



## EMERSON PARK JSP17-10

### EMERSON PARK 17-10

Public hearing at the request of Pulte Homes, LLC for Planning Commission approval of the Preliminary Site Plan with Wetland Permit, Woodland Permit, and Stormwater Management Plan. The subject property is currently zoned RM-2 (High-Density Multi-Family Residential) with a Planned Rezoning Overlay Agreement associated. The subject property is approximately 24-acre and is located on the west side of Novi Road and north of Ten Mile Road in Section 22. The applicant is proposing a development of 120-unit multi-family attached condominiums with frontage and access to Novi Road.

### REQUIRED ACTION

Approve/deny the Preliminary Site Plan with Wetland Permit, Woodland Permit, and Storm water Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	01-18-18	<ul style="list-style-type: none"> <li>• <b>City Council is expected to consider a PRO agreement for final approval at the February 5, 2018 Council meeting.</b></li> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul>
Engineering	Approval recommended	01-19-18	<ul style="list-style-type: none"> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul>
Landscaping	Approval recommended	12-29-17	<ul style="list-style-type: none"> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul>
Wetlands	Approval recommended	01-22-18	<ul style="list-style-type: none"> <li>• <b>Requires a City of Novi Non-Minor Wetland Permit and an Authorization to encroach the 25-Foot Natural Features Setback.</b></li> <li>• Items to be addressed on the final site plan submittal</li> </ul>
Woodlands	Approval recommended	01-10-18	<ul style="list-style-type: none"> <li>• <b>Requires a City of Novi Woodland Permit</b></li> <li>• Items to be addressed on the final site plan submittal</li> </ul>
Traffic	Approval recommended	01-15-18	<ul style="list-style-type: none"> <li>• <b>Administrative variances required as noted in the review letter which are supported by staff.</b></li> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul>
Facade	Approval recommended	01-22-18	
Fire	Approval recommended	01-12-18	<ul style="list-style-type: none"> <li>• Items to be addressed on the Final Site Plan submittal.</li> </ul>

## **MOTION SHEET**

### **Approval – Preliminary Site Plan**

In the matter of Emerson Park JSP17-10, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. Approval is subject to the City Council's final approval of the associated rezoning with Planned Rezoning Overlay and Agreement at the February 5, 2018 City Council meeting;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters, as well as all of the terms and conditions of the PRO Agreement as approved, with these items being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

*(This motion is made because the plan is otherwise in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

### **Approval – Wetland Permit**

In the matter of Emerson Park JSP17-10, motion to **approve** the Wetland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

*(This motion is made because the plan is otherwise in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

### **Approval – Woodland Permit**

In the matter of Emerson Park JSP17-10, motion to **approve** the Woodland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

*(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

### **Approval – Stormwater Management Plan**

In the matter of Emerson Park JSP17-10, motion to **approve** the Stormwater Management Plan, based on and subject to:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. *(additional conditions here if any)*

*(This motion is made because it otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-OR-**

**Denial – Preliminary Site Plan**

In the matter of Emerson Park JSP17-10, motion to **deny** the Preliminary Site Plan... *(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Wetland Permit**

In the matter of Emerson Park JSP17-10, motion to **deny** the Wetland Permit... *(because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Woodland Permit**

In the matter of Emerson Park JSP17-10, motion to **deny** the Woodland Permit... *(because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

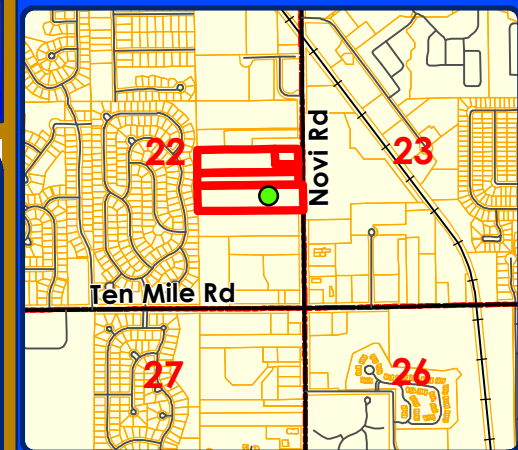
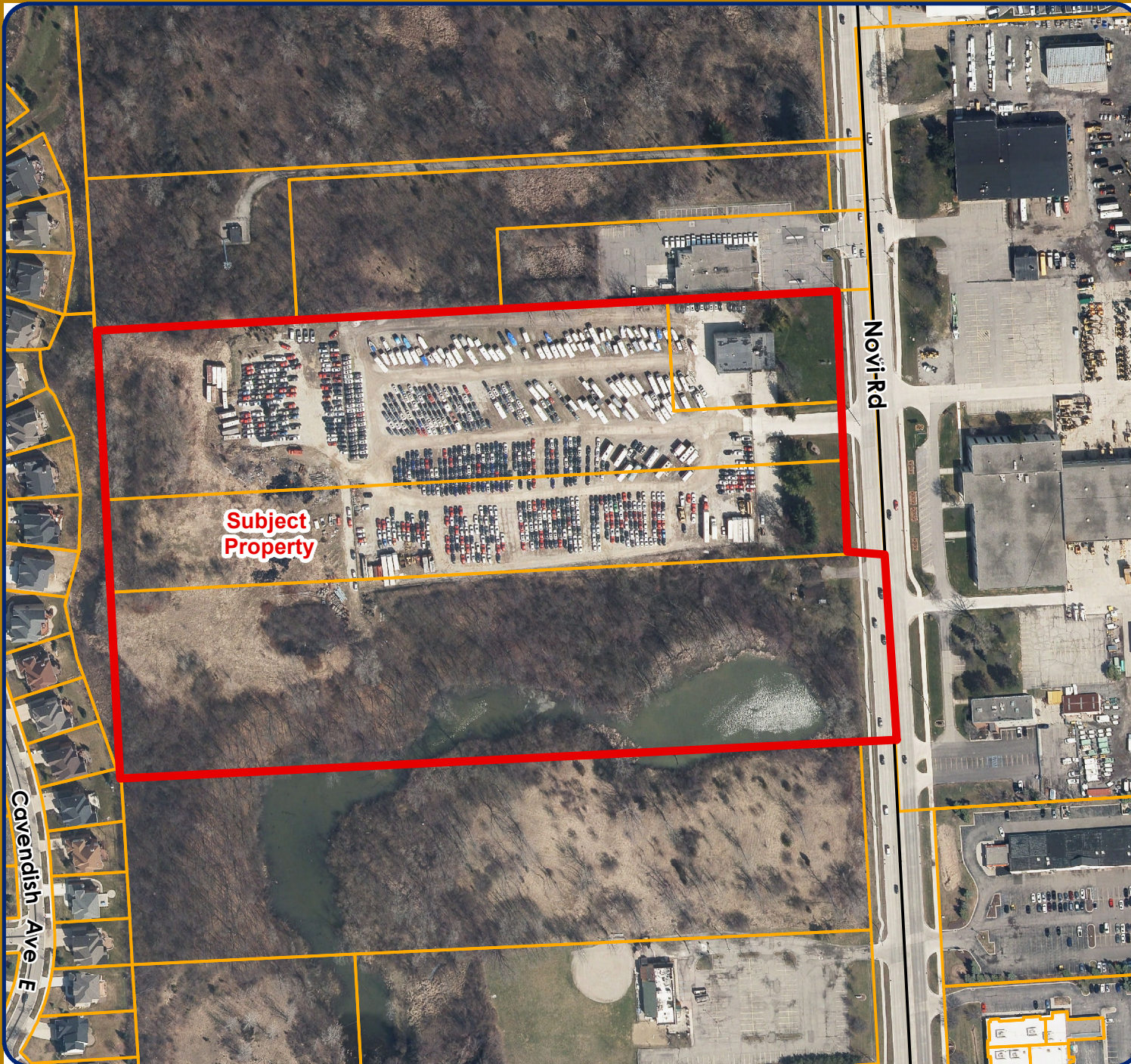
**-AND-**

**Denial – Stormwater Management Plan**

In the matter of Emerson Park JSP17-10, motion to **deny** the Stormwater Management Plan... *(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

MAPS  
Location  
Zoning  
Future Land Use  
Natural Features

# 17-10 Emerson Park Location Map



### LEGEND

 Sections



## City of Novi

Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
Novi, MI 48375  
cityofnovi.org

Map Author: Sri Komaragiri  
Date: 02/01/18  
Project: 17-10 Emerson Park  
Version #: 1



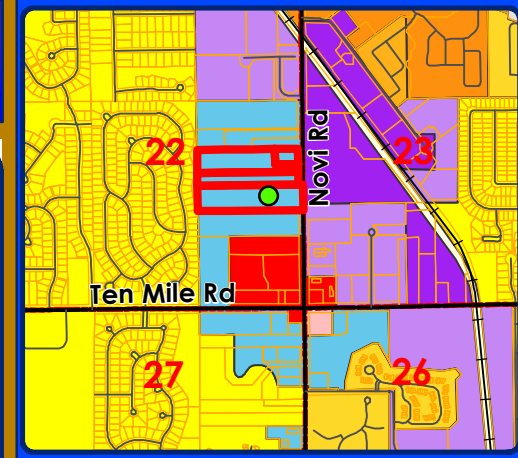
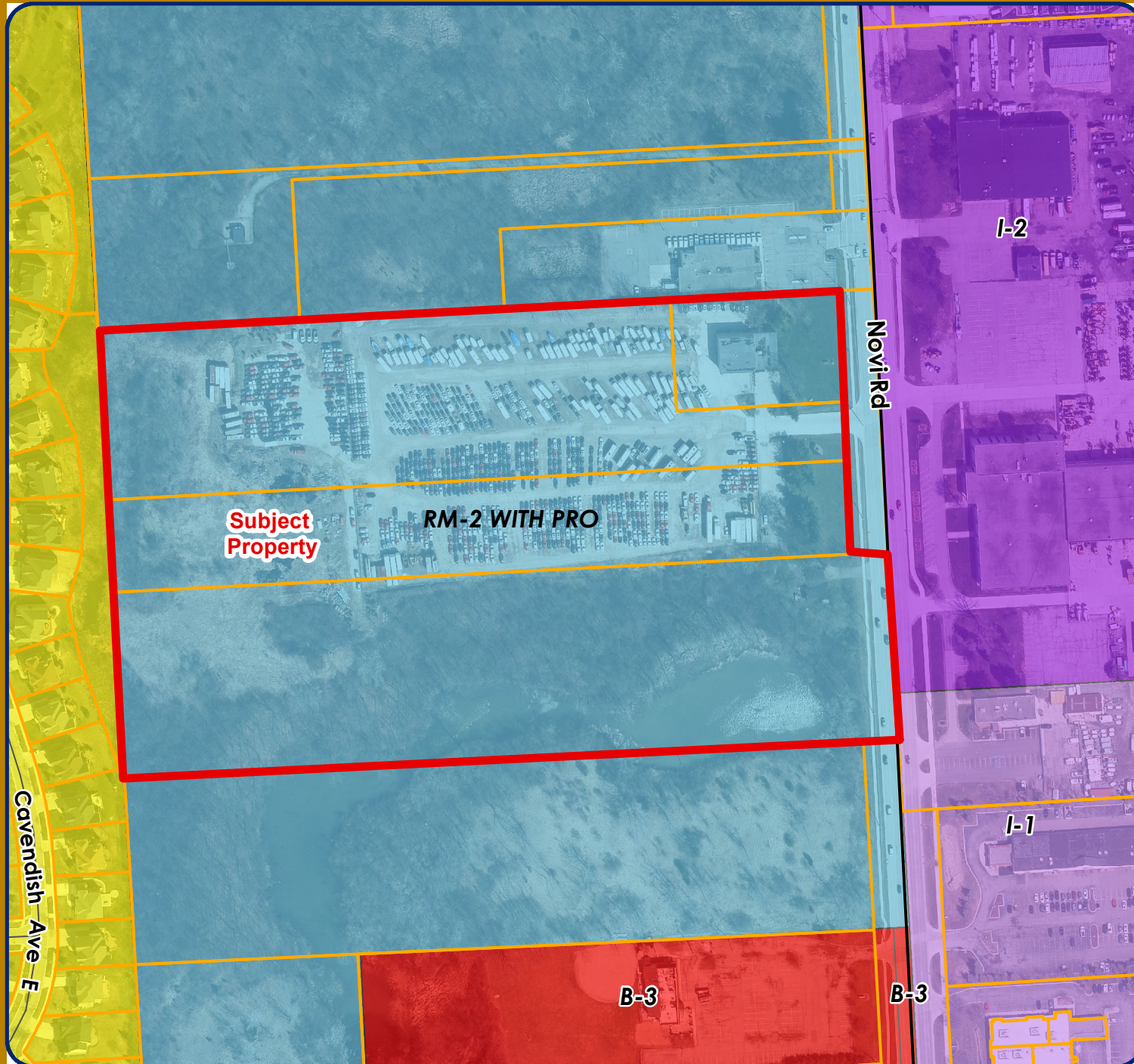
1 inch = 250 feet



### MAP INTERPRETATION NOTICE

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

# 17-10 Emerson Park Zoning Map



**LEGEND**

- Sections
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- RM-2: High-Density Multiple Family
- B-1: Local Business District
- B-3: General Business District
- I-1: Light Industrial District
- I-2: General Industrial District
- OS-1: Office Service District
- P-1: Vehicular Parking District
- TC-1: Town Center -1 District

**CITY OF NOVI**  
 City of Novi  
 Dept. of Community Development  
 City Hall / Civic Center  
 45175 W Ten Mile Rd  
 Novi, MI 48375  
 cityofnovi.org

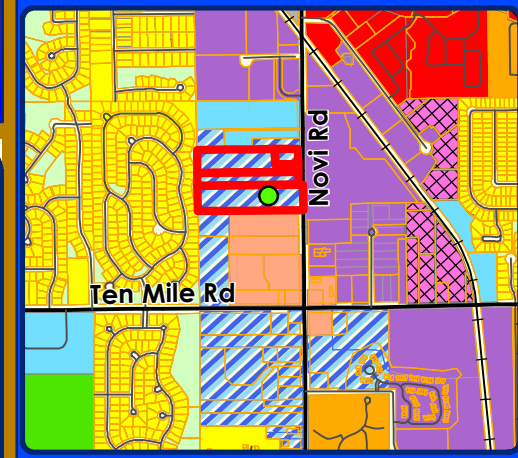
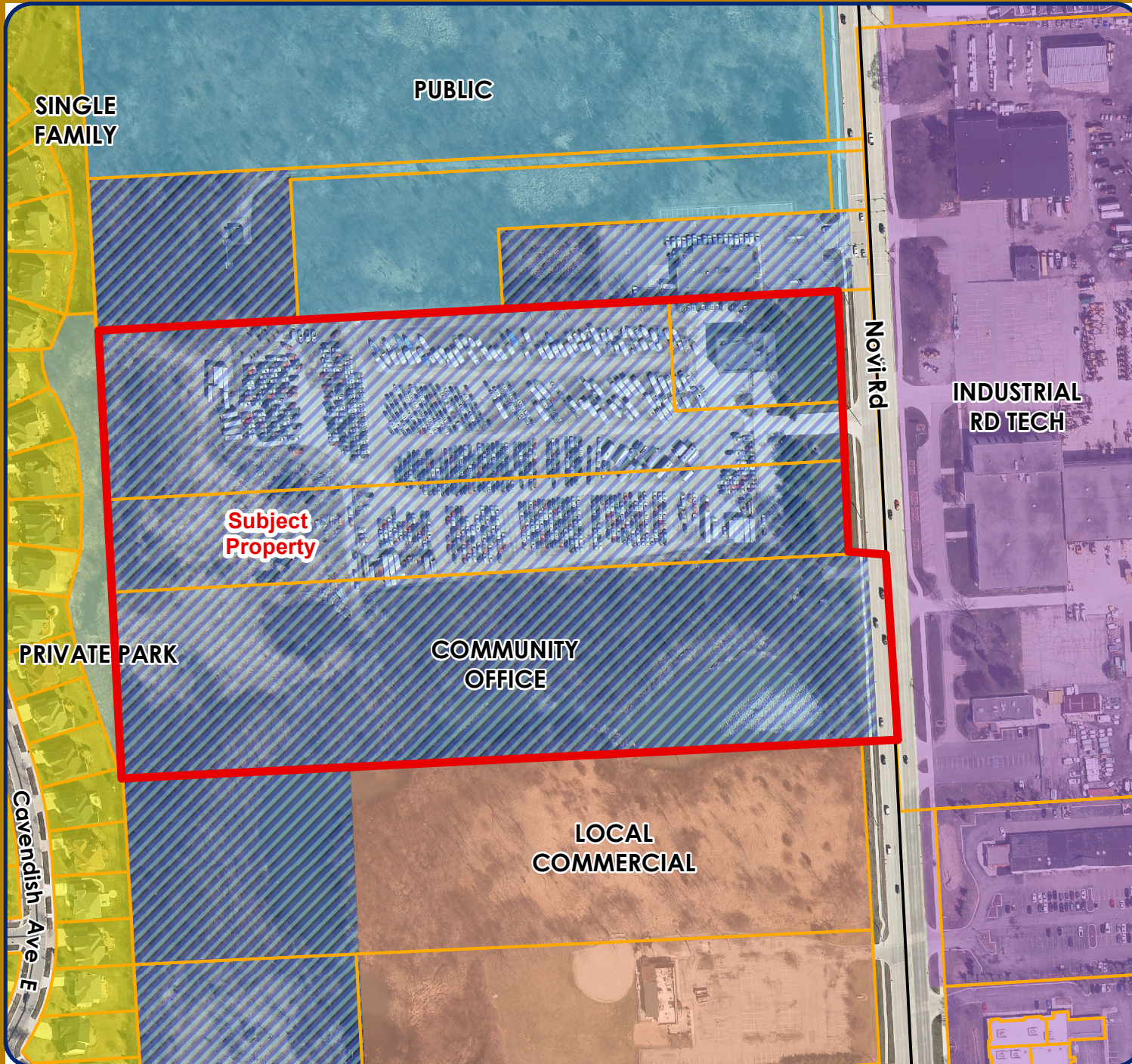
Map Author: Sri Komaragiri  
 Date: 02/01/18  
 Project: 17-10 Emerson Park  
 Version #: 1

0 55 110 220 330 Feet  
 1 inch = 250 feet

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# 17-10 Emerson Park Future Land Use Map



**LEGEND**

FUTURE LAND USE

- Single Family
- Multiple Family
- Community Office
- Industrial RD Tech
- Heavy Industrial
- Local Commercial
- TC Commercial
- TC Gateway
- Public
- Public Park
- Private Park
- Cemetery


**CITY OF**  
  
**NOVI**  
cityofnovi.org

**City of Novi**  
Dept. of Community Development  
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Feet  
0 55 110 220 330

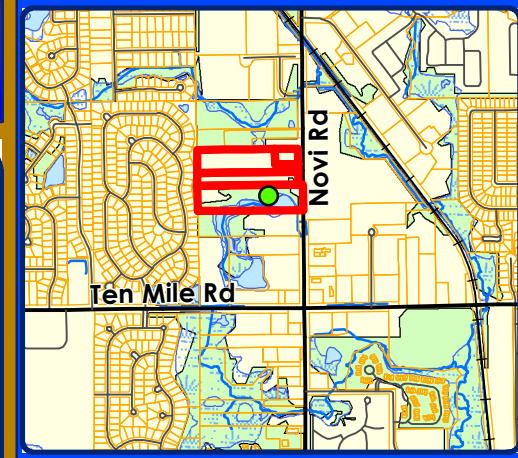
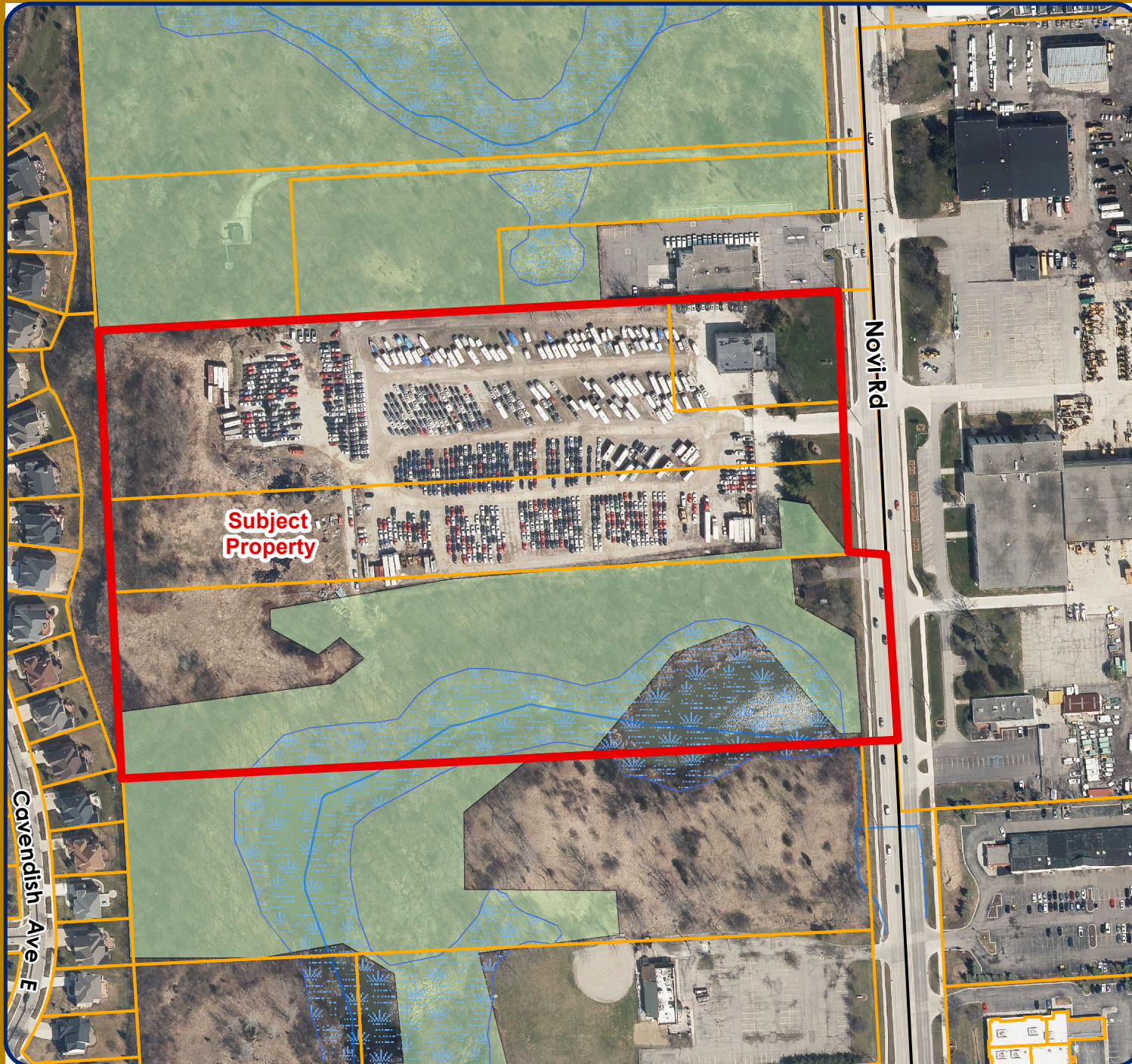
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# 17-10 Emerson Park Natural Features Map



- LEGEND**
- WETLANDS
  - WOODLANDS

**City of Novi**  
Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
Novi, MI 48375  
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Map Author: Sri Komaragiri  
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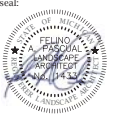


**SITE PLAN**

(Full plan set available for viewing at the Community Development Department.)



