from the current submittal.

Member Koneda asked if the MDEQ had jurisdiction over it and if so, does the applicant need a permit?

Ms. Thor answered, yes. She stated the applicant does have a permit.

In regard to the OS-1 land in front, Member Koneda asked if an OS-1 use would be sought out for that piece of property in the future?

Ms. Thor doubted it seriously.

Member Koneda asked why the road that goes through to 12½ Mile Road was not a through road instead of an emergency entrance?

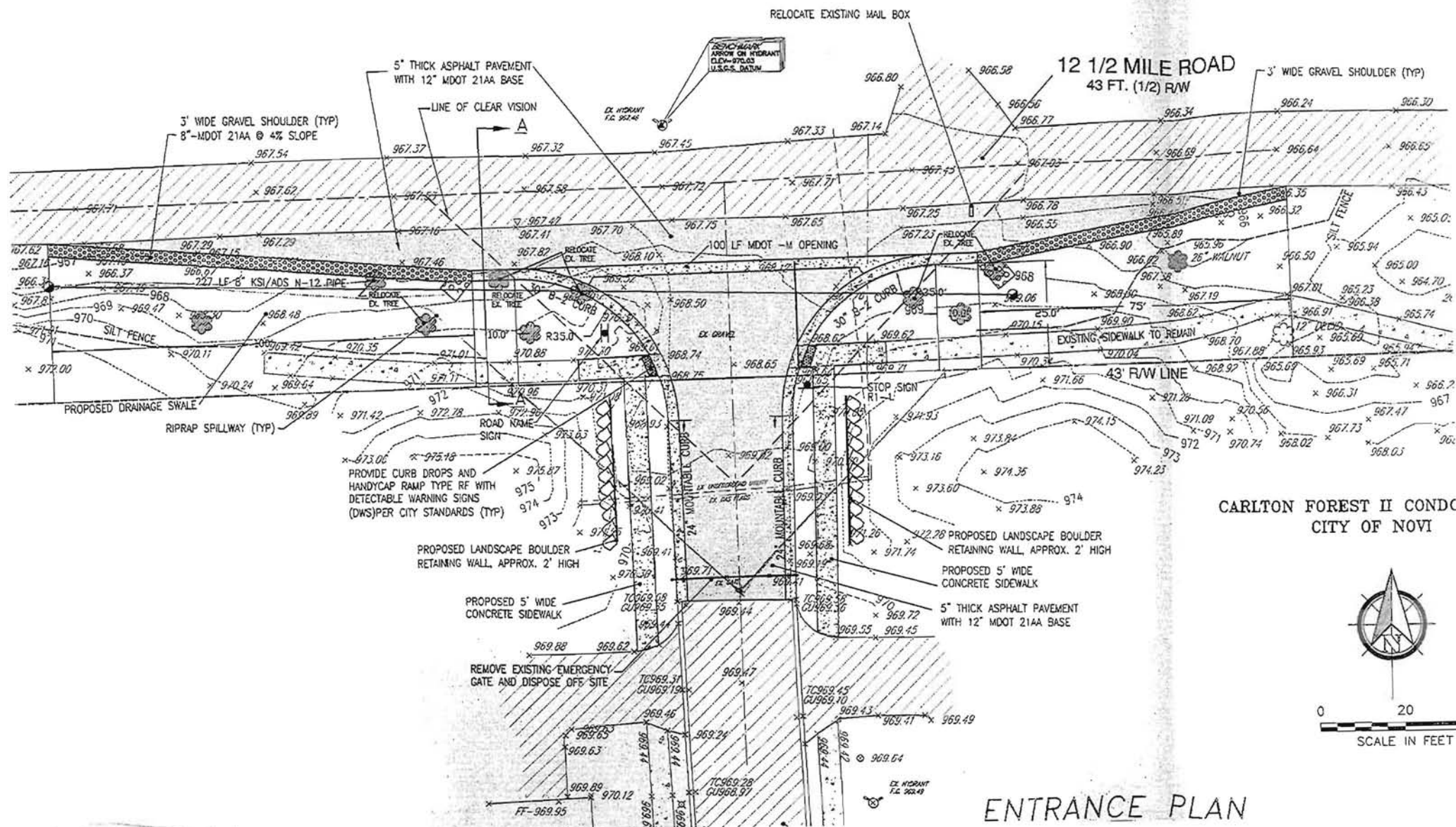
Mr. Arroyo answered, the reason it is not was because the DPW did an analysis of 12½ Mile Road at the time of the Society Hill project and that road is in very poor condition. It was the recommendation from that department that there not be regular access from that project to 12½ Mile Road. He stated there was no plan in the near future to upgrade 12½ Mile Road.

Member Koneda stated he could understand that, however, at some point, something will have to happen to 12½ Mile Road. He was personally opposed to having break-away gates on the developments, he would rather see them as through streets.

