



BERKSHIRE E-SUPPLY JSP17-72

BERKSHIRE E-SUPPLY JSP 17-72

Public hearing at the request of Berkshire E-Supply for Preliminary Site Plan with land bank parking, Wetland Permit, Woodland Permit, and Storm water Management plan approval. The subject property is approximately 57.12 acres and is located at the southeast corner of M-5 and W Fourteen Mile Road (Section 1). The applicant is proposing a two-story headquarters office building (18,380 SF) and a single story Fulfillment Center and warehouse with mezzanines (193,230 SF) with associated site improvements such as parking, loading and landscaping. The proposed site plan also proposes to land bank up to 74 parking spaces of the 359 required spaces.

Required Action

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

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	02-23-18	<ul style="list-style-type: none"> • Applicant to update the entry way design and signal location as shown in the updated 'PC-04: Preliminary Site Plan' PDF provided with the response letter dated February 23, 2018 • Approval of up to 74 land bank parking spaces (Total 359 required) • Zoning Board of Appeals variance for location of loading area in the side yard and for additional flag pole (4 proposed, 3 permitted); Approved February 13, 2018 • Items to be addressed by the applicant with the revised submittal
Engineering	Approval recommended	02-14-18	<ul style="list-style-type: none"> • City Council approval of agreement to pursue water service from another community • Items to be addressed by the applicant prior to Final Site Plan approval
Landscaping	Approval WITH CONDITIONS recommended	01-29-18	<ul style="list-style-type: none"> • Waiver for reduction of required street trees and berm along Fourteen Mile Road • Waiver for reduction of minimum required parking lot perimeter and parking lot interior trees • Waiver for reduction of required greenbelt trees along M-5 corridor • Items to be addressed by the applicant prior to Final Site Plan approval

Wetlands	Approval recommended	02-09-18	<ul style="list-style-type: none"> • Non-Minor wetland permit required • 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	02-09-18	<ul style="list-style-type: none"> • A City of Novi Woodland Permit is required for the proposed impacts • Location of proposed walking trail requires City's woodlands consultant approval; • Items to be addressed by the applicant prior to Final Site Plan approval
Traffic	Approval recommended	02-23-18	<ul style="list-style-type: none"> • Correspondence from Road Commission of Oakland County regarding signal and entryway design is required prior to Final site plan approval; • Items to be addressed by the applicant with the revised submittal
Façade	Approval recommended	02-13-18	<ul style="list-style-type: none"> • Section 9 waiver required for exceeding percentage of Limestone, for not meeting the minimum percentage of Brick and for exceeding flat metal panels;
Fire	Approval WITH CONDITIONS recommended	01-29-18	<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 Berkshire E-Supply JSP17-72, motion to **approve** the Preliminary Site Plan with land bank parking and the revised entry way design with a proposed traffic signal at the entry drive and Fourteen Mile intersection as shown in the updated 'PC-04: Preliminary Site Plan' PDF provided with the response letter dated February 23, 2018, based on and subject to the following:

- a. Approval of up to 74 land bank parking spaces based on Planning Commission finding that:
 - i. The applicant has demonstrated through substantial evidence that the specified occupant and building use will require less parking than what is required by the Zoning Ordinance;
 - ii. Parking will not occur on any street or driveway;
 - iii. Parking will not occur on any area not approved and developed for parking;
 - iv. Parking will not occur on that area where parking construction has been land banked until such time as that area is constructed for such parking;
 - v. The requested parking land banking will not create traffic or circulation problems on or off site; and
 - vi. The requested parking land banking will be consistent with the public health, safety and welfare of the City and the purposes of the Zoning Ordinance;
- b. The applicant shall apply for Planning Commission's approval of a site plan amendment and any associated woodland permit prior to construction of land bank parking. The applicant is allowed to provide "land bank" parking as contemplated under the City's Zoning Ordinance approximately as shown on the site plan without the requirement to identify protected trees within the area or to pay any tree preservation or tree replacement amounts unless and until the area is in fact improved with parking improvements in the future;
- c. A section 9 waiver for exceeding the maximum allowed percentages for Limestone for headquarters building, not meeting the minimum percentages for brick for both buildings and for exceeding the maximum allowed percentage of flat metal panels, as listed in the Façade review letter, which is hereby granted;
- d. Landscape waiver from Section 5.5.3.B.ii for reduction of required street trees (short of 2 trees) along Fourteen Mile frontage due to the existing ITC Corridor, which is hereby granted;
- e. Landscape waiver from Zoning Section 5.5.3.B.ii and iii for reduction of required berm (approximately 120 linear feet) along Fourteen Mile frontage due to the existing ITC Corridor easement, which is hereby granted;
- f. Landscape waiver from Section 5.5.3.B.ii.f for reduction of required greenbelt plantings, large canopy and sub-canopy along Fourteen Mile and M-5 frontage in areas where there is conflict with the existing wetlands and woodlands, which is hereby granted;
- g. Landscape waiver from Section 5.5.3.C to permit the reduction of parking lot interior trees due to the existing ITC Corridor easement and existing utility easements, which is hereby granted;
- h. Landscape waiver from section 5.5.3.C.iii Chart footnote to permit the reduction of vehicular use area perimeter trees due to the existing ITC Corridor easement, which is hereby granted;

- i. A Zoning Board of Appeals variance from Section 5.4.1. for allowing the loading zone in the side yard instead of the required rear yard, approved on February 13, 2018 ZBA meeting;
- j. Zoning Board of Appeals variance for an additional flag pole (4 flag poles proposed, a maximum of 3 are permitted), approved on February 13, 2018 ZBA meeting;
- k. City Council variance for not providing water main along the entire frontage of the site as required per Design and Construction Standards Manual;
- l. The applicant shall redesign the public walking trail to stay outside of the critical root zone of existing trees. Critical root zone is 1-foot outside of the longest dripline of the trees. Any alternate location within the critical root zone will require City's woodland consultant review and approval;
- m. The applicant to update the woodlands replacement tree calculations at the time Final Site Plan submittal to address the removals that may be required for the Walking trail, subject to City's woodland consultant approval;
- n. The applicant shall install the Traffic signal at the entrance along Fourteen Mile Road as shown in the updated 'PC-04: Preliminary Site Plan' PDF provided with response letter dated February 23, 2018, and as shall be provided in more detail on the Final Site Plan submittal, prior to the Temporary Certificate of Occupancy;
- o. The applicant shall provide correspondence from the Road Commission for Oakland County (RCOC) to the City prior to Final Site Plan approval in regard to the future considerations for any future 14 Mile Road improvements, such as widening, RCOC's approval of proposed traffic signal location, right turn taper/lane, and entry driveway design (as shown in the updated 'PC-04: Preliminary Site Plan' PDF provided with response letter dated February 23, 2018);
- p. The findings of compliance with Ordinance standards in the staff and consultant review letters, including water main extension issue to be resolved by engineering and city administration and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- q. (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.)

Approval – Wetland Permit

In the matter of Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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 Berkshire E-Supply JSP17-72, 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

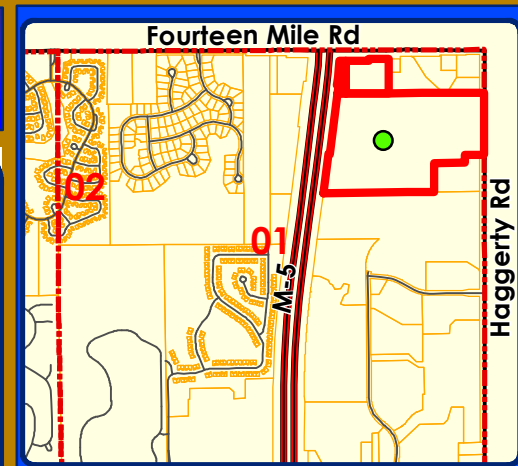
Future Land Use

Natural Features

JSP17-72 Berkshire E-Supply Fulfillment Center

Location

Commerce Township



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: 12/05/17
Project: JSP17-72 Berkshire E-Supply Fulfillment Center
Version #: 1

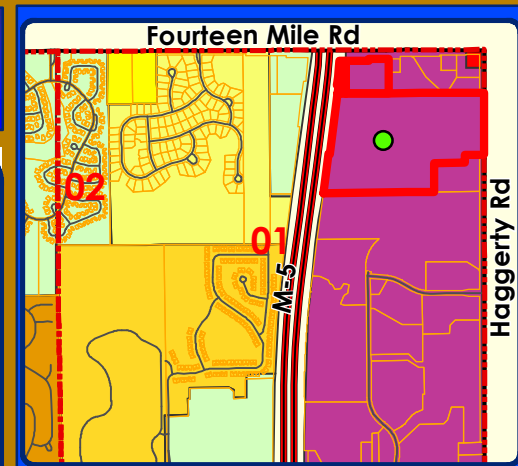
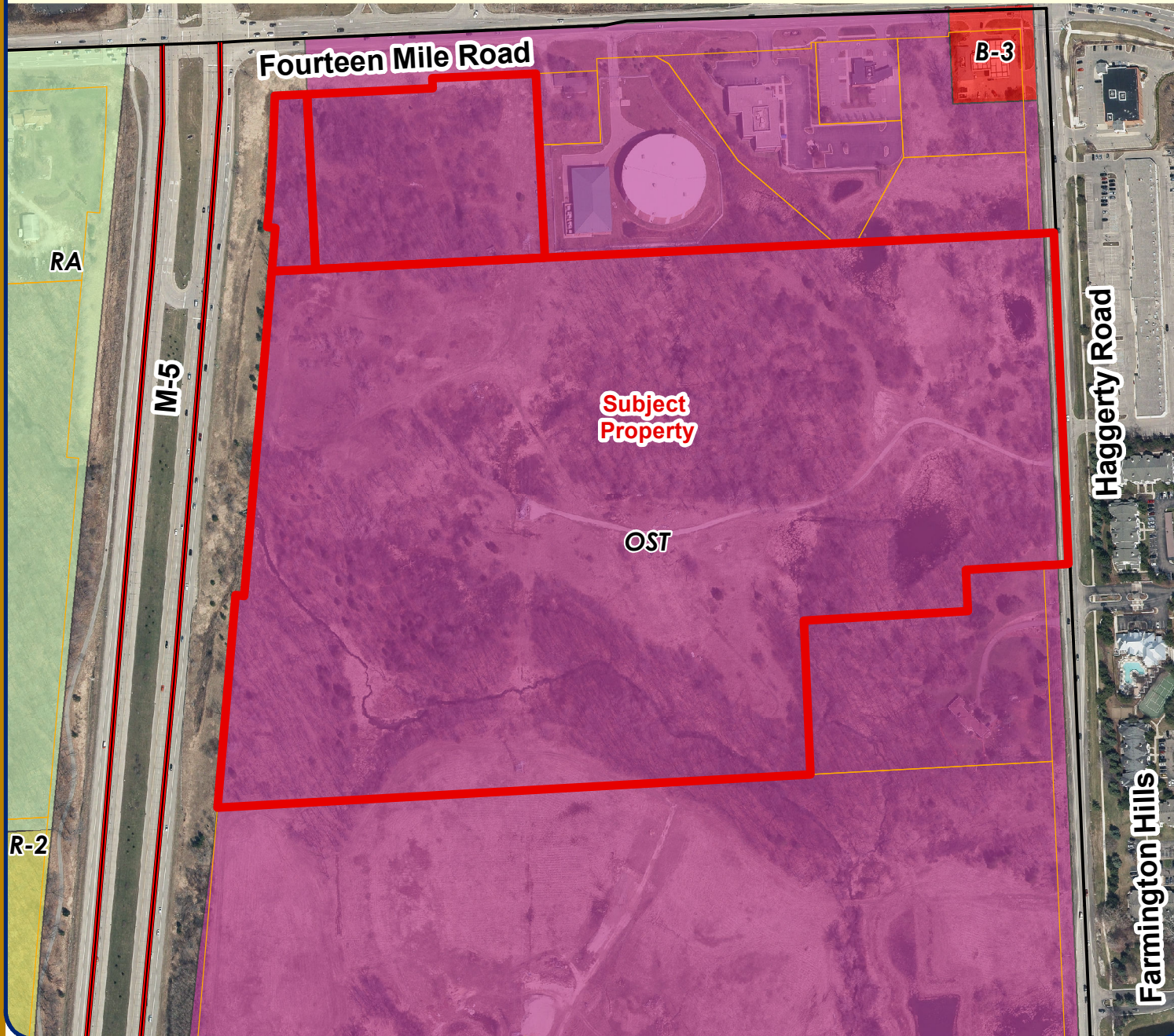


MAP INTERPRETATION NOTICE
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and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

JSP17-72 Berkshire E-Supply Fulfillment Center

Zoning

Commerce Township




LEGEND

	Sections
	R-A: Residential Acreage
	R-2: One-Family Residential
	R-4: One-Family Residential District
	RM-1: Low-Density Multiple Family
	MH: Mobile Home District
	B-3: General Business District
	OST: Office Service Technology

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

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0 80 160 320 480 Feet
1 inch = 367 feet



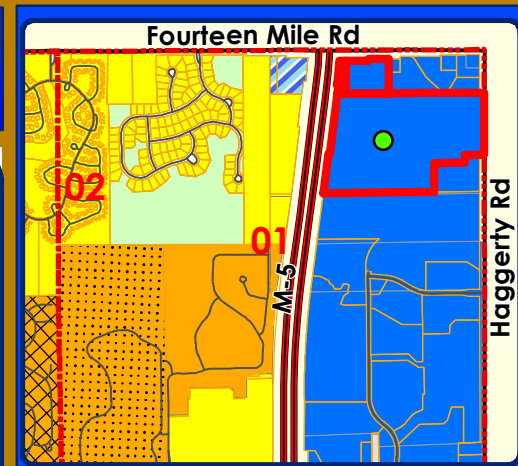
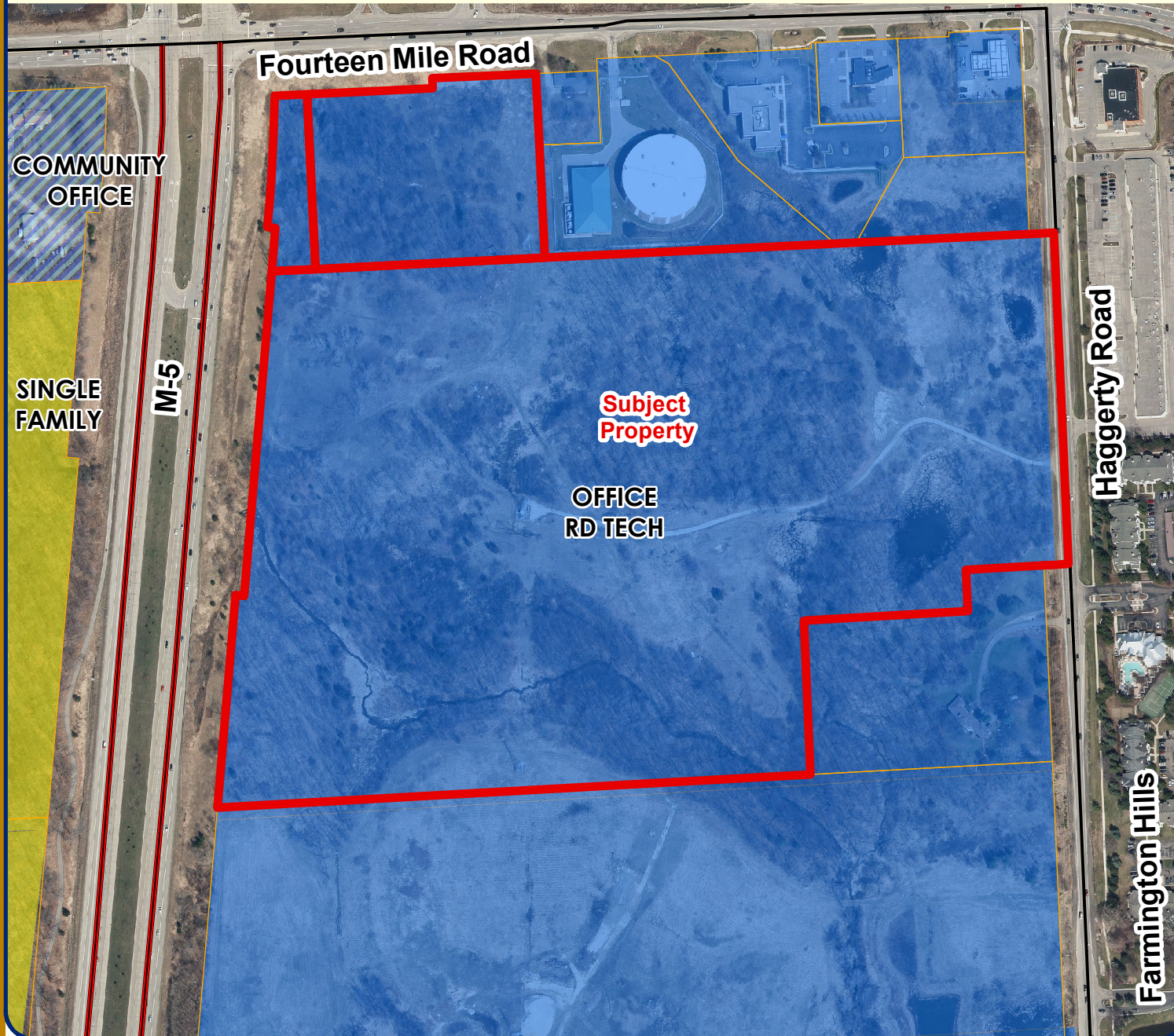
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JSP17-72 Berkshire E-Supply Fulfillment Center

Future Land Use

Commerce Township



LEGEND

- Sections (Red dashed line)
- FUTURE LAND USE
 - Single Family (Yellow)
 - Multiple Family (Orange)
 - PD1 (Orange with dots)
 - Mobile Home Park (Orange with X's)
 - Community Office (Blue with diagonal lines)
 - Office RD Tech (Blue)
 - Private Park (Green)
 - Utility (Grey)

CITY OF NOVI
City of Novi logo
NOVI cityofnovi.org

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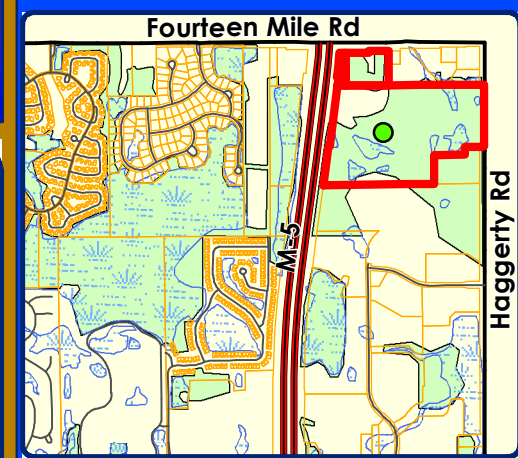
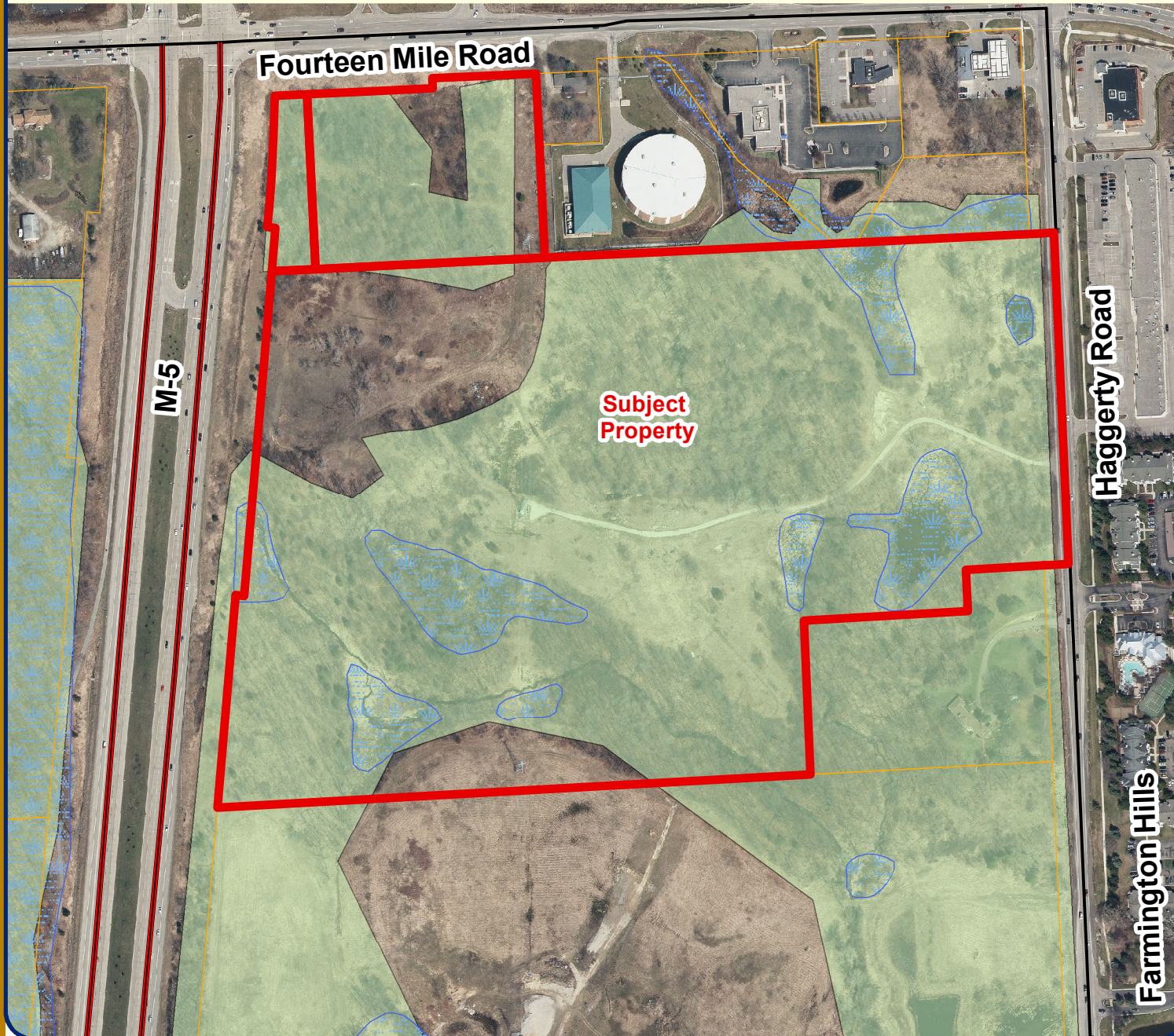
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JSP17-72 Berkshire E-Supply Fulfillment Center

