



## OROTEX BUILDING ADDITION JSP17-85

### OROTEX BUILDING ADDITION JSP 17-85

Approval at the request of Orotex for Preliminary Site Plan, Landbank Parking and Storm Water Management plan approval. The subject property (22475 Venture Drive) contains 5.96 acres and is located in Section 26, on the west side of Venture Drive and north of Nine Mile Road, in the I-1, Light Industrial District. The applicant is proposing a 60,000 square foot addition to the north end of the existing building with associated site improvements.

### Required Action

Approve the Preliminary Site Plan, Landbank Parking and Storm Water Management plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	1-12-18	<ul style="list-style-type: none"> <li>• <b>Approval of up to 15 landbank parking spaces</b></li> <li>• Items to be addressed by the applicant prior to Electronic Stamping Set approval</li> </ul>
Engineering	Approval recommended	1-10-18	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Landscaping	Approval recommended	1-12-18	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Woodlands	Not Applicable		
Wetlands	Not Applicable		
Traffic	Approval recommended	1-9-18	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Façade	Approval recommended	1-2-18	<ul style="list-style-type: none"> <li>• Addition is in full compliance with Façade ordinance</li> </ul>
Fire	Approval recommended	12-22-17	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>

## **MOTION SHEET**

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

In the matter of Orotex Building Addition JSP17-85, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. Approval of up to 15 landbank parking spaces (155 required, 142 provided, 15 land banked), due to Planning Commissions finding below, which is hereby granted;
  - 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 landbanked until such time as that area is constructed for such parking;
  - v. The requested parking landbanking will not create traffic or circulation problems on or off site; and
  - vi. The requested parking landbanking will be consistent with the public health, safety and welfare of the City and the purposes of the Zoning Ordinance;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- c. *(additional conditions here if any)*

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

**- AND -**

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

In the matter of Orotex Building Addition JSP17-85, 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)*

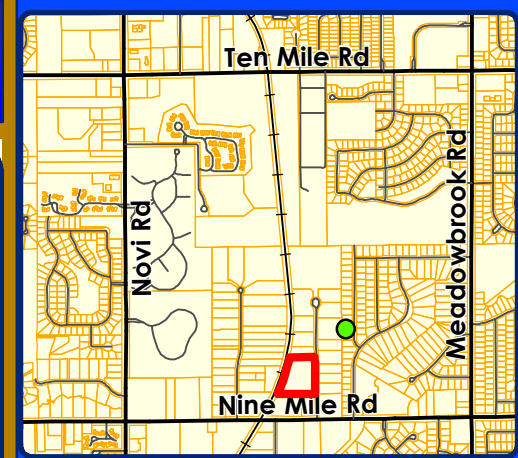
*(This motion is made because the plan is otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*


MAPS  
Location  
Zoning  
Future Land Use  
Natural Features

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# OROTEX ADDITION: JSP 17-85

Location

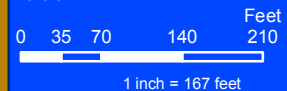


**LEGEND**  
 Subject Property



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

Map Author: Lindsay Bell  
Date: 01/31/18  
Project: OROTEX ADDITION\_JSP17-85  
Version #: 1

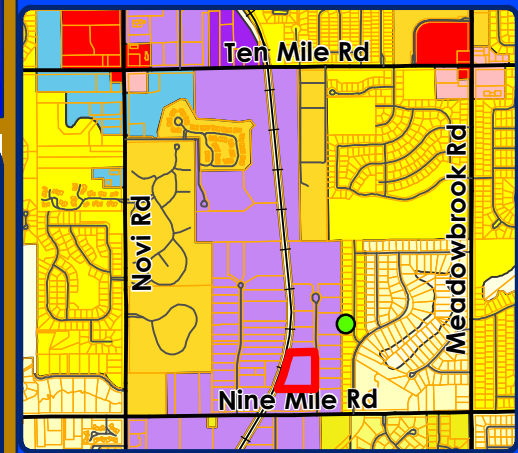


**MAP INTERPRETATION NOTICE**

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.

# OROTEX ADDITION: JSP 17-85

## Zoning



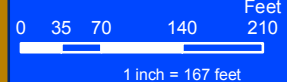
### LEGEND

- R-1: One-Family Residential District
- R-2: One-Family Residential
- R-3: One-Family Residential District
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
- B-1: Local Business District
- B-3: General Business District
- I-1: Light Industrial District
- I-2: General Industrial District
- OS-1: Office Service District



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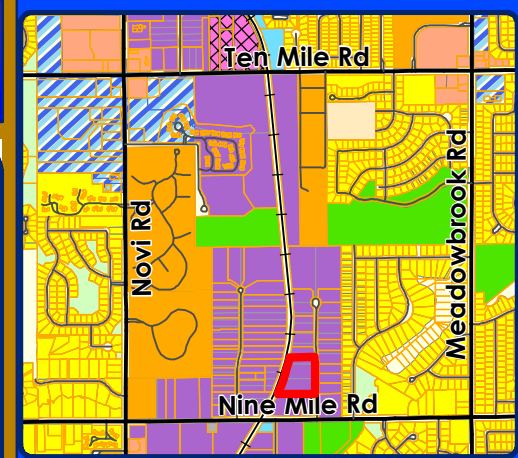


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# OROTEX ADDITION: JSP 17-85

Future Land Use




- LEGEND**
- FUTURE LAND USE
- Single Family
  - Multiple Family
  - Community Office
  - Industrial RD Tech
  - Heavy Industrial
  - Local Commercial
  - Educational Facility
  - Public
  - Public Park
  - Private Park
  - Cemetery
- Subject Property

**City of Novi**  
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0 35 70 140 210 Feet  
1 inch = 167 feet



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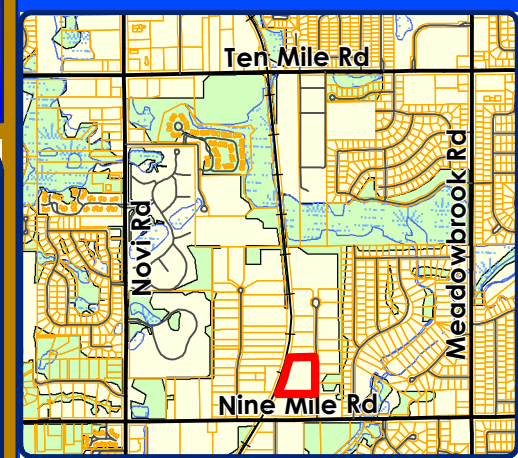
# OROTEX ADDITION: JSP 17-85

## Natural Features





**Subject  
Property**

Venture-Dr



### LEGEND

-  WETLANDS
-  WOODLANDS
-  Subject Property



## City of Novi

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City Hall / Civic Center  
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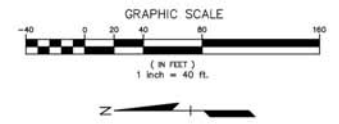
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**SITE PLAN**

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





# Orotex Corporation

Novi, MI

January, 2018

PEA, Inc.  
 2430 Rochester Ct.  
 Troy, MI 48065  
 t: 248.688.9100  
 f: 248.688.1044  
 www.peainc.com



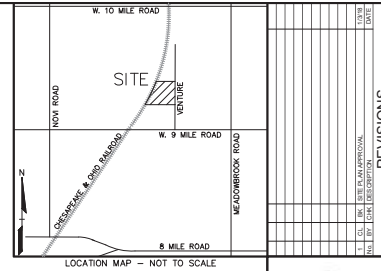
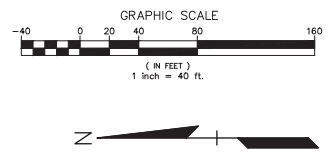
**LEGAL DESCRIPTION**  
(Per Access Ordinance)  
PARCEL ID 22-26-378-005  
Land In the City of Novi, Oakland County, Michigan, described as follows:  
T1N, R8E, SEC. 26 HIGHWAY CORPORATE PARK LOTS 3 & 4, ALSO SLY 98.23 FT OF LOT 5, 9-12-92 PER 001, 002 & 401-007

**FLOODPLAIN NOTE:**  
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE "C", AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26125C0629F, DATED SEPTEMBER 29, 2006.

**SIGN LEGEND:**  
30"x30" "STOP" SIGN (R1-1) [ ] 1 EA.  
"BARRIER FREE PARKING" SIGN (R7-8) [ ] 3 EA.  
"VAN ACCESSIBLE" SIGN (R7-8P) [ ] 1 EA.  
"NO PARKING FIRE LANE" SIGN (LR7-22) [ ] 6 EA.

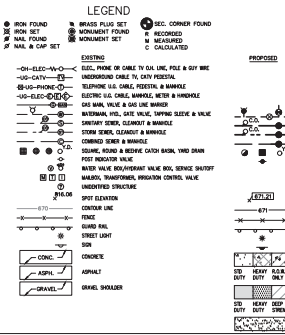
**SIDEWALK RAMP LEGEND:**  
SIDEWALK RAMP "TYPE R"  
REFER TO LATEST A.D.T. R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

**GENERAL NOTES:**  
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.  
1. ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.  
2. REFER TO SHEET SP-5.0 FOR ON-SITE PAVING DETAILS.  
3. NO "PARKING-FIRE LANE" SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.  
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.  
5. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.  
6. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.  
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

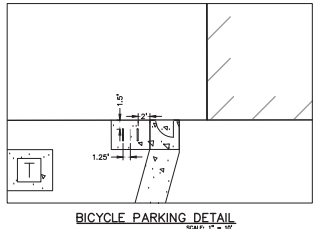
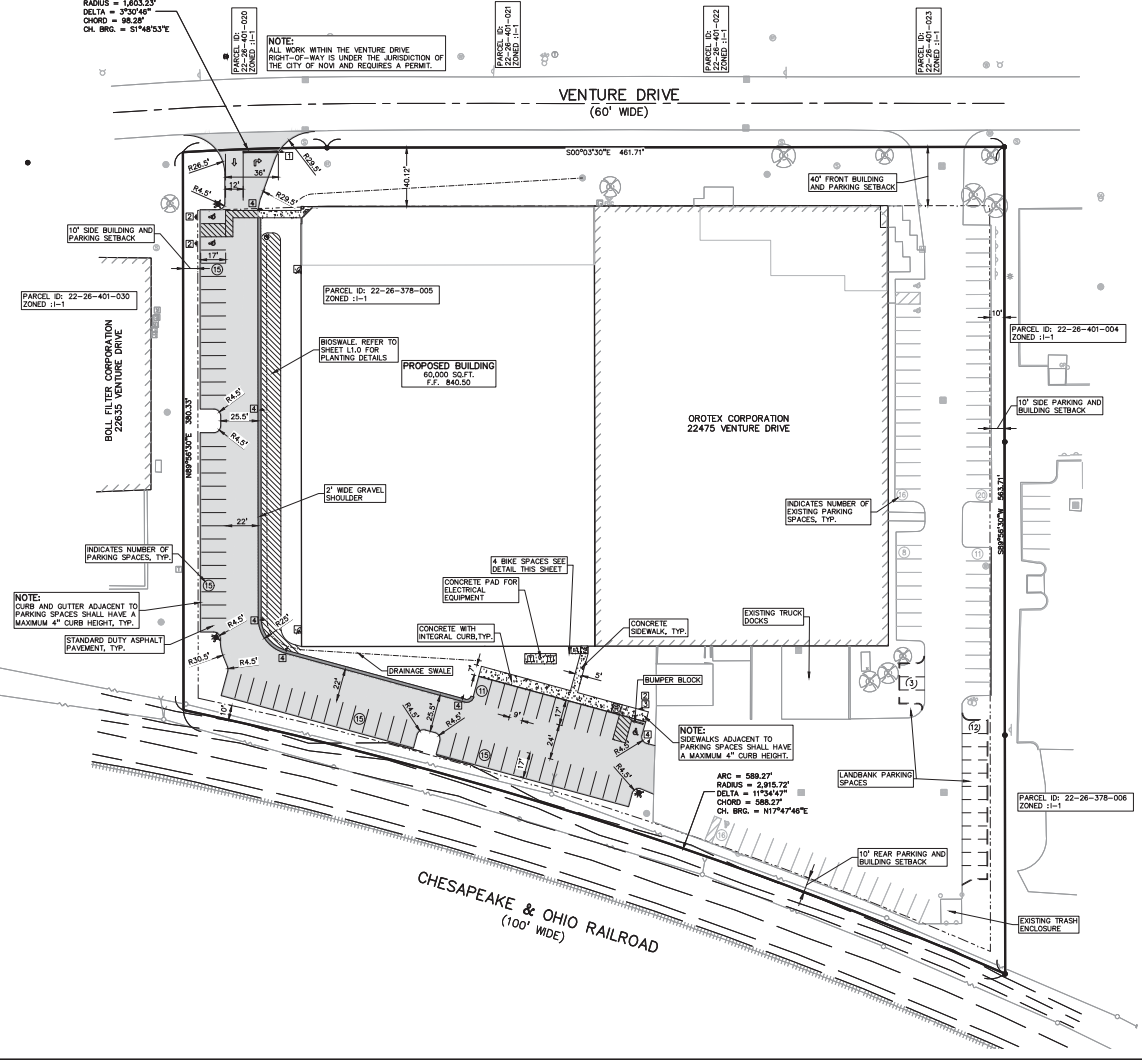


**BENCHMARKS**  
(GPS DERIVED - NAVD88)  
BM #300  
ARROW ON A HYDRANT LOCATED APPROX. 110' SOUTHWEST OF THE SOUTHWEST BUILDING CORNER OF #22870 VENTURE, AND APPROX. 30' EAST OF THE CENTERLINE OF VENTURE DRIVE.  
ELEV. = 849.10  
BM #301  
ARROW ON A HYDRANT LOCATED APPROX. 100' NORTHEAST OF THE NORTHEAST BUILDING CORNER OF #22475 VENTURE DRIVE AND APPROX. 30' EAST OF THE CENTERLINE OF VENTURE DRIVE.  
ELEV. = 845.45  
BM #302  
ARROW ON A HYDRANT LOCATED APPROX. 110' EAST OF THE SOUTHWEST BUILDING CORNER OF #22475 VENTURE DRIVE AND APPROX. 30' EAST OF THE CENTERLINE OF VENTURE DRIVE.  
ELEV. = 839.78

RADIUS = 1,603.23'  
DELTA = 3°30'46"  
CHORD = 98.35'  
CH. BRG. = S1°48'53"E  
NOTE: ALL WORK WITHIN THE VENTURE DRIVE RIGHT-OF-WAY IS UNDER THE JURISDICTION OF THE CITY OF NOVI AND REQUIRES A PERMIT.