PM-99-01-011 TO APPROVE CARLTON FOREST CONDOMINIUMS SP98-40A PRELIMINARY SITE PLAN, WOODLANDS PERMIT, WETLANDS PERMIT AND TO GRANT A VARIANCE OF THE 45 DEGREE ANGLE OF BUILDINGS 10, 12 AND 21 AND TO WAIVE THE BERM ON THE EASTERN BOUNDARY OF THE PROPERTY SUBJECT TO ALL OF THE CONSULTANTS ORAL AND WRITTEN COMMENTS AND CONDITIONED ON WAIVERS FROM THE ZBA FOR THE BERM BETWEEN THE RM-1 AND OS-1 PROPERTY AS WELL AS GRANTING OF THE 18' INBOUND BOULEVARD WIDTH BY CITY COUNCIL

Moved by Koneda, seconded by Churella, CARRIED UNANIMOUSLY: To approve Carlton Forest Condominiums SP98-40A Preliminary Site Plan, Woodlands Permit, Wetlands Permit and to grant a variance of the 45 degree angle of buildings 10, 12 and 21 and to waive the berm on the eastern boundary of the property subject to all of the Consultants oral and written comments and conditioned on waivers from the ZBA for the berm between the RM-1 and OS-1 property as well as granting of the 18' inbound boulevard width by City Council.

REDUCED SITE PLAN

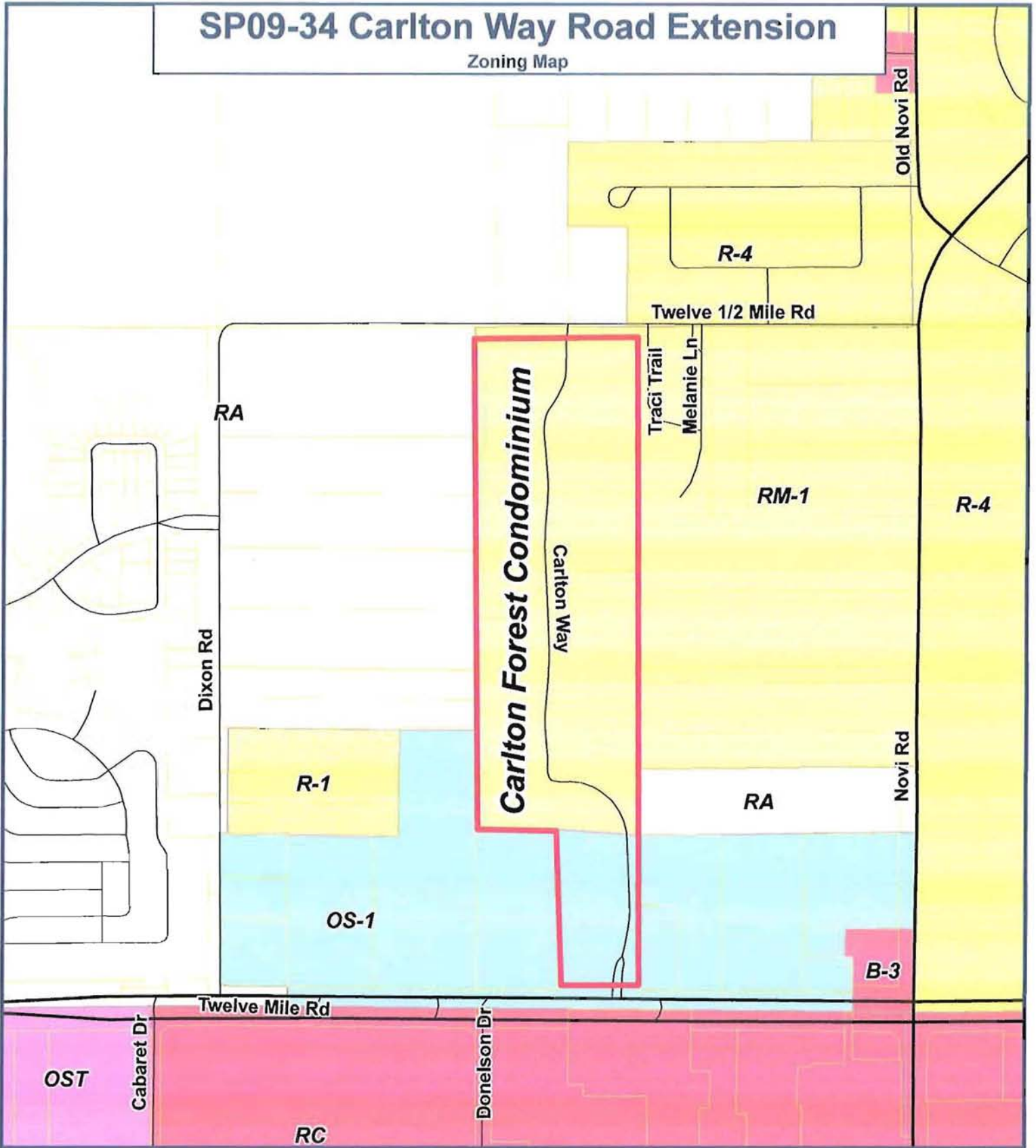


MAPS

**Location/Air Photo
Zoning**

SP09-34 Carlton Way Road Extension

Zoning Map



Map Author: Mark Spencer
 Date: 12/10/09
 Project: SP09-34 Carlton Forest zoning
 Version #: 1.0