Natural Features

Commerce Township



LEGEND

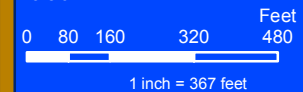
-  WETLANDS
-  WOODLANDS



City of Novi

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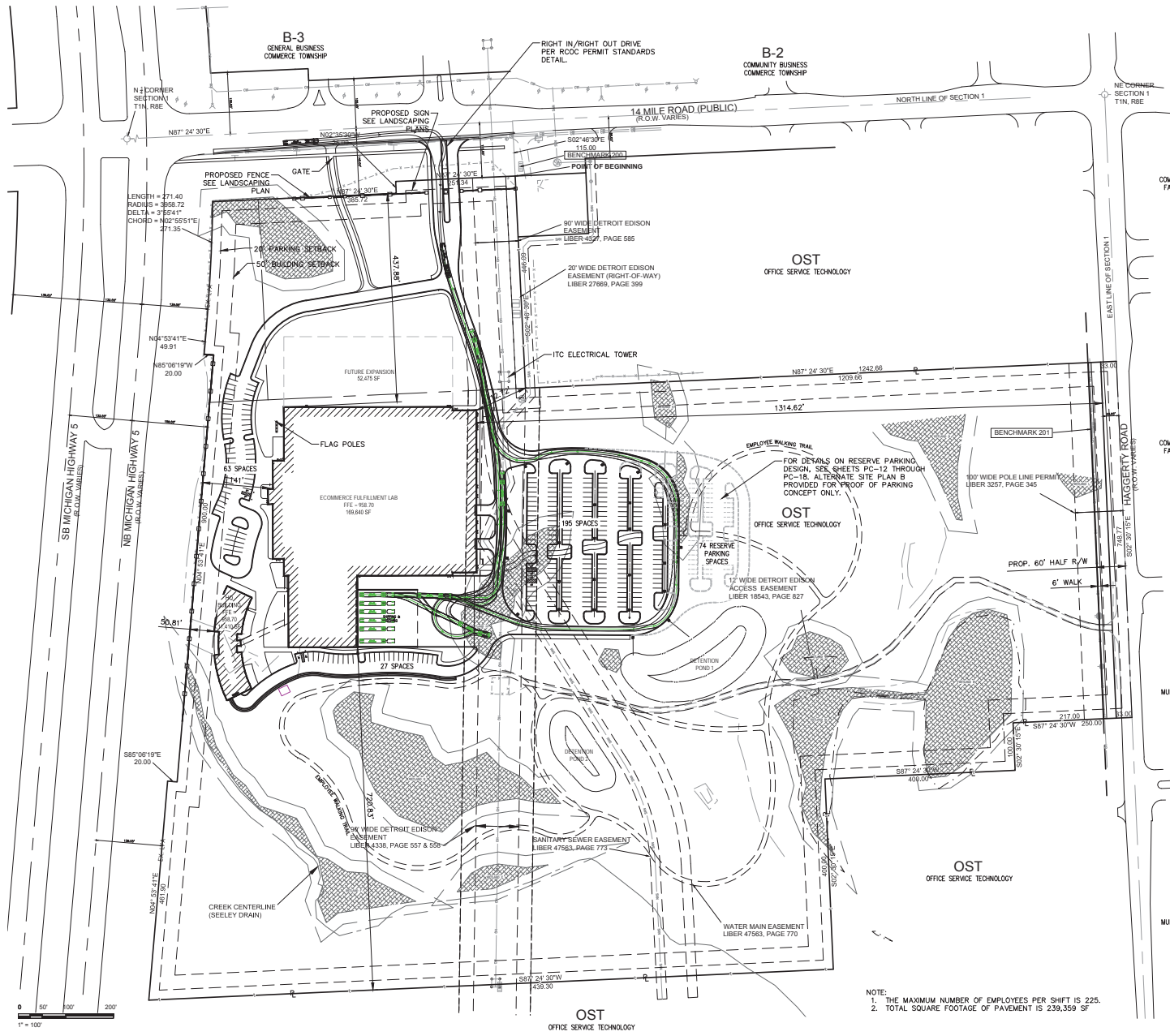


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SITE PLAN

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



PARKING SUMMARY
PARKING REQUIRED:

OFFICE PARKING (5.2.12.0)
GROSS LEASABLE FLOOR AREA:
HQ - 18,380 SF (10,700 SFT 1ST FLOOR, 7,680 2ND FLOOR)
WAREHOUSE PARKING (5.2.12.1)
USEABLE FLOOR AREA:
FULFILLMENT CENTER (INCL. OFFICE AND MEZZANINE) - 193,230 SF
REQUIRED PARKING
1 SPACE PER 222 SF: 18,380/222 = 82
FULFILLMENT: 1 SPACE PER 700 SF: 193,230/700 = 277
TOTAL PARKING SPACES REQUIRED = 359

PARKING PROVIDED

PARKING SPACES PROVIDED (PER 5.2.14. LANDBANK PARKING)
WEST LOT = 61 STANDARD SPACES (10'X20')
2 ACCESSIBLE SPACES (8'X20' W/8' AISLES)
SOUTH LOT = 25 STANDARD SPACES (10'X20') (REWSING TO 17 SPACES)
2 ACCESSIBLE SPACES (8'X20' W/8' AISLES)
EAST LOT = 191 STANDARD SPACES (10'X20')
4 ACCESSIBLE SPACES (8'X20' W/8' AISLES)
TOTAL = 277 STANDARD SPACES
8 ACCESSIBLE SPACES (7 ACCESSIBLE SPACES REQUIRED PER ADA)
TOTAL PARKING SPACES PROVIDED = 285 SPACES
TOTAL PARKING PROPOSED IN LANDBANK AREA = 74 SPACES

ZONING

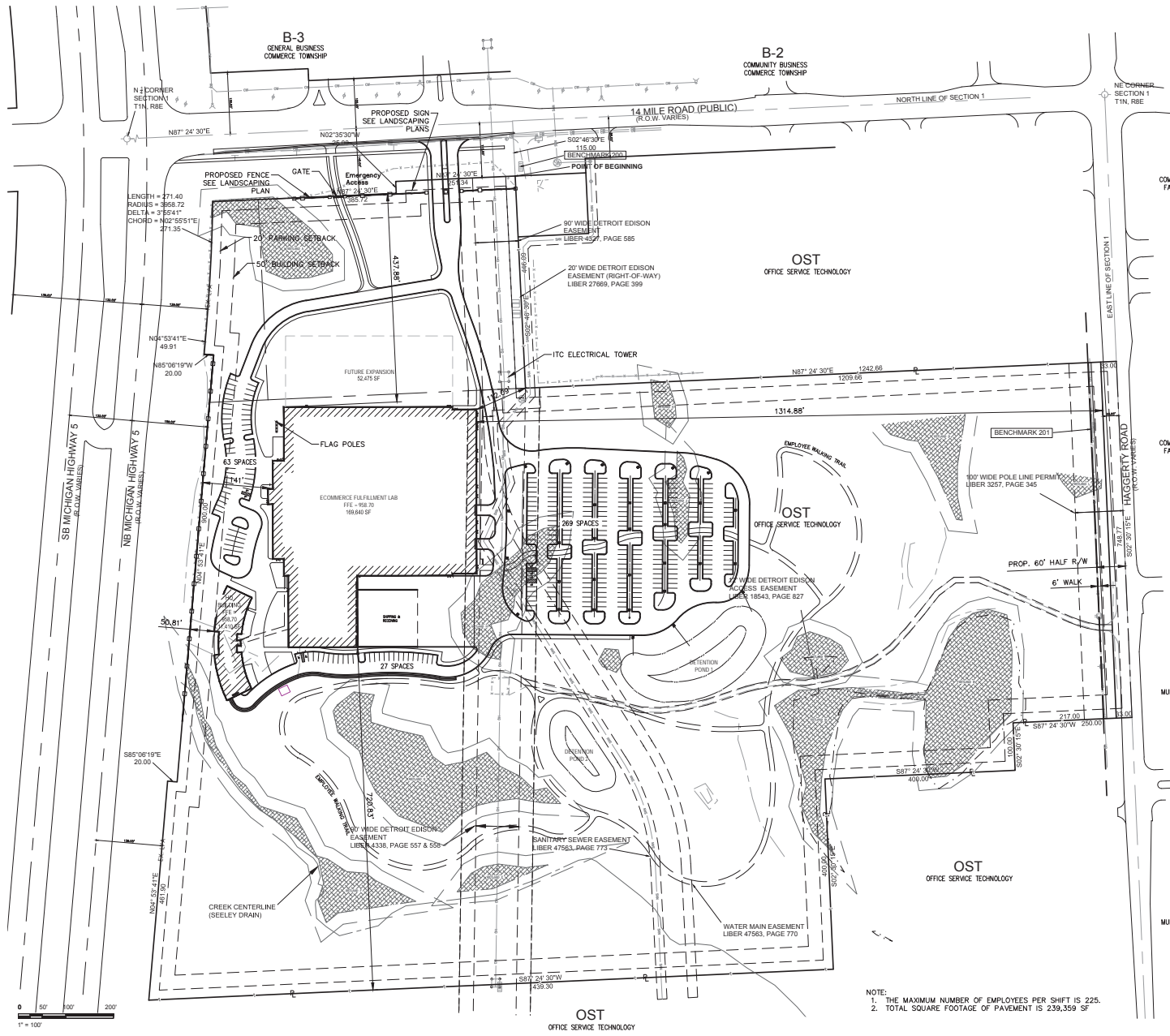
EXISTING ZONING = OST (OFFICE SERVICE TECHNOLOGY)
THE SITE IS NOT LOCATED IN OR WITHIN 50 FEET OF THE 100-YEAR FLOOD PLAN PER FEMA MAP.
DUMPSTER/TRASH COMPACTOR WILL BE INSIDE THE BUILDING IN THE SOUTHEAST CORNER OF THE WAREHOUSE AT THE TRUCK DOCK. NO EXTERNAL TRASH ENCLOSURE WILL BE REQUIRED.

PAVEMENT/WALKS = 280,704 SF
BUILDING FOOTPRINTS = 181,400 SF
TOTAL = 462,104 SF
EXISTING PARCEL = 57.12 ACRES (2,488,147 SF)
462,104 SF / 2,488,147 SF
MAXIMUM LOT COVERAGE = 19%

NOTE:
1. THE MAXIMUM NUMBER OF EMPLOYEES PER SHIFT IS 225.
2. TOTAL SQUARE FOOTAGE OF PAVEMENT IS 239,359 SF



PRELIMINARY OVERALL SITE PLAN A PC-03



PARKING SUMMARY

PARKING REQUIRED:

OFFICE PARKING:

GROSS LEASABLE FLOOR AREA:
 HQ = 18,360 SF (10,700 SFT 1ST FLOOR, 7,660 2ND FLOOR)
 FULFILLMENT OFFICE AND MEZZANINE = 193,230 SF

REQUIRED OFFICE PARKING:
 HQ: 1 SPACE PER 222 SF: 18,360/222 = 82
 FULFILLMENT: 1 SPACE PER 700 SF: 193,230/700 = 277
TOTAL PARKING SPACES REQUIRED = 359

PARKING PROVIDED:

PARKING SPACES PROVIDED:

WEST LOT = 61 STANDARD SPACES (10'x20')
 2 ACCESSIBLE SPACES (8'x20' W/8' AISLES)

SOUTH LOT = 25 STANDARD SPACES (10'x20') (REVISING TO 17 SPACES)
 2 ACCESSIBLE SPACES (8'x20' W/8' AISLES)

EAST LOT = 265 STANDARD SPACES (10'x20')
 4 ACCESSIBLE SPACES (8'x20' W/8' AISLES)

**TOTAL = 361 STANDARD SPACES
 8 ACCESSIBLE SPACES (7 ACCESSIBLE SPACES REQUIRED PER ADA)**

TOTAL PARKING SPACES PROVIDED = 359

ZONING

EXISTING ZONING = OST (OFFICE SERVICE TECHNOLOGY)

THE SITE IS NOT LOCATED IN OR WITHIN 50 FEET OF THE 100-YEAR FLOOD PLAIN PER FEMA MAP.

DUMPSTER/TRASH COMPACTOR WILL BE INSIDE THE BUILDING IN THE SOUTHEAST CORNER OF THE WAREHOUSE AT THE TRUCK DOOR. NO EXTERNAL TRAIL ENCLOSURE WILL BE REQUIRED.

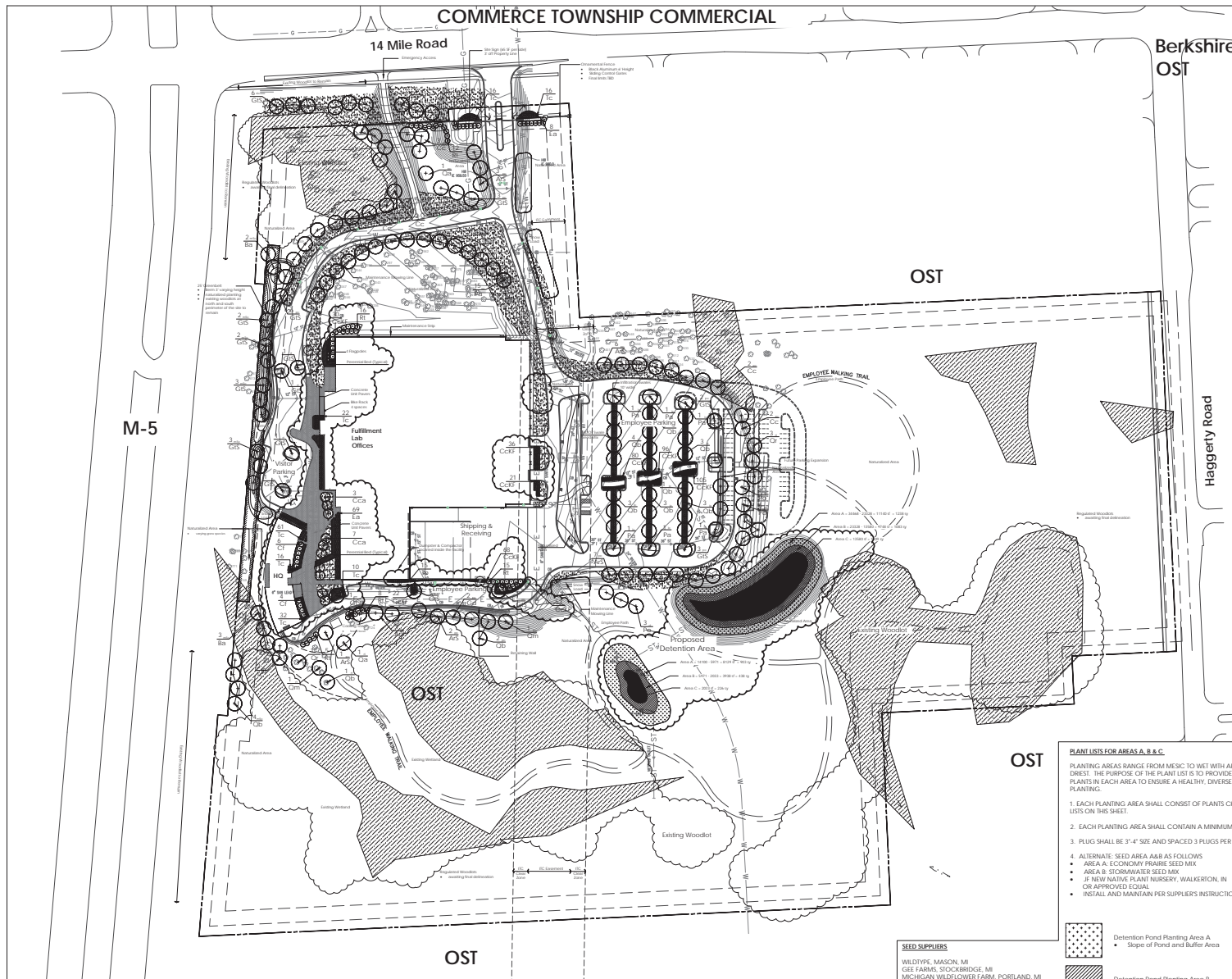
PAVEMENT/WALKS = 280,704 SF
 BUILDING FOOTPRINTS = 181,400 SF
TOTAL = 462,104 SF

EXISTING PARCEL = 57.12 ACRES (2,488,147 SF)
 462,104 SF/2,488,147 SF
MAXIMUM LOT COVERAGE = 19%

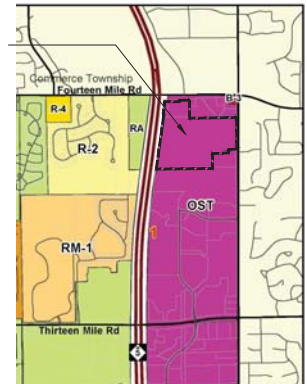
NOTE:
 1. THE MAXIMUM NUMBER OF EMPLOYEES PER SHIFT IS 225.
 2. TOTAL SQUARE FOOTAGE OF PAVEMENT IS 239,359 SF



**ALTERNATE SITE PLAN B
 PRELIMINARY OVERALL SITE PLAN PC-13**



Berkshire eSupply Site
OST



Zoning

Owner Contact
Martin M. Wroubel
30100 Telegraph Road, Suite 366, Bingham Farms, MI 48025
Office: 248.999.9999 x209

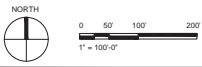
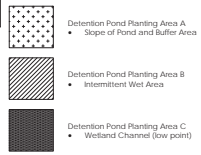


Call before you DIG
800-482-7171

DETENTION POND PLANTING SCHEDULE							
Symbol	Scientific Name	Common Name	Size	Qty	Genus %	Species %	
Area A Slope & Buffer Area							
	Grasses, Sedges & Rushes						
	<i>Andropogon gerardi</i>	Big Bluestem	1#4	77	20%	20%	
	<i>Carex bicknelli</i>	Sedge	1#4	77	20%	20%	
	<i>Elymus canadensis</i>	Canada Wild Rye	1#4	77	20%	20%	
	<i>Panicum virgatum</i>	Switch Grass	1#4	77	20%	20%	
	<i>Sorghastrum nutans</i>	Indian Grass	1#4	77	20%	20%	
	Forbs						
	<i>Aster laevis</i>	Smooth Aster	1#4	77	20%	20%	
	<i>Helianthus scaberrimus</i>	False Sunflower	1#4	77	20%	20%	
	<i>Ratibida pinnata</i>	Yellow Coneflower	1#4	77	20%	20%	
	<i>Rudbeckia hirta</i>	Black Eyed Susan	1#4	77	20%	20%	
	<i>Solidago rigida</i>	Stiff Goldenrod	1#4	77	20%	20%	
Area B - Intermittent Wet Area							
	Grasses, Sedges & Rushes						
	<i>Andropogon gerardi</i>	Big Bluestem	1#4	26	14%	14%	
	<i>Calamagrostis canadensis</i>	Blue Joint Grass	1#4	26	14%	14%	
	<i>Carex bicknelli</i>	Sedge	1#4	26	14%	29%	
	<i>Carex stipata</i>	Sedge	1#4	26	14%	14%	
	<i>Zizynus virginiana</i>	Virginia Wild Rye	1#4	26	14%	14%	
	<i>Panicum virgatum</i>	Switch Grass	1#4	26	14%	14%	
	<i>Sorghastrum nutans</i>	Indian Grass	1#4	26	14%	14%	
	Forbs						
	<i>Anemone canadensis</i>	Canada Anemone	1#4	26	7%	7%	
	<i>Aster novae-angliae</i>	New England Aster	1#4	26	7%	7%	
	<i>Cornopsis tripteris</i>	Tail Tickweed	1#4	26	7%	7%	
	<i>Lupatorium maculatum</i>	Joe-Pye Weed	1#4	26	7%	14%	
	<i>Lupatorium perfoliatum</i>	Burser	1#4	26	7%	7%	
	<i>Helianthus autumnale</i>	Sneezeweed	1#4	26	7%	7%	
	<i>Liatris scapitata</i>	March Blazing Star	1#4	26	7%	7%	
	<i>Labella siphilitica</i>	Blue Lobelia	1#4	26	7%	7%	
	<i>Penstemon digitalis</i>	Beardtongue	1#4	26	7%	7%	
	<i>Ratibida pinnata</i>	Yellow Coneflower	1#4	26	7%	7%	
	<i>Solidago robbellii</i>	Robb's Goldenrod	1#4	26	7%	7%	
	<i>Verbesina hastata</i>	Blue Vervain	1#4	26	7%	7%	
	<i>Veronicastrum virginicum</i>	Culvert's Root	1#4	26	7%	7%	
	<i>Zizia aurea</i>	Golden Alexanders	1#4	26	7%	7%	
Area C - Meandering Channel							
	Grasses, Sedges & Rushes						
	<i>Carex comosa</i>	Sedge	1#4	43	25%	25%	
	<i>Juncus effusus</i>	Soft-Stemmed Bulrush	1#4	43	25%	25%	
	<i>Schoenoplectus actus</i>	Hardstem Bulrush	1#4	43	25%	25%	
	<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush	1#4	43	25%	25%	
	Forbs						
	<i>Aster laevis</i>	Smooth Aster	1#4	43	50%	50%	
	<i>Iris virginica</i>	Southern Blue Flag	1#4	42	50%	50%	

- PLANT LISTS FOR AREAS A, B & C**
- PLANTING AREAS RANGE FROM MESC TO WET WITH AREA A HABITAT BEING THE DRIEST. THE PURPOSE OF THE PLANT LIST IS TO PROVIDE A WIDE VARIETY OF NATIVE PLANTS IN EACH AREA TO ENSURE A HEALTHY, DIVERSE AND PERMANENT NATIVE PLANTING.
1. EACH PLANTING AREA SHALL CONSIST OF PLANTS CHOSEN FROM THE FOLLOWING LISTS ON THIS SHEET.
 2. EACH PLANTING AREA SHALL CONTAIN A MINIMUM OF 30% FORBS.
 3. PLUG SHALL BE 3"-4" SIZE AND SPACED 3 PLUGS PER SQUARE YARD (SY) MINIMUM.
 4. ALTERNATE SEED AREA A,B & C AS FOLLOWS
 - AREA A: ECONOMY FRASER SEED MIX
 - AREA B: STORMWATER SEED MIX
 - IF NEW NATIVE PLANT NURSERY, WALKERSON, IN OR APPROVED EQUAL
 - INSTALL AND MAINTAIN PER SUPPLIER'S INSTRUCTION

- SEED SUPPLIERS**
- WILDTYPE, MASON, MI
 - GEE FARMS, STOCKBRIDGE, MI
 - MICHIGAN WILDOVER FARM, PORTLAND, MI
 - NATIVESCAPE, MANCHESTER, MI
 - NESEA PRIME PERENNIALS, KALAMAZOO, MI
 - CORCOR TREE CROPS, KALAMAZOO, MI
 - SANDHILL FARM, ROCKFORD, MI
 - TWIXWOOD, BERREN SPRINGS, MI
 - WETLANDS NURSERY, SAGINAW, MI
 - JF NEW NATIVE PLANT NURSERY, WALKERSON, IN
 - LAFAYETTE HOME NURSERY, LAFAYETTE, IL



PLA-101 PRELIMINARY PLANTING PLAN



Berkshire e-Supply HQ & Fulfillment Center
Novi, MI



Aberkahn Associates, Inc.
7430 Second Ave.
Detroit, Michigan 48202
P: 313-202-7000
F: 313-202-7001
www.aberkahn.com
PROJECT NO: 03375-00 ISSUED DATE: 01/22/18



BERKSHIRE eSUPPLY

PA-900 NORTHEAST VIEW

BERKSHIRE e-SUPPLY HQ & FULFILLMENT CENTER
NOVI, MI



Albert Kahn Associates, Inc.
7430 Second Ave.
Detroit, Michigan 48202

P: 313-202-7000
F: 313-202-7001

www.albertkahn.com

PROJECT NO.: 03375-00

ISSUED DATE: 11/14/17



BERKSHIRE eSUPPLY

PA-901 SOUTHEAST VIEW

BERKSHIRE e-SUPPLY HQ & FULFILLMENT CENTER
NOVI, MI



Albert Kahn Associates, Inc.
7430 Second Ave.
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P: 313-202-7000
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www.albertkahn.com

PROJECT NO.: 03375-00

ISSUED DATE: 11/14/17

PLANNING REVIEW



PLAN REVIEW CENTER REPORT

February 23, 2018

Planning Review

BERKSHIRE E-SUPPLY

JSP 17-72

PETITIONER

Berkshire E-Supply

REVIEW TYPE

Revised Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	1	
Site Location	southeast corner of M-5 and W Fourteen Mile Road 50-22-01-200-026, 50-22-01-200-018 and 50-22-01-200-027	
Site School District	Walled Lake Consolidated School District	
Site Zoning	OST: Office Service and Technology	
Adjoining Zoning	North	Commercial @ Commerce Township
	East	OST: Office Service and Technology Commercial @ Farmington Hills
	West	RA: Residential Acreage across M-5
	South	OST: Office Service and Technology
Current Site Use	Vacant	
Adjoining Uses	North	Commercial
	East	Commercial
	West	Single Family Residence/vacant across M-5
	South	vacant
Site Size	57.12 Acres	
Plan Date	January 22, 2018	

RECOMMENDATION

The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations listed in this and other review letters. **Planning Commission's approval for Preliminary Site Plan, landbank parking, wetland permit, woodland permit and Storm Water Management Plan is required.**

Approval of the *Preliminary Site Plan* **is recommended.**

PROJECT SUMMARY

The subject property is approximately 57.12 acres and is located at the southeast corner of M-5 and W Fourteen Mile Road (Section 1). The applicant is proposing a two story Headquarters office building and a single story Fulfillment Center and warehouse with mezzanines with associated site improvements such as parking, loading and landscaping. The applicant is also proposing to landbank up to 84 spaces of the required 359 parking spaces. The site plan also proposes two walking trails, one for employees and another one south of Seeley drain that is open to public.

