



WOODBIDGE PARK JSP17-67

WOODBIDGE PARK JSP 17-67

Public hearing at the request of Pulte Homes of Michigan, LLC for Preliminary Site Plan, Wetland Permit, Woodland Permit, and Storm Water Management plan approval. The subject property is currently zoned RM-1 (Low-rise Multiple Family Residential). The subject property is approximately 9.23 acres and is located at the northeast corner of Novi Road and Nine Mile Road (Section 26). The applicant is proposing a 40-unit multi-family for-sale residential development with frontage and access to Nine Mile Road.

Required Action

Approve/Deny the Preliminary Site Plan, Wetland Permit, Woodland Permit, and Storm water Management plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended Subject to conditions	03-19-18 05-02-18 (Revised)	<ul style="list-style-type: none"> • City Council approval required to vacate the existing berm easement on the property; • Zoning Board of Appeals waiver <ul style="list-style-type: none"> ○ For reduction of side setback (75 ft. required, 30 ft. provided), ○ For reduction of exterior side setback (75 ft. required, 40 ft. provided) , ○ For reduction of rear setback (75 ft. required, 40 ft. provided) ○ Not meeting minimum building orientation requirements (45 degrees required, 0 degrees provided) • Items to be addressed by the applicant prior to Final Site Plan approval
Engineering	Approval recommended	03-14-18	<ul style="list-style-type: none"> • City Council Variance for <ul style="list-style-type: none"> ○ Lack of sidewalk along west side of entrance road ○ Lack of secondary connection at interval exceeding one thousand three hundred (1,300) feet. • Items to be addressed by the applicant prior to Final Site Plan approval
Landscaping	Approval recommended Subject to conditions	03-09-18 04-19-18 (Revised)	<ul style="list-style-type: none"> • Landscape waiver for <ul style="list-style-type: none"> ○ Not meeting minimum requirements for screening berm along eastern property ○ Lack of berms and greenbelt trees along few sections of Nine Mile Road and Novi Road frontage ○ To allow 25% percent of total required canopy trees as sub-canopy trees ○ To allow placement of street trees between

			<p>sidewalk and the building</p> <ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval
Wetlands	Approval recommended	03-13-18	<ul style="list-style-type: none"> • A City of Novi Non-Minor Wetland Permit is required for the proposed impacts • Letter of authorization for encroaching into 25 foot wetland buffers • Applicant to contact MDEQ for any additional permits • Items to be addressed by the applicant prior to Final Site Plan approval
Woodlands	Approval recommended	03-13-18	<ul style="list-style-type: none"> • A City of Novi Non-Minor Woodland Permit is required for the proposed impacts • Items to be addressed by the applicant prior to Final Site Plan approval
Traffic	Approval recommended	03-13-18	<ul style="list-style-type: none"> • City Council variance for reduction of minimum required Taper depth. (7.5 feet provided, a minimum of 10 feet is required). • Planning Commission waiver <ul style="list-style-type: none"> ○ For reduction of same-side driveway distance (150 ft. required, 141 ft. provided) ○ For reduction of opposite side driveway distance (200ft. required, 188ft. provided); • Items to be addressed by the applicant prior to Final Site Plan approval
Façade	Approval recommended	03-12-18	<ul style="list-style-type: none"> • The applicant should note that Vinyl siding is not allowed. • No additional comments
Fire	Approval recommended	02-26-18	<ul style="list-style-type: none"> • Items to be addressed by the applicant prior to Final Site Plan approval

MOTION SHEET

Approval – Preliminary Site Plan

In the matter of Woodbridge Park JSP 17-67, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. Landscape waiver from Sec. 5.5.5.A for not meeting the minimum requirements for length for the proposed berm along the eastern boundary to avoid conflicts with the existing fire access drive and also because the adjacent use is currently a legal non-conforming commercial use (sit-down restaurant) and not industrial. The proposed landscaping will provide significant visual screening from the existing building, which is hereby granted;
- b. Landscape waiver from Sec. 5.5.5.A for not meeting the minimum requirements for height (6ft. to 8 ft. required due to the existing commercial use), which is hereby granted. The provided berm is approximately 3 feet above the residential building's Finished Floor Elevation and 6 feet above the neighboring property's elevation;
- c. The applicant shall revise the landscape plans indicating the proposed berm, landscape screening and easements as shown in the exhibit shared via e-mail dated May 14, 2018;
- d. Landscape waiver from Sec. 5.5.3.B.ii and iii for lack of berms along sections of Novi Road and Nine Mile Road in order to preserve the existing vegetation and topography, which is hereby granted;
- e. Landscape waiver from Sec. 5.5.3.B.ii and iii for lack of greenbelt trees (deciduous canopy/large evergreen trees and sub canopy trees) along sections of Novi Road and Nine Mile Road in order to preserve the existing vegetation and topography, which is hereby granted;
- a. Landscape waiver from Sec. 5.5.3.F.ii.b.(1) to allow additional sub-canopy trees in lieu of deciduous canopy or large evergreen trees provided the applicant limits the percentage of proposed sub-canopy trees within 25 percent of total required canopy trees, as it will provide additional visual and species diversity to the site, which is hereby granted;
- b. Landscape waiver from Sec. 5.5.3.F.ii.b.(2) to allow placement of street trees between the sidewalk and the building as opposed to between the sidewalk and curb in areas where there are conflicts with proposed utility layout, which is hereby granted;
- a. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for 141 feet provided between same-side commercial driveways where 150 feet is required, which is hereby granted;
- b. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for 188 feet provided between opposite side commercial driveways where 200 feet is required, which is hereby granted;
- f. City Council approval of vacation of existing landscape berm easement on the property; In the event the adjacent property is redeveloped as an industrial use, the owner or developer of the adjacent property shall provide the required berm along the property line;
- c. City Council variance from Design and Construction Standards Section 11-256(c) for lack of sidewalk along west side of entrance road where five (5) foot sidewalk is required along both sides of proposed streets;
- d. City Council variance from Subdivision Ordinance, Appendix C, Section 4.04 for lack of secondary connection at interval exceeding one thousand three hundred (1,300) feet;
- e. City Council variance for reduction of minimum required Taper depth. (7.5 feet provided, a minimum of 10 feet is required);

- f. A Zoning Board of Appeals variance from Section 3.1.7.D to allow reduction of side setback (75 ft. required, 30 ft. provided);
- g. A Zoning Board of Appeals variance from Section 3.1.7.D to allow reduction of exterior side setback (75 ft. required, 40 ft. provided);
- h. A Zoning Board of Appeals variance from Section 3.1.7.D to allow reduction of rear setback (75 ft. required, 40 ft. provided);
- i. A Zoning Board of Appeals variance from Section 3.8.2.D for not meeting minimum building orientation requirements (45 degrees required, 0 degrees provided);
- j. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- k. *(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 Woodbridge Park JSP 17-67, 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 Woodbridge Park JSP 17-67, 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.)

-AND-

Approval – Stormwater Management Plan

In the matter of Woodbridge Park JSP 17-67, motion to **approve** the Stormwater Management Plan 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 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- OR -

Denial – Preliminary Site Plan

In the matter of Woodbridge Park JSP 17-67, 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 Woodbridge Park JSP 17-67, 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 Woodbridge Park JSP 17-67, 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 Woodbridge Park JSP 17-67, 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

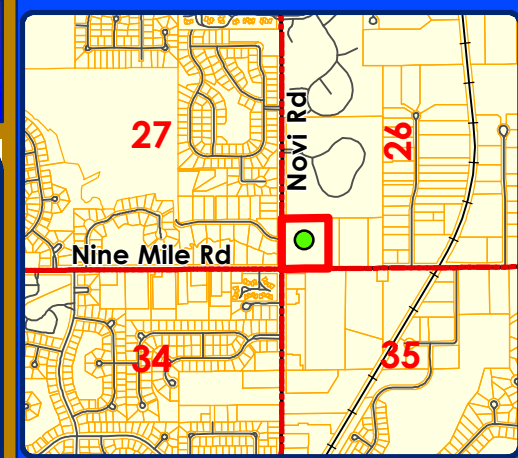
Zoning

Future Land Use

Natural Features

JSP 17-67: WOODBRIDGE PARK

Location



LEGEND

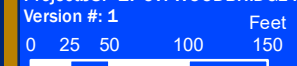
 Sections



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: 05/18/18
Project: JSP 17-67: WOODBRIDGE PARK
Version #: 1



1 inch = 122 feet

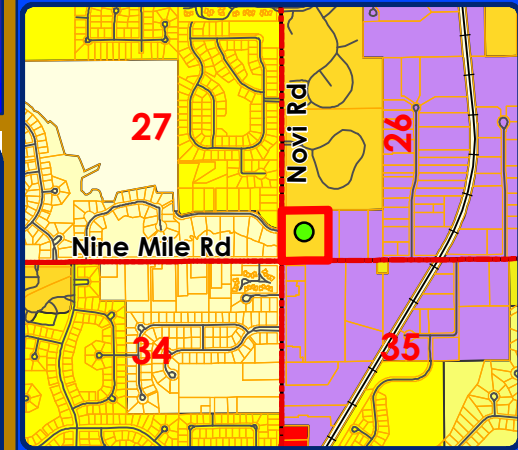
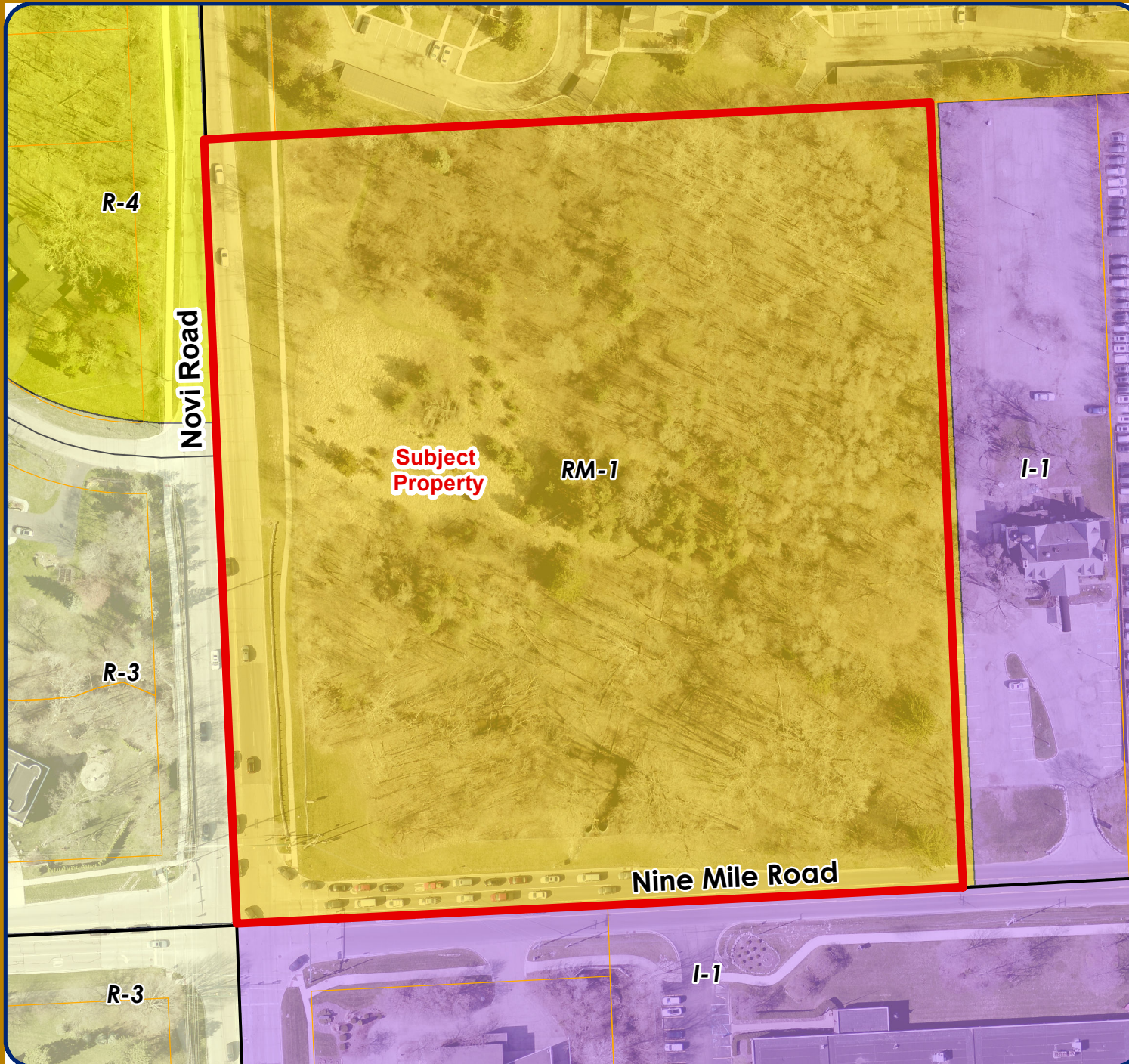


MAP INTERPRETATION NOTICE

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JSP 17-67: WOODBRIDGE PARK

Zoning



LEGEND

- Sections
- R-1: One-Family Residential District
- R-2: One-Family Residential
- R-3: One-Family Residential District
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- B-3: General Business District
- I-1: Light Industrial District
- P-1: Vehicular Parking District



City of Novi

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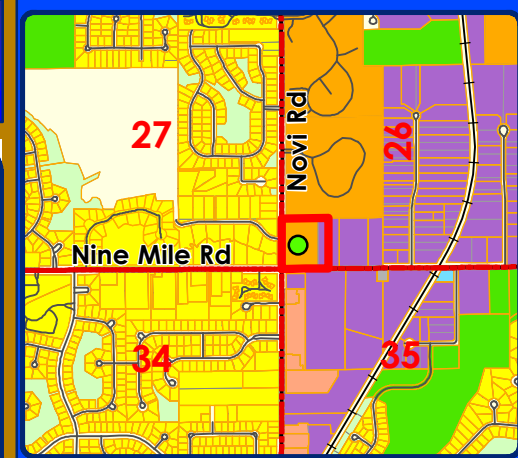
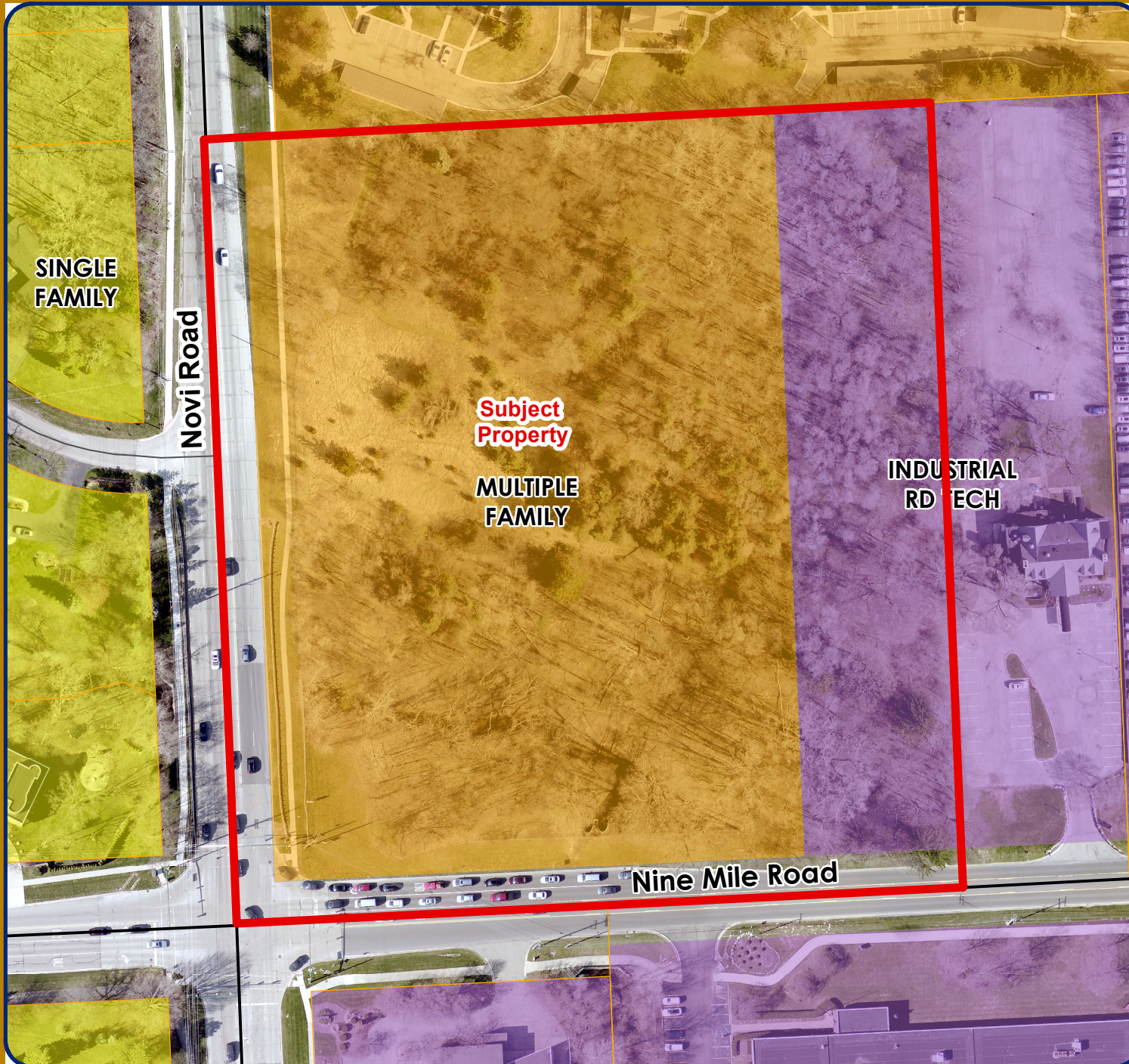


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JSP 17-67: WOODBRIDGE PARK

Future Land Use



LEGEND

- Sections
- FUTURE LAND USE**
- Single Family
- Multiple Family
- Industrial RD Tech
- Local Commercial
- Public
- Public Park
- Private Park
- Cemetery



City of Novi

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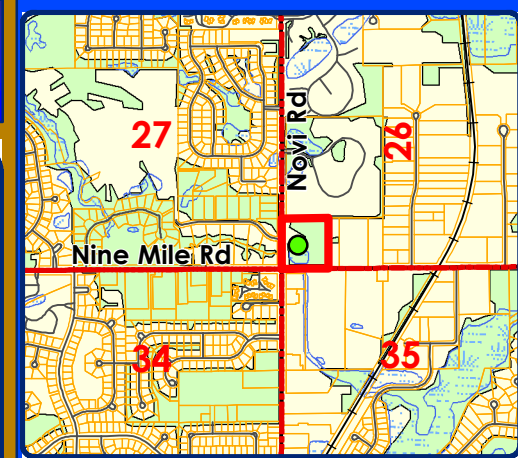


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JSP 17-67: WOODBRIDGE PARK

Future Land Use



- LEGEND**
- Sections
 - WETLANDS
 - WOODLANDS



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SITE PLAN

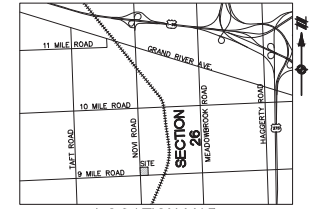
(Full plan set available for viewing at the Community Development Department.)



PRELIMINARY SITE PLAN

WOODBIDGE PARK

A MULTI-FAMILY RESIDENTIAL DEVELOPMENT
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN



LOCATION MAP
1" = 500'

DEVELOPER/APPLICANT

PULTE HOMES OF MICHIGAN, LLC
100 BLOOMFIELD HILLS PARKWAY, SUITE 150
BLOOMFIELD HILLS, MICHIGAN 48304
CONTACT: JOE SKORE
PHONE: 248.249.4611

ENGINEER

ATWELL, LLC
311 NORTH MAIN STREET
ANN ARBOR, MICHIGAN 48104
CONTACT: MATTHEW W. BUSH, PE
PHONE: (734) 994-0000

DEVIATIONS

THE FOLLOWING DEVIATIONS REQUIRE APPROVAL BY THE CITY OF NOVI:

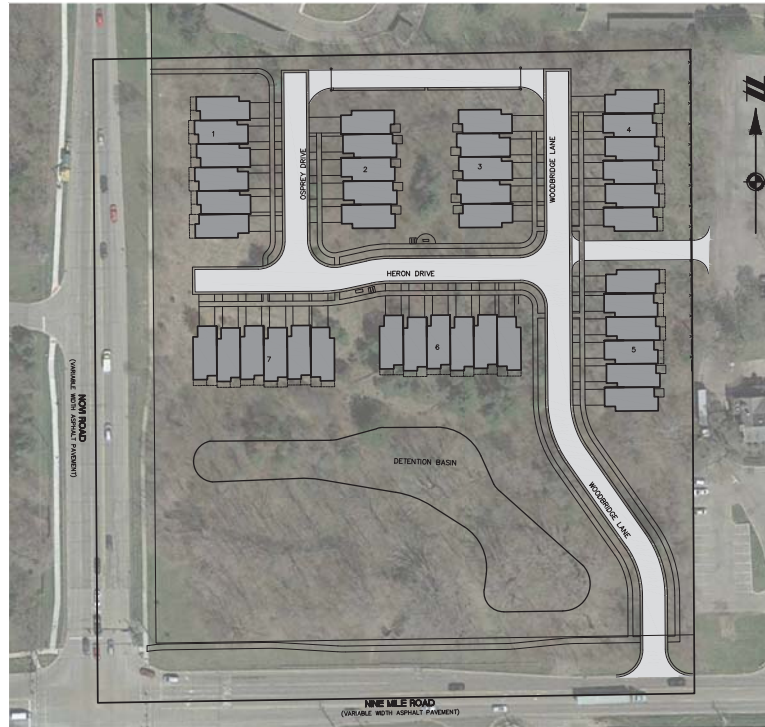
APPROVAL GRANTED BY	DEVIATION REQUESTED
ZONING BOARD OF APPEALS	PERIMETER SETBACK - [SECTION 3.17.D] 40 FEET BUILDING SETBACK ALONG NORTH PROPERTY LINE 37 FEET BUILDING SETBACK ALONG WEST PROPERTY LINE 27 FEET BUILDING SETBACK ALONG EAST PROPERTY LINE
CITY COUNCIL	BUILDING ORIENTATION - [SECTION 3.8.2.D] PERIMETER BUILDINGS ORIENTED AT ANGLES LESS THAN 45° SIDEWALKS - [ENGINEERING DESIGN MANUAL, SECTION 7.4.2.C.1] 12.5 FEET FROM BACK OF CURB TO OUTSIDE EDGE OF SIDEWALK STUB STREETS - [NOVI SUBDIVISION ORD. APPENDIX C, SECTION 4.04] NO SECONDARY STUB STREET IS BEING PROVIDED DRIVE TAPER LENGTH - [DESIGN AND CONST. STANDARDS FIGURE K.5] 7.5 LONG TAPER PROPOSED
PLANNING COMMISSION	DRIVE SEPARATION - [ENGINEERING DESIGN MANUAL, FIGURE K.17] 141 FEET BETWEEN DRIVES ON SAME SIDE OF NINE MILE 188 FEET BETWEEN DRIVES ON OPPOSITE SIDE OF NINE MILE LANDSCAPE GREENBELT BERM - [SEC. 5.5.3.A (9) AND 3.21.2.A.(II)] NO BERM ON 9 MILE ROAD DUE TO PRESERVATION OF EXISTING VEGETATION. NO BERM ON NOVI ROAD SOUTH OF HERON DRIVE DUE TO TOPOGRAPHY AND PRESERVATION OF EXISTING VEGETATION. LANDSCAPE ROW SCREENING - [SEC. 5.5.3.B.(I) NOTES (2) (10)] NO SUB CANOPY TREES ON 9 MILE DUE TO PRESERVATION OF EXISTING VEGETATION AND SPATIAL CONSTRAINTS. NO SUB CANOPY TREES ON NOVI ROAD DUE TO PRESERVATION OF EXISTING VEGETATION AND SPATIAL CONSTRAINTS. LANDSCAPE SITE - [SEC. 5.5.3.E.(I) B.(II)] ALLOW SUB CANOPY TREES TO COMPRISE 25% OF THE REQUIRED SITE PLANTING (TOTALING 30 TREES)

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE CITY OF NOVI'S CURRENT STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY OF NOVI FOR ANY WORK WITHIN THE RIGHT-OF-WAY OF 9 MILE ROAD AND A PERMIT FROM THE ROAD COMMISSION FOR OAKLAND COUNTY AND THE CITY OF NOVI FOR THE SANITARY SEWER CONNECTION IN THE NOVI ROAD RIGHT OF WAY.
- ALL PAYMENT MARKINGS, TRAFFIC CONTROL SIGNS, AND PARKING SIGNS SHALL COMPLY WITH THE DESIGN AND PLACEMENT REQUIREMENTS OF THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

FIRE DEPARTMENT NOTES

- ALL FIRE HYDRANTS AND WATER MAINS SHALL BE INSTALLED AND IN SERVICE PRIOR TO ABOVE FOUNDATION BUILDING CONSTRUCTION.
- ALL ROADS SHALL BE PAVED AND CAPABLE OF SUPPORTING 35 TONS PRIOR TO CONSTRUCTION ABOVE FOUNDATION.
- BUILDING ADDRESSES SHALL BE POSTED FACING THE STREET DURING ALL PHASES OF CONSTRUCTION. ADDRESSES SHALL BE A MINIMUM OF THREE INCHES IN HEIGHT ON A CONTRASTING BACKGROUND.
- PROVIDE 4"Ø DIAMETER OF CONCRETE FILLED STEEL POST 48" ABOVE FINISH GRADE AT EACH HYDRANT AS REQUIRED.
- FIRE LANES SHALL BE POSTED WITH "FIRE LANE - NO PARKING" SIGNS IN ACCORDANCE WITH ORDINANCE #85.99.02.