**CAUTION!**  
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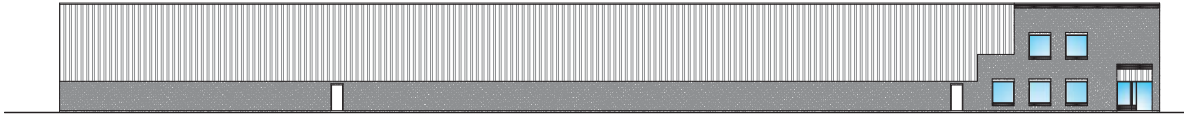
**SITE DATA TABLE:**  
SITE AREA: 5.94 ACRES±  
CURRENT ZONING: I-1  
PARCEL ID: 22-26-378-005  
**BUILDING INFORMATION:**  
MAXIMUM ALLOWABLE BUILDING HEIGHT = 40 FEET  
PROPOSED BUILDING HEIGHT = 29 FEET 4 INCHES  
**BUILDING FOOTPRINT AREA:**  
EXISTING ORTEX FACILITY: 60,000 S.F.  
PROPOSED BUILDING ADDITION: 60,000 S.F.  
TOTAL: 120,000 S.F.  
**SETBACK REQUIREMENTS:**  
I-1 ZONING DISTRICT:  
FRONT SETBACK (EAST): 40 FEET MINIMUM REQUIRED 40.00' PROVIDED  
SIDE SETBACK (NORTH): 10 FEET REQUIRED 10.00' PROVIDED  
SIDE SETBACK (SOUTH): 10 FEET REQUIRED 10.00' PROVIDED  
REAR PARKING SETBACK (WEST): 10 FEET REQUIRED 10.00' PROVIDED

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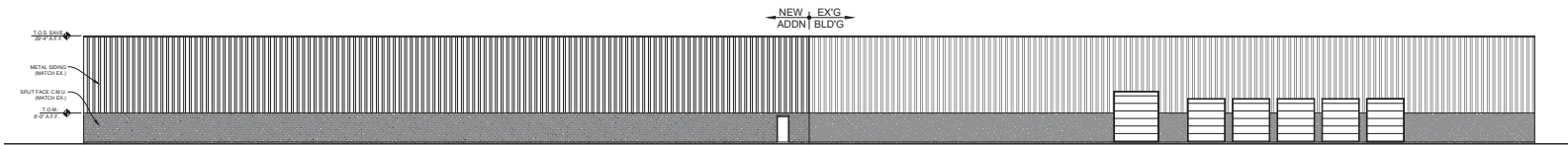
**PEA, Inc.**  
2430 Rochester Ct. Ste 100  
Troy, MI 48063-1872  
T: 248.889.9090  
F: 248.889.1044  
www.peainc.com

**J.B. DONALDSON COMPANY**  
FARMINGTON HILLS, MICHIGAN 48331  
**PRELIMINARY SITE PLAN**  
**ORTEX BUILDING EXPANSION**  
PART OF THE SOUTH MARKET PLACE SECTION, MAIN ROAD  
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN  
D.E.S. BK. 10N. CL. 18R. ZONING DISTRICT: I-1  
P:\Projects\2017\410\410-SP-2.0.dwg

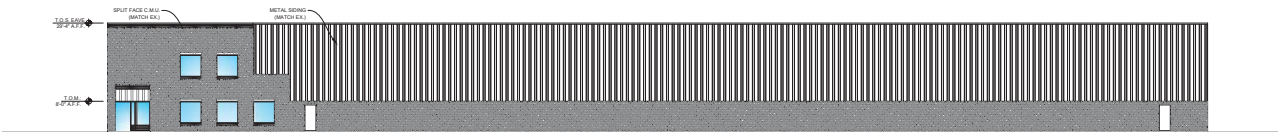
ORIGINAL ISSUE DATE: DECEMBER 15, 2017  
PEA JOB NO. 2017-410  
SCALE: 1"=40'  
DRAWING NUMBER: **SP-2.0**



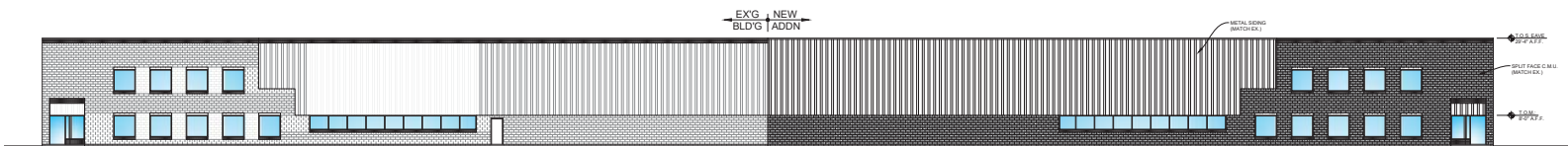
**SOUTH ELEVATION (EXISTING)**  
 SCALE: 1/16" = 1'-0" 4



**WEST ELEVATION**  
 SCALE: 1/16" = 1'-0" 3



**NORTH ELEVATION**  
 SCALE: 1/16" = 1'-0" 2



**EAST ELEVATION**  
 SCALE: 1/16" = 1'-0" 1

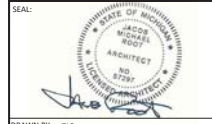
Proposed Addition

OROTEX

22475 Venture Dr.  
 Novi, MI 48375

REV	DATE	ISSUED
12-21-17	REVIEW	
12-14-17	SITE PLAN APPROVAL	

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DRAWN BY: TIG  
 CHECKED BY: VW, JMR  
 IN CHARGE: VW, JMR

SHEET NAME:  
 PRELIMINARY ELEVATIONS

JOB NO: 17-182

SHEET NO: PE-2

**LANDSCAPE CALCULATION:**  
 PER CITY OF NOW DOWING ORDINANCE - ZONED I-1 DISTRICT

**INTERIOR PARKING LOT LANDSCAPE REQUIRED:**  
 A. 5' OF PAVED AREA UNDER 50,000 SF = 26,993 SF x .05 = 1,349.5 SF  
 B. 5' OF ADDITIONAL PAVED AREA OVER 50,000 SF = 0 SF x .05 = 0 SF  
 A+B= 1,349.5 + 0 = 1,349.5 SF OF ISLANDS REQUIRED  
 E. C/200 1,345,200 = 6.7 CANOPY TREES REQUIRED  
 PROVIDED: 1,922 SF OF INTERIOR LANDSCAPE ISLAND AREA  
 7, 3" CAL. DEC. TREES

**VEHICULAR PERIMETER PARKING LOT REQUIRED:** 1 TREE PER 35 LF OF PAVED VEHICULAR PERIMETER  
 805 LF OF PARKING LOT / 35 LF = 23 TREES REQUIRED

**PROVIDED:** 23 - 3" CAL DEC OR 8' EVG. TREES (NOTE: SMALLER ORNAMENTAL AND DECIDUOUS TREES ARE PROPOSED IN AREAS WHERE A MINIMUM 15' DISTANCE CANNOT BE MET BETWEEN A PROPOSED TREE AND OVERHEAD UTILITY LINE)

**FOUNDATION PLANTINGS REQUIRED:** LF OF BUILDING PERIMETER x 8 = REQ. SF BLDG. FDN. PLANTINGS  
 BUILDING ADDITION = 700 LF x 8 = 5,600 SF  
 PROVIDED: BUILDING ADDITION = 5,762 SF FDN. PLANTINGS

**ROW LANDSCAPE SCREENING REQUIRED:** 1 CANOPY DEC. TREE OR LARGE EVG. TREE / 60 LF, 1 SUB CANOPY DEC. TREE / 40 LF  
 (560.31 LF = 36 - 36) / 60 = 8.13 CANOPY TREES  
 (560.31 LF = 36 - 36) / 40 = 12.2 SUB CANOPY TREES  
 PROVIDED: 3 EXISTING CANOPY TREES, 3 EXISTING EVERGREEN TREES, 3 PROPOSED CANOPY TREES, AND 13 PROPOSED SUB CANOPY TREES

**NOTES PER CITY OF NOW:**  
 PLANT MATERIAL SHALL NOT BE PLANTED WITHIN 4' OF PROPERTY LINE.  
 NO TREES SHALL BE PLANTED CLOSER THAN 15' FROM OVERHEAD UTILITY, 10' FROM FIRE HYDRANT, CATCH BASIN OR MANHOLE, 5' FROM UNDERGROUND UTILITIES AND 3' FROM BACK OF CURB.  
 NO TREE TO BE LOCATED IN FRONT OF ANY SIGN OR BLDG. BUILDING ADDRESS. FIELD ADJUST TREES AS NECESSARY.  
 ALL TRANSFORMER AND UTILITY BOXES TO BE SCREENED FOR NOW CITY SETBACK AND IN THE CASE ADDITIONAL BOXES ARE ADDED TO THE SITE AFTER PLAN APPROVAL. SEE LANDSCAPE DETAIL SHI. L-1.1.  
 REPLACEMENT TREES SHALL BE FROM CITY OF NOW'S WOODLAND REPLACEMENT CHART FOR ACCEPTABLE NATIVE REPLACEMENT SPECIES.

**BIOSWALE LANDSCAPE:**  
 ONLY NATIVE SEED MIXES ARE TO BE USED IN BIOSWALE

**DECIDUOUS TREE PLANT LIST:**

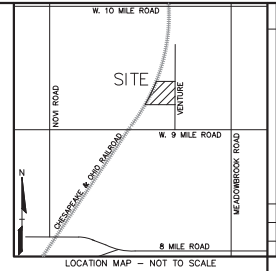
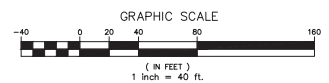
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC COMMENT
10	AAB	Downy Serviceberry	<i>Aamelanchier arborea</i>	8" HL. BAB	Native
2	AB3	Trident Maple	<i>Acer buergerianum</i>	3" Cal. BAB	Non-Native
3	AR3	Red Maple	<i>Acer rubrum</i>	3" Cal. BAB	Native
3	CC8	Eastern Redbud	<i>Cercis canadensis</i>	8" HL. BAB	Native
1	GT3	Skyline Honeylocust	<i>Gleditsia stancheva Skyline™</i>	3" Cal. BAB	Native
4	MP3	Prairiefire Crab	<i>Malva prairifire™</i>	3" Cal. BAB	Non-Native
2	PO3	American Sycamore	<i>Platanus occidentalis</i>	3" Cal. BAB	Native
2	QR3	Red Oak	<i>Quercus rubra</i>	3" Cal. BAB	Native
6	TB3	Boulevard Linden	<i>Tilia americana Boulevard</i>	3" Cal. BAB	Native

**EVERGREEN TREE PLANT LIST:**

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC COMMENT
7	PD8	Black Hills Spruce	<i>Picea glauca Denata™</i>	8" HL. BAB	Native
6	PD8	White Spruce	<i>Picea glauca</i>	8" HL. BAB	Native

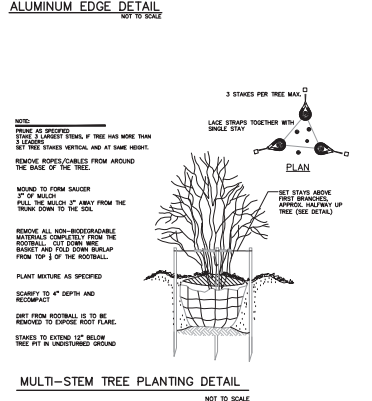
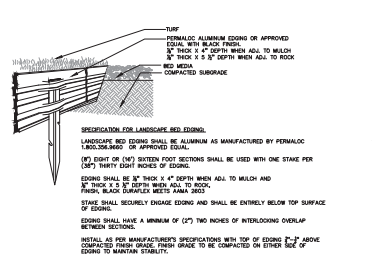
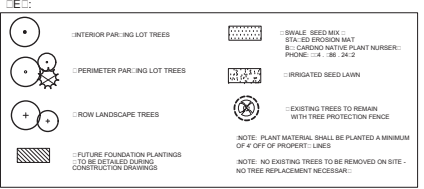
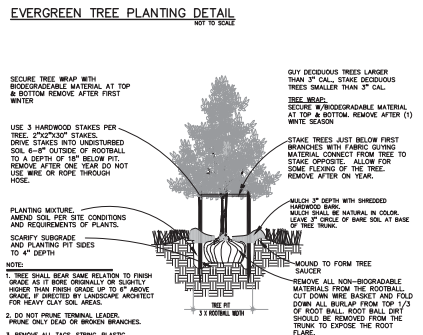
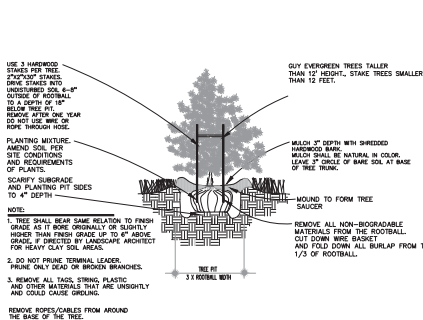
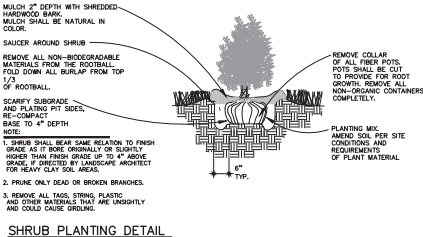
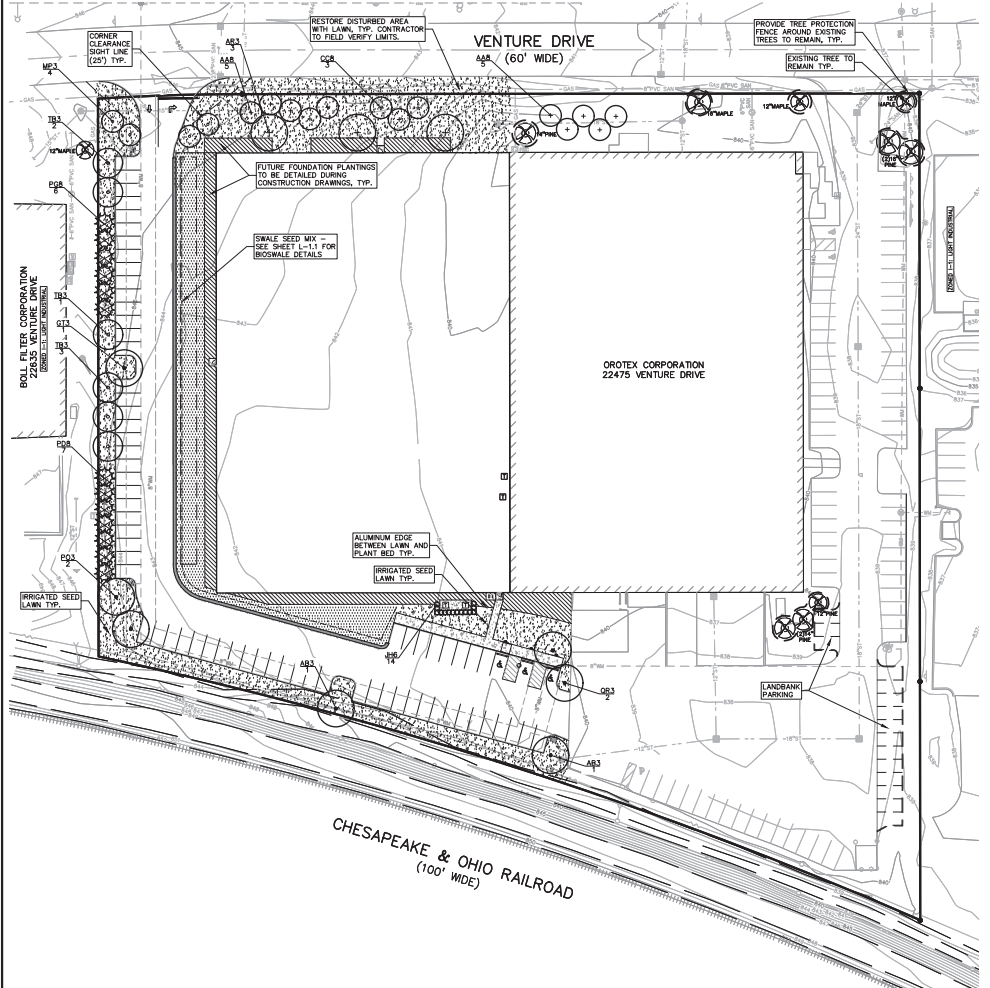
**SHRUB PLANT LIST:**

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC COMMENT
14	JH8	Hate Columar Juniper	<i>Juniperus chinensis Hated Columar™</i>	8" SBB	Non-Native



**REVISIONS**

NO.	DATE	DESCRIPTION



**CAUTION:**  
 THIS PLAN IS A PRELIMINARY DESIGN. IT IS NOT TO BE USED FOR CONSTRUCTION WITHOUT THE APPROVAL OF THE CITY ENGINEER. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CITY ENGINEER'S OFFICE IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON.