**FELINO A. PASCUAL**  
and ASSOCIATES  
Community Land Planner and  
registered Landscape Architect  
24333 Orchard Lake Rd., Suite G  
Farmington Hills, MI 48336  
ph. (248) 557-5588  
fax. (248) 557-5416



client:  
**PULTE HOMES**  
100 Bloomfield Hills  
Parkway, Suite 150,  
Bloomfield Hills, Michigan  
48304

project:  
**EMERSON PARK**  
A planned residential  
community

project location:  
City of Novi, MI  
Novi Road

sheet title:  
**OVERALL PLANTING  
PLAN VIEW**

job no./issue/revision date:

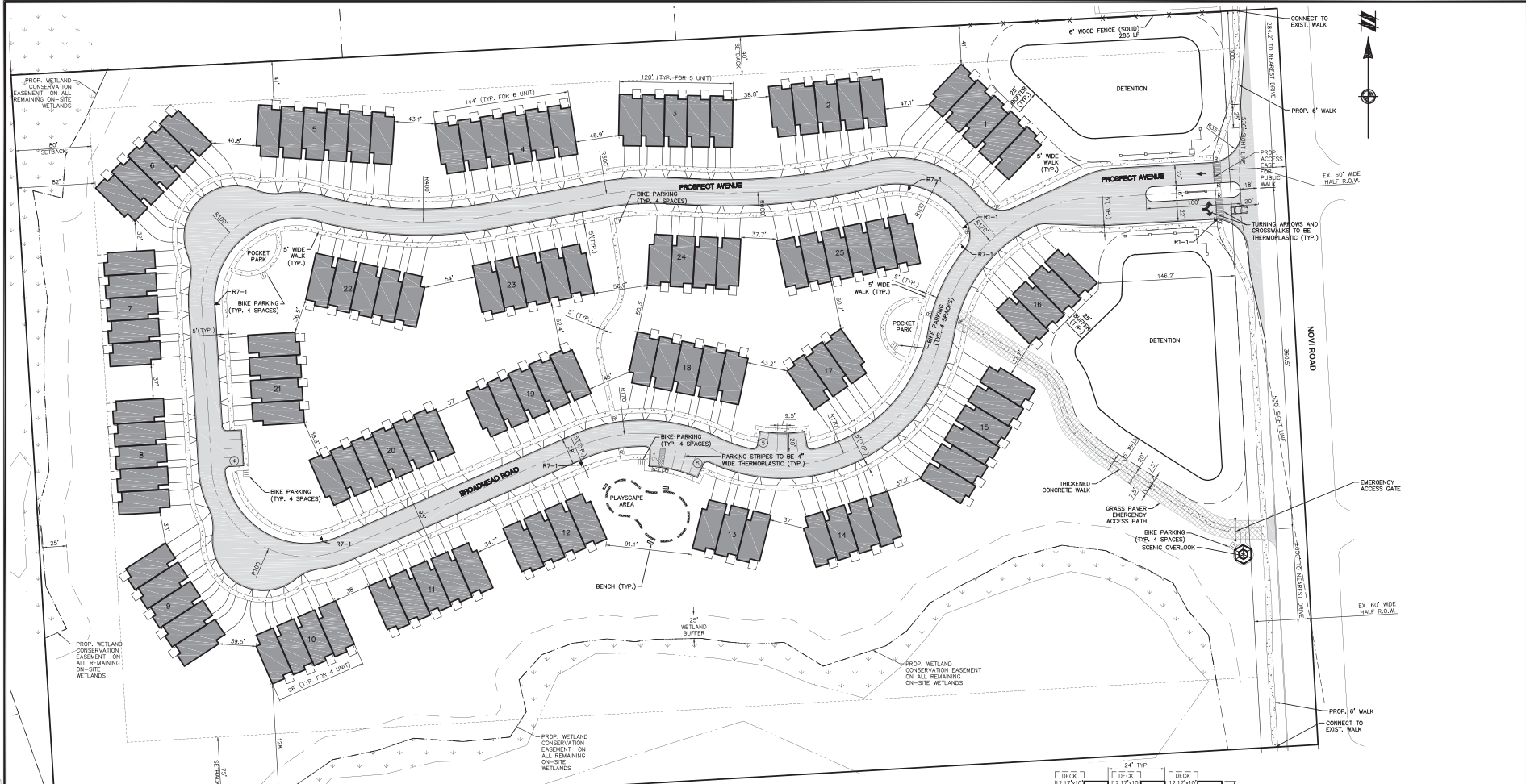
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LS17.025.03	PSF	3-1-2017
LS17.025.05	PSF	5-22-2017
LS17.025.05	PSF	5-30-2017
		6-5-2017
LS17.025.07	PSF	7-24-2017
LS17.025.08	color	8-21-2017

drawn by:  
**JP, KM, CS**  
checked by:  
**FP**  
date:  
**1-19-2017**  
notice:  
Copyright © 2017  
This document and the subject matter contained therein is proprietary and to be used only for the individual and written permission of Felino Pascual and Associates.  
Do Not scale drawings. Use figured dimensions only



The location and dimensions of existing underground utilities as shown on this drawing are only approximate; no guarantee is either expressed or implied as to the completeness of accuracy; contractor shall be exclusively responsible for determining the location and elevation prior to the start of construction.

project no:  
**LS17.025.01**  
sheet no:



**LAYOUT NOTES**

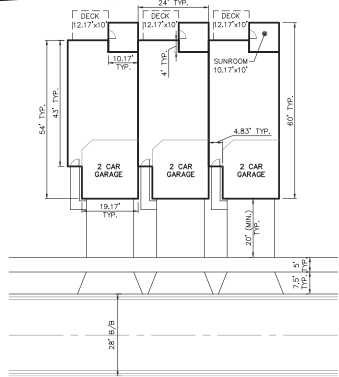
1. THE PROPOSED DEVELOPMENT IS PLANNED TO BE DEVELOPED USING THE CITY'S PLANNED ZONING OVERLY DEVELOPMENT OPTION TO ALLOW FOR THE MULTI-FAMILY USE.
2. LANDSCAPE BUFFERS WILL BE PROVIDED ON THE SIDES OF THE DEVELOPMENT AS SHOWN BUFFERING THE PROPERTY FROM THE ADJACENT USES.
3. THE DEVELOPMENT WILL CONTAIN PRIVATE ROADS. THE PROPOSED CONNECTION WILL BE COORDINATED WITH THE ROAD COMMISSION OF OAKLAND COUNTY.
4. ALL SIDEWALKS AND SIDEWALK RAMPS SHALL BE ADA COMPLIANT.
5. ALL SIDEWALKS SHALL COMPLY WITH BARRIER FREE DESIGN STANDARDS.
6. SEE DETAIL SHEET FOR EYEBROW DIMENSIONAL DETAIL.
7. SIGHT DISTANCE TRIANGLES SHOWN FOR 3.5' EYE HEIGHT IN ACCORDANCE WITH MDOT TRAFFIC AND SAFETY STANDARDS FEBRUARY 6, 2008 (2004 ASHTO, EXHIBITS 9-55, 661). SIGHT DISTANCE FOR SPEED LIMIT ON 45 MPH AND 4 LANES OF TRAFFIC IS 500'.
8. PER PLANNING COMMENT UNIT GARAGE AND DRIVE WAY PARKING EXCEEDS CITY PARKING REQUIREMENTS. NO PARKING SIGNAGE TO BE PLACED IN AREAS OF ROAD CURVE RADIUS LESS THAN 230'.
9. PROPOSED BUILDING FACADES WILL HAVE A MINIMUM OF 50% BRICK OR STONE.
10. THE TOTAL PROPOSED FLOOR SQUARE FOOTAGE OF EACH DWELLING UNIT IS 1,400 SQUARE FEET.
11. ALL ON-SITE SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE UNMUTED.

**CITY BUILDING SEPARATION TABLE**

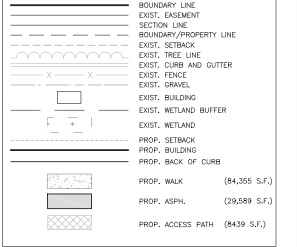
SPACE BETWEEN BUILDINGS	Min (feet)	Max (feet)	LL (feet)	UL (feet)	Required spacing (feet)	Proposed spacing (feet)
18.2	32	32	corner	corner	30.0	37.2
28.3	32	32	42.3	43.7	37.7	38.8
38.4	32	32	39.5	40.9	34.7	45.9
48.5	32	32	45.3	35.2	34.8	43.1
58.6	32	32	corner	corner	30.0	46.8
68.7	32	32	corner	corner	30.0	53.0
78.8	32	32	38.8	38.8	34.3	39.0
88.9	32	32	41.1	29.1	33.0	33.0
99.0	32	32	corner	corner	30.0	39.5
109.1	32	32	50.0	50.0	30.0	38.0
119.2	32	32	39.7	39.7	34.6	34.7
129.3	32	32	corner	corner	30.0	51.1
139.4	32	32	36.9	39.1	30.7	37.0
149.5	32	32	35.4	35.3	29.8	37.2
159.6	32	32	12.8	3.1	24.0	37.7
179.7	32	32	corner	corner	30.0	43.2
189.8	32	32	50.6	35.4	29.0	40.0
199.9	32	32	38.8	38.8	34.3	37.0
210.0	32	32	39.9	39.9	34.3	39.8
220.1	32	32	corner	corner	30.0	36.5
230.2	32	32	46.5	23.4	33.5	34.0
240.3	32	32	30.8	38.7	33.9	36.8
250.4	32	32	38.7	48.6	33.9	37.7
260.5	32	32	48.0	22.4	33.1	30.7
270.6	32	32	76	94.3	49.7	50.3
280.7	32	32	72.4	88.2	47.4	52.4
290.8	32	32	144.0	144.0	93.9	93.9

**BUILDING ROOM COUNT TABLE**

BUILDING NUMBER	LENGTH	HEIGHT	NUMBER OF THREE BEDROOM UNITS PER UNIT**	ROOM COUNT (FOUR ROOMS PER UNIT)**
1	120	32	5	20
2	120	32	5	20
3	120	32	5	20
4	144	32	6	24
5	144	32	6	24
6	120	32	5	20
7	120	32	5	20
8	120	32	5	20
9	120	32	5	20
10	96	32	4	16
11	120	32	5	20
12	96	32	4	16
13	72	32	3	12
14	96	32	4	16
15	144	32	6	24
16	96	32	4	16
17	72	32	3	12
18	120	32	5	20
19	120	32	5	20
20	144	32	6	24
21	96	32	4	16
22	120	32	5	20
23	120	32	5	20
24	144	32	6	24
25	144	32	6	24
TOTALS			120	480
ALLOWED PER RMA-2 ZONING				420



**LEGEND**



**TYPICAL UNIT DETAIL**

PRELIMINARY - NOT FOR CONSTRUCTION

Know what's below.  
Call before you dig.

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**NOTICE:**  
CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE RESPONSIBILITY OF THE DEVELOPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES.

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**ATWELL**  
866.850.0000 www.atwell-group.com  
3115 WOODLAND STREET  
ANN ARBOR, MICHIGAN 48106  
481-234-8944-4000

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SECTION 22  
TOWN 1 NORTH, RANGE 8 EAST  
CITY OF NOVI  
OAKLAND COUNTY, MICHIGAN

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PULTE HOMES OF MICHIGAN, LLC  
EMERSON PARK  
PRELIMINARY SITE PLAN  
LAYOUT PLAN

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DATE: NOVEMBER 27, 2017

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REVISIONS

NO.	DESCRIPTION
1	PROF. WALK (84,355 S.F.)
2	PROF. ASPHL (29,589 S.F.)
3	PROF. ACCESS PATH (8439 S.F.)

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SCALE: 1" = 50 FEET  
DRAWN BY: JSC  
CHECKED BY: JSC  
P.L.M.: MB  
JOB #: 16020400  
FILE CODE: 16020400  
SHEET NO: 06

## PLANNING REVIEW



## PLAN REVIEW CENTER REPORT

January 18, 2018

### Planning Review

Emerson Park

JSP17-10 with Rezoning 18.717

#### PETITIONER

Pulte Homes of Michigan, LLC

#### REVIEW TYPE

Preliminary Site Plan

#### PROPERTY CHARACTERISTICS

<b>Section</b>	22	
<b>Site Location</b>	West of Novi (on Novi Road); North of W Ten Mile Road; Parcel Id's: 50-22-22-400-006, 007, 019 and 020	
<b>Site School District</b>	Novi Community School District	
<b>Site Zoning</b>	RM-2 (High Density Multi-Family Residential) with a Planned Rezoning	
<b>Adjoining Zoning</b>	North	OS-1 Office Service
	East	I-2 General Industrial
	West	R-4 One Family Residential
	South	OS-1 Office Service
<b>Current Site Use</b>	RV storage Facility (Non-conforming use)	
<b>Adjoining Uses</b>	North	Postal Office/vacant
	East	Single Family Residences
	West	Churchill Crossing
	South	Vacant
<b>Site Size</b>	24 Acres (Net Site Acreage 19.4 Acres)	
<b>Plan Date</b>	November 27, 2017	

#### PROJECT SUMMARY

The applicant has proposed a 120-unit multi-family for-sale residential development with frontage and access to Novi Road. The Plan shows two detention ponds on either side of the proposed entrance Boulevard. The detention ponds also serve as screening from Novi Road frontage. The concept plan also includes pocket parks and pedestrian walks spread throughout the development for active and passive recreation. All proposed internal roads are private. This is not a gated community. The subject property a 24-acre property located on the west side of Novi Road and north side of Ten Mile Road (Section 22)

The rezoning request from a Zoning Map amendment from OS-1 (Office Service) to RM-2 (high Density Multi-Family Residential) utilizing the City's Planned Rezoning Overlay (PRO) option is tentatively approved by Council on October 23, 2017. The project is scheduled for the consideration of final approval of PRO concept plan and PRO agreement on February 5, 2018. The current review is based on the draft PRO agreement.

#### RECOMMENDATION

**Approval of the Preliminary Site Plan with phasing is recommended.** The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations that were approved by City

Council as part of PRO Concept plan approval. **Planning Commission's approval of Preliminary Site Plan, Wetland Permit, Woodland Permit and Storm Water Management Plan approval is required.**

### PRO OPTION

The PRO option creates a "floating district" with a conceptual plan attached to the rezoning of a parcel. As part of the PRO, the underlying zoning is proposed to be changed (in this case from OS-1 to RM-2) and the applicant enters into a PRO agreement with the City, whereby the City and the applicant agree to tentative approval of a conceptual plan for development of the site. Following final approval of the PRO concept plan and PRO agreement, the applicant will submit for Preliminary and Final Site Plan approval under standard site plan review procedures. The PRO runs with the land, so future owners, successors, or assignees are bound by the terms of the agreement, absent modification by the City of Novi. If the development has not begun within two years, the rezoning and PRO concept plan expires and the agreement becomes void.

### PROJECT REVIEW HISTORY

Action summaries from all the public meetings listed below are provided in the attachment.

- On December 12, 2016, a Pre-application meeting was held.
- On March 28, 2017, the plan was presented to Master Planning and Zoning Committee. The change from Office to residential use received favorable comments from the Committee with a note to work with the staff on proposed density.
- On May 10, 2017, the Planning Commission held a Public hearing and postponed their recommendation.
- On August 23, 2017, Planning Commission considered the proposed development and made a favorable recommendation to Council.
- On October 09, 2017, City Council considered the proposed development for tentative approval of proposed zoning amendment and postponed their decision.
- On October 23, 2017, City Council reconsidered the proposed zoning amendment and tentatively approved the concept plan and directed the staff and the applicant to work on the PRO agreement.

### ORDINANCE REQUIREMENTS

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. **Please see the attached charts for information pertaining to ordinance requirements.** Items in **bold** below must be addressed and incorporated as part of the stamping set submittal.

1. **Phasing:** Draft PRO agreement refers to building all site improvements in one phase and possible phasing on building the units. **A phasing plan is not required when site improvements are built in one phase.**
2. **Public Benefits:** The applicant is required to submit a layout for the 10 mile pathway along with Preliminary site plan. **The applicant is currently working with staff to realign the layout from what is shown on the submitted plan for constructability reasons.**
3. **Deviations:** Please list all the deviations included in the draft PRO agreement on the site plan.
4. **Facade:** Façade is currently not recommending approval of submitted elevations. The current submittal includes elevations of 4 types of individual units. They do not conform to the code as listed in the draft PRO agreement. **The applicant agreed to provide composite elevations of 3-unit, 4-unit, 5-unit and 6-unit elevations. These are required to be submitted for staff review no later than January 23<sup>rd</sup> to be able to provide a recommendation prior to Planning Commission meeting.**

5. **Lighting and Photometric Plan:** The subject property is abutting residential district. Clarify if street lighting is proposed within the site. Provide a lighting and photometric plan or a justification that the spillover will be kept at 0 along property line abutting residential.
6. **Wetland and Woodland Conservation Easements:** Draft of conservation easement are required prior to stamping set submittal.
7. **Property Combination:** All four lots should be combined into prior to stamping set approval. Please contact Assessing at 248-347-0485 for more details.

#### **MAJOR CONDITIONS OF PLANNED REZONING OVERLAY AGREEMENT**

Some selected conditions that are part of draft PRO are included below. Please refer to the draft PRO agreement for other details

1. All building elevations, which shall be in a housing style consistent with the conceptual renderings attached and incorporated hereto as Exhibit C (the "Conceptual Renderings") shall be reviewed and approved by the City's Façade Consultant. Applicant shall submit elevations with material percentages meeting or exceeding the requirements of the Façade Ordinance at the time of Preliminary Site Plan submittal. At a minimum, all front building facades shall have brick or stone up to the second floor roof line, and all side and rear facades shall have brick or stone up to the second floor beltline, as required by the City's Façade Ordinance. If the façade deviates from the approved stamping sets then revised plans must be submitted to the Planning Division for review and approval prior to submittal of building permits.
2. Upgraded garage doors with windows shall be provided.
3. Additional buffer screening must be provided for existing residences on the adjacent property along the western property boundary.
4. Applicant shall submit Woodland and Wetland Conservation Easements for any areas of remaining wetland, remaining woodland, and replacement trees within 60 days of the issuance of the City of Novi Woodland and Wetland and Watercourse permits, as set forth in the City's Woodland and Wetland Consultant's Reports.

#### **ORDINANCE DEVIATIONS**

The following deviations from the standards of the zoning ordinance are hereby authorized pursuant to §7.13.D.i.c (2) of the City's Zoning Ordinance.

1. Planning Deviation from Sec. 3.1.8.D of Zoning Ordinance for reduction of the minimum required building side setbacks by 34 feet (Required 75 feet, provided 41 feet), since the buildings are low profile and would not necessarily benefit from the additional setback standards;
2. Planning Deviation from Sec. 3.8.1.B of Zoning Ordinance for exceeding the maximum number of rooms (423 maximum allowed, 480 provided), because the development will be built using only three-bedroom units, instead of a mix of 2- and 3-bedroom units, which could have met the ordinance standards, but would not meet the Applicant's understanding of the current market demand for this type of housing;
3. Planning Deviation from Sec. 3.8.2.D of Zoning Ordinance for not meeting the minimum orientation for all buildings along an outer perimeter property line (45 degrees required, varied angles provided), since the buildings are low profile and would not necessarily benefit from the modified building orientation;
4. Planning Deviation from Sec. 5.16.5.C of Zoning Ordinance for reduction of minimum required sidewalk width for bike parking (6 feet required, 5 feet provided), as the deviation will have minimal practical effect;

5. Landscape deviation from Sec. 5.5.3.E.i.c and 5.5.3.E.ii of Zoning Ordinance for reduction/absence of street trees along Novi Road frontage (16 trees required, 16 proposed contingent on RCOC approval), because the Road Commission for Oakland County may not allow the plantings for site distance and traffic safety reasons;
6. Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for not meeting the minimum height of landscape berm along North boundary (4.5-6 feet required, 2-2.5 feet provided along approximately 950 of 1340 linear feet of boundary);
7. Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for absence of required berm along a portion of northern property boundary (no berm proposed for approximately 390 linear feet), due to location of proposed detention ponds;
8. Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms along the entire southern property boundary (4.5-6 feet required, 0 feet provided), due to existing wetlands;
9. Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms within Novi Road green belt (779 Linear feet frontage required, 0 feet provided), due to distance between Novi Road and the proposed homes, the proposed detention ponds, and heavy landscaping;
10. Landscape deviation from Sec 5.5.3.E.ii of Zoning Ordinance for proposing sub canopy trees In lieu of some of the required Deciduous Canopy of Large evergreen trees (approximately 21 percent of required Canopy trees are replaced with sub canopy trees), as it will provide additional visual and species diversity to the site;
11. City Council variance from Sec. 4.04, Article IV, Appendix Subdivision ordinance of City Code of Ordinances for absence of a stub street required at 1,300 feet interval along the property boundary to provide connection to the adjacent property boundary, due to conflict with existing wetlands;
12. City Council variance from Chapter 7(c)(1) of Engineering Design manual for reducing the distance between the sidewalk and back of the curb to a minimum of 7.5 feet because of the low speed of traffic expected through the site.
13. No deviation for Facade Ordinance requirements is granted. The applicant shall provide revised conceptual elevations that conform to-or exceed Ordinance requirements.

#### **PUBLIC BENEFIT UNDER PRO ORDINANCE**

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In its development of the Land under the PRO Plan, Applicant shall provide the following Public Benefits/Public Improvements:

1. The completed project will remove a long-standing non-conforming use.
2. The construction of an off-site approximately 380-foot long pedestrian path connection in the area between the entrance of Churchill Crossing Subdivision at Churchill Boulevard and the existing retail complex at the northwest corner of Novi Road and Ten Mile Road, on the north side of Ten Mile Road west of Novi Road[at Applicant's own expense (except for the cost of acquiring the necessary easement or right-of-way, which acquisition shall be pursued by the City)
3. Construction of pocket parks with bench seating and a play scape area within the Development as shown in the PRO Plan.
4. Additional buffer screening for existing residences on the adjacent property along the western property boundary.
5. Providing an alternative housing type to serve the needs of age groups at the younger end of the spectrum, including millennials and young families.

#### **SUMMARY OF REVIEWS**

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- a. Engineering Review: Additional comments to be addressed with Final Site Plan. Engineering recommends conditional approval.
- b. Landscape Review: Additional comments to be addressed with Final Site Plan. Landscape recommends conditional approval.



- c. Wetlands Review: A City of Novi Non-minor Wetland Permit and Buffer Authorization are required for the proposed impacts to wetlands and regulated wetland setbacks. Additional comments to be addressed with Final Site Plan. Wetlands recommend approval.
- d. Woodlands Review: A City of Novi Woodland permit is required for the proposed impacts to regulated woodlands. Additional comments to be addressed with Final Site Plan. Woodlands recommend approval.
- e. Traffic Review: Additional comments to be addressed with Final Site Plan. Traffic recommends conditional approval.
- f. Facade Review: Façade is recommending approval. Please bring the samples to the Planning Commission meeting.
- g. Fire Review: Additional comments to be addressed with Final Site Plan. Fire recommends conditional approval.

#### **NEXT STEP: PLANNING COMMISSION MEETING**

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The site plan is scheduled for a public hearing on February 07, 2018 meeting. Please provide the following **no later than January 26, 2018**.

1. Original Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters.
3. A color rendering of the Site Plan, if any.

#### **FINAL SITE PLAN SUBMITTAL**

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After receiving the Preliminary Site Plan approval, please submit the following for Final site plan review and approval

1. Seven copies of Final Site Plan addressing all comments from Preliminary review
2. Response letter **addressing all comments and refer to sheet numbers where the change is reflected**
3. [Final Site Plan Application](#)
4. [Final Site Plan Checklist](#)
5. Engineering Cost Estimate
6. Landscape Cost Estimate
7. [Other Agency Checklist](#)
8. [Hazardous Materials Packet](#) (Non-residential developments)
9. [Non-Domestic User Survey](#) (Non-residential developments)
10. [No Revision Façade Affidavit](#) (if no changes are proposed for Façade)
11. Legal Documents as required
12. Drafts of any legal documents (note that off-site easements need to be executed and any on-site easements need to be submitted in draft form before stamping sets will be stamped)

#### **ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER**

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After receiving Final Site Plan approval, please submit the following for Electronic stamping set approval:

1. Plans addressing the comments in all of the staff and consultant review letters in PDF format.
2. Response letter addressing all comments in ALL letters and ALL charts and **refer to sheet numbers where the change is reflected.**

#### **STAMPING SET APPROVAL**

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Stamping sets are still required for this project. After having received all of the review letters from City staff the applicant should make the appropriate changes on the plans and submit **10 size 24" x 36" copies with original signature and original seals,** to the Community Development Department for final Stamping Set approval.

## **SITE ADDRESSING**

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**A new address is required for this project.** The applicant should contact the Building Division for an address prior to applying for a building permit. Building permit applications cannot be processed without a correct address. The address application can be found by clicking on this [link](#).

Please contact the Ordinance Division 248.735.5678 in the Community Development Department with any specific questions regarding addressing of sites.

## **STREET AND PROJECT NAME**

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**This project does not require approval from the Street and Project Naming Committee.** Please contact Hannah Smith (248-347-0579) in the Community Development Department for additional information. The address application can be found by clicking on this [link](#).

## **PRE-CONSTRUCTION MEETING**

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**A Pre-Construction meeting is required for this project.** 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. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah Marchioni [248.347.0430 or [smarchioni@cityofnovi.org](mailto:smarchioni@cityofnovi.org)] in the Community Development Department.

## **CHAPTER 26.5**

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Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni at 248-347-0430 for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5607 or [skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org).



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Sri Ravali Komaragiri – Planner

### **Attachments:**

1. Planning Review Chart
2. Action Summaries: Previous Meetings
3. Residential entryway lighting

## **ACTION SUMMARIES: PREVIOUS MEETINGS**

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### **On October 09, 2017, City Council considered the proposed development for tentative approval of proposed zoning amendment and postponed their decision based on the following motion:**

*To postpone the consideration of the request of Pulte Homes of Michigan, LLC, for Emerson Park, JSP 17-10, with Zoning Map Amendment 18.717, to rezone property in Section 22, located on the west side of Novi Road between Ten Mile Road and Grand River Avenue from OS-1, (Office Service) to RM-2 (High Density Multiple Family Residential) subject to a Planned Rezoning Overlay (PRO) Agreement, and corresponding PRO Concept Plan.*

### **On October 23, 2017, City Council reconsidered the proposed zoning amendment and tentatively approved the concept plan and directed the staff and the applicant to work on the PRO agreement based on the following motion:**

*Tentative indication that Council may approve the request of Pulte Homes of Michigan, LLC, for Emerson Park, JSP 17-10, with Zoning Map Amendment 18.717, to rezone property in Section 22, located on the west side of Novi Road between Ten Mile Road and Grand River Avenue from OS-1, (Office Service) to RM-2 (High Density Multiple Family Residential) subject to a Planned Rezoning Overlay (PRO) Agreement, and corresponding PRO Concept Plan, and direction to the City Attorney to prepare a proposed PRO Agreement with the following considerations:*

1. *The PRO Agreement shall contain the following Ordinance deviations, for which the City Council makes the finding, for the reasons stated, that each Zoning Ordinance provision sought to be deviated would, if the deviation were not granted, prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas (which is hereby granted):*
  - a. *Planning Deviation from Sec. 3.1.8.D of Zoning Ordinance for reduction of the minimum required building side setbacks by 34 feet (Required 75 feet, provided 41 feet), since the buildings are low profile, and would not necessarily benefit from the additional setback standards;*
  - b. *Planning Deviation from Sec. 3.8.1.B of Zoning Ordinance for exceeding the maximum number of rooms (423 maximum allowed, 480 provided), because the development will be built using only three-bedroom units, instead of a mix of 2- and 3-bedroom units, which could have met the ordinance standards, but would not meet the developer's understanding of the current market demand for this type of housing;*
  - c. *Planning Deviation from Sec. 3.8.2.D of Zoning Ordinance for not meeting the minimum orientation for all buildings along an outer perimeter property line (45 degrees required, varied angles provided), since the buildings are low profile and would not necessarily benefit from the modified building orientation;*
  - d. *Planning Deviation from Sec. 5.16.5.C of Zoning Ordinance for reduction of minimum required sidewalk width for bike parking (6 feet required, 5 feet provided), as the deviation will have minimal practical effect;*
  - e. *Landscape deviation from Sec. 5.5.3.E.i.c and 5.5.3.E.ii of Zoning Ordinance for reduction/absence of street trees along Novi Road frontage (16 trees required, 16 proposed contingent on RCOC approval), because the Road Commission for Oakland County may not allow the plantings for site distance and traffic safety reasons;*
  - f. *Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for not meeting the minimum height of landscape berm along North boundary (4.5-6 feet required, 2-2.5 feet provided along approximately 950 of 1340 linear feet of boundary);*
  - g. *Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for absence of required berm along a portion of northern property boundary (no berm proposed for approximately 390 linear feet), due to location of proposed detention ponds;*



- b. The proposed plan meets several objectives of the Master Plan, as noted later in this review letter, including:
  - i. Provide residential developments that support healthy lifestyles by providing neighborhood open space between neighborhoods (by including the proposed play space, pedestrian walks and pocket parks).
  - ii. Provide a wide range of housing opportunities that meet the needs of all demographic groups including but not limited to singles, couples, first time home buyers, families and the elderly the applicant has indicated that the proposed townhouse development meets the demand for "missing middle" housing, and will also provide an attractive alternative to the single family residential homes, by providing another option for young families and millennials to purchase property in the City.
  - iii. Protect and maintain the City's woodlands, wetlands, water features and open space (A majority of site is preserved in Open space. Over 99.5% of wetlands are preserved and only 20 % of woodlands are proposed to be removed as a part of the development plans).
- c. The proposed density of 6.2 units to the acre in attached townhouse format provides reasonable transition between the existing recommended density of no more than 3.3 units to the acre on the single family detached residential property to the west, and the non-residential uses proposed and existing along Novi Road.
- d. The development plan will remove a long-standing non-conforming outdoor storage yard use of the property.
- e. The City's Traffic Engineering Consultant has reviewed the Rezoning Traffic Impact Study and found that a reduction of 1,402 trips per day, 264 trips for the AM peak hour, and 225 trips for the PM peak hour is estimated based on the zoning change from Office to residential.
- f. Submittal of a Concept Plan and any resulting PRO Agreement provides assurance to the Planning Commission and to the City Council of the manner in which the property will be developed, and offers benefits that would not be likely to be offered under standard development options.
- g. This tentative approval does not guarantee final PRO Plan approval or approval of PRO Agreement.