LOCATION MAP
1" = 60'

PROJECT NARRATIVE

THE DEVELOPMENT IS PROPOSED TO BE AN EXCLUSIVE MULTI-FAMILY RESIDENTIAL COMMUNITY LOCATED ON AN APPROXIMATE 9-ACRE PARCEL IN THE CITY OF NOVI, OAKLAND COUNTY, MICHIGAN. THE PROPOSED PARCEL IS LOCATED AT THE NORTHEAST CORNER OF NINE MILE ROAD AND NOVI ROAD. THE PROPERTY IS PROPOSED TO BE DEVELOPED BY HOMEBUILDERS, PULTE HOMES. THE SUBJECT PARCEL IS CURRENTLY UNDEVELOPED AND CONTAINS LOW AND MEDIUM QUALITY WOODLANDS AND A STREAM FLOWS THROUGH THE SOUTH WEST CORNER OF THE SITE. THE STREAM AND HIGHER QUALITY TREES WILL BE PRESERVED.

THE DEVELOPMENT IS PROPOSED USING THE EXISTING RM-1 ZONING TO ALLOW FOR A MULTI-FAMILY HOUSING USE. LANDSCAPE BUFFERS WILL BE PROVIDED ON THE SIDES OF THE DEVELOPMENT BUFFERING THE PROPERTY FROM THE ADJACENT USES. A SIDEWALK WILL BE PROVIDED ALONG THE FRONTAGE OF NINE MILE ROAD, FROM THE PROJECT ENTRANCE OUT THE THE NOVI ROAD SIDEWALK.

THE DEVELOPMENT WILL CONTAIN PRIVATE ROADS AND IS ALSO PROPOSED TO BE SERVED BY PUBLIC SEWER AND WATER LOCATED WITHIN THE NOVI ROAD AND NINE MILE ROAD RIGHT-OF-WAYS. STORM WATER MANAGEMENT IS PROPOSED TO BE ADDRESSED THROUGH THE CONSTRUCTION OF A DETENTION BASIN IN THE SOUTHERN PORTION OF THE SITE. THE DETENTION POND WILL BE DESIGNED IN ACCORDANCE WITH THE CITY'S REQUIREMENTS FOR 100-YEAR DETENTION.

THE DEVELOPMENT IS PLANNED TO BE CONSTRUCTED IN ONE PHASE.

SHEET INDEX

- 01 COVER SHEET
 - 02 EXISTING CONDITIONS PLAN
 - 03 WOODLANDS ANALYSIS
 - 04 TREE LIST
 - 05 LAYOUT PLAN
 - 06 UTILITY PLAN
 - 07 GRADING AND STORM WATER MANAGEMENT PLAN
 - 08 LANDSCAPE PLAN
 - 09 LANDSCAPE PLAN
 - 10 LANDSCAPE PLAN
 - 11 LANDSCAPE PLAN DETAILS
 - 12 LANDSCAPE PLAN DETAILS
 - 13 DETAIL SHEET
- 1 OF 1 PHOTOMETRIC SITE PLAN (BY OTHERS)

SITE DATA

ZONING	RM-1	
EXISTING ZONING	RM-1	
FUTURE ZONING	MULTIFAMILY (9.3 DU/ACRE)	
PROPOSED ZONING	RM-1	
GROSS SITE AREA	9.23 ACRES ±	
R.O.W. AREA	1.46 ACRES ±	
WETLANDS AREA	0.02 ACRES ±	
NET SITE AREA	7.48 ACRES ±	
DENSITY		
PROPOSED UNITS	40 UNITS	
RM-1 ALLOWABLE UNIT DENSITY	5.4 DU/ACRE	(BASED ON ROOM COUNT)
DENSITY - PROPOSED (GROSS)	4.3 DU/ACRE ±	
DENSITY - PROPOSED (NET)	5.3 DU/ACRE ±	
TOTAL OPEN SPACE AREA *	177,100 SF	(8,000 SF MIN)
USABLE OPEN SPACE AREA *	21,568 SF	(5,000 SF MIN)
MINIMUM BUILDING COVERAGE	54,102 SF	(25% MAX)
MAXIMUM LOT AREA COVERED (NET)	17%	
* EXCLUDES STORMWATER DETENTION BASINS, WETLANDS, AND ROAD R.O.W.		
SETBACKS		
BLDG. TO BLDG.	30 FEET MIN	
BLDG. TO PROPERTY LINE (REAR - EAST)	27 FEET	(15 FEET MIN)
BLDG. TO PROPERTY DISK - (NORTH)	40 FEET	(15 FEET MIN)
BLDG. TO NOVI ROAD R.O.W.	37 FEET	(30 FEET MIN)
BUILDING SIZE		
HEIGHT	32 FEET	(MAX)
LENGTH	144 FEET	(MAX)
STORIES	2	
FLOOR AREA PER UNIT	1,860 SF	(900 SF MIN; 3 BEDROOM)
PARKING		
PARKING SPACES (UNITS)	160 SPACES*	
STREET PARKING NEAR MAILBOXES	5 SPACES	
PARKING SPACES (TOTAL)	165 SPACES	(100 REQUIRED; 2.5 PER UNIT)
BIKE PARKING	8 SPACES	(8 REQUIRED; 1 PER 5 UNITS)
* TWO CAR GARAGE WITH TWO CARS IN THE DRIVEWAY		

NET SITE AREA	±	7.51 ACRES
NUMBER OF ROOMS PER UNIT	±	4 ROOMS
PROPOSED UNITS	±	40 UNITS
NUMBER OF ROOMS	±	160 ROOMS
RM ALLOWABLE NUMBER OF ROOMS	±	168 (NET / 2,000 PER 3.8 1.A)

Know what's below.
Call before you dig.

THE LOCATION OF UTILITIES, INCLUDING BUT NOT LIMITED TO WATER, GAS, ELECTRIC, AND TELEPHONE LINES, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PREPARE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE: CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR THE WORK OF PERSONS EMPLOYED BY THE CONTRACTOR AND FOR ANY DAMAGE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PREPARE ANY AND ALL UNDERGROUND UTILITIES.

CONTRACTOR SHALL LOCATE AND RECONSTRUCT ALL UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OF ATWELL, LLC.

ATWELL
311 NORTH MAIN STREET
ANN ARBOR, MI 48104
734.994.0000

SECTION 26
TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN

PULTE HOMES OF MICHIGAN, LLC
WOODBIDGE PARK
PRELIMINARY SITE PLAN
COVER SHEET

DATE: FEBRUARY 20, 2018
2018-04-09 PER CITY

REVISIONS

SCALE: 1" = 60 FEET
DRAWN BY: S
CHECKED BY: SS
P.L.M.: MB
JOB #: 17001466
FILE CODE: -
SHEET NO. 01

C:\Users\mshuman\OneDrive\Documents\17001466\17001466.dwg - DATE: 4/10/2018 12:54 PM - SHEET: 01/1



Know what's below. Call before you dig.

THE LOCATION OF UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF UTILITIES PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN PRIOR TO ANY EXCAVATION WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN PRIOR TO ANY EXCAVATION WORK.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF NOVI ZONING ORDINANCE 3.8.1.C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF NOVI AND THE STATE OF MICHIGAN PRIOR TO ANY EXCAVATION WORK.



ATWELL
11100 WOODBRIDGE PARK
TOWNSHIP, MICHIGAN 48063-1000
313.494.4000

SECTION 26
TOWN 1 NORTH, RANGE 8 EAST
CITY OF NOVI
OAKLAND COUNTY, MICHIGAN

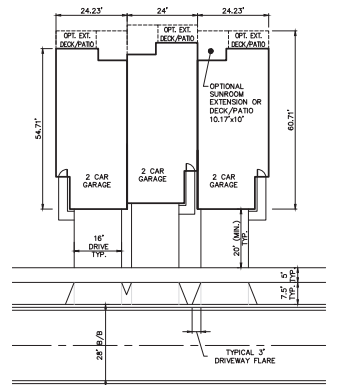
PULTE HOMES OF MICHIGAN, LLC
WOODBRIDGE PARK
PRELIMINARY SITE PLAN
LAYOUT PLAN

DATE: FEBRUARY 20, 2018
2018-04-09 PER CITY

REVISIONS
SCALE: 1" = 50 FEET
DRAWN BY: SJS
CHECKED BY: SJS
P.L.M.: MB
JOB #: 17001466
FILE CODE: -
PRINT NO: 06

LAYOUT NOTES

- THE PROPOSED DEVELOPMENT IS PLANNED TO BE DEVELOPED USING THE CITY'S PLANNED REZONING OVERLY DEVELOPMENT OPTION TO ALLOW FOR THE MULTI-FAMILY USE.
- LANDSCAPE BUFFERS WILL BE PROVIDED ON THE SIDES OF THE DEVELOPMENT AS SHOWN BUFFERING THE PROPERTY FROM THE ADJACENT USES.
- THE DEVELOPMENT WILL CONTAIN PRIVATE ROADS. THE PROPOSED CONNECTION WILL BE COORDINATED WITH THE ROAD COMMISSION OF OAKLAND COUNTY.
- ALL SIDEWALKS AND SIDEWALK RAMPS SHALL BE ADA COMPLIANT.
- SHORT DISTANCE TRIANGLES SHOWN FOR 2.0' EYE HEIGHT IN ACCORDANCE WITH MOST TRAFFIC AND SAFETY STANDARDS FEBRUARY 6, 2008 (CORA ADAPTED, EXHIBITS 8-24A, 8-24B). SHORT DISTANCE FOR SPEED LIMIT FOR 45 MPH AND 4 LANES OF TRAFFIC IS 530'.
- ON-STREET PARKING IS PROPOSED NEAR THE MAILBOXES. UNIT GARAGE AND DRIVE WAY PARKING EXCEEDS CITY PARKING REQUIREMENTS.
- PROPOSED BUILDING FACADES WILL HAVE A MINIMUM OF 30% BRICK OR STONE.
- THE TOTAL PROPOSED FLOOR SQUARE FOOTAGE OF EACH DWELLING UNIT IS 1,860 SQUARE FEET.



CITY BUILDING SEPARATION TABLE

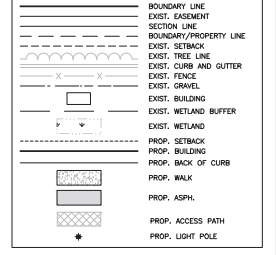
SPACE BETWEEN BUILDINGS	Hs (feet)	La (feet)	Ls (feet)	Required spacing (feet)	Proposed spacing (feet)
2 & 3	32	32	120.0	61.3	61.5
4 & 5	32	32	54.0	54.0	59.3
6 & 7	32	32	44.0	44.0	46.3
1 & 2	32	32	120.0	61.3	63.0
1 & 7	32	32	55.0	55.0	59.7
2 & 6	32	32	17.0	17.0	27.0
3 & 6	32	32	55.0	55.0	59.7
3 & 4	32	32	120.0	61.3	63.0
5 & 6	32	32	55.0	55.0	59.7

BUILDING ROOM COUNT TABLE

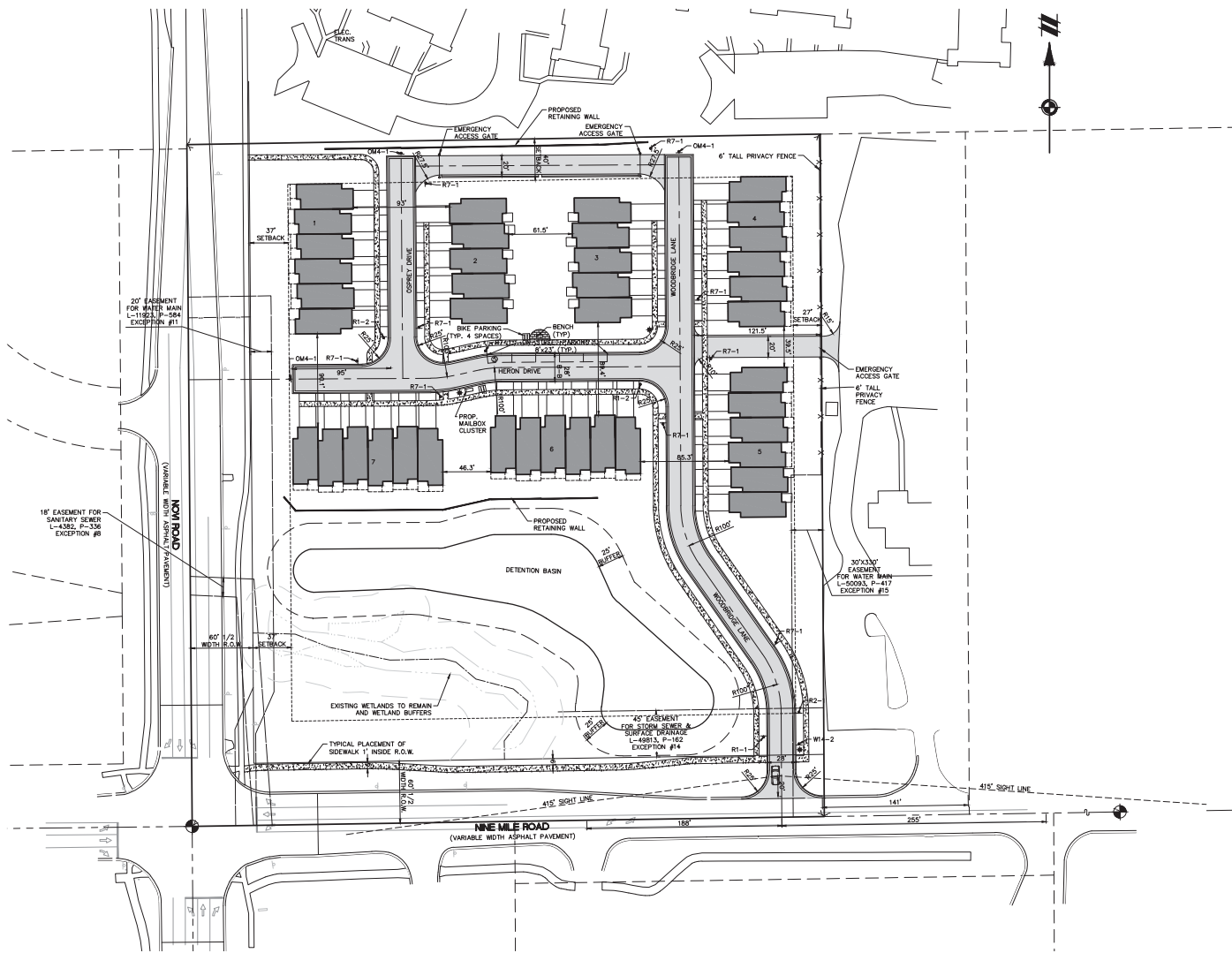
BUILDING NUMBER	LENGTH	HEIGHT	NUMBER OF THREE BEDROOM UNITS	ROOM COUNT (FOUR ROOMS PER UNIT)*
1	144	32	6	24
2	120	32	5	20
3	120	32	5	20
4	144	32	6	24
5	144	32	6	24
6	144	32	6	24
7	144	32	6	24
TOTALS			40	160

* ALLOWED PER RM-1 ZONING
* ROOM COUNTS SHOWN PER CITY OF NOVI ZONING ORDINANCE 3.8.1.C

LEGEND



PRELIMINARY - NOT FOR CONSTRUCTION



SIGNAGE NOTES

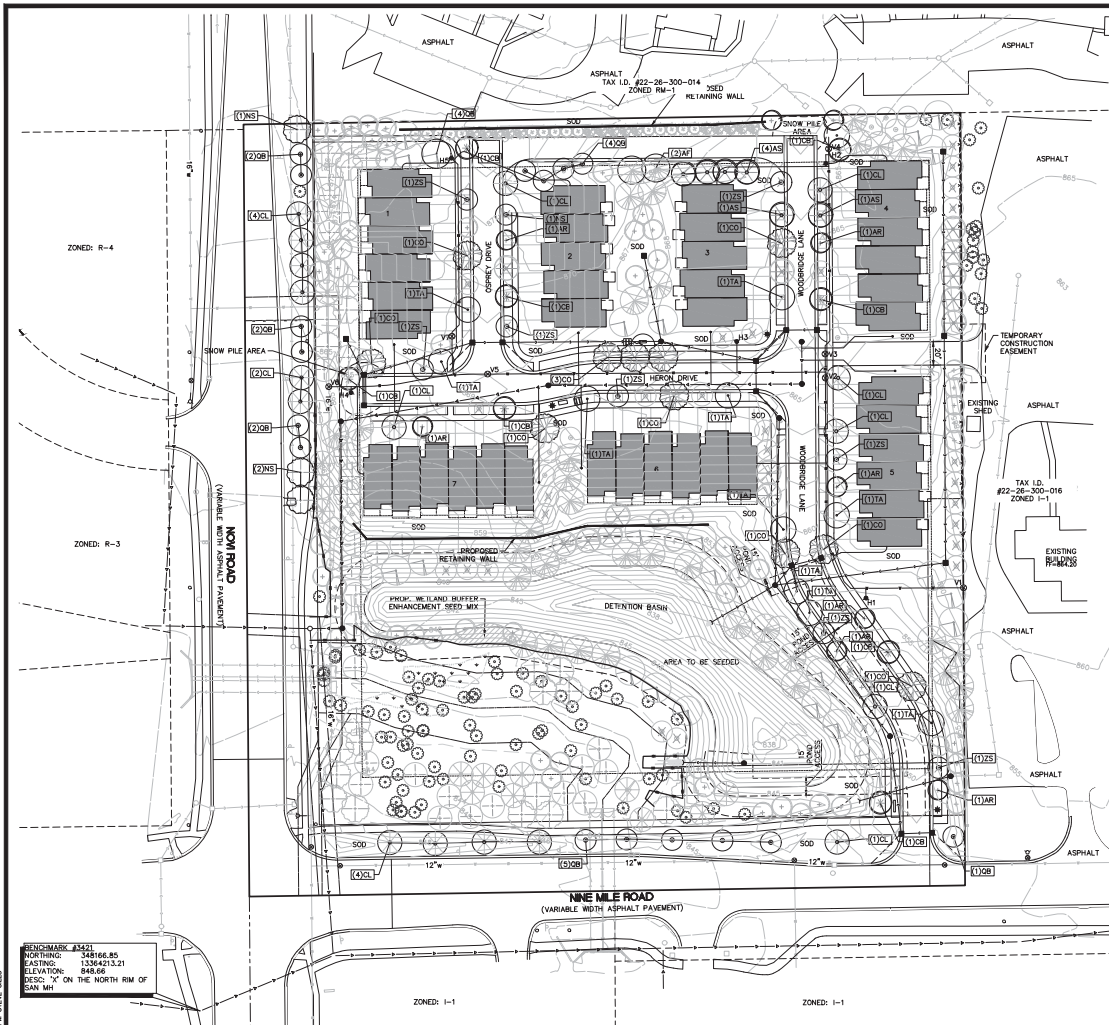
- ALL ON-SITE SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE MANUAL.
- ALL ROADWAY SIGNS SHOULD BE INSTALLED TWO FEET FROM THE FACE OF THE CURB TO THE NEAR EDGE OF THE SIGN. ALL SIGNS SHALL BE A HEIGHT OF 7 FEET FROM GRADE TO THE BOTTOM OF THE SIGN WHEN PLACED IN THE MOUNTY OF A CURBED AREA.
- TRAFFIC CONTROL SIGNS SHALL USE THE FHWA STANDARD ALPHABET SERIES.
- TRAFFIC CONTROL SIGNS SHALL HAVE HIGH INTENSITY PRISMATIC (HWP) SHEETING TO MEET FHWA RETROREFLECTIVITY REQUIREMENTS.
- STREET NAME SIGNS SHALL BE DESIGNED PER THE CITY OF NOVI TRAFFIC CONTROL SIGN STANDARDS.
- STREET NAME SIGNS ARE REQUIRED TO HAVE A GREEN FIELD, WHITE LETTERS, AND A WHITE BORDER. TEXT SHALL CONSIST OF A CAPITALIZED FIRST LETTER WITH THE REMAINING LETTERS IN LOWERCASE FOR THE CURVED LETTERS AND ALL IN CAPS 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.
- STREET NAME SIGNS SHALL HAVE A LETTERING HEIGHT OF THREE INCHES FOR SUPPLEMENTARY LETTERING TO INDICATE THE STREET TYPE (E.G. DRIVE, AVENUE, ETC).
- 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 2 1/2" OR GREATER U-CHANNEL POST AS DICTATED BY THE WEIGHT OF THE PROPOSED SIGN. STREET NAME SIGNS WITH NOMINAL HEIGHT OF 12 INCHES SHALL BE SINGLE SIDED AND SANDBLACHED ON A 1 1/2" X 1 1/2" GALVANIZED PERFORATED GALVANIZED STEEL INSERT WITH THE SING OF THE SIGNS DELTA TOGETHER. THE SIGNS SHALL HAVE MINIMUM LETTERING OF 3 INCHES. THE CITY HAS MOST EXTENSIVE THE MINIMUM OF 12 INCHES INTO THE 3 LB. OR HEAVIER U-CHANNEL POST. IN PREVIOUS EXPERIENCES, THE CITY HAS DISCOVERED THAT THE CONSIDERED OPTION MUST BE REPLACED WITH WHITE AS USED TO JOIN THE SIGNS 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.
- 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 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.