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**PEA, INC.**

2433 RIVINGTON CIRCLE SUITE 100  
 TOLSON, MI 48063-3822  
 TEL: 248.689.9090  
 FAX: 248.689.1044

**J.B. DONALDSON COMPANY**  
 FARMINGTON HILLS, MICHIGAN 48331

**PRELIMINARY LANDSCAPE PLAN  
 OROTEX BUILDING EXPANSION**

DATE OF REVIEW: 12/20/14  
 DATE OF PLAN: 12/20/14  
 PROJECT: OROTEX BUILDING EXPANSION  
 CLIENT: CITY OF NOW ON LAND COUNT: MICHIGAN

DES: J.B. DONALDSON  
 DRAWN: J.B. DONALDSON  
 CHECKED: J.B. DONALDSON  
 SCALE: 1" = 40'

ORIGINAL ISSUE DATE: DECEMBER 11, 2011  
 PEA JOB NO. 2014-010  
 DRAWING NUMBER: L-010

## PLANNING REVIEW

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# PLAN REVIEW CENTER REPORT

January 12, 2018

## Planning Review

Orotex Building Addition

JSP 17-85

### Petitioner

JB Donaldson Company

### Review Type

Preliminary Site Plan

### Property Characteristics

<b>Section</b>	26	
<b>Site Location</b>	22475 Venture Drive; North of Nine Mile Road on West side of Venture Drive	
<b>Site School District</b>	Novi Community School District	
<b>Site Zoning</b>	I-1: Light Industrial District	
<b>Adjoining Zoning</b>	North	I-1: Light Industrial District
	East	I-1: Light Industrial District
	West	I-1: Light Industrial District
	South	I-1: Light Industrial District
<b>Current Site Use</b>	Vacant	
<b>Adjoining Uses</b>	North	Light industrial
	East	Light industrial: Vacant
	West	Railroad tracks/Light Industrial: Vacant
	South	Industrial/Office
<b>Site Size</b>	5.94 acres	
<b>Plan Date</b>	December 15, 2017	

### Project Summary

The applicant is proposing a 60,000 +/- square foot addition to the north end of the existing building (60,000 sf) with associated site improvements on the west side of Venture Drive, north of Nine Mile Road, and east of the Chesapeake & Ohio Railroad tracks. The proposed 60,000 sf single-story addition would be used for manufacturing/warehouse space for Orotex, an auto-industry supplier. The 5.96 acre site is planned and zoned for Light Industrial use.

### Recommendation

Approval of the ***Preliminary Site Plan is recommended.*** The plan mostly conforms to the requirements of the Zoning Ordinance, with a few deviations to be addressed in subsequent Site Plan submissions. All reviews recommend approval. **Planning Commission's approval for Preliminary Site Plan, Landbank Parking and Storm Water Management Plan is required.**

### Ordinance Requirements

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

1. Required Parking Calculations:

- Total Existing Parking: 71 spaces
- Total New Parking required for addition: 84 spaces
- Total parking proposed on site: 142 spaces
- **Total Parking required for entire site: 155 spaces**
- **Total parking proposed landbank spaces: 15 spaces**

**Warehouse**

**Option A:** 1 space per every 700 sf usable floor area; For 108,000 sf total parking required: **155 spaces**

108,00 sf includes the warehouse and accessory office spaces within building

**Option B:** 5 spaces + 1 space for every 1700 sf: **90 spaces**

**Option C:** 5 spaces + 1 space for each employee for largest shift (80 employees): **85 spaces**

Typically, Planning Commission may reduce the required parking from Option A using either Option B or Option C (whichever is greater) provided that a surplus area is provided on the site to accommodate the construction of additional parking to fulfill the requirements of Option A. Applicant is proposing more parking than Options B & C, but less than Option A. Landbank parking proposed would bring the site total to 157 spaces, which meets the Option A requirement.

**To grant the approval for landbank parking, the Planning Commission will evaluate (Sec 5.2.14):**

- i. *Whether the applicant has demonstrated through substantial evidence that the specified occupant or building use would require less parking than what would typically be required by the 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 landbanked until such time as that area is constructed for parking;*
  - v. *The requested parking landbanking shall not create traffic or circulation problems on or off site;*
  - vi. *The requested parking landbanking shall be consistent with the public health, safety and welfare of the City and the purposes of this Ordinance.*
2. Plan Review Chart: There are additional minor clarifications requested in the Plan review chart. Please refer to the chart for additional details.
3. Economic Impact Information: **The following information is needed before the Planning Commission meeting:**
- i. Total cost of the proposed construction & site improvements
  - ii. Number of anticipated jobs created (during construction & after building is occupied, if known)
4. Response Letter: **Please provide a response letter addressing all comments and refer to sheet numbers where the change is reflected.**
5. Drive Aisles (Sec 5.3.2): **When adjacent parking spaces are present, drives aisles should be 24 feet. Several locations shown 22 foot drive aisles.**
6. Other Reviews:

- a. Engineering Review: Additional comments to be addressed with Final Site Plan. Engineering recommends approval.
- b. Landscape Review: Landscape recommends approval with comments to be addressed in Final Site Plan Submittal. Refer to review letter and chart for more comments.
- c. Wetlands Review: No impacts to regulated Wetlands are proposed. Wetland Review is not necessary.
- d. Woodlands Review: No impacts to regulated Woodlands are proposed. Woodland Review is not necessary.
- e. Traffic Review: Additional comments to be addressed with Final Site Plan. Traffic recommends approval.
- f. Facade Review: Façade consultant recommends approval. See review letter for details.
- g. Fire Review: Fire recommends approval. Additional comments to be addressed with Final Site Plan.

### **NEXT STEP: Planning Commission Meeting**

This Site Plan is scheduled to go before Planning Commission for consideration on **February 7, 2018 at 7:00 p.m.** Please provide the following **no later than 12:00pm, February 1, 2018** if you wish to keep the schedule.

1. Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters and a request for waivers as you see fit.
3. A color rendering of the Site Plan (Optional to be used for Planning Commission presentation).
4. A sample board of building materials as requested by our Façade Consultant.

### **Final Site Plan Submittal**

After receiving Planning Commission's approval of the Preliminary Site Plan, please follow the [Final Site Plan Checklist](#) and submit for approval:

1. Six copies of Final Site Plan sets addressing all comments from Preliminary review,
2. Response letter addressing ALL the comments from ALL the review letters and **refer to sheet numbers where the change is reflected.**
3. [Final Site Plan Application](#)

### **Electronic Stamping Set Submittal**

After receiving Final Site Plan approval, plans addressing the comments in all of the staff and consultant review letters should be submitted electronically for informal review and approval prior to printing Stamping Sets. A letter from either the applicant or the applicant's representative addressing comments in this and other review letters and associated charts is to be submitted with the electronic stamping set. This letter should address 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.

If required, drafts for all legal documents with a legal transmittal are to be submitted along with stamping sets.

### **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. 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. 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.

**Parcel Split/Combination**

No parcel split or combination is required.

**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](mailto: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 248.347.0484 or [lbell@cityofnovi.org](mailto:lbell@cityofnovi.org).



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Lindsay Bell – Planner



## PLANNING REVIEW CHART

**Review Date:** January 12, 2018  
**Review Type:** Preliminary Site Plan  
**Project Name:** Orotex Building Addition  
**Plan Date:** 12-15-17  
**Prepared by:** Lindsay Bell, Planner  
**E-mail:** [lbell@cityofnovi.org](mailto:lbell@cityofnovi.org) **Phone:** 248.347.0484

**Bold** To be addressed with the final site plan submittal  
**Bold and Underline** Requires Planning Commission and/or City Council Approval  
*Italics* To be noted

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted July 26, 2017)</i>	Industrial Research Development and Technology	No Change	Yes	
<b>Area Study</b>	The site does not fall under any special category	NA	NA	
<b>Zoning</b> <i>(Effective December 25, 2013)</i>	I-1: Light Industrial District	No Change	Yes	
<b>Uses Permitted</b> (Sec 3.1.18.B & C)	Principal Uses Permitted Special Land Uses	60,000 sf addition to existing 60,000 sf building	Yes	<i>Industrial office and warehouse are permitted uses when not abutting residential</i>
<b>Height, bulk, density and area limitations (Sec 3.1.18)</b>				
<b>Frontage on a Public Street.</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	Frontage on Venture Drive	Yes	
<b>Access to Major Thoroughfare</b> <i>(Sec. 5.13)</i>	Vehicular access shall be provided only to an existing or planned major thoroughfare or freeway service drive or on other street not opposite planned or existing single family residential	Access to 9 Mile via Venture Drive is provided; not opposite residential	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit in Ac <i>(Sec 3.6.2.D)</i>	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	5.94 ac	NA	
<b>Minimum Zoning Lot Size</b> for each Unit: Width in Feet			NA	

Item	Required Code	Proposed	Meets Code	Comments
<b>Open Space Area</b>	----	----	----	----
<b>Maximum % of Lot Area Covered</b> (By All Buildings)	(Sec 3.6.2.D)		Yes	
<b>Building Height</b> (Sec. 3.1.18.D)	40 ft.	29' 4"	Yes	
<b>Building Setbacks</b> (Sec 3.1.18.D)				
Front (east)	40 ft.	40 ft.	Yes	
Rear (west)	20 ft.	60 ft.	Yes	
Side (north)	20 ft.	80 ft.	Yes	
Side (south)	20 ft.	77 ft.	Yes	
<b>Parking Setback</b> (Sec 3.1.18.D) & Refer to applicable notes in Sec 3.6.2				
Front (east)	40 ft. (See 3.6.2.E)	40 ft.	Yes	
Rear (west)	10 ft.	10 ft.	Yes	
Side (north)	10 ft.	10 ft.	Yes	
Side (south)	10 ft.	10 ft.	Yes	
<b>Note To District Standards</b> (Sec 3.6.2)				
<b>Exterior Side Yard Abutting a Street</b> (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	No side yard abutting street	NA	
<b>Off-Street Parking in Front Yard</b> (Sec 3.6.2.E)	Off-street parking is allowed in front yard if - the site is a minimum 2 acre site, - does not extend into the minimum required front yard setback of the district, - cannot occupy more than 50% of the area between min. front yard setback & bldg. setback, - must be screened by brick wall or landscaped berm - lighting compatible with surrounding neighborhood	No parking proposed in front yard	Yes	
<b>Off-Street Parking in Side and Rear Yards</b> (Sec 3.6.2.F)	Off-street parking is allowed in side and rear yards if the site does not abut residential. If it does, additional conditions apply.	Not adjacent to residential districts	NA	
<b>Setback from Residential District</b> (Sec 3.6.2.H)	I-1 and I-2 districts, five (5) feet of horizontal setback for each foot of building height, or one-hundred (100) feet, whichever is greater. c. Except when a site or rear yard is separated from a residential district by a railroad	Not abutting a residential district	NA	

Item	Required Code	Proposed	Meets Code	Comments
	right-of-way, the right-of-way may be included as part of the setback requirement.			
<b>Wetland/ Watercourse Setback</b> (Sec 3.6.2.M)	A setback of 25 ft. from wetlands and from high watermark course shall be maintained	No wetlands on site	Yes	
<b>Additional Height</b> (Sec 3.6.2.O)	Additional heights for selected building is allowed based on conditions listed in Sec 3.6.2.O	Applicant not requesting	NA	
<b>Parking setback screening</b> (Sec 3.6.2.P)	Required parking setback area shall be landscaped per Sec 5.5.3.	Parking lot is screened	Yes	<b>See Landscaping comments</b>
<b>Modification of parking setback requirements</b> (Sec 3.6.2.Q)	The Planning Commission may modify parking setback requirements based on conditions listed in Sec 3.6.2.Q	Not requested	NA	
<b>Parking and Loading Requirements</b>				
<b>Number of Parking Spaces</b> Warehouses and wholesale establishments and related accessory offices (Sec.5.2.12.E)  Business offices or professional offices (Sec.5.2.12.D)	Option 1: One (1) space for each seven hundred (700) square feet of usable floor area:  Total Warehouse: 108,000 SF usable space (90% useable) Required Parking: 155 spaces  Option 2: 5 + # of employees in largest shift (85) Total Required: 90 spaces	Total Proposed = <b>142</b> (plus 15 landbank)  157 shown on plan	Yes	<b>Correct the parking numbers shown in the calculations. Show the correct number of spaces on the NE parking bay (14) and the bay closest to the building on the West side (12)</b>
<b>Parking Space Dimensions and Maneuvering Lanes</b> (Sec. 5.3.2)	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives ( <i>"When no parking spaces are present adjacent to a maneuvering lane, the lane width may be reduced to 22 feet...unless the Planning Commission finds that the 24 foot width is warranted for the proposed use."</i> ) - 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	22 ft. drives  9 ft. x 17 ft. perimeter spaces along landscaping and 7' sidewalks	<b>No</b>	<b>Parking spaces are present, therefore drive must be 24 feet</b>  <b>Confirm sidewalks are 7'adjacent to 17' parking spaces by indicating dimensions on plan</b>

Item	Required Code	Proposed	Meets Code	Comments
<b>Parking stall located adjacent to a parking lot entrance</b> (public or private) (Sec. 5.3.13)	Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Minimum distance is maintained	Yes	
<b>Landbank Parking</b> (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			Less than 25% proposed to be landbanked
	- minimum number of spaces required prior to request for land banking: 45 spaces	144 provided	Yes	
	- Alternative layout plan showing land bank parking	Landbanked spaces labeled on site plan	Yes	
	- All areas designated for land banking shall be landscaped open space and may not be used for any other purposes	The current site plan indicates the spaces to be landscaped open space	Yes	<b>Add a note to the plan</b>
	- Planning Commission grants the request based on certain conditions	To be determined		<b><u>The conditions are listed in the review letter</u></b>
	- The owner of the property shall report any proposed change in use or occupancy for further evaluation			<b>Add a note on the plan</b>
	- Landbank spaces may be installed prior to change in use or occupancy, if determined			
<b>Loading Spaces</b> (Sec. 5.4.3)	Loading area in the rear yard, unless abutting residential or interior side yard is adjacent to I, EXPO or EXO district	Existing truck docks located in rear yard	Yes	
<b>Accessory Structures</b>				
<b>Dumpster</b> (Sec 4.19.2.F)	- Located in rear yard - Attached to the building or no closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft, from property line.	Yes Yes, >10 ft. from bldg. Yes, 10 ft. from lot line Yes	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>- Away from Barrier free Spaces</li> <li>- When in use should not cut off or diminish access to parking spaces or service drives</li> </ul>	Yes		
<b>Dumpster Enclosure</b> (Sec. 21-145. (c))	<ul style="list-style-type: none"> <li>- Screened from public view</li> <li>- A wall or fence 1 ft. higher than height of refuse bin</li> <li>- And no less than 5 ft. on three sides</li> <li>- Posts or bumpers to protect the screening</li> <li>- Hard surface pad</li> <li>- Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>	Existing dumpster – no detail of enclosure shown	Yes	
<b>Roof top equipment and wall mounted utility equipment</b> (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	No rooftop equipment is shown on elevations	Yes	<b>Show any rooftop equipment if there will be any</b>
<b>Roof top appurtenances screening</b>	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.		NA	
<b>Transformer/ Generator</b>	Provide location of any proposed transformers/ generators etc.	Electrical equipment shown at rear of building	Yes	<b>See landscaping comments for screening requirements</b>
<b>I-1 District Required Conditions (Sec 3.14)</b>				
<b>Outdoor Storage of above ground storage tanks</b> (Sec. 3.14.1.B.ii)	Outdoor placement of above-ground storage tanks of not more than 600 capacity per tank and accessory to an otherwise permitted use. Additional conditions apply.	Not Proposed	NA	
<b>Outdoor Storage of recreational equipment</b> (Sec. 3.14.1.B.iii)		Not Proposed	NA	
<b>Other</b> (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.		Yes	<b>Add the note to the plan</b>
<b>Adjacent to Freeway ROW</b> (Sec 3.14.4)	Where a permitted use abuts a freeway right-of-way, special conditions listed in section 3.14.4 apply	Not adjacent to Freeway ROW	NA	
<b>Adjacent to Residential</b>	Where a permitted use abuts a residential district, special	Not adjacent to residential district	NA	