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 chart for information pertaining to ordinance requirements.** Items in **bold** below must be addressed and incorporated as part of the Final Site Plan submittal:

1. Landbank Parking: Per Section 5.2.13. *landbanking may be permitted on the request of the applicant if an applicant can demonstrate that the number of parking spaces required under this Section are in excess of the actual requirements for the functional use of the building, for up to twenty five (25) percent of the required number of parking spaces on the site, subject to the conditions listed in section 5.13. (also listed in the Plan Review Chart).* **If the Planning Commission approves the landbank parking request at this time, the applicant should note the following:**
 - a. The plan will require Planning Commission's approval of final layout of landbank parking, woodland permit and storm water management plan at the time of construction of landbank parking spaces, as well any other proposed site improvements.
 - b. The Woodlands consultant is in general agreement of the location of landbank parking. The current plan did not quantify woodland impacts for land bank parking area, future building and parking expansion. A woodland permit will be required for the landbank parking prior to construction of those spaces.
 - c. The Wetlands consultant identified that the proposed landbank parking does not require any additional impacts than what are being proposed now. A wetland permit will not be required for landbank parking prior to construction.
2. Cabot Drive extension: The City of Novi Master Plan for Land Use recommends an extension of Cabot Drive to connect from its terminus near Mackenzie Drive north to Fourteen Mile Road to provide access through subject property. The current plan is not proposing a connection.
3. Not included in the current review: The current site plan identified two areas for a future Fulfillment Center expansion (52,475 sf) and future parking area which is intended to be reserve parking area. Additional information is not provided in terms of stormwater management, layout, impacts to wetlands and woodlands. The current review and approval do not include those areas. The applicant will be required to provide an alternative site plan for approval prior to construction of the future improvements.
4. Approved Zoning Board of Appeals variances:
Zoning Board of Appeals approved the following deviations at their February 13, 2018 meeting.
 - a. Loading zone (Sec. 5.4.1): The current site plan proposes multiple loading zones on the east and south side of proposed building which is adequately screened by the existing vegetation.
 - b. Flag Poles (Sec. 28.7 of Sign Ordinance): The applicant is proposing a fourth flag pole. Two additional are allowed along with one US flagpole.
5. City Council Variance:
 - a. A variance from Section 11-68.a.1 of City Code of Ordinances for not providing a public water main along the frontage of a parcel being developed as the applicant has entered into an agreement with City for an alternate location.
6. Planning Commission waivers
 - a. Façade Deviation: A Section 9 Waiver is therefore recommended for the overage of Limestone and underage of Brick on the Headquarters Building and the overage of Flat Metal Panels on the north façade of the Fulfillment Center. The City's Façade Consultant recommends approval of the waiver.
 - b. Landscape Deviations:

Landscape review identified multiple deviations that would require Planning Commission's approval of landscape waivers. The applicant should consider addressing waivers that are followed by comments at the time of final site plan and avoid seeking those deviations at this time

- i. A waiver from Sec 5.5.3.A for not providing required landscaped berm between residential property to the northeast of the property and the site. **Supported by staff because location of berm and landscaping would be within ITC corridor and this is not allowed by ITC.**
- ii. A waiver from Sec. 5.5.3.B.ii and iii
 - For not providing 6 canopy or large evergreen trees that are required in the 14 Mile Road greenbelt in order to preserve existing woodlot/wetlands or which would be within the ITC corridor; **Supported by staff subject to applicant providing 4 trees in areas where they do not conflict with preserved wetlands and woodlands or ITC corridor.**
 - For not providing 9 sub-canopy trees are required in the 14 Mile Road greenbelt in order to preserve existing woodlot/wetlands or which would be within the ITC corridor; **Supported by staff subject to applicant providing 6 sub-canopy trees in areas where they do not conflict with preserved wetlands and woodlands or ITC corridor.**
 - For not providing 4 canopy or large evergreen trees that are required in the M-5 greenbelt in order to preserve existing woodlot/wetlands; **Supported by staff subject to applicant providing 12 trees between M-5 and parking lot/buildings.**
 - For not providing 10 sub-canopy trees are required in the M-5 greenbelt in order to preserve existing woodlot/wetland; **Supported by staff subject to applicant providing 22 sub-canopy trees between M-5 and the parking lot/buildings.**
- iii. A waiver from Sec. 5.5.3.C. for not providing 4 parking lot interior canopy trees within the ITC corridor; Supported by staff
- iv. A waiver from Sec. 5.5.3.C.iv for not providing 29 parking lot perimeter canopy trees within the ITC corridor; Supported by staff
- v. A waiver from Sec. 5.5 for not providing the required screening for loading zone; **Supported by staff as landscaping provided plus existing topography and vegetation to remain will screen loading area from offsite sufficiently.**
- vi. A waiver from Sec 5.5.3.D for not providing the required mix of plantings per the requirements for building foundation; **Not supported by staff at this time Revise or provide justification for the proposed mix of naturalized areas and more information regarding the proposed plantings so decision can be made whether the proposed landscaping is sufficient.**
- vii. A waiver from Sec 5.5.3.E.iv and LDM 1.d.(3) for not providing shrubs as are required around 70% of the rim of the detention pond. **Not supported by staff. Provide the required shrubs.**

7. Follow-up Revisions and Submittals:

- a. Fire access: During the course of the review, staff has requested the applicant to address some of the concerns to resolve issues prior to Planning Commission meetings. Revisions were reviewed and input was provided via e-mail. **The applicant should make the necessary changes as agreed at the time of Final site plan approval.**
 - i. Changes to fire lane width within the parking lot north of headquarters building as shown in the attached document.
 - ii. Provide an adequate turn-around for fire trucks at the end of drive south of headquarters building.
- b. Public Walking Trail: The applicant has shared a PDF proposing additional walking trail south of Seeley drain for public with a possible connection to adjacent sites to the south. The trail

also proposed two scenic overlooks into the wetlands. The applicant should provide additional details and indicate the impacts to wetlands and woodlands. Certain type of construction and materials are not allowed within wetlands. **Please work with our wetland consultant and City Engineer in determining the acceptable options.**

- c. Entry driveway: The applicant has diligently worked with staff to address driveway design concerns. Our Traffic consultant has revised the letters to address the revised design shared on 02-16-18. A majority of issues have been identified and resolved. However, Traffic is currently not recommending approval the site plan because, although the most recent submittal allows truck access, it does not adequately restrict left-turns in to the development.
8. Road Commission of Oakland County Approval: The applicant should provide the City with written support and approval of the driveway design from the Road Commission for Oakland County. **Prior to final site plan submittal, the applicant should also provide information in writing from the RCOC in regards to the future considerations for any future 14 Mile Road improvements such as a traffic signal or widening.**
9. Photometric Plan: **Please refer to Planning Review Chart for additional comments that need to be addressed prior to approval of Photometric plan.**
10. Exterior Signage: Exterior Signage is not regulated by the Planning Division or Planning Commission. Sign permit applications that relate to construction of a new building or an addition to an existing building may submitted, reviewed, and approved as part of a site plan application. In that case, the proposed signs shall be shown on the Preliminary Site Plan. Alternatively, an applicant may choose to submit a sign application to the Building Official for administrative review after Site plan approval. Following Preliminary Site Plan approval, any application to amend a sign permit or for a new or additional sign shall be submitted to the Building Official. Please contact the Ordinance Division 248.735.5678 for information regarding sign permits.
11. Conservation Easements: Draft conservation easements are required along with Final Site Plan submittal.
12. International Transmission Company (ITC) Corridor: **Prior to Final site plan approval, the applicant should provide correspondence indicating ITC's approval of proposed improvements within ITC Corridor on the subject property.**
13. Other Reviews
 - a. Engineering Review: Additional comments to be addressed with Final Site Plan. Engineering is currently recommending approval conditional upon approval of coordination with the City and Commerce Township for the water main construction.
 - b. Landscape Review: Landscape review has identified waivers that may be required. Refer to review letter for more comments. Landscape recommends approval provided the applicant agrees to revise the plans to reduce the number of deviations sought at the time final site plan submittal.
 - c. Wetlands Review: A City of Novi Non-minor Wetland Permit and Buffer Authorization are required for the proposed impacts to wetlands and regulated wetland setbacks. Additional comments to be addressed with Final Site Plan. Wetlands recommend approval. The current review did not include the future building and parking expansion.
 - d. Woodlands Review: A City of Novi Woodland permit is required for the proposed impacts to regulated woodlands. Additional comments to be addressed with Final Site Plan. Woodlands recommend approval.
 - e. Traffic Review: Additional comments to be addressed with Final Site Plan. Traffic recommends approval.

- f. Facade Review: Façade is recommending approval of Section 9 waiver. Please bring the samples to the Planning Commission meeting.
- g. Fire Review: Additional comments to be addressed with Final Site Plan. Fire recommends conditional approval.

NEXT STEP: PLANNING COMMISSION MEETING

All reviews are recommending approval. The site plan is scheduled for a Public hearing on February 28th meeting. Please provide the following **no later than 10 am on February 23, 2018.**

1. Original Site Plan submittal in PDF format dated 01-22-2018 (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters and **a request for waivers as you see fit.**
3. A color rendering of the Site Plan, if any.
4. A sample board of building materials as requested by our Façade Consultant. The applicant can bring the material samples to the Planning Commission meeting.

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](#)
9. [Non-Domestic User Survey](#)
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

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

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

STREET AND PROJECT NAME

This project does not require approval from the Street and Project Naming Committee.

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.

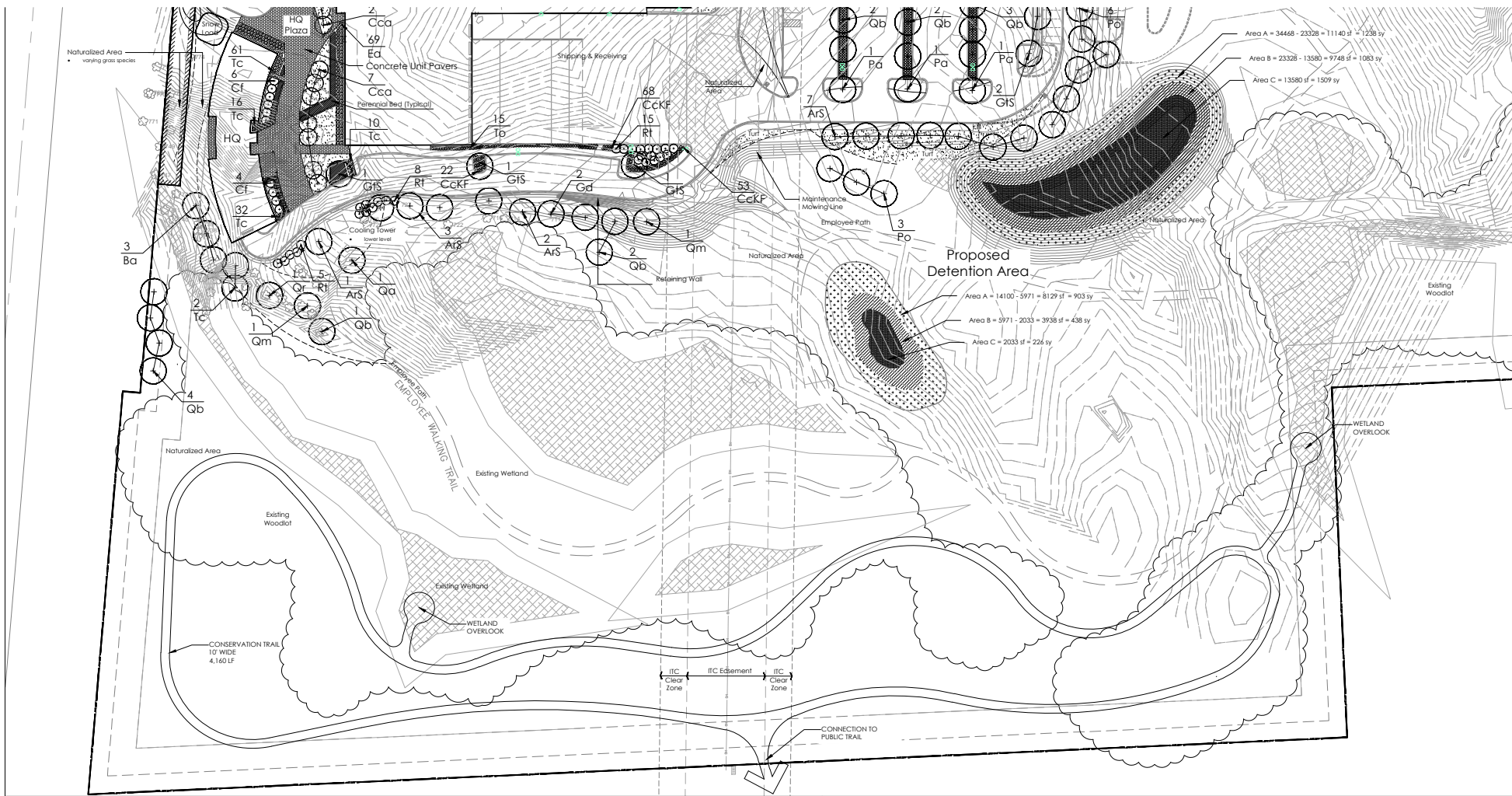
CHAPTER 26.5

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



1 LANDSCAPE PLAN - AREA B
1" = 50'

- LEGEND**
- Detention Pond Planting Area A
• Slope of Pond and Buffer Area
 - Detention Pond Planting Area B
• Intermediate Wet Area
 - Detention Pond Planting Area C
• Wetland Channel (low point)
 - Manicured turf areas
• All other areas are naturalized. A combination of MCOI seed mix and native grasses to blend the campus into a natural setting.
 - MCOI
• Infiltration swale seed mix typical in all hatched areas.

NOTES
1. SEE LP-400 FOR DETAIL PLAN OF HQ PLAZA.

PLANT LISTS FOR AREAS A, B & C

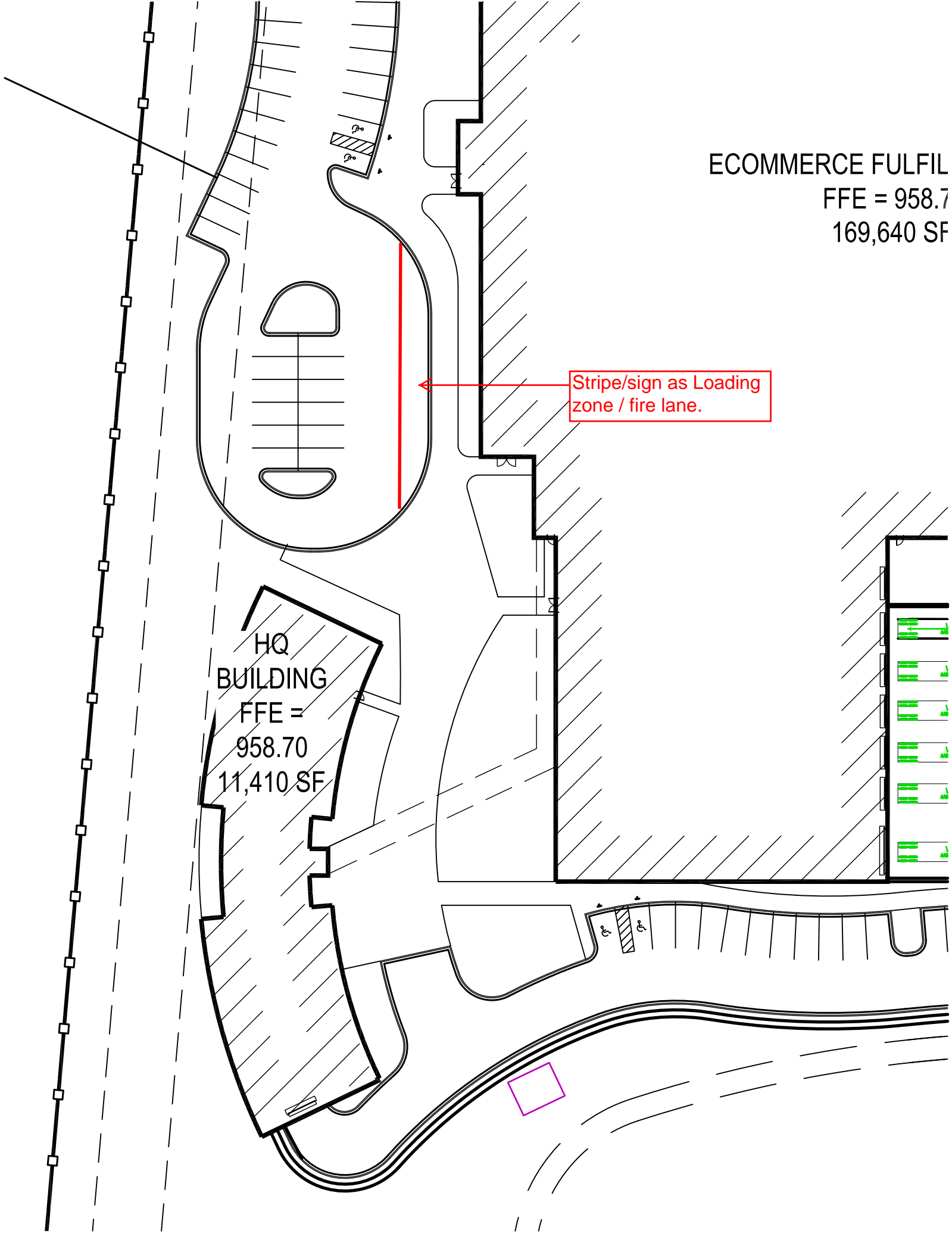
PLANTING AREAS RANGE FROM MESIC TO WET WITH AREA A HABITAT BEING THE DRIEST. THE PURPOSE OF THE PLANT LIST IS TO PROVIDE A WIDE VARIETY OF NATIVE PLANTS IN EACH AREA TO



ECOMMERCE FULFIL
FFE = 958.7
169,640 SF

Stripe/sign as Loading
zone / fire lane.

HQ
BUILDING
FFE =
958.70
11,410 SF





PLANNING REVIEW CHART: Office Service Technology (OST)

Review Date: February 13, 2018
Review Type: Revised Preliminary Site Plan Review
Project Name: **BERKSHIRE E-SUPPLY**
Plan Date: January 22, 2018
Prepared by: Sri Komaragiri, Planner
E-mail: skomaragiri@cityofnovi.org; **Phone:** (248) 735-5607

Bold To be addressed with the next submittal
Underline To be addressed with final site plan submittal
Bold and Underline May require Planning Commission, City Council and/or Zoning Board of Appeals
Italics Noted to be noted

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan <i>(adopted August 23, 2017)</i>	Office research development and technology	Office	Yes	
Area Study	Master plan indicates extension of Cabot Drive through the subject parcel to connect to Fourteen Mile Road	No connection is proposed	Yes	Refer to Traffic study review for more comments
Zoning <i>(Effective December 25, 2013)</i>	OST: Office Service and Technology	OST	Yes	
Uses Permitted <i>(Sec 3.1.23.B & C)</i>	Sec. 3.1.23.B. - Principal Uses Permitted. Sec. 3.1.23.C. – Special Land Uses Permitted.	169,640 sf building footprint for Fulfillment center 11,410 sf building footprint for Headquarters	Yes	<i>Requires Planning Commission approval of the Preliminary Site Plan</i>
Height, bulk, density and area limitations (Sec 3.1.23.D)				
Frontage on a Public Street. <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	The site has frontage on Haggerty Road and Fourteen Mile Road	Yes	
Access To Major Thoroughfare <i>(Sec. 5.13)</i>	Access to Major Thoroughfare only Access to other roads only if other side of the street has multi-family or non-residential uses, or City makes a determination the property meets the requirements of this	The site has access to Fourteen Mile Road	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	section			
Minimum Zoning Lot Size for each Unit in Ac (Sec 3.6.2.D)	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space		NA	
Minimum Zoning Lot Size for each Unit: Width in Feet (Sec 3.6.2.D)			NA	
Maximum % of Lot Area Covered (By All Buildings)	(Sec 3.6.2.D)	19% (Total 181,400 SF of building footprint)	Yes	Maximum lot area covered should just includes the square footage of buildings. Revise the data on sheet PC-03 to say 7 %
Building Height (Sec. 3.1.23.D & Sec. 3.20.1)	46 feet or 3 stories Additional height can be proposed if met with the conditions listed in Section 3.20	40'-8"	Yes	List maximum building height for both buildings under Site Data on sheet PC-03
Building Setbacks (Sec 3.1.23.D)				
East @ Haggerty (Exterior Side)	50 ft.	1314.55 ft.	Yes	
North @ Fourteen Mile (Front)	50 ft.	437.88 ft.	Yes	
South (Rear)	50 ft.	720.83 ft.	Yes	
West @ M-5 (Exterior Side)	50 ft.	141 ft.	Yes	
Parking Setback (Sec 3.1.23.D) Refer to applicable notes in Sec 3.6.2				
East @ Haggerty (Exterior Side)	20 ft.	20 ft. minimum	Yes	
North @ Fourteen Mile (Front)	20 ft.			
South (Rear)	20 ft.			
West @ M-5 (Exterior Side)	20 ft.			
OST District Required Conditions (Sec 3.20)				
Additional Height (Sec 3.20.1)	Properties north of Grand River Avenue: Max height: 65 ft. with additional setbacks of 2 ft. for every 1 ft. in excess	40'-8"	NA	

Item	Required Code	Proposed	Meets Code	Comments
	of 46 ft.			
Loading and Unloading Screening (Sec 3.20.2.A)	Truck service areas and overhead truck loading/unloading doors shall be totally screened from view from any public right-of-way, including freeway right-of-way, and adjacent properties, except for required driveway access.	Some loading areas are proposed in the exterior side yard(east). Large truck loading spaces are proposed in the rear in a loading dock.	No	<i>Zoning Board of Appeals has approved the proposed location on February 13, 2018.</i>
Required Parking Calculation (Sec 3.20.2.B)	A floor plan indicating different uses, leasable floor space used for calculating parking should be shown on the plans	Floor plans for two floors are submitted.	Yes	<i>Applicant has provided revised floor plans indicating the area including in the area calculations.</i>
Additional conditions for permitted uses in 3.1.23.B.ii – v (Sec 3.20.2.C)	Uses permitted under subsections 3.1.23.B.ii - v shall not be located on property sharing a common boundary with property zoned for R-A, R-1, R-2, R-3, R-4 or MH district use unless conditions in section 3.20.2.C are met	Unable to determine the type of uses. The properties zoned RA are separated by a Public right of way, so the conditions of this section would not apply.	NA	
Outdoor storage (Sec 3.20.2.D)	The outdoor storage of goods or materials shall be prohibited.	A note has been added to the plans to clarify	Yes	
Parking, Loading and Dumpster Requirements				
Number of Parking Spaces Professional Office (Sec.5.2.12.D) Warehouse (Sec.5.2.12.E)	- For buildings up to 100,000 square feet, 1 space per 222 SF GLA 18,380 sf of office space - One (1) space for each seven hundred (700) square feet of usable floor area (See Note below) 193, 230 sf of warehouse and accessory uses	Total Parking for Headquarters building: 82 spaces Fulfillment Center:277 spaces Entire site: 359 spaces Total parking proposed on site: 359 spaces including 74 land bank spaces	Yes	<u>Approxiamtely 30 to 40 trees are noted to be removed for landbak parking construction</u> <u>Headquarters total required should be 83 and Fulfillment Center should be 276. Please correct</u>
Note: Upon approval by the Planning Commission, granted pursuant to Section 5.2.14 , the paved area for off-street parking may be reduced to an area comprising five (5) spaces plus one (1) for every one (1) employee in the largest working shift, or five (5) spaces plus one (1) for every seventeen hundred (1700) square feet of usable floor area, whichever is greater, provided that a surplus area is provided on the site to accommodate the construction of additional off-street parking to fulfill the requirements of the preceding paragraph if needed				

Item	Required Code	Proposed	Meets Code	Comments
Landbank Parking (Sec.5. 2.14)				
Land banking may be permitted on the request of the applicant if an applicant can demonstrate that the number of parking spaces required under this Section are in excess of the actual requirements for the functional use of the building, for up to twenty five (25) percent of the required number of parking spaces on the site, subject to the following conditions	Maximum number of Landbank spaces: 25% of required parking	Proposing 74 spaces to be landbanked. Total required: 359 Total % landbanked: 21%	Yes	<p>Add notes to the site that address the items noted as 'unable to determine'.</p> <p>A woodland permit should be requested through site plan submittal prior to construction of landbank parking.</p> <p>Proposed landbank parking do not create any additional impacts to wetlands. A wetland permit will not be required prior to construction of landbank parking.</p>
	Minimum number of spaces required prior to request for land banking: 45 spaces	359	Yes	
	Alternative layout plan showing land bank parking	Sheets PC-13 and PC-18 indicates alternative layout	Yes	
	All areas designated for land banking shall be landscaped open space and may not be used for any other purposes	unable to determine	Yes?	
	Planning Commission grants the request based on certain conditions	unable to determine	Yes	
	The owner of the property shall report any proposed change in use or occupancy for further evaluation	unable to determine	Yes?	
	Land bank spaces may be installed prior to change in use or occupancy, if determined	Woodland impacts are not quantified	No	
Parking Dimensional Requirements				
Parking Lot location	- Parking shall be provided on the same parcel and or within 300 feet from the entrance being served	Future parking are appears to be contiguous to the proposed parking area.	NA	
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	- 90° Parking: 10 ft. x 20 ft. - 24 ft. two way drives	Yes	Exceeds City standards; Traffic recommended reducing the parking space dimensions to 9 x 19 in order to provide additional turning radii for trucks within parking lot.
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,	Not applicable	NA	

Item	Required Code	Proposed	Meets Code	Comments
	whichever is closer			
End Islands (Sec. 5.3.12)	<ul style="list-style-type: none"> - End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 feet wide, have an outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance 	End Islands are proposed wherever applicable	Yes	
Barrier Free Spaces <i>Barrier Free Code</i>	For total 200 to 300 = 7 spaces including 2 van accessible	7 spaces are provided	Yes	Relocate some of the barrier free spaces near the Head quarters building If land banked parking is ever constructed an additional accessible parking space will be required to provide a total of eight accessible parking spaces (for 301-400 spaces)
Barrier Free Space Dimensions <i>Barrier Free Code</i>	<ul style="list-style-type: none"> - 8' wide with an 8' wide access aisle for van accessible spaces - 5' wide with a 5' wide access aisle for regular accessible spaces 	Two types of accessible spaces are provided	Yes	
Barrier Free Signs <i>Barrier Free Code</i>	One sign for each accessible parking space.	Not indicated	No	Detail provided on landscape set
Minimum number of Bicycle Parking (Sec. 5.16.1)	<u>General Offices:</u> Five (5) percent of required automobile spaces, minimum two (2) spaces For 83 Office spaces, 4 bike racks are required	Bike racks indicated on landscape plan, but number not provided	Yes?	List of the required and provided under Parking Calculations
Automobile parking space reduction bonus (Sec. 5.16.3)	If 20 or more automobile parking is required, then the minimum required spaces can be reduced by 1 space for every 10 uncovered bike parking and 1 space for every 5 covered bike parking, up to a maximum of 10	Not requested at this time	NA	

Item	Required Code	Proposed	Meets Code	Comments
	percent reduction			
Covered bicycle parking (Sec. 5.16.4)	When twenty (20) or more bicycle parking spaces are required, twenty-five (25) percent of the bicycle parking spaces shall be covered	4 spaces are required	NA	
Bicycle Parking General requirements (Sec. 5.16.1)	<ul style="list-style-type: none"> - 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 	Distance appears to be in conformance Location appears to be within 120 feet.	Yes	<u>Provide the type of bike rack being proposed</u>
Bicycle Parking Lot layout (Sec 5.16.5) (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	Not provided	No	Provide the bike parking layout plan as needed. Indicate the sheet number where the comment is addressed
Loading Spaces Sec. 5.4.1	<ul style="list-style-type: none"> - Within the OS districts, loading space shall be provided in the rear yard or - in the case of a double frontage lot, in the interior side yard, - in the ratio of five (5) square feet per front foot of building up to a total area of three-hundred sixty (360) square feet per building. 	A majority of loading and unloading happens at the shipping and receiving zone located to the south. Some intermittent loading operations will happen to the east of the warehouse	No	<i>Zoning Board of Appeals has approved the proposed location on February 13, 2018.</i> Provide information on size of trucks, hours of operation and screening for loading areas.
Dumpster Sec 4.19.2.F	<ul style="list-style-type: none"> - 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 	A trash compactor is located within the building.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	than 10 ft, from property line. - Away from Barrier free Spaces			
Dumpster Enclosure Sec. 21-145. (c) Chapter 21 of City Code of Ordinances	- Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery	Inside the building	NA	
Exterior lighting Sec. 5.7	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal	A lighting and photometric plan is provided at this time		Refer to comments below
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	Rooftop equipment is proposed	Yes	
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.	Rooftop equipment is screened by parapets	Yes	Provide additional information to verify conformance
Non-Motorized Facilities				
Public Sidewalk Article XI. Off-Road Non-Motorized Facilities	Haggerty Road: 6 feet sidewalk Fourteen Mile Road: 6 feet sidewalk	A six feet sidewalk proposed along Fourteen Mile Road and Haggerty Road.	Yes	Show proposed sidewalks on all layout sheets for consistency
Pedestrian Connectivity	Assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets	Sidewalks are proposed around the building. A connection to Fourteen Mile Road sidewalk is proposed.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
		A connection to Haggerty Road is not proposed due to absence of sidewalk along Taft		
Building Code and Other Requirements				
Building Code	Building exits must be connected to sidewalk system or parking lot.	All exits appear to be connected to sidewalk	Yes	
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Legal description for the all the parcel is 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).	The submittal has lot of information missing	No	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) 	Not provided at this time	No	Provide required information prior to Planning Commission meeting
Site Addressing	- The applicant should contact the Building Division for an address prior to applying for a building permit.	A new address will be required for this site. One will be issues after stamping sets are approved	Yes	<u>For further information contact Ordinance Enforcement at 248-347-0438.</u>
Development/ Business Sign	<ul style="list-style-type: none"> - Signage can be reviewed as part of the site plan to identify any potential conflicts with site elements or deviations required - Separate application - Signs shall be installed within 60 days after the permit being issued 	Signage is not reviewed with this site plan.		<u>For further information contact Ordinance Enforcement at 248-347-0438.</u>

Item	Required Code	Proposed	Meets Code	Comments
	- A application should be submitted if a ZBA deviation is required			
Project and Street naming	Some projects may need approval from the Street and Project Naming Committee.	This project does not need approval of the Project Name		
Property Split	All property splits and combination must be submitted to the Assessing Department for approval.	Three parcels are proposed to be combined	Yes?	New parcel should be combined prior to Final Site Plan approval
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	A lighting and photometric plan is provided at this time	Yes	Labels for site lights are conflicting with site lights and are hard to identify
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.	Provided	Yes	
Lighting Plan (Sec.5.7.2.A.ii)	Specifications for all proposed & existing lighting fixtures	Provided	Yes	
	Photometric data	Provided	Yes	
	Fixture height	25 ft	Yes	
	Mounting & design	Provided	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	LED	Yes	
	Hours of operation	Photo-Eye lights; 5 am to 11 pm Parking lot, roadway and walkway fixtures	Yes	

Item	Required Code	Proposed	Meets Code	Comments
		will be at 50 percent output from 11 pm to 5 am;		
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties			
Maximum Height (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses	25 ft.	Yes	
Standard Notes (Sec. 5.7.3.B)	<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 	Unable to determine	No	Add the notes added to the plan. Indicate the sheet number where the notes are added
Security Lighting (Sec. 5.7.3.H) 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 	Parking lot, roadway and walkway fixtures will be at 50 percent output from 11 pm to 5 am;	Yes?	
Average Light Levels (Sec. 5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	The ratio is under 4:1 for 100 percent output	Yes?	Avg to Min ratio column is cut-off from Sheet PE-103
Type of Lamps (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	LED	Yes	Specification sheets included in the sheets are not legible.
Min. Illumination (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.2 min	Yes	
	Loading & unloading areas: 0.4 min	0.4 min	Yes	
	Walkways: 0.2 min	0.2 min	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	Building entrances, frequent use: 1.0 min	1.0 min	Yes	
	Building entrances, infrequent use: 0.2 min	0.2 min	Yes	
Max. Illumination adjacent to Non-Residential (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	Does not exceed 1.0	Yes	
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	Residential district across M-5 to the west. Does not exceed 0.5	Yes	

NOTES:

1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. 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

February 14, 2018

Engineering Review

Berkshire eSupply
JSP17-0072

Applicant

Berkshire eSupply

Review Type

Revised Preliminary Site Plan

Property Characteristics

- Site Location: East of M-5, South of Fourteen Mile Road
- Site Size: 57.12 acres
- Plan Date: 01/22/2018
- Design Engineer: Mannik Smith Group

Recommendation

Approval of the revised Preliminary Site Plan and Preliminary Storm Water Management Plan can be recommended, conditional upon approval of the agreement with Commerce Township for water supply to the site.

Comments:

The revised 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:

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 Non-domestic User Survey form shall be submitted to the City so it can be forwarded to Oakland County. This form was included in the original site plan package.
3. Revise the plan set to reference at least one city established benchmark. An interactive map of the City's established survey benchmarks can be found under the 'Map Gallery' tab on www.cityofnovi.org.

4. Right-of-way permits will be required from the Road Commission for Oakland County, and from the City of Novi for work in the Fourteen Mile and Haggerty Road rights-of-way.
5. Provide a traffic control sign table on the Final Site Plan listing the quantities of each sign type proposed for the development. Provide a note along with the table stating all traffic signage will comply with the current MMUTCD standards.
6. Traffic signs in the RCOC right-of-way will be installed by RCOC.
7. Provide a traffic control plan for the proposed road work activity (City and/or County roads).
8. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
9. Provide a construction materials table on the Utility Plan in the Final Site Plan package listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
10. Provide a construction materials table on the Site Layout or Paving Plan in the Final Site Plan package listing the quantity and material type for each pavement cross-section being proposed.
11. Provide a utility crossing table on the Utility Plan in the Final Site Plan set indicating that at least 18-inch vertical clearance will be provided; or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
12. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. All utilities shall be shown on the landscape plan, or other appropriate sheet, to confirm the separation distance.
13. The City standard detail sheets are not required for the Final Site Plan submittal. The City's current standard detail sheets can be found on the City website (www.cityofnovi.org/DesignManual) and shall be printed and included in the final Stamping Set submittal of construction plans.

Water Main

14. As described in Section 11-68.a.1, public water main shall be provided along the frontage of a parcel being developed. A Request for Variance for Design and Construction Standards is required for any deviation from this requirement.
15. Remove Utility Notes number 2 and 3 from the site plan sheets. Details surrounding the water main extension and water supply to the site are being worked out in separate discussions with the City Manager's office and City Council. A general note indicating that an intergovernmental agreement between the City of Novi and Commerce Township is anticipated for supply of water to the site can be included on the plans.

16. All water main on the site shall be installed to City of Novi standards and will be in 20-foot public water main easement dedicated to the City of Novi.
17. Include notes and details for the connection to the Commerce Township water main and indicate method of installation across 14 Mile. Open-cut of 14 Mile is not permitted, unless RCOC gives their approval.
18. Provide a profile for all proposed water main 8-inch and larger with the Final Site Plan submittal.
19. Indicate on the plans the extent of existing water main easement to be abandoned using cross hatch or other symbology. The widened portion just south of the Great Lakes Water Authority (GLWA) parcel is to remain, where the City's future master meter will be located. The proposed on-site water main easement should extend to the north to the GLWA property line.
20. Provide an access easement from 14 Mile road to the City's future master water meter vault location. Show the access easement on the site utility plan.
21. A unique shut-off valve is required on the domestic and fire building leads. Indicate the size and location of the domestic and fire leads to the HQ building.
22. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Division once the water main alignment is finalized. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

23. A sanitary sewer pump station is proposed with connection to the existing force main. The lift station shall be designed to meet the City of Novi and Oakland County Water Resource Commission (OCWRC) standards. All appropriate Oakland County detail sheets shall be included at the time of final stamping set submittal.
24. The building footprint is shown in close proximity to the existing force main. A minimum clearance of 10 feet must be provided from the building foundation to the existing sanitary sewer. The applicant shall confirm that any necessary excavation for maintenance or repair operations on the force main would not compromise the building foundation.
25. Provide a sanitary sewer monitoring manhole for each sanitary sewer building lead, each in a dedicated 20-foot wide access easement from the road right-of-way (rather than a public sanitary sewer easement).
26. Provide a note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
27. Provide a note on the Utility Plan and sanitary profile stating that sanitary leads shall be buried at least 5 feet deep where under the influence of pavement.
28. Submit five (5) sealed sets of utility plans and applicable standard detail sheets to the Engineering Division for submittal to OCWRC for review and

approval of the lift station and connection to existing sanitary sewer force main. These sets should be submitted near the time of Final Site Plan approval, once no further changes are anticipated.

Storm Sewer

29. A minimum cover depth of 3 feet shall be maintained over all storm sewers.
30. Provide a four-foot deep sump and an oil/gas separator in the last storm structure(s) prior to discharge to on-site storm water basins.
31. Show and label all roof conductors, and show where they will tie into the storm sewer system on the layout and on the storm profiles.
32. Provide a site drainage area map and all storm sewer sizing calculations with the Final Site Plan.
 - a. The plans indicate that the land bank parking area is included in the overall site storm water management plan and detention basin sizing.
 - b. The land bank parking area storm sewer sizing information can be included for review and approval of the landbank parking plan at this time, or details submitted for separate future site plan approval.

Storm Water Management Plan

33. Provide a sheet or sheets titled "Storm Water Management Plan" (SWMP) in the Final Site Plan set. The SWMP shall comply with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual (refer to the runoff coefficients, 1V:4H allowable basin slopes, etc.).
34. 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 illustrating the pre- and post-development tributary drainage areas. The area being used for off-site discharge should be delineated and the ultimate location of discharge shown.
35. Revise basin side slopes to 1V:4H
36. Provide supporting calculations for the runoff coefficient determination.
37. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum slope of 1V:5H, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
38. Provide a 5-foot wide stone bridge allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
39. Provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.

40. A 25-foot vegetated buffer is preferred around the detention basin perimeter, and must be provided where overland flow is directed toward a storm water basin.
41. A permanent water surface and storage volume are preferred for meeting storm water quality requirements. Refer to section 5.6.1.A of the Engineering Design Manual for the depth and volume requirements for wet detention basins.
42. Provide release rate calculations for the three design storm events/volumes described in the Engineering Design Manual (first flush, bank full, 100-year).
43. Provide a table illustrating the incremental depth and storage volumes for each pond, identifying the permanent low water surface, first flush, bankfull, high water and free board elevations.
44. A 4-foot wide safety shelf is required one-foot below the permanent water surface elevation within the basin.

Paving & Grading

45. Provide additional spot grades on the Final Site Plan as necessary to demonstrate that a minimum 5-percent slope away from the building is provided for a minimum distance of ten feet around the perimeter of the building.
46. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
 - a. Standard 6-inch curb height to be provided adjacent to 19-foot stalls and at all landscape islands and drive aisles.
 - b. Curbing and walks adjacent to the end of 17-foot stalls shall be reduced to 4-inch height.
47. Additional dimension and grading information is required for the land bank parking shown in Alternate Site Plan B. These details can be included with the Final Site Plan for approval of the land bank parking at this time, or details provided for future site plan approval of land bank parking.

Soil Erosion and Sediment Control

48. A Soil Erosion Control Permit must be obtained from the City of Novi. Include the SESC plan in the Final Site Plan submittal for informal review and comment. The formal SESC permit application and SESC plan set must be submitted separately from the Final Site Plan submittal.
49. 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.

Off-Site Easements and Agreements

50. Any off-site utility easements anticipated must be executed by all parties **prior to final approval of the plans**. Drafts of the easement shall be submitted at

the time of the Preliminary Site Plan submittal for review, and shall be approved by the City prior to final signatures.

51. The intergovernmental agreement with Commerce Township must be fully approved and executed prior to final approval of the site plan.

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

52. 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).
53. Draft copies of any off-site utility 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: (Please note that all documents must be submitted together as a package with the Stamping Set submittal with a legal review transmittal form that can be found on the City's website. Partial submittals will not be accepted.)

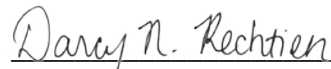
54. A draft copy of the maintenance agreement for the storm water facilities, as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department with the Final Site Plan. Once the form of the agreement is approved, this agreement must be approved by City Council and shall be recorded in the office of the Oakland County Register of Deeds.
55. 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.
56. A draft copy of the 20-foot wide access easement for the sanitary sewer monitoring manhole must be submitted to the Community Development Department. This document is available on the City website.
57. A draft copy of the access easement from 14 Mile to the proposed water meter vault location.
58. A draft copy of the warranty deed for the additional right-of-way along Haggerty must be submitted for acceptance by the City.
59. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.

The following must be addressed prior to construction:

60. 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).
61. 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. There is no fee for this permit.
62. 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.
63. 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.
64. A permit for work within the right-of-way of Fourteen Mile Road and Haggerty 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.
65. A permit for work within the right-of-way of Fourteen Mile Road and Haggerty 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.
66. 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.
67. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
68. 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 at the Treasurer's Office.
69. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Water & Sewer Department at 248-735-5642 to determine the amount of these fees.
70. An inspection permit for the sanitary sewer tap must be obtained from the Oakland County Water Resource Commissioner.
71. A street sign financial guarantee in an amount to be determined (\$400 per traffic control sign proposed) must be posted at the Treasurer's Office.

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
Ben Croy, Water and Sewer

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT

January 29, 2018

Revised Preliminary Site Plan - Landscaping

Berkshire e-Supply

Review Type

Revised Preliminary Landscape Review

Property Characteristics

- Site Location: 14 Mile Road east of M-5
- Site Zoning: OST
- Adjacent Zoning: OST, M-5, Commerce Twp Commercial
- Plan Date: January 22, 2018

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 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

There is sufficient room on the site to satisfy all of the requirements, so the Preliminary Site Plan is **recommended for approval** at this time, subject to modifications on the Final Site Plans of a number of deficiencies on the Preliminary Site plans. The plans do not include a number of required plantings and the revised preliminary plans submittal still reflect the majority of the shortages noted with the original submittal, despite the applicant's letter of December 8 indicating that they would correct the shortages noted before.

The plan requires a number of landscape waivers as currently configured. The waivers for all trees that cannot be planted within the ITC corridor can be supported but other plantings such as short shrubs, perennials and grasses must be proposed in the areas without trees to compensate for the lack of trees. Only "Naturalized Areas" are provided for replacement plantings. This won't be sufficient.

Please include a list of all landscape waivers requested in your response letter, listing the request, the impact (e.g. trees not planted) and the justification for each waiver request. This list will be used by the Planning Commission for evaluation of the requests.

Ordinance Considerations

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

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

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))
1. Calculations for required tree replacements are provided.