SIGN QUANTITIES

SIGN TYPE	SIGN SIZE	QUANTITY
R1-1	30"x30"	1
R2-2	30"x30"x36"	2
R7-1	18"x12"	10
W14-2	24"x24"	1
R2-1	24"x30"	1
OM4-1	18"x18"	3



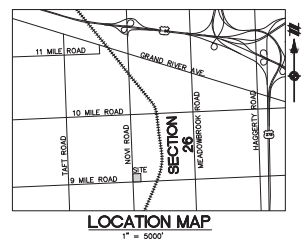


LANDSCAPE REQUIREMENTS

Street Tree	Required	Proposed	Notes
	1 Tree per 35 LF Interior: 683 LF - 360' driveways= 201 LF/35' = 20 trees Exterior: 1974 LF - 360' driveways= 1654 LF/35' = 47 trees	47 Trees Provided	Back of curb line utilized for long road minus driveways (interior and exterior)
Novi Road Street Trees	Street Trees 1/35 LF - 598/75= 17 Trees	14 Trees Provided*	*Trees provided using 1.25 Deciduous Tree Credit for using 3" Caliper
9 Mile Street Trees	Street Trees 1/35 LF - 520/35= 15 Trees	12 Trees Provided*	*Trees provided using 1.25 Deciduous Tree Credit for using 3" Caliper Entrance Road Subtracted from Total

NOTE:

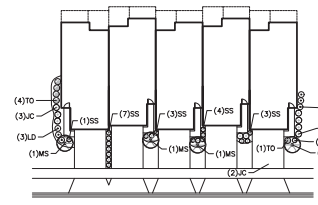
- NO EXISTING OVERHEAD UTILITIES WILL REMAIN ON THE SITE.
- THE PLACEMENT OF TREES IN AREAS WITH EXISTING TREES SHALL BE APPROVED BY THE CITY PRIOR TO PLANTING.
- ALL TREES ARE TO BE PLACED 10' FROM HYDRANTS AND UTILITY STRUCTURES, AND 5' FROM UNDERGROUND UTILITY LINES.
- TRANSFORMERS TO BE SCREENED PER CITY OF NOVI STANDARDS WHEN LOCATION IS FINALIZED. SEE DETAIL ON SHEET 13.
- PROPOSED TREE PLANTING LOCATIONS SHALL BE APPROVED BY THE CITY OF NOVI LANDSCAPE ARCHITECT PRIOR TO PLANTING.



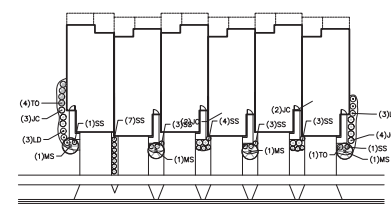
BENCHMARK #3421
 NORTHING: 348168.80
 EASTING: 13364213.21
 ELEVATION: 848.66
 DESC: "C" ON THE NORTH RIM OF SAN MH

STREET TREE LANDSCAPE PLAN

TREE LABEL KEY



TYPICAL 5-UNIT PLANTING DETAIL
 SCALE: 1" = 30'



TYPICAL 6-UNIT PLANTING DETAIL
 SCALE: 1" = 30'

PREPARED BY KATE BOND, PLA 1266

SEE SHEET 12 FOR MASTER PLANT LIST

LEGEND	
	BOUNDARY LINE
	BOUNDARY/PROPERTY LINE
	EXIST. CONTOUR
	EXIST. CURB AND GUTTER
	EXIST. FENCE
	EXIST. GRAVEL
	EXIST. WETLAND
	EXIST. WETLAND BUFFER
	EXIST. STORM
	EXIST. WATER MAIN
	EXIST. SANITARY
	EXIST. CULVERT
	EXIST. CATCH BASIN/INLET
	EXIST. HYDRANT
	EXIST. VALVE
	EXIST. SANITARY SEWER
	PROP. SETBACK
	PROP. BUILDING
	PROP. WALL
	PROP. PARKING STRIPE
	PROP. BACK OF CURB
	PROP. CONTOUR
	PROP. TREE LINE
	PROP. STORM SEWER
	PROP. SANITARY
	PROP. WATER MAIN
	PROP. END SECTION
	PROP. CATCH BASIN/INLET
	PROP. WATER VALVE
	PROP. FIRE HYDRANT
	PROP. MANHOLE
	PROP. LIGHT POLE

PRELIMINARY - NOT FOR CONSTRUCTION

Know what's below.
 Call before you dig.

THE LOCATION OF UTILITIES AND THE DEPTH OF UTILITIES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY THE EXISTING LOCATION OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATION AND DEPTH OF ANY UTILITIES PRIOR TO ANY CONSTRUCTION WORK.

NOTICE: THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S FAILURE TO VERIFY THE LOCATION AND DEPTH OF ANY UTILITIES PRIOR TO ANY CONSTRUCTION WORK.

ATWELL
 LANDSCAPE ARCHITECTS
 3110 WOODBURN STREET
 ANN ARBOR, MICHIGAN 48106
 TEL: 734.994.4000

SECTION 26
 TOWN 1 NORTH, RANGE 8 EAST
 CITY OF NOVI
 OAKLAND COUNTY, MICHIGAN

PULTE HOMES OF MICHIGAN, LLC
 WOODBRIDGE PARK
 PRELIMINARY SITE PLAN
 LANDSCAPE PLAN

DATE: FEBRUARY 20, 2018
 2018-04-09 PER CITY

REVISIONS

NO.	DATE	DESCRIPTION
0		
1		
2		
3		
4		
5		

SCALE: 1" = 50 FEET
 DRAWN BY: KAS
 CHECKED BY: SS
 P.L.M.B.
 JOB #: 17001466
 FILE CODE: -
 SHEET NO. **06**

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

May 02, 2018

Planning Review

Woodbridge Park

JSP17-67

PETITIONER

Pulte Homes of Michigan, LLC

REVIEW TYPE

Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	26	
Site Location	North East corner of Novi and Nine Mile Road Parcel Id: 22-26-300-015	
Site School District	Novi Community School District	
Site Zoning	RM-1 (Low-Density Multi-Family Residential)	
Adjoining Zoning	North	RM-1: Low-Density Multi-Family Residential
	East	I-1 Light Industrial
	West	R-4 One Family Residential
	South	I-1 Light Industrial
Current Site Use	Vacant	
Adjoining Uses	North	Saddle creek apartments
	East	Shiro's restaurant (legal non-conforming use)
	West	Brookland Farms and Weston Estates (Residential sub-division)
	South	Oak Pointe Plaza (Consent Judgement); Industrial Offices
Site Size	9.23Acres (Net Site Acreage 7.48 Acres)	
Plan Date	February 20, 2017	

PROJECT SUMMARY

The applicant is proposing a 40-unit multi-family for-sale residential development with frontage and access to Nine Mile Road. The development includes seven buildings which are 5 and 6 unit attached town home style units. The subject property is approximately 9 acres and is located on north east corner of Nine Mile and Novi Road. The property is currently undeveloped and has regulated wetlands and woodlands predominantly on the south west corner of the site. Private roads are proposed to serve the development. There is on-site detention pond proposed west of the proposed entry drive from None-Mile Road. The development also proposes a connection to Shiro restaurant parking to the east for secondary emergency access only.

The current submittal is made as Landscape review was not recommending approval of Preliminary site plan. Plans were only distributed for Landscape and Planning review at this time. No changes to the layout or number of units are made.

RECOMMENDATION

Approval of the Preliminary Site Plan is recommended provided the issue with vacating the berm easement is resolved prior to Planning Commission meeting. 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.**

After Planning Commission’s approval, plan would also require approvals for certain deviations from City Council and Zoning Board of Appeals.

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 final site plan submittal.

1. **Existing 15 foot Berm Easement:** Sheet 02 indicates an existing 15 feet easement for berm that is proposed to be vacated. Based on initial research by staff, it was determined that the easement was granted to City of Novi as a condition of site plan approval for adjacent parcel(Shiro) to the East for a restaurant use. **The applicant for the eastern parcel (Shiro’s site) at that time has provided a 15 feet easement on subject parcel and intent to build a berm or a wall when a residential development is approved for the subject parcel. With the current proposal, the applicant is proposing to vacate the 15 foot berm easement and an alternative location is not proposed. With this submittal, the applicant has proposed landscape screening along property line abutting non-residential use. Landscape reviews states that it is not adequate and does not meet the intent of screening that would be provided by a berm and landscape. The applicant should consider an opaque screen such as a brick wall supplemented by evergreen trees. Please refer to the landscape review for more details. An alternative location for the required berm or wall (condition of previous site plan approval), subject to staff’s review and approval should be provided prior to vacating the easement.**
2. **Mailbox Parking:** The applicant has designated 5 spaces north of Heron drive for mailbox parking. The proposed location is acceptable, but **the applicant should refine the signing plans to clearly label that as an approved parking zone, since the remainder of their site prohibits on-street parking.**

We do not recommend striping the parking spaces on street. Propose a sign on the east end of the parking “bay” to begin the permitted parking section. Signs similar to the following could be considered at either end of the parking area with arrows pointing in opposite, applicable directions or replace the arrow symbol on the signs with “THIS SIDE OF SIGN” or “HERE TO CORNER” at beginning and end of the parking bay, respectively.



R7-1

1. **Lighting and Photometric Plan:** Please show the light poles on the landscape plan to make sure that there are no conflicts with proposed tree locations.
2. **Wetland and Woodland Conservation Easements:** Draft of conservation easement are required prior to stamping set submittal.

3. **Zoning Board of Appeals Variances:**

As discussed at the concept meeting, the plan would require approval from Zoning Board of Appeals for the following variances. Staff understands that the southwestern portion of the site contains regulated wetlands and woodlands that make up for almost one-third of the total site area. This area limits the area available for development on this site and the development potential. However, the deviations are subject to ZBA's discretion.

- i. A ZBA variance from Section 3.1.7.D to allow reduction of side setback (75 ft. required, 30 ft provided)
- ii. A ZBA variance from Section 3.1.7.D to allow reduction of exterior side setback (75 ft. required, 40 ft. provided)
- iii. A ZBA variance from Section 3.1.7.D to allow reduction of rear setback (75 ft. required, 40 ft provided)
- iv. A ZBA variance from Section 3.8.2.D for not meeting minimum building orientation requirements (45 degrees required, 0 degrees provided)

4. **City Council Variances:**

- i. City Council variance (staff supported) from Design and Construction Standards Section 11-256(c) for lack of sidewalk along west side of entrance road where five (5) foot sidewalk is required along both sides of proposed streets.
- ii. City Council variance (staff supported) from Subdivision Ordinance, Appendix C, Section 4.04 for lack of secondary connection at interval exceeding one thousand three hundred (1,300) feet.
- iii. City Council variance for reduction of minimum required Taper depth. (7.5 feet provided, a minimum of 10 feet is required).
- iv. City Council approval of vacation of existing landscape berm.

Deviations listed on the cover sheet do not match the approval authority listed in Engineering review letter. Please correct it accordingly.

5. **Planning Commission Waivers:**

- i. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for 141 feet provided between same-side commercial driveways where 150 feet is required;
- ii. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for 1188 feet provided between opposite side commercial driveways where 200 feet is required;
- iii. Additional Landscape waivers as noted in Landscape review letter. **Refer to review letter for more details.**

The site plan as proposed requires multiple deviations. While staff supports some of the unavoidable deviations, strongly recommends considering alternative options to eliminate any of the above if possible.

SUMMARY OF REVIEWS

The current submittal is made as Landscape review was not recommending approval of Preliminary site plan. Plans were only distributed for Landscape and Planning review at this time. No changes to the layout or number of units are made.

- a. **Engineering Review (03-14-18):** Review noted some Council and Administrative variances that are required. Additional comments to be addressed with Final Site Plan. Engineering recommends conditional approval.
- b. **Landscape Review (Revised 04-19-18):** Review noted some Planning Commission waivers that may be required. Additional comments to be addressed with revised Preliminary Site Plan. Landscape **is currently not recommending** approval.

- c. Wetlands Review (03-13-18): 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 (03-13-18): 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 (03-13-18): Additional comments to be addressed with Final Site Plan. Traffic recommends conditional approval.
- f. Facade Review (03-12-18): Façade is recommending approval
- g. Fire Review (02-26-18): Additional comments to be addressed with Final Site Plan. Fire recommends conditional approval.

NEXT STEP: PLANNING COMMISSION MEETING

All reviews are recommending approval except for Landscape. The site plan is scheduled for public hearing on May 23, 2018 per applicant's request. Staff recommends addressing pending issue prior to scheduling a Planning Commission meeting. Please submit the following no later than May 15, 2017.

1. Response letter **addressing all comments from all letters as dated under 'Summary of other reviews'**
2. Site plan submittal in PDF dated 04-09-17
3. A revised landscape plan to address the screening along the eastern property line.
4. A color rendering of the site plan, as needed

CITY COUNCIL AND ZONING BOARD OF APPEALS MEETINGS

If the Planning Commission approves the site plan, the applicant should then seek a Zoning Board of Dimensional Variance for items listed earlier in the review. The application can be found at this [link](#). Please contact Kate Oppermann at 248-347-0459 for meeting and deadline schedule.

The plan would also require City Council approval for the items listed earlier in the review. There is no separate application required to schedule a City Council meeting. Staff will schedule next available one after receiving Planning Commission approval.

FINAL SITE PLAN SUBMITTAL

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

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

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

New addresses are 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

This project requires approval from the Street and Project Naming Committee. A meeting is scheduled for March 22, 2018 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

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] in the Community Development Department.

CHAPTER 26.5

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.



Sri Ravali Komaragiri – Planner



PLANNING REVIEW CHART: RM-1

Review Date: May 02, 2018
Review Type: Preliminary Site Plan
Project Name: **JSP 17-67 WOODBRIDGE PARK**
Plan Date: April 09, 2018
Prepared by: Sri Komaragiri, Planner
E-mail: skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant prior to next submittal. Underlined items need to be addressed at the time of Preliminary Site Plan

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(Adopted July 26, 2017)</i>	Multiple Family	40 Unit residential development	Yes	
Area Study	The site does not fall under any special category	NA	NA	
Residential Density Map <i>(Adopted July 26, 2017)</i>	9.3 DUA	5.3 DUA (Net)	Yes	
Zoning <i>(Effective December 25, 2013)</i>	RM-1 Multiple Family	RM-1 Multiple Family	Yes	
Uses Permitted (Sec 3.1.7.B & C)	Sec. 3.1.7.B. - Principal Uses Permitted. Sec. 3.1.7.C. – Special Land Uses Permitted.	Attached townhouse development	Yes	
Phasing	Indicate how many phases Show phase lines on the plans Tentative timeline for completion of all phases	Phasing is not proposed	NA	
Height, bulk, density and area limitations (Sec 3.1.7.D)				
Frontage on a Public Street. <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	The site has frontage and access to Nine Mile Road	Yes	
Minimum Zoning Lot Size for each Unit: in Acres <i>(Sec 3.8.1)</i>	RM-1 and RM-2 Required Conditions			
Minimum Zoning Lot Size for each Unit: Width in Feet <i>(Sec 3.8.1)</i>				
Usable Open Space Area <i>(Sec 3.1.7.D)</i>	200 sf of Minimum usable open space per dwelling unit For a total of 40 dwelling	0.49 acres for central courtyard (Sheet 13)	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	units, <u>required Open Space: 8, 000 SF</u>			
Maximum % of Lot Area Covered (By All Buildings)	25%	17%	Yes	
Building Height (Sec. 3.20)	65 ft. or 5 stories whichever is less	2 stories and 32 feet	Yes	
Minimum Floor Area per Unit (Sec. 3.1.7.D)	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 SF	Yes
	4 bedroom	1,000 sq. ft.	Not Proposed	NA
Maximum Dwelling Unit Density/Net Site Area (Sec. 3.1.7.D)	Efficiency	Max 5 %	Not proposed	Yes
	1 bedroom	10.9 Max 20 %	Not proposed	
	2 bedroom	7.3	Not proposed	
	3+ bedroom	5.4	5.3 DUA Total site area: 9.23 Ac ROW Area: 1.66 Acres Wetlands: 0.09 Acres Net Site Area: 7.48 Acres	
Residential Building Setbacks (Sec 3.1.7.D)				
Exterior Side @ Novi Road	75 ft. per Sec. 3.6.2.B	40 ft.	No	<u>These are considered deviations and would require Zoning Board of Appeals</u>
Front Nine Mile Road	75 ft.	75 ft. minimum	Yes	
Side East	75 ft.	30 ft.	No	
Rear North	75 ft.	40 ft.	No	
Parking Setback (Sec 3.6.2. B)				
Exterior Side @ Novi Road	75 ft.	Parking is provided in the garage and in front of the garage.	NA	Refer to Planning review for notes regarding on-street parking near mailboxes.
Front Nine Mile Road	75 ft.		NA	
Side East	20 ft.		NA	
Rear North	20 ft.		NA	
Note To District Standards (Sec 3.6.2)				
Exterior Side Yard Abutting a Street (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	Nine Mile Road is considered exterior side yard	Yes	
Off-Street Parking in Front Yard (Sec 3.6.2.E)	Off-street parking is allowed in front yard	Parking is not proposed in the front yard	NA	
Distance between buildings	It is governed by sec. 3.8.2 or by the minimum	Applicant has provided information on the	Yes	

Item	Required Code	Proposed	Meets Code	Comments
(Sec 3.6.2.H)	setback requirements, whichever is greater	sheet. All distance meet the minimum requirement		
Wetland/Watercourse Setback (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	Wetlands exist on south west corner of the site.	Yes?	Refer to wetland review for more comments
Parking setback screening (Sec 3.6.2.P)	Required parking setback area shall be landscaped per sec 5.5.3.	Parking lots are not proposed	NA	
Modification of parking setback requirements (Sec 3.6.2.Q)	The Planning Commission may modify parking setback requirements based on its determination according to Sec 3.6.2.Q	None required	NA	
RM-1 and RM-2 Required Conditions (Sec 3.8)& (Sec 3.10)				
Total number of rooms (Sec. 3.8.1)	Total No. of rooms < Net site area in SF/2000 3,25,829 SF/2000 = 163	160	Yes	
Public Utilities (Sec. 3.8.1)	All public utilities should be available	All public utilities are available	Yes	
Maximum Number of Units (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 3 bedroom units	Yes	
Room Count per Dwelling Unit Size (Sec. 3.8.1.C) <i>*An extra room such as den count towards an extra room</i>	Dwelling Unit Size	Room Count *		Yes
	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)	
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.				
Setback along natural shore line (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	
Structure frontage (Sec. 3.8.2.B)	Each structure in the dwelling group shall	All structures front on proposed private drive	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	front either on a dedicated public street or approved private drive.			
Maximum length of the buildings (Sec. 3.8.2.C)	A single building or a group of attached buildings cannot exceed 180 ft.	144 ft.	Yes	
Modification of maximum length (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.			
Building Orientation (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	<u>This is considered a deviation and would require Zoning Board of Appeals approval. Provide a justification and note whether other alternatives were considered.</u>
Yard setback restrictions (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	
Off-Street Parking or related drives (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	NA	
	No closer than 8 ft. for other walls or	None proposed	NA	
	No closer than 20 ft. from ROW and property line	None proposed	NA	
Pedestrian Connectivity (Sec. 3.8.2.G)	5 feet sidewalks on both sides of the Private drive are required to permit	All sidewalks along the private drive are 5 feet wide.	Yes?	Sidewalks are not proposed for the entire length of private drives.

Item	Required Code	Proposed	Meets Code	Comments
	safe and convenient pedestrian access.			This would require City Council approval. Refer to Engineering review for more details.
	Where feasible sidewalks shall be connected to other pedestrian features abutting the site.	Sidewalks are extended to connect to public sidewalk along Novi Road	Yes	Sidewalks can be looped to provide a connected walks within the development
	All sidewalks shall comply with barrier free design standards	Layout notes indicate that all sidewalks shall be ADA compliant	Yes	
Minimum Distance between the buildings (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	
Minimum Distance between the buildings (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	
Number of Parking Spaces 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 For 40 Three or more BR units, required spaces = 100 spaces	Garage Spaces: 80 In front of Garage: 80 TOTAL PROVIDED: 160 Parallel street parking proposed near mail boxes.	Yes	5 on-street parallel parking spaces are proposed on north of Heron drive to access mailboxes.
Parking Space Dimensions and Maneuvering Lanes (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 -	Yes	
Parking stall located adjacent to a parking lot entrance (public or private) (Sec. 5.3.13)	- shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Does not apply	NA	

Item	Required Code	Proposed	Meets Code	Comments
Barrier Free Spaces <i>Barrier Free Code</i>	2 accessible space (including 1 Van accessible) for every 26 to 50 spaces	None required	NA	
Barrier Free Space Dimensions <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			
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.			
Minimum number of Bicycle Parking (Sec. 5.16.1) <u>Multiple-family residential</u>	One (1) space for each five (5) dwelling units Required: 8 Spaces	10 spaces provided within development at three different locations	Yes	
Bicycle Parking General requirements (Sec. 5.16)	No farther than 120 ft. from the entrance being served When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations Spaces to be paved and the bike rack shall be inverted "U" design Shall be accessible via 6 ft. paved sidewalk	Detail provided on sheet 13	Yes	
Bicycle Parking Lot layout (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			
Accessory and Roof top Structures				
Dumpster Sec 4.19.2.F	- Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft, from property line.	Curb side Refuse pick up is being proposed	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	- Away from Barrier free Spaces			
Roof top equipment and wall mounted utility equipment Sec. 4.19.2.E.ii	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	
Roof top appurtenances screening	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	
Sidewalks and Other Requirements				
Non-Motorized Plan	No regional trails proposed in the vicinity An eight foot asphalt pathway is indicated on the master plan along Novi Road A 6 foot sidewalk is required along Nine Mile Road	The applicant is proposing a 6 foot sidewalk along Nine Mile Road A six foot concrete sidewalk exists along Novi Road	Yes?	Eight foot pathway is required along Novi road. This is considered a deviation and this requires City Council approval. Please refer to Engineering review for more details
Sidewalks (Subdivision Ordinance: Sec. 4.05)	Sidewalks are required on both sides of proposed drives	Sidewalks are proposed on both sides of the proposed private drive for most part	Yes	Sidewalks should be provided on both sides. Loops the sidewalks wherever possible.
Public Sidewalks (Chapter 11, Sec.11-276(b), Subdivision Ordinance: Sec. 4.05)	A 6 foot sidewalk is required along Novi Road	The applicant is proposing a 6 foot sidewalk	Yes?	This is considered a deviation and this requires City Council approval. Please refer to Engineering review for more details
Entryway lighting Sec. 5.7	One street light is required per entrance.	None proposed at this time	Yes	Applicant to work with engineering and DTE on the location and type of the fixtures are proposed in the right of way
Building Code and Other Requirements				
Building Code	Building exits must be connected to sidewalk system or parking lot.	All exits are connected to internal sidewalk through the driveways	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	
General layout and dimension of proposed physical improvements	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).	Mostly provided	Yes	Refer to all review letters for additional information requested
Economic Impact	<ul style="list-style-type: none"> - Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known) 	Information will be provided at a later time	NA	
Other Permits and Approvals				
Development/ Business Sign <i>(City Code Sec 28.3)</i> <i>Sign permit applications may be reviewed as part of Preliminary Site Plan or separately for Building Office review.</i>	Sign improvement can be reviewed with site plan or as a separate application after site plan approval	None indicated	NA	
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Name approved	Yes	
Property Split	Any proposed property split must be submitted to the Assessing Department for approval.	Subject parcel is one single parcel	Yes	<u>The existing berm easement to be vacated requires City Council approval</u>
Other Legal Requirements				
Master	Applicant is required to	Not applicable at this	NA	<u>A Master Deed draft shall</u>

Item	Required Code	Proposed	Meets Code	Comments
Deed/Covenants and Restrictions	submit this information for review with the Final Site Plan submittal	moment		<u>be submitted prior to Stamping Set approval.</u>
Conservation easements	Conservation easements may be required for woodland impacts	Not Applicable	NA	
Lighting and Photometric Plan (Sec. 5.7)				
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky			The subject property abuts existing residential development. Please provide a lighting plan to verify spillovers along property line prior to Planning Commission Meeting
Lighting Plan (Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures			
Building Lighting (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.			
Lighting Plan (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			
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties			
Required Conditions (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft.			