Item	Required Code	Proposed	Meets Code	Comments
<b>district</b> (Sec 3.14.5)	conditions listed in section 3.14.5 apply			
<b>Planning Commission findings for permitted uses (Sec 3.14.3)</b>				
Sec 3.14.3.A	Protecting current and future residential uses from development impact	Not adjacent to residential districts	NA	
<b>Long term truck parking</b> Sec 3.14.3.B	No long term delivery truck parking on site		Yes	<b>Add note to the plan</b>
<b>Performance standards</b> Sec 3.14.3.C	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of the article and performance standards of Section 5.14			
<b>Storage and/use of material</b> Sec 3.14.3.D	The storage and/or use of any volatile, flammable or other materials shall be fully identified in application and shall comply with any city ordinances regarding toxic or hazardous materials.	Checklist not provided	<b>No</b>	<b>Provide for Planning Commission submittal</b>
<b>Hazardous material checklist</b> Sec 3.14.3.E	Compliance of City's hazardous materials checklist	Checklist not provided	<b>No</b>	<b>Provide for Planning Commission submittal</b>
<b>Sidewalks and Pathways</b>				
<b>ARTICLE XI. OFF-ROAD NON-MOTORIZED FACILITIES</b> Sec. 11-256. Requirement. (c) & Sub. Ord. Sec. 4.05,	<ul style="list-style-type: none"> <li>- In the case of new streets and roadways to be constructed as part of the project, a sidewalk shall be provided on both sides of the proposed street or roadway.</li> <li>- Sidewalks along arterials and collectors shall be 6 feet or 8 feet wide as designated by the "Bicycle and Pedestrian Plan," but not along industrial service streets per Subdivision Ordinance.</li> <li>- Whereas sidewalks along local streets and private roadways shall be five (5) feet wide.</li> </ul>	<p>NA</p> <p>Venture Drive is a non-residential collector but also considered industrial service street</p> <p>NA</p>	Yes	
<b>Pedestrian Connectivity</b>	- Whether the traffic circulation features within the site and parking areas are designed to assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access	No sidewalks shown on northern building exits	<b>No</b>	<b>Provide sidewalks to all building exits</b>

Item	Required Code	Proposed	Meets Code	Comments
	streets - Building exits must be connected to sidewalk system or parking lot.			
<b>Lighting and Photometric Plan (Sec. 5.7)</b>				
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Provided	Yes	<b>Lighting plan is very hard to read – increase font size of labels/numbers and lighten background image</b>
<b>Lighting Plan (Sec. 5.7.A.i)</b>	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures		<b>No</b>	<b>Landscaping and existing exterior lighting fixtures not shown</b>
<b>Building Lighting (Sec. 5.7.2.A.iii)</b>	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.		<b>No</b>	<b>Show lighting on building elevations</b>
<b>Lighting Plan (Sec. 5.7.2.A.ii)</b>	Specifications for all proposed & existing lighting fixtures		Yes	<b>Show glare control, color rendition, hours of operation in notes</b>
	Photometric data		Yes	
	Fixture height		Yes	
	Mounting & design		Yes	
	Glare control devices (Also see Sec. 5.7.3.D)		<b>No?</b>	
	Type & color rendition of lamps	LED	<b>No</b>	
	Hours of operation		<b>No</b>	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties		Yes	
<b>Maximum Height (Sec. 5.7.3.A)</b>	Height not to exceed maximum height of zoning district (40 ft.) (or 25 ft. where adjacent to residential districts or uses)	25 feet proposed	Yes	
<b>Standard Notes (Sec. 5.7.3.B)</b>	- 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		<b>No</b>	<b>Add notes to lighting plan</b>



Item	Required Code	Proposed	Meets Code	Comments
	after a site's hours of operation			
<b>Security Lighting</b> (Sec. 5.7.3.H)  Lighting for security purposes shall be directed only onto the area to be secured.	- All fixtures shall be located, shielded, and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred.		No	Show security lighting
<b>Average Light Levels</b> (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	3.3:1	Yes	
<b>Type of Lamps</b> (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	
<b>Min. Illumination</b> (Sec. 5.7.3.k)	Parking areas: 0.2 min	.4 min	Yes	Show illumination levels on walkways, building entrances
	Loading/unloading areas: 0.4 min	Not shown - existing	No	
	Walkways: 0.2 min	Not shown	No	
	Building entrances, frequent use: 1.0 min	Not shown	No	
	Building entrances, infrequent use: 0.2 min	Not shown	No	
<b>Max. Illumination adjacent to Non-Residential</b> (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	.9 Max	Yes	
<b>Cut off Angles</b> (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	Not abutting residential	NA	
<b>Other Requirements</b>				
<b>Exterior lighting</b> (Sec. 5.7)	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal		Yes	Refer to Lighting chart comments for additional compliance requests
<b>Design and Construction Standards Manual</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>General layout and dimension of proposed physical improvements</b>	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Provided	Yes	
<b>Economic Impact Information</b>	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known).		No	<b>Provide requested information for Planning Commission's consideration</b>
<b>Development and Street Names</b>	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Name approval for business not required	NA	<u>Contact Hannah Smith at 248-347-0475 to schedule a meeting with the Committee</u>
<b>Development/ Business Sign</b>	Signage if proposed requires a permit. Can be considered during site plan review process or independently.	None shown	NA	<u>For sign permit information contact Maureen Underhill 248-735-5602.</u>

**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

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# PLAN REVIEW CENTER REPORT

January 10, 2018

## Engineering Review

Orotex Building Addition  
JSP17-0085

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### Applicant

JB Donaldson Company

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: North of Nine Mile Road, West of Venture Drive
- Site Size: 5.94 acres
- Plan Date: 12/15/2017
- Design Engineer: PEA, Inc.

### Project Summary

- Construction of a building addition of approximately 60,000 square feet north of the existing building, with additional parking.
- Water service would be provided by an 8-inch extension from the existing 12-inch water main along the north side of Venture Drive to serve three additional fire hydrants and connect to existing 8 inch water main on the site. No additional building leads are shown on the plans.
- No changes to sanitary sewer service are shown on the plans.
- A bioswale is proposed for storm water quality and quantity control on the site.

### Recommendation

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

**Comments:**

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

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

**General**

1. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website ([www.cityofnovi.org/DesignManual](http://www.cityofnovi.org/DesignManual)).
2. The plan set should 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](http://www.cityofnovi.org).
3. Show all drives within 200 feet on the plans.
4. Provide a note that compacted sand backfill shall be provided for all utilities within the influence of paved areas, and illustrate on the profiles.
5. Provide a construction materials table on the Utility Plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
6. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.

**Water Main**

7. Indicate directional drill or bore and jack of water main across Venture drive.
8. Provide additional notes at connection of proposed water main to existing water main at the southwest portion of the site.
9. Provide a profile for all water main 8 inch and larger.
10. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

**Paving & Grading**

11. Provide a separate plan for landbanked parking layout and grading.
12. Parking lot curb is required. Provide a curb along the south edge of the parking lot, with curb openings to allow flow into the bioswale area.
13. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
  - a. Indicate standard 6 inch curb height at landscape islands and drive aisles.

- b. Include a curb height transition detail.
- 14. Revise grading plan to be consistent with the revised layout of accessible parking spaces.
- 15. The driveway width and layout are not in accordance with City standards. Refer to the traffic review letter for additional information.
- 16. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection. Provide spot grades as necessary to establish this grade.
- 17. Site grading shall be limited to 1V:4H (25-percent), excluding any landscaping berms.
- 18. Revise the grading at the southwest portion of the site to ensure positive drainage.
  - a. Do not take the swale around the northwest corner of the building. If necessary, use a 2-foot diameter structure with piping to convey storm water around the building.
  - b. Alternatively, runoff from this area can be routed to existing storm sewer to the south rather than to proposed bioswale, if adequate pipe capacity is available.

Storm Water Management Plan and Storm Sewer

- 19. Provide a sheet entitled Storm Water Management Plan in the plan set.
- 20. Revise the Storm Water Narrative on sheet SP-04 to remove the reference to regional detention. The City does not have records of regional detention ever planned for this area. The Storm Water Narrative can simply refer to the Hickory Corporate Park Storm Water Management Plan for the development.
- 21. The site c factor should be determined using a runoff coefficient of 0.35 for grass areas.
- 22. Provide a drainage area map. Include drainage areas for existing storm sewer to the south where any new runoff may be incorporated (including landbanked parking).
- 23. Provide storm sewer sizing calculations as appropriate.
- 24. Indicate locations of roof drain conductors and tie-in to storm drainage facilities.
- 25. Refer to section 5.12 of the Engineering Design Manual for bioretention/rain garden design criteria.
- 26. This bioswale volume can include the above-grade ponded water and the below-grade gravel media. The available storage volume in the gravel shall assume only 85-percent of the volume is available for storage to account for sediment accumulation of sediment within the media. Provide these calculations on the plans.
- 27. Provide a cross-section for the bioswale, including all relevant elevations, side slopes, inverts and dimensions. The detail for the bioswale shall indicate the above-grade ponding depth, and shall show the overflow catch basin.

28. Provide a soil boring in the vicinity of the bioretention facility to determine soil conditions and to establish the high water elevation of the groundwater table. Verify the ground water elevation is at least 3 feet below the bioretention facility.
29. A cleanout shall be provided at each end of the proposed underdrain for periodic maintenance.
30. Provide and show on the plans a Storm Drain Facility Maintenance Easement including an access route from the public right-of-way. Refer to section 5.15 of the Engineering Design Manual for all maintenance requirements to be included in the maintenance easement agreement.

#### Soil Erosion and Sediment Control

31. Include a Soil Erosion and Sediment Control Plan (SESC plan) and indicate the size of the disturbed area. A SESC permit will be required from the City of Novi for areas of disturbance exceeding one acre. Please submit a SESC permit application under a separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

#### Off-Site Easements

32. Any off-site utility easements anticipated must be executed **prior to final approval of the plans**. Off-site easements are not anticipated at this time.

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

33. 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).
34. Draft copies of any applicable off-site utility easements, a recent title search of the off-site property, and legal escrow funds must be submitted to the Community Development Department for review and approval by the Engineering Division and the City Attorney prior to being executed.

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

35. 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.

36. A draft copy of the 20-foot wide easement for the water main to be constructed on the site must be submitted to the Community Development Department. This document is available on our website.
37. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.

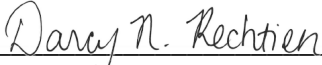
**The following must be addressed prior to construction:**

38. 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).
39. 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.
40. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Water & Sewer Division at 248-347-0498 to determine the amount of these fees.
41. A permit for work within the right-of-way of Venture Drive 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.
42. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.
43. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.
44. Construction Inspection Fees, to be determined once the construction cost estimate is submitted, must be paid prior to the pre-construction meeting.
45. A storm water performance guarantee, equal to 1.2 times the amount required to complete storm water management and facilities as specified in the Storm Water Management Ordinance, must be posted with Community Development.
46. A street sign financial guarantee in the amount of \$4,400 (\$400 per traffic control sign proposed) must be posted with Community Development.



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

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

  
\_\_\_\_\_  
Darcy N. Rechten, P.E.

cc: Theresa Bridges, Engineering  
George Melistas, Engineering  
Lindsay Bell, Community Development  
Kristen Pace, Treasurers  
Ben Croy, Water and Sewer

## LANDSCAPE REVIEW

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# PLAN REVIEW CENTER REPORT

January 5, 2018

## Preliminary Site Plan - Landscaping

Orotex Building Addition

### Review Type

Preliminary Landscape Review – JSP17-0085

### Property Characteristics

- Site Location: 22475 Venture Drive
- Site Acreage: 5.94 acres
- Site Zoning: I-1
- Adjacent Zoning: North, South, East, West: I-1
- Plan Date: 12/15/2017

### Ordinance Considerations

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the revised Preliminary/Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart are summaries based on the codes and are not intended to substitute for any Ordinance.

### Recommendation

The project is **recommended for approval**. Please make the required changes noted below and on the Landscape Chart as part of the Final Site Plans.

**Note:** Last year our Landscape Ordinance and Landscape Design Manual were amended. Please use the amended ordinance and manual which can be found at the locations below:

#### REVISED LANDSCAPE ORDINANCE:

<http://cityofnovi.org/Reference/Code-of-Ordinances-and-City-Charter/18-283LandscapeStandards.aspx>

#### REVISED LANDSCAPE DESIGN MANUAL:

<http://cityofnovi.org/Government/City-Services/Community-Development/Information-Requirements-Sheets,-Checklists,-Manua/LandscapeDesignManual.aspx>

### Ordinance Considerations

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

Provided.

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

1. Provided.
2. There are overhead utility lines along the west property line.
3. **Please relocate the proposed water main so the required parking lot trees can be planted within the islands.**

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

1. No existing trees will be removed as part of this project.
2. **Please copy the tree fencing shown around existing trees near the addition shown on the landscape plan to the Grading Plan.**

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

Property is not adjacent to Residential.

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

1. The project is not immediately adjacent to a public right-of-way.
2. It does front on an industrial subdivision road (Venture Drive) but no berm is required along that right-of-way.

Industrial Subdivision Frontage Landscaping (LDM 2.b.)