**On August 23, 2017, Planning Commission considered the proposed development and made a favorable recommendation to Council based on the following motion:**

In the matter of Emerson Park JSP 17-10 and Zoning Map Amendment 18.717, motion to recommend approval to the City Council to rezone the subject property OS-1 (Office Service) to RM-2 (High Density Multi-Family Residential) with a Planned Rezoning Overlay Concept Plan

1. The recommendation shall include the following ordinance deviations for consideration by the City Council:
  - a. Planning Deviation from Sec. 3.1.8.D of Zoning Ordinance for reduction of the minimum required building side setbacks by 34 feet (Required 75 feet, provided 40 feet);
  - b. Planning Deviation from Sec. 3.8.1.B of Zoning Ordinance for exceeding the maximum number of rooms (423 maximum allowed, 480 provided);
  - c. Planning Deviation from Sec. 3.8.2.D of Zoning Ordinance for not meeting the minimum orientation for all buildings along an outer perimeter property line (45 degrees required, varied angles provided);
  - d. Planning Deviation from Sec. 5.16.5.C of Zoning Ordinance for reduction of minimum required sidewalk width for bike parking (6 feet required, 5 feet provided);
  - e. Landscape deviation from Sec. 5.5.3.E.i.c and 5.5.3.E.ii of Zoning Ordinance for reduction/absence of street trees along Novi Road frontage; (16 trees required, proposed contingent on RCOC approval);

- f. Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for not meeting the minimum height of landscape berm along North boundary (4.5-6 feet required, 2.5 – 3 feet provided along approximately 950 of 1340 linear feet of boundary);*
  - g. Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for absence of required berm along a portion of northern property boundary (no berm proposed for approximately 390 linear feet) due to location of proposed detention ponds;*
  - h. Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms along the entire southern property boundary (4.5-6 feet required, 0 feet provided) due to existing wetlands;*
  - i. Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms within Novi Road green belt (779 Linear feet frontage required, 0 feet provided) due to distance across detention ponds to buildings and heavy landscaping;*
  - j. Landscape deviation from Sec 5.5.3.E.ii of Zoning Ordinance for proposing sub canopy trees in lieu of some of the required Deciduous Canopy of Large evergreen trees (Approximately 21 percent of required Canopy trees are replaced with sub canopy trees) as it will provide additional visual and species diversity to the site;*
  - k. City Council variance from Sec. 4.04, Article IV, Appendix C-Subdivision ordinance of City Code of Ordinances for absence of a stub street required at 1,300 feet interval along the property boundary to provide connection to the adjacent property boundary, due to conflict with existing wetlands;*
  - l. City Council variance from Chapter 7(c)(1) of Engineering Design manual for reducing the distance between the sidewalk and back of the curb. A minimum of 7.5 feet can be supported by staff.*
2. Applicant complying with the conditions listed in the staff and consultant review letters.
3. If the City Council approves the rezoning, the Planning Commission recommends the following conditions be requirements of the Planned Rezoning Overlay Agreement:
- a. The Zoning Map amendment from OS-1 (Office Service) to RM-2 (High Density Multi-Family Residential) limits the maximum residential density to 6.2 dwelling units per acre (DUA) with a maximum of 120 three bedroom units, whereas the maximum allowed for proposed rezoning RM-2 is 15.6 DUA;*
  - b. Minor modifications to the approved Planned Rezoning Overlay Concept Plan (PRO) can be approved administratively, upon determination by the City Planner, that the modifications are minor, do not deviate from the general intent of the approved PRO Concept plan and result in reduced impacts on the surrounding development and existing infrastructure.*
  - c. Applicant complying with the conditions listed in the staff and consultant review letters.*
4. While the applicant has offered a public benefit for improvements along Novi Road, details of the actual improvements being offered need to be further evaluated and resolved through discussion with the Planning Commission and the City Council with regard to the types of improvements, and the overall costs for any easements, installation and maintenance of such improvements.

This motion is made because

- a. The applicant has presented a reasonable alternative to the Master Plan for Land Use recommendation of Community Office for the parcel as indicated in the applicant's letter dated March 20, 2017, noting the appropriateness of a residential use for the site given the close proximity to Main Street and Town Center and the ability for additional nearby residents to add vibrancy and support for local businesses,*
- b. The proposed plan meets several objectives of the Master Plan, as noted later in this review letter, including:*

- i. Provide residential developments that support healthy lifestyles by providing neighborhood open space between neighborhoods (by including the proposed play space, pedestrian walks and pocket parks).
  - ii. Provide a wide range of housing opportunities that meet the needs of all demographic groups including but not limited to singles, couples, first time home buyers, families and the elderly (the applicant has indicated that the proposed townhouse development meets the demand for "missing middle" housing, and will also provide an attractive alternative to the single family residential homes, by providing another option for young families and millennials to purchase property in the City.
  - iii. Protect and maintain the City's woodlands, wetlands, water features and open space (A majority of site is preserved in Open space. Over 99.5% of wetlands are preserved and only 20 % of woodlands are proposed to be removed as a part of the development plans).
- c. The proposed density of 6.2 units to the acre in attached townhouse format, provides a reasonable transition between the existing recommended density of no more than 3.3 units to the acre on the single family detached residential property to the west, and the non-residential uses proposed and existing along Novi Road.
  - d. The development plan will remove a long-standing non-conforming outdoor storage yard use of the property.
  - e. The City's Traffic Engineering Consultant has reviewed the Rezoning Traffic Impact Study and found that a reduction of 1,402 trips per day, 264 trips for the AM peak hour, and 225 trips for the PM peak hour is estimated based on the zoning change from Office to residential.
  - f. Submittal of a Concept Plan and any resulting PRO Agreement, provides assurance to the Planning Commission and to the City Council of the manner in which the property will be developed, and offers benefits that would not be likely to be offered under standard development options.

**On May 10, 2017 Planning Commission held a Public hearing and postponed their decision for a later meeting based on the following motion:**

*In the matter of Princeton Park JSP 17-10 and Zoning Map Amendment 18.717, motion postpone making a recommendation on the proposed PRO and Concept Plan to allow the applicant time to consider further modifications to the Concept Plan as discussed in the review letters, or provide additional usable open space on site prior to consideration by the City Council to rezone the subject property OS-1 (Office Service) to RM-2 (High Density Multi-Family Residential) with a Planned Rezoning Overlay This recommendation is made for the following reasons:*

- a. The Planning Commission would like the applicant to further discuss whether the proposed density and change of use is compatible with the existing and future land use in the surroundings. Existing land use patterns indicate a concentration of commercial and industrial uses along Novi Road. The applicant may consider reducing the density to conform to maximum density for RM-1, as RM-1 would be compatible with the low intensity office/retail development along Novi Road. RM-1 also creates a zone of transition from the nonresidential districts and major thoroughfares to the existing Single-Family development (to west) as intended in our Zoning Ordinance.
- b. The Planning Commission may wish to further discuss if the proposed public benefits outweigh the detriments of the zoning change. Most of the benefits offered by the applicant may be considered incidental benefits from the development. Some of the benefits, though substantial, are dependent on other agencies approval. The applicant should initiate preliminary discussions with other agencies involved and provide more information to justify the viability of the benefits being offered.

- c. *The Concept Plan appears to provide the minimum required usable common open space as required by the code, with the central open space, three pockets and a play area for the enjoyment by the residents. The initial plan reviewed at the Pre-Application meeting included one additional pocket park and additional pedestrian connections on the central courtyard, which have now been removed from the plan.*
- d. *The Concept plan can be revised to address design and layout concerns shared in the Planning review. The proposed layout plans a dense development in order to maximize the number of units on site. Modifications to site design can result in reduction of density, more usable open space, creates interest and breaks the continuous layout. Reduction in density to be consistent with maximum allowed in RM-1 will allow more compatible zoning and reduce deviations with regards to building orientation and number of rooms.*
- e. *Additional discussion is needed regarding the other Traffic and Engineering issues listed in the staff and consultant review letters. The proposed site entry is aligned with the existing Michigan CAT entrance. Traffic Engineers have inquired how proposed signal timing and other optimization changes listed in the Traffic Study will affect the intersection of the existing CAT driveway and site driveway along Novi Road. The proposed density may require additional contractual sewer capacity downstream of Eight Mile Road as the proposed density increase results in higher sanitary sewer discharge*





**PLANNING REVIEW CHART: RM-2 with PRO**

**Review Date:** January 18, 2018  
**Review Type:** Preliminary Site Plan  
**Project Name:** JSP 17-10 Emerson Park  
**Plan Date:** November 27, 2017  
**Prepared by:** Sri Komaragiri, Planner  
**E-mail:** skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant and/or the Planning Commission Public hearing for Preliminary Site Plan. Underlined items need to be addressed on the Final Site Plan.

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted August 25, 2010)</i>	Community Office	120 Unit residential development with PRO overlay; The proposed units will be "for sale" 6.2 maximum dwelling units per acre (Three Bedrooms)	Yes?	<b>Council tentatively approved the PRO plan on October 23, 2017.</b>
<b>Area Study</b>	The site does not fall under any special category	NA	NA	
<b>Zoning</b> <i>(Effective December 25, 2013)</i>	OS-1 Office Service	RM-2 High Density Multi-Residential District	No	
<b>Uses Permitted</b> (Sec 3.1.21.B & C)	Office and Service Uses Sec. 3.1.21.B. - Principal Uses Permitted. Sec. 3.1.21.C. – Special Land Uses Permitted.	Multi-Family Residential	No	<b>The proposed rezoning category would allow Multi-family uses</b>
<b>Phasing</b>		In the response letter, the applicant indicated two phases	Yes	<b>Draft PRO agreement indicates that all site improvements will be built in one phase.</b>
<b>Planned Rezoning Overlay Document Requirements (SDM: <u>Site development Manual</u>)</b>				
<b>Written Statement</b> <i>(Site Development Manual)</i>	Potential development under the proposed zoning and current zoning	Included in the draft PRO agreement	Yes	
<i>The statement should describe the following</i>	Identified benefit(s) of the development	Included in the draft PRO agreement	Yes	<b>Applicant is currently working on revised the sidewalk out along 10 mile that is being offered as a Public benefit</b>
	Conditions proposed for inclusion in the PRO Agreement (i.e., Zoning Ordinance deviations, limitation on total units, etc)	Included in the draft PRO agreement	Yes	
<b>Traffic Impact Study</b>	A Traffic Impact Study	TIS was reviewed and	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<i>(Site development manual)</i>	as required by the City of Novi Site Plan and Development Manual.	approved as part of PRO approval		
<b>Community Impact Statement</b> <i>(Sec. 2.2)</i>	<ul style="list-style-type: none"> <li>- Over 30 acres for permitted non-residential projects</li> <li>- Over 10 acres in size for a special land use</li> <li>- All residential projects with more than 150 units</li> <li>- A mixed-use development, staff shall determine</li> </ul>	Not required	NA	
<b>Height, bulk, density and area limitations</b> <i>(Sec 3.1.8.D)</i>				
<b>Frontage on a Public Street.</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	The site has frontage and access to Novi Road	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit: in Acres <i>(Sec 3.8.1)</i>	RM-1 and RM-2 Required Conditions			
<b>Minimum Zoning Lot Size</b> for each Unit: Width in Feet <i>(Sec 3.8.1)</i>				
<b>Open Space Area</b> <i>(Sec 3.1.8.D)</i>	200 sf of Minimum usable open space per dwelling unit For a total of 123 dwelling units, <u>required</u> Open Space: 24,600 SF	The plans appear to have the required open space area among the pocket parks, central courtyard and the building patios	Yes	
<b>Maximum % of Lot Area Covered</b> <i>(By All Buildings)</i>	45%	17 %	Yes	
<b>Building Height</b> <i>(Sec. 3.20)</i>	65 ft. or 5 stories whichever is less	2 stories and 32 feet	Yes	
<b>Minimum Floor Area per Unit</b> <i>(Sec. 3.1.8.D)</i>	Efficiency	400 sq. ft.	Not proposed	NA
	1 bedroom	500 sq. ft.	Not proposed	NA
	2 bedroom	750 sq. ft.	Not proposed	Yes
	3 bedroom	900 sq. ft.	1,860 sq. ft.	Yes
	4 bedroom	1,000 sq. ft.	Not Proposed	NA
<b>Maximum Dwelling Unit Density/Net Site Area</b> <i>(Sec. 3.1.8.D)</i>	Efficiency	Max 10%	Not proposed	Yes
	1 bedroom	31.1 Max 33%	Not proposed	
	2 bedroom	20.7	Not proposed	

Item	Required Code		Proposed	Meets Code	Comments
	3+ bedroom	15.8	6.2 DUA  Total site area: 24 Acres ROW Area: 1.1 Acres Wetlands: 3.5 Acres Net Site Area: 19.4 Acres		
<b>Residential Building Setbacks (Sec 3.1.8.D)</b>					
Front (along Novi Road)	75 ft.		147 ft.	yes	<i>North setback deviation is included in the draft PRO agreement</i>
Rear (West)	75 ft.		82 ft.	Yes	
Side (North & South)	75 ft.		North: 41 ft. South: 128 ft. (including decks)	No	
<b>Parking Setback (Sec 3.1.8.D) (Sec 3.1.12.D) Refer to applicable notes in Sec 3.6.2</b>					
Front	20 ft.		20 ft. on all sides. Parking is provided in the garage and in front of the garage. Proposed parking along the streets meets the setback requirements	Yes	
Rear	10 ft.			Yes	
Side	10 ft.			Yes	
<b>Note To District Standards (Sec 3.6.2)</b>					
<b>Exterior Side Yard Abutting a Street (Sec 3.6.2.C)</b>	All exterior side yards abutting a street shall be provided with a setback equal to front yard.		No exterior side yards	NA	
<b>Off-Street Parking in Front Yard (Sec 3.6.2.E)</b>	Off-street parking is allowed in front yard		Parking is not proposed in the front yard	NA	
<b>Distance between buildings (Sec 3.6.2.H)</b>	It is governed by sec. 3.8.2 or by the minimum setback requirements, whichever is greater		RM-2 code has additional requirements for distance between buildings.	Yes	<b>See Comments on Page 8</b>
<b>Wetland/Watercourse Setback (Sec 3.6.2.M)</b>	A setback of 25ft from wetlands and from high watermark course shall be maintained		Wetlands exist on south and west side of the site. minimal impacts are proposed	Yes?	
<b>Parking setback screening (Sec 3.6.2.P)</b>	Required parking setback area shall be landscaped per sec 5.5.3.		Parking lots are not proposed	NA	
<b>Modification of parking setback requirements (Sec 3.6.2.Q)</b>	The Planning Commission may modify parking setback requirements based on its determination according to Sec 3.6.2.Q		None required	NA	

Item	Required Code	Proposed	Meets Code	Comments	
<b>RM-1 and RM-2 Required Conditions (Sec 3.8)&amp; (Sec 3.10)</b>					
<b>Total number of rooms</b> (Sec. 3.8.1)	For building less than four stories: Total No. of rooms < Net site area in SF/2000  <b>8,45,064 SF/2000 = 423</b>  For buildings more than four stories: Total No. of rooms < Net site area in SF/700	Total number of rooms = 480  All buildings are less than four stories	Yes	<i>Total proposed number of rooms is exceeding the maximum number of rooms allowed for this property.</i>  <i>This is included in the draft PRO agreement</i>	
<b>Public Utilities</b> (Sec. 3.8.1)	All public utilities should be available	All public utilities are available	Yes		
<b>Maximum Number of Units</b> (Sec. 3.8.1.A.ii)	Efficiency < 5 percent of the units	Not Proposed	NA		
	1 bedroom units < 20 percent of the units	Not Proposed	NA		
	Balance should be at least 2 bedroom units	All are either 3 or 4 bedroom units	Yes		
<b>Room Count per Dwelling Unit Size</b> (Sec. 3.8.1.C) <i>*An extra room such as den count towards an extra room</i>	<b>Dwelling Unit Size</b>	<b>Room Count *</b>	Yes	For the purpose of determining lot area requirements and density in a multiple-family district, a room is a living room, dining room or bedroom, equal to at least eighty (80) square feet in area. A room shall not include the area in kitchen, sanitary facilities, utility provisions, corridors, hallways, and storage. Plans presented showing one (1), two (2), or three (3) bedroom units and including a "den," "library," or other extra room shall count such extra room as a bedroom for the purpose of computing density.	
	Efficiency	1			Not proposed
	1 bedroom	2			Not proposed
	2 bedroom	3			Not proposed
	3 or more bedrooms	4			4 (2 bedroom units with a den are also calculated as 3 or more bedroom units)
<b>Setback along natural shore line</b> (Sec. 3.8.2.A)	A minimum of 150 feet along natural shore line is required.	No natural shore line exists within the property	NA		
<b>Structure frontage</b> (Sec. 3.8.2.B)	Each structure in the dwelling group shall front either on a dedicated public street or approved private drive.	All structures front on proposed private drive	Yes		

Item	Required Code	Proposed	Meets Code	Comments
<b>Maximum length of the buildings</b> (Sec. 3.8.2.C)	A single building or a group of attached buildings cannot exceed 180 ft.	144 ft.	Yes	
<b>Modification of maximum length</b> (Sec. 3.8.2.C)	Planning Commission may modify the extra length up to 360 ft. if	Applicant is not proposing extra length than allowed	NA	
	Common areas with a minimum capacity of 50 persons for recreation or social purposes			
	Additional setback of 1 ft. for every 3 ft. in excess of 180 ft. from all property lines.			
<b>Building Orientation</b> (Sec. 3.8.2.D)	Where any multiple dwelling structure and/or accessory structure is located along an outer perimeter property line adjacent to another residential or nonresidential district, said structure shall be oriented at a minimum angle of forty-five (45) degrees to said property line.	Buildings orientation do not meet the minimum requirement for all buildings	No	<i>This is included in the draft PRO agreement</i>
<b>Yard setback restrictions</b> (Sec. 3.8.2.E)	Within any front, side or rear yard, off-street parking, maneuvering lanes, service drives or loading areas cannot exceed 30% of yard area	No off-street parking or loading area is proposed	NA	
<b>Off-Street Parking or related drives</b> (Sec. 3.8.2.F)  Off-street parking and related drives shall be..	No closer than 25 ft. to any wall of a dwelling structure that contains openings involving living areas or	None proposed	Yes	
	No closer than 8 ft. for other walls or	Appears to be in conformance	Yes	
	No closer than 20 ft. from ROW and property line	Appears to be in conformance	Yes	
<b>Pedestrian Connectivity</b> (Sec. 3.8.2.G)	5 feet sidewalks on both sides of the Private drive are required to permit safe and convenient pedestrian access.	All sidewalks along the private drive are 5 feet wide.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	Where feasible sidewalks shall be connected to other pedestrian features abutting the site.	The plan proposed sidewalks on both sides of the streets, a pathway running north south in the central courtyard. There are sidewalk connections from the central sidewalk system to public sidewalks. An additional connection is provided to Novi Road which is also used as an emergency access path.	Yes	
	All sidewalks shall comply with barrier free design standards	Layout notes indicate that all sidewalks shall be ADA compliant	Yes	
<b>Minimum Distance between the buildings</b> (Sec. 3.8.2.H)	(Total length of building A + total length of building B + 2(height of building + height of building B))/6	All distances are in conformance with the requirement as listed on the plan.	Yes	
<b>Minimum Distance between the buildings</b> (Sec. 3.8.2.H)	In no instance shall this distance be less than thirty (30) feet unless there is a corner-to-corner relationship in which case the minimum distance shall be fifteen (15) feet.	Buildings are setback by at least 30 ft. from each other	Yes	
<b>Number of Parking Spaces</b> Residential, Multiple-family (Sec.5.2.12.A)	Two (2) for each dwelling unit having two (2) or less bedrooms and two and one-half (2 ½) for each dwelling unit having three (3) or more bedrooms <b>For 120 Three or more BR units, required spaces = 300 spaces</b>	Garage Spaces: 240 In front of Garage: 240 Along street: 14 <b>TOTAL PROVIDED: 494</b>	Yes	
<b>Parking Space Dimensions and Maneuvering Lanes</b> (Sec. 5.3.2)	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping	- 28 ft. two way drives - 90° Parking proposed along private drives	Yes	<b>Refer to Traffic comments for comments on parking dimensions</b>
<b>Parking stall located adjacent to a parking</b>	- shall not be located closer than twenty-five	Does not apply	NA	

Item	Required Code	Proposed	Meets Code	Comments
<b>lot entrance</b> (public or private) (Sec. 5.3.13)	(25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer			
<b>Barrier Free Spaces</b> <i>Barrier Free Code</i>	2 accessible space (including 1 Van accessible) for every 26 to 50 spaces	1 barrier free space is provided near play scape area.	No?	<b>Propose the required sign</b>
<b>Barrier Free Space Dimensions</b> <i>Barrier Free Code</i>	- 8' wide with an 8' wide access aisle for van accessible spaces - 5' wide with a 5' wide access aisle for regular accessible spaces	It does not indicate access aisle  Signage is not indicated at the moment		
<b>Barrier Free Signs</b> <i>Barrier Free Code</i>	One sign for each accessible parking space.			
<b>Minimum number of Bicycle Parking</b> (Sec. 5.16.1) <u>Multiple-family residential</u>	One (1) space for each five (5) dwelling units <b>Required: 24 Spaces</b>	Total Proposed: 24 Spaces See sheet Ls-5	Yes	
<b>Bicycle Parking General requirements</b> (Sec. 5.16)	No farther than 120 ft. from the entrance being served	Yes	Yes?	<i>The deviation for 5 foot sidewalk is included in the draft PRO agreement</i>
	When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations	Bicycle Parking is proposed in multiple (7) locations.		
	Spaces to be paved and the bike rack shall be inverted "U" design Shall be accessible via 6 ft. paved sidewalk	All sidewalks are 5 feet wide. It is residential development		
<b>Bicycle Parking Lot layout</b> (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	Locations are indicated, but the layout is not specified	Yes?	<u>Parking detail provided on sheet 09 is typical detail. Please show site specific detail</u>
<b>Accessory and Roof top Structures</b>				
<b>Dumpster</b> <i>Sec 4.19.2.F</i>	- Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking	Curb side Refuse pick up is being proposed for this residential development	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>setback</li> <li>- If no setback, then it cannot be any closer than 10 ft, from property line.</li> <li>- Away from Barrier free Spaces</li> </ul>			
<b>Dumpster Enclosure</b> <i>Sec. 21-145. (c)</i> <i>Chapter 21 of City Code of Ordinances</i>	<ul style="list-style-type: none"> <li>- Screened from public view</li> <li>- A wall or fence 1 ft. higher than height of refuse bin</li> <li>- And no less than 5 ft. on three sides</li> <li>- Posts or bumpers to protect the screening</li> <li>- Hard surface pad.</li> <li>- Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>	Not proposed	NA	
<b>Roof top equipment and wall mounted utility equipment</b> <i>Sec. 4.19.2.E.ii</i>	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Not Applicable	NA	
<b>Roof top appurtenances screening</b>	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	Not Applicable	NA	
<b>Sidewalks and Other Requirements</b>				
<b>Non-Motorized Plan</b>	<p>Proposed Off-Road Trails and Neighborhood Connector Pathways.</p> <p>A residential neighborhood connector is indicated on the master plan connecting Novi Road to residential neighborhood to the west</p>	The applicant is building a key segment along 10 Mile road as a public benefit	NA	
<b>Sidewalks</b> <i>(Subdivision Ordinance: Sec. 4.05)</i>	Sidewalks are required on both sides of proposed drives	Sidewalks are proposed on both sides of the proposed private drive	Yes	



Item	Required Code	Proposed	Meets Code	Comments
<b>Public Sidewalks</b> (Chapter 11, Sec.11-276(b), Subdivision Ordinance: Sec. 4.05)	A 6 foot sidewalk is required along Novi Road	6 foot sidewalk existing along Novi Road	Yes	
<b>Entryway lighting</b> Sec. 5.7	One street light is required per entrance.	Eight pole lights are proposed along Novi Road frontage  Decorative pole and acorn style fixtures are proposed	Yes	<u>Applicant to work with engineering and DTE on the location and type of the fixtures are proposed in the right of way</u>
<b>Building Code and Other Requirements</b>				
<b>Building Code</b>	Building exits must be connected to sidewalk system or parking lot.	All exits are connected to internal sidewalk through the driveways	Yes	
<b>Design and Construction Standards Manual</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	
<b>General layout and dimension of proposed physical improvements</b>	Location of all existing and proposed buildings, proposed building heights, 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).	Provided	Yes	<b>Refer to Traffic comments for additional information requested.</b>
<b>Economic Impact</b>	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Information not provided	No?	<b>Information required prior to Planning Commission meeting</b>
<b>Other Permits and Approvals</b>				
<b>Development/ Business Sign</b>  (City Code Sec 28.3)  Sign permit applications may be reviewed an part of	The leading edge of the sign structure shall be a minimum of 10 ft. behind the right-of-way.  Entranceway shall be a maximum of 24 square feet, measured by	A monument sign is proposed in the entrance boulevard  No dimensions are provided for the lettering placed upon the sign structure.		<u>The current review and approval does not include review of proposed sign locations. The applicant should apply for a sign permit for proper review.</u>