Item	Required Code	Proposed	Meets Code	Comments
	where adjacent to residential districts or uses)			
Required Conditions <i>(Sec. 5.7.3.B)</i>	<ul style="list-style-type: none"> - Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation 			
Security Lighting <i>(Sec. 5.7.3.H)</i> Lighting for security purposes shall be directed only onto the area to be secured.	<ul style="list-style-type: none"> - 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 			
Required Conditions <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			
Required Conditions <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			
Min. Illumination <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			
Max. Illumination adjacent to Non-Residential <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			

Item	Required Code	Proposed	Meets Code	Comments
Cut off Angles (Sec. 5.7.3.L)	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.

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

03/14/2018

Engineering Review

Woodbridge Park
JSP17-0067

Applicant

Pulte Homes

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: North of Nine Mile Road, east of Novi Road
- Site Size: 9.3 acres site
- Plan Date: 02/20/2018
- Design Engineer: Atwell

Project Summary

- Construction of a multi-family residential development of 40 total units. Site access would be from a new curb cut off of Nine Mile Road to private roads within the development.
- Water service would be provided by an extension of water main from the existing 16-inch water main along the east side of Novi Road with additional hydrants in the development.
- Sanitary sewer service would be provided by connection to an existing sanitary sewer manhole on existing 21-inch sewer main along the east side of Novi Road.
- Storm water would be collected by a single storm sewer collection system and detained on-site in a proposed detention basin.

Recommendation

Approval of the Preliminary Site Plan and Preliminary Storm Water Management Plan is recommended.

Comments:

The Preliminary Site Plan meets the general requirements of the design and construction standards as set forth in Chapter 11 of the City of Novi Codified Ordinance, the Storm Water Management Ordinance and the Engineering Design Manual with the following items to be addressed at the time of Final Site Plan submittal (further engineering detail will be required at the time of the final site plan submittal):

Additional Comments (to be addressed upon Final Site Plan submittal):

General

1. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
2. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website (<http://cityofnovi.org/Government/City-Services/Public-Services/Engineering-Division/Engineering-Standards-and-Construction-Details.aspx>).
3. Reference at least one city established survey benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab on www.cityofnovi.org.
4. A right-of-way permit will be required from the City of Novi for construction activity on Nine Mile Road, and from both the City of Novi and Oakland County for any construction activity in the Novi Road right-of-way.
5. Construction of 6-foot sidewalk along the Nine Mile Road frontage in accordance with the Bicycle and Pedestrian master plan is required with the development. This sidewalk should extend along the entire Nine Mile frontage, to the east property line.
6. The Bicycle and Pedestrian Master Plan calls for an 8-foot pathway along the east side of Novi Road. The project should include this 8-foot pathway along the Novi Road frontage. Alternatively, an administrative variance may be sought to make a contribution into the City sidewalk fund in lieu of constructing the pathway as shown in the master plan.
7. As shown, the master planned half-width of the right-of-way along both Novi Road and Nine Mile Road is sixty (60) feet. Dedication of the master-planned half right-of-way of sixty (60) feet half-width is required for the project. Label the additional right-of-way width to be dedicated along Novi Road and Nine Mile Road as "proposed" right-of-way.
8. Revise the list of deviations on the cover sheet as follows:
 - a. Administrative approval from Engineering for variance from Engineering Design Manual Section 7.4.2.C.1 for 12.5 feet from back of curb to outside edge of sidewalk where 15 feet is required (variance of 2.5 feet).
 - b. City Council variance (staff supported) from Design and Construction Standards Section 11-256(c) for lack of sidewalk along west side of entrance road where five (5) foot sidewalk is required along both sides of proposed streets.

- c. City Council variance (staff supported) from Subdivision Ordinance, Appendix C, Section 4.04 for lack of secondary connection at interval exceeding one thousand three hundred (1,300) feet.
- d. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for:
 - i. 141 feet provided between same-side commercial driveways where 150 feet is required;
 - ii. 188 feet provided between opposite side commercial driveways where 200 feet is required.
9. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
10. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
11. Soil borings shall be provided for a preliminary review of the constructability of the proposed development (roads, basin, etc.). Borings identifying soil types, and groundwater elevation should be provided at the time of Preliminary Site plan.
12. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

13. Provide a profile for all proposed water main 8-inch and larger.
14. Where water main terminates at north end of property, provide a valve in well following the hydrants.
15. Provide a minimum of 6 feet of cover on water main where under the influence of pavement, and a minimum of 5.5 feet of cover elsewhere.
16. Provide three (3) signed and sealed sets of revised utility plans along with the MDEQ permit application (06/12 rev.) for water main construction. 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

17. The 21-inch sanitary sewer in Novi Road is maintained by Oakland County. Contact Oakland County for specific permitting and approval requirements.
18. Provide seven (7) signed sealed sets of revised utility plans along with the MDEQ permit application (01/18 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

19. Show the existing 45 foot easement for surface storm drainage at the southeastern portion of the site on the utility plan.
20. Public 20 foot storm sewer easement over the storm sewer network is not needed.
21. A minimum cover depth of 3 feet shall be maintained over all storm sewers.
22. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
23. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

Storm Water Management Plan

24. Provide a sheet or sheets titled "Storm Water Management Plan" (SWMP) that complies with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual (refer to the runoff coefficients, 1V:4H allowable basin slopes, etc.)
25. It is not clear what is proposed to meet storm water quality requirements. A permanent water surface and storage volume is the preferred method to meet storm water quality requirements. Refer to section 5.3 of the Engineering Design Manual for general storm water quality performance criteria, and section 5.6.1.A for the depth and volume requirements for wet detention basins.
26. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates and volumes. The area being used for this off-site discharge should be delineated and the ultimate location of discharge shown.
27. 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.
28. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin. This buffer cannot encroach onto adjacent lots or property.

Paving & Grading

29. Sidewalk is required along both sides of all proposed streets. A variance may be required for lack of sidewalk along the west side of the entrance road.
30. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants. Note on the plan any location where the 3-foot separation cannot be provided.

Soil Erosion and Sediment Control

31. A SESC permit is required. A full review has not been done at this time. The review checklist detailing all SESC requirements is attached to this letter. An informal review will be complete with the Final Site Plan if SESC plans are included in the submittal.

Flood Plain

32. The approximate limits of the 100-year flood plain and FEMA FIRM panel are identified on the plans. If the development will have any impact on the flood plain, a City of Novi floodplain use permit may be required. Contact the Building Department for submittal information. An MDEQ floodplain use permit may also be required prior to site plan approval.

Off-Site Easements

33. Any off-site easements anticipated must be executed **prior to final approval of the plans**. Submit drafts of the off-site temporary construction easement and emergency access easement with a recent title search to the Community Development Department as soon as possible for review and approval by the Engineering Division and the City Attorney prior to executing the easements.

The following must be submitted at the time of Final Site Plan submittal:

34. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal 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 cost estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving, right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pretreatment structure and restoration).
35. 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.
36. Draft copies of any off-site easements, a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to getting executed.

The following must be submitted at the time of Stamping Set submittal:

37. A draft copy of the maintenance agreement for the storm water facilities, 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.
38. 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.
 39. 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.
 40. Executed copies of any required off-site easements must be submitted to the Community Development Department.

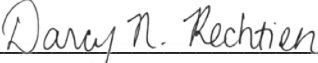
The following must be addressed prior to construction:

41. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
42. 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 fee).
43. An NPDES permit must be obtained from the MDEQ since the site is over 5 acres in size. The MDEQ requires an approved plan to be submitted with the Notice of Coverage.
44. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
45. A permit for work within the right-of-way of Nine Mile Road and Novi Road must be obtained from the City of Novi. The application is available from the City Engineering Division and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Division at 248-347-0454 for further information.
46. 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.
47. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the water main plans have been approved.
48. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the sanitary sewer plans have been approved.

49. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
50. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities as specified in the Storm Water Management Ordinance, must be posted with Community Development.
51. An incomplete site work performance guarantee, equal to 1.2 times the amount required to complete the site improvements (excluding the storm water detention facilities) as specified in the Performance Guarantee Ordinance, must be posted with Community Development.
52. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted with Community Development.
53. Permits for the construction of each retaining wall may be required from the Community Development Department (248-347-0415).

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 Rechtien at (248) 735-5695 with any questions.



Darcy N. Rechtien, P.E.

cc: Theresa Bridges, Engineering
George Melistas, Engineering
Sri Komaragiri, Community Development

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

April 19, 2018

Revised Preliminary Site Plan - Landscaping

JSP 17-67: Woodbridge Park

Review Type

Revised Preliminary Site Plan Landscape Review

Property Characteristics

- Site Location: Northeast corner of Novi and Nine Mile Roads
- Site Acreage: 9.23 acres
- Site Zoning: RM-1
- Adjacent Zoning: North: RM-1, East, South: I-1, West: R-3, R-4
- Plan Date: 8/30/2017

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 revised Preliminary/Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart is a summary and not intended to substitute for any Ordinance.

Recommendation

The project is **not recommended for approval**. There are still a number of corrections to be made, and a number of waivers required, which are summarized below. The subcanopy percentage can easily be met and I'm sure will be by the applicant. The most problematic waiver is for the lack of sufficient screening between the residential property and the industrial property to the east. I am not convinced that the proposed screening is sufficient. The comments below should be corrected in Preliminary or Final Site Plans, as indicated by bold or underlined comments.

WAIVERS REQUIRED: Please add a list of waiver requests, with their impact (trees not planted, linear feet of berm not provided, etc) and justification for the request, on the landscape plan.

- Some internal street trees are not located between back of curb and sidewalk. *Supported by staff*
- Berms not provided along sections of Novi Road and Nine Mile Road. *Supported by staff*
- 33% (39) of site landscaping trees are subcanopy species. *This is not supported by staff.* Staff would support the waiver request if only 25% of the site landscaping species were subcanopy trees to provide additional diversity to the site.
- The required 10-15 foot tall landscaped berm is not provided along the east property line, between the residential property and the industrial property to the east. Alternate screening in the form of a 6 foot vinyl privacy fence along the property line, with a line of deciduous canopy trees in front of it, is proposed as alternate screening. *Not supported by staff.*

Ordinance Considerations

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

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

A note stating that there will be no overhead utilities on the site has been provided.

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

1. A tree survey is provided and trees to be removed are clearly marked.
2. **Please show tree fencing at the Critical Root Zone (1' beyond dripline) for all existing trees to remain near the project area on the Demolition or Grading Plan when it is created.**
3. **In order to protect the preserved natural area at the southwest corner of the property where trees are proposed to be planted, please add a call-out, as noted in the Landscape Chart.**

Woodland Replacement Trees

1. See ECT's review for a more detailed discussion of woodland replacement trees.
2. **Please broaden the diversity of replacement trees with replacement of some of the maples with oaks, native elms and perhaps tulip trees. Currently red maples constitute almost half of the replacement trees.**

Adjacent to Residential - Buffer (Zoning Sec. 5.5.3.B.ii and iii)

1. A 10-15 foot tall landscaped berm, with a 6 foot wide crest, is required between the site and the industrial property to the east.
2. A 6' privacy fence and a line of deciduous canopy trees along the fence is proposed.
3. **Until evidence that this screening provides similar visual and audible screening that a landscaped berm would provide, or a different method of screening that does provide the same screening as a berm would, the landscape waiver is not supported by staff.**

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

1. **Berms are provided along the developed portions of the frontages on Novi Road and Nine Mile Road, but not in the areas to be preserved in their natural state. Staff would support waivers for these areas, and for sections where the topography does not allow them, but not where those conditions do not exist. Please see the landscape chart for a detailed discussion of missing berms.**
2. Credits for upsizing trees is allowed for greenbelt trees, and are used to reduce the number of trees planted.
3. **Please provide the correct number of subcanopy trees.**
4. If the applicant wishes, a landscape waiver can be requested to deduct the frontages to be preserved from the basis of calculation for the deciduous canopy/large evergreen trees and subcanopy trees (see the landscape chart for a discussion of this). *This waiver request would be supported by staff.*

Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.)

1. Street trees are provided along both roads, but the correct number is not provided.
2. **Upsizing credits are not allowed for street trees. Please provide the correct number of trees.**
3. If some or all of those trees cannot be planted due to spatial constraints, utility conflicts or other conflicts, a landscape waiver is can be requested. The impact of that waiver, and justification for it, need to be provided. *This waiver request would be supported by staff if it is limited to areas with clear conflicts.*
4. **Please use canopy trees (minimum 30 feet mature height and 20 foot mature canopy width) for the Novi Road and Nine Mile Road street trees.**

Parking Lot Landscaping and Perimeter Trees (Zoning Sec. 5.5.3.C.)

No parking lots are proposed.

Multi-family Landscaping (Zoning Section 5.5.3.E.ii)

1. The required number of site trees (120) appears to be provided.
2. 39 of the 120 trees (approximately 33%) of the site trees are proposed to be subcanopy trees. This would require a landscape waiver. I would support 25% of the trees (30) to be subcanopy trees to add diversity to the planting mix, but no more. **Please reduce the proportion of subcanopy trees and request a landscape waiver for including subcanopy trees as part of the site landscaping plantings.** *This would be supported by staff.*
3. *The site landscaping requirement is for large evergreen trees, defined to be minimum 30 feet mature height and 15 feet mature width. The evergreens provided along the fire access lane are too small to meet this requirement so they can't be counted as site landscaping trees. Please plant other site landscaping trees to make up the total.*
4. Interior street trees need to be planted between the sidewalk and curb. The applicant has worked to provide more trees as required. While there are still some utility conflicts, where trees are located behind the sidewalk, there are many trees properly located. A landscape waiver is still required for those trees not between the sidewalk and curb, but *this waiver request would now be supported.*
5. **Please relocate all interior street trees in spaces between driveways less than 5 feet to a nearby location with better space (at least 5' wide) to grow.**
6. **Subcanopy trees are allowed and encouraged for the interior street trees where planting space is limited (see the tree space recommendations in the Landscape Design Manual section 2). They would not count toward the 25% maximum for site landscaping trees.**

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. The typical unit landscaping detail shows that approximately 35% of each building's frontage along the interior drive is landscaped, which meets the 35% requirement.
2. **Please add foundation landscaping along the sides of the buildings that face interior drives (not the fire access lane).**

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

1. **Please be sure that the tree species composition meets the requirements of the Landscape Design Manual Section 4. Woodland replacement species should be broken out from that calculation.**
2. Please revise the standard costs on the cost summary to use those listed on the landscape chart and multiply the quantities by the unit costs to get total landscape costs.

Planting Notations and Details (LDM)

Provided.

Storm Basin Landscape (Zoning Sec 5.5.3.E.iv and LDM 1.d.(3))

The required shrubs are provided.

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

The proposed landscaping must be provided with sufficient water to become established and survive over the long term. Please provide an irrigation plan as part of the Final Site Plans or note how this will be accomplished if an irrigation plan is not provided.

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

Provided.

Snow Deposit (LDM.2.q.)

Provided.

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

Please add tree protection fencing for all trees to remain.

Corner Clearance (Zoning Sec 5.9)

1. **Please adjust the clear vision zone per the diagram on the Landscape Chart.** (The zone is drawn from the property line, not the curb.)
2. **Please move the monument sign out of the zone at 9 Mile unless it will be shorter than 30".**

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 rmeader@cityofnovi.org.



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – REVISED PRELIMINARY SITE PLAN

Review Date: April 19, 2018
Project Name: JSP17 – 0067: WOODBRIDGE PARK
Plan Date: August 30, 2017
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

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

This project is **not recommended for approval**. As with previous multi-family plans, they are proposing the street trees to be well back of the sidewalk instead of between the sidewalk and curb. There is no reason why they can't relocate the utilities to allow street trees to be located as required. Other shortages also exist.

WAIVERS REQUIRED: Please add a list of waiver requests, with their impact (e.g. trees not planted, If of berm not provided, etc) and justification for the request, on the landscape plan.

- Berm not provided between residential and non-residential
- Street trees not all located between back of curb and sidewalk
- Berms not provided along Novi Road and Nine Mile Road
- Mix of replacement tree species too heavily weighted with maples.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan <i>(Zoning Sec 5.5.2, LDM 2.e.)</i>	<ul style="list-style-type: none"> ▪ 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 ▪ Consistent with plans throughout set 	<ul style="list-style-type: none"> ▪ Overall Plan Scale 1"=50' ▪ Details Scale: 1"=30', 1"=20' 	Yes	
Project Information <i>(LDM 2.d.)</i>	Name and Address	Yes	Yes	
Owner/Developer Contact Information <i>(LDM 2.a.)</i>	Name, address and telephone number of the owner and developer or association	Yes	Yes	On Cover Sheet
Landscape Architect contact information <i>(LDM 2.b.)</i>	Name, Address and telephone number of RLA	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Sealed by LA. <i>(LDM 2.g.)</i>	Requires original signature	No		<u>Need for Final Site Plans</u>
Miss Dig Note (800) 482-7171 <i>(LDM.3.a.(8))</i>	Show on all plan sheets	Yes	Yes	
Zoning <i>(LDM 2.f.)</i>	Include parcel and all adjacent parcels' zoning	<u>Parcel:</u> RM-1 <u>North:</u> RM-1 <u>East, South:</u> I-1 <u>West:</u> R-3, R-4	Yes	
Survey information <i>(LDM 2.c.)</i>	<ul style="list-style-type: none"> ▪ Legal description or boundary line survey ▪ Existing topography 	Sheet 02	Yes	
Existing plant material Existing woodlands or wetlands <i>(LDM 2.e.(2))</i>	<ul style="list-style-type: none"> ▪ Show location type and size. Label to be saved or removed. ▪ Plan shall state if none exists. 	Yes	TBD	<ol style="list-style-type: none"> 1. See ECT review for detailed discussion of woodlands. 2. Red maples constitute about 48% of replacement trees. Please include more species, genera such as more oaks, tulip trees, elms, etc. to reduce the percentage of maples down 3. Currently many of the larger trees are too tightly spaced for healthy growth. Please use a more representative symbol for larger trees such as red maples, sugar maples and swamp white oaks, whose canopies can get up to 40-50 feet wide.
Soil types <i>(LDM.2.r.)</i>	<ul style="list-style-type: none"> ▪ As determined by Soils survey of Oakland county ▪ Show types, boundaries 	Sheet 2	Yes	
Existing and proposed improvements <i>(LDM 2.e.(4))</i>	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and proposed utilities <i>(LDM 2.e.(4))</i>	Overhead and underground utilities, including hydrants	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
Proposed grading. 2' contour minimum <i>(LDM 2.e.(1))</i>	Provide proposed contours at 2' interval	Sheet 7	Yes	
Snow deposit <i>(LDM.2.g.)</i>	Show snow deposit areas on plan	Yes	Yes	
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements <i>(LDM 1.c)</i>	<ul style="list-style-type: none"> ▪ Clear sight distance within parking islands ▪ No evergreen trees 	NA		No parking lots are proposed.
Name, type and number of ground cover <i>(LDM 1.c.(5))</i>	As proposed on planting islands	NA		
General <i>(Zoning Sec 5.5.3.C.ii)</i>				
Parking lot Islands <i>(a, b, i)</i>	<ul style="list-style-type: none"> ▪ A minimum of 200 SF to qualify ▪ A minimum of 200sf unpaved area per tree planted in an island ▪ 6" curbs ▪ Islands minimum width 10' BOC to BOC 	NA		No parking lots are proposed.
Curbs and Parking stall reduction <i>(c)</i>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	NA		No parking spaces are proposed.
Contiguous space limit <i>(j)</i>	Maximum of 15 contiguous spaces	NA		No parking spaces are proposed.
Plantings around Fire Hydrant <i>(d)</i>	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	It appears that trees are located at least 10 feet from all hydrants and utility structures.	Yes	
Landscaped area <i>(g)</i>	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Sod is indicated around buildings	Yes	
Clear Zones <i>(LDM 2.3.(5))</i>	<ul style="list-style-type: none"> • 25 ft corner clearance required. • Refer to Zoning Section 5.5.9 	No	No	<ol style="list-style-type: none"> 1. Please adjust clear vision zone at 9 Mile Road per the diagram below. 2. Remove any shrubs taller than 30" or trees from the zone. 3. The monument sign should also be outside of the clear vision zone.

Item	Required	Proposed	Meets Code	Comments
				4. The width of the clear zone measured halfway between the sidewalk and the curb may be deducted from the street tree requirement calculation without a waiver.
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)				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	<ul style="list-style-type: none"> A = x sf * 7.5 % = A sf Xxx * 7.5% = xx sf 	NA		No parking lots are proposed.
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> B = x sf * 1% = B sf (xxx - 50000) * 1% = xx sf 	NA		See above
All Categories				
C = A+B Total square footage of landscaped islands	xxx + xxx = xx SF	NA		No parking lots are proposed.
D = C/200 Number of canopy trees required	xx/200 = xx Trees	NA		No parking lots are proposed.
Parking land banked	NA	No		
Berms, Walls and ROW Planting Requirements				
Berms				
<ul style="list-style-type: none"> 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 of loam with 6" layer of top soil. 				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirement (Sect 5.5.3.A)	A landscaped berm 10-15' tall, with a 6 foot wide crest, is required between residential property and I-1 property.	A 6' solid vinyl privacy fence, plus a line of deciduous canopy trees is proposed.	No	<ol style="list-style-type: none"> A landscape waiver is required for this discrepancy. The applicant must provide evidence that the proposed substitution's visible and audible screening will be sufficient to meet the requirements of the ordinance.

Item	Required	Proposed	Meets Code	Comments
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Sec 5.5.B) and (LDM 1.b)				
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)				
Greenbelt width (2)(3)(5)	40 feet	Novi Road: 40 ft min 9 Mile Rd: 228 ft min	Yes	
Berm requirements (Zoning Sec 5.5.3.A.(5) and 3.21.2.A.iii)	Undulating berm 4 feet tall with a 4 foot wide crest within greenbelt (not within the right-of-way)	<ul style="list-style-type: none"> • None • A landscape waiver is requested to not provide the required berm along either Novi or 9 Mile Roads. 	No	<ol style="list-style-type: none"> 1. Staff supports the waiver request for Novi Road due to the preservation of existing trees and topography along the southerly 400 feet of the site. Please extend the proposed berm southward to screen the southernmost unit of Building 1 better. 2. Staff supports the waiver request for the western 370 feet along 9 Mile due to the topography and preserved natural vegetation.
Min. berm crest width	4 feet	No		See the discussion above.
Minimum berm height (9)	3-5 feet	No		See above
3' wall	(4)(7)	None		
Canopy deciduous or large evergreen trees Notes (1) (10)	<ul style="list-style-type: none"> ▪ 1 per 35 lf ▪ Novi Road: 597/35 = 17 trees ▪ <i>Novi Road: (597-160)/35 = 13 trees</i> ▪ 9 Mile Road: (550-28)/35 = 15 trees ▪ <i>9 Mile Road: (520-310-28)/35 = 5 trees</i> 	<ul style="list-style-type: none"> ▪ Novi Road: 17 trees (total) ▪ 9 Mile Road: 17 trees (total) 	Yes/No	<ol style="list-style-type: none"> 1. If desired, the applicant may request a waiver for the 160 feet along Novi Road and 310 feet along 9 Mile Road that are being preserved. The resulting requirements are shown italics to the left. <i>This would be supported by staff.</i> 2. If the waiver is requested, please include the waiver and its impacts (trees not planted) in the list mentioned above.