1. Based on the frontage of the addition (244lf), the following are required:
  - a. 7 trees (at least 5 )1/50 lf) should be planted as street trees along Venture Drive
  - b. 6 subcanopy trees
  - c. 12 shrubs
  - d. 24 lf of plant massing at entry drive.
2. **Please provide these on the plan.**
3. **Either a 3 foot tall berm or a continuous hedge of evergreen shrubs kept at a minimum height of 3 feet must be provided to screen the parking lot from Venture Drive. This hedge would be in addition to the 12 shrubs mentioned above.**

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

1. Based on the 26,893sf vehicular use areas, 1345 sf of islands and 7 parking lot interior trees are required. 1,922 sf of islands and 7 trees are provided.
2. **One tree at the west end of the project is not placed within the island because of a conflict with the proposed water line. Please shift the water main so it and its easement do not prevent the proper location of the tree.**
3. **The oak abutting the existing paving is in an island that is not large enough to support the tree. Please relocate that tree to a better location (the corner north of that would be fine, but not next to the second oak, which can serve as a required perimeter tree, but not an interior tree.**
4. If the 12 landbanked spaces are built, 1 interior deciduous canopy tree should be placed at the west end of the bay and 3 deciduous canopy perimeter trees should be planted along the south edge.
5. If the 3 landbanked spaces are built, no additional trees are required if the 3 evergreen trees are preserved. If they die or are not preserved, one deciduous canopy tree should be planted near the bay to help shade the spaces.

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

1. The parking lot perimeter is actually 1190lf, not 805 lf. All parking lot areas at least 20 feet away from the building should be included in the calculation.
2. **Please provide the 34 required perimeter trees along all sides of the parking lot, not just the northern edge. They should be spaced evenly around the lot to help shade it.**
3. **On the west edge, where there are overhead lines, subcanopy trees can be used in place of the canopy trees at a rate of 1.5 trees per canopy trees, or 2 trees per canopy trees if a fastigiata variety is used.**
4. **Please see the landscape chart for other details related to the perimeter trees.**

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

No loading zone screening is required as part of this project.

Building Foundation Landscape (Zoning Sec 5.5.3.D.)

1. Only foundation landscaping for the addition is required.
2. Based on the addition's 700lf perimeter, 5,600sf of foundation area is required and the plan indicates that 5762 sf will be provided.
3. 65% of the addition fronting Venture drive is landscaped, exceeding the 60% required.

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

Provided.

Planting Notations and Details (LDM)

1. Provided.
2. **Please revise or provide the required details per the instructions on the landscape chart.**

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

1. A bioswale is provided around the north and west sides of the addition. Assuming this is satisfactory to Engineering, the proposed seeding is satisfactory, as long as the bioswale is not maintained as lawn.
2. (The parking lot perimeter trees that need to be planted along the parking lot there should be species compatible with the anticipated hydrology of the bioswale).

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))

**Please provide as part of the Preliminary Site Plans.**

Snow Deposit (LDM.2.q.)

**Please provide as part of the Preliminary Site Plans.**

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

No woodlands exist on the site and no trees are proposed to be removed.

Corner Clearance (Zoning Sec 5.9)

Provided.

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



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Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART - Preliminary Site Plan

**Review Date:** January 5, 2017  
**Project Name:** JSP17 – 0085: Orotex Building Addition  
**Plan Date:** December 15, 2017  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

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

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (LDM (2))</b>				
<b>Landscape Plan</b> (Zoning Sec 5.5.2, LDM 2.e.)	<ul style="list-style-type: none"> <li>▪ New commercial or residential developments</li> <li>▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.</li> <li>▪ 1"=20' minimum with proper North. Variations from this scale can be approved by LA</li> <li>▪ Consistent with plans throughout set</li> </ul>	Yes	Yes	1. Scale 1"=40' 2. <b>Please use a smaller scale (1"=20', minimum) for the detailed foundation designs.</b>
<b>Project Information</b> (LDM 2.d.)	Name and Address	Yes	Yes	
<b>Owner/Developer Contact Information</b> (LDM 2.a.)	Name, address and telephone number of the owner and developer or association	Yes	Yes	Please include owner address and contact number on Landscape Plan.
<b>Landscape Architect contact information</b> (LDM 2.b.)	Name, Address and telephone number of RLA	Yes	Yes	
<b>Sealed by LA.</b> (LDM 2.g.)	Requires original signature	Yes	Yes	<u>Need for Final Site Plans</u>
<b>Miss Dig Note</b> (800) 482-7171 (LDM.3.a.(8))	Show on all plan sheets	Yes	Yes	
<b>Zoning</b> (LDM 2.f.)	Include all adjacent zoning	<u>Parcel:</u> I-1 <u>North South, East,</u> <u>West:</u> I-1	Yes	
<b>Survey information</b> (LDM 2.c.)	<ul style="list-style-type: none"> <li>▪ Legal description or boundary line survey</li> <li>▪ Existing topography</li> </ul>	Topo, description on Sheet SP-1.0	Yes	
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b>	<ul style="list-style-type: none"> <li>▪ Show location type and size. Label to be saved or removed.</li> </ul>	<ul style="list-style-type: none"> <li>▪ On Sheet SP-1.0.</li> <li>▪ All trees on site will be saved.</li> </ul>	Yes	<b>Please copy tree fencing shown on L-1.0 to sheet SP3.0</b>

Item	Required	Proposed	Meets Code	Comments
(LDM 2.e.(2))	<ul style="list-style-type: none"> <li>Plan shall state if none exists.</li> </ul>	<ul style="list-style-type: none"> <li>No woodlands on site</li> </ul>		
<b>Soil types</b> (LDM.2.r.)	<ul style="list-style-type: none"> <li>As determined by Soils survey of Oakland county</li> <li>Show types, boundaries</li> </ul>	List provided on Sheet SP-2.0	Yes	<b>Please show boundaries on sheet to help show potential infiltration capability of bioswale.</b>
<b>Existing and proposed improvements</b> (LDM 2.e.(4))	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
<b>Existing and proposed utilities</b> (LDM 2.e.(4))	Overhead and underground utilities, including hydrants	Yes	Yes	<b>Please shift the proposed water main so it and its easement are outside of required landscape islands so required trees can be planted within islands.</b>
<b>Proposed grading. 2' contour minimum</b> (LDM 2.e.(1))	Provide proposed contours at 2' interval	Provided on Sheet SP-3.0	Yes	<b>If a berm is to be provided instead of required screening shrubs for parking lot, please show on grading plan.</b>
<b>Snow deposit</b> (LDM.2.q.)	Show snow deposit areas on plan	No	No	<b>Please indicate snow deposit areas that won't harm landscaping.</b>
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Parking Area Landscape Requirements LDM 1.c. &amp; Calculations (LDM 2.o.)</b>				
<b>General requirements</b> (LDM 1.c)	<ul style="list-style-type: none"> <li>Clear sight distance within parking islands</li> <li>No evergreen trees</li> </ul>	Yes	Yes	
<b>Name, type and number of ground cover</b> (LDM 1.c.(5))	As proposed on planting islands	Yes	Yes	Seed is indicated on islands.
<b>General (Zoning Sec 5.5.3.C.ii)</b>				
<b>Parking lot Islands</b> (a, b. i)	<ul style="list-style-type: none"> <li>A minimum of 200 SF to qualify</li> <li>A minimum of 200sf unpaved area per tree planted in an island</li> <li>6" curbs</li> <li>Islands minimum width 10' BOC to BOC</li> </ul>	Yes	TBD	<ol style="list-style-type: none"> <li>Island with oak at southern corner of parking lot does not appear to meet minimum 10' width. Please widen island or move tree to a different location.</li> <li>Please realign the water main such that required perimeter and interior trees can be planted in</li> </ol>

Item	Required	Proposed	Meets Code	Comments
				acceptable locations. 3. A canopy tree should be planted at the northwestern corner of the parking lot if that corner is to be counted toward the required areas. It should also be planted at least 10 feet from the hydrant there.
<b>Curbs and Parking stall reduction (c)</b>	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	Yes	Yes	
<b>Contiguous space limit (j)</b>	Maximum of 15 contiguous spaces	15 is maximum bay length	Yes	
<b>Plantings around Fire Hydrant (d)</b>	No plantings with matured height greater than 12' within 10 ft. of fire hydrants	No	Yes	See note above regarding northeast hydrant.
<b>Landscaped area (g)</b>	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
<b>Clear Zones (LDM 2.3.(5))</b>	25 ft corner clearance required. Refer to Zoning Section 5.5.9	Provided at Venture Drive entries.	Yes	
<b>Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C.iii)</b>				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	<ul style="list-style-type: none"> <li>• <math>A = x \text{ sf} * 7.5 \% = A \text{ sf}</math></li> <li>• <math>50,000 * 7.5\% = 3750 \text{ sf}</math></li> </ul>	NA	Yes	
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> <li>• <math>B = x \text{ sf} * 1\% = B \text{ sf}</math></li> <li>• <math>(xxx - 50000) * 1\% = xx \text{ sf}</math></li> </ul>	NA	Yes	
<b>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)</b>				
A. = Total square footage of vehicular use area up to 50,000 sf x 5%	<ul style="list-style-type: none"> <li>▪ <math>A = x \text{ sf} * 5\% = A \text{ sf}</math></li> <li>▪ <math>A = 26,893 \text{ sf} * 5\% = 1,345\text{sf}</math></li> </ul>			
B = Total square footage of additional paved vehicular use	$B = 0.5\% \times 0 \text{ sf} = B \text{ SF}$	NA		



Item	Required	Proposed	Meets Code	Comments
areas over 50,000 SF x 0.5%				
<b>All Categories</b>				
<p>C = A+B                      Total square footage of landscaped islands</p>	<p>1345 + 0 = 1345 SF</p>	<p>1922 sf</p>	<p>Yes/No</p>	<ol style="list-style-type: none"> <li>Islands must be acceptable dimensions and area, and have a tree planted in them to count toward the total.</li> <li><b>Please dimension islands' widths to backs of curbs.</b></li> <li><b>Please make adjustments to trees and/or islands as required. Although it is labeled as 201sf, the narrow island at the south end of the 11 space bay does not appear to have that area adjacent to the parking lot and only at its widest point is it 10 feet wide.</b></li> </ol>
<p>D = C/200                      Number of canopy trees required</p>	<ul style="list-style-type: none"> <li>1345/200 = 7 Trees</li> </ul>	<p>7 trees</p>	<p>Yes</p>	
<p><b>Perimeter Green space</b></p>	<ul style="list-style-type: none"> <li>1 Canopy tree per 35 lf</li> <li>1190lf/35 = 34 trees</li> </ul>	<p>23 provided</p>	<p>No</p>	<ol style="list-style-type: none"> <li><b>Perimeter measurement should include all areas of new paving except where it is 20 feet or less from the building.</b></li> <li>Parking lot perimeter trees are to be large deciduous canopy trees which are defined to have a mature height of at least 30 feet and a mature canopy of at least 20 feet. A maximum of 25% of the perimeter trees can be evergreens.</li> <li><b>Please reduce the number of</b></li> </ol>

Item	Required	Proposed	Meets Code	Comments
				<p>evergreens to no more than 9. Fewer would be preferable, since there is really no need for screening of the parking lot from adjacent industrial uses. Deciduous canopy trees should be used as perimeter canopy trees whenever possible.</p> <p>4. Please space the trees around the parking lot more evenly. The southern edge of the northern section of the parking lot (in or abutting the bioswale) and both sides of the western parking lot should have perimeter trees to help shade the paving.</p>
<p><b>Accessway perimeter</b></p>	<ul style="list-style-type: none"> <li>▪ 1 canopy tree per 35 lf on each side of road, less widths of access drives.</li> <li>▪ <math>(xx \text{ lf}) / 35 = xx \text{ trees}</math></li> </ul>	<p>See note</p>		<p>The accessway perimeter was included in the 1190 lf for the perimeter. This is acceptable.</p>
<p><b>Parking land banked</b></p>	<p>NA</p>	<p>15 spaces are shown on the existing section of the site.</p>		<p>1. If/when the 12 spaces are built, they should have 3 canopy trees planted along the southern edge and 1 at the western end of the bay.</p> <p>2. No additional trees need to be planted if the 3 spaces are built, if the 3 existing evergreens are preserved. If they die or are not preserved, one tree should be planted to provide shade.</p>
<p><b>Berms, Walls and ROW Planting Requirements</b></p>				

Item	Required	Proposed	Meets Code	Comments
<b>Berms</b>				
<ul style="list-style-type: none"> <li>▪ All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</li> <li>▪ Berm should be located on lot line except in conflict with utilities.</li> <li>▪ Berms should be constructed with 6" of top soil.</li> </ul>				
<b>Residential Adjacent to Non-residential (Sec 5.5.3.A) &amp; (LDM 1.a)</b>				
<b>Berm requirements (Zoning Sec 5.5.A)</b>	No berms are required for this as the site is surrounded by industrial uses.	None		
<b>Planting requirements (LDM 1.a.)</b>	LDM Novi Street Tree List	NA		
<b>Adjacent to Public Rights-of-Way (Sec 5.5.B) and (LDM 1.b)</b>				
<b>Berm requirements (Zoning Sec 5.5.3.A.(5))</b>	As this project is part of an industrial subdivision and doesn't front on any roads not part of it, this requirement is not applicable. Follow the industrial subdivision requirements below.			
<b>Cross-Section of Berms (LDM 2.j)</b>				
Slope, height and width	<ul style="list-style-type: none"> <li>▪ Label contour lines</li> <li>▪ Maximum 33%</li> <li>▪ Min. 3 feet flat horizontal area</li> <li>▪ Minimum 3 feet high</li> <li>▪ Constructed of loam with 6' top layer of topsoil.</li> </ul>	No		Please provide berm cross section if any berms are provided.
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	NA		<ol style="list-style-type: none"> <li>1. Please clearly indicate any overhead lines.</li> <li>2. If an overhead line along west edge of property line has prevented the use of canopy trees, subcanopy trees, at a rate of 1.5 trees per required canopy tree, should be used for perimeter trees.</li> </ol>
<b>Walls (LDM 2.k &amp; Zoning Sec 5.5.3.vi)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete	No walls proposed.		