MAP INTERPRETATION NOTICE

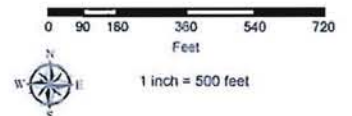
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Map Legend

- Tax Parcels
- Zoning**
- R-A: Residential Acreage
- R-1: One-Family Residential District
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- B-3: General Business District
- OS-1: Office Service District
- OST: Office Service Technology
- RC: Regional Center District

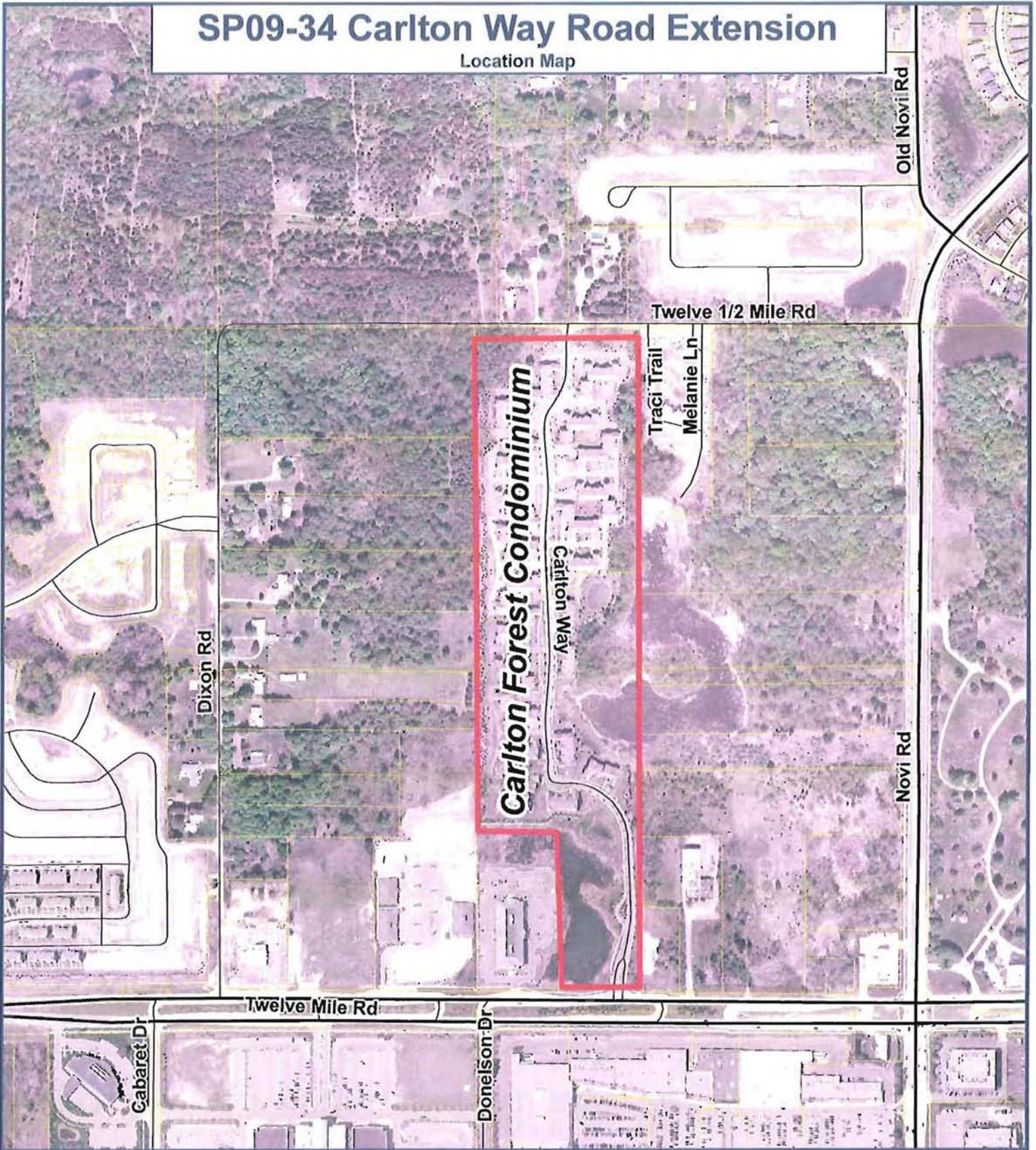


City of Novi
 Planning Division
 Community Development Dept.
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org



SP09-34 Carlton Way Road Extension

Location Map



Map Author: Mark Spencer
Date: 12/10/09
Project: SP09-34 Carlton Forest location
Version #: 1.0

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Map Legend

 Tax Parcels



City of Novi
Planning Division
Community Development Dept.
45175 W Ten Mile Rd
Novi, MI 48375
cityofnovi.org

0 50 100 200 300 400
Feet



1 inch = 500 feet

**Carlton Way
North End
Air Photo Close-Up**



© 2009 MicroSoft Corporation © 2009 NAVTEQ © AND
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25 feet
10 m