Item	Required	Proposed	Meets Code	Comments
				<p>3. Credits for upsizing trees are taken, as allowed by the ordinance but they cannot be used to not plant the required subcanopy trees.</p>
<p>Sub-canopy deciduous trees Notes (2)(10)</p>	<ul style="list-style-type: none"> ▪ 1 tree per 20 lf ▪ Novi Road: $597/20 = 30$ trees ▪ Novi Road: $(597-160)/20 = 22$ trees ▪ 9 Mile Road: $(520-28)/20 = 25$ trees ▪ 9 Mile Road: $(550-310-28)/25 = 11$ trees 	<p>Novi Road: 5 trees (total) 9 Mile Road:</p>	<p>No</p>	<ol style="list-style-type: none"> 1. See above. The waiver would be supported for subcanopy trees as well. 2. Please use the required number of subcanopy trees. (Only the hawthorns of the proposed species are subcanopy trees which can count as subcanopy)
<p>Canopy deciduous trees in area between sidewalk and curb (Novi Street Tree List)</p>	<ul style="list-style-type: none"> ▪ 1 tree per 35 lf Novi Road: $598/35 = 17$ trees ▪ 9 Mile Road: $(550 - 100)/35 = 13$ trees 	<ul style="list-style-type: none"> ▪ Novi Road: 16 trees ▪ 9 Mile Road: 11 trees 	<p>Yes/No</p>	<ol style="list-style-type: none"> 1. Please revise clear vision zone at 9 Mile Road and deduct per Section 5.5.3 Table Footnote 19 to get basis of calculation. 2. For the Novi and 9 Mile Road trees, please use species that attain a mature height of at least 30 feet and a mature width of 20 feet. The hawthorn does not get to this size. (The hawthorns can be used as street trees for the internal roads since the planting areas are smaller). 3. Upsizing credits are not available for street trees. Please adjust the calculation and provide the correct number of trees. 4. If required trees cannot be planted in

Item	Required	Proposed	Meets Code	Comments
				areas due to spatial constrictions or existing utility conflicts (for example much of the southern portion of the Novi Road frontage), a landscape waiver for the trees that can't be planted may be requested, with justification. <i>Those waivers would be supported by staff.</i>
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	<ul style="list-style-type: none"> ▪ Label contour lines ▪ Maximum 33% ▪ Min. 4 feet flat horizontal area ▪ Minimum 3 feet high ▪ Constructed of loam with 6' top layer of topsoil. 	No		Please provide cross sections for all berms provided.
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	A note indicates that no existing overhead utilities will remain on the site.	Yes	
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No walls are proposed.		
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		NA		
Multi-family/Attached Dwelling Units (Zoning Sec 5.5.3.E.ii)				
Interior Street Trees (Sec 5.5.3.E.ii.B.ii.b(2))	<ul style="list-style-type: none"> • 1 deciduous canopy tree per 35 lf of interior roadway (both sides), excluding driveways, parking entry drives and interior roads adjacent to public 	67 trees	Yes	1. A landscape waiver is required to not place street trees between the sidewalk and curb. <i>As the applicant has made a good effort toward meeting this</i>

Item	Required	Proposed	Meets Code	Comments
	rights-of-way <ul style="list-style-type: none"> • 2315/35 = 67 trees 			<p><i>requirement, it will not be supported by staff.</i></p> <p>2. Please move trees located in areas that are less than 5 feet between driveways to areas with more space. I counted 5 trees in such small spots but there may be more. They may be planted anywhere along street frontage within the site where there is room</p>
Site Landscaping (Sec. 5.5.3.E.ii.b.(1))	<ul style="list-style-type: none"> • (3) deciduous canopy trees or large evergreen trees for each dwelling unit on the ground floor. • Evergreens not closer than 20 ft from roadway • 40 units * 3 = 120 trees 	90 trees around site and 30 at the buildings.		<p>1. The requirement for large evergreens (min 30 feet mature height and 15 feet width) is not met by the arborvitaes and redcedars placed along the access road. They can still be used, but can't count toward the site landscaping requirement. Please use trees that meet the definition's requirement for deciduous canopy and large evergreens to meet the site landscaping requirement.</p> <p>2. A landscape waiver to allow subcanopy trees to comprise 25% of the required site plantings would be supported by staff. Currently, 39 subcanopy trees are proposed (33%). Please reduce the total number of subcanopy trees to 25% (30 trees).</p>

Item	Required	Proposed	Meets Code	Comments
				<p>3. Please add a callout for the southwest corner of the site stating: " <i>Placement of trees in this area is to be jointly determined by the City and the developer. Trees may only be planted where they won't damage existing trees or healthy habitat. Proposed trees that can't be planted shall be planted elsewhere on site. A deposit to the tree fund may be made for woodland replacement trees that can't be planted on the site.</i>"</p>
<p>Foundation plantings (Sec 5.5.3.E.ii.B.(3))</p>	<p>Mix of shrubs, subcanopy trees, groundcover, perennials, annuals and ornamental grasses provided at the front of each ground floor unit covering at least 35% of the front building façade.</p>	<p>Per the typical building landscape plans, 33% of the fronts of the buildings are landscaped, plus 4-10' extra landscape areas are provided beyond the building edges for a total over 35%</p>	<p>Yes</p>	<p><u>Please include plantings in landscaping cost estimate.</u></p>
<p>Transformers/Utility boxes (LDM 1.e from 1 through 5)</p>	<ul style="list-style-type: none"> ▪ A minimum of 2ft. separation between box and the plants ▪ Ground cover below 4" is allowed up to pad. ▪ No plant materials within 8 ft. from the doors 	<p>No</p>	<p>No</p>	<p>1. When transformer locations are finalized, screening shrubs per standard detail are required. 2. Please add a note to this effect to the plans.</p>
<p>Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)</p>				
<p>Planting requirements (Sec. 5.5.3.E.iv)</p>	<ul style="list-style-type: none"> ▪ 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 	<p>The required coverage appears to be provided.</p>	<p>Yes</p>	

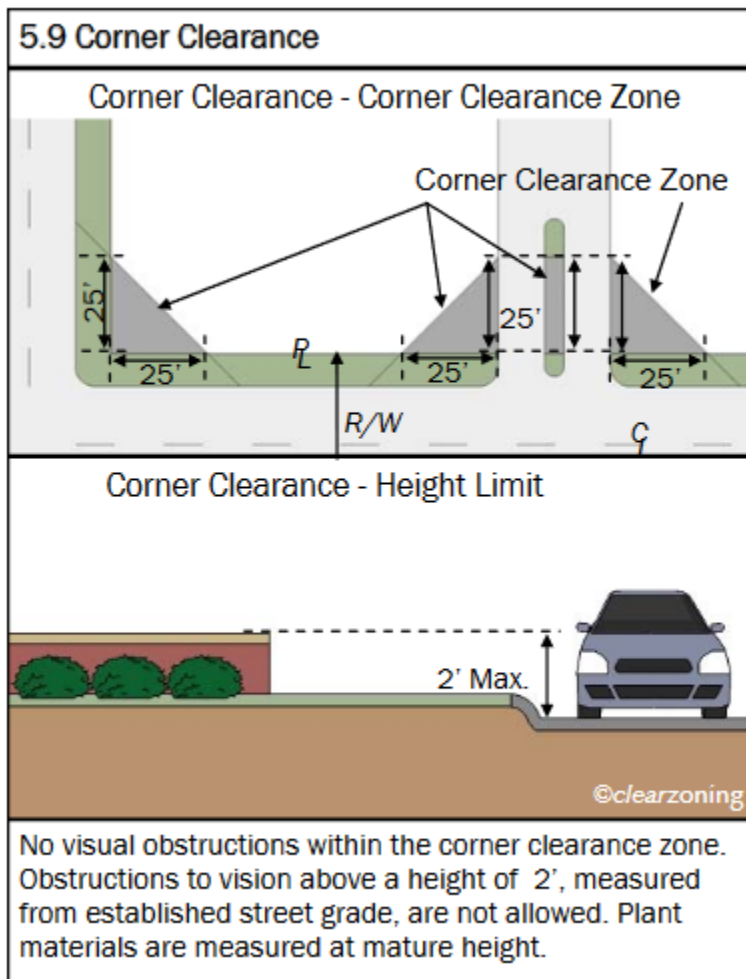
Item	Required	Proposed	Meets Code	Comments
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date <i>(LDM 2.i. & Zoning Sec 5.5.5.B)</i>	Provide intended date	Between Mar 15 and Nov 15.	Yes	
Maintenance & Statement of intent <i>(LDM 2.m & Zoning Sec 5.5.6)</i>	<ul style="list-style-type: none"> ▪ 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	
Plant source <i>(LDM 2.n & LDM 3.a.(2))</i>	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan <i>(LDM 2.s.)</i>	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	Notes indicated that an irrigation system will be provided.		<ol style="list-style-type: none"> 1. <u>The plan should be provided with Final Site Plans.</u> 2. <u>In areas where irrigation will not be provided, notes should be added to the plans indicating how plants should be watered for establishment and long- term survival.</u>
Other information <i>(LDM 2.u)</i>	Required by Planning Commission	NA		
Establishment period <i>(Zoning Sec 5.5.6.B)</i>	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. <i>(Zoning Sec 5.5.5.E)</i>	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 2.h.) – Include all cost estimates				
Botanical and common names	Refer to LDM suggested plant list	More than 50% of proposed species are native to Michigan.	Yes	<u>On the Final Site plans, please specify the species of the proposed subcanopy trees.</u>
Quantities and sizes		No	No	
Root type		No	No	
Type and amount of lawn		No	No	Please add areas of each in cost table.
Cost estimate <i>(LDM 2.t)</i>	For all new plantings, mulch and sod as listed on the plan	Unit prices and quantities provided on Plant List.	Yes, with fixes and foundation	<ol style="list-style-type: none"> 1. <u>Please use these costs for the table:</u> <ul style="list-style-type: none"> • Deciduous canopy trees: \$400 ea

Item	Required	Proposed	Meets Code	Comments
			planting added.	<ul style="list-style-type: none"> • Evergreen trees: \$325 ea • Subcanopy trees: \$250 ea. • Shrubs: \$50 ea • Perennials/grasses: \$15 ea • Sod: \$6/syd • Seed: \$3/syd • Mulch: \$35/cyd <p>2. <u>Hawthorn is a subcanopy tree.</u></p> <p>3. <u>Please extend unit costs by quantities to get total costs.</u></p> <p>4. <u>Please add mulch costs.</u></p>
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing		Located at Critical Root Zone (1' outside of dripline)	Yes	Yes
Other Plant Material Requirements (LDM 3)				
General Conditions <i>(LDM 3.a)</i>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material <i>(LDM 3.b)</i>	Clearly show trees to be removed and trees to be saved.	Sheets 3 and 4	Yes	<p>1. Proposed trees can only be planted in locations where existing trees or habitat won't be damaged by the new plantings.</p> <p>2. Please add the note mentioned above near the preserved woodland area.</p>
Landscape tree credit <i>(LDM3.b.(d))</i>	<ul style="list-style-type: none"> • Substitutions to landscape standards for preserved canopy 	74 credits are taken for 31 existing trees that are preserved.	TBD	1. Please indicate on the chart which trees are being used for

Item	Required	Proposed	Meets Code	Comments
	<p>trees outside woodlands/ wetlands should be approved by LA.</p> <ul style="list-style-type: none"> Refer to Landscape tree Credit Chart in LDM 			<p>credit.</p> <p>2. Only preserved trees not within regulated woodlands or wetlands can be used for credit.</p> <p>3. If some non-eligible trees are used, please remove them from the credits calculation.</p>
Plant Sizes for ROW, Woodland replacement and others <i>(LDM 3.c)</i>	2.5" canopy trees 6' evergreen trees	Yes	TBD	
Woodland replacement trees		Per the calculations provided, 419 credits are required, 74 credits are taken for preserved trees, 155 are planted on site and a deposit to the tree fund will be made for 190 unplanted trees.	TBD	<p>1. Please use fewer red maples and more elms, oaks, hickories or other species from the Woodland Tree Replacement chart.</p> <p>2. See the ECT review for more detailed review of woodlands.</p>
Plant size credit <i>(LDM3.c.(2))</i>	NA	No		
Prohibited Plants <i>(LDM 3.d)</i>	No plants on City Invasive Species List	None are proposed	Yes	
Recommended trees for planting under overhead utilities <i>(LDM 3.e)</i>	Label the distance from the overhead utilities	A note indicates that no overhead lines will exist on the site.	Yes	
Collected or Transplanted trees <i>(LDM 3.f)</i>		No		
Nonliving Durable Material: Mulch <i>(LDM 4)</i>	<ul style="list-style-type: none"> Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate. Refer to section for additional information 	Yes	Yes	

NOTES:

Item	Required	Proposed	Meets Code	Comments
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.



WETLANDS REVIEW



March 13, 2018
ECT No. 180141-0100

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

Re: Woodbridge Park (Nine Mile and Novi Road) JSP17-0067
Wetland Review of the Preliminary Site Plan (PSP18-0026)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan (Plan) for the proposed Woodbridge Park (Nine Mile and Novi Road) project prepared by Atwell dated February 20, 2018 and stamped "Received" by the City of Novi Community Development Department on February 21, 2018 (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. ECT also visited the site on June 29, 2016 for the purpose of a wetland boundary verification.

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
Wetland Mitigation	Not Required
Wetland Buffer Authorization	Required
MDEQ Permit	Required
Wetland Conservation Easement	Required

The proposed development is located at the northeast corner of W. Nine Mile and Novi Road in Section 26. The overall project site area is noted as 9.23 acres with a developed area (not including right-of-way (ROW) and wetlands) of approximately 7.48 acres. The project includes the construction of seven (7) multi-family residential units for a total of 40 units, access drive from Nine Mile Road, associated utilities, and a stormwater detention basin. ECT suggests that the City of Novi Engineering Department review this plan in order to verify that the site's stormwater will be adequately managed and meet the City's stormwater storage requirements.

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769-3164

Wetland Evaluation/Wetland Impact Review

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1); it appears as if this proposed project site contains both City-Regulated Wetlands and Regulated Woodlands. In addition, Thornton Creek flows through the southwestern portion of the project site.

It should be noted that our office previously conducted a wetland verification for the subject site on June 29, 2016. At that time, the site was reviewed for the presence of regulated wetlands as defined in the City of Novi Wetland and Watercourse Protection Ordinance. ECT met with King & MacGregor Environmental, Inc. (KME) at that time to review and confirm wetland boundaries. The wetland boundary map from the June 2016 site visit is attached as Figure 2.

The current Plan indicates three (3) areas of wetland on the site that have been confirmed by the applicant’s wetland consultant. Wetlands B and C are an emergent wetland fringe found directly adjacent to Thornton Creek. These wetland areas are bounded by cottonwood (*Populus deltoides*) and American elm (*Ulmus Americana*) trees. The most common emergent vegetation is Pennsylvania smartweed (*Polygonum pennsylvanicum*) and moneywort (*Lysimachia nummularia*). Thornton Creek is approximately twelve feet wide and one foot deep and runs through the center of the flagged wetland boundaries of Wetlands B and C. Wetland A is similar in nature to Wetlands B and C.

Currently, the Plan indicates one (1) direct impacts to Wetland A and the Plan quantifies the areas of proposed wetland impacts. The total amount of direct (i.e., fill or excavation) impact to on-site wetlands is 0.05-acre. The current impacts to Wetland A is for the purpose of constructing an entrance drive from Nine Mile Road and the proposed stormwater detention basin.

The following table summarizes the proposed wetland impacts as listed on the *Existing Conditions Plan* (Sheet 02):

Table 1. Proposed Wetland Impacts

Wetland	Wetland Area (Acres)	City Regulated?	MDEQ Regulated?	Impact Area (acre)	Estimated Impact Volume (cubic yards)
A	0.05	Yes City Regulated /Essential	Likely	0.05	450 (fill)
B	0.03	Yes City Regulated /Essential	Likely	None	None
C	0.02	Yes City Regulated /Essential	Likely	None	None
TOTAL	0.10	--	--	0.05	450

The Plan also includes the construction of one (1) storm water detention basin located adjacent to existing wetlands and Thornton Creek. There will be a storm water outlet adjacent to Thornton Creek and 25-foot wetland/watercourse setback in this area.

The currently proposed wetland impacts will not require wetland mitigation as the City’s threshold for wetland mitigation is 0.25-acre of wetland impact and the MDEQ’s threshold is 0.30-acre. The current proposed wetland total impact to Wetland A is 0.05-acre (approximately 2,200 square feet) and includes approximately 450 cubic yards of wetland fill.

In addition to the proposed wetland impacts, the Plan proposes disturbance to 0.26-acre of on-site 25-foot wetland/watercourse buffer area. The impacts to the existing Wetland A 25-foot setback are for the purpose of constructing an entrance drive from Nine Mile Road and the proposed stormwater detention basin. The following table summarizes the impacts proposed to the existing wetland/watercourse setbacks as listed on the Plan:

Table 2. Proposed 25-Foot Wetland/Watercourse Buffer Impacts

<i>Wetland/Watercourse Buffer Impact Area</i>	<i>Wetland Buffer Area (acre)</i>	<i>Buffer Impact Area (acre)</i>	<i>Purpose</i>
A	0.26	0.26	Construction of entrance drive from Nine Mile Road and the proposed stormwater detention basin
B	0.13	None	N/A
C	0.15	None	N/A
TOTAL	0.54	0.26	--

As noted above, the Plan proposes to construct a storm water outfall to wetland/watercourse setback from the proposed detention basin. The applicant shall quantify any permanent and/or temporary impacts to wetlands/watercourses or associated buffers in this area.

In addition to the proposed wetland impacts and proposed impact to the regulated drain, the Plan may propose impacts to regulated floodplain. Subsequent Plan submittals should address any proposed impacts to existing floodplain areas located on the site. Floodplain impacts will likely need to be authorized by the Michigan Department of Environmental Quality (MDEQ).

City of Novi Ordinance Requirements

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, and Article V) describes the regulatory criteria for wetlands and review standards for wetland permit applications.

As stated in the Ordinance, 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).

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below. Wetlands deemed essential by the City of Novi require the approval of a use permit for any proposed impacts to the wetland:

All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city....In making the determination, the city shall find that one (1) or more of the following exist at the particular site:

- (1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].*
- (2) The site represents what is identified as a locally rare or unique ecosystem.*
- (3) The site supports plants or animals of an identified local importance.*
- (4) The site provides groundwater recharge documented by a public agency.*
- (5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.*
- (6) The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.*
- (7) The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.*
- (8) The site provides pollution treatment by serving as a biological and chemical oxidation basin.*
- (9) The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.*
- (10) The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.*

After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).

Permits & Regulatory Status

Based on the criteria set forth in The City of Novi Wetlands and Watercourse Protection ordinance (Part II-Code of Ordinances, Ch. 12, Article V.), the wetland to be impacted appears to meet the definition of a City-regulated wetland and meets one or more of the essentially criteria (i.e., wildlife habitat, storm water control, etc.). A wetland use permit would be required for any proposed activities within City regulated wetlands.

It appears as though a City of Novi **Non-Minor** Use Wetland Permit would be required for the proposed impacts. The granting or denying of a Nonresidential *Minor* Use Permit shall be the responsibility of the Community Development Department. A Nonresidential *Minor* Use Permit is 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 impacts include the construction of a storm water outfall as well as one (1) direct impacts to wetlands that is noted to involve more than 300 cubic yards of wetland fill (i.e., 450 cubic yards).

A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.

It appears as though a MDEQ Wetland Permit would be required for the proposed impacts to on-site wetlands. It should be noted that it is the Applicant's responsibility to contact MDEQ in order to determine the need for a permit from the state. In 1979, the Michigan legislature passed the Geomare-Anderson Wetlands Protection Act, 1979 PA 203, which is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The MDEQ has adopted administrative rules which provide clarification and guidance on interpreting Part 303.

In accordance with Part 303, wetlands are regulated if they are any of the following:

- Connected to one of the Great Lakes or Lake St. Clair.
- Located within 1,000 feet of one of the Great Lakes or Lake St. Clair.
- Connected to an inland lake, pond, river, or stream.
- Located within 500 feet of an inland lake, pond, river or stream.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, but the DEQ has determined that these wetlands are essential to the preservation of the state's natural resources and has notified the property owner.

The law requires that persons planning to conduct certain activities in regulated wetlands apply for and receive a permit from the state before beginning the activity. A permit is required from the state for the following:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.

Wetland Comments

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

1. It should be noted that that the Plan does not appear to include all of the wetland area that was included in the 2016 King & MacGregor Environmental, Inc. wetland delineation (see Figure 2). The applicant shall include the area included in this previous wetland delineation on the Plan. The 25-foot wetland/watercourse setback in this area shall also be clearly indicated and labeled on subsequent site plans.
2. The Plan proposes to construct one (1) storm water outfall to wetland/watercourse setback. The applicant shall quantify any permanent and/or temporary impacts to wetlands/watercourse (i.e., Thornton Creek) or associated 25-foot setbacks in this outfall area (i.e., square feet/acreage and cubic yards).
3. It appears as though a MDEQ Wetland Permit and a City of Novi *Wetland Non-Minor Use Permit* would be required for any proposed impacts to site wetland. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland buffers.

It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland (or floodplain) impacts. Final determination as to the regulatory status of each of the on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

4. If applicable, the Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland as well as for any proposed wetland mitigation areas (if necessary). 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.

Any proposed conservation easement areas/boundaries shall be clearly indicated and labeled on the Plan.

Woodbridge Park (Nine Mile and Novi Rd) JSP17-0067
Wetland Review of the Preliminary Site Plan (PSP18-0026)
March 13, 2018
Page 7 of 11

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.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.