Item	Required	Proposed	Meets Code	Comments
	interior			
<b>Walls greater than 3 ½ ft. should be designed and sealed by an Engineer</b>		No details provided		
<b>ROW Landscape Screening Requirements (Sec 5.5.3.B. ii)</b>				
<b>Greenbelt width</b> (2)(3) (5)				Use requirements for industrial subdivision below.
Min. berm crest width				See above
Minimum berm height (9)				See above
3' wall				
<b>Canopy deciduous or large evergreen trees</b> Notes (1) (10)				See above
<b>Sub-canopy deciduous trees</b> Notes (2)(10)				See above
<b>Canopy deciduous trees in area between sidewalk and curb</b> (Novi Street Tree List)				See above
<b>Non-Residential Zoning Sec 5.5.3.E.iii &amp; LDM 1.d (2)</b>				
Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
<b>Interior Street to Industrial subdivision</b> (LDM 1.d.(2))	<ul style="list-style-type: none"> <li>▪ 1 canopy deciduous or 1 large evergreen per 35 lf along Venture Drive. (At least 1 per 50 lf should be used as street trees.)</li> <li>▪ No evergreen trees closer than 20 ft to road.</li> <li>▪ 1 sub canopy tree per 40 lf of frontage</li> <li>▪ 2 shrubs per 40 lf of frontage</li> <li>▪ Parking lot screened by evergreen shrubs at least 3 feet high, or berm 3 feet high</li> <li>▪ Plant massing for 10% of ROW at entry points</li> </ul>			<ol style="list-style-type: none"> <li>1. Please revise calculations per these requirements.</li> <li>2. Please provide required plantings.</li> <li>3. Use 244lf as basis (280lf – 36lf)</li> <li>4. Only building addition frontage is required to meet requirement, but additional landscaping may be added in front of existing building to make it more consistent, if desired.</li> </ol>
<b>Screening of outdoor storage, loading/unloading</b> (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)		<ul style="list-style-type: none"> <li>▪ No additional screening is provided.</li> <li>▪ Loading area faces railroad</li> </ul>	Yes	<ol style="list-style-type: none"> <li>1. Existing loading zone is being maintained.</li> <li>2. No additional screening is required.</li> </ol>

Item	Required	Proposed	Meets Code	Comments
		and industrial use.		
<b>Transformers/Utility boxes</b> (LDM 1.e from 1 through 5)	<ul style="list-style-type: none"> <li>▪ A minimum of 2ft. separation between box and the plants</li> <li>▪ Ground cover below 4" is allowed up to pad.</li> <li>▪ No plant materials within 8 ft. from the doors</li> </ul>	Transformers and screening are shown at west end of building addition.	Yes	
<b>Building Foundation Landscape Requirements (Sec 5.5.3.D)</b>				
<b>Interior site landscaping SF</b>	<ul style="list-style-type: none"> <li>▪ Equals to building addition perimeter of the building x 8 with a minimum width of 4 ft.</li> <li>▪ 700 lf x 8ft = 5600 SF</li> </ul>	5762 sf	Yes	<ol style="list-style-type: none"> <li>1. Shaded areas indicate that sufficient area will be provided.</li> <li>2. <u>Please provide detailed planting plans for foundation planting with final site plans.</u></li> <li>3. <u>Foundation plantings are to be included in cost estimate.</u></li> </ol>
<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	130/200lf (65%) of building addition facing Venture Drive is landscaped.	Yes	<ol style="list-style-type: none"> <li>1. The existing building has no foundation landscaping.</li> <li>2. <b>The applicant may wish to add some foundation landscaping to the existing building to match the addition more closely. This is not required.</b></li> </ol>
<b>Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)</b>				
<b>Planting requirements</b> (Sec. 5.5.3.E.iv)	<ul style="list-style-type: none"> <li>▪ Clusters shall cover 70-75% of the basin rim area</li> <li>▪ 10" to 14" tall grass along sides of basin</li> <li>▪ Refer to wetland for basin mix</li> </ul>	A bioswale with a native seed mix is proposed along the north and west sides of the addition.		<ol style="list-style-type: none"> <li>1. <b>If Engineering approves the bioswale, the proposed seeding is acceptable. However, the swale needs to be maintained in a natural condition, not mowed close as lawn.</b></li> <li>2. <b>A sign is proposed, but the applicant needs to adhere to</b></li> </ol>

Item	Required	Proposed	Meets Code	Comments
				this requirement. <b>3. Please indicate sign locations on the landscape plan.</b>
<b>Phragmites Control</b> (Sec 5.5.6.C)	<ul style="list-style-type: none"> <li>▪ Any and all populations of Phragmites australis on site shall be included on tree survey.</li> <li>▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.</li> </ul>	None indicated	TBD	<b>1. Please survey the site for any populations of Phragmites australis and submit plans for its removal.</b> <b>2. If none is found, please indicate that on the survey.</b> <b>3. The applicant should plan to remove Phragmites, Purple Loosestrife or other invasives soon after they appear (if they appear) in the bioswale to avoid it being taken over by those invasive plants.</b>
<b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>				
<b>Landscape Notes – Utilize City of Novi Standard Notes</b>				
<b>Installation date</b> (LDM 2.i. & Zoning Sec 5.5.5.B)	Provide intended date	Between Mar 15 and Nov 15.	Yes	
<b>Maintenance &amp; Statement of intent</b> (LDM 2.m & Zoning Sec 5.5.6)	<ul style="list-style-type: none"> <li>▪ Include statement of intent to install and guarantee all materials for 2 years.</li> <li>▪ Include a minimum one cultivation in June, July and August for the 2-year warranty period.</li> </ul>	Yes	Yes	
<b>Plant source</b> (LDM 2.n & LDM 3.a.(2))	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
<b>Irrigation plan</b> (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>
<b>Other information</b>	Required by Planning	NA		

Item	Required	Proposed	Meets Code	Comments
(LDM 2.u)	Commission			
<b>Establishment period</b> (Zoning Sec 5.5.6.B)	<b>2 yr. Guarantee</b>	Yes	Yes	
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5.E)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
<b>Plant List (LDM 2.h.) - Include all cost estimates</b>				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		Yes	Yes	
Type and amount of lawn		Yes	Yes	
Cost estimate (LDM 2.t)	For all new plantings, mulch and sod as listed on the plan	Yes	Yes	
<b>Planting Details/Info (LDM 2.i) - Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	Please copy note regarding dirt covering root flare from the deciduous tree detail to this detail.
Multi-stem tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		No	No	<b>Please add to plan</b>
Tree stakes and guys. (Wood stakes, fabric guys)		No	No	<b>Please add to plan</b>
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	<b>Please revise to show fencing 1 foot outside of dripline.</b>
<b>Other Plant Material Requirements (LDM 3)</b>				
<b>General Conditions</b> (LDM 3.a)	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
<b>Plant Materials &amp; Existing Plant Material</b> (LDM 3.b)	Clearly show trees to be removed and trees to be saved.	Yes	Yes	
<b>Landscape tree credit</b> (LDM3.b.(d))	Substitutions to landscape standards for preserved canopy trees outside woodlands/wetlands should be approved by LA. Refer	No		No trees outside of woodlands/wetlands are being saved.

Item	Required	Proposed	Meets Code	Comments
	to Landscape tree Credit Chart in LDM			
<b>Plant Sizes for ROW, Woodland replacement and others</b> (LDM 3.c)	2.5" canopy trees 6' evergreen trees	On plant list	Yes	
<b>Plant size credit</b> (LDM3.c.(2))	NA	No		
<b>Prohibited Plants</b> (LDM 3.d)	No plants on City Invasive Species List		TBD	
<b>Recommended trees for planting under overhead utilities</b> (LDM 3.e)	Label the distance from the overhead utilities		TBD	1. Please clearly indicate any overhead lines. 2. If none exist, please add a note to landscape plan stating this.
<b>Collected or Transplanted trees</b> (LDM 3.f)		No		
<b>Nonliving Durable Material: Mulch</b> (LDM 4)	<ul style="list-style-type: none"> <li>▪ Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth</li> <li>▪ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.</li> <li>▪ Refer to section for additional information</li> </ul>	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.



TRAFFIC REVIEW

---



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

**Project name:**  
 JSP17-0085 Orotex Preliminary Traffic Review

**From:**  
 AECOM

**Date:**  
 January 9, 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:** Orotex Preliminary Traffic Review

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

## GENERAL COMMENTS

1. The applicant, JB Donaldson Company, is proposing a building and parking lot expansion to the existing development located at 22475 Venture Drive, located just north of Nine Mile Road. The proposed building addition is 60,000 SF and will be primarily used as a warehouse facility. The location of the building addition is located on the north side of the existing development.
2. The site is zoned I-1 (industrial)
3. Venture Drive is under the jurisdiction of the City of Novi.
4. Summary of waivers/variances:
  - a. There are not any traffic-related waivers or variances requested by the applicant at this time; however certain variances and/or waivers may be required based on the response to the comments contained herein.

## TRAFFIC IMPACTS

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

ITE Code: 150 Warehousing (It should be noted that the warehousing land-use includes a portion of office space)  
 Development-specific Quantity: 60,000 SF  
 Zoning Change: N/A

Trip Generation Summary				
	City of Novi Threshold	Estimated Trips	Method	Above Threshold?
<b>AM Peak-Hour, Peak-Direction Trips</b>	100	23	Fitted Curve Equation	No

<b>PM Peak-Hour, Peak-Direction Trips</b>	100	26	Fitted Curve Equation	No
<b>Daily (One-Directional) Trips</b>	750	140	Fitted Curve Equation	No

- The number of trips does not exceed the City’s threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour. AECOM recommends performing the following traffic impact study in accordance with the City’s requirements:

Traffic Impact Study Recommendation	
Type of Study	Justification
None	

## EXTERNAL SITE ACCESS AND OPERATIONS

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

- The applicant has proposed a new driveway at the north end of the development.
  - The proposed driveway is tapered from 36 feet wide to 22 feet wide. The proposed width meets the City’s standard width of 36 feet for industrial street driveways; however, the proposed width is tapered to 22 feet wide which is below City standards. The applicant has the option of revising the driveway width to 36 feet for the entire length of the driveway or requesting a council variance for the proposed tapered width of 36 feet to 22 feet. The applicant could increase the minimum tapered width to 32 feet, which would require an administrative variance for approval. Please reference Figure IX.1 in the City’s Code of Ordinances for further clarification.
  - The proposed driveway has a 26.5 foot entering radii and a 29.5 foot exiting radii. The proposed turning radii do not meet the City’s standard for turning radii for industrial street driveways of 35 feet; however, the proposed turning radii do fall within the City’s allowable range. The applicant has the option of revising the driveway turning radii to 35 feet or requesting an administrative variance for the proposed turning radii. Please reference Figure IX.1 in the City’s Code of Ordinances for further clarification.
- The proposed driveway does not require any modifications such as turn lanes or tapers to Venture Drive.
- The applicant is required to provide sight distance dimensions at the proposed driveway in accordance with Figure XIII-E in the City’s Code of Ordinances.
- The applicant is required to provide same side and opposite side driveway spacing dimensions from the proposed driveway to the nearest driveways in either direction. Please reference both Section 11-216.d.1.d and Figure IX.12 for further clarification.

## INTERNAL SITE OPERATIONS

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

- The applicant should indicate (through the inclusion of turning patterns) that the site is fully accessible to the largest expected truck and large emergency vehicles. The radii near the northwest corner of the building seem to be less than ideal for such operations.
- The access aisles throughout portions of the site are indicated at 22 feet. The City standard minimum access aisle adjacent to parking is 24 feet, per Section 5.3.2 of the City’s Zoning Ordinance, and the access aisles should be updated to a minimum of 24 feet.

- c. The entire parking area including parking spaces and maneuvering lanes are required to be curbed. Please reference Section 11-239.b.1 of the City's Code of Ordinances for more information.
- d. The applicant should indicate the width of the connection between the existing parking area and the proposed parking area on the west side of the site.
- e. The applicant should indicate the location of any existing and proposed loading zones.
- f. The existing trash collection area may interfere with the accessibility of the proposed landbanked parking spaces. The applicant could consider relocating the existing trash enclosure or modifying the landbanked parking spaces.
- g. The applicant should indicate how the landscaping on the south end of the proposed parking spaces will tie in to the existing pavement such as a curb.

## 2. Parking Facilities

- a. Based on the use of industrial or research establishments with accessory offices the City of Novi requires:
  - i. One (1) space for each seven hundred (700) square feet of usable floor area; or,
  - ii. 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.
  - iii. Based on the requirements, the applicant is required to provide 155 parking spaces (based on 108,000 SF usable floor area); or, 90 spaces (based on a max shift of 85 employees) with Planning Commission approval.
- b. The applicant has proposed a total of 159 parking spaces, 15 of which are landbanked.
- c. The applicant should provide dimensions for the proposed landbanked parking spaces and indicate the new landscape parking peninsula dimensions including width, radii and curb height near the landbanked spaces.
- d. The proposed standard parking space dimensions are generally in compliance with City standards. However, the applicant should revise the integral curb and sidewalk detail on Sheet SP-5.0 to indicate a four inch curb as indicated by notes on the site plan.
- e. The applicant should consider moving the note regarding sidewalk curb height that is located near the accessible parking spaces if the sidewalk is flush with the asphalt as indicated by the sidewalk ramp to the north of the accessible parking space on the west side of the building. The proposed parking bumper should be flush to where the asphalt meets the sidewalk so that it provides 17 feet between the face of the bumper block and the end of the parking space.
  - i. The bumper block detail should be updated to indicate a length of six feet, not eight feet.
- f. The placement of the proposed parking peninsulas are in compliance with City standards.
- g. The applicant is required to provide five accessible parking spaces.
- h. The applicant has provided six accessible parking spaces. However, the applicant should consider relocating the lone accessible parking space located north of the truck loading docks to somewhere that is located closer to a building access point.
  - i. The applicant is required to and has provided one van accessible parking space.
  - j. The applicant should provide dimensions for the proposed accessible parking areas.
- k. Curbs for parking peninsulas and other landscaped areas in the parking lot are required to be six inches in height. The applicant should indicate such on the plans.
- l. The City of Novi indicates that 5% of the total required parking spaces for the number of bicycle parking spaces required. The applicant has provided four bicycle parking spaces which is in compliance with the 86 proposed parking spaces.
  - i. If there are existing bicycle parking spaces, they should be called out on the plans in order to formulate a total bicycle parking count since the applicant is required to provide a minimum of eight bicycle parking spaces based on the required 155 parking spaces for the overall site.

- m. The applicant should relocate the proposed bicycle parking area to be located along the principal building entrance approach line and be clearly visible and easily accessible from the approach and the building entrance being served. Please reference Section 5.16.1.D in the Zoning Ordinance for more information
    - i. The applicant could consider providing bicycle parking in increments of two spaces per entrance in order to facilitate multiple entrances. Please reference Section 5.16.1.F in the City's Zoning Ordinance.
  - n. The applicant has provided a bicycle parking layout detail; however, the following details should be updated/included with the layout.
    - i. The applicant is required to provide a four foot wide maneuvering aisle within bicycle parking area, per Section 5.16.4.A of the Zoning Ordinance.
    - ii. The applicant should indicate the parking space width, which is required to be six feet, per Section 5.15.4.A of the Zoning Ordinance.
    - iii. The applicant is required to provide a six foot accessible route from the parking lot, per Section 5.16.5.C.
3. Sidewalk Requirements
- a. The applicant should provide width dimensions for the proposed sidewalk near the northeast corner of the building near the driveway in addition to providing a ramp with a detectable warning surface.
  - b. Sidewalks are not required along Venture Drive.
  - c. The applicant should provide a detail for the proposed sidewalk ramps.
4. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices. The following is a discussion of the proposed signing and striping.
- a. All signing and striping details are required by the final site plan.
    - i. The applicant should indicate details for the proposed signing including sign height, sign post details and sign sizes.
  - b. The proposed crosswalk near the driveway should be redesigned to be consistent with MMUTCD or omitted due to the irregular design.
  - c. All roadside signs should be installed two feet from the face of the curb to the near edge of the sign. Please provide a detail or note indicating as such in future submittals.
  - d. All post-mounted signs are required to be a minimum height of seven feet from grade to the bottom of the sign in the vicinity of a sidewalk or curb.
  - e. 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. Please provide a detail or note indicating as such in future submittals.
  - f. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements. Please provide a detail or note indicating as such in future submittals.
  - g. For clarification, indicate both a R7-8 and an R7-8p sign at the van accessible parking space and update the signing quantities table to reflect three total R7-8 signs.
  - h. Indicate the color of the proposed parking bumpers. The City requires all parking bumpers to be yellow in color.
  - i. Provide details and notes related to pavement markings and striping.
    - i. Standard parking striping shall be four inch white.
    - ii. A four inch white parking stripe shall be placed adjacent to a four inch blue parking stripe in areas where a standard parking space borders an accessible parking space.
    - iii. Provide a detail for the international symbol for accessibility. The applicant could revise the plans to indicate placement of the international symbol for accessibility towards the near end of the space as opposed to the middle. The symbol is required to be white or white with a blue background and white border.