Item	Required Code	Proposed	Meets Code	Comments
<i>Preliminary Site Plan or separately for Building Office review.</i>	completely enclosing all lettering within a geometric shape.  Maximum height of the sign shall be 5 ft.	The height of the sign complies with the ordinance allowance of 5 ft.		
<b>Development and Street Names</b>	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	The applicant has recently changed the name to Emerson park from Princeton Park.  All development and street names are approved	Yes	
<b>Property Split</b>	The proposed property split must be submitted to the Assessing Department for approval.	The subject property is proposing a combination of four lots.	Yes	<u>The applicant must create this parcel prior to Stamping Set approval. Plans will not be stamped until the parcel is created.</u>
<b>Other Legal Requirements</b>				
<b>PRO Agreement (Sec. 7.13.2.D(3))</b>	A PRO Agreement shall be prepared by the City Attorney and the applicant (or designee) and approved by the City Council, and which shall incorporate the PRO Plan and set forth the PRO Conditions and conditions imposed	Staff and the applicant worked on a draft PRO agreement.	NA	<b>The agreement is scheduled for Council consideration and approval on February 05, 2018.</b>  <b>Planning Commission cannot consider Preliminary Site Plan unless Council approves the PRO agreement</b>
<b>Master Deed/Covenants and Restrictions</b>	Applicant is required to submit this information for review with the Final Site Plan submittal	Not applicable at this moment	NA	<u>A Master Deed draft shall be submitted prior to Stamping Set approval.</u>
<b>Conservation easements</b>	Conservation easements may be required for woodland impacts	A wetland and woodland easements are required as part of the draft PRO agreement	NA	<u>The following documents will be required prior to stamping set approval.</u>
<b>Lighting and Photometric Plan (Sec. 5.7)</b>				
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Site lighting includes pole lighting along Novi road and bollard lighting within the site.		<b>A lighting and photometric plan is not required until Final site plan, unless the site abuts residential development. Provide more information to demonstrate that the spillover will be kept under 0 fc along</b>

Item	Required Code	Proposed	Meets Code	Comments
				property boundary abutting residential.
<b>Lighting Plan</b> (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures			
<b>Building Lighting</b> (Sec. 5.7.2.A.iii)	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.			
<b>Lighting Plan</b> (Sec. 5.7.2.A.ii)	Specifications for all proposed & existing lighting fixtures			
	Photometric data			
	Fixture height			
	Mounting & design			
	Glare control devices (Also see Sec. 5.7.3.D)			
	Type & color rendition of lamps			
	Hours of operation			
<b>Required Conditions</b> (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses)			
<b>Required Conditions</b> (Sec. 5.7.3.B)	<ul style="list-style-type: none"> <li>- Electrical service to light fixtures shall be placed underground</li> <li>- Flashing light shall not be permitted</li> <li>- Only necessary lighting for security purposes &amp; limited operations shall be permitted after a site's hours of operation</li> </ul>			

Item	Required Code	Proposed	Meets Code	Comments
<b>Security Lighting</b> <i>(Sec. 5.7.3.H)</i>  Lighting for security purposes shall be directed only onto the area to be secured.	- All fixtures shall be located, shielded and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred			
<b>Required Conditions</b> <i>(Sec.5.7.3.E)</i>	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1			
<b>Required Conditions</b> <i>(Sec. 5.7.3.F)</i>	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps			
<b>Min. Illumination</b> <i>(Sec. 5.7.3.k)</i>	Parking areas: 0.2 min			
	Loading & unloading areas: 0.4 min			
	Walkways: 0.2 min			
	Building entrances, frequent use: 1.0 min			
	Building entrances, infrequent use: 0.2 min			
<b>Max. Illumination adjacent to Non-Residential</b> <i>(Sec. 5.7.3.K)</i>	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle			
<b>Cut off Angles</b> <i>(Sec. 5.7.3.L)</i>	when adjacent to residential districts - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle			

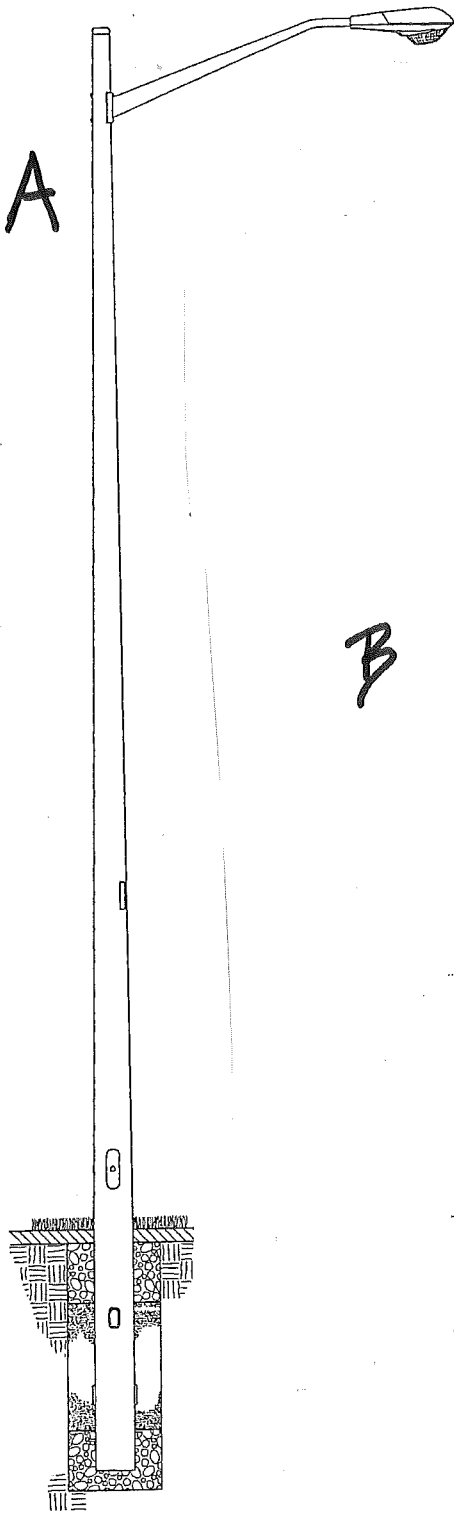
**NOTES:**

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4 and 5 of the zoning ordinance for further details
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

## RESIDENTIAL ENTRYWAY LIGHTING

1. One light per entrance is required by the City.
2. City pays for one (1) light per entrance if you chose Option A.
3. Any of the three decorative options (referred to as DTE lights) listed in the attached PDF will be developer's responsibility.
4. Street lights within public right of way have to be one of the four in the PDF.
5. Private street lighting, which is developers responsibility does not have to be one of the four options. If you chose to use the DTE lights within the development along private streets, you need to work with the City.
6. Refer to Section 5.7 EXTERIOR LIGHTING of our zoning ordinance for other applicable standards
7. You can contact Darcy Rechten at [248.735.5695](tel:248.735.5695) for further details.
8. See attached lighting options.

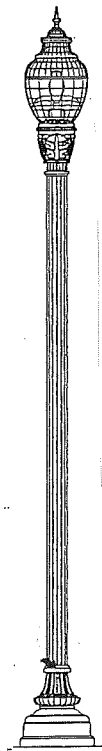
# RESIDENTIAL DEVELOPMENT ENTRANCE LIGHTING OPTIONS



SILVER  
 CODE 80 - 30'  
 CODE 81 - 30' DUAL  
 CODE 82 - 40'  
 CODE 83 - 40' DUAL

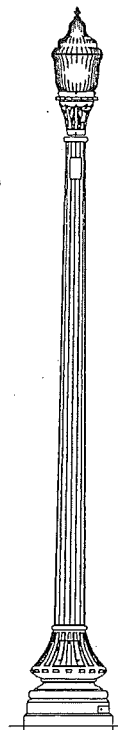
BLACK  
 CODE 70 - 30'  
 CODE 71 - 30' DUAL  
 CODE 72 - 40'  
 CODE 73 - 40' DUAL

B



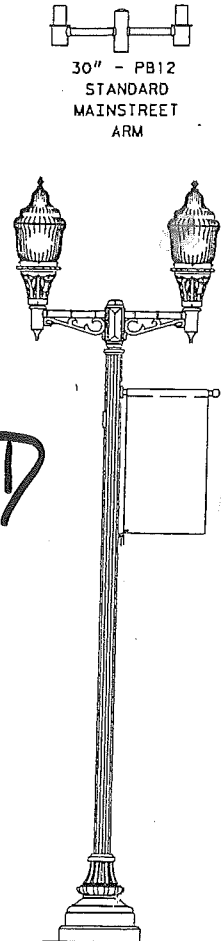
12'  
 5" DIA.  
 HAZEL PARK  
 WADSWORTH  
 POST &  
 WASHINGTON  
 POSTLITE

C



12'  
 MAINSTREET  
 POST W/  
 GRANVILLE  
 LUMINAIRE  
 & LEAF  
 HOUSING

D



12'  
 WADSWORTH  
 POST W/  
 GRANVILLE  
 LEAF LUM'S,  
 BANNER ARM,  
 TIE DOWN &  
 MAINSTREET  
 38" PB32  
 DECORATIVE  
 ARM

30" - PB12  
 STANDARD  
 MAINSTREET  
 ARM

## ENGINEERING REVIEW



# PLAN REVIEW CENTER REPORT

January 19, 2018

## Engineering Review

JSP17-0010

Emerson Park Preliminary Site Plan

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### Applicant

Pulte Homes

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: N. of 10 Mile Road and W. of Novi Road
- Site Size: 24 acres
- Plan Date: April 3, 2017
- Design Engineer: Atwell – Matt Bush, P.E.

### Project Summary

- Construction of a 120 unit attached multi-family subdivision on approximately 24 acres. Site access would be provided by a new roadway with a single curb cut onto Novi Road.
- Water service would be provided by tapping the existing 24-inch water main on the west side of Novi Road.
- Sanitary sewer service would be provided by connection to an existing manhole on the 8-inch sanitary sewer on the west side of Novi Road.
- Storm water would be collected on site and detained in a proposed on-site basin.

### Recommendation

**The Preliminary Site Plan and Preliminary Storm Water Management plan can be recommended for approval, with items to be address with Final Site Plan.**

### Comments:

The Preliminary 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 with Final Site Plan submittal:



General

1. Correct Note 4. on Proposed Deviations that a distance of 7.5 feet from back of curb is proposed where 10 feet is required in the Engineering Design Manual.
2. Correct Note 2. on General Notes that contractor must obtain right-of-way permits from both the City of Novi and the Road Commission for Oakland County (RCOC).
3. Provide the City's standard detail sheets for water main, sanitary sewer, storm sewer, and pathway and boardwalks at the time of the Stamping Set submittal (do not include these sheets in the Final Site Plan submittal). These details are currently being updated and the newly revised standard details will be available on the City's website by the time of stamping set printing.
4. Any traffic signs in the RCOC right-of-way will be installed by RCOC.
5. Provide a traffic control plan for the proposed construction activity in the Novi Road right-of-way.
6. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
7. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
8. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
9. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.
10. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.
11. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur.

Water Main

12. Indicate that a tapping sleeve, valve and well is required at the connection to the existing water main.
13. Provide a profile for all proposed water main 8-inch and larger.
14. Indicate water main pipe material and sizes and show all building leads.
15. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

### Sanitary Sewer

16. Provide the diameter and material type for all proposed and existing sanitary sewer.
17. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
18. Provide a note on the Utility Plan and sanitary profile stating the sanitary lead will be buried at least 5 feet deep where under the influence of pavement.
19. Seven (7) sealed sets of revised utility plans along with the MDEQ permit application (04/14 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets. Also, the MDEQ can be contacted for an expedited review by their office.

### Storm Sewer

20. Provide site drainage area map and storm sewer sizing calculations.
21. A minimum cover depth of 3 feet shall be maintained over all storm sewers. Grades shall be elevated and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
22. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
23. Match the 0.80 diameter depth above invert for pipe size increases.
24. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.
25. Submit a request for variance from the Design and Construction standards where runoff along the southern portion of the development will discharge to the wetlands without being captured in the site storm sewer and storm water detention basin system. This request will be reviewed for administrative approval with the Final Site plan showing additional site grading and storm water design details.

### Paving & Grading (on-site)

26. The residential driveways will not meet the standard dimensions shown in Figure IX.6 due to the sidewalk placement 7.5 feet from back of curb. Standard driveway tapers are 3 feet in width over a 10 foot length between sidewalk and curb. The placement of the sidewalk was previously approved with the PRO agreement. Provide a note on the plans indicating a minimum 2 foot flare width.
27. Adjust the sidewalk along the emergency access drive to be routed around the access gate to provide unobstructed pedestrian/bicycle access to the Novi Road pathway.

Paving & Grading (off-site Ten Mile pathway)

28. The off-site pathway plan should refer to the City's standard boardwalk detail sheet.
29. Indicate maximum 2% cross slope on the boardwalk.
30. The proposed boardwalk shall include foundations at each end, helical piers, and composite hand rails as described in PRO agreement and as detailed in the newly revised City standard details.
31. Label the dimension of boardwalk width and distance from back of curb.
32. Provide a cross section of pathway, indicating a shoulder along the pathway and maximum 4:1 slope to match existing grades. If necessary to go beyond the proposed 10 foot pathway easement to perform grading to match existing, indicate the extent of temporary grading easement required.
33. The existing 5 foot sidewalk must be revised to taper out to 8 foot width to match proposed boardwalk width.
  - a. Indicate on the plans one or two flags of sidewalk to be removed and replaced to flare out to 8 foot width at boardwalk connection.
  - b. Ideally the flares should be even on the north and south sides, which may require adjustment of the longitudinal alignment of the pathway(s).
34. A point of egress for the parcel to the north of the proposed boardwalk must be provided. The landowner is to provide information on the desired location of a future driveway. The boardwalk design must accommodate this future driveway opening.

Storm Water Management Plan

35. Provide pre- and post-development drainage area maps as previously discussed.
36. In the pre- and post- runoff analysis, provide a breakdown of the post development discharge from detention basin at the restricted rate of 0.15 cfs/acre, and the discharge from surface run off.
37. An adequate maintenance access route to the basin outlet structure, and any other pretreatment structures, shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
38. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
39. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
40. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.
41. Provide release rate calculations for the three design storm events (first flush, bank full, 100-year).

Soil Erosion and Sediment Control

42. A SESC permit is required. A full review has not been done at this time. Include a Soil Erosion and Sediment Control plan with the Final Site Plan set. A separate application for the SESC permit is required. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

Off-Site Easements

43. Any off-site easements must be executed prior to final approval of the plans. Drafts shall be submitted as soon as possible.
  - a. Any applicable off-site temporary grading easements must be executed prior to final approval of the plans.
  - b. The City is obtaining the off-site easement for the 10 Mile pathway as described in the PRO agreement.

**The following must be submitted with the Final Site Plan:**

44. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan 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.**
45. An 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 yardage), 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 submitted with the Stamping Set:**

(Please note that all documents must be submitted together as a package with the Stamping Set submittal with a legal review transmittal form that can be found on the City's website. Partial submittals will not be accepted.)

46. A draft copy of the Storm Drainage Facility Maintenance Easement Agreement, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the form of the agreement is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds. This document is available on our website.
47. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

48. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.
49. Draft copy of the required sidewalk easement must be submitted to the Community Development Department for review.
50. Executed copies of any required off-site temporary grading easements.

**The following must be addressed prior to construction:**

51. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
52. 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). No fee is required for this permit.
53. 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.
54. Construction inspection fees in an amount to determined must be paid to the Community Development Department.
55. Legal escrow fees in an amount to be determined must be deposited with the Community Development Department. Unused escrow will be returned to the payee at the end of the project. This amount includes engineering legal fees only. There may be additional legal fees for planning legal documents.
56. A storm water performance guarantee (equal to 120% of the cost required to complete the storm water management facilities) as specified in the Storm Water Management Ordinance must be posted at the Community Development Department.
57. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Water & Sewer Division at 248-347-0498 to determine the amount of these fees.
58. A street sign financial guarantee in the amount of \$400 per traffic control sign proposed must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.
59. 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.
60. 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 Division or on the City website and may be filed once the Final Site Plan has been submitted. Please contact the Engineering Division at 248-347-0454 for further information. Only

submit the cover sheet, standard details and plan sheets applicable to the permit.

61. A permit for work within the right-of-way of Novi Road must be obtained from the Road Commission for Oakland County. Please contact the RCOC (248-858-4835) directly with any questions. The applicant must forward a copy of this permit to the City. Provide a note on the plans indicating all work within the right-of-way will be constructed in accordance with the Road Commission for Oakland County standards.
62. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.
63. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the sanitary sewer plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.
64. An NPDES permit must be obtained from the MDEQ because the site is over 5 acres in size. The MDEQ may require an approved SESC plan to be submitted with the Notice of Coverage.
65. MDEQ wetland permit will be required for the off-site pathway construction.
66. The amount of the incomplete site work performance guarantee for this development will be equal to 1.2 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 reduced prior to TCO, at which time it will be based on percentage of construction completed.

To the extent this review letter addresses items and requirements that require the approval of or a permit from an agency or entity other than the City, this review shall not be considered an indication or statement that such approvals or permits will be issued.

Please contact Darcy Rechten at (248) 735-5695 with any questions.



Darcy N. Rechten, P.E.  
Plan Review Engineer

## LANDSCAPE REVIEW



# PLAN REVIEW CENTER REPORT

December 29, 2017

## Preliminary Site Plan Landscape Review

Emerson Park

Review Type

Preliminary Site Plan Landscape Review

Job #

JSP17-0010

Property Characteristics

- Site Location: West side of Novi Road, just south of Post Office
- Site Zoning: OS-1 – proposed RM-1
- Adjacent Zoning: OS-1 to north, I-2 to east, B-3 to south, R-4 to west
- Plan Date: November 27, 2017

Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the Preliminary Site Plan submittal. Underlined items must be addressed in Final Site Plans. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review is a summary and not intended to substitute for any Ordinance. Please also see the accompanying landscape chart for additional comments.

Recommendation:

This project is **recommended for approval**. However, there are a number of changes that need to be made to the plan to make it compliant with our ordinances, even with the landscape deviations that were approved. The layout indicates that there is sufficient room provided to meet city requirements.

**Please add this list of approved deviations to Sheet LS-1.**

**Landscape Deviations approved by Planning Commission August 23, 2017:**

- Landscape deviation from Sec. 5.5.3.E.i.c and 5.5.3.E.ii of Zoning Ordinance for reduction/absence of street trees along Novi Road frontage; (16 trees required, proposed contingent on RCOC approval)
- Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for not meeting the minimum height of landscape berm along North boundary (4.5-6 feet required, 2.5–3 feet provided along approximately 950 of 1340 linear feet of boundary);
- Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for absence of required berm along a portion of northern property boundary (no berm proposed for approximately 390 linear feet) due to location of proposed detention ponds
- Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms along the entire southern property boundary (4.5-6 feet required, 0 feet provided) due to existing wetlands;
- Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms within Novi Road green belt (779 Linear feet frontage required, 0 feet provided) due to distance across detention ponds to buildings and heavy landscaping
- Landscape deviation from Sec 5.5.3.E.ii of Zoning Ordinance for proposing sub canopy trees in lieu of some of the required Deciduous Canopy of Large evergreen trees (Approximately 21 percent of required Canopy trees are replaced with sub canopy trees) as it will provide additional visual and species diversity to the site



Existing Soils (Preliminary Site Plan checklist #10, #17)

Soil information is provided.

Existing and proposed overhead and underground utilities, including hydrants.(LDM 2.e.(4))

Utilities are shown on the Landscape Plans.

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))

Existing trees and proposed removals have been shown on Sheets 2 through 4.

Proposed trees to be saved (Sec 37 Woodland Protection 37-9, LDM 2.e.(1))

1. **Show proposed tree fencing at a minimum of 1' outside of tree driplines.**
2. **Include tree planting detail that shows fencing at 1' outside of tree driplines.**

Woodland Replacement Trees

1. Upsizing of trees cannot be used to reduce the number of replacement trees required. This is a landscape deviation that was not approved by the Planning Commission.
2. **Please revise the calculations to remove the upsizing credit.**

Proposed topography. 2' contour minimum (LDM 2.e.(1))

Provided.

Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.B.ii and iii)

1. The Planning Commission accepted the deviation of not providing the berm along Novi Road.
2. The required quantities of greenbelt landscaping are provided.
3. **Please ensure that tree species and locations for Novi Road greenbelt trees are compatible with the overhead utility lines. If necessary, subcanopy trees can be used as substitutes for canopy trees at a rate of 2 subcanopy trees per 1 canopy tree.**

Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and 5.5.3.E.ii)

1. The Road Commission for Oakland County sight triangle has been provided for the Novi Road entry and trees are not located within it. Per the revised ordinance, the width of that triangle at the midway point between the right-of-way and the curb can be deducted so only 13 trees are required.
2. **If the RCOC prohibits any or all of those trees, those trees do not need to be provided elsewhere. A copy of their review will need to be provided as evidence.**
3. The clear vision zone for the interior road intersection is also shown and all trees are outside of it.
4. It appears that the distance between driveways has been increased to 7-8 feet. This should help the survival of the trees planted between driveways. Also, the long-term survival of the trees in that situation is doubtful, given the small area for roots to collect air and water. Furthermore, some species are known to cause upheaval in paved surfaces.

Multi-family Landscaping Requirements (Zoning Sec 5.5.3.E.ii)

1. The street tree requirement is discussed above.
2. Based on 120 ground level dwelling units, 360 deciduous canopy or large evergreen trees are required as site landscaping. A deviation allowing up to 21% (76) of the trees to be subcanopy trees to increase the diversity of the plantings was granted by the Planning Commission. **This replacement can be at a 1:1 ratio, not 2:1 as is shown on the landscape plan.**
3. Please provide building foundation landscaping details to scale and confirm that at least 35% of front of building units are landscaped.

Detention Basin Landscaping (LDM3)

1. It appears that there is less than 70% of the ponds' rims are landscaped with large native shrubs per the ordinance.
2. **Please increase the coverage with large native shrubs to at least 70% of the rims as measured along the high water line (approximately 94lf additional coverage is required along the northern pond and 37lf additional coverage is required along the southern pond).**
3. **Please replace the Mohawk viburnums and Tam Junipers along the rim with large native shrubs if they are to count toward the requirement.**

Phragmites Control (Zoning Sec 5.5.6.C)

1. Per the recently revised ordinance, developments are required to locate and remove any instances of Giant Reed (*Phragmites australis*) found on the property.
2. If any *Phragmites* is found on the property, it must be permanently removed from the property. A plan for its removal, in accordance with MDEQ requirements, must be added to the landscape plan and it must be carried out until the *Phragmites* is completely removed.
3. **Please survey the site for *Phragmites* and show it on the topographical survey if any (even one plant) is found.**
4. **If there is any, please add a management plan and schedule for it to be carried out.**

Transformer/Utility Box Screening (Zoning Sec 5.5.3.D.)

1. The detail is provided on Sheet 4.
2. **When proposed transformers/utilities/fire hydrants are available, add them to the landscape plan and adjust plant spacing accordingly.**
3. **If the locations are not determined prior to completion of the stamping sets, the applicant must still screen them per the detail.**

Plant List (LDM 1.d.(1).(d) and LDM 2.h. and t.)

1. Plant lists have been provided that meet the city requirements.
2. **Please replace the barberries with a species that is not on our prohibited species list.**

Planting Notations and Details (LDM)

1. **Details provided meet City of Novi requirements.**
2. For final site plans, costs per the City of Novi Community Development Fee Schedule need to be provided for all plants, including seed and sod, and mulch proposed to be used on the site.

Irrigation (LDM 1.a.(1)(e) and 2.s)

1. Irrigation plan for landscaped areas is required for Final Site Plan.
2. If the applicant elects to not provide underground irrigation, a plan for how the plantings will be provided with sufficient water for their establishment and long-term survival must be provided.

Snow Deposit Areas (LDM.2.q.)

Provided.

Phragmites australis Control (Section 5.5.6.C)

1. A new requirement in the revised ordinance is for the location and control of all *Phragmites* (Giant Reed) population on a site.
2. **Please locate and include on the survey any populations of *Phragmites australis* on the site.**
3. **Please provide a plan for eradication of the populations per MDEQ guidelines and regulations and carry out those plans.**

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.735.5621 or [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org).

A handwritten signature in black ink that reads "Rick Meader". The signature is written in a cursive, flowing style.

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Rick Meader – Landscape Architect

**LANDSCAPE REVIEW SUMMARY CHART – MULTI-FAMILY RESIDENTIAL**

**Review Date:** December 28, 2017  
**Project Name:** JSP17 – 0010: EMERSON PARK  
**Plan Date:** 11/27/2017  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant for approval of the Preliminary Site Plan. Underlined items need to be addressed for Final Site Plan.

**Landscape Deviations approved by Planning Commission August 23, 2017:**

- Landscape deviation from Sec. 5.5.3.E.i.c and 5.5.3.E.ii of Zoning Ordinance for reduction/absence of street trees along Novi Road frontage; (16 trees required, proposed contingent on RCOC approval)
- Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for not meeting the minimum height of landscape berm along North boundary (4.5-6 feet required, 2.5–3 feet provided along approximately 950 of 1340 linear feet of boundary);
- Landscape deviation Sec. 5.5.3.B.ii and iii of Zoning Ordinance for absence of required berm along a portion of northern property boundary (no berm proposed for approximately 390 linear feet) due to location of proposed detention ponds
- Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms along the entire southern property boundary (4.5-6 feet required, 0 feet provided) due to existing wetlands;
- Landscape deviation from Sec. 5.5.3.B.ii and iii of Zoning Ordinance for lack of berms within Novi Road green belt (779 Linear feet frontage required, 0 feet provided) due to distance across detention ponds to buildings and heavy landscaping
- Landscape deviation from Sec 5.5.3.E.ii of Zoning Ordinance for proposing sub canopy trees in lieu of some of the required Deciduous Canopy of Large evergreen trees (Approximately 21 percent of required Canopy trees are replaced with sub canopy trees) as it will provide additional visual and species diversity to the site

Please copy the above list, with the heading that includes the meeting date, to Sheet LS-1.

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements – Basic Information (LDM (2))</b>				
<b>Landscape Plan</b> <i>(Zoning Sec 5.5.2, LDM 2.e)</i>	§ New commercial or residential developments § Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. § 1”-20’ minimum with proper North. Variations from this scale can be approved by LA	Yes	Yes	Scale: 1”=50’ Details: 1”=30’
<b>Owner/Developer Contact Information</b> <i>(LDM 2.a.)</i>	Name, address and telephone number of the owner and	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
	developer or association			
<b>Landscape Architect contact information</b> (LDM 2.b.)	Name, Address and telephone number of RLA	Yes	Yes	
<b>Survey information</b> (LDM 2.c.)	Legal description or boundary line survey	Sheet 2	Yes	
<b>Project Information</b> (LDM 2.d.)	Name and Address	Yes	Yes	
<b>Sealed by LA.</b> (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Required on Final Site Plans</u>
<b>Miss Dig Note</b> (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
<b>EXISTING CONDITIONS</b>				
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 2.e.(2))	Show location type and size. Label to be saved or removed. Plan shall state if none exists.	Sheets 2-4	Yes	
<b>Soil type</b> (LDM.2.r.)	As determined by Soils survey of Oakland county	Sheet 2	Yes	
<b>Zoning</b> (LDM 2.f.)	Include site and all adjacent zoning	Yes	Yes	Site:OS-1 rezone to RM-1 North: OS-1; East: I-2; South: B-3; West: R-4
<b>PROPOSED IMPROVEMENTS</b>				
<b>Existing and proposed improvements</b> (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
<b>Existing and proposed utilities</b> (LDM 2.e.(4))	Overhead and underground utilities, including hydrants	Yes	Yes	
<b>Proposed topography - 2' contour minimum</b> (LDM 2.e.(1))	Provide proposed contours at 2' interval	Sheet 2	Yes	
<b>Clear Zones</b> (LDM 2.e.(5))	25 ft. corner clearance required. Refer to Zoning Sec 5.5.9	<ul style="list-style-type: none"> <li>RCOC zone has been shown on Landscape Plan</li> <li>25 foot clear zone shown at interior intersection.</li> </ul>	Yes	<b>On Sheet LS3, please show same RCOC clear zone that is shown on Sheets LS1 and LS2.</b>
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Berms and ROW Planting</b>				
All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed with 6" of top soil.				

Item	Required	Proposed	Meets Code	Comments
<b>Residential Adjacent to Non-residential (Sec 5.5.3.A) &amp; (LDM 1.a)</b>				
<b>Berm requirements</b> (Zoning Sec 5.5.A)	<ul style="list-style-type: none"> <li>4.5-6' berm required along north and south property lines by ordinance.</li> <li>Landscape deviation for shorter than required berm along north side was approved by Planning Commission.</li> <li>Landscape deviation for lack of berm along south property line was also approved by Planning Commission.</li> </ul>	<ul style="list-style-type: none"> <li>3 foot tall berm along most of north property line.</li> <li>No berm is proposed along south property line.</li> </ul>	No*	*See description of approved deviation above.
<b>Adjacent to Public Rights-of-Way (Sec 5.5.B) and (LDM 1.b)</b>				
<b>Berm requirements</b> (Zoning Sec 5.5.3.A.(5))	<ul style="list-style-type: none"> <li>4 foot tall berm with a 4 foot wide crest is required by ordinance for the eastern frontage.</li> <li>Landscape deviation for lack of required berm along east side was approved by Planning Commission.</li> </ul>	No berm is proposed.	No*	*See description of approved deviation above.
<b>Planting requirements</b> (LDM 1.a.)	LDM Novi Street Tree List	Yes	Yes	
<b>Street tree requirements</b> (Zoning Sec 5.5.3.B.ii)	No street trees within 25 ft. clear vision triangle	<ul style="list-style-type: none"> <li>RCOC sight triangle has been shown and trees are located outside of it.</li> <li>Interior intersection has clear vision zone with no trees planted within it</li> </ul>	Yes	<ol style="list-style-type: none"> <li>If the Road Commission for Oakland County still does not allow some or all of the proposed street trees to be planted along Novi Road, they do not have to be planted elsewhere.</li> <li><b>If they don't allow some or all of the trees, please provide us documentation of their decision.</b></li> </ol>
<b>ROW Landscape Screening Requirements Chart (Sec 5.5.3.B. ii)</b>				
<b>Greenbelt width</b> (2)(3) (5)	No parking: 34 ft	150 ft min	Yes	
<b>Min. berm crest width</b>	No parking: 3 ft	No	No*	*See description of approved deviation

Item	Required	Proposed	Meets Code	Comments
				above.
<b>Minimum berm height (9)</b>	No parking: 3 ft	No	No*	*See description of approved deviation above.
3' wall	(4)(7)	No		
<b>Canopy deciduous or large evergreen trees</b> Notes (1) (10)	§ No Parking: 1 per 35 lf; § 718/35 = 21 trees	23 trees	Yes	
<b>Sub-canopy deciduous trees</b> Notes (2)(10)	§ No Parking: 1 per 25 lf; § 718/25 = 29 trees	29 trees	Yes	
<b>Canopy deciduous trees in area between sidewalk and curb</b>	§ No Parking: 1 per 35 lf; § (780-320)/35 = 13 trees	16 trees	Yes	<b>If the applicant elects to just provide 13 trees, please only locate them along the section of road outside of the RCOC sight triangle south of the entrance.</b>
<b>Snow deposit (LDM.2.q.)</b>	Show snow deposit areas on plan	Yes	Yes	
<b>Parking Area Landscape Requirements LDM 1.c. &amp; Calculations (LDM 2.o.)</b>				
<b>General requirements (LDM 1.c)</b>	§ Clear sight distance within parking islands § No evergreen trees	No		All parking is to be in garages and driveways.
<b>Name, type and number of ground cover (LDM 1.c.(5))</b>	As proposed on planting islands	Yes	Yes	Lawn areas will be hydroseeded.
<b>General (Zoning Sec 5.5.3.C.ii)</b>				
<b>Parking lot Islands (a, b. i)</b>	§ A minimum of 300 SF to qualify § 6" curbs § Islands minimum width 10' BOC to BOC	No		All parking is to be in garages and driveways.
<b>Curbs and Parking stall reduction (c)</b>	Parking stall can be reduced to 17' with 4" curb adjacent to a sidewalk of minimum 7 ft.	No		Sidewalk abutting parking bay is only 5' wide.
<b>Contiguous space limit (j)</b>	Maximum of 15 contiguous spaces	NA		
<b>Plantings around Fire Hydrant (d)</b>	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	Yes	Yes	1. All hydrants appear to be clear of trees. 2. <b>Please move trees at least 10 feet away from utility structures and, if possible, 5 feet from underground lines.</b>

Item	Required	Proposed	Meets Code	Comments
				<b>3. Please add note to plans stating that trees are to be at least 10 feet away from any utility structure.</b>
<b>Landscaped area (g)</b>	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
<b>Name, type and number of ground cover (LDM 1.c.(5))</b>	As proposed on planting islands	Yes	Yes	All disturbed areas shown as being seeded via hydroseed.
<b>Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C.iii)</b>				
<b>A = Total square footage of parking spaces not including access aisles x 10%</b>	$\$ A = x 10\% = sf$	NA		
<b>B = Total square footage of additional paved vehicular use areas (not including A) under 50,000 SF) x 5%</b>	$\$ B = x 5\% = sf$ $\$ Paved Vehicular access area includes loading areas$	NA		
<b>C= Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %</b>	$\$ C = x 1\% = sf$	NA		
<b>All Categories</b>				
<b>D = A+B or A+C Total square footage of landscaped islands</b>	$A + B + C = x SF$	NA		
<b>E = D/75 Number of canopy trees required</b>	$x/75 = y Trees$	NA		
<b>Perimeter Green space</b>	$\$ 1 Canopy tree per 35 lf$ $\$ Sub-canopy trees can be used under overhead utility lines.$	NA		
<b>Parking land banked</b>	NA	NA		
<b>Multi-Family Residential Zoning Sec 5.5.3.E.iii &amp; LDM 1.d (2)</b>				
<b>Interior Street Trees</b>	1 tree per 35 lf, net of driveways, access road $4901-2080=2821 lf$ $2821/35 = 81 trees$	88 trees	Yes	1. While numbers are correct, please ensure that trees are placed in situations in



Item	Required	Proposed	Meets Code	Comments
				which they can grow, and not damage adjacent driveways 2. <b>Please revise species if necessary to avoid damage from root heaving nearby paving.</b>
<b>Building Landscaping</b> (Zoning Sec 5.5.3.E.ii.)	<ul style="list-style-type: none"> <li>• 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor.</li> <li>• 120*3 = 360 trees</li> <li>• 35% of building frontage must be landscaped</li> </ul>	<ul style="list-style-type: none"> <li>• 409 new trees plus 6 existing trees (This was per my count which may not be exactly right)</li> <li>• It appears that less than 35% of the unit frontages are landscaped.</li> </ul>	Yes*/No	1. *A landscape waiver allowed up to 21% of the trees to be subcanopy trees as it creates additional diversity in the site. 2. <b>Subcanopy trees do not have to be provided at a rate of 2:1. I counted 58 subcanopy trees. Per the waiver, a total of 76 subcanopy trees can be used in place of 76 canopy or large evergreen trees at a 1:1 exchange rate.</b> 3. <b>Please add a unit landscaping detail that shows at least 35% of the unit frontages are landscaped. Less than that is a deviation that was not approved by the Planning Commission.</b>
<b>Miscellaneous Landscaping Requirements</b>				
<b>Transformers/Utility boxes</b> (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> <li>§ A minimum of 2ft. separation between box and the plants</li> <li>§ Ground cover below 4" is allowed up to pad.</li> <li>§ No plant materials within 8 ft. from the doors</li> </ul>	No	No	1. <b>Please add note on plan or with detail stating that all utility boxes shall be screened per the detail.</b> 2. <b>If utility box locations are available before stamping sets, please add them to the landscape plan, with required</b>

Item	Required	Proposed	Meets Code	Comments
<p><b>Detention/Retention Basin Planting requirements (Sec. 5.5.3.E.iv)</b></p>	<p>§ Clusters shall cover 70-75% of the basin rim area                      § 10" to 14" tall grass along sides of basin                      § Refer to wetland for basin mix                      § Include seed mix details on landscape plan</p>	<p>Yes</p>	<p>No</p>	<p><b>landscaping.</b></p> <ol style="list-style-type: none"> <li>1. It does not appear that 70% of either pond perimeter at the high water line is landscaped with large native shrubs. <b>Please increase the coverage. The northern pond needs to have at least 94 lf of rim coverage added and the southern pond needs to have at least 37lf added (trees do not count toward the coverage).</b></li> <li>2. <b>Some of the shrubs (Tam's Juniper, Mohawk Viburnum) are not native to Michigan and should be substituted for species that are if they are to be counted toward the requirement.</b></li> <li>3. <b>Please add a note that dwarf cultivars should not be used.</b></li> </ol>
<p><b><i>Phragmites australis</i> control (Sec 5.5.6.C)</b></p>	<p>§ All Phragmites populations should be noted on the plans.                      § Treatment plans for the removal of all Phragmites found on the site should be included on the Landscape Plan and carried out per the ordinance.</p>	<p>No Phragmites is indicated.</p>	<p>TBD</p>	<ol style="list-style-type: none"> <li>1. <b>The site should be surveyed for any plants or populations of Phragmites, of any size, and they should be added to the survey.</b></li> <li>2. <b>If none is found, that can be noted on the plan but the site will still be checked for any missing plants or populations.</b></li> <li>3. <b>If any is found, a plan for their permanent removal (not just mowing or pulling) shall be added to the plan</b></li> </ol>

Item	Required	Proposed	Meets Code	Comments
				and carried out over the course of the maintenance period, and beyond if necessary, to rid the site of <i>Phragmites</i> .
<b>General Landscape Requirements (LDM 3)</b>				
<b>General Conditions (LDM 3.a)</b>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	Please add note near plantings along property lines.
<b>Irrigation plan (LDM 2.s.)</b>	A fully automatic irrigation system and a method of draining is required with Final Site Plan	No		<u>Required for Final Site Plan</u>
<b>Other information (LDM 2.u)</b>	Required by Planning Commission	NA		
<b>Landscape tree credit (LDM3.b.(d))</b>	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No		
<b>Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)</b>	Canopy Deciduous shall be 3" and sub-canopy deciduous shall be 2.5" caliper. Refer to section for more details	Yes	Yes	
<b>Plant size credit (LDM3.c.(2))</b>	NA	Yes – for replacement evergreens.	No	1. Upsizing credit is not available for woodland replacement trees. This is a deviation that was not approved by the Planning Commission. 2. Please revise the calculations and replacement trees provided.
<b>Prohibited Plants (LDM 3.d)</b>		Yes	No	Please use a different species than barberry as barberry is now on our prohibited species list.
<b>Recommended trees for planting under</b>	Label the distance from the overhead utilities	Canopy trees proposed near	TBD	1. There are some overhead wires

Item	Required	Proposed	Meets Code	Comments
<b>overhead utilities</b> (LDM 3.e)		overhead lines.		<b>along the front of the property. Please ensure that the species selected for use near them will not interfere with the wires, or reach a height that will require the utility company to prune them.</b>  2. If necessary, sub-canopy trees can be used at a rate of 2 trees to 1 canopy tree below or near overhead wires.
<b>Collected or Transplanted trees</b> (LDM 3.f)		No		
<b>Nonliving Durable Material: Mulch</b> (LDM 4)	§ Trees shall be mulched to 4" depth and shrubs, groundcovers to 3" depth § Specify natural color, finely shredded hardwood bark mulch. § Include in cost estimate. § Refer to section for additional information.	Yes	Yes	
<b>Phragmites Control</b> (Sec 5.5.6.C)	§ Any and all populations of Phragmites australis on site shall be included on tree survey. § Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.	None indicated	TBD	1. Please survey the site for any populations of Phragmites australis and submit plans for its removal. 2. If none is found, please indicate that on the survey.
<b>Landscape Notes and Details– Utilize City of Novi Standard Notes</b>				
<b>Plant List (LDM 2.h.) – Include all cost estimates</b>				
Quantities and sizes		Yes	Yes	<b>Please double-check plant counts.</b>
Root type		Yes	Yes	
Botanical and common names	Refer to LDM suggested plant list	Yes	Yes	<b>1. Please replace the barberries with a species that is not on</b>

Item	Required	Proposed	Meets Code	Comments
				the prohibited species list. 2. While Hedge Maple is an allowed species, we have had numerous requests recently for substitutions of it on other projects due to extremely limited availability of that species. The applicant may want to consider replacing that species with one that is more widely available.
Type and amount of lawn		Yes	Yes	1. Seed is indicated for all disturbed areas. 2. If sod is to be used, please clearly indicate those areas on the plan.
Cost estimate (LDM 2.t)	For all new plantings, mulch and sod as listed on the plan	No		<u>Need for final site plan</u>
<b>Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Multi-stem tree		Yes	Yes	Please copy note regarding root flare dirt from deciduous tree detail to this detail.
Evergreen Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys	Wood stakes, fabric guys.	Yes	Yes	
<b>Cross-Section of Berms (LDM 2.j)</b>				
Slope, height and width	§ Label contour lines § Maximum 33% § Min. crest width § Construction of loam § 6" top layer of topsoil.	No	No*	*See description of approved deviation above.
Type of Ground Cover		No	No*	See above
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from	No	No*	See above

Item	Required	Proposed	Meets Code	Comments
	edge of utility or 20 ft. setback from closest pole, 10 feet from structures, hydrants			
<b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No		No walls proposed
<b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>		NA		
<b>Notes (LDM 2.i) – Utilize City of Novi Standard Details</b>				
<b>Installation date</b> (LDM 2.i. & Zoning Sec 5.5.5.B)	§ Provide intended date § Between Mar 15 – Nov 15	Fall 2018	Yes	
<b>Maintenance &amp; Statement of intent</b> (LDM 2.m & Zoning Sec 5.5.6.B)	§ Include statement of intent to install and guarantee all materials for 2 years. § Include a minimum one cultivation in June, July and August for the 2-year warranty period.	Yes	Yes	<b>Please change City of Novi Landscape General Note #2 on Sheet and Landscape Maintenance Note #4 on Sheet LS3 to read ... "Replace failing material within <u>3</u> months or the next appropriate planting period, whichever is less." (sorry about the previous comment that said 6 months).</b>
<b>Plant source</b> (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade.	Sheet LS4	Yes	
<b>Establishment period</b> (Zoning Sec 5.5.6.B)	<b>2 yr. Guarantee</b>	Sheet LS3	Yes	
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5.E)	City must approve any substitutions <u>in writing</u> prior to installation.	Sheet LS3	Yes	

**NOTES:**

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 and the Landscape Design Manual for the appropriate items under the applicable zoning classification.
3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.

Item	Required	Proposed	Meets Code	Comments

WETLANDS REVIEW





January 22, 2018  
ECT Project No. 170137-0300

Ms. Barbara McBeth, AICP  
City Planner  
Community Development Department  
City of Novi  
45175 W. Ten Mile Road  
Novi, Michigan 48375

Re: Emerson Park (f.k.a. Princeton Park) JSP17-0010  
Wetland Review of the Preliminary Site Plan (PSP17-0017)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Emerson Park multi-family residential development project prepared by Atwell dated November 27, 2017 and stamped "Received" by the City of Novi Community Development Department on November 28, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance.

The project is located west of Novi Road between Ten Mile Road and Grand River Avenue (Section 22), just south of the U.S. Post Office. The northern two-thirds (approximately) of the proposed project site is currently used as a storage facility for cars, boats, trailers and other vehicles. The southern one-third (approximately) of the proposed site contains areas noted as City Regulated Wetlands and City Regulated Woodlands and is currently undeveloped.

The site plan appears to propose the construction of twenty-five (25) multi-family residential buildings (totaling 120 units), associated utilities, parking, and two (2) storm water detention basins located on the east portion of the site (adjacent to Novi Road). The ultimate outfall for the storm water detention basins is an existing wetland area located on the southern portion of the development site.

**ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland Comments* section of this letter prior to approval of the Final Site Plan.**

The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Not necessary as wetland impacts do not exceed 0.25-acre
Wetland Buffer Authorization	Required
MDEQ Permit	To be determined. It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use

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Item	Required/Not Required/Not Applicable
	permit (for direct impact/fill of Wetland #3) and/or stormwater discharge to Wetland #1.
Wetland Conservation Easement	Required

Based on our review of the Plan, Novi aerial photos, Novi GIS, the City of Novi Official Wetlands and Woodlands Maps (see Figure 1, attached) and our initial site visit on February 21, 2017, it appears as if this proposed project site contains City-regulated wetlands and woodlands. The City's Regulated Wetland and Woodland map shows that the overall property contains wetlands along its southern side. However, as confirmed in our on-site evaluation, the site contains three (3) areas of wetland (Wetlands #1, #2, and #3), located along both the southern and western portion of the site.

**Wetlands**

As noted, there appear to be three (3) wetland areas located on the site totaling 3.20 acres:

**Wetland #1**

Wetland #1 (2.75 acres) is a scrub-shrub/open-water wetland located along the southern portion of the site. This wetland is associated with the existing northern tributary of Chapman Creek. The emergent fringe of this wetland contains cattail (*Typha spp.*), boxelder (*Acer negundo*), eastern cottonwood (*Populus deltoides*), and willow species (*Salix spp.*).

**Wetland #2**

Wetland #2 (0.37-acre) is an emergent wetland located along the west side of the site. Portions of Wetland #2 appear to have been created as part of the Churchill Crossing residential development located west of the subject parcel. This area is located within a Michigan Department of Environmental Quality (MDEQ) conservation easement based on the data provided on the MDEQ Wetlands Map Viewer (<http://www.mcgi.state.mi.us/wetlands/mcgiMap.html>). This wetland contains eastern cottonwood, dogwood (*Cornus spp.*) and common buckthorn (*Rhamnus cathartica*).

**Wetland #3**

Wetland #3 (0.08-acre) is an isolated, emergent/scrub-shrub wetland located near the southwest corner of the site. It appears as though during wet periods drainage from Wetland #3 flows through an upland area and ultimately drains to Wetland #1. Wetland #3 generally contains invasive species of vegetation: common buckthorn and common reed (*Phragmites australis*).

**On-Site Wetland Evaluation**

ECT visited the site on Tuesday, February 21, 2017 for the purpose of a Wetland Boundary Evaluation. The wetland flagging and tree identification provided on the Plan was completed by Atwell. The wetlands were marked with pink survey tape flagging at the time of our inspection. Based on our site inspection, the wetland boundaries appear to be accurately flagged on the site and accurately portrayed on the Plan.

**Wetland Impact Review**

As noted, three (3) areas of wetland exist on this parcel (Wetland #1, #2, and #3). The proposed site development appears to be partly designed around the existing on-site wetland and 25-foot wetland setback areas. Specifically, the proposed site layout will avoid impacts to Wetland 1 and Wetland 2. However, the

Plan does propose several impacts to the 25-foot buffers of Wetland 1 and Wetland 2. The *Existing Conditions* Plan (Sheet 02) indicates that the proposed development will impact Wetland #3 and its 25-foot wetland setback. The outlet from the stormwater detention basin is currently proposed to be directed to the 25-foot setback of Wetland #1, in the southeast portion of the site. The following table summarizes the existing wetlands and the proposed wetland impacts as indicated on the Plan (shown on the Grading and Storm Water Management Plan):

**Table 1. Proposed Wetland Impacts**

<b>Wetland Area</b>	<b>Wetland Area (acres)</b>	<b>City Regulated?</b>	<b>MDEQ Regulated?</b>	<b>Impact Area (acre)</b>	<b>Estimated Impact Volume (cubic yards)</b>
1	2.75	Yes City Regulated /Essential	Yes	None Indicated	None
2	0.37	Yes City Regulated /Essential	Yes	None Indicated	None
3	0.08	Yes City Regulated /Essential	Yes	0.08	103 CY Fill and 144 CY Cut
<b>TOTAL</b>	<b>3.20</b>	--	--	<b>0.08</b>	<b>41 CY (Net Cut)</b>

In addition to wetland impacts, the Plan also appears to propose impacts (both permanent and temporary) to 25-foot natural features setbacks of all three (3) wetlands. The following table summarizes the existing wetland buffer areas and the proposed impacts as indicated on the Plan (i.e., indicated on the Grading and Storm Water Management Plan (Sheet 07):

**Table 2. Proposed Wetland Buffer Impacts**

<b>Wetland Buffer Area</b>	<b>Wetland Buffer Area</b>	<b>City Regulated?</b>	<b>MDEQ Regulated?</b>	<b>Permanent Impact Area (acre)</b>		<b>Temporary Impact Area (acre)</b>	
	<b>Acres</b>			<b>Sq. Ft.</b>	<b>Acre</b>	<b>Sq. Ft.</b>	<b>Acre</b>
1	0.72	Yes City Regulated /Essential	N/A	605	0.014	505	0.012
2	0.39	Yes City Regulated /Essential	N/A	2,957	0.068	N/A	N/A
3	0.18	Yes City Regulated /Essential	N/A	Approx. 7,840	0.18	N/A	N/A
<b>TOTAL</b>	<b>1.29</b>	--	--	<b>11,402</b>	<b>0.262</b>	<b>505</b>	<b>0.012</b>

The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland. A Conservation Easement shall be executed covering all remaining wetland areas on site as shown on the approved plans. This language shall be

submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit.

### **Wetland Mitigation**

The MDEQ generally requires mitigation for impacts greater than one-third acre and the City generally requires mitigation for impacts greater than one-quarter acre (0.25-acre). Wetland mitigation is not required for the currently-proposed impacts as the total wetland impact proposed is 0.08-acre.

### **Permits & Regulatory Status**

The purpose of the City of Novi Wetland and Watercourse Protection Ordinance is described in the City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 1. This section states that:

- (a) The wetlands and watercourses of the city are indispensable and fragile natural resources subject to floodwater capacity limitations, erosion, soil bearing capacity limitations and other hazards. In their natural state, wetlands and watercourses provide many public benefits, such as the maintenance of water quality through nutrient cycling and sediment trapping, and flood and stormwater runoff control through temporary water storage, slow release and groundwater recharge. In addition, wetlands provide open space, passive recreation, fish and wildlife habitat, including migratory waterfowl and rare, threatened or endangered animal and plant species. The continued destruction and loss of wetlands and watercourses constitutes a distinct and immediate danger to the public health, safety and general welfare.
- (b) Throughout the state, considerable acreage of these important natural resources has been lost or impaired by draining, dredging, filling, excavating, building, pollution and other acts inconsistent with the natural uses of such areas. Remaining wetlands and watercourses are in jeopardy of being despoiled or impaired. Consequently, it is the policy of the city to prevent a further net loss of those wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size, but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b).
- (c) Pursuant to Mich. Const. 1963, Art. IV, § 52, the conservation and development of natural resources of the state is a matter of paramount public concern in the interest of the health, safety and general welfare of the people. Pursuant to the Michigan Environmental Protection Act, MCL 324.1701, et seq., it is the responsibility of public and private entities to prevent the pollution, impairment or destruction of the air, water or other natural resources by their conduct. It is, therefore, the policy of the city to protect wetlands and watercourses while taking into account varying ecological, hydrologic, economic, recreational and aesthetic values. Activities which may damage wetlands and watercourses shall be located on upland sites outside of upland woodland areas, unless there are no less harmful, feasible and prudent alternatives to the proposed activity. When an activity will result in the impairment or destruction of a wetland, mitigation shall be required in accordance with section 12-173(e)1.b.
- (d) It is the purpose of this article to protect the public health, safety and welfare through the protection of wetlands and watercourses. To meet these purposes, this article establishes standards and procedures for the review of proposed activities in wetlands and watercourses, provides for the

issuance of use permits for approved activities, requires coordination with other applicable ordinances, statutes and regulations and establishes penalties for the violation of this article.

Any proposed impacts to the on-site wetlands would require a City of Novi *Wetland (Non-Minor) Use Permit* as well as an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The on-site wetlands are considered essential by the City as they appear to meet one or more of the essentiality criteria set forth in the City's Wetland and Watercourse Protection Ordinance (i.e., storm water storage/flood control, wildlife habitat, etc.).

The granting or denying of nonresidential minor use permits shall be the responsibility of the Community Development Department per the City's Wetland Ordinance. A nonresidential minor use permit is a permit for activities consisting of no more than one (1) of the following activities which have a minimal environmental effect:

- a) Minor fills of three hundred (300) cubic yards or less and not exceeding ten thousand (10,000) square feet in a wetland area, providing the fill consists of clean, nonpolluting materials which will not cause siltation and do not contain soluble chemicals or organic matter which is biodegradable, and providing that any upland on the property is utilized to the greatest degree possible. All fills shall be stabilized with sod, or seeded, fertilized and mulched, or planted with other native vegetation, or riprapped as necessary to prevent soil erosion.
- b) Installation of a single water outfall provided that the outlet is riprapped or otherwise stabilized to prevent soil erosion.
- c) Watercourse crossings by utilities, pipelines, cables and sewer lines which meet all of the following design criteria:
  - i. The method of construction proposed is the least disturbing to the environment employable at the given site;
  - ii. The diameter of pipe, cable or encasement does not exceed twenty (20) inches;
  - iii. A minimum of thirty (30) inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings; and
  - iv. Any necessary backfilling will be of washed gravel.
- d) Extension of a wetland/watercourse permit previously approved by the planning commission.
- e) Replacement of a culvert of an identical length and size, and at the same elevation. If the proposed culvert is of a greater length or size than the existing culvert, or is a new culvert altogether, it must meet the conditions of subpart c., above, to qualify for a nonresidential minor use permit.
- f) Temporary impacts where the encroachment into protected areas is less than five hundred (500) feet.

The proposed Plan includes both a minor fill to wetland and a single stormwater outfall to Wetland 1 and therefore requires a Non-Minor Wetland Use Permit.

The on-site wetlands may also be regulated by the Michigan Department of Environmental Quality (MDEQ) due to size or proximity to a watercourse (i.e., within 500 feet of the northern tributary of Chapman Creek). Final determination of regulatory status should be made by the MDEQ however. A permit from this agency may be required for any direct impacts, or potentially for stormwater discharge

from the proposed detention basin. The current Plan proposes to fill Wetland #3 and includes the outlet of pre-treated stormwater from the proposed detention basin to Wetland #1. It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use permit. It should be noted that a City of Novi Wetland Permit cannot be issued until the applicant receives either authorization or a letter of no jurisdiction from the MDEQ. The MDEQ does not regulate the 25-foot wetland buffer as does the City of Novi.

### **Wetland Comments**

Please consider the following comments when preparing subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The Applicant should consider modification of the proposed site design to preserve wetland and wetland buffer areas. Specifically, the applicant should investigate ways to preserve the 25-foot wetland buffers of Wetland 1 and Wetland 2.

The preservation of the 25-foot buffer areas is important to the overall health of the existing wetlands as the existing buffers serve to filter pollutants and nutrients from storm water before entering the wetlands, as well as provide additional wildlife habitat. The City regulates wetland buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

*“There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses”.*

ECT has spoken with the applicant's engineer, and in a conversation on Friday, January 19<sup>th</sup>, 2018, Atwell stated they will be decreasing the overall impacts to wetland buffer on the Final Site Plan submittal.

2. Please clarify/indicate how any temporary wetland buffer impacts will be restored (i.e., what seed mix will be used in the area of the stormwater outfall construction to Wetland #1). The Details and Plant Material List (Sheet LS-4 of 6) includes a Native Wildflower Seed Mix (from Nativescape, LLC). The Plan should clarify if this seed mix is proposed within areas of temporary wetland buffer impact.

In our telephone conversation with Atwell on Friday, January 19<sup>th</sup>, 2018 it was stated that this will be clarified on the Final Site Plan.

3. It is the Applicant's responsibility to confirm the need for a permit from the MDEQ for any proposed wetland impact and/or proposed stormwater discharge to Wetland #1. A City of Novi Wetland Permit cannot be issued until the applicant receives either authorization or a letter of no jurisdiction from the MDEQ.
4. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland. A Conservation Easement shall be executed covering all remaining wetland areas on site as shown on the approved plans. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and

Watercourse permit. In addition, all proposed conservation easements shall be indicated and clearly labeled on the Plan. It should be noted that Wetland #2 appears to already be included within an MDEQ Conservation Easement. Any proposed conservation easement areas should be demarcated on-site through the use of proposed easement signage and potentially other means such as boulders or decorative fencing along the setback boundaries.

**Recommendation**

ECT currently recommends approval of the Preliminary Site Plan for Wetlands. ECT recommends that the Applicant address the items noted in the *Wetland Comments* section of this letter prior to approval of the Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

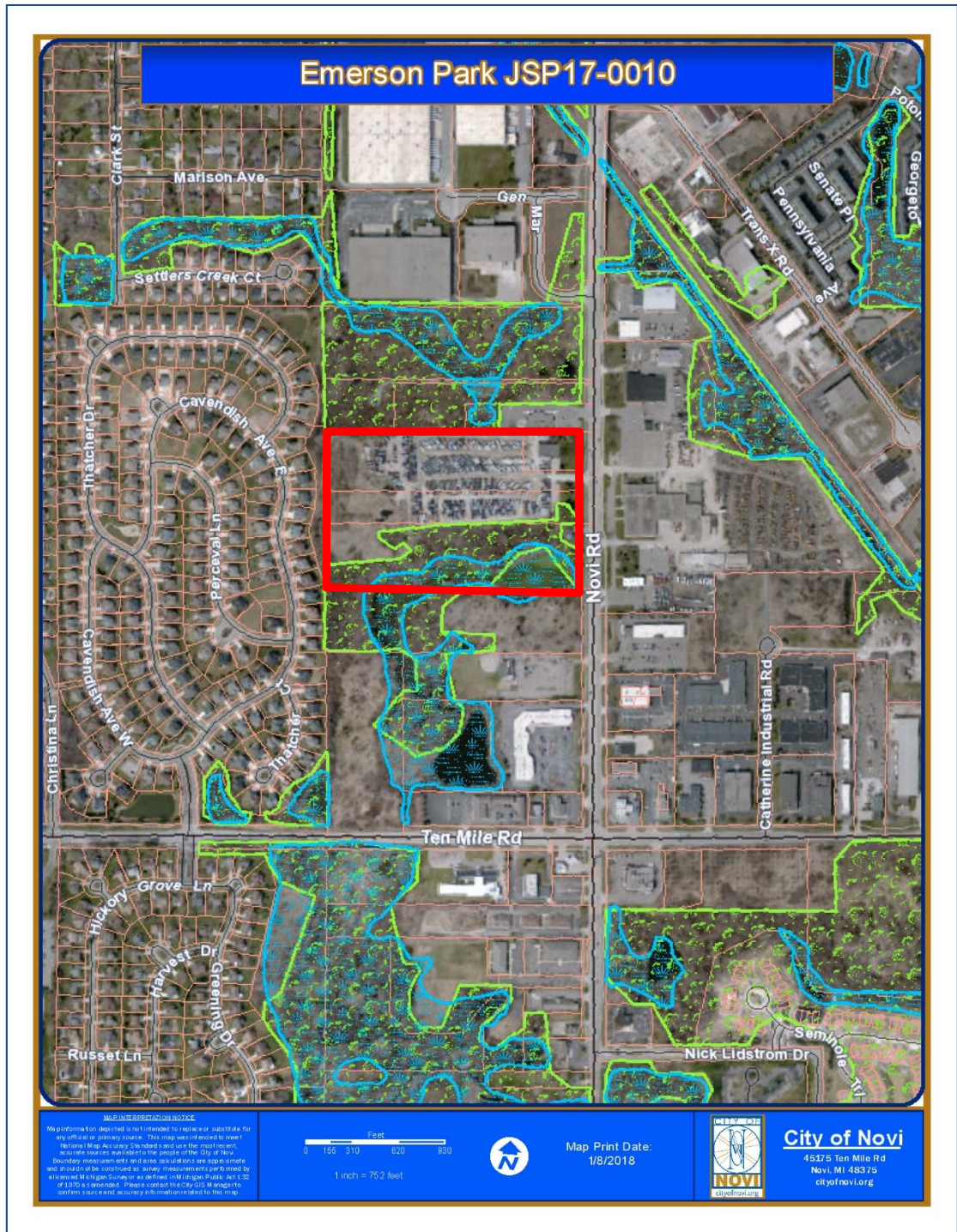
**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Pete Hill, P.E.  
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner ([lbell@cityofnovi.org](mailto:lbell@cityofnovi.org))  
Sri Komaragiri, City of Novi Planner ([skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org))  
Rick Meader, City of Novi Landscape Architect ([rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org))  
Hannah Smith, City of Novi Planning Assistant ([hsmith@cityofnovi.org](mailto:hsmith@cityofnovi.org))

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map  
Site Photos



**Figure 1.** City of Novi Regulated Wetland & Woodland Map (approximate project area is highlighted in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.



*Site Photos*



**Photo 1.** Looking southwest at Wetland Area #1 on the south side of the site (ECT, February 21, 2017).



**Photo 2.** Looking west at Wetland Area #2 on the west side of the site (ECT, February 21, 2017).



**Photo 3.** Looking east at Wetland Area #3 in the south/west section of the Site (ECT, February 21, 2017).



**Photo 4.** Looking east at upland drainage feature from Wetland Area #3 in the south/west section of the site (ECT, February 21, 2017).

WOODLANDS REVIEW



January 10, 2018  
ECT Project No. 170137-0400

Ms. Barbara McBeth, AICP  
City Planner  
Community Development Department  
City of Novi  
45175 West Ten Mile Road  
Novi, MI 48375

Re: Emerson Park (f.k.a. Princeton Park) JSP17-0010  
Woodland Review of the Preliminary Site Plan (PSP17-0017)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan for the proposed Emerson Park multi-family residential development project prepared by Atwell dated November 27, 2017 and stamped "Received" by the City of Novi Community Development Department on November 28, 2017 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

The project is located west of Novi Road between Ten Mile Road and Grand River Avenue (Section 22), just south of the U.S. Post Office. The northern two-thirds (approximately) of the proposed project site is currently used as a storage facility for cars, boats, trailers and other vehicles. The southern one-third (approximately) of the proposed site contains areas noted as City Regulated Wetlands and City Regulated Woodlands and is currently undeveloped.

The site plan appears to propose the construction of twenty-five (25) multi-family residential buildings (totaling 120 units), associated utilities, parking, and two (2) storm water detention basins located on the east portion of the site (adjacent to Novi Road). The ultimate outfall for the storm water detention basins is an existing wetland area located on the southern portion of the development site.

**ECT recommends approval of the Preliminary Site Plan for woodlands with the condition that the Applicant satisfactorily address the items noted in the "Woodland Comments" section of this letter at the time of Final Site Plan submittal.**

The following woodland related items are required for this project:

Item	Required/Not Required/Not Applicable
Woodland Permit	Required
Woodland Fence	Required
Woodland Conservation Easement	Required

What follows is a summary of our findings regarding on-site woodlands associated with the proposed project.

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769-3164

### **Woodland Evaluation**

ECT completed an on-site woodland evaluation on Tuesday, February 21, 2017. As noted above, the site does contain area designated as City of Novi Regulated Woodland. A significant portion of the proposed limits of disturbance for the project is located outside of the areas mapped as City Regulated woodland. The majority of the Regulated Woodland area is located on the southern portion of the project site (see Figure 1). Tree survey information has been provided on the *Tree List* plan (Sheet 03). This sheet includes a tree list that indicates the proposed woodland impacts/tree removals and required Woodland Replacement tree credits for these removals. This Sheet (*Woodland Summary* list) indicates that a total of **328** trees have been surveyed for the project. Of the trees surveyed, 262 trees are located within the area designated as Regulated Woodland (i.e., 80% of the surveyed trees are located within the regulated woodland area). Fifty percent (50%) of the surveyed trees are comprised of the following tree species:

- Eastern cottonwood (26% of the surveyed trees);
- Silver maple (12% of the surveyed trees);
- Sugar maple (12% of the surveyed trees);

The other 50% of the surveyed trees include the following tree species:

- Siberian elm (8%);
- Black cherry (7%);
- Boxelder (6%);
- Basswood (5%);
- Common apple (5%);
- White pine (4%);
- Bitternut hickory (3%); and
- Norway spruce, black walnut, quaking aspen, eastern red cedar, American elm, black willow, black locust, corkscrew willow, Norway maple, and common pear.

The majority of the trees are listed as being in Good condition.

### **Woodland Impact Review & Woodland Replacement Credits**

It should be noted that the purpose of the City of Novi Woodland Protection Ordinance (Chapter 37) is to:

1. *Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;*
2. *Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and*

3. Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.

As shown, there are impacts proposed to regulated woodlands associated with the site construction. The Plan notes that a total of **54** of the **262** on-site, regulated trees (approximately 20% of the regulated trees) will be removed as a result of the proposed project.

As noted above, a *Woodland Summary* list has been included on the *Tree List* (Sheet 03). The Applicant has noted the following:

- Total Regulated Trees 262
- Regulated Trees Removed: 54 (20% Removal)
- Regulated Trees Preserved: 208 (80% Preservation)
  
- Stems to be Removed 8" to 11": 30 x 1 replacement (Requiring 30 Replacements)
- Stems to be Removed 11" to 20": 13 x 2 replacements (Requiring 26 Replacements)
- Stems to be Removed 20" to 30": 4 x 3 replacements (Requiring 12 Replacements)
- Stems to be Removed 30"+: 0 x 4 replacements (Requiring 0 Replacements)
- Multi-Stemmed Trees (7 trees): (Requires 20 Replacements)
  
- Total Replacement Trees Required: 88 Replacements

Sheet LS-6 of 6 (Tree Replacement Planting Plan) states that all tree replacement plantings are to be located and installed in conservation easement areas (greenbelt, park/open space, and detention pond) per City Standards and approval. This Plan notes that the following Woodland Replacement Tree Material will be provided on-site:

- 31 – 2 1/2" caliper deciduous trees;
- 29 – 12' evergreen trees;
- 29 – 14' evergreen trees.

The proposed deciduous tree species all appear to be acceptable per the City's Woodland Tree Replacement Chart (swamp white oak, sugar maple, red maple, American sweetgum, northern hackberry, and bur oak).

The applicant has proposed both 12' tall and 14' tall white spruce and black hills spruce (*Picea glauca* 'densata'). It should be noted that the black hills spruce is not a species approved by the City for Woodland Replacement.

**In addition, per the Landscape Design Manual Section 3.c.(2) no additional Woodland Replacement credits can be gained by using larger plant material than those specified in the table 3.c.(1). As a rule, the standard woodland replacement tree credits listed on the Woodland Replacement Chart in Section 37 must be used, including the 1.5 trees : 1 Woodland Credit evergreen ratio.** All deciduous replacement trees shall be two and one-half (2 1/2) inches caliper or greater and count at a 1-to-1 replacement ratio. Based on this requirement, it appears as if the Plan is currently proposing 31 deciduous replacement trees (providing **31** credits at 1:1 replacement ratio) and 58 coniferous

replacement trees (will provide **38.6** credits at 1.5:1 replacement ratio). As such, the plan appears to provide for a total of **69.6** Woodland Replacement Credits (as opposed to the **89** credits noted in the *Woodland Tree Replacement Summary*). **The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi.** As such acceptable replacement evergreen trees shall be provided at a 1.5:1 replacement ratio. The applicant should review and revise the calculations on the Plan and the tree replacement plant list as necessary.

**City of Novi Woodland Review Standards and Woodland Permit Requirements**

Based on Section 37-29 (*Application Review Standards*) of the City of Novi Woodland Ordinance, the following standards shall govern the grant or denial of an application for a use permit required by this article:

*No application shall be denied solely on the basis that some trees are growing on the property under consideration. However, the protection and conservation of irreplaceable natural resources from pollution, impairment, or destruction is of paramount concern. Therefore, the preservation of woodlands, trees, similar woody vegetation, and related natural resources shall have priority over development when there are location alternatives.*

In addition,

*“The removal or relocation of trees shall be limited to those instances when necessary for the location of a structure or site improvements and when no feasible and prudent alternative location for the structure or improvements can be had without causing undue hardship”.*

There are a significant number of replacement trees required for the construction of the proposed development. While, the overall ecological values of the existing woodlands cannot be immediately replaced through the planting of woodland replacement trees, it appears that the applicant appears to be prepared to meet the required Woodland Replacement requirements through on-site replacement plantings. After reviewing the Woodland Replacement calculations as noted above, the applicant shall clarify whether all of the required Woodland Replacement tree credits will be provided on-site or if a portion will be paid into the City of Novi Tree Fund.

**Woodland Comments**

Please consider the following comments when preparing subsequent site plan submittals:

1. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1 replacement tree-to-1 credit replacement ratio. All coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5 replacement tree-to-1 credit replacement ratio. All Woodland Replacement trees shall be species that are listed on the City’s Woodland Tree Replacement Chart (attached).
2. The applicant has proposed both 12’ tall and 14’ tall white spruce and black hills spruce (*Picea glauca* ‘densata’). It should be noted that the black hills spruce is not a species approved by the City for Woodland Replacement. Please review and revise the Plan as necessary based on the approved coniferous tree species listed in the attached Woodland Tree Replacement Chart.

3. The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. As such, acceptable replacement evergreen trees shall be provided at a 1.5 replacement tree-to-1 credit replacement ratio. The applicant should review and revise the calculations on the Plan and the tree replacement plant list as necessary.
4. A Woodland Replacement Performance financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. This financial guarantee will be calculated based on the following:

Number of on-site Woodland Replacements x \$400/replacement credit x 1.2).

This financial guarantee will be **\$35,200** (88 Woodland Replacements required x \$400/credit).

Based on a successful inspection of the installed on-site Woodland Replacement trees, the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the value of the Woodland Replacement material (i.e., **\$8,800**) shall be kept for a period of 2-years after the successful inspection of the tree replacement installation as a *Woodland Maintenance and Guarantee Bond*.

5. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site.
6. Replacement material should not be located 1) within 10’ of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the *Plant Material Spacing Relationship Chart for Landscape Purposes* found in the City of Novi *Landscape Design Manual*.
7. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit.



Emerson Park (JSP17-0010)  
Woodland Review of the Preliminary Site Plan (PSP17-0017)  
January 10, 2018  
Page 6 of 9

**Recommendation**

ECT recommends approval of the Preliminary Site Plan for woodlands with the condition that the Applicant satisfactorily address the items noted in the “*Woodland Comments?*” section of this letter at the time of Final Site Plan submittal.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

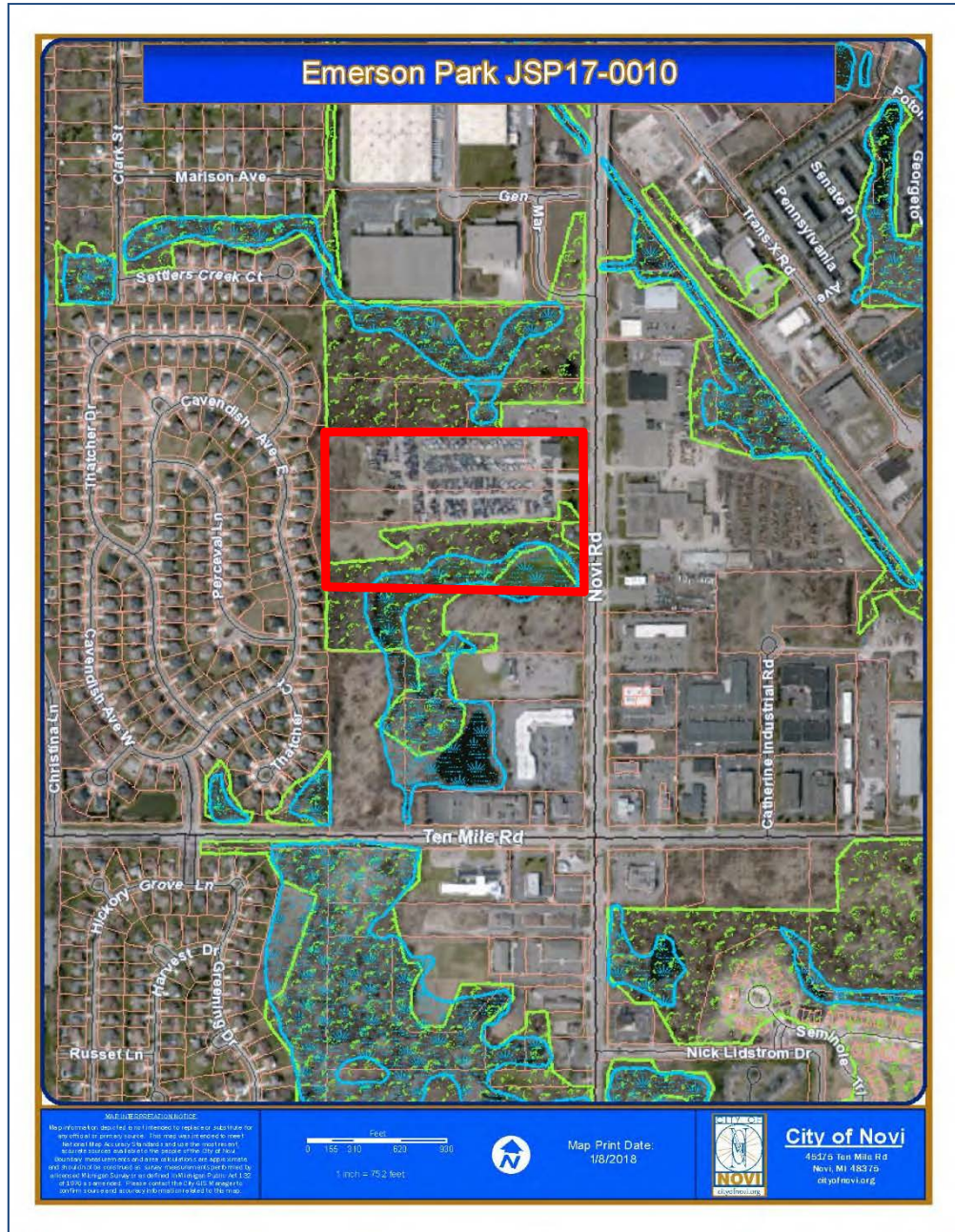
**ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.**



Pete Hill, P.E.  
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner ([lbell@cityofnovi.org](mailto:lbell@cityofnovi.org))  
Sri Komaragiri, City of Novi Planner ([skomaragiri@cityofnovi.org](mailto:skomaragiri@cityofnovi.org))  
Rick Meader, City of Novi Landscape Architect ([rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org))  
Hannah Smith, City of Novi Planning Assistant ([hsmith@cityofnovi.org](mailto:hsmith@cityofnovi.org))

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map  
Woodland Tree Replacement Chart  
Site Photos



**Figure 1.** City of Novi Regulated Wetland & Woodland Map (approximate project area is highlighted in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.

### Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)

(All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Red Maple	Acer rubrum
Sugar Maple	Acer saccharum
Mountain Maple	Acer spicatum
Ohio Buckeye	Aesculus glabra
Downy Serviceberry	Amelanchier arborea
Yellow Birch	Betula alleghaniensis
Paper Birch	Betula papyrifera
American Hornbeam	Carpinus caroliniana
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Northern Hackberry	Celtis occidentalis
Eastern Redbud	Cercis canadensis
Yellowwood	Cladrastis lutea
Beech	Fagus sp.
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus dioicus
Walnut	Juglans sp.
Eastern Larch	Larix laricina
Sweetgum	Liquidambar styraciflua
Tuliptree	Liriodendron tulipifera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine	Pinus resinosa
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
American Sycamore	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Burr Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
Black Oak	Quercus velutina
American Bladdernut	Staphylea trifolia
Bald Cypress	Taxodium distichum
American Basswood	Tilia americana
Hemlock (1.5:1 ratio) (6' ht.)	Tsuga canadensis

*Site Photos*



**Photo 1.** Looking west at area of regulated woodland just north of Wetland Area #1 on the south side of the site (ECT, February 21, 2017).



**Photo 2.** Looking south at area of regulated woodland just north of Wetland Area #1 on the south side of the site (ECT, February 21, 2017).

TRAFFIC REVIEW



AECOM  
27777 Franklin Road  
Southfield  
MI, 48034  
USA  
aecom.com

**Project name:**  
JSP17-0010 Emerson Park PRO Preliminary Site  
Plan Traffic Review

**From:**  
AECOM

**Date:**  
January 15, 2018

**To:**  
Barbara McBeth, AICP  
City of Novi  
45175 10 Mile Road  
Novi, Michigan 48375

**CC:**  
Sri Komaragiri, Lindsay Bell, George Melistas,  
Theresa Bridges, Darcy Rechten, Hannah Smith

# Memo

**Subject:** Emerson Park PRO Preliminary Traffic Review

The preliminary site plan was reviewed to the level of detail provided and AECOM **recommends approval** for the applicant to move forward with the condition that the comments provided below are adequately addressed to the satisfaction of the City.

## GENERAL COMMENTS

1. The applicant, Pulte Homes of Michigan, LLC, is proposing a multi-family residential community located on a 24-acre parcel located on the west side of Novi Road, north of 10 Mile Road and south of Grand River Avenue. The parcel is currently being used for vehicle storage. The development will consist of 120 three-bedroom units.
2. Novi Road is under the jurisdiction of the Road Commission for Oakland County.
3. The parcel is currently under OS-1 (Office Service) zoning. However, the developer is using the City's planned rezoning overlay (PRO) option in order to allow for a multi-family housing use utilizing RM-1 zoning.
4. Summary of traffic-related waivers/variances:
  - a. The applicant is seeking a deviation for the minimum required distance of 15 feet from back of curb to the sidewalk. The applicant is currently proposing only 12.5 feet.

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation estimate based on the ITE Trip Generation Manual, 10<sup>th</sup> Edition, as follows:

ITE Code: 220 – Multifamily Housing (Low-Rise)

Development-specific Quantity: 120 Units

Zoning Change: Planned Rezoning Overlay (PRO) from OS-1 to RM-1. The existing land-use of the parcel is vehicle storage. Information to estimate the existing number of trips to and from the parcel is unavailable; however, the traffic impacts incurred from the existing development are expected to be negligible.

Trip Generation Summary				
	City of Novi Threshold	Estimated Trips	Method	Above Threshold?
AM Peak-Hour, Peak-Direction Trips	100	44	Fitted Curve Equation	No
PM Peak-Hour, Peak-Direction Trips	100	44	Fitted Curve Equation	No
Daily (One-Directional) Trips	750	866	Fitted Curve Equation	Yes

- The number of trips does exceed the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City's requirements:

Traffic Impact Study Recommendation	
Type of Study	Justification
Traffic Impact Study	The applicant has provided a TIS dated 2/6/2017. The TIS has been reviewed separately and comments have been provided in a separate letter to the City and the developer dated 3/2/2017. The study included an addendum dated 6/6/2017. The addendum was reviewed separately and comments have been provided in a separate letter to the City and the developer dated 6/22/2017. No further action is required at this time.

## EXTERNAL SITE ACCESS AND OPERATIONS

The following comments relate to the external interface between the proposed development and the surrounding roadway(s).

- The applicant has proposed a site entrance drive that is in alignment with the Michigan CAT construction equipment driveway that is located on the opposite side of Novi Road.
  - The applicant has proposed entering and exiting drive widths of 22 feet. While these dimensions are within the City's allowable range, a width of 24 feet is required by the City's Ordinance. The applicant should increase the drive widths to meet the required 24 foot width or may request an administrative variance for the use of 22 feet since the widths are within the City's allowable range.
  - The applicant has proposed a 35 foot entering turning radii at the site driveway. It is assumed that the exiting radii is also 35 feet; however, it should be dimensioned on the plans for clarification. While these dimensions are within the City's allowable range, a radii of 25 feet is required by the City's Ordinance. The applicant should decrease the turning radii to meet the required 25 foot radii or may request an administrative variance for the use of 35 feet since the radii are within the City's allowable range.
  - The applicant has proposed an island width of 16 feet. While this dimension is within the City's allowable range, a width of 10 feet is required by the City's Ordinance. The applicant should decrease

the island width to meet the required 10 foot width or may request an administrative variance for the use of 16 feet since the width is within the City's allowable range.

- d. The applicant has proposed an island nose offset of 18 feet. While this dimension is within the City's allowable range, an offset of 12 feet is required by the City's Ordinance. The applicant should decrease the island nose offset to meet the required 12 foot offset or may request an administrative variance for the use of 16 feet since the offset is within the City's allowable range.
  - e. The applicant has proposed an island length of 100 feet. While this dimension is within the City's allowable range, an island length of 35 feet is required by the City's Ordinance. The applicant should decrease the island length to meet the required 35 foot length or may request an administrative variance for the use of 100 feet since the length is within the City's allowable range.
  - f. Please reference Figure IX.3 in the City's Code of Ordinances for clarification in regards to driveway dimensions.
2. The applicant should indicate a six inch curb for the driveway island. Please reference Section 11-216.d.6 in the City's Code of Ordinances for further clarification.
  3. The applicant should indicate that the radii on the edge of the island are large enough to accommodate the largest vehicle to normally use the drive approach. Please reference Section 11-216.d.6 in the City's Code of Ordinances for further clarification.
  4. Although the minimum of a right turn taper was required at the site entrance, the applicant has provided a full entering and exiting lane and taper for right turning vehicles. The entering right turn lane is in compliance with City standards; however the applicant has not provided dimensions for the exiting lane. The exiting lane is required to consist of a 25 foot exiting lane length and a 75 foot exiting taper length. Please reference Figure IX.11 in the City's Code of Ordinances for further information.
  5. Novi Road has a two-way left turn lane (TWLTL) for left-turning vehicles.
  6. The applicant has indicated adequate sight distance in both directions at the site driveway according to City standards provided in Figure VIII-E in the City's Code of Ordinances.
  7. Based upon an estimation that the two (2) driveways on the west side of Novi Road located to the north and south of the proposed driveway generate less than 400 trips per peak hour, driveway spacing requirements are in compliance with City standards.
  8. The applicant has proposed an emergency access path using the combination of grass pavers and a thickened concrete walk as requested and approved by the Fire Marshal. The proposed walk is a total of 20 feet wide and exceeds the 15 foot requirement. The applicant should indicate 10 foot turning radii at the entrance of the emergency access drive at Novi Road.
  9. The applicant has proposed a 22 foot wide emergency access gate which is in compliance with City standards. The applicant should consider relocating the gate to the east side of the Novi Road sidewalk in order to allow pedestrian access to the sidewalk and scenic overlook area while maintaining the same dimensions of the gate and path at the given location.
  10. The proposed driveway is located approximately 185 feet south of the stop bar for northbound Novi Road traffic at the signalized intersection with the U.S. Post Office. The impacts of this are discussed within the TIS letter.

## INTERNAL SITE OPERATIONS

*The following comments relate to the on-site design and traffic flow operations.*

1. General Traffic Flow
  - a. The provided pavement width and material for the local street is in compliance with City standards.
  - b. The applicant has provided two eyebrow designs on the west side of the site. The eyebrow detail provided is in compliance with City standards. It should be noted that the eyebrows on the site plan appear to exceed minimum eyebrow radii requirements in order to facilitate the number of residential driveways proposed.
  - c. On-street parking shall be restricted using signage in areas with curve radii less than 230 feet. The applicant has proposed signing at such locations.



- d. The applicant should provide turning radii dimensions at the intersection of Prospect Avenue and Broadmead Avenue. A 25 foot turning radii is required at local street intersections as per Section 111-94.b.8 in the City's Code of Ordinances.
- e. The applicant should indicate additional dimensions for residential driveways including widths and taper widths. The applicant has indicated a 7.5 foot taper depth for residential driveways. The required taper depth for residential driveways is 10 feet. The applicant should revise the residential driveway dimensions given in the typical unit detail to reflect the required driveway dimensions in Figure IX.5 in the City's Code of Ordinances. Dimensions within the City's allowable range, but not the standard value, will require an administrative variance. Dimensions not within the City's allowable range will require a City Council variance.
- f. The applicant has indicated that the residential driveway grades do not exceed 10% as required by Section 11-216.e.8 in the City's Code of Ordinances.

## 2. Parking Facilities

- a. The City of Novi Zoning Ordinance requires two parking spaces for each dwelling unit having two or less bedrooms and two and one-half parking spaces for each dwelling unit having three or more bedrooms. Therefore the applicant is required to provide a total of 300 parking spaces. The applicant should revise the plans to indicate 300 required parking spaces as opposed to 313 required parking spaces.
- b. The applicant has proposed a total of 494 parking spaces. The parking areas consist of a single two car garage per unit with availability to park two cars per unit driveway totaling 480 parking spaces per unit and the applicant has also provided an additional 14 parking spaces throughout the development.
- c. The parking spaces are proposed with 20 foot lengths. It should be noted that the City requires 19 foot long parking spaces when abutting a 6" curb; or, 17 foot long spaces when abutting a 4" curb. The applicant has also provided a parking space width of 9.5 feet which exceeds City standards. For more information please consult Section 5.3 of the City's Zoning Ordinance.
  - i. The applicant should indicate 6" curbs at the end of the 20 foot parking spaces and also provide a detail for the curb.
- d. The applicant has provided one accessible parking space. The single accessible parking space is required to be van-accessible. The applicant should indicate dimensions particular to the accessible parking space in accordance with ADA standards for accessible design Section 502.2.
- e. The applicant is required to provide one bicycle parking space for every five dwelling units totaling 24 bicycle parking spaces.
- f. The applicant has provided 24 bicycle parking spaces.
- g. The bicycle parking layout is in compliance with City standards.
- h. The applicant should indicate the type of bicycle parking that will be installed. The City requires the use of an inverted U-shape bicycle parking device that is at least three feet in height with two contact points on the ground.

## 3. Sidewalk Requirements

- a. The applicant has indicated a five foot wide sidewalk on both sides of the proposed local streets and a six foot walk along Novi Road. Both proposed widths are in compliance with City standards.
- b. The applicant is seeking a deviation for the minimum required distance of 15 feet from back of curb to the sidewalk. The applicant is currently proposing only 12.5 feet.
- c. The proposed sidewalk ramp locations and the ramp detailed dimensions are in compliance with City standards.

## 4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and striping.

- a. All signing and striping details are required by the final site plan.
- b. The applicant should consider replacing the proposed R1-1 (stop) sign at the intersection of Prospect Avenue and Broadmead Avenue with a R1-2 (yield) sign.
- c. The applicant could consider providing W11-2 (pedestrian warning) signs at all non-intersection pedestrian crossings.

- d. The applicant should indicate that all roadside signs should be installed two feet from the face of the curb to the near edge of the sign.
- e. The applicant could consider the use of a W14-2 (no outlet) sign at the entrance of the development.
- f. Street name signs shall be designed per the City of Novi Traffic Control Sign standards.
  - i. Street name signs are required to have a green field, white letters, and a white border.
  - ii. Text shall consist of a capitalized first letter with the remaining letters in lowercase font.
  - iii. Street name signs shall have a minimum height of 12 inches and minimum lettering height of eight inches for the Capital letters and six inches for the lowercase letters, if located adjacent to a road with a speed limit of 30 mph or greater; or, have a minimum height of eight inches and minimum lettering height of 4.5 inches, if located at residential street intersections
  - iv. Street name signs shall have a lettering height of three inches for supplementary lettering to indicate the street type (i.e. drive, avenue, etc.)
  - v. All street name signs within the City's right of way or located on public streets at the intersection of a public street and a private street shall be mounted on a 3 lb. or greater U-channel post as dictated by the weight of the proposed signs. Street name signs with a nominal height of 12 inches shall be single sided and sandwiched on a 1 ¼" x 1 ¼" 12-gauge perforated galvanized steel insert with the ends of the signs **bolted** together. The steel insert shall have a minimum length of 36 inches and must extend a minimum of 12 inches into the 3 lb. or heavier U-channel post. In previous experiences, the City has discovered that the connection often must be replaced when rivets are used to join the ends of the signs. The bolts to adjoin the signs are not required on street signs placed on private roadways since private roadway signs are not maintained by the City.
- g. Single signs with nominal dimensions of 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post. Multiple signs and/or signs with nominal dimension greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post as dictated by the weight of the proposed signs.
- h. All signs shall be a height of 7 feet from grade to the bottom of the sign when placed in the vicinity of a curbed area.
  - i. Traffic control signs shall use the FHWA Standard Alphabet series.
  - j. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
  - k. The applicant should provide an R7-8 sign and an R7-8p plaque at the accessible parking space.
  - l. The applicant should update the sign quantities table to include all signs and correct quantities (There are currently some discrepancies).
  - m. The applicant should indicate white parking striping for standard parking spaces and blue striping for accessible parking spaces.
  - n. The applicant should provide a white line adjacent to a blue line in areas where standard parking and accessible parking spaces are adjacent.
  - o. The applicant should provide a detail for the international symbol for accessibility. Note that the symbol is required to be white; or, white with a blue background and white border.
    - i. Also note that the symbol for accessibility is oriented in the incorrect direction within the plans. It should be rotated 90 degrees and positioned near the end of the parking space so that it can be seen by approaching vehicles.
  - p. The applicant should provide a detail for the proposed crosswalk markings near the entrance of the development.

Should the City or applicant have questions regarding this review, they should contact AECOM for further clarification.

Sincerely,

Memo

**AECOM**

A handwritten signature in blue ink that reads "Sterling Frazier". The signature is written in a cursive style with a long horizontal stroke at the end.

Sterling Frazier, PE  
Reviewer, Traffic/ITS Engineer

A handwritten signature in blue ink that reads "Maureen Peters". The signature is written in a cursive style with a long horizontal stroke at the end.

Maureen N. Peters, PE  
Senior Traffic/ITS Engineer

FAÇADE REVIEW



January 22, 2018

*Façade Review Status Summary:*  
**Full Compliance, Section 9 Waiver Not Required**

City of Novi Planning Department  
 45175 W. 10 Mile Rd.  
 Novi, MI 48375-3024

Attn: Ms. Barb McBeth – Director of Community Development

Re: **FACADE ORDINANCE REVIEW**  
**Emerson Park, Preliminary Site Plan, JSP17-0010**  
 Façade Region: 1, Zoning District: RM-2 with PRO

Dear Ms. McBeth:

The following is the Façade Review of the updated drawings dated 12/12/17 provided by the Pulte Group for compliance with the Façade Ordinance and the PRO Agreement. This submittal includes typical 3, 4, 5 and 6 unit buildings consisting of various combinations of Elevation Types 1, 2, 3 and 4. The percentages of materials proposed are as shown below.

	3-Unit Building Front Elev.	4-Unit Building Front Elev.	5-Unit Building Front Elev.	6-Unit Building Front Elev.	Rear Elevations, All Bldgs.	Side Elevations Type 3 (others similar)	Ordinance Maximum (Minimum)
Stone or Brick	42%	41%	42%	39%	45%	44%	100% (30% Min)
Horizontal Siding	0%	0%	0%	0%	27%	31%	50% (Note 10)
Shake Siding	3%	2%	2%	2%	12%	12%	50% (Note 10)
Wood Trim	14%	13%	13%	13%	8%	11%	15%
Asphalt Shingles	41%	44%	43%	46%	8%	2%	50% (Note 14)

**Façade Ordinance Section 5.15** - As shown above the percentage of all façade materials are in full compliance with the Façade Ordinance.

**PRO Agreement** – The PRO Agreement includes the following additional façade requirements;

- All building elevations, which shall be in a housing style consistent with the conceptual renderings attached and incorporated hereto as Exhibit C (the “Conceptual Renderings”) shall be reviewed and approved by the City’s Façade Consultant. Applicant shall submit elevations with material percentages meeting or exceeding the requirements of the Façade Ordinance at the time of Preliminary Site Plan submittal. At a minimum, all front building facades shall have brick or stone up to the*

*second floor roof line, and all side and rear facades shall have brick or stone up to the second floor beltline, as required by the City's Façade Ordinance. If the façade deviates from the approved stamping sets then revised plans must be submitted to the Planning Division for review and approval prior to submittal of building permits.*

2. *Upgraded garage doors with windows shall be provided.*

**Recommendation** - All front elevations have Brick or Stone up to the second floor roof line and the percentage of Brick or Stone exceeds the minimum amount required by the Façade Ordinance (30%) on all front, side and rear facades. Carriage house style garage doors with arched vision lites and divided lite windows are indicated on all elevation types. This meets the requirement for upgraded garage doors and windows. Decorative shutters, brick soldier coursing, and built-up columns are indicated on all elevation types and dormer windows are provided on elevation types 3 and 4.

**Therefore, it is our recommendation that all proposed facades are in full compliance with the Façade Ordinance and meet the additional requirements set forth in the PRO Agreement.**

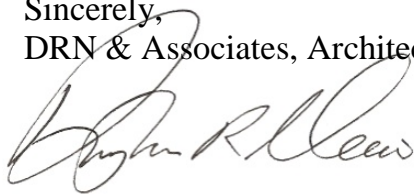
A sample board indicating carefully coordinated earth toned colors for all facades should be provided at least five days prior to the Planning Commission and/or City Council meetings.

**Notes to the Applicant:**

1. Inspections – The Façade Ordinance requires inspection(s) for all projects. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time (before installation). In this case the materials should match the adjacent existing materials with respect to color and texture. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

<http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp>.

Sincerely,  
DRN & Associates, Architects PC



Douglas R. Necci, AIA

**FIRE REVIEW**



January 12, 2018

TO: Barbara McBeth- City Planner  
Sri Ravali Komaragiri- Plan Review Center  
Kirsten Mellem- Plan Review Center

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Gwen Markham

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Brian Burke

**City Manager**  
Pete Auger

**Director of Public Safety  
Chief of Police**  
David E. Molloy

**Director of EMS/Fire Operations**  
Jeffery R. Johnson

**Assistant Chief of Police**  
Erick W. Zinser

**Assistant Chief of Police**  
Jerrod S. Hart

RE: Emerson Park-fka Princeton Park

PSP# 17-0087

**Project Description:**

Build a 25 multi-tenant buildings off of Novi Rd. north of Ten Mile Rd.

**Comments:**

1. On plan #08, Gate for emergency access road MUST have an opening of not less than 20' (IFC 5036.2.1 and 503.6)
2. If locking the gate for the emergency access, you MUST either have "Break away chains or a Knox Lock." (IFC 503.5.1)
3. Using grass pavers for emergency access road. MUST have a permanent way of labeling the edge of the access road.

**Recommendation:**

APPROVAL with CONDITIONS

Sincerely,

Kevin S. Pierce-Fire Marshal  
City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration  
45125 W. Ten Mile Road  
Novi, Michigan 48375  
248.348.7100  
248.347.0590 fax

cityofnovi.org



APPLICANT RESPONSE LETTER



January 29, 2018

Sri Komaragiri, Planner  
City of Novi  
45175 10 Mile Road  
Novi, Michigan 48375

*RE: Planning Review – Emerson Park (f.k.a. Princeton Park)  
JSP17-10 with Rezoning 18.717*

Thank you for providing the City's review and feedback for the above referenced project. We intend to address the plan revisions in the Final Site Plan (FSP) submittal in accordance with the comments in the planning report dated January 18, 2018. For your use, below are our responses on how we have addressed or plan to address each of the comments in the report.

## **PLANNING REVIEW**

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1. Council tentatively approved the PRO plan on October 23, 2017.  
**Response:** *Noted.*
2. The proposed rezoning category would allow Multi-family uses.  
**Response:** *Noted.*
3. Draft PRO agreement indicates that all site improvements will be built in one phase.  
**Response:** *Noted.*
4. Applicant is currently working on revised the sidewalk out along 10 mile that is being offered as a Public benefit.  
**Response:** *Noted.*
5. See Comments on Page 8.  
**Response:** *Refer to enclosed comment responses.*
6. Refer to Traffic comments for comments on parking dimensions.  
**Response:** *Noted.*
7. Propose the required sign.  
**Response:** *The required barrier free park sign will be included on the FSP.*
8. Refer to Traffic comments for additional information requested.  
**Response:** *Refer to enclosed comment responses.*
9. Economic Impact information required prior to Planning Commission meeting.  
**Response:** *The two requested pieces of economic impact information will be provided this week, prior to the Planning Commission meeting.*

10. The agreement is scheduled for Council consideration and approval on February 05, 2018. Planning Commission cannot consider Preliminary Site Plan unless Council approves the PRO agreement.

**Response:** *Noted.*

11. A lighting and photometric plan is not required until Final site plan, unless the site abuts residential development. Provide more information to demonstrate that the spillover will be kept under 0 fc along property boundary abutting residential.

**Response:** *The lighting and photometric plan will be included with the FSP submittal. The development will comply with ordinance standards to keep spillover at 0 foot candles along the property boundary.*

## ENGINEERING REVIEW

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1. Correct Note 4. on Proposed Deviations that a distance of 7.5 feet from back of curb is proposed where 10 feet is required in the Engineering Design Manual.

**Response:** *The note will be corrected on the FSP.*

2. Correct Note 2. on General Notes that contractor must obtain right-of-way permits from both the City of Novi and the Road Commission for Oakland County (RCOC).

**Response:** *The note will be corrected on the FSP.*

3. Provide the City's standard detail sheets for water main, sanitary sewer, storm sewer, and pathway and boardwalks at the time of the Stamping Set submittal (do not include these sheets in the Final Site Plan submittal). These details are currently being updated and the newly revised standard details will be available on the City's website by the time of stamping set printing.

**Response:** *The standard details will be provided with the final stamping set. Please provide the newly revised City standard details when complete.*

4. Any traffic signs in the RCOC right-of-way will be installed by RCOC.

**Response:** *A note will be included on the Frontage Plan sheet of the FSP.*

5. Provide a traffic control plan for the proposed construction activity in the Novi Road right-of-way.

**Response:** *A traffic control plan will be included with the FSP submittal.*

6. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.

**Response:** *A note will be included on the Overall Utility Plan sheet and the proposed sand backfill hatch will be shown on the Utility Profile sheets of the FSP.*

7. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.

**Response:** *A quantity table will be included on the Cover sheet of the FSP.*

8. Provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.  
**Response:** *A crossing table will be included on the FSP.*
9. Provide a note stating if dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Division for review.  
**Response:** *A note will be provided on the Overall Utility Plan sheet of the FSP.*
10. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.  
**Response:** *The landscape Plan sheet of the FSP will be revised to relocate proposed trees to maintain a 5-foot horizontal separation distance from utilities whenever possible.*
11. Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur.  
**Response:** *Light pole locations will need to be included on the FSP. A note will be provided on the Overall Utility Plan sheet to be included with the FSP. Typical light pole foundation depths are around 48"-60". The light poles will be located so that there are no conflicts with underground utilities.*
12. Indicate that a tapping sleeve, valve and well is required at the connection to the existing water main.  
**Response:** *The requested note and TSGV callout will be shown on the Utility Plan of the FSP.*
13. Provide a profile for all proposed water main 8-inch and larger.  
**Response:** *The profiles will be included with the FSP submittal.*
14. Indicate water main pipe material and sizes and show all building leads.  
**Response:** *The locations, material and sizes will be shown on the FSP.*
15. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.  
**Response:** *Draft MDEQ applications and permit plans will be included with the FSP submittal.*
16. Provide the diameter and material type for all proposed and existing sanitary sewer.  
**Response:** *The sanitary sewer material and sizes will be shown in the FSP.*
17. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.  
**Response:** *A note will be provided on the Overall Utility Plan sheet to be included on the Utility Plan of the FSP.*

18. Provide a note on the Utility Plan and sanitary profile stating the sanitary lead will be buried at least 5 feet deep where under the influence of pavement.

**Response:** *A note will be provided on the Overall Utility Plan sheet to be included with the FSP.*

19. Seven (7) sealed sets of revised utility plans along with the MDEQ permit application (04/14 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets. Also, the MDEQ can be contacted for an expedited review by their office.

**Response:** *Draft MDEQ applications and permit plans will be included with the FSP submittal.*

20. Provide site drainage area map and storm sewer sizing calculations.

**Response:** *A drainage area map and storm sewer design calculations will be included on the FSP.*

21. A minimum cover depth of 3 feet shall be maintained over all storm sewers. Grades shall be elevated and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.

**Response:** *The storm sewer system is designed with at least 3' of cover. Storm sewer profiles will be included with the FSP.*

22. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.

**Response:** *The required 0.1-foot drop will be provided where required. Storm sewer profiles will be included with the FSP.*

23. Match the 0.80 diameter depth above invert for pipe size increases.

**Response:** *The 0.8's points will be matched where required. Storm sewer profiles will be included with the FSP.*

24. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot deep plunge pool.

**Response:** *2' sumps will be shown in structures where required. Storm sewer profiles will be included with the FSP.*

25. Submit a request for variance from the Design and Construction standards where runoff along the southern portion of the development will discharge to the wetlands without being captured in the site storm sewer and storm water detention basin system. This request will be reviewed for administrative approval with the Final Site plan showing additional site grading and storm water design details.

**Response:** *A formal request for this variance will be provided with the FSP submittal narrative.*

26. The residential driveways will not meet the standard dimensions shown in Figure IX.6 due to the sidewalk placement 7.5 feet from back of curb. Standard driveway tapers are 3 feet in width over a 10 foot length between sidewalk and curb. The placement of the sidewalk was previously

approved with the PRO agreement. Provide a note on the plans indicating a minimum 2 foot flare width.

**Response:** *The requested 2' minimum drive flare will be noted and shown in the typical building detail on the Layout Plan sheet of the FSP.*

27. Adjust the sidewalk along the emergency access drive to be routed around the access gate to provide unobstructed pedestrian/bicycle access to the Novi Road pathway.

**Response:** *The walk will be adjusted to bypass the gate on the FSP.*

28. The off-site pathway plan should refer to the City's standard boardwalk detail sheet.

**Response:** *A note will be included on the FSP. Please provide the newly revised City standard boardwalk detail when complete and they will be incorporated into the FSP.*

29. Indicate maximum 2% cross slope on the boardwalk.

**Response:** *A note will be included on the FSP.*

30. The proposed boardwalk shall include foundations at each end, helical piers, and composite hand rails as described in PRO agreement and as detailed in the newly revised City standard details.

**Response:** *Noted. Please provide the newly revised City standard boardwalk detail when complete and they will be incorporated into the FSP.*

31. Label the dimension of boardwalk width and distance from back of curb.

**Response:** *Dimensions will be included on the FSP.*

32. Provide a cross section of pathway, indicating a shoulder along the pathway and maximum 4:1 slope to match existing grades. If necessary to go beyond the proposed 10 foot pathway easement to perform grading to match existing, indicate the extent of temporary grading easement required.

**Response:** *A cross section will be included on the FSP.*

33. The existing 5 foot sidewalk must be revised to taper out to 8 foot width to match proposed boardwalk width.

a. Indicate on the plans one or two flags of sidewalk to be removed and replaced to flare out to 8 foot width at boardwalk connection.

**Response:** *The requested removal and flare will be shown on the FSP.*

b. Ideally the flares should be even on the north and south sides, which may require adjustment of the longitudinal alignment of the pathway(s).

**Response:** *The requested flares will be shown on the FSP.*

34. A point of egress for the parcel to the north of the proposed boardwalk must be provided. The landowner is to provide information on the desired location of a future driveway. The boardwalk design must accommodate this future driveway opening.

**Response:** *A future driveway egress location will be shown on the FSP. A 30' long portion of the pathway will be graded and constructed as an asphalt path to accommodate a future point of egress. The egress will be located in the most feasible location along the west property line to minimize based on minimizing wetland impacts to construct an access drive (i.e. the narrowest*

*portion of wetland). This also appears to be the current used egress location per tire tracks shown on aerial imagery.*

35. Provide pre- and post-development drainage area maps as previously discussed.

**Response:** *The pre- and post- drainage areas will be shown and labeled on the drainage area map shown in the FSP.*

36. In the pre- and post- runoff analysis, provide a breakdown of the post development discharge from detention basin at the restricted rate of 0.15 cfs/acre, and the discharge from surface runoff.

**Response:** *The pre- and post- breakdown will be provided on the FSP.*

37. An adequate maintenance access route to the basin outlet structure, and any other pretreatment structures, shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.

**Response:** *An access route will be shown on the FSP. The landscaping will be adjusted accordingly.*

38. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.

**Response:** *The stone access bridge will be shown on the FSP.*

39. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.

**Response:** *Storm sewer easements will be shown and labeled in the FSP.*

40. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.

**Response:** *The required safety shelf will be shown and labeled on the detention profile that will be shown in the FSP.*

41. Provide release rate calculations for the three design storm events (first flush, bank full, 100-year).

**Response:** *The outlet control and release rate calculations will be shown in the FSP.*

42. A SESC permit is required. A full review has not been done at this time. Include a Soil Erosion and Sediment Control plan with the Final Site Plan set. A separate application for the SESC permit is required. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

**Response:** *A SESC application will be included with the FSP submittal.*

43. Any off-site easements must be executed prior to final approval of the plans. Drafts shall be submitted as soon as possible.

- a. Any applicable off-site temporary grading easements must be executed prior to final approval of the plans.

**Response:** *Noted.*

- b. The City is obtaining the off-site easement for the 10 Mile pathway as described in the PRO agreement.

**Response:** *Noted. An off-site easement sketch and description exhibit was previously provided to the Planning department. These exhibits must be revised per the requested egress and construction implications with the existing utility poles, but will be provided to the Planning department as soon as possible.*

- 44. A letter from either the applicant or the applicant's engineer must be submitted with the Final Site Plan 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.

**Response:** *Noted. A revision letter will be provided with the Final Site Plan. It will essentially be the same as this response letter.*

- 45. An 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 yardage), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).

**Response:** *Noted. An itemized cost opinion will be included with the FSP submittal.*

- 46. A draft copy of the Storm Drainage Facility Maintenance Easement Agreement, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the form of the agreement is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds. This document is available on our website.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

- 47. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

- 48. A draft copy of the 20-foot wide easement for the sanitary sewer to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

- 49. Draft copy of the required sidewalk easement must be submitted to the Community Development Department for review.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

- 50. Executed copies of any required off-site temporary grading easements.

**Response:** *Noted. This document will be provided with a future submittal when complete.*



51. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).  
**Response:** *Noted.*
52. 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). No fee is required for this permit.  
**Response:** *Noted.*
53. 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.  
**Response:** *Noted.*
54. Construction inspection fees in an amount to determined must be paid to the Community Development Department.  
**Response:** *Noted. Fees will be paid once determined by the City and prior to construction.*
55. Legal escrow fees in an amount to be determined must be deposited with the Community Development Department. Unused escrow will be returned to the payee at the end of the project. This amount includes engineering legal fees only. There may be additional legal fees for planning legal documents.  
**Response:** *Noted. Fees will be paid once determined by the City.*
56. A storm water performance guarantee (equal to 120% of the cost required to complete the storm water management facilities) as specified in the Storm Water Management Ordinance must be posted at the Community Development Department.  
**Response:** *Noted. Fees will be paid once determined by the City and prior to construction.*
57. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Water & Sewer Division at 248-347-0498 to determine the amount of these fees.  
**Response:** *Noted. Fees will be paid once determined by the City and prior to construction.*
58. A street sign financial guarantee in the amount of \$400 per traffic control sign proposed must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.  
**Response:** *Noted. Fees will be paid once determined by the City and prior to construction.*
59. 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.  
**Response:** *Noted. A SESC application and abridged SESC plans will be included with the FSP submittal. Fees will be paid once determined by the City and prior to construction.*

60. 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 Division or on the City website and may be filed once the Final Site Plan has been submitted. Please contact the Engineering Division at 248-347-0454 for further information. Only submit the cover sheet, standard details and plan sheets applicable to the permit.  
**Response:** *Noted. A ROW application and abridged plan set will be included with the FSP submittal.*
61. A permit for work within the right-of-way of Novi Road must be obtained from the Road Commission for Oakland County. Please contact the RCOC (248-858-4835) directly with any questions. The applicant must forward a copy of this permit to the City. Provide a note on the plans indicating all work within the right-of-way will be constructed in accordance with the Road Commission for Oakland County standards.  
**Response:** *Noted. A permit application has already been submitted to the RCOC and detail permit plans will be submitted to the RCOC when the FSP is submitted to the City. A copy of the permit will be provided to the City when obtained.*
62. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.  
**Response:** *Noted. Draft MDEQ applications and permit plans will be included with the FSP submittal.*
63. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the sanitary sewer plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.  
**Response:** *Noted. Draft MDEQ applications and permit plans will be included with the FSP submittal.*
64. An NPDES permit must be obtained from the MDEQ because the site is over 5 acres in size. The MDEQ may require an approved SESC plan to be submitted with the Notice of Coverage.  
**Response:** *Noted. The NPDES NOC permit will be applied for once the SESC permit is obtained from the City.*
65. MDEQ wetland permit will be required for the off-site pathway construction.  
**Response:** *Noted. A copy of the wetland permit will be provided once obtained.*
66. The amount of the incomplete site work performance guarantee for this development will be equal to 1.2 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 reduced prior to TCO, at which time it will be based on percentage of construction completed.  
**Response:** *Noted.*

## LANDSCAPE REVIEW

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1. Show proposed tree fencing at a minimum of 1' outside of tree driplines.  
**Response:** *Tree protection fencing will be shown on the FSP. The protection fencing will be shown at the limits of the proposed grading and outside of the tree driplines wherever feasible.*
2. Include tree planting detail that shows fencing at 1' outside of tree driplines.  
**Response:** *Detail will be provided on the Landscape Plans with the FSP submittal.*
3. Please revise the calculations to remove the upsizing credit.  
**Response:** *The calculations will be revised as requested on the Landscape Plans with the FSP submittal.*
4. Please ensure that tree species and locations for Novi Road greenbelt trees are compatible with the overhead utility lines. If necessary, subcanopy trees can be used as substitutes for canopy trees at a rate of 2 subcanopy trees per 1 canopy tree.  
**Response:** *The Landscape Plans will be reviewed and revised accordingly with the FSP submittal.*
5. If the RCOC prohibits any or all of those trees, those trees do not need to be provided elsewhere. A copy of their review will need to be provided as evidence.  
**Response:** *Noted.*
6. This replacement can be at a 1:1 ratio, not 2:1 as is shown on the landscape plan.  
**Response:** *The Landscape Plans will be revised accordingly with the FSP submittal.*
7. Please provide building foundation landscaping details to scale and confirm that at least 35% of front of building units are landscaped.  
**Response:** *This was discussed with Rick Meader and an administrative wavier will be requested with the FSP submittal. The 35% cannot technically be obtained given the area of the front loaded driveways/garages, but note that foundation landscaping will be provided in the available spaces along the frontage and additional landscaping will be provided wrapping around the building to accommodate additional foundation landscaping.*
8. Please increase the coverage with large native shrubs to at least 70% of the rims as measured along the high water line (approximately 94lf additional coverage is required along the northern pond and 37lf additional coverage is required along the southern pond).  
**Response:** *The Landscape Plans will be revised accordingly with the FSP submittal.*
9. Please replace the Mohawk viburnums and Tam Junipers along the rim with large native shrubs if they are to count toward the requirement.  
**Response:** *The Landscape Plans will be revised accordingly with the FSP submittal.*
10. Please survey the site for Phragmites and show it on the topographical survey if any (even one plant) is found.  
**Response:** *A phragmites survey will be performed for the site as requested. This request will take a little more lead time to provide, but results of the survey will be provided on the FSP after the first FSP submittal and review.*

11. If there is any, please add a management plan and schedule for it to be carried out.  
**Response:** *A phragmites survey will be performed for the site as requested. This request will take a little more lead time to provide, but a management plan and schedule will be provided on the FSP after the first FSP submittal and review.*
12. When proposed transformers/utilities/fire hydrants are available, add them to the landscape plan and adjust plant spacing accordingly.  
**Response:** *The Landscape Plans will be revised to show the proposed utilities, including fire hydrants, on the landscape plan with the FSP submittal. The proposed transformers will also be shown on the Landscape Plan following completion of the electrical routing design from DTE.*
13. If the locations are not determined prior to completion of the stamping sets, the applicant must still screen them per the detail.  
**Response:** *Noted.*
14. Please replace the barberries with a species that is not on our prohibited species list.  
**Response:** *The Landscape Plans will be revised accordingly with the FSP submittal.*
15. Details provided meet City of Novi requirements.  
**Response:** *Noted.*
16. For final site plans, costs per the City of Novi Community Development Fee Schedule need to be provided for all plants, including seed and sod, and mulch proposed to be used on the site.  
**Response:** *A landscaping cost opinion will be provided with the FSP submittal.*
17. Irrigation plan for landscaped areas is required for Final Site Plan.  
**Response:** *An irrigation plan will be provided for review and approval after the first FSP review and prior to stamping set approval.*
18. If the applicant elects to not provide underground irrigation, a plan for how the plantings will be provided with sufficient water for their establishment and long-term survival must be provided.  
**Response:** *Noted. An irrigation plan will be provided for review and approval after the first FSP review and prior to stamping set approval.*
19. Please locate and include on the survey any populations of Phragmites australis on the site.  
**Response:** *A phragmites survey will be performed for the site as requested. This request will take a little more lead time to provide, but results of the survey will be provided on the FSP after the first FSP submittal and review.*
20. Please provide a plan for eradication of the populations per MDEQ guidelines and regulations and carry out those plans.  
**Response:** *A phragmites survey will be performed for the site as requested. This request will take a little more lead time to provide, but a management plan and schedule will be provided on the FSP after the first FSP submittal and review.*

## WETLAND REVIEW

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1. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The Applicant should consider modification of the proposed site design to preserve wetland and wetland buffer areas. Specifically, the applicant should investigate ways to preserve the 25-foot wetland buffers of Wetland 1 and Wetland 2.

**Response:** *The grading will be revised in the FSP to reduce the impacts as discussed.*

2. Please clarify/indicate how any temporary wetland buffer impacts will be restored (i.e., what seed mix will be used in the area of the stormwater outfall construction to Wetland #1). The Details and Plant Material List (Sheet LS-4 of 6) includes a Native Wildflower Seed Mix (from Nativescape, LLC). The Plan should clarify if this seed mix is proposed within areas of temporary wetland buffer impact.

**Response:** *A note will be included on the Grading Plan of the FSP indicating the disturbed buffer areas are to be restored with the Native Wildflower seed mix.*

3. It is the Applicant's responsibility to confirm the need for a permit from the MDEQ for any proposed wetland impact and/or proposed stormwater discharge to Wetland #1. A City of Novi Wetland Permit cannot be issued until the applicant receives either authorization or a letter of no jurisdiction from the MDEQ.

**Response:** *Noted. A MDEQ JPA has been applied for and is currently under review by the State.*

4. The Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland. A Conservation Easement shall be executed covering all remaining wetland areas on site as shown on the approved plans. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Wetland and Watercourse permit. In addition, all proposed conservation easements shall be indicated and clearly labeled on the Plan. It should be noted that Wetland #2 appears to already be included within an MDEQ Conservation Easement. Any proposed conservation easement areas should be demarcated on-site through the use of proposed easement signage and potentially other means such as boulders or decorative fencing along the setback boundaries.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

## WOODLAND REVIEW

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1. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1 replacement tree-to-1 credit replacement ratio. All coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5 replacement tree-to-1 credit replacement ratio. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached).

**Response:** *Noted.*

2. The applicant has proposed both 12' tall and 14' tall white spruce and black hills spruce (*Picea glauca 'densata'*). It should be noted that the black hills spruce is not a species approved by the City for Woodland Replacement. Please review and revise the Plan as necessary based on the approved coniferous tree species listed in the attached Woodland Tree Replacement Chart.

**Response:** *Noted. The landscape plan will be revised accordingly with the FSP submittal.*

3. The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. As such, acceptable replacement evergreen trees shall be provided at a 1.5 replacement tree-to-1 credit replacement ratio. The applicant should review and revise the calculations on the Plan and the tree replacement plant list as necessary.

**Response:** *Noted. The landscape plan will be revised accordingly with the FSP submittal.*

4. A Woodland Replacement Performance financial guarantee for the planting of replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of \$400. This financial guarantee will be calculated based on the following:

Number of on-site Woodland Replacements x \$400/replacement credit x 1.2)..

This financial guarantee will be \$35,200 (88 Woodland Replacements required x \$400/credit).

Based on a successful inspection of the installed on-site Woodland Replacement trees, the original Woodland Financial Guarantee shall be returned to the Applicant. Twenty-five percent (25%) of the value of the Woodland Replacement material (i.e., \$8,800) shall be kept for a period of 2-years after the successful inspection of the tree replacement installation as a Woodland Maintenance and Guarantee Bond.

**Response:** *Noted. The financial guarantee will be provided after determined by the City and prior to construction.*

5. The Applicant will be required to pay the City of Novi Tree Fund at a value of \$400/credit for any Woodland Replacement tree credits that cannot be placed on-site.

**Response:** *Noted.*

6. Replacement material should not be located 1) within 10' of built structures or the edges of utility easements and 2) over underground structures/utilities or within their associated easements. In addition, replacement tree spacing should follow the Plant Material Spacing Relationship Chart for Landscape Purposes found in the City of Novi Landscape Design Manual.

**Response:** *Noted. The landscape plan will be revised accordingly with the FSP submittal.*

7. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit.

**Response:** *Noted. This document will be provided with a future submittal when complete.*

## TRAFFIC REVIEW

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1. The applicant has proposed a site entrance drive that is in alignment with the Michigan CAT construction equipment driveway that is located on the opposite side of Novi Road.
  - a. The applicant has proposed entering and exiting drive widths of 22 feet. While these dimensions are within the City's allowable range, a width of 24 feet is required by the City's Ordinance. The applicant should increase the drive widths to meet the required 24 foot width or may request an administrative variance for the use of 22 feet since the widths are within the City's allowable range. *The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*
  - b. The applicant has proposed a 35 foot entering turning radii at the site driveway. It is assumed that the exiting radii is also 35 feet; however, it should be dimensioned on the plans for clarification. While these dimensions are within the City's allowable range, a radii of 25 feet is required by the City's Ordinance. The applicant should decrease the turning radii to meet the required 25 foot radii or may request an administrative variance for the use of 35 feet since the radii are within the City's allowable range. *A 35' radius callout will be provided for both radii on the FSP. The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*
  - c. The applicant has proposed an island width of 16 feet. While this dimension is within the City's allowable range, a width of 10 feet is required by the City's Ordinance. The applicant should decrease the island width to meet the required 10 foot width or may request an administrative variance for the use of 16 feet since the width is within the City's allowable range. *The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*
  - d. The applicant has proposed an island nose offset of 18 feet. While this dimension is within the City's allowable range, an offset of 12 feet is required by the City's Ordinance. The applicant should decrease the island nose offset to meet the required 12 foot offset or may request an administrative variance for the use of 16 feet since the offset is within the City's allowable range. *The island offset has been reduce to 12 feet.*
  - e. The applicant has proposed an island length of 100 feet. While this dimension is within the City's allowable range, an island length of 35 feet is required by the City's Ordinance. The applicant should decrease the island length to meet the required 35 foot length or may request an administrative variance for the use of 100 feet since the length is within the City's allowable range. *The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*
  - f. Please reference Figure IX.3 in the City's Code of Ordinances for clarification in regards to driveway dimensions. *The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with*

*the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*

**Response:** *See above responses in red.*

2. The applicant should indicate a six inch curb for the driveway island. Please reference Section 11-216.d.6 in the City's Code of Ordinances for further clarification.

**Response:** *The boulevard island will be called out as 6" high curb on the FSP.*

3. The applicant should indicate that the radii on the edge of the island are large enough to accommodate the largest vehicle to normally use the drive approach. Please reference Section 11-216.d.6 in the City's Code of Ordinances for further clarification.

**Response:** *The boulevard center island radii should not pose any conflicts with anticipated vehicles. An AutoTURN analysis was provided for the largest anticipated vehicle (fire truck) and there are no perceived issues or anticipated conflicts with the island curb as shown.*

4. Although the minimum of a right turn taper was required at the site entrance, the applicant has provided a full entering and exiting lane and taper for right turning vehicles. The entering right turn lane is in compliance with City standards; however the applicant has not provided dimensions for the exiting lane. The exiting lane is required to consist of a 25 foot exiting lane length and a 75 foot exiting taper length. Please reference Figure IX.11 in the City's Code of Ordinances for further information.

**Response:** *The exit lane dimensions will be revised accordingly on the FSP to match the City detail Figure IX.11.*

5. Novi Road has a two-way left turn lane (TWLTL) for left-turning vehicles.

**Response:** *Noted.*

6. The applicant has indicated adequate sight distance in both directions at the site driveway according to City standards provided in Figure VIII-E in the City's Code of Ordinances.

**Response:** *Noted.*

7. Based upon an estimation that the two (2) driveways on the west side of Novi Road located to the north and south of the proposed driveway generate less than 400 trips per peak hour, driveway spacing requirements are in compliance with City standards.

**Response:** *Noted.*

8. The applicant has proposed an emergency access path using the combination of grass pavers and a thickened concrete walk as requested and approved by the Fire Marshal. The proposed walk is a total of 20 feet wide and exceeds the 15 foot requirement. The applicant should indicate 10 foot turning radii at the entrance of the emergency access drive at Novi Road.

**Response:** *The 10' turning radii will be shown and labeled on the FSP.*

9. The applicant has proposed a 22 foot wide emergency access gate which is in compliance with City standards. The applicant should consider relocating the gate to the east side of the Novi Road sidewalk in order to allow pedestrian access to the sidewalk and scenic overlook area while maintaining the same dimensions of the gate and path at the given location.

**Response:** *The pedestrian walk will be relocated on the FSP.*



10. The proposed driveway is located approximately 185 feet south of the stop bar for northbound Novi Road traffic at the signalized intersection with the U.S. Post Office. The impacts of this are discussed within the TIS letter.

**Response:** *Noted.*

*The following comments relate to the on-site design and traffic flow operations.*

1. General Traffic Flow

- a. The provided pavement width and material for the local street is in compliance with City standards. *Will be provided with the FSP.*
- b. The applicant has provided two eyebrow designs on the west side of the site. The eyebrow detail provided is in compliance with City standards. It should be noted that the eyebrows on the site plan appear to exceed minimum eyebrow radii requirements in order to facilitate the number of residential driveways proposed. *Noted.*
- c. On-street parking shall be restricted using signage in areas with curve radii less than 230 feet. The applicant has proposed signing at such locations. *Noted.*
- d. The applicant should provide turning radii dimensions at the intersection of Prospect Avenue and Broadmead Avenue. A 25 foot turning radii is required at local street intersections as per Section 111-94.b.8 in the City's Code of Ordinances. *A 25' radius callout will be provided on the Intersection Detail Plans on the FSP.*
- e. The applicant should indicate additional dimensions for residential driveways including widths and taper widths. The applicant has indicated a 7.5 foot taper depth for residential driveways. The required taper depth for residential driveways is 10 feet. The applicant should revise the residential driveway dimensions given in the typical unit detail to reflect the required driveway dimensions in Figure IX.5 in the City's Code of Ordinances. Dimensions within the City's allowable range, but not the standard value, will require an administrative variance. Dimensions not within the City's allowable range will require a City Council variance. *The dimensions as proposed are within the City standard allowable ranges. These dimensions have already been requested and approved with the PRO approval. If there are additional requests needed to formally request the administrative variance with the FSP submittal, please advise.*
- f. The applicant has indicated that the residential driveway grades do not exceed 10% as required by Section 11-216.e.8 in the City's Code of Ordinances. *Noted.*

**Response:** *See above responses in red.*

2. Parking Facilities

- a. The City of Novi Zoning Ordinance requires two parking spaces for each dwelling unit having two or less bedrooms and two and one-half parking spaces for each dwelling unit having three or more bedrooms. Therefore the applicant is required to provide a total of 300 parking spaces. The applicant should revise the plans to indicate 300 required parking spaces as opposed to 313 required parking spaces. *The required number of parking spaces will be revised on the Cover Sheet of the FSP.*
- b. The applicant has proposed a total of 494 parking spaces. The parking areas consist of a single two car garage per unit with availability to park two cars per unit driveway totaling 480 parking spaces per unit and the applicant has also provided an additional 14 parking spaces throughout the development. *Noted.*
- c. The parking spaces are proposed with 20 foot lengths. It should be noted that the City requires 19 foot long parking spaces when abutting a 6" curb; or, 17 foot long spaces when abutting a 4" curb. The applicant has also provided a parking space width of 9.5

feet which exceeds City standards. For more information please consult Section 5.3 of the City's Zoning Ordinance. *Noted.*

- i. The applicant should indicate 6" curbs at the end of the 20 foot parking spaces and also provide a detail for the curb. *The requested 6" back curb (Type F6) will be shown and labeled on the Intersection Detail Plan of the FSP.*
- d. The applicant has provided one accessible parking space. The single accessible parking space is required to be van-accessible. The applicant should indicate dimensions particular to the accessible parking space in accordance with ADA standards for accessible design Section 502.2. *The ADA parking space will be revised to be a van-accessible space with dimensions shown on the Intersection Details Plan in the FSP.*
- e. The applicant is required to provide one bicycle parking space for every five dwelling units totaling 24 bicycle parking spaces. *Noted.*
- f. The applicant has provided 24 bicycle parking spaces. *Noted.*
- g. The bicycle parking layout is in compliance with City standards. *Noted.*
- h. The applicant should indicate the type of bicycle parking that will be installed. The City requires the use of an inverted U-shape bicycle parking device that is at least three feet in height with two contact points on the ground. *The bike racks will be inverted U-shape as requested. A detail complying with the requested dimensions will be shown on the Detail Sheet of the FSP.*

**Response:** *See above responses in red.*

### 3. Sidewalk Requirements

- a. The applicant has indicated a five foot wide sidewalk on both sides of the proposed local streets and a six foot walk along Novi Road. Both proposed widths are in compliance with City standards. *Noted.*
- b. The applicant is seeking a deviation for the minimum required distance of 15 feet from back of curb to the sidewalk. The applicant is currently proposing only 12.5 feet. *Noted.*
- c. The proposed sidewalk ramp locations and the ramp detailed dimensions are in compliance with City standards. *Noted.*

**Response:** *Noted.*

### 4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and striping.

- a. All signing and striping details are required by the final site plan. *Signing and striping details and notes will be shown on the FSP.*
- b. The applicant should consider replacing the proposed R1-1 (stop) sign at the intersection of Prospect Avenue and Broadmead Avenue with a R1-2 (yield) sign. *The stop sign will be replaced with a yield sign as requested on the FSP.*
- c. The applicant could consider providing W11-2 (pedestrian warning) signs at all non-intersection pedestrian crossings. *The requested signs will be shown on the FSP.*
- d. The applicant should indicate that all roadside signs should be installed two feet from the face of the curb to the near edge of the sign. *A note will be added to the FSP.*
- e. The applicant could consider the use of a W14-2 (no outlet) sign at the entrance of the development. *We considered this sign and it does not seem necessary for this development.*
- f. Street name signs shall be designed per the City of Novi Traffic Control Sign standards. *A note will be added to the FSP specifying the required street sign requirements.*

- i. i. Street name signs are required to have a green field, white letters, and a white border.
  - ii. ii. Text shall consist of a capitalized first letter with the remaining letters in lowercase font.
  - iii. iii. Street name signs shall have a minimum height of 12 inches and minimum lettering height of eight inches for the Capital letters and six inches for the lowercase letters, if located adjacent to a road with a speed limit of 30 mph or greater; or, have a minimum height of eight inches and minimum lettering height of 4.5 inches, if located at residential street intersections
  - iv. iv. Street name signs shall have a lettering height of three inches for supplementary lettering to indicate the street type (i.e. drive, avenue, etc.)
  - v. v. All street name signs within the City's right of way or located on public streets at the intersection of a public street and a private street shall be mounted on a 3 lb. or greater U-channel post as dictated by the weight of the proposed signs. Street name signs with a nominal height of 12 inches shall be single sided and sandwiched on a 1 ¼" x 1 ¼" 12-gauge perforated galvanized steel insert with the ends of the signs bolted together. The steel insert shall have a minimum length of 36 inches and must extend a minimum of 12 inches into the 3 lb. or heavier U-channel post. In previous experiences, the City has discovered that the connection often must be replaced when rivets are used to join the ends of the signs. The bolts to adjoin the signs are not required on street signs placed on private roadways since private roadway signs are not maintained by the City.
- g. Single signs with nominal dimensions of 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post. Multiple signs and/or signs with nominal dimension greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post as dictated by the weight of the proposed signs. *A note will be added to the FSP.*
- h. All signs shall be a height of 7 feet from grade to the bottom of the sign when placed in the vicinity of a curbed area. *A note will be added to the FSP.*
- i. Traffic control signs shall use the FHWA Standard Alphabet series. *A note will be added to the FSP.*
- j. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements. *A note will be added to the FSP.*
- k. The applicant should provide an R7-8 sign and an R7-8p plaque at the accessible parking space. *A note and typical detail will be added to the FSP.*
- l. The applicant should update the sign quantities table to include all signs and correct quantities (There are currently some discrepancies). *The sign table will be revised on the FSP.*
- m. The applicant should indicate white parking striping for standard parking spaces and blue striping for accessible parking spaces. *A note will be added to the FSP.*
- n. The applicant should provide a white line adjacent to a blue line in areas where standard parking and accessible parking spaces are adjacent. *A note will be added to the FSP.*
- o. The applicant should provide a detail for the international symbol for accessibility. Note that the symbol is required to be white; or, white with a blue background and white border. *A detail will be added to the FSP.*
  - i. Also note that the symbol for accessibility is oriented in the incorrect direction within the plans. It should be rotated 180 degrees and positioned near the end of the parking space so that it can be seen by approaching vehicles. *The symbol will be rotated on the FSP.*

- p. The applicant should provide a detail for the proposed crosswalk markings near the entrance of the development. *The crosswalk will be removed from the FSP as this striping is not necessary for this application.*

**Response:** *See above responses in red.*

## FAÇADE REVIEW

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1. All building elevations, which shall be in a housing style consistent with the conceptual renderings attached and incorporated hereto as Exhibit C (the “Conceptual Renderings”) shall be reviewed and approved by the City’s Façade Consultant. Applicant shall submit elevations with material percentages meeting or exceeding the requirements of the Façade Ordinance at the time of Preliminary Site Plan submittal. At a minimum, all front building facades shall have brick or stone up to the

**Response:** *The detailed façade building drawings have been prepared and are currently under review by the City’s Façade Consultant.*

2. Upgraded garage doors with windows shall be provided.

**Response:** *Upgraded doors have been agreed to and will be provided as noted in the PRO agreement.*

## FIRE REVIEW

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1. On plan #08, Gate for emergency access road MUST have an opening of not less than 20’ (IFC 5036.2.1 and 503.6)

**Response:** *The opening proposed is now 22’. This will be shown on the FSP.*

2. If locking the gate for the emergency access, you MUST either have “Break away chains or a Knox Lock.” (IFC503.5.1)

**Response:** *The gate is not currently proposed to be locked. The City’s standard detail is included on the detail sheet. This detail specifies if the gate is to be locked, the locking mechanisms must be purchased from the Novi Fire Department. Thus, we are complying with this request.*

3. Using grass pavers for emergency access road. MUST have a permanent way of labeling the edge of the access road.

**Response:** *Access markers will be provided every 50 feet as shown on the typical emergency access detail on the detail sheet.*

Should you have any remaining questions or need anything else from us to help facilitate your review and approvals, please do not hesitate to contact me direct at (810) 923-6878.

Sincerely,

**ATWELL, LLC**



Matthew W. Bush, P.E.

Project Manager / Engineer