Peter Hill, P.E.
Senior Associate Engineer

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

Attachments: Figure 1. City of Novi Regulated Wetland & Woodland Map
Figure 2. Wetland Boundary Map (KME, 2016)
Site Photos

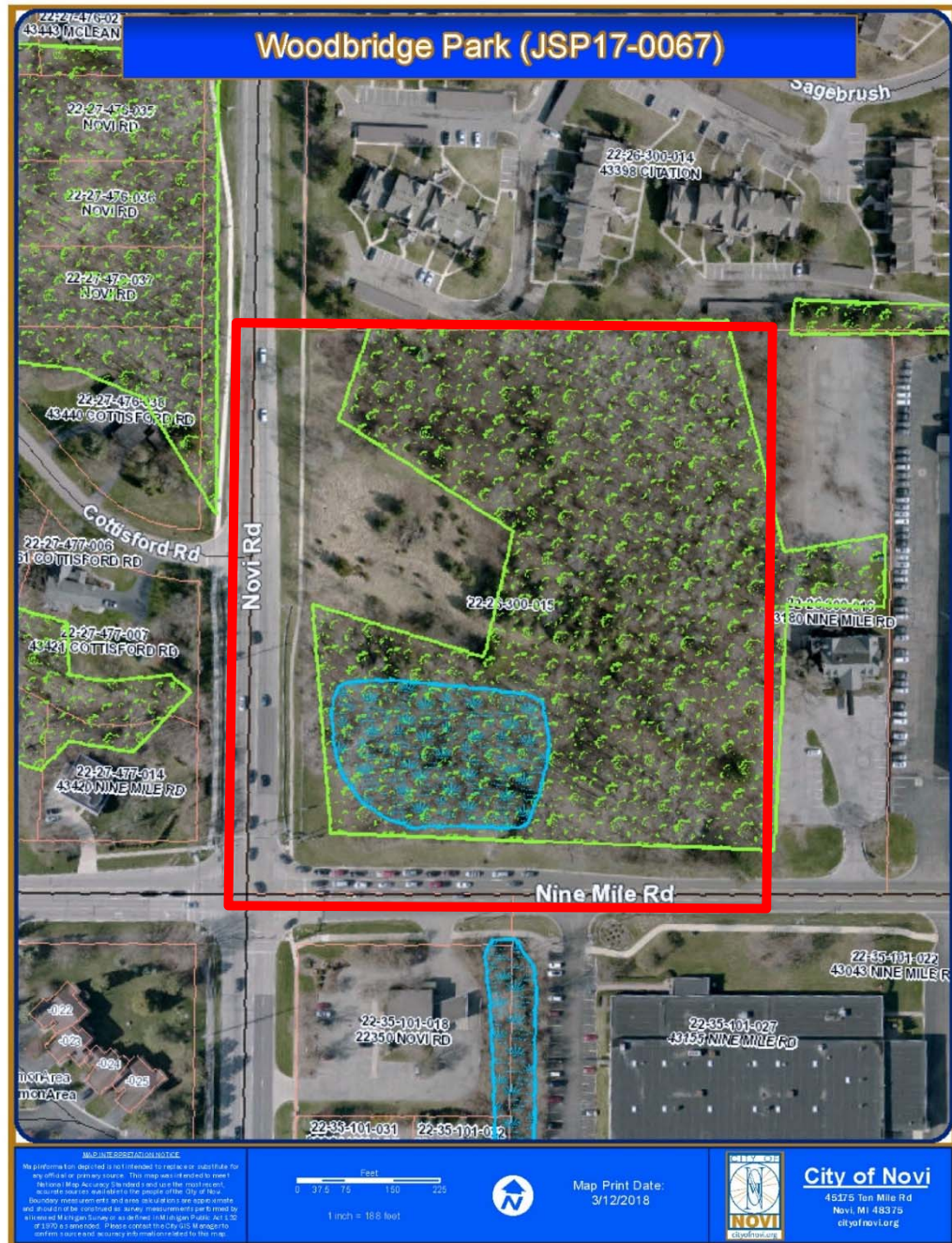


Figure 1. City of Novi Regulated Wetland & Woodland GIS Coverage Map (approximate property boundary shown in red). Regulated Woodland areas are shown in green and regulated Wetland areas are shown in blue.

Site Photos



Photo 1. Looking west at existing 7'x10' corrugated metal culverts adjacent to Novi Road, located western edge of the development site (ECT, June 29, 2016).



Photo 2. Looking east along Thornton Creek in the southwest portion of the development site (ECT, June 29, 2016).



Photo 3. Looking southwest at existing 7'x10' corrugated metal culverts adjacent to Nine Mile Road along the southern edge of the development site (ECT, June 29, 2016).



Photo 4. Looking east at existing 12-inch storm sewer located at the eastern end of Wetland A in the southeast section of the development site (ECT, June 29, 2016).

WOODLANDS REVIEW

ECT Project No. 180141-0200

March 13, 2018

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

Re: Woodbridge Park (Nine Mile and Novi Road) JSP17-0067
 Woodland Review of the Preliminary Site Plan (PSP18-0026)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Preliminary Site Plan (Plan) for the proposed Woodbridge Park (Nine Mile and Novi Road) project prepared by Atwell dated February 20, 2018 and stamped "Received" by the City of Novi Community Development Department on February 21, 2018 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT also visited the site on June 29, 2016 for the purpose of a wetland boundary verification and woodland evaluation.

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

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

The proposed development is located at the northeast corner of W. Nine Mile and Novi Road in Section 26. The overall project site area is noted as 9.23 acres with a developed area (not including right-of-way (ROW) and wetlands) of approximately 7.48 acres. The project includes the construction of seven (7) multi-family residential units for a total of 40 units, access drive from Nine Mile Road, associated utilities, and a stormwater detention basin. ECT suggests that the City of Novi Engineering Department review this plan in order to verify that the site's stormwater will be adequately managed and meet the City's stormwater storage requirements.

Although the acreage of the site containing areas mapped as City-Regulated Woodland does not appear to be quantified on the Plan, the proposed project site contains a significant amount of City-Regulated Woodland area (see Figure 1).

The purpose of the Woodlands Protection Ordinance 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.*

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

Woodland Evaluation/Woodland Impact Review

ECT's in-office review of available materials included the City of Novi Regulated Woodland map and historical aerial photographs. The site includes areas indicated as City-regulated woodland on the official City of Novi Regulated Woodland Map (see Figure 1).

ECT has verified the woodland information as shown on the current Plan, including on the *Woodlands Analysis Plan* (Sheet 03) and the *Tree List* (Sheet 04). The *Woodlands Analysis* plan has provided a description of the makeup and overall quality of the existing trees on the project through six (6) vegetation areas. These areas are summarized in the following table:

Table 1. Existing Vegetation Zones (per Applicant)

Zone	Quality	Species
A	Medium	Medium-sized black walnut, American elm, black locust, box elder
B	Medium	Scotch pine stand
C	Medium	Large cottonwood, smaller box elder and American elm
D	Medium	Several specimen sugar maple and Norway spruce
E	Medium	Scotch pine stand
F	Low	Siberian elm, American elm, black locust and box elder

In general, the proposed site contains trees of medium quality. The site does contain a number of relatively large diameter cottonwood, as well as sugar maple, black walnut and Siberian elm trees. Most of these trees will be removed under the current development plan. The following table summarizes some of the larger trees on the development site and their removal status:

- Stems to be Removed 20” to 30”;
- Stems to be Removed 30”+;
- Total Replacement Trees Required.

It should be noted that the *Landscape Plan* (Sheet 09) indicates that a total of 282 Woodland Replacement Tree credits are required for the proposed tree removals. The Plan does not appear to clearly indicate which tree material is intended to meet the Woodland Replacement Tree requirements. This information shall be clearly indicated on the Plan.

It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees. It should also be noted that all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio. All coniferous replacement trees shall be 6-feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. Finally, all proposed Woodland Replacement tree material shall meet the species requirements in the *Woodland Tree Replacement Chart* (attached).

With regard to the location of woodland replacement trees, the Woodland Ordinance states:

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit, tree relocation or replacement shall be within the same woodland areas as the removed trees. Such woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*
- *Where the tree relocation or replacement is not feasible within the woodland area, the relocation or replacement plantings may be placed elsewhere on the project property;*
- *Where tree relocation or replacement is not feasible within the woodland area, or on the project property, the permit grantee shall pay into the city tree fund monies for tree replacement in a per tree amount representing the market value for the tree replacement as approved by the planning commission. The city tree fund shall be utilized for the purpose of woodland creation and enhancement, installation of aesthetic landscape vegetation, provision of care and maintenance for public trees and provision and maintenance of specialized tree care equipment. Tree fund plantings shall take place on public property or within right-of-ways with approval of the agency of jurisdiction. Relocation or replacement plantings may be considered on private property provided that the owner grants a permanent conservation easement and the location is approved by the planning commission;*
- *Where replacements are installed in a currently non-regulated woodland area on the project property, appropriate provision shall be made to guarantee that the replacement trees shall be preserved as planted, such as through a conservation or landscape easement to be granted to the city. Such easement or other provision shall be in a form acceptable to the city attorney and provide for the perpetual preservation of the replacement trees and related vegetation.*

The applicant shall demonstrate that all proposed Woodland Replacement Trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement to be granted to the City.

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”.

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-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). The “upsizing” of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. All Woodland Replacement trees shall be species that are listed on the City’s Woodland Tree Replacement Chart (attached).
2. Please provide woodland tree replacement calculations summary on Sheet 4 (Tree List). The information should include the following:
 - a) Total Regulated Trees;
 - b) Regulated Trees Removed;
 - c) Regulated Trees Preserved;
 - d) Stems to be Removed 8” to 11”;
 - e) Stems to be Removed 11” to 20”;
 - f) Stems to be Removed 20” to 30”;
 - g) Stems to be Removed 30”+;
 - h) Total Replacement Trees Required.
3. It should be noted that the *Landscape Plan* (Sheet 09) indicates that a total of 282 Woodland Replacement Tree credits are required for the proposed tree removals. The Plan does not appear to clearly indicate which tree material is intended to meet the Woodland Replacement Tree requirements. This information shall be clearly indicated on the Plan. Please clearly indicate in the Master Plant List (Sheet 12) which species are intended as Woodland Replacement Tree credits. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees.

4. With regard to Woodland Replacement Tree plantings, please add a note near the preserved woodland area that the proposed tree planting locations need to be approved by the City of Novi Landscape Architect prior to planting.
5. As noted in the City of Novi's Landscape review, Woodland Replacement trees must have a fairly natural appearance and be representative of the natural woodlands in the area. Please do not use Bowhall Maple as a Woodland Replacement Tree as its crown is too narrow.
6. Please use a greater number of species from the woodland replacement chart (attached) than those that appear to be proposed. The addition of oaks and American elms are recommended per the City of Novi Landscape review.
7. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees 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. These easement areas shall be indicated on the Plan.
8. A Woodland Replacement 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.
9. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee shall then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation.
10. 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.
11. 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*.
12. Woodland replacement trees should be provided in quantities that are in the approximate composition as the trees removed (i.e., evergreen and deciduous Woodland Replacements should be proposed in quantities/percentages that are similar to the make-up of the Woodland trees being removed).

Woodbridge Park (Nine Mile and Novi Road) JSP17-0067
Woodland Review of the Preliminary Site Plan (PSP18-0026)
March 13, 2018
Page 7 of 9

Recommendation

ECT currently recommends approval of the Preliminary Site Plan for Woodlands. ECT recommends that the Applicant address the items noted in the *Woodland 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
Sri Komaragiri, City of Novi Planner
Rick Meader, City of Novi Landscape Architect
Hannah Smith, City of Novi Planning Assistant

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



Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate property boundary shown 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 dioica
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

TRAFFIC REVIEW



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

Project name:
 JSP17-0067 Woodbridge Park Preliminary Traffic Review

From:
 AECOM

Date:
 March 13, 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: Woodbridge Park Preliminary Site Plan 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. Pulte Homes of Michigan, LLC, is proposing a 40-unit multi-family residential development in the northeast quadrant of the intersection of Nine Mile Road and Novi Road. The site has a total of seven buildings with access to/from Nine Mile Road.
2. Nine Mile Road is under the jurisdiction of the City of Novi.
3. The site is under RM-1 (Low-Density, Multiple-Family) zoning. The applicant has not requested to rezone the property.
4. Summary of traffic-related waivers/variances:
 - a. The applicant is requesting a City Council variance for the internal sidewalk offset from the back of curb.
 - b. The applicant is requesting an administrative variance for the lack of a secondary stub street.
 - c. The applicant is requesting a planning commission waiver for driveway spacing.

TRAFFIC IMPACTS

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

ITE Code: 220 Multifamily Housing (Low-Rise)
 Development-specific Quantity: 40 dwelling units
 Zoning Change: N/A

Trip Generation Summary				
	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold (Directional Trips)	Above Threshold?
AM Peak-Hour Trips	20	16	100	No

PM Peak-Hour Trips	26	17	100	No
Daily (One-Directional) Trips	262	N/A	750	No

- The number of trips does not 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
None	N/A

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 single site access point at Nine Mile Road.
 - The applicant has proposed width and radii dimensions for the driveway that meet City standards for a local street.
- The development does not require any right turn lanes or tapers at the proposed site driveway. It should be noted that because a right turn lane or taper is not required that the existing taper of the right-turn lane for Nine Mile Road does not have to be extended, even though it is within 100 feet of the driveway.
- The development is not required to provide a left-turn passing lane as a two-way left turn lane is provided on Nine Mile Road.
- The applicant has indicated 415 feet of sight distance in both directions which exceeds the required 400 feet of sight distance for a 35 mph multi-lane roadway.
- The applicant has indicated a driveway spacing of 141 feet from the proposed driveway to the driveway directly east on the same side of Nine Mile Road. The applicant is required to provide 150 feet of driveway spacing for same-side driveways. Please reference Section 11-216.d.1.d for more information. The applicant is seeking a planning commission waiver for the driveway spacing.
- The applicant has indicated a driveway spacing of 255 feet to the existing opposite-side driveway that is downstream from the proposed driveway left-turns which exceeds the City’s standard of 150 feet.
- The applicant has indicated a driveway spacing of 188 feet to the existing opposite-side driveway that is located upstream from inbound left-turns. The City requires a driveway spacing of 200 feet based on previous analysis documented to the City via a separate correspondence. Please reference Figure IX.12 in the City’s Code of Ordinances for more information. The applicant is seeking a planning commission waiver for the driveway spacing.
- The applicant has proposed an emergency access drive that connects to the parcel located to the east of the proposed site.
 - The proposed emergency access drive is 20 feet wide which exceeds City standards.
 - The applicant is required to provide turning radii dimensions at the west end of the emergency access driveway.
 - The applicant should consider re-locating the proposed gate farther to the west side of the emergency access drive to prevent non-emergency vehicles from potentially utilizing the driveway. If the proposed location of the gate is more than 100 feet from the beginning of the emergency access drive, then an emergency access only sign is required at the entrance.
 - The applicant could consider placing an additional gate at the east end of the emergency access drive to prevent vehicles from the adjacent parking lot from accessing the access drive without an area to turn around. If the proposed location of the gate is more than 100 feet from the beginning of the emergency access drive, then an emergency access only sign is required at the entrance.

- e. The applicant has provided an emergency access gate detail that is in compliance with City standards. The applicant has also indicated that two gates may not conform to this detail as they cover a wider section of roadway. The applicant should include a separate detail for the gates that are located on the north side of the site

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow

- a. The applicant has indicated a minimum residential driveway width of 16 feet which is in compliance with City standards.
- b. The applicant should indicate the entering and exiting taper width for the residential driveways.
- c. The applicant has indicated a taper depth of 7.5 feet. The City requires a taper depth of at least 10 feet. The applicant is requesting a City Council variance for the deviation
- d. The applicant has provided an additional emergency access pathway within the site with two gates, one on each side of the pathway. The proposed pathway is 20 feet wide and in compliance with City standards. As mentioned above, the applicant should provide a detail for the proposed emergency access gates. The applicant should also indicate details related to the driveway entering width and turning radii.
- e. The applicant has proposed three dead ends within the site. A vehicle is expected to be able to utilize the available space of the emergency access drive in order to turn around if needed. However, there is not an adequate location for an emergency vehicle or truck to turn around located west of Road 3. The applicant should provide a "T" turnaround on the dead end on the west side of the site dimensioned as indicated in Figure VIII-I. Please reference Section 11-194.a.18 in the City's Code of Ordinances for more information.
- f. The roadway width throughout the site is in compliance with City standards.
- g. Local street turning radii and width dimensions are in compliance with City standards.
- h. The proposed mailbox location is not expected to interfere with traffic operations; however, residents that live east of the mailboxes will need an area to turn around further enforcing the need for a "T" turnaround on the west dead end.

2. Parking Facilities

- a. The City of Novi requires 2.5 parking spaces per unit totaling 100 spaces. The plans indicate 115 parking spaces are required. Revise the plans to indicate 2.5 spaces per unit for 40 units.
- b. The applicant is proposing 160 spaces. The applicant has indicated that the unit garage and drive way parking exceeds City requirements.
- c. The applicant has elected to dis-allow on-street parking.
- d. The City requires one bicycle parking space every five units totaling nine bicycle parking spaces. The applicant is proposing 10 bicycle parking spaces according to the cover sheet and 12 bicycle parking spaces according to the plans. The applicant should revise the plans for consistency.
- e. The applicant has proposed bicycle parking adjacent to the proposed emergency access pathway. The applicant should re-locate the bicycle parking spaces away from the emergency access pathway such that there is not potential for interference with the proposed emergency access pathway. Or, the applicant may rotate the bicycle parking such that it may be accessed from the sidewalk.
- f. The applicant should provide the bicycle parking rack specifications.

3. Sidewalk Requirements

- a. The applicant has indicated a width of five foot sidewalks within the development and along Nine Mile Road. The applicant should revise the sidewalks along Nine Mile Road to be within 6 to 8 feet wide.
- b. The applicant should indicate that the Nine Mile Road sidewalk is located one foot inside the ROW of Nine Mile Road.
- c. The internal sidewalks are required that the outside edge of the sidewalk be located a minimum of 15 feet from the back of curb. The applicant has proposed that the outside edge of the sidewalk is 12.5 feet from the back of curb. The applicant has requested a City Council variance for the deviation.

- d. The applicant has proposed sidewalk crossings throughout the site. The applicant provided sidewalk ramp and detectable warning surface detail should be updated to R-28-J.

SIGNING AND STRIPING

4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The following is a discussion of the proposed signing and striping.
 - a. The applicant should consider removal of the proposed R1-1 (stop) sign at the intersection of Road 2 and Road 3 and the intersection of Road 1 and Road 2. The applicant may downgrade these signs to R1-2 (yield) signs.
 - b. The applicant should provide R7-1 signs on both sides of the street if on-street parking is to be dis-allowed.
 - c. The applicant could consider W11-2 (crosswalk warning) signs at the proposed crossings. W11-2 signs shall be placed four feet from a sidewalk or sidewalk ramp to the near edge of the sign.
 - d. The applicant should consider a W14-2 (no outlet) sign at the entrance of the development.
 - e. The applicant should consider an R2-1 (speed limit) sign at the entrance to the development.
 - f. The applicant is required to provide an OM4 series (end of roadway: OM4-1, OM4-2, or OM4-3) sign at each of the three dead ends.
 - g. The applicant should include D3-1 (street name) signs in future submittals. Street name signs have the following requirements:
 - i. Have a green field, white letters, and a white border
 - ii. Text shall consist of a Capitalized first letter with the remaining letters lowercase
 - iii. 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
 - iv. Have a minimum height of eight inches and minimum lettering height of 4.5 inches, if located at residential street intersections
 - v. Have lettering height of three inches for supplementary lettering to indicate street type (drive, avenue, etc.)
 - vi. 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.
 - h. The applicant should provide sign post details. 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.
 - i. The applicant should indicate sign heights. All signs shall be seven feet from the top of grade to the bottom of the sign.
 - j. The applicant should indicate that traffic control signs shall use the FHWA Standard Alphabet series.
 - k. The applicant should indicate that traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
 - l. The applicant has not proposed any striping.

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

Memo

Sincerely,

AECOM

A handwritten signature in blue ink that reads "Sterling Frazier". The signature is fluid and cursive, with the first name being more prominent.

Sterling Frazier, PE
Reviewer, Traffic/ITS Engineer

A handwritten signature in blue ink that reads "Maureen Peters". The signature is cursive and somewhat stylized.

Maureen N. Peters, PE
Senior Traffic/ITS Engineer

FAÇADE REVIEW



March 12, 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**
Woodbridge Park, Preliminary Site Plan, JSP18-0026
 Façade Region: 1, Zoning District: RM-1

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 5 and 6 unit buildings consisting of various combinations of 4 elevation types. The percentages of materials proposed are as shown below.

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

Façade Ordinance Section 5.15 - As shown above the percentage of all façade materials are in full compliance with the Façade Ordinance. 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. The front elevations are articulated with multiple roof lines and front facing gables and dormers. Carriage house style garage doors with arched vision lites and divided lite windows are indicated on all elevation types. Decorative shutters, brick soldier coursing and built-up columns are provided on selected units. It should be noted that this review is based on the Horizontal Siding being Cement Fiber type (vinyl siding is not allowed).

It is our recommendation that all proposed facades is in full compliance with the Façade Ordinance. A Section 9 Waiver is not required for this project. The applicant should note the vinyl siding is not allowed.

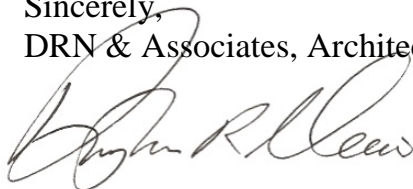
A sample board indicating carefully coordinated earth toned colors for all facades should be provided at least five days prior to the Planning Commission and/or City Council meetings.

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

A handwritten signature in black ink, appearing to read "Douglas R. Necci". The signature is fluid and cursive, written over the typed name below.

Douglas R. Necci, AIA

FIRE REVIEW



February 26, 2018

TO: Barbara McBeth- City Planner
Sri Ravali Komaragiri- Plan Review Center
Lindsay Bell-Plan Review Center
Hannah Smith-Planning Assistant

RE: Woodbridge Park

PSP# 18-0026

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

Gwen Markham

Kelly Breen

City Manager
Peter E. 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
Scott R. Baetens

Project Description:

Build a 7 build multi-tenant building at Nine Mile and Novi Rd.

Comments:

- **All** fire hydrants **MUST** in installed and operational prior to any building construction begins.
- Hydrant spacing is 300' from hydrant to hydrant. **(NOT AS THE CROW FLIES)** Novi City Ordinance 11-68(F)(1)c.

Recommendation:

APPROVED WITH CONDITIONS

Sincerely,

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

cc: file

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

cityofnovi.org

APPLICANT RESPONSE LETTER



May 15, 2018

Sri Komaragiri
Planning Department
City of Novi
45175 West Ten Mile Road
Novi, MI 48375

RE: *JSP 17-67 WOODBRIDGE PARK
Preliminary Site Plan Reviews*

Thank you for providing your review and feedback for the above referenced project. We have revised the plans in accordance with your review letter dated May 2, 2018. For your use, below are our responses on how we have addressed or plan to address each of the comments in your letter. If a comment is not spoken to in this response letter that appears in the May 2 review, it shall be assumed that the comment is noted, a variance is not being requested, and the comment will be addressed with future submittals.

PLANNING REVIEW

1. Existing 15 foot Berm Easement: The applicant for the eastern parcel (Shiro's site) at that time has provided a 15 feet easement on subject parcel and intent to build a berm or a wall when a residential development is approved for the subject parcel. With the current proposal, the applicant is proposing to vacate the 15 foot berm easement and an alternative location is not proposed. With this submittal, the applicant has proposed landscape screening along property line abutting non-residential use. Landscape reviews states that it is not adequate and does not meet the intent of screening that would be provided by a berm and landscape. The applicant should consider an opaque screen such as a brick wall supplemented by evergreen trees. Please refer to the landscape review for more details. An alternative location for the required berm or wall (condition of previous site plan approval), subject to staff's review and approval should be provided prior to vacating the easement.

Response: *An alternative location for the screening will be placed along the east side of the property where it makes more sense rather than having the screening element run through the middle of the existing site. We are currently working with the landscape reviewer to provide a solution for a berm and an opaque row of screen trees along the east property line that meets or exceeds the intent of the 15-foot wide berm easement, which may include obtaining an additional 20 easement from the adjacent owner to provide for a screening option to the greatest extent possible (which would be twice as wide as the original 15-foot wide berm easement in the area that it is proposed). This proposal has been communicated to the landscape reviewer and we understand that they support this alternate as a means of screening.*

2. Mailbox Parking: The applicant should refine the signing plans to clearly label that as an approved parking zone, since the remainder of their site prohibits on street parking.

Response: *Noted. This will be addressed with future submittals.*

3. Lighting and Photometric Plan: Please show the light poles on the landscape plan to make sure

that there are no conflicts with proposed tree locations.

Response: *Noted. This will be addressed with future submittals.*

4. Zoning Board of Appeals Variances: As discussed at the concept meeting, the plan would require approval from Zoning Board of Appeals for the following variances. Staff understands that the southwestern portion of the site contains regulated wetlands and woodlands that make up for almost one-third of the total site area. This area limits the area available for development on this site and the development potential. However, the deviations are subject to ZBA's discretion.
Response: *Noted.*
5. City Council Variances: Deviations listed on the cover sheet do not match the approval authority listed in Engineering review letter. Please correct it accordingly.
Response: *Noted. This will be addressed with future submittals.*
6. Planning Commission Waivers: Refer to review letter for more details.
Response: *Noted. This will be addressed with future submittals.*
7. Planning Commission Waivers: The site plan as proposed requires multiple deviations. While staff supports some of the unavoidable deviations, strongly recommends considering alternative options to eliminate any of the above if possible.
Response: *Noted.*
8. Summary of Reviews: The current submittal is made as Landscape review was not recommending approval of Preliminary site plan. Plans were only distributed for Landscape and Planning review at this time. No changes to the layout or number of units are made.
Response: *Noted. This will be addressed with future submittals.*
9. Landscape Review: Is currently not recommending approval.
Response: *Noted. We are currently working with the landscape reviewer to provide a solution for a berm and an opaque row of screen trees along the east property line that meets or exceeds the intent of the 15-foot wide berm easement.*
10. Planning Commission Meeting: addressing all comments from all letters as dated under 'Summary of other reviews'
Response: *See responses in this letter addressing all review.*
11. Final Site Plan Submittal: Addressing all comments and refer to sheet numbers where the change is reflected.
Response: *Noted. This will be addressed with future submittals and sheet numbers will be provided with the resubmittal letter provided with the revised plans.*
12. Street and Project Name: This project requires approval from the Street and Project Naming Committee.
Response: *Noted. This will be addressed with future submittals.*

PLANNING REVIEW CHART

1. Building Setbacks: These are considered deviations and would require Zoning Board of Appeals.
Response: *Noted.*
2. Refer to Planning review for notes regarding on street parking near mailboxes.
Response: *Noted. This will be addressed with future submittals.*
3. Refer to wetland review for more comments.
Response: *Noted. These will be addressed with future submittals.*
4. This is considered a deviation and would require Zoning Board of Appeals approval. Provide a justification and note whether other alternatives were considered.
Response: *Noted. The development area for this site is limited and to have the buildings at a 45 degree orientation to the property line would preclude a roadway network that could run parallel to the property lines, which would drastically impact the efficiency of the layout. The southwestern portion of the site contains regulated wetlands and woodlands that will be preserved. This area makes up for almost one-third of the total site area and limits the area available for development on this site and the development potential. In addition, the adjacent developments to do appear to comply with this requested building orientation.*
5. Sidewalks are not proposed for the entire length of private drives. This would require City Council approval. Refer to Engineering review for more details.
Response: *Noted. Sidewalks are 5' wide and now proposed on both sides of the private roads, except for a couple short sections along the north of the site. The proposed walk fronts and connects all the proposed building units to the development pedestrian walk network.*
6. Sidewalks can be looped to provide a connected walks within the development.
Response: *Noted and addressed. Sidewalks have need looped where appropriate and now connect to the sidewalk along Novi Road at the northwest corner of the site.*
7. 5 on-street parallel parking spaces are proposed on north of Heron drive to access mailboxes.
Response: *Noted. No further action required.*
8. Eight foot pathway is required along Novi road. This is considered a deviation and this requires City Council approval. Please refer to Engineering review for more details.
Response: *Noted.*
9. Sidewalks should be provided on both sides. Loops the sidewalks wherever possible.
Response: *Noted and addressed. Sidewalks have need looped where appropriate and now connect to the sidewalk along Novi Road at the northwest corner of the site.*
10. Refer to all review letters for additional information requested.
Response: *Noted.*
11. The existing berm easement to be vacated requires City Council approval.
Response: *Noted.*

12. The subject property abuts existing residential development. Please provide a lighting plan to verify spillovers along property line prior to Planning Commission Meeting.

Response: *Noted and addressed. No further action required.*

ENGINEERING REVIEW (As responded on April 9, 2018)

General

1. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.

Response: *Refer to general note #1 on the cover sheet.*

2. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website.

Response: *Noted. The City detail sheets will be provided with the stamping set submittal.*

3. Reference at least one city established survey benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab.

Response: *City benchmark #3421 is located in the southwest quadrant of the Novi Road and Nine Mile Road intersection. This benchmark is now shown on sheet 02.*

4. A right-of-way permit will be required from the City of Novi for construction activity on Nine Mile Road, and from both the City of Novi and Oakland County for any construction activity in the Novi Road right-of-way.

Response: *Right-of-way applications will be submitted under separate cover during Final Site Plan submittals.*

5. Construction of 6-foot sidewalk along the Nine Mile Road frontage in accordance with the Bicycle and Pedestrian master plan is required with the development. This sidewalk should extend along the entire Nine Mile frontage, to the east property line.

Response: *The sidewalk along Nine Mile Road is now proposed as 6' wide. Refer to proposed dimensions on sheet 05.*

6. The Bicycle and Pedestrian Master Plan calls for an 8-foot pathway along the east side of Novi Road. The project should include this 8-foot pathway along the Novi Road frontage. Alternatively, an administrative variance may be sought to make a contribution into the City sidewalk fund in lieu of constructing the pathway as shown in the master plan.

Response: *A 5' wide walk exists along the frontage of Novi Road. We are not proposing to replace the entire existing walk as the existing longitudinal slope of the walk is currently not ADA compliant (greater than 5%) and the reconstruction of this walk cannot be made ADA compliant due to pre-existing conditions. Thus, a contribution into the City sidewalk fund in lieu of constructing the pathway will be proposed.*

7. As shown, the master planned half-width of the right-of-way along both Novi Road and Nine Mile Road is sixty (60) feet. Dedication of the master-planned half right-of-way of sixty (60) feet half-width is required for the project. Label the additional right-of-way width to be dedicated along Novi Road and Nine Mile Road as "proposed" right-of-way.

Response: *There is already a 60' wide half-width highway and utility easement for both Novi and Nine Mile Roads. This easement is shown on sheets 02. Please advise if this needs to be handled in a different manner (i.e. dedication instead of the existing ROW easement as shown). This can be handled at Final Site Plan submittals.*

8. Revise the list of deviations on the cover sheet as follows:
 - a. Administrative approval from Engineering for variance from Engineering Design Manual Section 7.4.2.C.1 for 12.5 feet from back of curb to outside edge of sidewalk where 15 feet is required (variance of 2.5 feet).
 - b. City Council variance (staff supported) from Design and Construction Standards Section 11-256(c) for lack of sidewalk along west side of entrance road where five (5) foot sidewalk is required along both sides of proposed streets.
 - c. City Council variance (staff supported) from Subdivision Ordinance, Appendix C, Section 4.04 for lack of secondary connection at interval exceeding one thousand three hundred (1,300) feet.
 - d. Planning Commission waivers (staff supported) for variance from Design and Construction Standards Section 11-216(d) for:
 - i. 141 feet provided between same-side commercial driveways where 150 feet is required;
 - ii. 188 feet provided between opposite side commercial driveways where 200 feet is required.

Response: *The list of the deviations has been revised accordingly. The grading was able to be revised and the sidewalk is now being proposed on both sides of the entry road. Thus, this specific variance is no longer being requested.*

9. 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: *The materials have been noted in Utility Notes #2 and #3 on sheet 07. A utility materials and quantity table will be provided on the Final Site Plan submittal.*

10. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.

Response: *A paving materials and quantity table will be provided with the final site plan submittal.*

11. Soil borings shall be provided for a preliminary review of the constructability of the proposed development (roads, basin, etc.). Borings identifying soil types, and groundwater elevation should be provided at the time of Preliminary Site plan.

Response: *Soil boring locations are shown on sheet 02. A geotechnical investigation report is included with this resubmittal.*

12. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Response: *Noted. This letter describes changes made to the plans.*

Water Main

13. Provide a profile for all proposed water main 8-inch and larger.

Response: *The profiles will be provided with the Final Site Plan submittal.*

14. Where water main terminates at north end of property, provide a valve in well following the hydrants.

Response: *Per request, the water main termination on the east dead end stub has been revised to provide a valve following a hydrant. It is unlikely, but if the property to the north were ever redeveloped and a connection was necessary, it could be provided here. The dead end to the west is being left as a hydrant. It would seem that there would be no need to extend this second stub to the north property and this extension it would have to go under the proposed retaining wall to do so. Refer to sheet 06.*

15. Provide a minimum of 6 feet of cover on water main where under the influence of pavement, and a minimum of 5.5 feet of cover elsewhere.

Response: *Noted.*

16. Provide three (3) signed and sealed sets of revised utility plans along with the MDEQ permit application (06/12 rev.) for water main construction. 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: *Noted. This will be provided with the Final Site Plan submittal.*

Sanitary Sewer

17. The 21-inch sanitary sewer in Novi Road is maintained by Oakland County. Contact Oakland County for specific permitting and approval requirements.

Response: *Noted. A permit will be filed for with Oakland County for this sanitary connection.*

18. Provide seven (7) signed sealed sets of revised utility plans along with the MDEQ permit application (01/18 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: *Noted. This will be provided with the Final Site Plan submittal.*

Storm Sewer

19. Show the existing 45 foot easement for surface storm drainage at the southeastern portion of the site on the utility plan.

Response: *The easement is now being shown on sheets 02 and 06.*

20. Public 20 foot storm sewer easement over the storm sewer network is not needed.

Response: *The easements have been removed in the plans.*

21. A minimum cover depth of 3 feet shall be maintained over all storm sewers.

Response: *Noted. This will be provided in the profiles with the Final Site Plan submittal.*

22. Provide a four-foot deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.

Response: *This oil/gas separator storm structure has been called out on sheet 07. Details for this structure will be provided with the Final Site Plan submission.*

23. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

Response: *This schedule listing will be provided with the final site plan submittal.*

Storm Water Management Plan

24. Provide a sheet or sheets titled "Storm Water Management Plan" (SWMP) that complies with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual (refer to the runoff coefficients, 1V:4H allowable basin slopes, etc.)

Response: *A "Storm Water Management Plan" and details, in addition to those shown on sheet 08 of the Preliminary Site Plan, will be provided with the Final Site Plan submittal.*

25. It is not clear what is proposed to meet storm water quality requirements. A permanent water surface and storage volume is the preferred method to meet storm water quality requirements. Refer to section 5.3 of the Engineering Design Manual for general storm water quality performance criteria, and section 5.6.1.A for the depth and volume requirements for wet detention basins.

Response: *Water quality will be achieved using a permanent pool in the detention basin. The calculations on sheet 08 have been revised accordingly.*

26. The SWMP must detail the storm water system design, calculations, details, and maintenance as stated in the ordinance. The SWMP must address the discharge of storm water off-site, and evidence of its adequacy must be provided. This should be done by comparing pre- and post-development discharge rates and volumes. The area being used for this off-site discharge should be delineated and the ultimate location of discharge shown.

Response: *A pre/post analysis is shown on sheet 06. Additional details regarding the storm water management plan will be provided with Final Site Plan submittal.*

27. 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 and easement is now being provided. The proposed landscaping has been removed from this designated access.*

28. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin. This buffer cannot encroach onto adjacent lots or property.

Response: *Noted. A 25' buffer is provided and is labeled on sheet 05.*

29. Sidewalk is required along both sides of all proposed streets. A variance may be required for lack of sidewalk along the west side of the entrance road.

Response: *The grading was able to be revised and the sidewalk is now proposed on both sides of the entrance road. A variance is no longer required.*

30. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants. Note on the plan any location where the 3-foot separation cannot be provided.
Response: *All hydrants as shown are at least 3 feet from the edge of sidewalk. A note #9 has been added to the utility plan accordingly.*
31. A SESC permit is required. A full review has not been done at this time. The review checklist detailing all SESC requirements is attached to this letter. An informal review will be complete with the Final Site Plan if SESC plans are included in the submittal.
Response: *Noted. A SESC permit application will be submitted with the Final Site plan submittal.*
32. The approximate limits of the 100-year flood plain and FEMA FIRM panel are identified on the plans. If the development will have any impact on the flood plain, a City of Novi floodplain use permit may be required. Contact the Building Department for submittal information. An MDEQ floodplain use permit may also be required prior to site plan approval.
Response: *Noted. There are no proposed impacts to the 100-year floodplain.*
33. Any off-site easements anticipated must be executed prior to final approval of the plans. Submit drafts of the off-site temporary construction easement and emergency access easement with a recent title search to the Community Development Department as soon as possible for review and approval by the Engineering Division and the City Attorney prior to executing the easements.
Response: *Noted. The temporary construction easement for the fire access is the only proposed offsite easement. This will be provided for review once prepared.*
34. An itemized construction cost estimate must be submitted to the Community Development Department at the time of Final Site Plan submittal 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 cost estimate must be itemized for each utility (water, sanitary, storm sewer), on-site paving, 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. A cost estimate will be provided with the Final Site Plan submittal.*
35. 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.
Response: *This letter describes changes made to the plans.*
36. Draft copies of any off-site easements, a recent title search, and legal escrow funds must be submitted to the Community Development Department for review and approved by the Engineering Division and the City Attorney prior to getting executed.
Response: *Noted. These documents will be submitted for review under separate cover.*
37. A draft copy of the maintenance agreement for the storm water facilities, 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.
Response: *Noted. These documents will be submitted for review under separate cover.*

38. 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.
Response: *Noted. These documents will be submitted for review under separate cover.*
39. 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.
Response: *Noted. These documents will be submitted for review under separate cover.*
40. Executed copies of any required off-site easements must be submitted to the Community Development Department.
Response: *Noted. These documents will be submitted for review under separate cover.*
41. A pre-construction meeting shall be required prior to the commencement of any site work. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430).
Response: *Noted.*
42. 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 fee).
Response: *Noted.*
43. An NPDES permit must be obtained from the MDEQ since the site is over 5 acres in size. The MDEQ requires an approved plan to be submitted with the Notice of Coverage.
Response: *Noted. This will be submitted following issuance of the SESC permit.*
44. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department (248-347-0430) for forms and information.
Response: *Noted. A SESC permit application will be submitted with the Final Site Plan submittal.*
45. A permit for work within the right-of-way of Nine Mile Road and Novi Road must be obtained from the City of Novi. The application is available from the City Engineering Division and should be filed at the time of Final Site Plan submittal. Please contact the Engineering Division at 248-347-0454 for further information.
Response: *Noted. A ROW permit application will be submitted with the Final Site Plan submittal.*
46. 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 RCOC permit application will be submitted to the County when the Final Site Plans are submitted to the City.*

47. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the water main plans have been approved.

Response: *Noted. A draft application will be provided with the Final Site Plan submittal.*

48. A permit for sanitary sewer construction must be obtained from the MDEQ. This permit application must be submitted through the Water and Sewer Senior Manager after the sanitary sewer plans have been approved.

Response: *Noted. A draft application will be provided with the Final Site Plan submittal.*

49. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.

Response: *Noted.*

50. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities as specified in the Storm Water Management Ordinance, must be posted with Community Development.

Response: *Noted.*

51. An incomplete site work performance guarantee, equal to 1.2 times the amount required to complete the site improvements (excluding the storm water detention facilities) as specified in the Performance Guarantee Ordinance, must be posted with Community Development.

Response: *Noted.*

52. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted with Community Development.

Response: *Noted.*

53. Permits for the construction of each retaining wall may be required from the Community Development Department (248-347-0415).

Response: *Noted.*

LANDSCAPING REVIEW

1. Existing Trees: Please show tree fencing at the Critical Root Zone (1' beyond dripline) for all existing trees to remain near the project area on the Demolition or Grading Plan when it is created.

Response: *Noted. This will be addressed with future submittals.*

2. Existing Trees: In order to protect the preserved natural area at the southwest corner of the property where trees are proposed to be planted, please add a call-out, as noted in the Landscape Chart.

Response: *A call out will be provided on future submittals.*

3. Woodland Replacement Trees: See ECT's review for a more detailed discussion of woodland replacement trees.

Response: *Noted. This will be addressed with future submittals.*

4. Woodland Replacement Trees: Please broaden the diversity of replacement trees with replacement of some of the maples with oaks, native elms and perhaps tulip trees. Currently red maples constitute almost half of the replacement trees.

Response: *The plant list will be revised to indicate a broader variety of trees as requested. This will be addressed with future submittals.*

5. Adjacent to Residential - Buffer (Zoning Sec. 5.5.3.B.ii and iii): Until evidence that this screening provides similar visual and audible screening that a landscaped berm would provide, or a different method of screening that does provide the same screening as a berm would the waiver is not supported.

Response: *A revised screening design option with berm and appropriate plantings has been presented to the Landscape planner. It would appear at this time that it is acceptable to the City landscape architect and a waiver will be requested for the height of the berm. We will continue to work with the landscape architect to reach his support for the Planning Commission meeting.*

6. Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.B.ii and iii): Berms are provided along the developed portions of the frontages on Novi Road and Nine Mile Road, but not in the areas to be preserved in their natural state. Please see the landscape chart for a detailed discussion of missing berms.

Response: *Noted.*

7. Adjacent to Public Rights-of-Way – Berm (Wall) & Buffer (Zoning Sec. 5.5.3.B.ii and iii): Please provide the correct number of subcanopy trees.

Response: *The correct number of sub-canopy trees will be provided. This will be addressed with future submittals.*

8. Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.): Upsizing credits are not allowed for street trees. Please provide the correct number of trees.

Response: *The upsizing credit is intended only for the greenbelt requirements per the ordinance. The planting plan will be reviewed to confirm that the credit is not applied to street tree plantings. This will be addressed with future submittals.*

9. Street Tree Requirements (Zoning Sec. 5.5.3.E.i.c and LDM 1.d.): Please use canopy trees (minimum 30 feet mature height and 20 foot mature canopy width) for the Novi Road and Nine Mile Road street trees.

Response: *Canopy trees will be provided for these areas.*

10. Multi-family Landscaping (Zoning Section 5.5.3.E.ii): Please reduce the proportion of subcanopy trees and request a landscape waiver for including subcanopy trees as part of the site landscaping plantings.

Response: *A waiver will be requested and the sub-canopy tree proportion will be reduced. This will be addressed with future submittals.*

11. Multi-family Landscaping (Zoning Section 5.5.3.E.ii): Please relocate all interior street trees in spaces between driveways less than 5 feet to a nearby location with better space (at least 5' wide) to grow.

Response: *Interior street trees will be relocated to meet the minimum space requirement. This will be addressed with future submittals.*

12. Multi-family Landscaping (Zoning Section 5.5.3.E.ii): Subcanopy trees are allowed and encouraged for the interior street trees where planting space is limited (see the tree space recommendations in the Landscape Design Manual section 2). They would not count toward the 25% maximum for site landscaping trees.

Response: *Noted.*

13. Building Foundation Landscape (Zoning Sec 5.5.3.D.): Please add foundation landscaping along the sides of the buildings that face interior drives (not the fire access lane).

Response: *Foundation plantings will be provided at the sides of the buildings. This will be addressed with future submittals.*

14. Plant List (LDM 2.h. and t.): Please be sure that the tree species composition meets the requirements of the Landscape Design Manual Section 4. Woodland replacement species should be broken out from that calculation.

Response: *The composition will be reviewed and revised where necessary. This will be addressed with future submittals.*

15. Proposed trees to be saved (Sec 37 Woodland Protection 37-9, LDM 2.e.(1)): Please add tree protection fencing for all trees to remain.

Response: *Tree protection fencing will be provided on the landscape plan as requested. This will be addressed with future submittals.*

16. Corner Clearance (Zoning Sec 5.9): Please adjust the clear vision zone per the diagram on the Landscape Chart.

Response: *The clearance zone will be revised accordingly. This will be addressed with future submittals.*

17. Corner Clearance (Zoning Sec 5.9): Please move the monument sign out of the zone at 9 Mile unless it will be shorter than 30”.

Response: *The monument sign will be moved out of the clearance zone. This will be addressed with future submittals.*

LANDSCAPE REVIEW CHART

1. See ECT review for detailed discussion of woodlands.

Response: *Noted. This will be addressed with future submittals.*

2. Red maples constitute about 48% of replacement trees. Please include more species, genera such as more oaks, tulip trees, elms, etc. to reduce the percentage of maples down.

Response: *The plant list will be revised to provide more variety. This will be addressed with future submittals.*

3. Please use a more representative symbol for larger trees such as red maples, sugar maples and swamp white oaks, whose canopies can get up to 40-50 feet wide.

Response: *The tree symbols will be revised as suggested. This will be addressed with future submittals.*

4. Please adjust clear vision zone at 9 Mile Road per the diagram below.

Response: *The clear vision zone will be adjusted. This will be addressed with future submittals.*

5. Remove any shrubs taller than 30" or trees from the zone.

Response: *Noted. This will be addressed with future submittals.*

6. The monument sign should also be outside of the clear vision zone.

Response: *The monument sign will be moved out of the clear vision zone. This will be addressed with future submittals.*

7. The width of the clear zone measured halfway between the sidewalk and the curb may be deducted from the street tree requirement calculation without a waiver.

Response: *Noted. This will be addressed with future submittals.*

8. A landscape waiver is required for the berm requirement adjacent to Residential.

Response: *Noted. This will be addressed with future submittals.*

9. The applicant must provide evidence that the proposed substitution's visible and audible screening will be sufficient to meet the requirements of the ordinance.

Response: *A revised screening design with berm and appropriate plantings has been presented. It would appear at this time that it is acceptable to the City landscape architect and a waiver will be requested for the height of the berm. We will continue to work with the landscape architect to reach his support.*

10. Please extend the proposed berm southward to screen the southernmost unit of Building 1 better.

Response: *The berm will be extended. This will be addressed with future submittals.*

11. See the discussion above regarding berm crest.

Response: *Noted. This will be addressed with future submittals.*

12. See above regarding berm height.

Response: *Noted. This will be addressed with future submittals.*

13. If desired, the applicant may request a waiver for the 160 feet along Novi Road and 310 feet along 9 Mile Road that are being preserved. The resulting requirements are shown in italics to the left.

Response: *This waiver will be requested.*

14. If the waiver is requested, please include the waiver and its impacts (trees not planted) in the list mentioned above.

Response: *Noted. This will be addressed with future submittals.*

15. Credits for upsizing trees are taken, as allowed by the ordinance but they cannot be used to not plant the required subcanopy trees.

Response: *Noted. This will be addressed with future submittals.*

16. See above regarding the waiver.

Response: *Noted.*

17. Please use the required number of subcanopy trees. (Only the hawthorns of the proposed species are subcanopy trees which can count as subcanopy)

Response: *The required number of sub-canopy trees will be provided. This will be addressed with future submittals.*

18. Please revise clear vision zone at 9 Mile Road and deduct per Section 5.5.3 Table Footnote 19 to get basis of calculation.

Response: *Noted.*

19. For the Novi and 9 Mile Road trees, please use species that attain a mature height of at least 30 feet and a mature width of 20 feet. The hawthorn does not get to this size.

Response: *The correct size trees will be provided. This will be addressed with future submittals.*

20. Please adjust the calculation and provide the correct number of trees.

Response: *The calculation will be revised. This will be addressed with future submittals.*

21. If required trees cannot be planted in areas due to spatial constrictions or existing utility conflicts (for example much of the southern portion of the Novi Road frontage), a landscape waiver for the trees that can't be planted may be requested, with justification.

Response: *Noted.*

22. Please provide cross sections for all berms provided.

Response: *Cross sections will be provided. This will be addressed with future submittals.*

23. A landscape waiver is required to not place street trees between the sidewalk and curb.

Response: *A waiver will be requested. A majority of the street trees are being placed between the sidewalk and curb, except for limited areas where utilities must be avoided.*

24. Please move trees located in areas that are less than 5 feet between driveways to areas with more space. I counted 5 trees in such small spots but there may be more. They may be planted anywhere along street frontage within the site where there is room.

Response: *Street trees will be relocated to meet the minimum space requirement. This will be addressed with future submittals.*

25. Please use trees that meet the definition's requirement for deciduous canopy and large evergreens to meet the site landscaping requirement.

Response: *The trees will be reviewed and revised to meet this requirement. This will be addressed with future submittals.*

26. Please reduce the total number of subcanopy trees to 25% (30 trees).

Response: *The sub-canopy number will be reduced. This will be addressed with future submittals.*

27. Please add a note to the plans that transformers will be screened per standard detail.
Response: *A note will be added. This will be addressed with future submittals.*
28. Please add areas for the sub-canopy trees to the cost table.
Response: *These items will be added to the cost table. This will be addressed with future submittals.*
29. Please add a note regarding proposed trees not being planted where existing habitat will be disturbed near the preserved woodland area.
Response: *A note will be added. This will be addressed with future submittals.*
30. Please indicate on the chart which trees are being used for credit.
Response: *These trees will be identified. This will be addressed with future submittals.*
31. If some non-eligible trees are used, please remove them from the credits calculation.
Response: *Non-eligible trees will be removed from the calculation. This will be addressed with future submittals.*
32. Please use fewer red maples and more elms, oaks, hickories or other species from the Woodland Tree Replacement chart.
Response: *The tree list will be adjusted as requested. This will be addressed with future submittals.*
33. See the ECT review for more detailed review of woodlands.
Response: *Noted. This will be addressed with future submittals.*

WETLAND REVIEW (As responded on April 9, 2018)

1. It should be noted that that the Plan does not appear to include all of the wetland area that was included in the 2016 King & MacGregor Environmental, Inc. wetland delineation (see Figure 2). The applicant shall include the area included in this previous wetland delineation on the Plan. The 25-foot wetland/watercourse setback in this area shall also be clearly indicated and labeled on subsequent site plans.
Response: *The wetland lines shown on the K&M exhibit fall entirely within the edges of water as surveyed along the Thornton Creek. Per request, those lines are now shown at a darker color on sheet 02. Note that Atwell performed a separate wetland delineation on November 11, 2017. This delineation is shown in the plans and has now been supplemented to include the K&M line and associated 25' buffers as requested.*
2. The Plan proposes to construct one (1) storm water outfall to wetland/watercourse setback. The applicant shall quantify any permanent and/or temporary impacts to wetlands/watercourse (i.e., Thornton Creek) or associated 25-foot setbacks in this outfall area (i.e., square feet/acreage and cubic yards).
Response: *The buffer has been shown on the preliminary plan and the impact table updated. Permits for proposed impacts will be quantified and submitted with the Final Site Plan submittal.*

3. It appears as though a MDEQ Wetland Permit and a City of Novi Wetland Non-Minor Use Permit would be required for any proposed impacts to site wetland. A City of Novi Authorization to Encroach the 25-Foot Natural Features Setback would be required for any proposed impacts to on-site 25-foot wetland buffers. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from the MDEQ for any proposed wetland (or floodplain) impacts. Final determination as to the regulatory status of each of the on-site wetlands shall be made by MDEQ. The Applicant should provide a copy of the MDEQ Wetland Use Permit application to the City (and our office) for review and a copy of the approved permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

Response: *Permits for proposed impacts will be quantified and submitted with the Final Site Plan submittal. A permit will be filed with the MDEQ following approvals of the Preliminary Site Plan.*

4. If applicable, the Applicant shall provide wetland conservation easements as directed by the City of Novi Community Development Department for any areas of remaining wetland as well as for any proposed wetland mitigation areas (if necessary). 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. Any proposed conservation easement areas/boundaries shall be clearly indicated and labeled on the Plan.

Response: *Noted. Conservation easements will be provided as required.*

WOODLAND REVIEW (As responded on April 9, 2018)

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-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). The "upsizing" of Woodland Replacement trees for additional Woodland Replacement credit is not supported by the City of Novi. All Woodland Replacement trees shall be species that are listed on the City's Woodland Tree Replacement Chart (attached).

Response: *Noted. Tree impact and replacement calculations are shown on sheet 02. Additional woodland details will be submitted with the final site plan submittal.*

2. Please provide woodland tree replacement calculations summary on Sheet 4 (Tree List). The information should include the following:
 - a. Total Regulated Trees;
 - b. Regulated Trees Removed;
 - c. Regulated Trees Preserved;
 - d. Stems to be Removed 8" to 11";
 - e. Stems to be Removed 11" to 20";
 - f. Stems to be Removed 20" to 30";
 - g. Stems to be Removed 30"+;
 - h. Total Replacement Trees Required.

Response: *Revised woodland tree replacement calculations are now shown on sheet 04 and the landscape plans.*

3. It should be noted that the Landscape Plan (Sheet 09) indicates that a total of 282 Woodland Replacement Tree credits are required for the proposed tree removals. The Plan does not appear to clearly indicate which tree material is intended to meet the Woodland Replacement Tree requirements. This information shall be clearly indicated on the Plan. Please clearly indicate in the Master Plant List (Sheet 12) which species are intended as Woodland Replacement Tree credits. It is recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees.

Response: *The tree species intended to be woodland replacement trees are now indicated in the master plant list on sheet 12.*

4. With regard to Woodland Replacement Tree plantings, please add a note near the preserved woodland area that the proposed tree planting locations need to be approved by the City of Novi Landscape Architect prior to planting.

Response: *A note has been added to the landscape plans.*

5. As noted in the City of Novi's Landscape review, Woodland Replacement trees must have a fairly natural appearance and be representative of the natural woodlands in the area. Please do not use Bowhall Maple as a Woodland Replacement Tree as its crown is too narrow.

Response: *The Bowhall Maple has been replaced with other species.*

6. Please use a greater number of species from the woodland replacement chart (attached) than those that appear to be proposed. The addition of oaks and American elms are recommended per the City of Novi Landscape review.

Response: *The master plant list has been revised accordingly.*

7. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees 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. These easement areas shall be indicated on the Plan.

Response: *Conservation easements will be provided as required.*

8. A Woodland Replacement 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.

Response: *Noted. This will be provided under separate cover.*

9. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee shall then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation.

Response: *Noted. This will be provided under separate cover.*

10. 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. This will be provided under separate cover.*

11. 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. Tree spacing has been revised to follows the appropriate design specifications as discussed with the City landscape reviewer.*

12. Woodland replacement trees should be provided in quantities that are in the approximate composition as the trees removed (i.e., evergreen and deciduous Woodland Replacements should be proposed in quantities/percentages that are similar to the make-up of the Woodland trees being removed).

Response: *Noted.*

TRAFFIC REVIEW (As responded on April 9, 2018)

General Comments

1. Pulte Homes of Michigan, LLC, is proposing a 40-unit multi-family residential development in the northeast quadrant of the intersection of Nine Mile Road and Novi Road. The site has a total of seven buildings with access to/from Nine Mile Road.

Response: *Noted. No action required.*

2. Nine Mile Road is under the jurisdiction of the City of Novi.

Response: *Noted. No action required.*

3. The site is under RM-1 (Low-Density, Multiple-Family) zoning. The applicant has not requested to rezone the property.

Response: *Noted. No action required.*

4. Summary of traffic-related waivers/variances:

- a. The applicant is requesting a City Council variance for the internal sidewalk offset from the back of curb.
- b. The applicant is requesting an administrative variance for the lack of a secondary stub street.
- c. The applicant is requesting a planning commission waiver for driveway spacing.

Response: *Noted. No action required.*

Traffic Impacts

The number of trips does not 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: "Type of Study – None"

Response: *Noted. No action required.*

External Site Access and Operations

1. The applicant has proposed a single site access point at Nine Mile Road.
 - a. The applicant has proposed width and radii dimensions for the driveway that meet City standards for a local street.
Response: Noted. No action required.
2. The development does not require any right turn lanes or tapers at the proposed site driveway. It should be noted that because a right turn lane or taper is not required that the existing taper of the right-turn lane for Nine Mile Road does not have to be extended, even though it is within 100 feet of the driveway.
Response: Noted. No action required.
3. The development is not required to provide a left-turn passing lane as a two-way left turn lane is provided on Nine Mile Road.
Response: Noted. No action required.
4. The applicant has indicated 415 feet of sight distance in both directions which exceeds the required 400 feet of sight distance for a 35 mph multi-lane roadway.
Response: Noted. No action required.
5. The applicant has indicated a driveway spacing of 141 feet from the proposed driveway to the driveway directly east on the same side of Nine Mile Road. The applicant is required to provide 150 feet of driveway spacing for same-side driveways. Please reference Section 11-216.d.1.d for more information. The applicant is seeking a planning commission waiver for the driveway spacing.
Response: Noted. A planning commission waiver (staff supported) is being requested. No action required. The location of the site driveway is limited frontage due to the Thornton Creek.
6. The applicant has indicated a driveway spacing of 255 feet to the existing opposite-side driveway that is downstream from the proposed driveway left-turns which exceeds the City's standard of 150 feet.
Response: Noted. No action required.
7. The applicant has indicated a driveway spacing of 188 feet to the existing opposite-side driveway that is located upstream from inbound left-turns. The City requires a driveway spacing of 200 feet based on previous analysis documented to the City via a separate correspondence. Please reference Figure IX.12 in the City's Code of Ordinances for more information. The applicant is seeking a planning commission waiver for the driveway spacing.
Response: Noted. A planning commission waiver (staff supported) is being requested. No action required. The location of the site driveway is limited frontage due to the Thornton Creek.
8. The applicant has proposed an emergency access drive that connects to the parcel located to the east of the proposed site.
 - a. The proposed emergency access drive is 20 feet wide which exceeds City standards.
Response: Noted.

- b. The applicant is required to provide turning radii dimensions at the west end of the emergency access driveway.

Response: *Proposed turning radii dimensions have been added at the emergency access drive. Refer to sheet 05.*

- c. The applicant should consider re-locating the proposed gate farther to the west side of the emergency access drive to prevent non-emergency vehicles from potentially utilizing the driveway. If the proposed location of the gate is more than 100 feet from the beginning of the emergency access drive, then an emergency access only sign is required at the entrance.

Response: *The proposed gate has been shifted East towards to be 1' inside the property line and in line with the proposed 6' privacy fence. A "no parking" sign has been proposed at the west end of the emergency access drive. Parking will not be allowed within the emergency access pavement.*

- d. The applicant could consider placing an additional gate at the east end of the emergency access drive to prevent vehicles from the adjacent parking lot from accessing the access drive without an area to turn around. If the proposed location of the gate is more than 100 feet from the beginning of the emergency access drive, then an emergency access only sign is required at the entrance.

Response: *The proposed gate has been shifted east towards to be 1' inside the property line and in line with the proposed 6' privacy fence. A "no parking" sign has been proposed at the west end of the emergency access drive.*

- e. The applicant has provided an emergency access gate detail that is in compliance with City standards. The applicant has also indicated that two gates may not conform to this detail as they cover a wider section of roadway. The applicant should include a separate detail for the gates that are located on the north side of the site.

Response: *The gates proposed are all equal in width and matching the detail. Refer to sheet 13.*

Internal Site Operations

1. General Traffic Flow

- a. The applicant has indicated a minimum residential driveway width of 16 feet which is in compliance with City standards.

Response: *Noted. No action required.*

- b. The applicant should indicate the entering and exiting taper width for the residential driveways.

Response: *The standard 3' wide drive tapers are labeled as typical on the typical unit detail shown on sheet 05.*

- c. The applicant has indicated a taper depth of 7.5 feet. The City requires a taper depth of at least 10 feet. The applicant is requesting a City Council variance for the deviation.

Response: *Noted. A wavier (staff supported) is being requested.*

- d. The applicant has provided an additional emergency access pathway within the site with two gates, one on each side of the pathway. The proposed pathway is 20 feet wide and in compliance with City standards. As mentioned above, the applicant should provide a detail for the proposed emergency access gates. The applicant should also indicate details related to the driveway entering width and turning radii.

Response: *A detail of the gate is provided on sheet 13. The proposed turning radii dimensions have been labeled on sheet 05.*

- e. The applicant has proposed three dead ends within the site. A vehicle is expected to be able to utilize the available space of the emergency access drive in order to turn around if needed. However, there is not an adequate location for an emergency vehicle or truck to turn around located west of Road 3. The applicant should provide a "T" turnaround on the dead end on the west side of the site dimensioned as indicated in Figure VIII-I. Please reference Section 11-194.a.18 in the City's Code of Ordinances for more information.

Response: *The gates have been shifted to provide space for turning movements as referenced and acceptable per the above. There is not room to install a "T" turnaround at the dead end on Heron Drive, just west of Osprey Drive, due to the existing and proposed grades in this area. However, this dead end on Heron Drive is less than 150 feet (95' proposed) and therefore does not require a "T" turnaround per Section 11-194 (A) (18) of the City of Novi code of Ordinances. The turning movement is expected to utilize Osprey drive as required and this will operate similar to a "T" turnaround in function and vehicle movement.*

- f. The roadway width throughout the site is in compliance with City standards.

Response: *Noted. No action required.*

- g. Local street turning radii and width dimensions are in compliance with City standards.

Response: *Noted. No action required.*

- h. The proposed mailbox location is not expected to interfere with traffic operations; however, residents that live east of the mailboxes will need an area to turn around further enforcing the need for a "T" turnaround on the west dead end.

Response: *See response to 1e above.*

2. Parking Facilities

- a. The City of Novi requires 2.5 parking spaces per unit totaling 100 spaces. The plans indicate 115 parking spaces are required. Revise the plans to indicate 2.5 spaces per unit for 40 units.

Response: *Noted. The required parking total has been revised to be 2.5 spaces per unit.*

- b. The applicant is proposing 160 spaces. The applicant has indicated that the unit garage and drive way parking exceeds City requirements.

Response: *Noted. No action required.*

- c. The applicant has elected to dis-allow on-street parking.

Response: *Per City request, the street signage and layout presentation has been revised to allow additional street parking on the north side of Heron Circle near the mailbox cluster and pocket park areas. Refer to sheet 05.*

- d. The City requires one bicycle parking space every five units totaling nine bicycle parking spaces. The applicant is proposing 10 bicycle parking spaces according to the cover sheet and 12 bicycle parking spaces according to the plans. The applicant should revise the plans for consistency.

Response: *The cover sheet has been updated to reflect the proper number of bike parking spaces required (8) and proposed (8) as shown per the current plan.*

- e. The applicant has proposed bicycle parking adjacent to the proposed emergency access pathway. The applicant should re-locate the bicycle parking spaces away from the emergency access pathway such that there is not potential for interference with the proposed emergency access pathway. Or, the applicant may rotate the bicycle parking such that it may be accessed from the sidewalk.

Response: *The bike parking near the emergency access drive has been removed as this is no longer required due to 40 proposed units (8 spaces required and provided).*

- f. The applicant should provide the bicycle parking rack specifications.

Response: *A bike parking ad rack detail is provided on sheet 13.*

3. Sidewalk Requirements

- a. The applicant has indicated a width of five foot sidewalks within the development and along Nine Mile Road. The applicant should revise the sidewalks along Nine Mile Road to be within 6 to 8 feet wide.

Response: *The sidewalks along Nine Mile Road have been revised to be 6' wide as required. Refer to sheet 05 showing proposed dimension.*

- b. The applicant should indicate that the Nine Mile Road sidewalk is located one foot inside the ROW of Nine Mile Road.

Response: *A label been added to sheet 05 denoting that the typical sidewalk placement for the sidewalk is to be 1' inside the Nine Mile ROW.*

- c. The internal sidewalks are required that the outside edge of the sidewalk be located a minimum of 15 feet from the back of curb. The applicant has proposed that the outside edge of the sidewalk is 12.5 feet from the back of curb. The applicant has requested a City Council variance for the deviation.

Response: *Noted. A deviation is being requested. No further action required.*

- d. The applicant has proposed sidewalk crossings throughout the site. The applicant provided sidewalk ramp and detectable warning surface detail should be updated to R-28-J.

Response: *The detail on sheet 13 has been revised to the current version (R-28-J).*

Signing and Striping

4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The following is a discussion of the proposed signing and striping.
- a. The applicant should consider removal of the proposed R1-1 (stop) sign at the intersection of Road 2 and Road 3 and the intersection of Road 1 and Road 2. The applicant may downgrade these signs to R1-2 (yield) signs.
Response: *The two stop signs have been changed to yield signs (R1-2) per request. Refer to sheet 05.*
 - b. The applicant should provide R7-1 signs on both sides of the street if on-street parking is to be dis-allowed.
Response: *No parking signs have been added to both sides of the street in the areas on-street parking will be dis-allowed. The street signage and layout presentation has been revised to allow additional street parking on the north side of Heron Circle near the mailbox cluster and pocket park areas. Refer to sheet 05.*
 - c. The applicant could consider W11-2 (crosswalk warning) signs at the proposed crossings. W11-2 signs shall be placed four feet from a sidewalk or sidewalk ramp to the near edge of the sign.
Response: *Noted. The crossings are close to intersections where drivers should be aware or the potential for pedestrians without the signs.*
 - d. The applicant should consider a W14-2 (no outlet) sign at the entrance of the development.
Response: *A "No Outlet" (W14-2) sign has been added at the entrance of the development as requested.*
 - e. The applicant should consider an R2-1 (speed limit) sign at the entrance to the development.
Response: *A speed limit (R2-1) sign has been added at the entrance of the development as requested. Refer to sheet 05.*
 - f. The applicant is required to provide an OM4 series (end of roadway: OM4-1, OM4-2, or OM4-3) sign at each of the three dead ends.
Response: *OM4-1 signs have been added at the end of the three dead end roads. Refer to sheet 05.*
 - g. The applicant should include D3-1 (street name) signs in future submittals. Street name signs have the following requirements:
 - i. Have a green field, white letters, and a white border
 - ii. Text shall consist of a Capitalized first letter with the remaining letters lowercase
 - iii. 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
 - iv. Have a minimum height of eight inches and minimum lettering height of 4.5 inches, if located at residential street intersections

- v. Have lettering height of three inches for supplementary lettering to indicate street type (drive, avenue, etc.)
- vi. 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.

Response: *These signage requirement notes have been added to sheet 05 as requested.*

- h. The applicant should provide sign post details. 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.

Response: *A note regarding the post has been provided on sheet 05.*

- i. The applicant should indicate sign heights. All signs shall be seven feet from the top of grade to the bottom of the sign.

Response: *A note indicating sign heights has been provided on sheet 05.*

- j. The applicant should indicate that traffic control signs shall use the FHWA Standard Alphabet series.

Response: *A note stating this requirement has been added to sheet 05 as requested.*

- k. The applicant should indicate that traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.

Response: *A note stating this requirement has been added to sheet 05 as requested.*

- l. The applicant has not proposed any striping.

Response: *Noted. No further action required.*

FACADE ORDINANCE REVIEW

It is our recommendation that all proposed facades is in full compliance with the Façade Ordinance. A Section 9 Waiver is not required for this project.

Response: *Noted. No further action required.*

FIRE REVIEW (As responded on April 9, 2018)

1. All fire hydrants MUST in installed and operational prior to any building construction begins.

Response: *Noted. Refer to fire note #1 on the cover sheet stating this requirement.*

2. Hydrant spacing is 300' from hydrant to hydrant. (NOT AS THE CROW FLIES) Novi City Ordinance 11-68(F)(1)c.

Response: *A fire hydrant has been added along Heron Drive to meet this requirement.*

As mentioned, we are discussions and working with the Landscape reviewer to come up with a solution on the property line screening and are confident that we can come up with a solution that can be supported by all parties. We also understand that all other disciplines are recommending approval of the Preliminary Site plan. We look forward to addressing this exciting project at the Planning Commission public hearing on May 23, 2018.being placed on the next PC meeting agenda. 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.

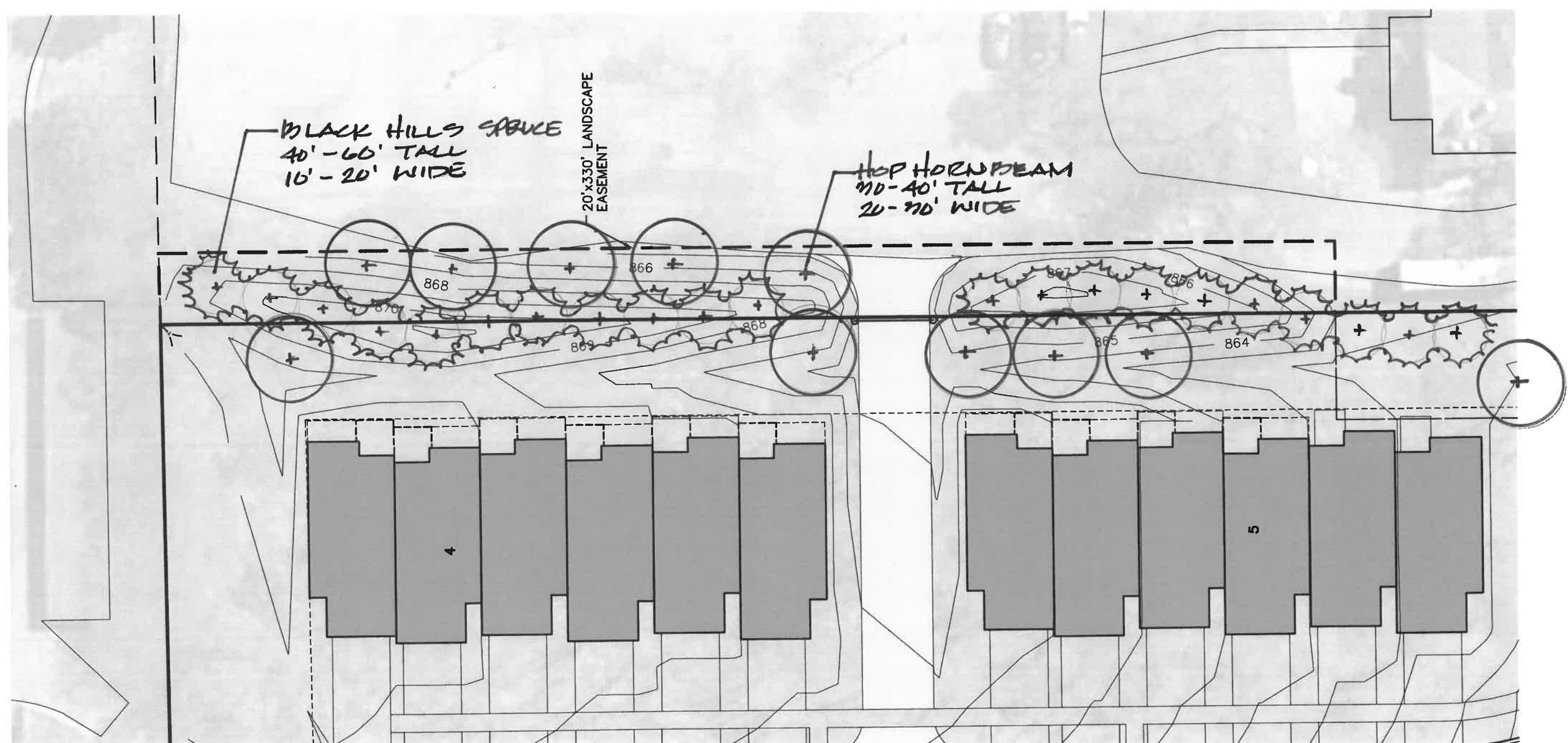
Sincerely,

ATWELL, LLC



Matthew W. Bush, P.E.
Project Manager / Engineer

SCREENING BERM AND LANDSCAPE EXHIBIT
Shared via e-mail dated May 14, 2018



BLACK HILLS SPRUCE
40'-60' TALL
10'-20' WIDE

20'x330' LANDSCAPE
EASEMENT

HOP HORNBREAM
30'-40' TALL
20'-30' WIDE

4

5

SCALE: 1" = 30'

PROJECT NO.: 17001466
DATE: 05/14/2018



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DR:
CAD FILE: 17001466PSP-03-L 11X17.DWG

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