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

Memo

Sincerely,

**AECOM**

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

Sterling Frazier, PE  
Reviewer, Traffic/ITS Engineer

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

Maureen N. Peters, PE  
Senior Traffic/ITS Engineer

FAÇADE REVIEW



January 2, 2018

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

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

**Re: FACADE ORDINANCE REVIEW Preliminary Site Plan**  
**Orotex Building Addition, JSP17-0085**  
 Façade Region: 3, Zoning District: I-1,  
 Existing Building Floor Area: 60,000 S.F.  
 Proposed Addition Floor Area: 60,000 S.F.

Dear Ms. McBeth;

The following is the Façade Review for Preliminary Site Plan Approval of the above referenced project based on the drawings prepared by Detroit Architectural Group, dated 12/14/17. The percentages of materials proposed for each façade are as shown on the table below. The maximum percentages allowed by Ordinance Section 5.15 are shown in the right hand column.

<b>Building (existing &amp; proposed, combined)</b>	South (Front)	West	North	East	Ordinance Maximum (Region 3)
Split Faced CMU (match existin)	36%	27%	27%	34%	75%
Ribbed Metal Siding (match existing)	<b>64%</b>	<b>73%</b>	<b>73%</b>	<b>66%</b>	50%

**Recommendation** - As shown above the percentage of Ribbed Metal Siding exceeds the maximum amount allowed by Façade Schedule. However, this project is considered an Addition as described in Section 5.15.7 of the Ordinance. Section 5.15.7 allows a continuation of existing materials provided that the addition does not exceed 100% of the floor area of the existing building, and provided that the proposed materials substantially constitute a continuation of the existing facades with respect to color, texture, size, height and location of materials. In this case the proposed addition does not exceed 100% of the existing floor area (it is essentially equal), and the drawings are noted that all proposed materials will “match existing”. Therefore, it is our recommendation that the proposed addition is in full compliance with the Façade Ordinance.



## Notes to the Applicant:

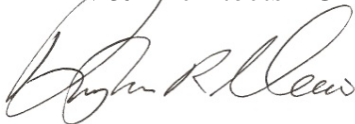
1. It should be noted that all roof top equipment must be screened from view from all vantage points both on-site and off-site using materials in compliance with the Façade Ordinance.

2. Inspections – The Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board (in this case the adjacent existing material) will be compared to materials to be installed. 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>.

If you have any questions regarding this review, please do not hesitate to call.

Sincerely,  
DRN & Architects PC

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

Douglas R. Necci, AIA

## FIRE REVIEW

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December 22, 2017

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

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Gwen Markham

Andrew Mutch

Wayne Wrobel

Laura Marie Casey

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

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

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

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

RE: Orotex Building Addition

PSP# 17-0184

**Project Description:**

To build a 60,000 S.Q. F.T. addition to an existing structure. Address for project is 22475 Venture Dr.

**Comments:**

1. Hydrant spacing is NO greater than 300' from hydrant to hydrant. City Ordinance 11-68(F)(1)c.
2. Must provide a hammerhead turnaround on the east side of structure or connect the two parking lots together. North and East parking lots is greater than 150'. ICF 503.2.5.

**Recommendation:**

**APPROVED WITH CONDITIONS**

Sincerely,

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

cc: file

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

cityofnovi.org

APPLICANT RESPONSE LETTER

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Civil Engineers | Land Surveyors | Landscape Architects

experienced. responsive. passion for quality.

Corporate Office: 2430 Rochester Court • Suite 100 • Troy, MI 48083  
t: 248.689.9090 • f: 248.689.1044 • www.peainc.com

January 31, 2018

PEA Project No: 2017-040

Ms. Lindsey Bell, Planner  
City of Novi  
45175 Ten Mile Road  
Novi, MI 48375

**RE: Planning Review Report  
Orotex Novi Building Expansion  
22475 Venture Drive  
Novi Project Number: JSP 17-85**

Dear Ms. Bell:

This office is in receipt of your review letter dated January 12, 2018, regarding the subject development. We will revise the plans in accordance with Staff comments and our responses below, for Final Site Plan submittal. We are including the following:

- Site Plan Submittal with no changes made, in PDF format
- This response letter addressing all comments
- Color rendering of site plan?
- Sample board of building materials

Please note the following revisions and clarifications in response to the review letter comments:

**Planning Review Chart Comments:**

**Note To District Standards (Sec 3.6.2)**

**1. Parking setback screening: See Landscaping comments**

Noted. Landscape Comments are addressed in the landscape response section.

**Parking and Loading Requirements**

**2. Number of Parking Spaces: Correct the parking numbers shown in the calculations. Show the correct number of spaces on the NE parking bay (14) and the bay closest to the building on the West side (12).**

Parking counts will be revised and the plans updated accordingly.

- 3. Parking Space Dimensions and Maneuvering Lanes: Parking spaces are present; therefore drive must be 24 feet. Confirm sidewalks are 7' adjacent to 17' parking spaces by indicating dimensions on plan.**

Sidewalks will be clearly labeled as 7' wide adjacent to parking.

- 4. Landbank Parking:**
  - a. All areas designated for land banking shall be landscaped open space and may not be used for any other purposes. Add a note to the plan.**

The required note will be added to the plan.

- b. Planning Commission grants the request based on certain conditions. The conditions are listed in the review letter.**

The required note will be added to the plan.

- c. The owner of the property shall report any proposed change in use or occupancy for further evaluation. Add a note to the plan.**

The required note will be added to the plan.

#### **Accessory Structures**

- 5. Roof top equipment and wall mounted utility equipment: Show any rooftop equipment if there will be any.**

Roof top equipment will be shown for the office area on the plans.

- 6. Transformer/Generator: See landscaping comments for screening requirement.**

Noted. Screening for the transformer will be addressed in the Landscape response section.

#### **I-1 District Required Conditions (Sec 3.14)**

- 7. Other: Unless otherwise provided, dealing directly with consumer at retail, is prohibited. Add the note to the plan.**

The required note will be added to the plan.

#### **Planning Commission findings for permitted uses (Sec 3.14.3)**

- 8. Long term truck parking: No long term delivery truck parking on site. Add the note to the plan.**

The required note will be added to the plan.

- 9. Storage and/use of material: The storage and/or use of any volatile, flammable or other materials shall be fully identified in application and shall comply with any city ordinances regarding toxic or hazardous materials. Checklist not provided -- Provide for Planning Commission submittal.**

Checklist will be submitted to the City.

**10. Hazardous material checklist: Compliance of City's hazardous materials checklist. Checklist not provided -- Provide for Planning Commission submittal.**

Checklist will be submitted to the City.

**Sidewalks and Pathways**

**11. Pedestrian Connectivity: Provide sidewalks to all building exits.**

Sidewalks will be provided to all building exits.

**Lighting and Photometric Plan (Sec. 5.7)**

**12. Intent: Lighting plan is very hard to read – increase font size of labels/numbers and lighten background image.**

Plans will be updated to correct font size and background image.

**13. Lighting Plan: Landscaping and existing exterior lighting fixtures not shown.**

Plans will be updated to show landscaping and exterior fixtures.

**14. Building Lighting: Show lighting on building elevations.**

Plans will be updated to show building lighting.

**15. Lighting Plan: Show glare control, color rendition, hours of operation in notes.**

Plans will be updated to indicate glare control, color, and hours of operation.

**16. Standard Notes: Add notes to lighting plan.**

Plans will be updated with required note.

**17. Security Lighting: Show security lighting.**

Plans will be updated with security lighting.

**18. Min. Illumination: Show illumination levels on walkways, building entrances.**

Plans will be updated to show illumination levels at entrances and walkways.

**Other Requirements**

**19. Economic Impact Information: Total cost of the proposed building & site improvements Number of anticipated jobs created (during construction & after building is occupied, if known). Provide requested information for Planning Commission's consideration.**

Total construction cost of building and site improvements will be provided. It is estimated that 15 additional permanent staff will be added to the building, and 50 temporary construction jobs created for the duration of the project. Estimated total construction cost is \$3.5 Million.

**Engineering Review Comments:**

**General**

- 1. The City standard detail sheets are not required for the Final Site Plan submittal. They will be required with the Stamping Set submittal. They can be found on the City website ([www.cityofnovi.org/DesignManual](http://www.cityofnovi.org/DesignManual)).**

City standard details will be incorporated into the Final Stamping Set.

- 2. The plan set should 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](http://www.cityofnovi.org).**

A City benchmark will be incorporated into the plan set.

- 3. Show all drives within 200 feet on the plans.**

All drives within 200 feet of the property boundaries will be shown in the plans.

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

The required note will be added to the plans. Compacted backfill will be shown on utility profiles as required.

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

Construction materials tables will be added to the Utility plan as required.

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

Construction materials tables will be added to the Paving plan as required.

**Water Main**

- 7. Indicate directional drill or bore and jack of water main across Venture drive.**

Bore and jack will be specified for the water main to cross Venture Drive.

- 8. Provide additional notes at connection of proposed water main to existing water main at the southwest portion of the site.**

Connection notes will be added for the tie-in between the existing and proposed water main.

- 9. Provide a profile for all water main 8 inch and larger.**

Construction materials tables will be added to the Utility plan as required.



- 10. Three (3) sealed sets of revised utility plans along with the MDEQ permit application (1/07 rev.) for water main construction and the Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.**

The required sealed utility sets and MDEQ applications will be submitted to the Engineering Department for review.

### **Paving & Grading**

- 11. Provide a separate plan for landbanked parking layout and grading.**

A separate plan for the landbank parking will be incorporated into the plan set.

- 12. Parking lot curb is required. Provide a curb along the south edge of the parking lot, with curb openings to allow flow into the bioswale area.**

Curbing will be added along the edge of the bioswale, with openings to allow water flow to the bioswale.

- 13. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.**

Top of curb and gutter pan grades will be added.

- a. Indicate standard 6 inch curb height at landscape islands and drive aisles.**

6" curb heights will be used at islands and parking aisles.

- b. Include a curb height transition detail.**

A curb height transition detail will be added.

- 14. Revise grading plan to be consistent with the revised layout of accessible parking spaces.**

The grading plan will demonstrate ADA compliance in the accessible parking areas.

- 15. The driveway width and layout are not in accordance with City standards. Refer to the traffic review letter for additional information.**

Drive width and layout will be adjusted per the traffic review letter.

- 16. The grade of the drive approach shall not exceed 2-percent within the first 25 feet of the intersection. Provide spot grades as necessary to establish this grade.**

The grade of the drive approach will be adjusted per requirements.

- 17. Site grading shall be limited to 1V:4H (25-percent), excluding any landscaping berms.**

Site grading will be adjusted to maintain a 1:4 slope maximum.

**18. Revise the grading at the southwest portion of the site to ensure positive drainage.**

The grading at the Southwest corner of the site will be revised as necessary.

- a. **Do not take the swale around the northwest corner of the building. If necessary, use a 2-foot diameter structure with piping to convey storm water around the building.**

The drainage swale will be revised to use piping past the corner of the building.

- b. **Alternatively, runoff from this area can be routed to existing storm sewer to the south rather than to proposed bioswale, if adequate pipe capacity is available.**

The drainage swale will be revised to use piping past the corner of the building.

**Storm Water Management Plan and Storm Sewer**

**19. Provide a sheet entitled Storm Water Management Plan in the plan set.**

A Storm Water Management Plan will be added to the set.

**20. Revise the Storm Water Narrative on sheet SP-04 to remove the reference to regional detention. The City does not have records of regional detention ever planned for this area. The Storm Water Narrative can simply refer to the Hickory Corporate Park Storm Water Management Plan for the development.**

The storm water narrative will be revised.

**21. The site c factor should be determined using a runoff coefficient of 0.35 for grass areas.**

A c factor of 0.35 will be utilized for green space in the storm design.

**22. Provide a drainage area map. Include drainage areas for existing storm sewer to the south where any new runoff may be incorporated (including landbanked parking).**

A drainage area map will be added to the plan set.

**23. Provide storm sewer sizing calculations as appropriate.**

Storm piping calculations will be added to the plan set.

**24. Indicate locations of roof drain conductors and tie-in to storm drainage facilities.**

Roof conductors will be added to the design.

**25. Refer to section 5.12 of the Engineering Design Manual for bioretention/rain garden design criteria.**

The bioswale will be in accordance with the Engineering Design Manual.

- 26. This bioswale volume can include the above-grade ponded water and the below-grade gravel media. The available storage volume in the gravel shall assume only 85-percent of the volume is available for storage to account for sediment accumulation of sediment within the media. Provide these calculations on the plans.**

Noted.

- 27. Provide a cross-section for the bioswale, including all relevant elevations, side slopes, inverts and dimensions. The detail for the bioswale shall indicate the above-grade ponding depth, and shall show the overflow catch basin.**

A cross-section for the bioswale will be added.

- 28. Provide a soil boring in the vicinity of the bioretention facility to determine soil conditions and to establish the high water elevation of the groundwater table. Verify the ground water elevation is at least 3 feet below the bioretention facility.**

A soil boring will be provided to identify soil conditions and water table in the bioswale area.

- 29. A cleanout shall be provided at each end of the proposed underdrain for periodic maintenance.**

Cleanouts will be provided for maintenance as required.

- 30. Provide and show on the plans a Storm Drain Facility Maintenance Easement including an access route from the public right-of-way. Refer to section 5.15 of the Engineering Design Manual for all maintenance requirements to be included in the maintenance easement agreement.**

A storm maintenance easement will be provided as required.

#### **Soil Erosion and Sediment Control**

- 31. Include a Soil Erosion and Sediment Control Plan (SESC plan) and indicate the size of the disturbed area. A SESC permit will be required from the City of Novi for areas of disturbance exceeding one acre. Please submit a SESC permit application under a separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.**

An SESC plan will be added to the plan set.

#### **Off-Site Easements**

- 32. Any off-site utility easements anticipated must be executed prior to final approval of the plans. Off-site easements are not anticipated at this time.**

Noted.

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

- 33. 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).**

An itemized construction estimate will be provided.

- 34. Draft copies of any applicable off-site utility easements, a recent title search of the off-site property, and legal escrow funds must be submitted to the Community Development Department for review and approval by the Engineering Division and the City Attorney prior to being executed.**

The required easement, title work, and escrow amounts will be provided.

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

- 35. 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.**

The maintenance agreement will be submitted as required.

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

A draft of the required easement will be submitted.

- 37. Executed copies of any required off-site utility easements must be submitted to the Community Development Department.**

No off-site easements are anticipated.

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

- 38. 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).**

A pre-construction meeting will be held as required.

- 39. 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.**

A grading permit will be obtained.

- 40. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Water & Sewer Division at 248-347-0498 to determine the amount of these fees.**

Water and sanitary fees will be paid prior to the pre-construction meeting.

- 41. A permit for work within the right-of-way of Venture Drive 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.**

A Right-of-way permit will be obtained as required.

- 42. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.**

An SESC permit will be obtained.

- 43. A permit for water main construction must be obtained from the MDEQ. This permit application must be submitted through the City Engineer after the water main plans have been approved. Only submit the cover sheet, overall utility sheet, standard details and plan/profile sheets applicable to the permit.**

An MDEQ permit will be obtained.

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

Fees will be paid as required.

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

A storm water performance guarantee will be submitted as required.

- 46. A street sign financial guarantee in the amount of \$4,400 (\$400 per traffic control sign proposed) must be posted with Community Development.**

A street sign guarantee will be submitted as required.

**Planning Review Chart Comments (Landscaping):**

- 1. Landscape Plan: Please use a smaller scale (1" = 20' minimum) for the detailed foundation designs.**

Noted. When foundation plantings are detailed during construction drawings, foundation plantings will be shown in detail at 1" = 20'.