2. Please clearly mark all trees to be removed with this project, including all trees north of the fulfillment center which, based on the grading plan, will be removed but which are not shown as being removed, and revise the replacement calculations.
3. Please show tree fencing at the Critical Root Zone (1' beyond dripline) for all existing trees to remain near the project area on the Grading Plans and Woodland Plans.
4. Please add a tree protection fencing detail with the fence located at the Critical Root Zone (1' beyond dripline).

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

1. Only the entrance is adjacent to Residential and the required screening would not be allowed in the ITC powerline corridor.
2. **A landscape waiver is required for the lack of landscaped berm, but it would be supported by staff.**

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

1. The project fronts on both M-5 and Fourteen Mile Road.
2. The required berm along M-5 is proposed and no berm is required along Fourteen Mile Road.
3. 19 canopy or large evergreen trees are required and are provided in the M-5 greenbelt. 4 canopy or large evergreen trees are required in the 14 Mile Road greenbelt. **Please provide the required trees. REPEATED COMMENT**
4. 32 subcanopy trees are required in the M-5 greenbelt and 6 are required in the 14 Mile Road greenbelt. None are provided in either greenbelt. **Please provide the required trees. REPEATED COMMENT**
5. Depending on what the proposed trees end up being counted as (perimeter canopy trees, greenbelt subcanopy trees, greenbelt canopy trees), at least one of the requirements for the Fourteen Mile Road frontage is not met. **Please provide the required trees and notate clearly which requirement(s) they are intended to meet.**
6. **Landscape waivers may be requested for trees that can't be planted due to the ITC easement and the preservation of the existing woodlands on the frontages. These would be supported by staff. REPEATED COMMENT**
7. **Landscape waivers would also be required for trees not provided in areas outside of the preserved wetlands/woodlands or ITC corridor. Those would not be supported by staff.**
8. **Please see the detailed discussions of the requirements, clear vision zones and possible double-counting of large canopy trees for credit on the accompanying landscape chart.**

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

1. No street trees are required along M-5.
2. **Please also show the required clear vision zones for the M-5 exit onto Fourteen Mile Road. REPEATED COMMENT**
3. Street trees that would be within the required vision zones do not need to be planted and no waiver is required. Trees for the frontage that are not within the clear vision triangles but are still not allowed by the Road Commission for Oakland County (RCOC) do not need to be planted, but a copy of the documentation not allowing the trees must be provided to the city.

Parking Lot Landscaping (Zoning Sec. 5.5.3.C.)

1. The islands' area is provided and is sufficient.
2. Also required are 28 interior canopy trees. 32 trees are labeled as interior canopy trees on the plan. As the requirement is currently exceeded, a waiver for interior canopy trees is not required. **If the plan is revised to only have 24 interior canopy trees because 4 canopy trees within the ITC corridor can't be planted, a landscape waiver for up to 4 trees would be required and it would be supported by staff.**

3. Woodland replacement trees should not be located in parking lot islands. Please re-label those trees as interior trees. Fewer trees can be planted in the eastern islands if desired since there are more than necessary.
4. There are some tree/utility conflicts within the east parking lot islands. Please make sure that all trees are planted at least 10 feet from any utility structure and are at least 5 feet from underground lines so they do not conflict. **REPEATED COMMENT**

Parking Lot Perimeter Canopy Trees (Zoning Sec. 5.5.3.C.(3) Chart footnote)

1. Based on the outlined areas shown on the plan, 139 parking lot perimeter trees are required. 76 are shown on the plan and the plan indicates that 39 cannot be planted within the ITC easement. Based on the figure on PLA-104, I concur that 29 perimeter trees can't be planted in the ITC corridor, spaced at 1/35lf. A landscape easement should be requested for those 29 trees. It would be supported by staff. The plantings within the large island would be interior canopy trees, not perimeter trees.
2. All perimeter trees' trunks are to be within 15 feet of the back of curb in order to qualify as perimeter trees. **Please reposition all trees to count as perimeter trees to within 15 feet of the curb. There can be variation within the 15 feet if desired.**
3. **Please see the detailed discussion about the perimeter trees on the accompanying landscape chart. Some of the greenbelt trees could also be counted as perimeter trees if they were planted within 15 feet of the back of curb.**
4. The red oaks at the east end of the east parking lot should be classified as perimeter trees. Replacement trees can't be placed in areas where they are likely to be removed.
5. **All perimeter trees need to be canopy trees, with a minimum mature height of 30 feet and mature canopy width of 20 feet. Redbuds or other subcanopy trees can't count as perimeter trees.**
6. **Please plant additional trees to meet the net requirement of 110 trees.**

Loading Zone screening (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)

1. No loading zone screening is provided to the south or east. The building screens it from the north and west.
2. Photographs of the views from off-site toward the loading zones were provided. The existing trees and topography to remain provide sufficient screening from those directions. **A landscape waiver is required to not provide the required screening, but it would be supported by staff. REPEATED COMMENT**

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. Based on the building perimeter of 2470lf, 19,760sf of foundation landscaping needs to be provided. Per the plan, 20,009sf are provided.
2. That total meets the areal requirement, but the ordinance also requires that 75% of the building perimeter needs to have landscaping at least 4 feet wide. Less than this is provided. The applicant has stated that they want to have grasses leading up to the building to tie in with the surrounding natural landscape, but sufficient information has not been provided to justify the lack of landscaping at the building foundation that is required (mix of shrubs, trees, grasses, perennials, etc.). Also 200 lf of the eastern side of the fulfillment center is shown as just having turf in the islands near the building. This is not acceptable.
3. At least 60% of the building facing public roads is to have foundation landscaping. As the comment above indicates, the applicant has not provided sufficient information regarding the landscaping that is to serve as foundation landscaping along the north and west sides of the buildings. **See the landscape chart for details.**
4. **Any deficient foundation landscaping should be provided per Section 5.5.7.**
5. **A landscape waiver will be required to not provide the required mix of plantings per the requirements. Justification for the discrepancy and additional information regarding the proposed substitution needs to be provided.**

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

1. All species proposed are acceptable.
2. Please see the suggestions regarding plant species on the landscape chart.

Planting Notations and Details (LDM)

The required notes have been provided but planting details are required. If desired, the city can provide the applicant with our standard detail sheet in PDF or AutoCAD format.

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

1. No shrubs are proposed as are required around 70% of the rim of the detention pond.
2. **Please provide the required large, native shrubs as required. REPEATED COMMENT.**

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 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.

Land-banked Parking

A landscape plan for the land-banked parking (calculations for additional interior and perimeter landscaping, and trees) should be provided.

Corner Clearance (Zoning Sec 5.9)

Provided. See the discussion on the Landscape Chart.

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



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART - Revised Preliminary Site Plan

Review Date: January 29, 2018
Project Name: JSP17 – 0072: BERKSHIRE E-SUPPLY
Plan Date: January 22, 2018
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.

COMMENT: Please note that many of the comments below are repeats from the last submittal (11/14/17). The applicant's response letter dated December 8, 2017 indicated that these issues would be addressed satisfactorily in Final Site Plans. While these are revised Preliminary Site Plans, not Final Site Plans, the applicant could have taken this opportunity to amend the plan to address the concerns raised and thus reduce the number of waivers that may be required. As this was not done, many of the comments below are repeats from the original Preliminary Site Plan review, are so noted, and still need to be addressed.

Landscape Waivers: In your response letter, please included a list of all landscape waivers requested and the justification for each, and copy that list to Sheet PLA-101. Each waiver request should include the number of trees or linear footage of berms not provided and the basis for that request.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2))				
Landscape Plan (Zoning Sec 5.5.2, LDM 2.e.)	§ 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	Yes	Yes	1. Overall Scale: 1"=100' 2. Detail Scale: 1"=50' 3. Sheet titles are aligned landscape bottom right corner. 4. Please rotate the sheet number and title so they can be read when the sheets are folded. REPEATED COMMENT
Project Information (LDM 2.d.)	Name and Address	Yes	Yes	Location map has been provided on landscape plans.
Owner/Developer Contact Information (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Yes	Yes	
Landscape Architect contact information (LDM 2.b.)	Name, Address and telephone number of LLA/RLA	Yes	Yes	
Sealed by LA. (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Need for Final Site Plans</u>

Item	Required	Proposed	Meets Code	Comments
Miss Dig Note (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
Zoning (LDM 2.f.)	Include site zoning and all adjacent parcels' zoning	<u>Parcel:</u> OST <u>North:</u> Commerce Twp Commercial <u>East, South:</u> OST <u>West:</u> M-5	Yes	
Survey information (LDM 2.c.)	§ Legal description or boundary line survey § Existing topography	Yes	Yes	PLA-102
Existing plant material Existing woodlands or wetlands (LDM 2.e.(2))	§ Show location type and size. Label to be saved or removed. § Plan shall state if none exists. § Per PC-12, 599 replacements are required	§ 15 replacement trees are shown on the plan § Table indicates 14 are proposed.	Yes	1. A tree survey is provided for most of the areas to be developed. 2. Most trees to be removed are clearly marked. See note #7 below. 3. Replacement calculations are provided on Sheet PC-12. 4. Replacement trees are labeled as such. 5. Please do not locate woodland replacement trees in parking lot islands or in areas that are designated for future development on the plan (such as on the east end of the eastern parking lot). REPEATED COMMENT 6. Please correct the plan or the number of replacement trees provided in table. 7. The grading plan indicates that the entire area north of the Fulfillment Center will be graded, but many of the existing trees in that area are not shown as being removed. Please revise the plan, tree chart and woodland

Item	Required	Proposed	Meets Code	Comments
				<p>tree replacement calculations to accurately reflect all tree removals.</p> <p>8. If all required replacements are not shown on the plan, it needs to note that a deposit for the remaining 584 credits will be made to the tree fund.</p> <p>9. See ECT comments for more detailed treatment of woodlands and wetlands.</p>
Soil types (LDM.2.r.)	<p>§ As determined by Soils survey of Oakland county</p> <p>§ Show types, boundaries</p>	Yes	Yes	PC-02
Existing and proposed improvements (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and proposed utilities (LDM 2.e.(4))	Overhead and underground utilities, including hydrants	PC-06, PC-07	Yes	Please be sure that the trees in the eastern parking lot depressed islands are at least 10 feet away from the catch basins.
Proposed grading. 2' contour minimum (LDM 2.e.(1))	Provide proposed contours at 2' interval	Yes	Yes	
Snow deposit (LDM.2.q.)	Show snow deposit areas on plan	Yes	Yes	
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements (LDM 1.c)	<p>§ Clear sight distance within parking islands</p> <p>§ No evergreen trees</p>	Yes	Yes	
Name, type and number of ground cover (LDM 1.c.(5))	As proposed on planting islands	Yes	Yes	Turf, Karl Foerster grass or MDOT swale mix
General (Zoning Sec 5.5.3.C.ii)				
Parking lot Islands (a, b. i)	<p>§ A minimum of 200 SF to qualify</p> <p>§ A minimum of 200sf</p>	Yes	TBD	Islands where trees are planted need to be 10' wide, measured at the

Item	Required	Proposed	Meets Code	Comments
	unpaved area per tree planted in an island § 6" curbs § Islands minimum width 10' BOC to BOC			backs of curbs. The 2 northern islands in the west lot do not appear to be 10' wide at the backs of curbs. Please enlarge them and any other non-conforming island if necessary. REPEAT COMMENT
Curbs and Parking stall reduction (c)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	Parking spaces are shown as 20 feet long.		Applicant desires to leave spaces larger than code requires.
Contiguous space limit (j)	Maximum of 15 contiguous spaces	15 is maximum bay length	Yes	
Plantings around Fire Hydrant (d)	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	<ul style="list-style-type: none"> Trees are at least 10 feet from hydrants. Some trees may be located closer than 10 feet to some utility structures. 	Yes/No	<ol style="list-style-type: none"> 1. Locate all trees no closer than 10 feet from structures and 5 feet from underground lines. 2. To assist contractors, please add a note to the plans stating that all trees are to be at least 10 feet from hydrants or utility structures. REPEAT COMMENT
Landscaped area (g)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.5.9	Yes	Yes	<ol style="list-style-type: none"> 1. RCOC clear vision zone has been added to the plan on Sheet PLA-104. Please also copy the clear vision zones from PLA-104 to Sheets PLA-101 and PLA-102. 2. The monument sign appears to be outside of the RCOC sight vision areas. 3. A waiver is <u>not</u> required for trees that can't be planted in the clear vision zone.

Item	Required	Proposed	Meets Code	Comments
				<p>4. Please also check with the RCOC on what clear vision zone should be used for the M-5 exit. If there is a clear vision zone that should be used for it, please show it on the plans as well, and deduct whatever linear footage is included in that right-of-way to calculate how many trees are required. If they don't have a requirement for that exit, please add a note to this effect on the plans. <i>REPEAT COMMENT</i></p> <p>5. Please adjust the calculations to include the basis used for the calculations. It seems that 5 street trees should be planted in the right-of-way, between the sidewalk and the road, unless RCOC says otherwise.</p>
<p>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)</p>				
<p>A = Total square footage of vehicular use areas up to 50,000sf x 7.5%</p>	<ul style="list-style-type: none"> • $A = x \text{ sf} * 7.5 \% = A \text{ sf}$ • $50,000 * 7.5\% = 3750 \text{ sf}$ 			
<p>B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %</p>	<ul style="list-style-type: none"> • $B = x \text{ sf} * 1\% = B \text{ sf}$ • $(237,068 - 50000) * 1\% = 1871 \text{ sf}$ 			
<p>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)</p>				
<p>A. = Total square footage of vehicular use area up to 50,000 sf x 5%</p>	<p>$A = x \text{ sf} * 5\% = A \text{ sf}$</p>	<p>NA</p>		

Item	Required	Proposed	Meets Code	Comments
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	$B = 0.5\% \times 0 \text{ sf} = B \text{ SF}$	NA		
All Categories				
C = A+B Total square footage of landscaped islands	$3750 + 1871 = 5621 \text{ SF}$	Based on the labeled areas, it appears that 23535sf is provided.	Yes	<ol style="list-style-type: none"> 1. Please verify the total area provided, including the area of the large island west of the spaces in the east lot. 2. The illustration on Sheet PLA-104 indicates that 4 interior canopy trees cannot be planted due to the ITC corridor. Please include this figure in a landscape waiver request. It will be supported by staff. REPEAT COMMENT 3. Please provide better information as to what is proposed as a substitute for planting within the easement. Currently the proposed landscaping (Naturalized Area or Turf) is unacceptable. REPEAT COMMENT
D = C/200 Number of canopy trees required	$\$ 5621/200 = 28 \text{ Trees}$	<ol style="list-style-type: none"> § 32 trees § 4 trees can't be planted within ITC easement. 	Yes	<ol style="list-style-type: none"> 1. Interior trees should be planted within the interior islands or parking lot corners. 2. Please double-check counts on plan. 3. If the applicant elects to propose fewer than 28 trees, a landscape waiver will be required. If the waiver request is for 4 trees or less, the request would be supported by staff.

Item	Required	Proposed	Meets Code	Comments
<p>Perimeter Trees (5.5.3.C.iv) (trees to be located on outside of parking areas and each side of entry drives)</p>	<p>§ 1 Canopy tree per 35 lf § 4848 LF /35 = 139 trees</p>	<p>§ 76 trees are provided. § (There are also 3 replacement trees along the east end of the east parking lot that should be labeled as perimeter trees, plus 10 M-5 greenbelt trees that could be double-counted as perimeter trees.)</p>	<p>No</p>	<ol style="list-style-type: none"> 1. The illustration on PLA-104 shows that 29 perimeter trees can't be planted within the ITC easement (the table indicates 39). The large interior island is not required to have perimeter trees (as the figure on PLA-104 shows) so those shouldn't be counted in the perimeter waiver request. Please include this figure (29) in a landscape waiver request. It will be supported by staff. REPEAT COMMENT 2. Perimeter trees should be canopy trees with a minimum mature height of 30 feet and minimum canopy width of 20 feet. Subcanopy trees such as redbuds can only be used under power lines. Please use canopy trees for perimeter trees. REPEAT COMMENT 3. Perimeter trees must be planted such that the trunk is within 15 feet of the back of curb. Please shift all perimeter trees to within 15 feet of the back of curb. REPEAT COMMENT 4. If the M-5 and/or 14 Mile Road greenbelt canopy trees are moved to within 15 feet of the back of curb of the parking

Item	Required	Proposed	Meets Code	Comments
				<p>lots or access aisle drives, they can double-count as perimeter trees. Consider moving trees closer to the paving to utilize this option. <i>REPEAT COMMENT</i></p> <p>5. If trees do utilize this option, please include both labels with tree. <i>REPEAT COMMENT</i></p> <p>6. Please add any remaining perimeter trees that are required to fulfill the requirement, net of trees covered under requested waivers. <i>My calculations indicate that if all 13 trees discussed above are counted as perimeter trees, an additional 21 canopy trees are required.</i></p>
Parking land banked	§ NA	None		
Berms, Walls and ROW Planting Requirements				
Berms				
<p>§ All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</p> <p>§ Berm should be located on lot line except in conflict with utilities.</p> <p>§ Berms should be constructed of loam with 6" top layer of topsoil.</p>				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
<p>Berm requirements <i>(Zoning Sec 5.5.A)</i></p>	<p>Landscaped berm 4.5-6 feet high required for frontage abutting residential.</p>	<p>None</p>		<p>1. Except for the entry, the site does not abut residential property (the single residence on 14 Mile Road is buffered from the development by the water storage facility).</p> <p>2. The ITC easement prevents any on-site tall plantings that</p>

Item	Required	Proposed	Meets Code	Comments
				would help screen the project from the home. 3. Please request a landscape waiver for this deviation. It will be supported by staff for the above reasons.
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)				
Berm requirements (Zoning Sec 5.5.3.A.(5))	§ No berm is required along 14 Mile Road since it is not adjacent to parking. § An undulating berm with a minimum height of 3 feet and a 3 foot wide crest is required along the M-5 frontage facing the parking lot.	§ No berm is provided along any of the 14 Mile Road frontage § An acceptable berm is provided between M-5 and the parking lot.	Yes	
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	§ Label contour lines § Maximum 33% § Min. 3 feet flat horizontal area § Minimum 3 feet high § Constructed of loam with 6' top layer of topsoil.	None		Please provide a berm cross section showing slope, crest, height (it should have a minimum height of 3 feet and vary in height), and materials. REPEAT COMMENT
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	NA		1. Please clearly indicate any overhead lines in the vicinity of berms if there are any. 2. Add callouts for any overhead lines along the frontages or a note stating that there none.
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.		

Item	Required	Proposed	Meets Code	Comments
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer				
ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)				
Greenbelt width (2)(3) (5)	Parking: 20 ft. No Pkg: 25 ft	14 Mile Rd: Min 370 ft M-5: Min 25 ft	Yes	
Min. berm crest width	Parking: 3 ft. No Pkg: 0 ft	<ul style="list-style-type: none"> The required berm is provided between M-5 and the parking lot. No berms are required or provided along 14 Mile Road. 	Yes	
Minimum berm height (9)	Parking: 3 ft. No Pkg: 0 ft	Yes/No	Yes	
3' wall	(4)(7)	No		
Canopy deciduous or large evergreen trees Notes (1) (10)	<p><u>14 Mile Road</u> § No Pkg: 1 per 60 ft § (635-68-120(ITC)-220 (ex woodlands))/60 = 4 trees</p> <p><u>M-5</u> § Parking: 1 tree per 35 lf § 430/35 = 12 trees § No Pkg: 1 per 60 ft § 415/60 = 7 trees § A waiver for not providing 7 trees in order to preserve existing 415lf of existing woodland/ wetland can be requested and will be supported by staff.</p>	14 Mile Road: 0 tree M-5: 19 trees	<p><u>14 Mile:</u> No</p> <p><u>M-5:</u> Yes</p>	<ol style="list-style-type: none"> Currently, all trees in the greenbelt between the 14 Mile road ROW and the drive to the HQ building are shown as perimeter canopy trees, not as greenbelt trees. Greenbelt canopy trees can double-count as perimeter trees if they are within 15 feet of the back of curb. If you do elect to double count a tree, please include both labels. If this option is not used, canopy trees will be needed to fulfill both the greenbelt and perimeter requirements. The widths of the access drives can be deducted from the basis per the ordinance.

Item	Required	Proposed	Meets Code	Comments
				<p>4. A landscape waiver can be requested for trees that can't be planted within the ITC corridor or within the woodlands if they are to be preserved. Landscape waiver requests for these reasons will be supported by staff. REPEAT COMMENT</p> <p>5. Show the number of trees that aren't planted due to these restrictions as part of the waiver request. REPEAT COMMENT</p> <p>6. All required canopy trees along M-5 should be placed between the parking lot and M-5. Currently, some are located in front of the existing woodland to remain. REPEAT COMMENT</p> <p>7. Please provide any remaining required trees for each requirement. REPEAT COMMENT</p>
<p>Sub-canopy deciduous trees Notes (2)(10)</p>	<p><u>14 Mile Road</u> § No Pkg: 1 per 40 ft § 227(*)/40 = 6 trees <u>M-5</u> § Parking: 1 tree per 20 lf § 435/20 = 22 trees § No Pkg: 1 per 40 ft § 415/40 = 10 trees § A waiver to not provide the 10 trees in the preserved wetlands/woodlands would be supported by staff.</p> <p>(*)See calculation above to get to 227</p>	<p>14 Mile Road: 0 trees M-5: 0 trees</p>	<p><u>14 Mile:</u> No <u>M-5:</u> No</p>	<p>1. See above discussion regarding tree locations and waivers. 2. Please provide the required subcanopy trees along M-5 and 14 Mile Road.</p>

Item	Required	Proposed	Meets Code	Comments
<p>Canopy deciduous trees in area between sidewalk and curb <i>(Novi Street Tree List)</i></p>	<p><u>14 Mile Road</u> § No Pkg: 1 per 35 ft § 225/35 = 6 trees <u>M-5</u> § Not required in M-5 ROW</p>	<p>14 Mile Road: 6 trees M-5: 0</p>	<p>Yes</p>	<ol style="list-style-type: none"> 1. Please copy RCOC sight zones from PLA-104 to PLA-101 and PLA-102. 2. Trees that can't be planted within the RCOC clear vision zone or ITC corridor do not have to be planted elsewhere along the frontage and no waiver is required. 3. If there are underground utility conflicts that prevent some or all street trees from being planted along 14 Mile Road, please request a landscape waiver for those. This request would be supported by staff. REPEAT COMMENT 4. As mentioned above in the clear vision discussion, please also show any clear vision requirements for the M-5 exit ramp and don't plant any trees in that zone. Please confirm from the RCOC what the requirement for that exit is since only the east side is impacted and it is a divided 4-lane road. REPEAT COMMENT 5. If the RCOC sight zones indicate that some trees can be planted outside of them, but the RCOC will still not allow them, please provide documentation of their decision to the City.

Item	Required	Proposed	Meets Code	Comments
Non-Residential Zoning Sec 5.5.3.E.iii & LDM 1.d (2)				
Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Interior Street to Industrial subdivision (LDM 1.d.(2))	§ 1 canopy deciduous or 1 large evergreen per 35 l.f. along ROW	NA		
Screening of outdoor storage, loading/unloading (Zoning Sec. 3.20, 4.55, 4.56, 5.5)	<ul style="list-style-type: none"> · Solid ornamental wall similar to building; OR · Earth berm 6-10 feet tall with 4 foot wide crest, planted to provide opacity of 80-90% by 2 years after planting (see 3.20.2.A for details). 	Loading zones are on the south end of the building, screened from 14 Mile and existing woods and wetland from the south.	No	<ol style="list-style-type: none"> 1. A landscape waiver is required if required screening is not provided. REPEAT COMMENT 2. Based on the photographs provided on Sheet PLA-106, the waiver would be supported by staff. REPEAT COMMENT
Transformers/Utility boxes (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> § A minimum of 2 ft. separation between box and the plants § Ground cover below 4" is allowed up to pad. § No plant materials within 8 ft. from the doors 	Yes	Yes	
Building Foundation Landscape Requirements (Sec 5.5.3.D)				
Interior site landscaping SF	<ul style="list-style-type: none"> § Equals to entire perimeter of the building x 8 § All but paved areas (approximately 75%) of the buildings should have foundation landscaping with a minimum width of 4 ft. § Total buildings' perimeter: 2470 lf x 8ft = 19,760 SF 	<ul style="list-style-type: none"> § 20,009 sf § Foundation areas are shown on PLA-102 and PLA-103. Calculations are shown on Sheet PLA-104. 	Yes/No	<ol style="list-style-type: none"> 1. It is not clear if proposed naturalized areas will be sufficient to count toward the foundation planting requirement. REPEAT COMMENT 2. Please provide seed mix lists for all proposed seeding areas, including naturalized areas. REPEAT COMMENT 3. The instruction that the area will be mowed twice per year may cause the plantings to look as though they are just overgrown lawn as their height would be limited and possibly any flowers or

Item	Required	Proposed	Meets Code	Comments
				<p>seedheads would be removed by the mowing. This would not be a suitable substitution for the shrubs, perennials, ornamental grasses and/or trees that are typically used for foundation plantings. REPEAT COMMENT</p> <p>4. Also, the light and soil conditions on the west side of the HQ building will be much different than those on other areas of the site. Without seed mix information it is impossible to tell whether the proposed concept will be interesting enough to offset the lack of shrubs, perennials or other plantings that are required for foundation landscaping.</p> <p>5. Please indicate the proposed dates of mowing. REPEAT COMMENT</p> <p>6. Karl Foerster grass is proposed along the southern third of the eastern foundation, but only turf is still indicated for the northern section. Some sort of foundation plantings other than just turf need to be provided along all of the east side of the building. They need to conform to ITC requirements since they would be within</p>

Item	Required	Proposed	Meets Code	Comments
				the ITC easement. 7. A landscape waiver will be required to provide something other than the mix of required plantings listed above. More information about the alternative plantings needs to be provided to help justify the waiver request. REPEAT COMMENT
<i>Zoning Sec 5.5.3.D.ii. All items from (b) to (e)</i>	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	<ul style="list-style-type: none"> 71% of the fulfillment center building visible from M-5 is landscaped but only 14% visible from 14 Mile Road is landscaped with something other than "Naturalized area". 100% of the headquarters building fronting M-5 is only landscaped with existing vegetation or "Naturalized Area". 	TBD	<ol style="list-style-type: none"> See above discussion related to Naturalized Areas. Both of the buildings will be visible from M-5 and the fulfillment center will be visible from 14 Mile Road so the requirement must be met satisfactorily.
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements (Sec. 5.5.3.E.iv)	§ Clusters of large native shrubs shall cover 70-75% of the basin rim area § 10" to 14" tall grass along sides of basin § Refer to wetland for basin mix	None	No	<ol style="list-style-type: none"> No shrubs are provided as required. REPEAT COMMENT Please provide detailed landscape plans with plant species and counts that meet the requirement. REPEAT COMMENT
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 2.I. & Zoning)	Provide intended date	Between Mar 15 and Nov 15.	Yes	

Item	Required	Proposed	Meets Code	Comments
Sec 5.5.5.B)				
Maintenance & Statement of intent (LDM 2.m & Zoning Sec 5.5.6)	§ 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 (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan (LDM 2.s.)	A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.	No	No	<u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long-term survival. If xeriscaping is used, please provide information about plantings included.</u>
Other information (LDM 2.u)	Required by Planning Commission	NA		
Establishment period (Zoning Sec 5.5.6.B)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	Yes	Yes	Please add "prior to installation" to note. REPEAT COMMENT
Plant List (LDM 2.h.) - Include all cost estimates				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	Canada yew is heavily grazed on by deer. You may want to choose a different species that is more deer resistant (this is not required). REPEAT COMMENT
Root type		No	No	
Botanical and common names		No	No	
Type and amount of lawn		No	No	<u>Please add areas of each in cost table.</u>
Cost estimate (LDM 2.t)	For all new plantings, mulch and sod as listed on the plan	No	No	<u>Please add to final site plan.</u>
Planting Details/Info (LDM 2.i) - Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	No	No	Please add to plan REPEAT COMMENT

Item	Required	Proposed	Meets Code	Comments
Evergreen Tree		No	No	See above
Multi-stem Tree		No	No	See above
Shrub		No	No	See above
Perennial/ Ground Cover		No	No	See above
Tree stakes and guys. (Wood stakes, fabric guys)		No	No	See above
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	1. Please show tree fencing on grading plans and woodland plans. REPEAT COMMENT 2. Please add a tree protection fence detail showing fence located at 1 foot outside of dripline. REPEAT COMMENT
Other Plant Material Requirements (LDM 3)				
General Conditions (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	Please add note near property lines stating this. REPEAT COMMENT
Plant Materials & Existing Plant Material (LDM 3.b)	Clearly show trees to be removed and trees to be saved.	PC-08, PC-09, PC-10	Yes	See comments in Existing Trees section of chart above.
Landscape tree credit (LDM3.b.(d))	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No		
Plant Sizes for ROW, Woodland replacement and others (LDM 3.c)	2.5" canopy trees 6' evergreen trees		TBD	
Plant size credit (LDM3.c.(2))	NA	No		
Prohibited Plants (LDM 3.d)	No plants on City Invasive Species List		TBD	While it is not prohibited, burning bush can be spread by birds to unintended places. Please consider using a different species. REPEAT COMMENT
Recommended trees	Label the distance from		TBD	1. Please clearly

Item	Required	Proposed	Meets Code	Comments
for planting under overhead utilities (LDM 3.e)	the overhead utilities			indicate any overhead lines. REPEAT COMMENT 2. If none exist, please add a note to landscape plan stating this. REPEAT COMMENT
Collected or Transplanted trees (LDM 3.f)		No		
Nonliving Durable Material: Mulch (LDM 4)	§ 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:

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



ECT Project No. 170766-0300

February 9, 2018

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

Re: Berkshire eSupply (JSP17-0072)
Wetland Review of the Revised Preliminary Site Plan (PSP18-0010)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Preliminary Site Plan for the proposed Berkshire eSupply project prepared by Albert Kahn Associates, Inc. and Mannik Smith Group dated January 22, 2018 and stamped "Received" by the City of Novi Community Development Department on January 23, 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 recommends approval of the Revised Preliminary Site Plan for Wetlands; however, the Applicant should address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Final Site Plan.

The following wetland related items are required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Required (Impacts currently 0.65-acre > 0.25-acre wetland mitigation threshold)
Wetland Buffer Authorization	Required
MDEQ Permit	To Be Determined. It is the applicant's responsibility to contact the MDEQ in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Required

The proposed development is located at the southeast corner of W. Fourteen Mile and M-5 (Haggerty Connector) in Section 1. The Plan proposes the construction of a headquarters building, an e-commerce fulfillment lab, associated parking, utilities, two (2) stormwater detention ponds and an area of on-site wetland mitigation. The Plan also includes an area of future expansion north of the e-commerce fulfillment lab, and an area of reserve parking that would be located just east of the proposed parking area on the east side of the e-commerce fulfillment lab. In addition, the Plan proposes an employee walking trail that meanders throughout the site. The site was reviewed for the presence of regulated wetlands as defined in

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769-3164

the City of Novi Wetland and Watercourse Protection Ordinance. ECT completed a site inspection on Tuesday, October 10, 2017.

The *Wetland Boundary Determination Application* notes that the gross site acreage is 57.12 acres and the wetland acreage is listed as approximately 5.2 acres. The site consists of disturbed open field areas, woodlands, wetlands and portions of the Seeley Drain (tributary to the Rouge River). The site is bounded by commercial developments to the north, M-5 to the west, and undeveloped properties directly to the south and east. The applicant previously provided a *Draft Surface Water Delineation Report* dated September 2017.

City of Novi Ordinance Requirements

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications.

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).

Wetland Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland and Watercourse map, USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. The site includes several wetland areas that are indicated as City-regulated wetland on the official City of Novi Regulated Wetland and Watercourse Map (see Figure 1).

The focus of the on-site wetland evaluation was to review site conditions in order to determine whether City-regulated wetlands are found on-site. The Mannik & Smith Group, Inc. (MSG) completed a wetland delineation on the site during the first and second weeks of September 2017. Pink wetland boundary flagging was in place at the time of this site inspection. ECT reviewed the flagging and agrees that the wetland boundaries were accurately flagged in the field. It should be noted that the applicant has provided a wetland flagging map that indicates the approximate locations of the wetland flagging/staking on site. Based on the existing vegetation and topography, it is ECT's assessment that the on-site wetlands have been adequately delineated at this time.

Twelve (12) wetland areas (Wetlands A, B, C, D, E, F, G, H, I, J, K and L) were identified. As noted above, portions of Wetlands B, E, F, and G are indicated on the City of Novi Regulated Wetlands Map. The following is a brief description of each of the on-site wetlands:

Wetland A (0.512-acre) is a forested wetland located in the northwestern portion of the property, near Fourteen Mile Road and M-5. The dominant vegetation consisted of American elm (*Ulmus Americana*), green ash (*Fraxinus pennsylvanica*), and common buckthorn (*Rhamnus cathartica*).

Wetland B (1.618 acres) is an emergent and forested wetland located along the eastern side of the property. The dominant vegetation consisted of silver maple (*Acer saccharinum*), reed canary grass (*Phalaris arundinacea*), and narrow-leaved cattail (*Typha angustifolia*).

Wetland C (0.207-acre) is an emergent wetland located near the eastern side of the property. The dominant vegetation consisted of mainly common reed (*Phragmites australis*).

Wetland D (0.323-acre) was located outside of the proposed limits of disturbance.

Wetland E (0.121-acre) is an emergent wetland located along the southern property boundary. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*) and green ash (*Fraxinus pennsylvanica*).

Wetland F (0.444-acre) is an emergent wetland located along the western and southern portions of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*) and common reed (*Phragmites australis*).

Wetland G (1.177 acres) is a scrub-shrub wetland located in the southern section of the of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*) and common buckthorn (*Rhamnus cathartica*).

Wetland H (0.484-acre) is an emergent scrub-shrub wetland located in the southern/central section of the of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*) and green ash (*Fraxinus pennsylvanica*).

Wetland I (0.039-acre) is an emergent and forested wetland located along the central/southern section of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*), common reed (*Phragmites australis*) and common buckthorn (*Rhamnus cathartica*).

Wetland J (0.12-acre) is an emergent and scrub-shrub wetland located in the northern section of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*), common buckthorn (*Rhamnus cathartica*), green ash (*Fraxinus pennsylvanica*), and narrow-leaved cattail (*Typha angustifolia*).

Wetland K (0.087-acre) is an emergent and scrub-shrub wetland located in the northern section of the property. The dominant vegetation consisted of reed canary grass (*Phalaris arundinacea*), common buckthorn (*Rhamnus cathartica*), green ash (*Fraxinus pennsylvanica*), and narrow-leaved cattail (*Typha angustifolia*).

Wetland L (0.064-acre) was located outside of the proposed limits of disturbance.

Wetland Impact Review

As noted above, several areas of wetland have been confirmed on the subject property by the applicant’s wetland consultant. Currently, the Plan indicates three (3) direct impacts to on-site wetlands. The Plan quantifies the areas of the proposed wetland impacts. The total amount of direct (i.e., fill or excavation) impact to on-site wetlands is 0.65-acre. The current impacts to Wetlands H, I, and J are for the purpose of constructing the proposed parking areas and associated grading as shown on the Plan. The proposed wetland impact quantities are unchanged from those shown on the Preliminary Site Plan.

The following table summarizes the proposed wetland impacts as listed on the *Preliminary Grading Plan – South Areas* (PC-09):

Table 1. Proposed Wetland Impacts

Wetland Impact Area	City Regulated?	MDEQ Regulated?	Impact Area (acre)	Estimated Impact Volume (cubic yards)
H	Yes City Regulated /Essential	To Be Determined	21,146 Sq. Ft. (0.49-acre)	Not Indicated
I	Yes City Regulated /Essential	Likely	1,685 Sq. Ft. (0.04-acre)	Not Indicated
J	Yes City Regulated /Essential	To Be Determined	5,285 Sq. Ft. (0.12-acre)	Not Indicated
TOTAL	--	--	28,116 Sq. Ft. (0.65-acre)	Not Indicated

In addition to the proposed wetland impacts, the Plan proposes disturbance to on-site 25-foot wetland buffer areas. The existing area of the 25-foot wetland buffers and the proposed impacts to 25-foot wetland buffers still have not been quantified on the Plan. The applicant shall provide information on subsequent plans that clearly indicates the areas of all onsite wetlands as well as the area of the 25-foot wetland buffers. The plans shall also clearly indicate the area (square feet or acres) of all wetland and wetland buffer impacts (both permanent and temporary, if applicable) and the volume (cubic yards) of all wetland impacts.

It should be noted that the future expansion area of the e-commerce fulfillment lab and the proposed reserve parking do not appear to involve additional impacts to wetland or 25-foot wetland setback areas.

The employee walking trail is however proposed within the 25-foot wetland setback in several areas and appears to clip a corner of Wetland C. Specifically, the trail appears to encroach into the 25-foot wetland setback of Wetlands B, C, and G. As noted above, the applicant should quantify all areas of wetland and wetland buffer impact. The proposed cross-section of the walking trail does not appear to be provided on the plan. The applicant should clarify what type of a trail is proposed (i.e., proposed material and construction technique).

Regulatory Discussion

ECT has evaluated the on-site wetlands and believes that they are all considered to be essential/regulated wetlands by the City of Novi as they meet one or more of the essentiality criteria (i.e., functions and values) outlined in the City of Novi Wetland and Watercourse Protection Ordinance (flood and storm control, wildlife habitat, etc., as listed above). As noted, the wetlands appear to accurately flagged in the field and appear to be generally indicated accurately on the Plan and the *Surface Water Delineation Map* provided by The Mannik & Smith Group, Inc (Figure 2, attached). It appears as though a City of Novi Non-Minor Use Wetland Permit would be required for the proposed impacts as the total wetland impacts appear to be greater than 10,000 square feet and/or 300 cubic yards [i.e., threshold for City of Novi Non-Residential (i.e., non-single-family residence) Minor Wetland Permits]. 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.

The Michigan Department of Environmental Quality (MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. Specifically, 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.

It is the applicant's responsibility to contact MDEQ in order to confirm the regulatory authority with respect to the on-site wetland areas. The *Draft Surface Water Delineation Report* notes that Wetland K would be regulated by the MDEQ as it is greater than five (5) acres in size. The applicant also notes that due to the presence of natural and artificial surface waters located on and around the site that can affect the regulatory status of each wetland, and the ambiguity in the MDEQ Part 301 (Inland Lakes and Streams) and part 303

(Wetlands) guidelines, The Mannik Smith Group (MSG) is not going to assume the regulatory status of the other wetlands on site until a field review by MDEQ is completed. In the *Preliminary Site Plan Submittal Disposition of Review Comments* letter dated November 14, 2017, Mannik & Smith notes that a Joint Permit Application for wetland permit from MDEQ will be submitted to the MDEQ early in the Final Site Plan preparation stage. The applicant's engineer continues to state in a Disposition of Comments letter dated January 22, 2018 that a Joint Permit Application will be submitted to the MDEQ in the Final Site Plan preparation stage.

The applicant is urged to minimize impacts to on-site wetlands and wetland setbacks to the greatest extent practicable. The City regulates wetland buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

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

Wetland Mitigation

It should be noted that in those cases where an activity results in the impact to wetland areas of 0.25-acre or greater that are deemed essential under City of Novi Ordinance subsection 12-174(b) mitigation shall be required. The applicant shall submit a mitigation plan which provides for the establishment of replacement wetlands at a ratio of 1.5:1 for emergent/scrub-shrub wetland types and 2:1 for forested wetlands, if impacts meet or exceed the 0.25-acre threshold. The MDEQ's threshold for the requirement of wetland mitigation is 0.3-acre of wetland impacts.

In the *Preliminary Site Plan Submittal Disposition of Review Comments* letter dated November 14, 2017, Mannik & Smith notes that all disturbed wetlands will be mitigated on site and an area of proposed wetland mitigation has been identified on the Grading Plan. Additional details for grading, planting and maintenance of this wetland will be provided in future submittals. *The Preliminary Grading Plan – South Area* (PC-09) indicates a total wetland impact of 0.65-acre and a proposed wetland mitigation area of 0.74-acre, located adjacent to (i.e., north of) Wetland G. It should be noted that impacts to emergent and scrub-shrub wetland areas shall be mitigated at a 1.5-to-1 ratio. Impacts to forested wetlands shall be mitigated for at a ratio of 2.0-to-1. The applicant shall review the wetland impact quantity, type of wetlands being impacted, and the quantity of proposed wetland mitigation area and revise the Plan as necessary.

Wetland Review Comments

The following are repeat comments from our Wetland Review of the Preliminary Site Plan (PSP17-0165) letter dated December 5, 2017. The current status of each comment follows in ***bold italics***. ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. It appears as though a City of Novi *Wetland Non-Minor Use Permit* would be required for any proposed impacts to site wetlands. 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.

This comment still applies. The applicant's engineer notes in a Disposition of Comments letter dated January 22, 2018 that they intend to meet all the requirements for issuance of the City Wetland Permit and Wetland Buffer Authorization at the time of Final Site Plan submittal.

2. 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 impact. 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.

This comment still applies. The applicant's engineer notes that a Joint Permit Application will be submitted to the MDEQ in the Final Site Plan preparation stage.

3. The applicant shall provide information on subsequent plans that clearly indicates the areas of all onsite wetlands as well as the area of the 25-foot wetland buffers. The plans shall also clearly indicate the area (square feet or acres) of all wetland and wetland buffer impacts (both permanent and temporary, if applicable) and the volume (cubic yards) of all wetland impacts.

This comment still applies. The Plan needs to be updated to include the areas of the existing 25-foot wetland buffers, the proposed areas of impact to the 25-foot wetland buffers and the proposed volume (cubic yards) of all wetland impacts. This information is required prior to issuance of the City of Novi Wetland Permit.

4. ECT encourages the Applicant to minimize impacts to on-site wetlands and wetland buffers to the greatest extent practicable. Currently, the Plan requires compensatory wetland mitigation. The applicant shall submit a mitigation plan which provides for the establishment of replacement wetlands at a ratio of 1.5:1 for impacts to emergent and/or scrub-shrub wetlands and a ratio of 2:1 for impacts to forested wetland areas. Currently, the Plan appears to be providing wetland mitigation at a ratio of 1.13-to-1. It should be noted that impacts to emergent and scrub-shrub wetland areas shall be mitigated at a 1.5-to-1 ratio. Impacts to forested wetlands shall be mitigated for at a ratio of 2.0-to-1. The applicant shall review the wetland impact quantity, type of wetlands being impacted, and the quantity of proposed wetland mitigation area and revise the Plan as necessary.

This comment still applies. The total quantity of wetland mitigation currently indicated on the Plan (i.e., 0.74-acre) is not adequate. As noted above impacts to emergent/scrub-shrub wetlands shall be mitigated at a 1.5-to-1 ratio and impacts to forested wetlands shall be mitigated for at a ratio of 2.0-to-1. The applicant's engineer notes that additional information on the types of existing wetland and further details on mitigation measures will be submitted on the Final Site Plan.

5. The Applicant should demonstrate that alternative site layouts that would reduce the overall impacts to wetlands and wetland setbacks have been reviewed and considered.

This comment has been addressed. The applicant's engineer has noted that the largest wetland being impacted (Wetland H), is in the middle of the developable area. With other site constraints (sanitary sewer and ITC easements bisecting the site) there is minimal flexibility on the site to maintain the existing wetlands that are being impacted.

6. The Plan should address how any temporary impacts to wetland buffers shall be restored, if applicable. A seed mix consisting of acceptable native plant species shall be indicated on the Plan if necessary. Sod or common grass seed is not acceptable for site restoration within areas of existing wetland or 25-foot wetland buffers. The applicant shall provide information for any proposed seed mixes that will be used to restore any areas of temporary wetland and/or wetland buffer impacts. ECT would like to ensure that the proposed plant/seed material contains native plants as opposed to invasive or threatened plant types.

This comment has been addressed. The applicant's engineer notes that seeding and planting details will be included with the Final Site Plan submittal and will identify a mixture of wetland seed and forbs for all disturbed or mitigated wetlands and buffers. All seed mixtures will consist of native plant materials only.

The employee walking trail is proposed within the 25-foot wetland setback in several areas and appears to clip a corner of Wetland C. Specifically, the trail appears to encroach into the 25-foot wetland setback of Wetlands B, C, and G. As noted above, the applicant should quantify all areas of wetland and wetland buffer impact. The proposed cross-section of the walking trail does not appear to be provided on the plan. The applicant should clarify what type of a trail is proposed (i.e., proposed material and construction technique).

7. It should be noted that the *Surface Water Delineation Report* was previously issued by Mannik Smith Group in Draft form. There appears to be some missing information within the report and several discrepancies related to wetland acreage as well as regulatory status within the report. The applicant should provide a copy of this report to the City once it has been finalized.

This comment still applies. The applicant's engineer notes that the final report will be submitted.

8. 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. 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.

This comment still applies.

Berkshire eSupply (JSP17-0072)
Wetland Review of the Revised Preliminary Site Plan – (PSP18-0010)
February 9, 2018
Page 9 of 17

Recommendation

ECT recommends approval of the Revised Preliminary Site Plan for Wetlands; however, the Applicant should address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland 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
Figure 2 – Surface Water Delineation Map
Site Photos



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.



Figure 2. Surface Water Delineation Map (provided by The Mannik & Smith Group, Inc.).

Site Photos



Photo 1. Looking west at Wetland A in the northwest section of the site (ECT, October 10, 2017).



Photo 2. Looking southeast at Wetland F in the southwest section of the site (ECT, October 10, 2017).



Photo 3. Stormwater inlet (Seeley Drain) located along the western property boundary in the southwest section of the site (ECT, October 10, 2017).



Photo 4. Looking southeast at Wetland G in the southern section of the site (ECT, October 10, 2017).



Photo 5. Looking south at Wetland E in the southern section of the site (ECT, October 10, 2017).



Photo 6. Looking north at Wetland B in the eastern section of the site (ECT, October 10, 2017).



Photo 7. Looking south at Wetland C in the eastern section of the site (ECT, October 10, 2017).



Photo 8. Looking north at Wetland J in the northern section of the site (ECT, October 10, 2017).



Photo 9. Looking north at Wetland K in the northern section of the site (ECT, October 10, 2017).



Photo 10. Looking southwest at Wetland H in the central section of the site (ECT, October 10, 2017).



Photo 11. Looking northeast at Wetland I in the central section of the site (ECT, October 10, 2017).

WOODLANDS REVIEW



ECT No. 170766-0400

February 9, 2018

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

Re: Berkshire eSupply (JSP17-0072)
Woodland Review of the Revised Preliminary Site Plan (PSP18-0010)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised Preliminary Site Plan for the proposed Berkshire eSupply project prepared by Albert Kahn Associates, Inc. and Mannik Smith Group dated January 22, 2018 and stamped "Received" by the City of Novi Community Development Department on January 23, 2018 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37. ECT conducted a woodland evaluation for the property on October 10, 2017.

ECT recommends approval of the Revised Preliminary Site Plan for Woodlands; however, the Applicant should address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland 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 southeast corner of W. Fourteen Mile and M-5 (Haggerty Connector) in Section 1. The Plan proposes the construction of a headquarters building, an e-commerce fulfillment lab, associated parking, utilities, two (2) stormwater detention ponds and an area of on-site wetland mitigation. The Plan also includes an area of future expansion north of the e-commerce fulfillment lab, and an area of reserve parking that would be located just east of the proposed parking area on the east side of the e-commerce fulfillment lab. In addition, the Plan proposes an employee walking trail that meanders throughout the site. A tree survey has been completed for the site.

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*

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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.

On-Site Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on October 10, 2017. ECT's in-office review of available materials included the City of Novi Regulated Woodland map and other available mapping. A good portion of the subject property does contain area mapped as City-regulated woodland on the official City of Novi Regulated Wetland and Watercourse Map (see Figure 1). The area included within the project's limits of disturbance contains a mix of vegetation types including shrubby, somewhat-disturbed, open field character as well as tree stands and understory. An ITC electrical corridor runs north/south through the subject property.

An existing tree survey has been completed for the site and is included as Sheet PC-10 (*Preliminary Woodland Plan – North Area*) and Sheet PC-11 (*Preliminary Woodland Plan – South Area*). The Plan also includes an existing tree list (Sheet PC-12, *Preliminary Woodland Table*) that identifies tree tag numbers, diameter-at-breast-height (DBH), common name, condition, removal status and required replacement tree quantity for trees proposed for removal for all surveyed trees.

The surveyed trees have been marked with aluminum tree tags allowing ECT to compare the tree diameters reported on the *Preliminary Woodland Plan* to the existing tree diameters in the field. ECT found that the Plan appears to accurately depict the location, species composition and the size of the existing trees. ECT took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The highest quality woodlands on site are found in and around the forested wetland area on the northeast, central and southern sides of the project site. In general, the on-site trees include black walnut (*Juglans nigra*), sugar maple (*Acer saccharum*), shellbark hickory (*Carya laciniosa*), box elder (*Acer negundo*), cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), and several other species.

In terms of habitat quality and diversity of tree species, the overall subject site consists of fair to good quality trees. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested area located on the subject site is considered to be of fair to good quality. As noted above, several areas of the site are mapped as Regulated Woodland on the City of Novi's Regulated Woodland Map. Although not specifically summarized, there are a significant number of trees to be removed for the proposed development.

Proposed Woodland Impacts and Replacements

The Applicant has noted the following woodland impacts associated with the Plan. Based on the information provided on *the Preliminary Woodland Table*.

- Total Surveyed Trees: 673
- Total Trees Removed: 399 (59% of total surveyed)
- Total Woodland Replacements Required: 599

A significant number of trees are proposed for removal for the proposed site construction. This includes a cluster of trees on the western side of the site including Tree #'s 736 through 774, etc. It is unclear why Trees # 740 through #745 are being removed as they appear to be within the area mapped as Wetland F/Seeley Drain. The purpose of the removal of this group of trees shall be clarified by the applicant. The applicant is urged to preserve as many of the existing trees as practical and incorporate them in to the site development concept. Perhaps the existing tree locations can be provided on the Grading Plans in order to provide additional clarity.

In the *Preliminary Site Plan Submittal Disposition of Review Comments* letter dated November 14, 2017, Mannik & Smith notes that the areas to receive proposed Woodland Replacement tree plantings will be identified in the Final Site Plan submittal and that it is doubtful that the site contains the necessary space to plant the entire quantity of Woodland Replacement Trees. It is likely that the developer will provide payment to the City of Novi Tree Fund for all credits that cannot be planted on-site.

City of Novi Woodland Review Standards, Woodland Permit Requirements & Proposed Impacts
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”.

The City of Novi regulates all trees 8-inches diameter-at-breast-height (DBH) and greater that are located within the areas delineated as regulated woodlands on the City-Regulated Woodlands Map. The City also regulates any individual tree greater than or equal to 36-inches DBH, irrespective of whether such tree is within a regulated woodland. Proposed woodland impacts will require a Woodland Permit and the regulated trees shall be relocated or replaced by the permit grantee.

It should be noted that the Plan proposes a total of 399 tree removals requiring 599 Woodland Replacement credits. It is not clear from the preliminary landscaping and planting plans what tree material is being proposed as Woodland Replacement material. It is assumed that the “rt” designation of ‘restoration tree’ are proposed on-site Woodland Replacement Trees. This should be clarified on the Plan.

The applicant shall review the City of Novi Woodland Tree Replacement Chart (attached) in order to ensure that any on-site Woodland Replacement Trees provided are acceptable to the City. The applicant shall review and revise the landscape and/or planting plans to list the quantities and species of Woodland Replacement Trees in table-form (i.e., indicate which trees are being proposed as Woodland Replacement trees.

It should be noted that the area of Landbank Parking is located within City-regulated woodland (per City Regulated Woodland Map). ECT does not support the clearing of the area intended for landbank parking until it is needed. The majority of this area includes existing, regulated trees ranging from 8-inch diameter-at-breast-height (DBH) to 12" DBH.

With regard to the area of proposed landbank parking:

- The applicant shall quantify the tree removals associated with the landbank parking separately from the other proposed woodland impacts and indicate the proposed impacts and associated required Woodland Replacements on the site plan;
- It appears as if the *Preliminary Woodland Plans* (Sheets PC-10 and PC-11) and the *Preliminary Woodland Table* (PC-12) need to be updated to include all trees 8-inch DBH located within the limits of disturbance for the potential landbank parking area (i.e., update the tree survey).

As noted, the Plan includes a proposed employee walking trail that meanders throughout the site. The applicant does not appear to have included/quantified all tree removals that are required to construct the proposed trail. This information shall be added to the Plan.

Woodland Comments

Please consider the following comments when submitting future site development plan submittals. For the most part, the applicant has not addressed the comments from our Woodland Review of the Preliminary Site Plan (PSP17-0165) letter dated December 5, 2017:

1. A significant number of trees are proposed for removal for the proposed site construction. This includes a cluster of trees on the western side of the site including Tree #'s 736 through 774, etc. It is unclear why Trees # 740 through #745 are being removed as they appear to be within the area mapped as Wetland F/Seeley Drain. The purpose of the removal of this group of trees shall be clarified by the applicant. The applicant is urged to preserve as many of the existing trees as practical and incorporate them in to the site development concept. Perhaps the existing tree locations can be provided on the Grading Plans in order to provide additional clarity.
2. The Plan does not currently appear to indicate the sizes, species and locations of the proposed on-site Woodland Replacement Trees. The Plan should clearly indicate the locations, sizes, species and quantities of all woodland replacement trees to be planted. 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).

It is assumed that the "rt" designation of 'restoration tree' are proposed on-site Woodland Replacement Trees. This should be clarified on the Plan.

- The applicant should clearly indicate on the Plan if existing trees are proposed for removal. The Applicant shall report the number of trees that are proposed to be removed within the following categories and indicate how many Woodland Replacement are required for each removed tree:

Replacement Tree Requirements

Removed Tree D.B.H. (In Inches)	Ratio Replacement/ Removed Tree
8 < 11	1
>11 < 20	2
> 20 < 29	3
> 30	4

- It should be noted that when a proposed tree to be removed has multiple trunks, each multi-stemmed tree's caliper inch diameter shall be totaled and then divided by 8 to determine the required number of Woodland Replacement trees. The result shall be rounded up to determine the number of replacement credits required. For example, a multi-stemmed tree with 10", 12" and 13" trunks (10+12+13=34 divided by 8 = 4.25. Therefore, rounding to the next full number, five (5) replacement credits would be required.

For example, Tree No. 587 appears to be listed on the Plan as a 2-stem black walnut tree with 10-inch diameter stems. The Preliminary Woodland Table notes that one (1) Woodland Replacement credit is required for this removal. This tree will require three (3) Woodland Replacement credits, as noted above. The applicant shall review and revise the Plan, as necessary.

- It should be note that the area of Landbank Parking is located within City-regulated woodland (per City Regulated Woodland Map). ECT does not support the clearing of the area intended for landbank parking until it is needed. The majority of this area includes existing, regulated trees ranging from 8-inch diameter-at-breast-height (DBH) to 12" DBH.

With regard to the area of proposed landbank parking:

- o The applicant shall quantify the tree removals associated with the landbank parking separately from the other proposed woodland impacts and indicate the proposed impacts and associated required Woodland Replacements on the site plan;
 - o It appears as if the *Preliminary Woodland Plans* (Sheets PC-10 and PC-11) and the *Preliminary Woodland Table* (PC-12) need to be updated to include all trees 8-inch DBH located within the limits of disturbance for the potential landbank parking area (i.e., update the tree survey).
- As noted, the Plan includes a proposed employee walking trail that meanders throughout the site. The applicant does not appear to have included/quantified all tree removals that are required to construct the proposed trail. This information shall be added to the Plan.
 - The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of remaining woodland and woodland

replacement trees. The applicant shall demonstrate that the all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. 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 credit value of \$400. The Plan shall clearly indicate the types, sizes, quantities and locations of all proposed Woodland Replacement trees.
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*.

Recommendation

ECT recommends approval of the Revised Preliminary Site Plan for Woodlands; however, the Applicant should address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland 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

Berkshire eSupply (JSP17-0072)
Woodland Review of the Revised Preliminary Site Plan (PSP18-0010)
February 9, 2018
Page 7 of 10

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

Site Photos



Photo 1. The surveyed trees were marked with aluminum tree tags allowing ECT to compare the tree diameters reported on the *Preliminary Woodland Table* to the existing tree diameters in the field. Tree #741 (16" red oak along the Seely Drain on the west side of the site) to be removed (ECT, October 10, 2017).



Photo 2. Are of regulated woodland located in the northeast section of the site (ECT, October 10, 2017).

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

TRAFFIC REVIEW



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

Project name:
JSP17-0072 Berkshire eSupply Revised
Preliminary Traffic Review

From:
AECOM

Date:
February 23, 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: Berkshire eSupply Revised Preliminary Traffic Review

The revised 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.

In addition to the comments below, the applicant should provide the City with written support and approval of the driveway design from the Road Commission for Oakland County. The applicant should also provide information in writing from the RCOC in regards to the future considerations for any future 14 Mile Road improvements such as a traffic signal or widening.

GENERAL COMMENTS

1. The applicant, Berkshire eSupply, is proposing an order fulfillment lab and a headquarters office building at the southeast corner of 14 Mile Road and M-5. The fulfillment lab and office building are proposed at a building footprint of 169,640 and 11,410 square feet, respectively.
2. The existing zoning is OST (Office Service Technology). The applicant has not proposed to rezone the land for the development.
3. 14 Mile Road is under the jurisdiction of the Road Commission for Oakland County (RCOC).
4. The City's 2016 official land use map indicates plans for Cabot Drive to extend to 14 Mile Road. Since the applicant is restricting the future accessibility of Cabot Drive to 14 Mile Road, the applicant could consider developing an alternative design for the completion of Cabot Drive. The applicant could consider the following options:
 - a. Extend Cabot Drive to Haggerty Road
 - i. Although this method provides increased accessibility and mobility for Cabot Drive traffic, it may produce unfavorable results along Haggerty Road near the intersection of 14 Mile Road and Haggerty Road.
 - b. Provide a cul-de-sac at the termination of Cabot Drive
 - i. A cul-de-sac would restrict access to the northern extents of Cabot Drive. Vehicles would then use McKenzie Drive or 13 Mile Road for access.
5. Summary of traffic-related waivers/variances:
 - a. There are not any traffic-related waivers or variances requested by the applicant at this time.

TRAFFIC IMPACTS

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

ITE Code: 150 (Warehousing) and 714 (Corporate Headquarters Building)

Development-specific Quantity: 169,490 square feet (land use 150), 225 employees (land use 714)

Zoning Change: N/A

Trip Generation Summary					
	City of Novi Threshold	Warehousing Estimated Trips	Headquarters Estimated Trips	Total Trips	Above Threshold?
AM Peak-Hour, Peak-Direction Trips	100	23	84	107	Yes
PM Peak-Hour, Peak-Direction Trips	100	24	68	92	No
Daily (One-Directional) Trips	750	313	704	1017	Yes

2. The applicant has submitted a Traffic Impact Study (TIS) with the first preliminary site plan submittal. The TIS was reviewed by AECOM on November 14, 2017. However, due to missing information with the first submitted TIS, a revised TIS was also submitted on December 5, 2017. The revised TIS was reviewed by AECOM on December 8th, 2017.
3. The TIS recommendations are summarized in AECOM's review letter dated December 8, 2017. It should be noted that an agreement should be reached between RCOG, the City of Novi, and the developer to determine who is responsible for any required actions.
4. It should be noted that even though the study recommends a signal at the intersection of the site driveway and Loop Road, the applicant is proposing a right-in/right-out only driveway in replacement of a signal. The applicant has submitted a revised impact study for additional review. Comments will be provided under a separate review letter.

EXTERNAL SITE ACCESS AND OPERATIONS

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

1. The applicant has proposed a single site access point by means of a divided driveway on 14 Mile road directly across from Loop Road.
 - a. The driveway is generally in compliance with City standards. However, the following items require an administrative variance:
 - i. The use of 35 foot entering and exiting turning radii in lieu of the 20 foot standard radii.
 - ii. The use of a 60 foot length median island in lieu of the 35 foot standard length.

2. The applicant has provided a turnaround area on approach to the gate. The turnaround area is 27 feet wide which is expected to be wide enough to accommodate a typical passenger vehicle. The applicant should verify that trucks are able to utilize the turnaround area or provide a narrative detailing the expected use of the turnaround by trucks.
3. The applicant has provided an entering right turn lane and exiting taper that are in compliance with City standards.
4. The applicant has extended the outside eastbound through lane along the north side of the site.
5. The applicant is required to indicate the available amount of sight distance on the plans in accordance with Figure XIII-E in the City's Code of Ordinances. For the proposed site driveway, 510 feet of sight distance is required in both directions. The applicant has indicated in their response letter that sight distance is available to M-5 to the west and to Haggerty to the east; however, this note should be added to the site plan.
6. The applicant has provided driveway spacing dimensions that are in compliance with City standards. It is also expected that the proposed traffic signal will produce enough gaps to adequately allow turns out of nearby driveways.
7. The applicant has proposed an emergency access pathway to the west of the proposed main site entrance. The applicant should provide additional details pertaining to the use of the proposed emergency access pathway.
 - a. The proposed emergency access path width includes a 10 foot concrete walk and five feet of grass pavers on each side of the walk, producing a total width of 20 feet.
 - b. The applicant has proposed 10 foot radii for the emergency access driveway at 14 Mile Road which is in compliance with City standards.
 - c. The applicant has provided an emergency access gate for an emergency access driveway. An emergency access gate detail should be included in future submittals in order to check for compliance with City standards. Please reference Figure VIII-K for required dimensions and standards.
 - d. The applicant should include a walk that bypasses the proposed gate and connects the proposed 10 foot walk to the 14 Mile Road sidewalk for purposes of providing an ADA compliant walk.

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 truck turning patterns throughout the development showing truck accessibility.
 - i. There are general concerns related to the operation of two-way traffic throughout the perimeter of the parking lot given the indicated truck turning patterns.
 - ii. The applicant should also indicate turning patterns into and out of the fulfillment lab driveways.
 - b. Note that fire typically requires a 50' outside and 30' inside radius. The applicant should consider indicating fire accessibility routes to the west side of the site in addition to the provided truck accessibility routes.
 - c. The applicant should provide the square footage of the shipping and receiving area to verify that the area is larger than the required 360 square feet. The applicant should also indicate a loading zone for the headquarters building which is also required to be 360 square feet.
 - d. The applicant should propose a turnaround area for the proposed overhead door on the south side of the headquarters building.
 - e. The applicant has proposed a trash compactor within the fulfillment lab near the southeast corner of the warehouse at the truck dock. There will not be any external trash collection.
 - f. The applicant should increase the turning radii of the northwest corner of the parking landscaping located directly east of the northernmost fulfillment lab driveway to 25 feet.
2. Parking Facilities
 - a. Based on City Ordinances, the applicant is required to provide a parking space for each 700 square feet of usable floor area for the fulfillment center and one parking space for each 222 square feet gross leasable floor area for buildings up to 100,000 square feet for the headquarters building (office use). The applicant is proposing a total of 18,380 square feet of gross leasable office space totaling a required 83 parking spaces for office use. The warehouse (193,230 square feet of usable floor area) requires 276 spaces. The total

- required parking spaces throughout the site equals 359 parking spaces. The applicant should revise the numbers in the plan to reflect the numbers indicated above.
- b. The applicant has indicated a total of 285 parking spaces and 74 land banked parking spaces, which is 20.6% of the required parking spaces.
 - c. The applicant has indicated 20'x10' standard parking spaces throughout the development, which exceed City standards. In order to provide additional parking spaces and/or maneuvering lanes for trucks, the parking space dimensions could be reduced as follows:
 - i. Standard parking spaces may be reduced to a nine foot width.
 - ii. Standard parking spaces may be reduced to a 19 foot length when abutting a six inch curb or reduced further to 17' when abutting a four inch curb and an unobstructed two foot overhang is provided.
 - iii. The applicant could free up an additional area by reducing the parking space dimensions to 19'x9' or to 17'x9'. Reducing the parking space dimensions is strongly recommended as it would could increase availability for additional parking spaces, decrease the number of land banked parking spaces and also could provide additional land for truck access while maintaining two-way traffic operations.
 - d. The applicant is required to provide seven accessible parking spaces based on 285 non-land banked parking spaces. Two of the accessible parking spaces are required to be van-accessible. The applicant has indicated eight accessible parking spaces and is required to provide an additional accessible parking space. It should be noted that if land banked parking is ever constructed an additional accessible parking space will be required to provide a total of eight accessible parking spaces.
 - e. The applicant is required to provide dimensions on the plans specific to the accessible parking spaces and aisles and identify which spaces are intended to be van-accessible.
 - f. The applicant needs to consider relocating accessible parking spaces to be located closer to the headquarters building entrance.
 - g. The applicant should provide detailed dimensions for parking peninsulas and end islands including internal and external radii, offset from adjacent parking space (end islands only), and width. The applicant should reference Section 5.3.2 and Section 5.3.12 in the City's Zoning Ordinance for the required parking dimensions detailed above.
 - i. The City requires parking end islands to be three feet shorter than the adjacent parking space per Section 5.3.12.
 - h. All curbs are required to be six inches based on the proposed parking dimensions. There are conflicting notes and details (Note 24 – Layout and Paving Notes on PC-01 and curb detail on PC-13). The applicant would require a City Council variance for the use of four inch curbs.
 - i. The applicant is required to provide 15 bicycle parking spaces. The landscape plans only indicate four bicycle parking spaces. The applicant is required to provide 11 additional bicycle parking spaces.
 - j. In addition to providing additional bicycle parking the applicant should provide a bicycle parking layout detail in compliance with the standards outline in Section 5.16.6 of the City's Code of Ordinances.
3. Sidewalk Requirements
- a. The applicant has generally indicated an eight foot sidewalk throughout the site which exceeds City requirements.
 - b. The applicant has provided a six foot wide sidewalk along 14 Mile Road which is in compliance with City requirements.
 - c. The applicant should provide sidewalk and sidewalk ramps on the proposed median island at the driveway.
 - d. The applicant should indicate the location and details for any proposed sidewalk ramps and detectable warning surfaces throughout the site as applicable.
 - e. Grading details and/or layouts should be provided in the vicinity of accessible parking spaces.
 - f. The applicant has proposed an employee walking trail on the east side of the site. The applicant has indicated on their response letter that the trail will be ten feet wide; however, this information should also be provided on the plans.

4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and striping.
 - a. The applicant should provide a sign quantity table to include the MMUTCD designation, size, and quantity of any proposed signs. The signs should be labeled throughout the site plan accordingly.
 - b. All signing and striping details, locations, and requirements below are required to be indicated on the final site plan.
 - c. Update Layout and Paving Note 8 on PC-01 to indicate the Michigan MUTCD.
 - d. The proposed accessible parking sign is not the standard R7-8 sign. The applicant should update the detail to reflect the actual R7-8 sign.
 - e. The applicant has proposed 24"x24" R1-1 (stop) signs. The applicant should increase the size of the R1-1 sign to 30"x30".
 - f. The applicant should indicate that all signs are seven feet high from the base of the sign to the top of grade.
 - g. The applicant should indicate that single signs with nominal dimensions of 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post. Multiple signs and/or signs with nominal dimension greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post as dictated by the weight of the proposed signs.
 - h. The applicant should indicate that all traffic control signs make use of the FHWA standard alphabet series font.
 - i. The applicant should indicate that all traffic control signs are comprised of high intensity prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
 - j. The applicant should provide details related to the width and color of parking striping.
 - i. Standard parking space markings shall be white in color and four inches wide
 - ii. Accessible parking space markings shall be blue in color and four inches wide
 - iii. A white marking shall be adjacent to a blue marking in areas where standard parking spaces are located adjacent to accessible parking spaces
 - k. The applicant should provide a detail for the international symbol for accessibility.

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

Sincerely,

AECOM



Sterling Frazier, PE
Reviewer, Traffic/ITS Engineer



Maureen N. Peters, PE
Senior Traffic/ITS Engineer

FAÇADE REVIEW



February 13, 2018

Façade Review Status Summary:
Approved, Section 9 Waiver recommended.

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

Re: **FACADE ORDINANCE – Façade Ordinance**
Berkshire eSupply, JSP17-0072, PSP18-0010
 Façade Region: 1, Zoning District: RA

Dear Ms. McBeth;

The following is the Façade Review for the above referenced project based on the revised drawings prepared by Albert Kahn Associates, Inc., dated 1/22/17. This project is subject to the Façade Ordinance Section 5.15. The percentages of materials proposed for each façade are as shown in the tables below. Materials in non-compliance are highlighted in bold.

Headquarters Building	West (Front)	East	North	South	Ordinance Maximum (Minimum)
Brick	0%	0%	0%	0%	100% (30% Minimum)
Limestone (hammered and smooth)	66%	57%	66%	54%	50%
Spandral Glass	34%	38%	34%	46%	50%
Flat Metal Panel	0%	5%	0%	0%	50%

Headquarters Building - As shown above the minimum percentage of Brick is not provided and the percentage of Limestone exceeds the maximum amount allowed by the Ordinance on all facades. A Section 9 Waiver would be required for these deviations.

Fulfillment Center	West (Front)	East	North	South	Ordinance Maximum (Minimum)
Brick	23%	70%	30%	48%	100% (30% Minimum)
Terracotta Tile (Shildan, Alphatron®, standard texture, orange color)	30%	0%	1%	2%	50%
Flat Metal Panels	47%	30%	69%	50%	50%

Fulfillment Center - As shown above the minimum percentage of Brick is not provided on the west facade and the percentage of Flat Metal Panels exceeds the maximum amount allowed by the Ordinance on the north facade. The Terracotta Tile as manufactured by Shildan, Alphatron® is a natural fired clay product and is therefore considered as Brick with respect to the Façade Ordinance. The west façade is therefore in technical compliance with respect to Brick. A Section 9 Waiver would be required for the overage of Flat Metal Panels on the north façade.

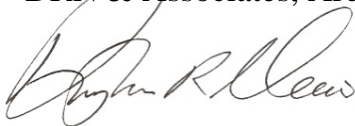
Recommendation - The applicant has proposed using natural Limestone in lieu of Brick on the Headquarters Building. We believe that the Limestone as used in this design will provide visual and physical properties equivalent to Brick and is therefore consistent with the intent and purpose of the Façade Ordinance. The overage of Flat Metal Panels on the north elevation of the Fulfillments Center represents a comparatively small deviation on a façade that is otherwise delineated by other high quality materials. ***A Section 9 Waiver is therefore recommended for the overage of Limestone and underage of Brick on the Headquarters Building and the overage of Flat Metal Panels on the north façade of the Fulfillment Center.***

Notes to the Applicant:

1. All roof top equipment must be screened from view from all vantage points both on and off-site using materials compliant with Section 5.15.
2. Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant’s responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department’s Online Inspection Portal with the following link. Please click on “Click here to Request an Inspection” under “Contractors”, then click “Façade”.

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

Sincerely,
DRN & Associates, Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



January 29, 2018

TO: Barbara McBeth- City Planner
Sri Ravali Komaragiri- Plan Review Center
Hannah Smith- Plan Review Center

RE: Berkshire eSupply

CITY COUNCIL

Mayor

Bob Gatt

Mayor Pro Tem

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Erick W. Zinser

Assistant Chief of Police

Scott R. Baetens

PSP# 17-0156 – 10/27/17

PSP# 17-0165 – 11/16/17

PSP# 18-0010 – 01/29/18

Project Description:

Build 169,475 S.Q. F.T. building in Section 1 off of Fourteen Mile and Haggerty Rds.

Comments:

1. **CORRECTED 11/16** - Water-main sizes not on plans for review.
2. **Hydrant spacing is 300' from fire hydrant to fire hydrant. (Not as the crow flies) (Novi City Ordinance 11-68(F)(1)C.)**
3. **CORRECTED 11/16** - MUST provide a secondary access to the property. (IFC 503.1.2).
4. **CORRECTED 11/16** - Secondary access road MUST be 20' wide and clearance of 14' height. (IFC 503.2.1).
5. **FDC MUST be with-in 100' from a fire hydrant. (Novi City Ordinance 15-17 912.2.3). Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the code official. (International Fire Code). Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object for a minimum of 3 feet (914 mm). (International Fire Code)**
6. **All roads MUST meet City of Novi weight requirements of 35 ton. (Novi City Ordinance 15-17 503.2.3).**
7. **Secondary emergency gate access detail should be included on prints. Construction must follow Novi City ordinance 99-124.11**
8. **A hazardous chemical survey is required to be submitted to the Planning & Community Development Department for distribution to the Fire Department at the time any Preliminary Site Plan is submitted for review and approval. Definitions of**

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

cityofnovi.org

chemical types can be obtained from the Fire Department at (248) 735-5674. (See Attachment B)

9. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200
10. An unobstructed outside turning radius of 50 feet minimum and an inside turning radius of 30 feet maximum are to be provided on the south west corner turn around.

Recommendation:

Pending the above conditions will be met, the Fire Department has no objections at this time.

Sincerely,

A handwritten signature in black ink, appearing to read 'KSP', with a long horizontal stroke extending to the right.

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

cc: file

APPLICANT RESPONSE LETTER



February 23, 2018

Ms. Sri Ravali Komaragiri
City of Novi Plan Review Office
45175 Ten Mile Road
Novi, Michigan 48375

Re: Berkshire-eSupply
HQ Building & Fulfillment Center Project
Novi, Michigan
Kahn Project No. 3375

Dear Ms. Komaragiri,

Thank you for your plan review comments plan review dated January 22, 2018. In response, please be informed that we intend to proceed to the February 28, 2018 Planning Commission Meeting with the plans as submitted and do intend to comply with the plan review comments as part of final engineering documents.

Regarding the landscaping commentary, the design team agrees to comply and revise the planting requirements for the 70% coverage at the detention pond areas in our final site plan submission as noted in the plan review commentary. The team agrees to comply and revise the foundation planting plan requirements as noted in the landscape review in our final site plan submission. With regards to the landscape waivers, the team will follow the reviewer's recommendations and address the required landscape waivers as noted and supported by the reviewer at the time of final site plan submission.

Please note the attached civil engineering and traffic response comments have been responded by our collaborative partner, the Mannik & Smith Group (MSG) who is providing civil engineering traffic study services for this project. Additionally, one revised Site Plan drawing PC-04 is enclosed.

In summary, we are confident that all the engineering review comments have been responded to as noted herein. However, should there be any items outstanding, we will address to the City's satisfaction at the time of the final site plan submittal. Please continue with the agreed upon schedule. We look forward to your continued support of this important project. Thank you.

Very truly yours,

A handwritten signature in blue ink, appearing to read "G. Craig Wood", is written over a blue ink scribble.

G. Craig Wood
Senior Program Manager
Albert Kahn Associates, Inc.

cc: Berkshire-eSupply – C. Elder, C. Fishel
MSG – K. McDevitt
Kahn – A. Cobb, P. Patel, S. White, P. Wroblewski



February 23, 2018

Sri Ravali Komaragiri, Planner
City of Novi
45175 Ten Mile road
Novi, Michigan 48375

Re: Berkshire eSupply – JSP 17-72
Revised Preliminary Site Plan Submittal
Disposition of Review Comments

Dear Ms. Komaragiri:

Below please find our disposition of how we addressed the review comments from the City on our Revised Preliminary Site Plan resubmittal dated 01/22/18, and questions and concerns related to the Berkshire eSupply Preliminary Site Plan Submittal. Some of the comments were more related to information that will be added to the plans for the Final Site Plan submittal or construction documents. In these cases, we provide some additional information to identify how we are planning to meet the City Code of Ordinances and Standards.

In order to mitigate the concerns of the Traffic Consultant and planning department, the Applicant, Berkshire eSupply (BeS) has agreed with the City that a signal is necessary at the intersection of 14 Mile Road and Loop Road/Proposed site access drive. BeS will be investigating funding opportunities with Oakland County Economic Development, the Road Commission for Oakland County and the Michigan Department of Transportation.

Design of the signal will begin once funding questions have been worked out and the Road Commission is able to fully vet the Site Plan and Traffic Study. In addition, there may be necessary driveway revisions that occur due to County comments. We are in the process of amending the Traffic Study to adjust simulations for the proposed build condition and to address comments from AECOM in regards to both our original and amended traffic studies.

If you have any questions in regards to the Site Plan, Traffic Study or the Disposition of Comments below, please feel free to contact me at (734) 395-0598.

Best Regards,

A handwritten signature in purple ink that reads "Kevin C. McDevitt".

Kevin C. McDevitt, PE
Project Manager

Att: Disposition of Comments



TECHNICAL SKILL.
CREATIVE SPIRIT.

A1390015.Revised Prelim Site Plan Submittal.LOT.Docx

Engineering Review – City of Novi Engineering Department

We concur with all comments and offer additional information for clarity on the following:

Water Main Comments

14. We do not anticipate providing water main along street frontages. As BeS will be constructing the 24" City water main under their parking lot to the east of the Fulfillment Center and constructing a 12" public water main up to and tapping into Commerce Township's system on the north side of 14 Mile Road; and as Commerce Township's water main system is already continuous along the north side of 14 Mile Road; and as the City has stated that they do not anticipate directly providing service to properties to the east of BeS site; BeS does not anticipate providing additional water main along the street frontages.
21. Building lead sizes will be provided on the final site plan upon further coordination with building mechanical designers. Each lead will have its own unique shut-off valve.

Paving and Grading

46. Curb will be revised to 6 inches tall except where sidewalk is adjacent to head in parking, where the curb will be 4 inches tall.
47. Additional details for future proposed dimensions and grading for the land banked parking will be provided on the Final Site Plan to provide sufficient detail to prove concept and conformance to the City of Novi's code of ordinances.

Off Site Easements

50. The applicant does not anticipate the need for any off-site utility easements.

Wetland Review – ECT

General Responses

50. All disturbed wetlands will be mitigated on site. An area has been identified on the Grading Plan that will be utilized for this. It is recognized that the wetland mitigation area identified on the preliminary site plan is likely not large enough in and of itself to provide enough area to fully mitigate the proposed impacts. Additional area as needed will be added to meet the ordinance and MDEQ requirements. These additional areas will likely be to the south and east of the proposed detention pond area, as there would be minimal impact to regulated woodland trees in these areas, these areas are adjacent to existing wetlands which will increase the likelihood of establishing a vibrant wetland, and these areas are also outside of the existing ITC easement. Additional details for grading, planting and maintenance of this wetland will be provided in future submittals.
51. The Applicant, Landscape Architect and Engineer will revise amenities such as the walking trail and storm water management areas to minimize impacts to both the existing wetlands and the wetland buffers. Specifically, the trail will be modified to stay completely out of existing wetland areas and minimize areas where it is located within wetland buffers.
52. A Soil Erosion Control Plan (temporary) and a Storm Water Management Plan (permanent) will be submitted on the Final Site Plan and Stamping Set submittals.
53. No existing wetlands would be impacted should landbank parking be constructed in the area identified on the site plan.

Woodland Review – ECT

The number of required replacement trees has been identified on the woodland plan. Future proposed woodlot will be identified in the Final Site Plan submittal. However, it is highly doubtful that space on site can be found to plant the entire number of required trees so it is likely that the developer will provide payment to the City's tree fund as provided for in the Woodland Protection ordinance.

Though no existing wetlands would be impacted should landbank parking be constructed, Woodland would be impacted should the landbank parking area need to be constructed. At this time individual trees have not been tagged outside of the area of current proposed construction. However, it is noted that potentially between 30 and 40 regulated trees of various sizes may be impacted should the landbank parking be constructed.

ECT requested the number of tree removals required to construct the proposed trail. The answer to this question is zero. The trail is intended to meander through the trees and will maintain at a minimum 10 feet separation from existing tree trunks. The trail identified on the site plan is intended to be a loose depiction of the proposed trail route which will be adjusted in the field to avoid any impact to regulated trees. Notes to this affect will be added to the Final Site Plan, in addition to making adjustments to the plans to eliminate any conflicts.

Traffic Review – AECOM

The Applicant is now proposing installation of a Traffic Signal as was identified in the Traffic Study as being warranted by background conditions. In addition, the proposal to provide a right-in/right-out only drive has been abandoned and the City's standard divided driveway dimensions, standard entering right turn lane and taper, and standard exiting taper are now being proposed for the site (see the attached revised site plan exhibit). Applicant will investigate funding options for the signal with RCOC, MDOT and Economic Development. Applicant believes that the cost of a signal should not be Applicant's responsibility alone due to the previously existing warrants.

External Site Access and Operations.

4. A note and/or dimensions will be added to the Final Site Plan identifying the provided sight distance. As the sign and all vertical appurtenances are set back significantly from the sight line for exiting traffic, there are no sight constraints to dimension at the entrance. A vehicle waiting to turn at the approximate stopping location would have a clear view of both the M-5 intersection to the west and the Haggerty Road intersection to the east.
5. The driveway has been placed directly across from Loop Road intentionally to line up with the major traffic generator and reduce conflicts. In addition, as the Applicant is proposing the construction of a signal at this intersection, we believe that the spacing requirements for driveways along should not apply. Instead, spacing requirements for drives near intersections should apply. All dimensions to existing drives have been identified on the revised site plan exhibit.
6. Emergency drive has been revised as follows:
 - b. Drive radii at 14 Mile have been reduced to 10' to match City ordinance.
 - d. In order to maintain security on site, the emergency drive is not intended to be utilized for pedestrian access; no provision for a pedestrian bypass is being proposed. Pedestrian access is being provided via the 8' wide sidewalk proposed on the west side of the main entry.

Internal Site Operations

1. General Traffic Flow
 - a. Turning templates have been identified for circulation throughout on the overall site plan. Additional turning templates for each overhead drive will be provided on Final Site Plan. The individual fulfillment lab driveways are only intended for use by small delivery (Single Unit) vehicles.
 - b. The parking area north of the HQ building has been enlarged to allow for Fire Truck turning. Please see the attached revised site plan exhibits. In addition, a 'T' turnaround has been identified east of the HQ building on the southerly access drive.
 - c. Concur. Will be provided loading areas square footages on the Final Site Plan.
 - d. The door to the south of the HQ building is for accessing an overhead door on the south side of the HQ building which will be used for moving equipment to be put on display in the cafeteria area there. It is anticipated that, at most, a 40' flatbed truck would be used for this. A turning area has been identified on the north side of the drive east of the HQ building. In addition, the pedestrian

bridge over the plaza area is being designed with over 14 feet of clearance to allow for emergency vehicle access between the parking areas.

- f. Concur. At plotting, this was not revised but will be revised on the Final Site Plan Submittal.
2. Parking areas
 - e. All barrier free parking spaces will have 8' access aisles and will therefore be van accessible. This will be identified on the Final Site Plan.
 - h. All curb height is proposed to be 4" tall.
 - g. Detailed dimensions for all parking areas will be identified on the Final Site Plan.
 3. Sidewalk Requirements
 - c. & d. Details for ADA ramps will be provided on the Final Site Plan and Stamping Set.
 4. Signing and pavement marking
Details for signing and pavement marking will be identified on the final site plan and construction documents and will meet the MMUTCD and/or City of Novi requirements.

Fire Department Review

2. We have placed hydrants 300' or less as hose would lay (for instance, on the northeast corner of the facility, the distance was measured north along the main drive and then west along the drive towards M-5). We will revise hydrant spacing as necessary but please clarify the requirement.
5. FDC is located on the northeast corner of the Fulfillment Center, facing 14 Mile Road and on the north side of the HQ building facing 14 Mile Road. Both are within 100' of a hydrant.
6. Concur.
7. Details for the emergency gate will be included on the Final Site Plan submittal.
8. To be provided by the Applicant.
9. Details for security gates will be included on the Final Site Plan submittal.
10. Concur. All site drive and turn around areas will be designed utilizing AutoTurn for fire truck access.



MEMO

To: Sterling Frazier, PE - AECOM
From: Steve Diebol, PE, PTOE
CC: Maureen Peters, Chuck Keller, Kevin McDevitt, Chuck Elder
Date: February 22, 2018

Project #: A1390015
Re: Berkshire eSupply Traffic Impact Study Addendum – Response to Review Comments

The purpose of this memo is to document MSG responses to AECOM comments on the Traffic Impact Study Addendum submittal. Only comments relevant to the traffic analysis are considered below. Responses to comments pertaining to driveway configurations, site plan elements, or other non-Traffic Impact Study items are provided separately.

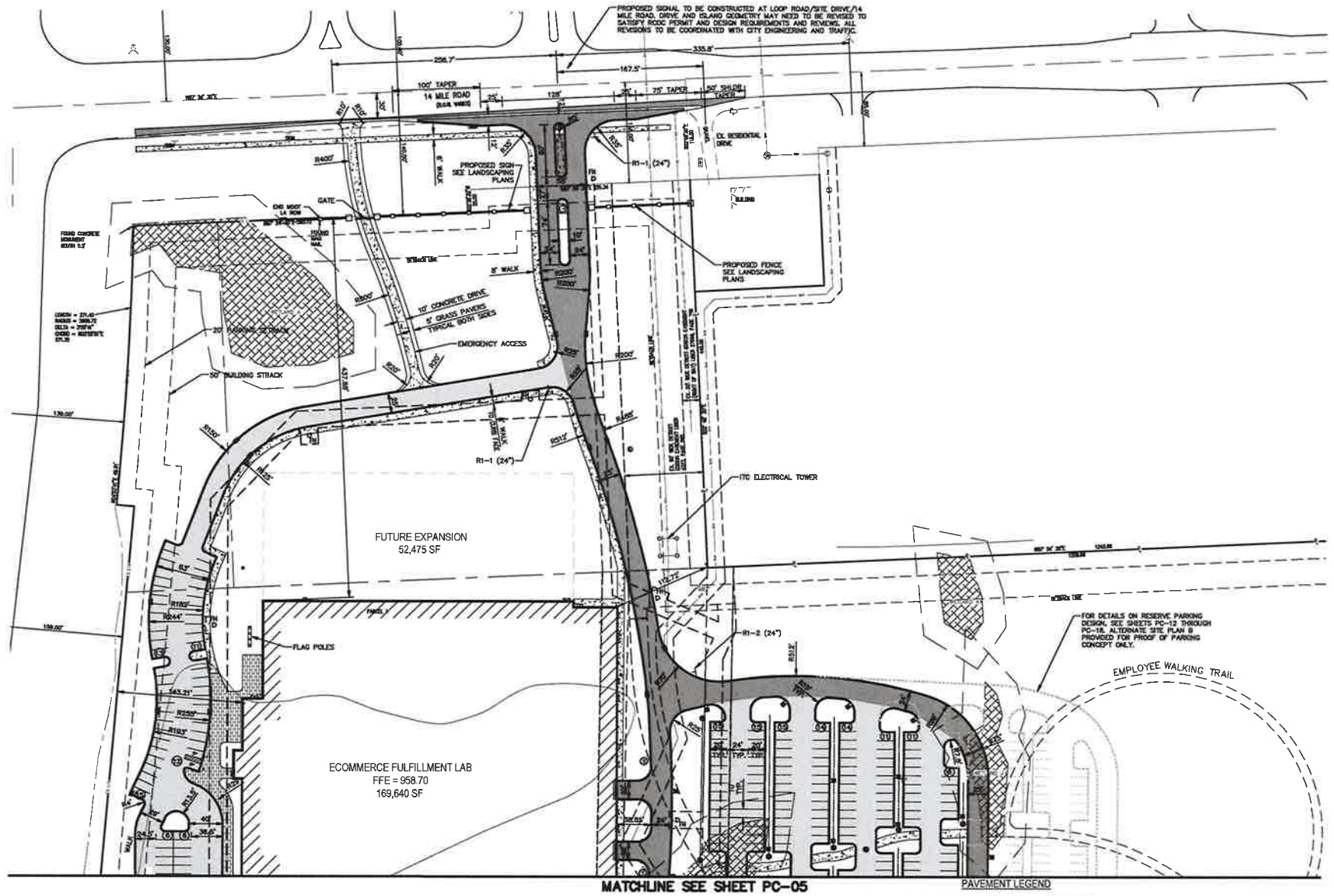
AECOM's comments requiring responses on the TIS Addendum dated 2/20/18 are shown in black text below, with MSG responses in **green text**. It should be noted that the developer no longer intends to restrict movements at the site driveway on 14 Mile Road, therefore future updates to the full TIS will be completed and the Addendum analysis for the alternate access scenario will be discarded. The following comments pertain to analyses that are necessary to carry over into the revised TIS:

7. The applicant should indicate why the 2018 No Build conditions (without improvements) has changed from the original TIS to the addendum. 2018 No Build conditions without improvements should not have changed from the original report. However, each intersection has different delay values and LOS. **Upon review of the Synchro files from the original study it was discovered that speed limits were not entered in the models. When optimizing the signal timings (to account for SCATS operations) the offsets are based on travel time between intersections which is based on the speed limits. When the speed limits were entered the timings/offsets were reset. This resulted in minor changes to the LOS and delay values in the table but did not influence the outcomes/recommendations of the study.**
8. In order to adequately assess the impact of the site traffic on the existing roadway network, the TIS must show consistent No Build conditions. **No Build conditions reflecting actual speed limits and optimized timings/offsets will be presented in the revised TIS.**
9. Traffic signal timings within the Synchro reports are not consistent from the original TIS Build condition Synchro Reports to the TIS Addendum Build Condition Synchro reports. It is understood that site-traffic was re-distributed to account for the right-in/right-out driveway. The applicant should indicate why changes were made to green times from the original report. If the model was re-optimized due to the existing SCATS traffic signal system that should be stated in the report. **Yes, the signals were re-optimized. This statement will be added in the revised TIS.**
10. Since the existing conditions delay and LOS have changed from the original report, the statements made in the TIS addendum to reflect the new existing conditions should be revised to match the original existing conditions of the report. **Noted, the TIS will be updated.**

A revised TIS will be prepared to update the No Build conditions as described above and to evaluate the final proposed geometry for the site access point shared intersection with Loop Road at 14 Mile Road. If you have any questions feel free to contact me.

A handwritten signature in blue ink that reads "Steve Diebol".

Steve Diebol, PE, PTOE
Project Engineer



PROPOSED SIGNAL TO BE CONSTRUCTED AT LOOP ROAD/SITE DRIVE/14 MILE ROAD. DRIVE AND ISLAND GEOMETRY MAY NEED TO BE REVISED TO SATISFY ROAD FORMIT AND DESIGN REQUIREMENTS AND ROWING. ALL REVISIONS TO BE COORDINATED WITH CITY ENGINEERING AND TRAFFIC.

FOR DETAILS ON RESERVE PARKING DESIGN, SEE SHEETS PC-12 THROUGH PC-16. ALTERNATE SITE PLAN B PROVIDED FOR PROOF OF PARKING CONCEPT ONLY.

PAVEMENT LEGEND

	LIGHT DUTY FLEXIBLE PAVEMENT (SEE DETAIL SHEET)		CONCRETE PAVEMENT (SEE DETAIL SHEET)		SINGLE UNIT PAVERS (SEE LANDSCAPE PLANS FOR DETAILS)
	HEAVY DUTY FLEXIBLE PAVEMENT (SEE DETAIL SHEET)		CONCRETE SIDEWALK (SEE DETAIL SHEET)		



PRELIMINARY SITE PLAN - NORTH AREA PC-04

BERKSHIRE eSUPPLY

BERKSHIRE e-SUPPLY HQ & FULFILLMENT CENTER
NOVI, MI