**2. Existing plant material, Existing woodlands or wetlands: Please copy tree fencing shown on L-1.0 to sheet SP3.0.**

The tree fencing will be copied to the specified sheet.

**3. Soil types: Please show boundaries on sheet to help show potential infiltration capability of bioswale.**

The soil types will be shown on landscape plan to coordinate with proposed bioswale.

**4. Existing and proposed utilities: Please shift the proposed water main so it and its easement are outside of required landscape islands so required trees can be planted within islands.**

The water main will be shifted so required trees can be planted within islands.

**5. Proposed 2' contour minimum: If a berm is to be provided instead of required screening shrubs for parking lot, please show on grading plan.**

Berm will be shown on grading plan if chosen instead of screening shrubs.

**6. Snow deposit: Please indicate snow deposit areas that won't harm landscaping.**

Snow deposit areas will be shown and labeled on landscape plan.

**7. Parking lot islands:**

**a. Island with oak at southern corner of parking lot does not appear to meet minimum 10' width. Please widen island or move tree to a different location.**

The tree will be moved to a different location.

**b. Please realign the water main such that required perimeter and interior trees can be planted in acceptable locations.**

The water main will be moved to allow perimeter and interior trees to be planted in designated areas.

**c. A canopy tree should be planted at the northwestern corner of the parking lot if that corner is to be counted toward the required areas. It should also be planted at least 10' from the hydrant there.**

The tree will be planted in the northwest corner of the parking lot and will be a minimum of 10' off the hydrant.

**8. Plantings around Fire Hydrant: See note above regarding northeast hydrant.**

All proposed plantings will be spaced a minimum of 10' off all hydrants.

**9. Total square footage of landscaped islands:**

**a. Please dimension islands' widths to backs of curbs.**

Island dimensions will be shown on plan.

- b. Please make adjustments to trees and/or islands as required. Although it is labeled as 201 sf, the narrow island at the south end of the 11 space bay does not appear to have that area adjacent to the parking lot and only at its widest point is it 10' wide.**

The tree will be moved to another location to satisfy the interior tree requirement and the 201 sf will not count towards the required interior landscaped sf.

#### **10. Perimeter green space:**

- a. Perimeter measurement should include all areas of new paving except where it is 20' or less from the building.**

Additional perimeter linear footage has been added to calculation.

- b. Please reduce the number of evergreens to no more than 9. Fewer would be preferable, since there is really no need for screening of the parking lot from adjacent industrial uses. Deciduous canopy trees should be used as perimeter canopy trees whenever possible.**

The overall number of evergreens will be 9 or less. Deciduous canopy trees will primarily be used as perimeter trees where the site allows.

- c. Please space the trees around the parking lot more evenly. The southern edge of the northern section of the parking lot (in abutting the bioswale) and both sides of the western parking lot should have perimeter trees to help shade the paving.**

The proposed perimeter trees will be spaced more evenly around the parking lot to better help provide shade to all areas of the parking lot.

#### **11. Parking land banked: If / when the 12 spaces are built, they should have 3 canopy trees planted along the southern edge and 1 at the western end of the bay.**

When the land banked parking is constructed, 4 canopy trees will be installed as described above.

#### **12. Cross-Section of berms: Please provide berm cross section if any berms are provided.**

If berms are provided, there will be corresponding cross sections.

#### **13. Setbacks from utilities:**

- a. Please clearly indicate any overhead lines.**

All overhead utility lines will be identified and labeled on the plan.

- b. If an overhead line along west edge of property line has prevented the use of canopy trees, subcanopy trees, at a rate of 1.5 trees per required canopy tree, should be used for perimeter trees.**

Subcanopy trees will be used along the west edge of property line.

**14. ROW landscape screening requirements: Use requirements for industrial subdivision below.**

Industrial subdivision requirements will be used for ROW landscape screening which will include these items: greenbelt width, canopy or deciduous or large evergreen trees, subcanopy deciduous trees, and canopy deciduous trees in area between sidewalk and curb.

**15. Interior street to industrial subdivision:**

**a. Please revise calculations per these requirements.**

Calculations will be revised to reflect interior street to industrial subdivision requirements.

**b. Please provide required plantings.**

Required plantings will be provided to reflect revised calculations.

**c. Use 244 lf as basis (280 lf – 36 lf).**

244 lf will be used for calculations.

**16. Building foundation landscape requirements: The applicant may wish to add some foundation landscaping to the existing building to match the addition more closely.**

Foundation landscaping will be added on existing portion of building to become more aesthetically pleasing.

**17. Planting requirements:**

**a. If engineering approves the bioswale, the proposed seeding is acceptable. However, the swale needs to be maintained in a natural condition, not mowed close as lawn.**

The swale will be maintained in a natural condition and not mowed as close as lawn.

**b. A sign is proposed, but the applicant needs to adhere to this requirement.**

Noted.

**c. Please indicate sign locations on the landscape plan.**

Sign locations will be shown and labeled on landscape plan.

**18. Phragmites control:**

**a. Please survey the site for any populations of phragmites australis and submit plans for its removal.**

Site will be surveyed for phragmites with detailed plans of removal.

**b. If none is found, please indicate that on the survey.**

If phragmites are not found on site, it will be noted on plan.



- c. **The applicant should plan to remove phragmites, purple loosestrife or other invasives soon after they appear (if they appear) in the bioswale to avoid it being taken over by those invasive plants.**

Phragmites and other invasive species will be removed as soon as they appear on site.

- 19. Planting Details: Please add perennial / ground cover detail, tree stakes and guys (wood stakes, fabric guys), and tree protection fencing with the fencing 1' outside of the dripline.**

The above-mentioned details and revisions will be added to the landscape plan.

- 20. Recommended trees for planting under overhead utilities:**

- a. **Please clearly indicate any overhead lines.**

All overhead utility lines will be identified and labeled on plan.

- b. **If none exist, please add a note to landscape plan stating this.**

If no overhead utilities are on site, it will be noted on landscape plan.

**Traffic Review Comments:**

**EXTERNAL SITE ACCESS AND OPERATIONS**

1. **The applicant has proposed a new driveway at the north end of the development.**
  - a. **The proposed driveway is tapered from 36 feet wide to 22 feet wide. The proposed width meets the City's standard width of 36 feet for industrial street driveways; however, the proposed width is tapered to 22 feet wide which is below City standards. The applicant has the option of revising the driveway width to 36 feet for the entire length of the driveway or requesting a council variance for the proposed tapered width of 36 feet to 22 feet. The applicant could increase the minimum tapered width to 32 feet, which would require an administrative variance for approval. Please reference Figure IX.1 in the City's Code of Ordinances for further clarification.**

The driveway will be revised as required.

- b. **The proposed driveway has a 26.5 foot entering radii and a 29.5 foot exiting radii. The proposed turning radii do not meet the City's standard for turning radii for industrial street driveways of 35 feet; however, the proposed turning radii do fall within the City's allowable range. The applicant has the option of revising the driveway turning radii to 35 feet or requesting an administrative variance for the proposed turning radii. Please reference Figure IX.1 in the City's Code of Ordinances for further clarification.**

The driveway will be revised as required.

2. **The proposed driveway does not require any modifications such as turn lanes or tapers to Venture Drive.**

Noted.

3. **The applicant is required to provide sight distance dimensions at the proposed driveway in accordance with Figure XIII-E in the City's Code of Ordinances.**

Sight distances will be shown as required.

4. **The applicant is required to provide same side and opposite side driveway spacing dimensions from the proposed driveway to the nearest driveways in either direction. Please reference both Section 11-216.d.1.d and Figure IX.12 for further clarification.**

The driveway spacing will be provided on the plans as required.

## **INTERNAL SITE OPERATIONS**

1.
  - a. **The applicant should indicate (through the inclusion of turning patterns) that the site is fully accessible to the largest expected truck and large emergency vehicles. The radii near the northwest corner of the building seem to be less than ideal for such operations.**

A truck-turn will be added to the plans.

- b. **The access aisles throughout portions of the site are indicated at 22 feet. The City standard minimum access aisle adjacent to parking is 24 feet, per Section 5.3.2 of the City's Zoning Ordinance, and the access aisles should be updated to a minimum of 24 feet.**

The aisle widths will be revised as required.

- c. **The entire parking area including parking spaces and maneuvering lanes are required to be curbed. Please reference Section 11-239.b.1 of the City's Code of Ordinances for more information.**

Curbs will be added as required.

- d. **The applicant should indicate the width of the connection between the existing parking area and the proposed parking area on the west side of the site.**

A dimension will be added for clarification.

- e. **The applicant should indicate the location of any existing and proposed loading zones.**

Loading zones will be indicated on the plans.

- f. **The existing trash collection area may interfere with the accessibility of the proposed landbanked parking spaces. The applicant could consider relocating the existing trash enclosure or modifying the landbanked parking spaces.**

Loading zones will be indicated on the plans.

- g. **The applicant should indicate how the landscaping on the south end of the proposed parking spaces will tie in to the existing pavement such as a curb.**

Notes will be added to clarify the transition.

## 2. Parking Facilities

- a. **Based on the use of industrial or research establishments with accessory offices the City of Novi requires:**
  - i. **One (1) space for each seven hundred (700) square feet of usable floor area; or,**
  - ii. **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.**
  - iii. **Based on the requirements, the applicant is required to provide 155 parking spaces (based on 108,000 SF usable floor area); or, 90 spaces (based on a max shift of 85 employees) with Planning Commission approval.**
- b. **The applicant has proposed a total of 159 parking spaces, 15 of which are landbanked.**

Noted.

- c. **The applicant should provide dimensions for the proposed landbanked parking spaces and indicate the new landscape parking peninsula dimensions including width, radii and curb height near the landbanked spaces.**

Dimensions for the land-banked spaces will be added.

- d. **The proposed standard parking space dimensions are generally in compliance with City standards. However, the applicant should revise the integral curb and sidewalk detail on Sheet SP-5.0 to indicate a four inch curb as indicated by notes on the site plan.**

Detail will be revised.

- e. **The applicant should consider moving the note regarding sidewalk curb height that is located near the accessible parking spaces if the sidewalk is flush with the asphalt as indicated by the sidewalk ramp to the north of the accessible parking space on the west side of the building. The proposed parking bumper should be flush to where the asphalt meets the sidewalk so that it provides 17 feet between the face of the bumper block and the end of the parking space.**

Block location and note will be revised.

- i. **The bumper block detail should be updated to indicate a length of six feet, not eight feet.**

Detail will be revised.

- f. **The placement of the proposed parking peninsulas are in compliance with City standards.**

Noted.

- g. The applicant is required to provide five accessible parking spaces.**

Noted.

- h. The applicant has provided six accessible parking spaces. However, the applicant should consider relocating the lone accessible parking space located north of the truck loading docks to somewhere that is located closer to a building access point.**

Noted.

- i. The applicant is required to and has provided one van accessible parking space.**

Noted.

- j. The applicant should provide dimensions for the proposed accessible parking areas.**

Dimensions will be added for the accessible areas.

- k. Curbs for parking peninsulas and other landscaped areas in the parking lot are required to be six inches in height. The applicant should indicate such on the plans.**

Curb heights will be indicated on the plans.

- l. The City of Novi indicates that 5% of the total required parking spaces for the number of bicycle parking spaces required. The applicant has provided four bicycle parking spaces which is in compliance with the 86 proposed parking spaces.**

Noted.

- i. If there are existing bicycle parking spaces, they should be called out on the plans in order to formulate a total bicycle parking count since the applicant is required to provide a minimum of eight bicycle parking spaces based on the required 155 parking spaces for the overall site.**

Bicycle parking spaces will be added to bring site in compliance with the Ordinance.

- m. The applicant should relocate the proposed bicycle parking area to be located along the principal building entrance approach line and be clearly visible and easily accessible from the approach and the building entrance being served. Please reference Section 5.16.1.D in the Zoning Ordinance for more information**

Bicycle parking will be revised as required.

- i. The applicant could consider providing bicycle parking in increments of two spaces per entrance in order to facilitate multiple entrances. Please reference Section 5.16.1.F in the City's Zoning Ordinance.**

Noted.

- n. **The applicant has provided a bicycle parking layout detail; however, the following details should be updated/included with the layout.**
  - i. **The applicant is required to provide a four foot wide maneuvering aisle within bicycle parking area, per Section 5.16.4.A of the Zoning Ordinance.**
  - ii. **The applicant should indicate the parking space width, which is required to be six feet, per Section 5.15.4.A of the Zoning Ordinance.**
  - iii. **The applicant is required to provide a six foot accessible route from the parking lot, per Section 5.16.5.C.**

Bicycle parking will be revised as required.

### **3. Sidewalk Requirements**

- a. **The applicant should provide width dimensions for the proposed sidewalk near the northeast corner of the building near the driveway in addition to providing a ramp with a detectable warning surface.**

Sidewalk will be dimensioned and a ramp added.

- b. **Sidewalks are not required along Venture Drive.**

Noted.

- c. **The applicant should provide a detail for the proposed sidewalk ramps.**

Ramp details will be added.

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

- a. **All signing and striping details are required by the final site plan.**

Signing and striping details will be added.

- i. **The applicant should indicate details for the proposed signing including sign height, sign post details and sign sizes.**

Signing and striping details will be added.

- b. **The proposed crosswalk near the driveway should be redesigned to be consistent with MMUTCD or omitted due to the irregular design.**

The crosswalk will be removed from the design.

- c. **All roadside signs should be installed two feet from the face of the curb to the near edge of the sign. Please provide a detail or note indicating as such in future submittals.**

A note will be added.

- d. **All post-mounted signs are required to be a minimum height of seven feet from grade to the bottom of the sign in the vicinity of a sidewalk or curb.**

Sign details will reflect this requirement.

- e. **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. Please provide a detail or note indicating as such in future submittals.**

Sign details will reflect this requirement.

- f. **Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements. Please provide a detail or note indicating as such in future submittals.**

Sign details will reflect this requirement.

- g. **For clarification, indicate both a R7-8 and an R7-8p sign at the van accessible parking space and update the signing quantities table to reflect three total R7-8 signs.**

Sign quantities will be updated accordingly.

- h. **Indicate the color of the proposed parking bumpers. The City requires all parking bumpers to be yellow in color.**

A note will be added specifying bumper block color.

- i. **Provide details and notes related to pavement markings and striping.**
  - i. **Standard parking striping shall be four inch white.**
  - ii. **A four inch white parking stripe shall be placed adjacent to a four inch blue parking stripe in areas where a standard parking space borders an accessible parking space.**
  - iii. **Provide a detail for the international symbol for accessibility. The applicant could revise the plans to indicate placement of the international symbol for accessibility towards the near end of the space as opposed to the middle. The symbol is required to be white or white with a blue background and white border.**

Striping details will reflect this requirement.

**Fire Department Review Comments:**

**Comments:**

1. **Hydrant spacing is NO greater than 300' from hydrant to hydrant. City Ordinance 11-68(F)(1)c.**

Noted.

2. **Must provide a hammerhead turnaround on the east side of structure or connect the two parking lots together. North and East parking lots is greater than 150'. ICF 503.2.5.**

The parking lots for the new and existing expansion will be connected, and entrances onto Venture drive provide a fire access road completely around the building.

If you should have any questions or require any additional information, please feel free to contact this office.

Sincerely,

**PEA, Inc.**



Becky Klein, PE, LEED AP BD+C  
Project Coordinator

Attachment:

Cc: