SAKURA NOVI
JZ19-31

SAKURA NOVI JZ19-31 WITH REZONING 18.732

Public hearing at the request of Robert B. Aikens & Associates, LLC and Robertson Brothers Homes for Planning Commission's recommendation to City Council for a Zoning Map amendment from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay. The subject property is approximately 15.59 acres and is located north of Grand River Avenue, south of Eleven Mile Road and east of Town Center Drive (Section 23). The applicant is proposing to develop the property as an Asian-themed mixed-use development.

REQUIRED ACTION

Recommendation to City Council for approval or denial, or postpone the recommendation, of the rezoning request from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay.

MOTION SHEET

Postpone Recommendation

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732, motion to postpone making a recommendation to the City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan. This motion is made for the following reasons:

1. To allow the applicant time to provide a revised submittal which reflects the changes shown on the phasing plan as received via email on December 4, 2019;
2. To allow the applicant time to determine details such as proposed parcel lines, wetland mitigation, woodland discrepancies;
3. To allow staff to review the revisions to the plans to identify any additional deviations and conditions that would be needed in the PRO Agreement, and evaluate any new information provided;
4. To allow the applicant to work with staff to reduce the number of deviations requested;
5. To allow additional time for the applicant to submit additional evidence/information in support of the public benefits to be achieved through this development and to justify the proposed ordinance deviations and the intent of the section 7.13.2.D.ii that the proposed PRO rezoning would be in the public interest and the benefits to public of the proposed PRO rezoning would clearly outweigh the detriments.
6. The applicant shall have the opportunity to clarify through a modified submittal if any PRO conditions are being offered under the PRO provisions of the Zoning Ordinance;
7. *(Additional reasons here if any).*

-OR-

Approval

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732 motion to **recommend approval** to City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan.

The recommendation includes the following ordinance deviations for consideration by the City Council:

[insert all deviations being recommended from the applicant's response dated December 4, 2019]

If the City Council approves the rezoning, the Planning Commission recommends the following conditions be made part of the PRO Agreement:

[insert any conditions]

This motion is made because the proposed Town Center-1 zoning district is a reasonable alternative to the Master Plan for Land Use, and because:

[insert reasons/benefits of the development]:

-OR-

Denial

In the matter of Sakura Novi, JZ19-31, with Zoning Map Amendment 18.732 motion to **recommend denial** to City Council to rezone the subject property from Office Service (OS-1), Office Service Commercial (OSC) and Light Industrial (I-1) to Town Center-1 (TC-1) with a Planned Rezoning Overlay Concept Plan... *because [insert any reasons]*

MAPS

Location

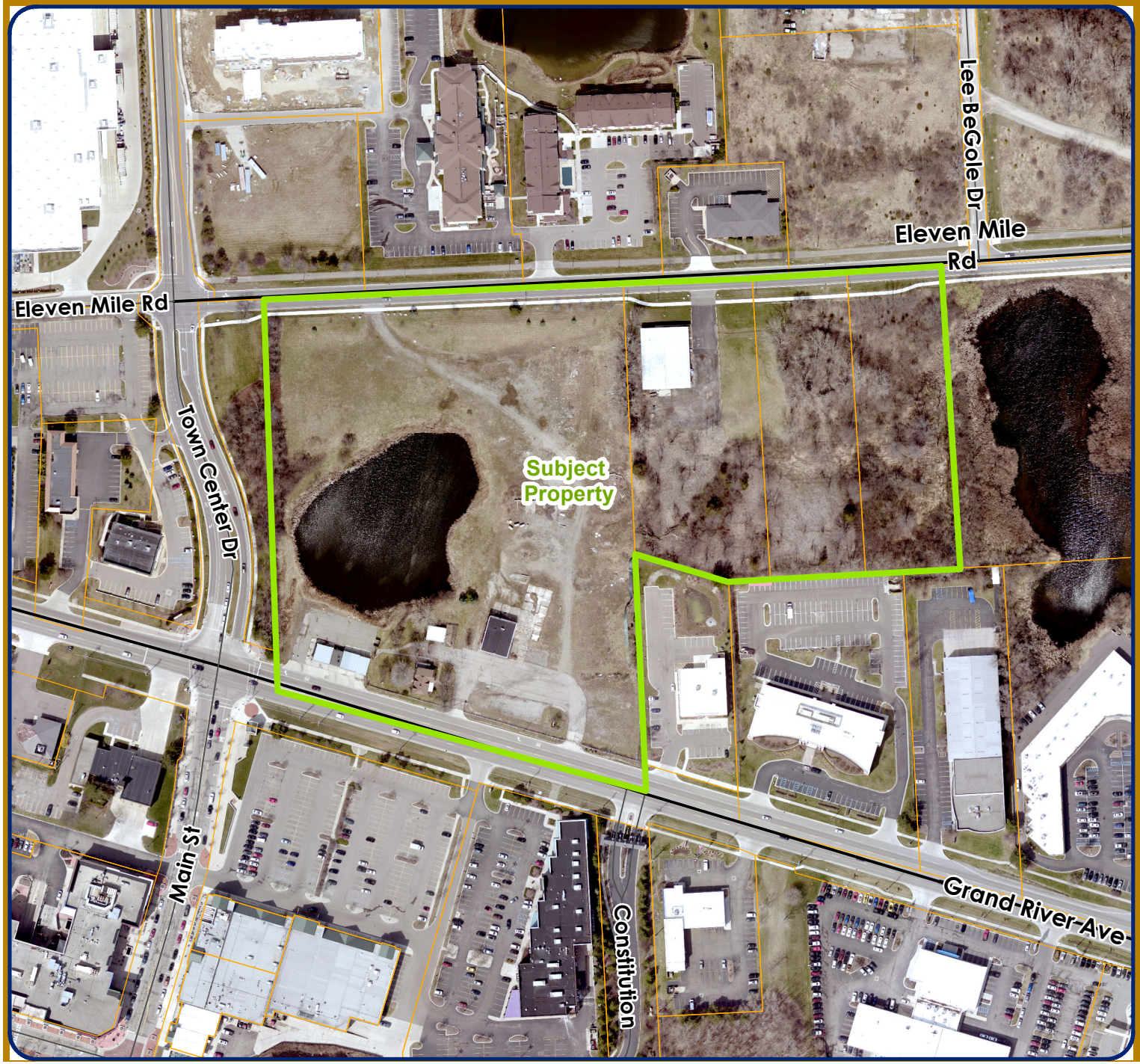
Zoning

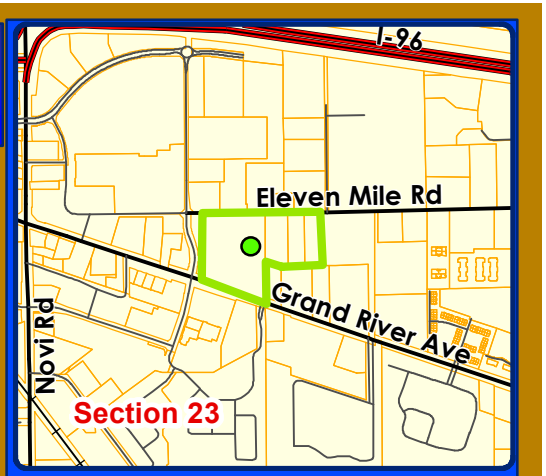
Future Land Use

Natural Features

SAKURA WAY: JZ19-31

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: 7/22/19
Project: SAKURA WAY JZ 19-31
Version #: 1

Feet
0 55 110 220 330

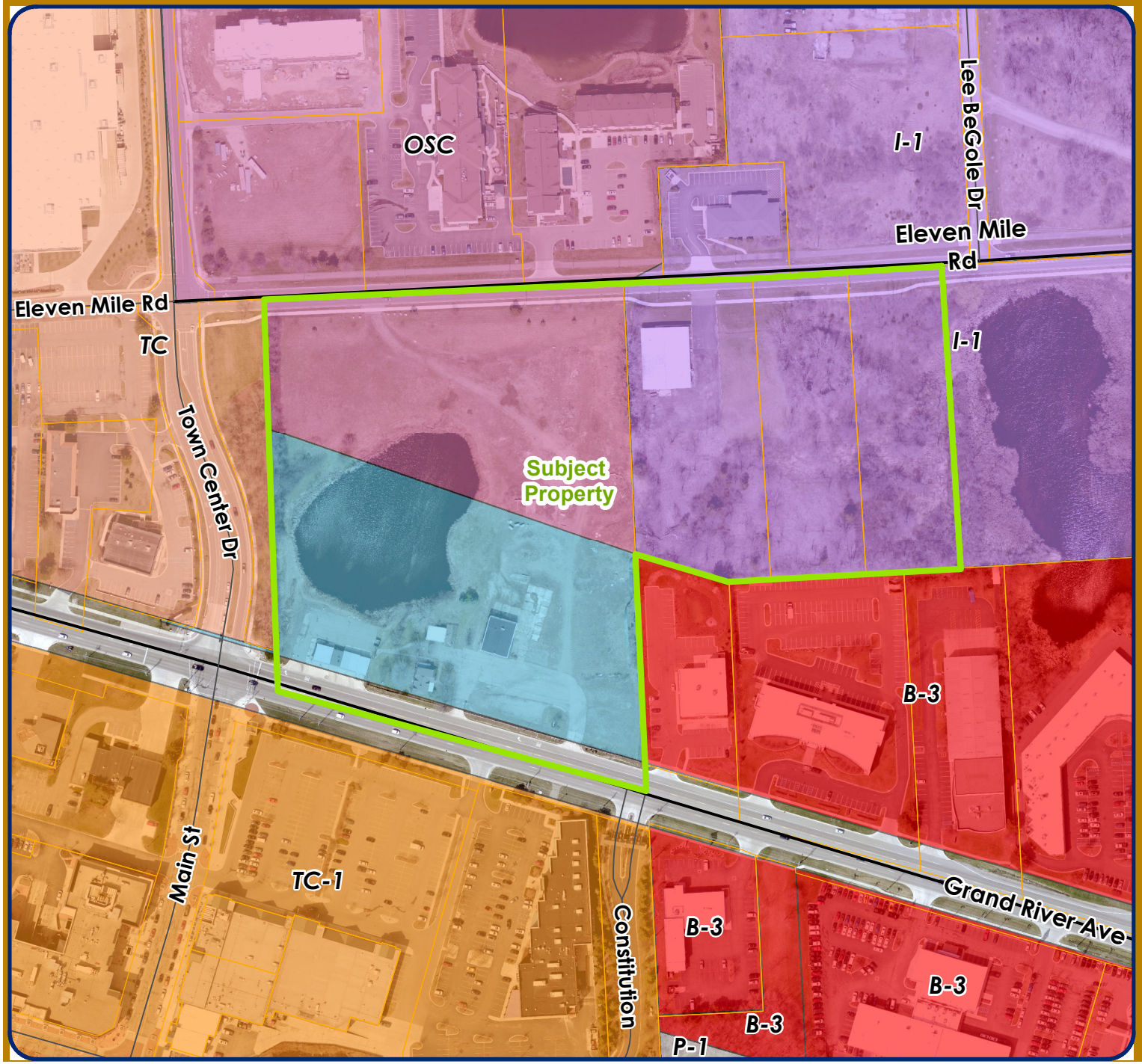
1 inch = 250 feet

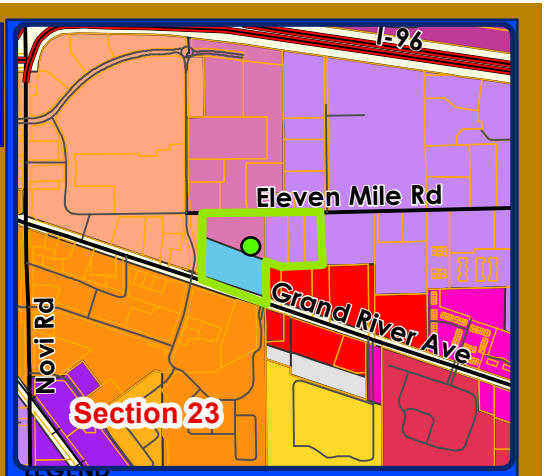
MAP INTERPRETATION NOTICE

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

SAKURA WAY: JZ19-31

ZONING





LEGEND

- RM-1: Low-Density Multiple Family
- RM-2: High-Density Multiple Family
- B-3: General Business District
- GE: Gateway East District
- I-1: Light Industrial District
- I-2: General Industrial District
- NCC: Non-Center Commercial District
- OS-1: Office Service District
- OSC: Office Service Commercial
- OST: Office Service Technology
- P-1: Vehicular Parking District
- TC: Town Center District
- TC-1: Town Center -1 District
- Subject Property

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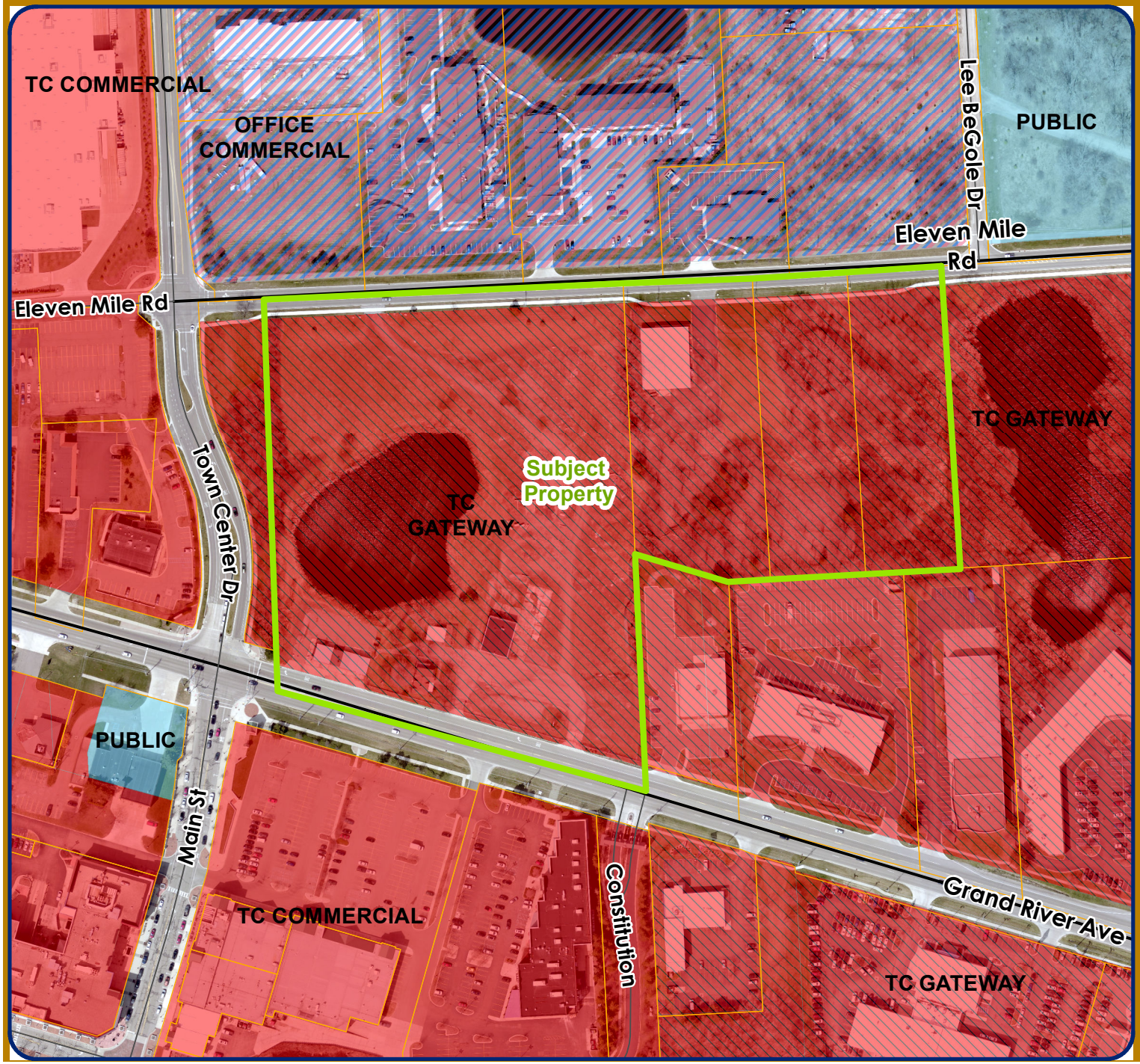
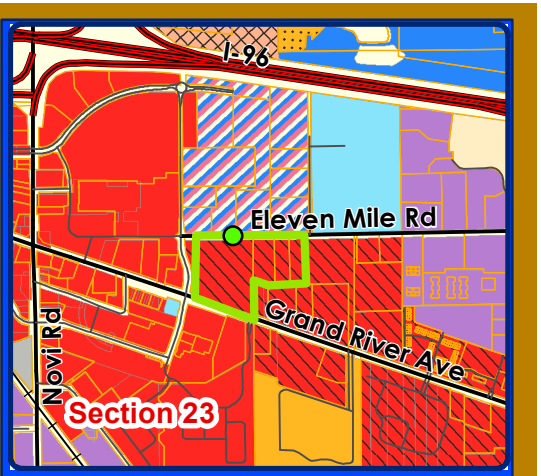
SAKURA WAY: JZ19-31

FUTURE LAND USE





LEGEND

- Multiple Family
- PD1
- Office Research Development Technology
- Office Commercial
- Industrial Research Development Technology
- Regional Commercial
- TC Commercial
- TC Gateway
- Educational Facility
- Public
- Cemetery
- Subject Property

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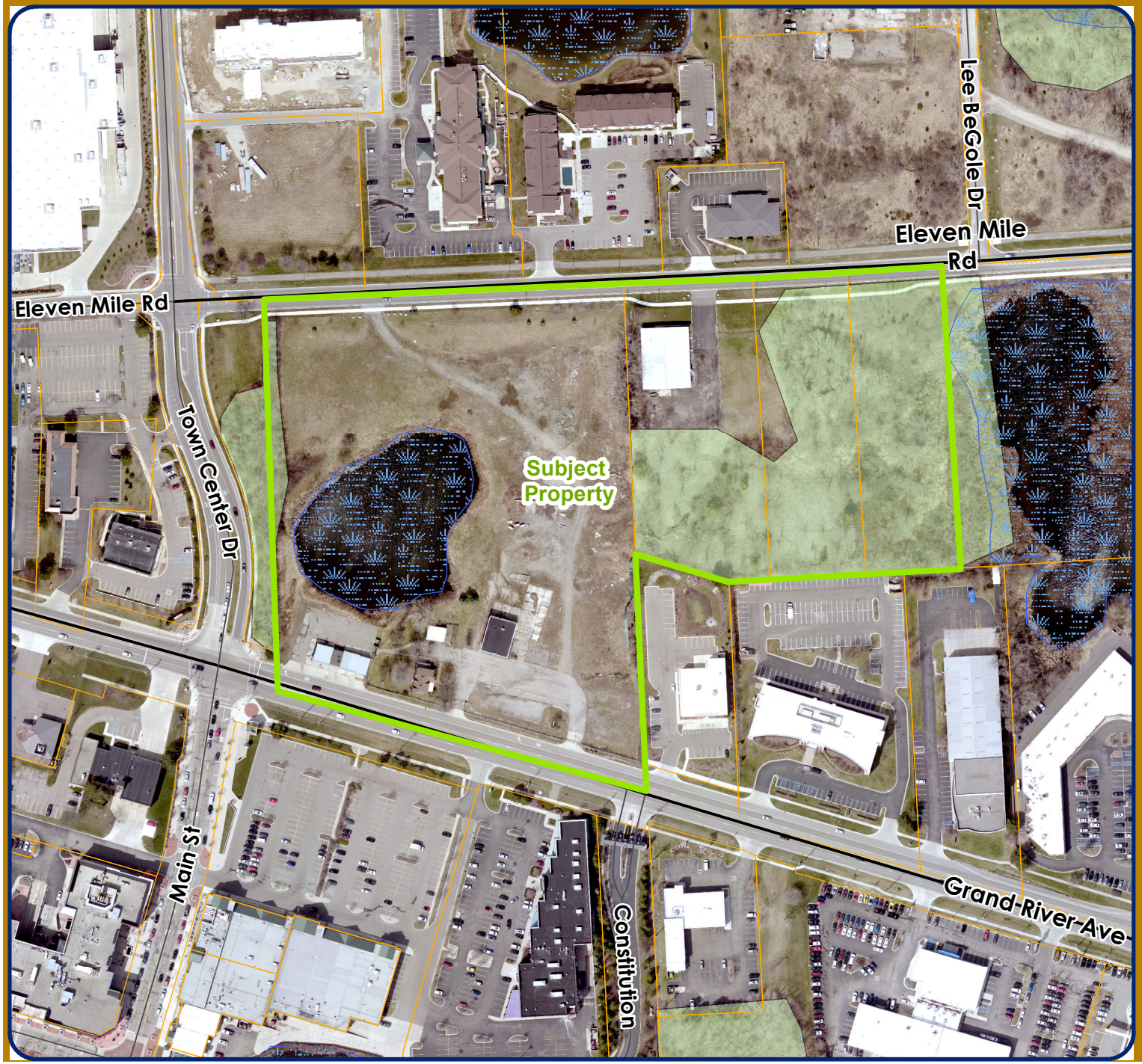
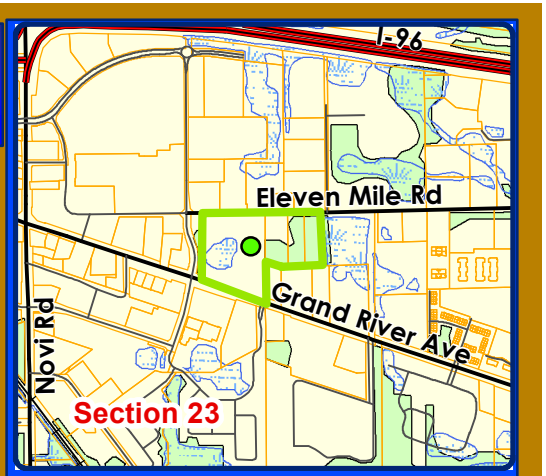
SAKURA WAY: JZ19-31

NATURAL FEATURES





LEGEND

- WETLANDS
- WOODLANDS
- Subject Property

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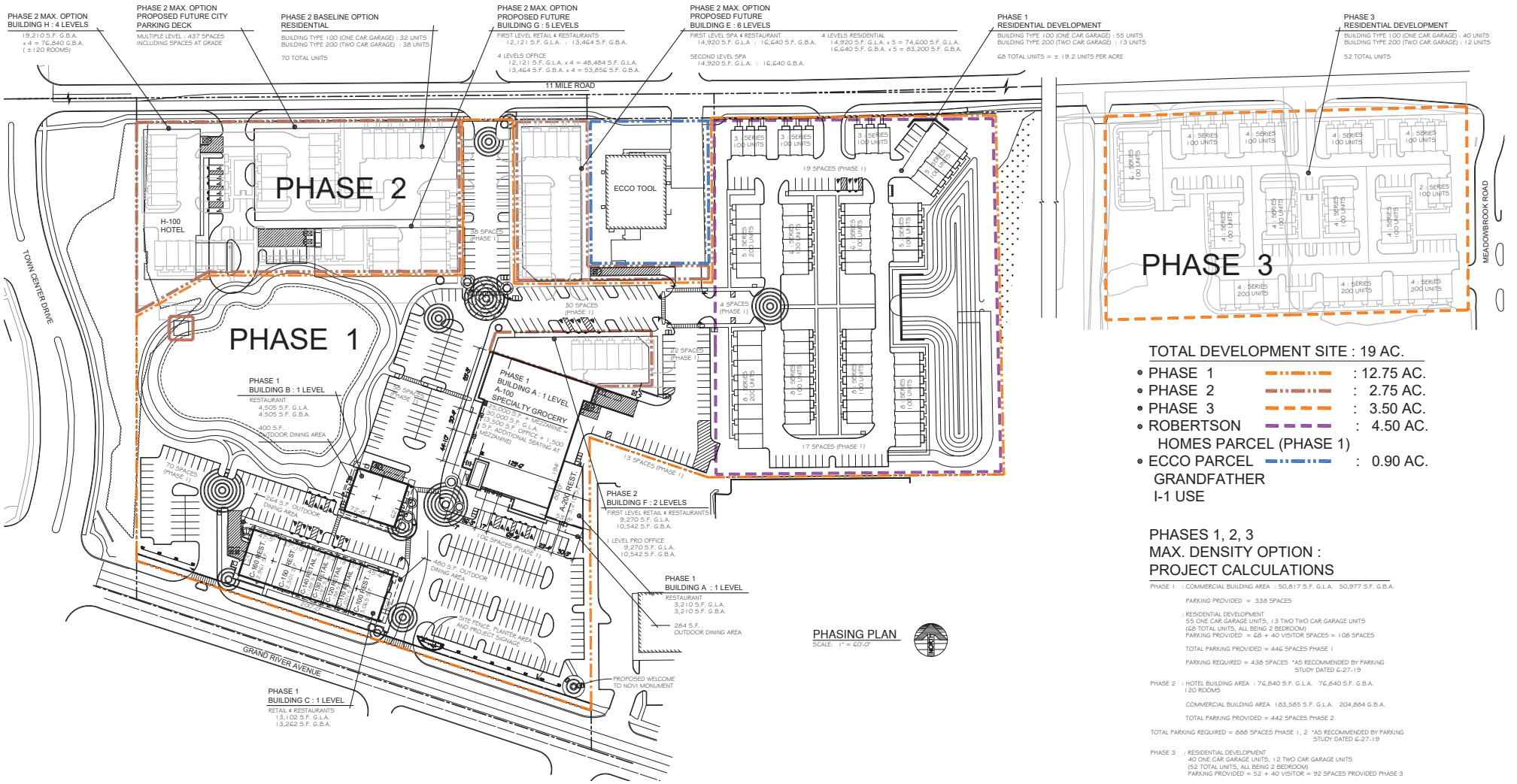
PRO CONCEPT PLAN
OCTOBER 3, 2019



PHASING PLAN
SCALE: 1" = 60'-0"

TOTAL DEVELOPMENT SITE : 19 AC.

- PHASE 1 : 12.75 AC.
- PHASE 2 : 2.75 AC.
- PHASE 3 : 3.50 AC.
- ROBERTSON HOMES PARCEL (PHASE 1) : 4.50 AC.
- ECCO PARCEL : 0.90 AC.
  GRANDFATHER I-1 USE

PHASES 1, 2, 3 MAX. DENSITY OPTION : PROJECT CALCULATIONS

PHASE 1 : COMMERCIAL BUILDING AREA : 50,817 S.F. G.L.A. 50,977 S.F. G.B.A.

PARKING PROVIDED = 338 SPACES

: RESIDENTIAL DEVELOPMENT
55 ONE CAR GARAGE UNITS, 13 TWO TWO CAR GARAGE UNITS
(68 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 68 + 40 VISITOR SPACES = 108 SPACES

TOTAL PARKING PROVIDED = 446 SPACES PHASE 1

PARKING REQUIRED = 438 SPACES *AS RECOMMENDED BY PARKING STUDY DATED 6-27-19

PHASE 2 : HOTEL BUILDING AREA : 76,840 S.F. G.L.A. 76,840 S.F. G.B.A.
120 ROOMS

COMMERCIAL BUILDING AREA 183,585 S.F. G.L.A. 204,884 G.B.A.

TOTAL PARKING PROVIDED = 442 SPACES PHASE 2

TOTAL PARKING REQUIRED = 888 SPACES PHASE 1, 2 *AS RECOMMENDED BY PARKING STUDY DATED 6-27-19

PHASE 3 : RESIDENTIAL DEVELOPMENT
40 ONE CAR GARAGE UNITS, 12 TWO CAR GARAGE UNITS
(52 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 52 + 40 VISITOR = 92 SPACES PROVIDED PHASE 3

PHASE 1 USES :

- 30,000 S.F. MARKET (25,000 S.F. + 3,500 S.F. MEZZ. OFFICE + 1,500 S.F. MEZZ. ADDITIONAL SEATING)
- 5 RESTAURANTS
- 4 RETAIL SPACE
- 68 TOWN-HOME APARTMENTS
  (55 - 1,184 S.F. & 13 - 1,541 S.F. UNITS)
  121 PARKING SPACES
  ± 19.2 UNITS PER ACRE
- LIGHT INDUSTRIAL USE ECCO TOOL CO.
  PARCEL GRANDFATHERED IN

PHASE 2 MAX. DENSITY OPTION POTENTIAL PHASE 2 USES :

- BUILDING E PODIUM : 5,000 S.F. RESTAURANT (GROUND FLR.)
  25,000 S.F. SPA (GROUND FLR. & 2ND FLR.)
  48 RESIDENTIAL UNITS (FLR.S 3, 4, 5 & 6)
  (16 - 1 BEDROOM & 32 - 2 BEDROOM UNITS)
- BUILDING F : 3,000 S.F. RESTAURANT (GROUND FLR.)
  6,000 S.F. RETAIL (GROUND FLR.)
  10,000 S.F.MULTI-TENANT PRO OFFICE (2ND FLR.)
- BUILDING G : 2 - 3,000 S.F. RESTAURANTS (GROUND FLR.)
  6,000 S.F. RETAIL (GROUND FLR.)
  48,000 S.F. MULTI-TENANT OFFICE / PRO OFFICE (FLR.S 2, 3, 4 & 5)
- BUILDING H : 120 ROOM HOTEL
- PARKING DECK : 442 SPACES INCLUDING SPACES AT GRADE

PHASE 2 BASELINE OPTION RESIDENTIAL :

- 70 TOWN-HOME APARTMENTS
  (32 - 1,184 S.F. & 38 - 1,541 S.F. UNITS)
  148 PARKING SPACES

PHASE 3 :

- 52 TOWN-HOME APARTMENTS
  (40 - 1,184 S.F. & 12 - 1,541 S.F. UNITS)
  104 PARKING SPACES

PHASING PLAN

SAKURA • NOVI

NOVI, MICHIGAN

Robert B. Aikens & Associates, L.L.C.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

WAH YEE ASSOCIATES
ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
OCTOBER 2, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

CAD DWG 5035 P11 PHASING PLAN REVISED 10-2-19.DWG

PHASING PLAN
SCALE: 1" = 60'-0"

TOTAL DEVELOPMENT SITE : 19 AC.

- PHASE 1 COMMERCIAL : 7.35 AC.
- PHASE 2 : 2.75 AC.
- PHASE 3 : 3.50 AC.
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- ECCO PARCEL GRANDFATHER I-1 USE : 0.90 AC.

PHASES 1 + 2 BASELINE OPTION + PHASE 3

PHASE 1 : COMMERCIAL BUILDING AREA : 50,817 S.F. G.L.A. 50,977 S.F. G.B.A.

PARKING PROVIDED = 336 SPACES

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(68 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 68 + 40 VISITOR SPACES = 108 SPACES

TOTAL PARKING PROVIDED = 444 SPACES PHASE 1

PARKING REQUIRED = 436 SPACES *AS RECOMMENDED BY PARKING STUDY DATED 6-27-19

PHASE 2 : RESIDENTIAL DEVELOPMENT
32 ONE CAR GARAGE UNITS, 38 TWO CAR GARAGE UNITS
(70 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 106 + 40 VISITOR SPACES = 146 SPACES

TOTAL PARKING PROVIDED = 146 SPACES PHASE 2

PHASE 3 : RESIDENTIAL DEVELOPMENT
40 ONE CAR GARAGE UNITS, 12 TWO CAR GARAGE UNITS
(52 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 52 + 40 VISITOR = 92 SPACES PROVIDED PHASE 3

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- 5 RESTAURANTS
- 4 RETAIL SPACE
- 68 TOWN-HOME APARTMENTS
  (55 - 1,184 S.F. & 13 - 1,541 S.F. UNITS)
  121 PARKING SPACES
  ± 19.2 UNITS PER ACRE
- LIGHT INDUSTRIAL USE ECCO TOOL CO. PARCEL GRANDFATHERED IN

PHASE 2 BASELINE OPTION RESIDENTIAL :

- 70 TOWN-HOME APARTMENTS
  (32 - 1,184 S.F. & 38 - 1,541 S.F. UNITS)
  148 PARKING SPACES

PHASE 3 :

- 52 TOWN-HOME APARTMENTS
  (40 - 1,184 S.F. & 12 - 1,541 S.F. UNITS)
  104 PARKING SPACES

PHASING EXHIBIT E : PHASE 1 + 2 BASELINE OPTION + PHASE 3

SAKURA • NOVI

NOVI, MICHIGAN

Robert B. Aikens & Associates, L.L.C.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-263-1071

Wah Yee Associates
Architects & Planners
42400 Grand River Avenue, Suite 200
Novi, Michigan 48375
Phone 248.489.9160
Project No. 5035

ISSUED FOR
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FEB. 27, 2019
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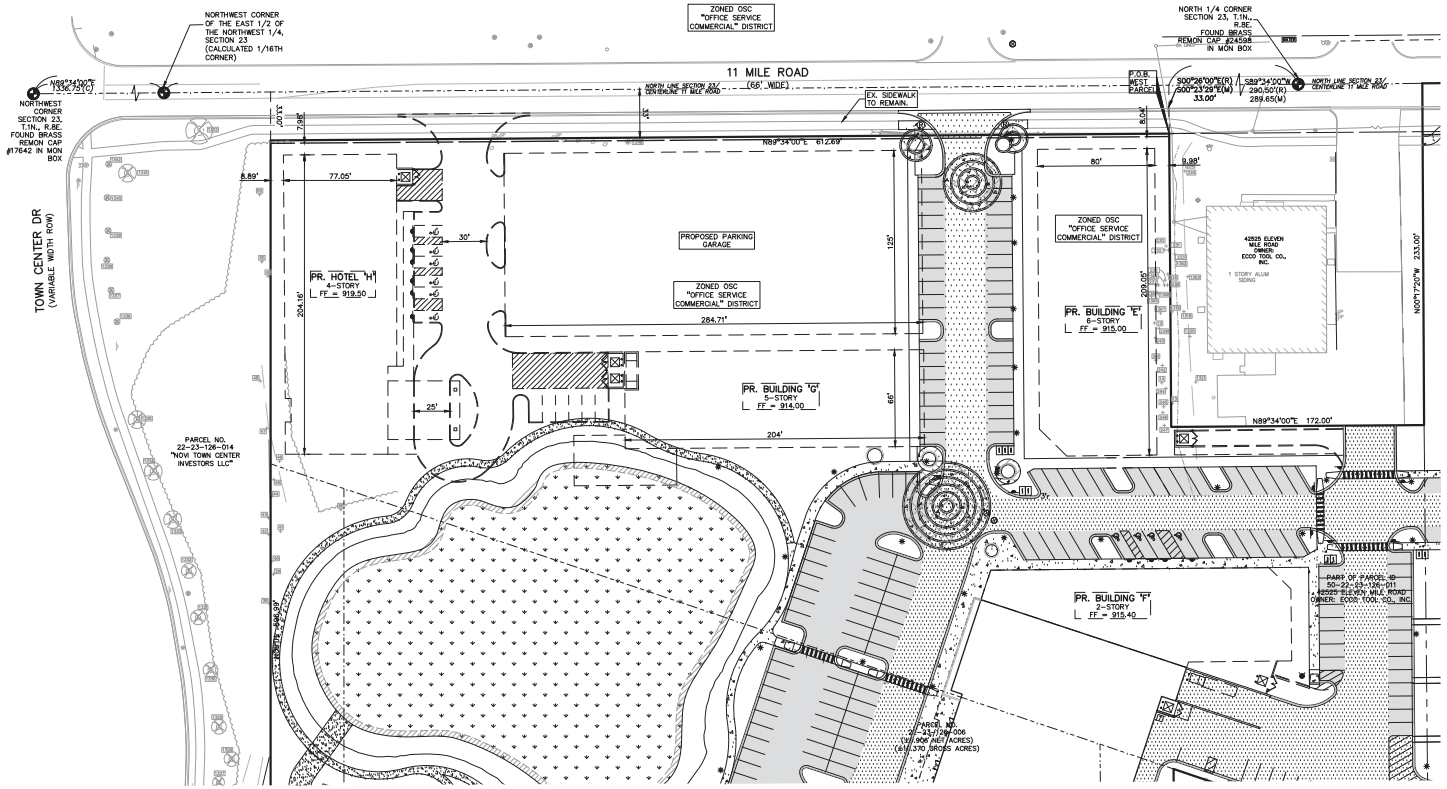
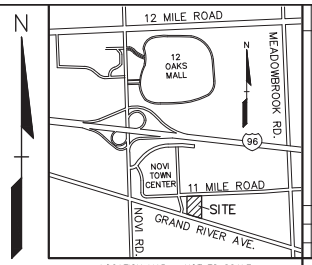
PHASING EXHIBIT
NOVEMBER 1, 2019

PRELIMINARY
NOT FOR CONSTRUCTION PE-E
CAD DWG E. PHASE 1 + 2 B.L. + 3 EXHIBIT 10-31-19.DWG





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND · IRON SET · NAIL FOUND · NAIL & CAP SET · BRASS PLUG SET · MONUMENT FOUND · MONUMENT SET · SECT. CORNER FOUND · R RECORDED · M MEASURED · C CALCULATED

EXISTING	PROPOSED
OH-ELEC-W-O- ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE	
-UG-CATV- UNDERGROUND CABLE TV, CATV PEDESTAL	
-UG-PHONE- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
-UG-ELEC- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECHYE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
SPOT ELEVATION	
CONTOUR LINE	
FENCE	
GUARD RAIL	
STREET LIGHT	
SIGN	
CONCRETE	
ASPH. ASPHALT	
GRAVEL GRAVEL SHOULDER	
WETLAND	

STD DUTY · HEAVY DUTY · R.O.W. ONLY · STD DUTY · HEAVY DEEP DUTY · DEEP STRENGTH

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

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. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS 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.
5. 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.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON–BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	10/2/19

REVISIONS

GREGORY BONO ENGINEER 47911 LICENSED PROFESSIONAL ENGINEER STATE OF MICHIGAN

CAUTION!!

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

THIS DRAWING AND DESIGNS ARE THE PROPERTY OF PEA, INC. AND ARE NOT TO BE USED IN ANY WAY THAT THEY ARE NOT TO BE USED, REPRODUCED, OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF PEA, INC. ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS ARE HEREBY SPECIFICALLY RESERVED. © 2019 PEA, INC.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL 811

Know what's below Call before you dig

MISS DIG System, Inc.

1-800-482-7171 www.missdig.org

(TOLL FREE)

PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
f: 248.689.9090
f: 248.689.1044
www.peainc.com

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

ALTERNATE PHASE 2 DIMENSION PLAN
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	CK.	JKS	SUR.	GWC	P.M.	JPB

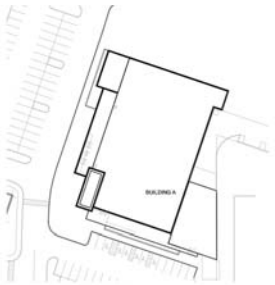
K:\PROJECTS\2018\18033 NOVI–APPLEBY\SITE PLANS\C-2.3.PHS 24 – 18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.3



KEY PLAN
SCALE: N.T.S.

BR-1
Belden
Gray Bricks
Beacon Velour

FCP-1
Nichiha
VintageWood
Cedar EPC762F

EIFS-1
Dryvit
Commercial Cement Plaster
PPG Gray Palomino 521-3

MTL-1
Alpolic
Alpolic/PE
CLR Anodized Clear

GFRC-1
ConcreteWorks East
GFRC Wall Panels
Cumulus G

A WEST ELEVATION
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,569 S.F.	37.0 %
MTL-1	FLAT METL PANEL	25 %	141 S.F.	3.0 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	630 S.F.	15 %
GFRC-1	G.F.R.C CLADDING SYSTEM	25 %	498 S.F.	12.0 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	1,143 S.F.	27.0 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	113 S.F.	3 %
	TOTAL		4,007 S.F.	100.0 %

B SOUTH ELEVATION
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,347 S.F.	31%
MTL-1	FLAT METL PANEL ALUMINUM COMPOSITE (ALPOLIC)	25%	807 S.F.	12 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	1,159 S.F.	23 %
GFRC-1	G.F.R.C CADDING SYSTEM	25 %	604 S.F.	12 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	871 S.F.	17.5 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	247 S.F.	4.5 %
	TOTAL		5,031 S.F.	100.0 %

ONE WORLD MARKET
NOVI MICHIGAN

BUILDING A ELEVATIONS
SAKURA WAY
NOVI, MICHIGAN

P4.1

PRELIMINARY
NOT FOR CONSTRUCTION

www.dwdw.co dwdw

NORTH ELEVATION
SCALE: 3/32" = 1'-0"
1 / P4.4

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	292 S.F.	7.8 %
BRICK	30 % MIN.	2,186 S.F.	58.4 %
EIFS FACADE	25 %	467 S.F.	12.4 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	352 S.F.	9.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	455 S.F.	12.1 %
TOTAL		3,764 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,320 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,556 S.F. = 3,764 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.

WEST ELEVATION
SCALE: 3/32" = 1'-0"
3 / P4.4

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	55 S.F.	3.6 %
BRICK	30 % MIN.	625 S.F.	40.4 %
EIFS FACADE	25 %	610 S.F.	39.5 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	98 S.F.	6.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	158 S.F.	10.2 %
TOTAL		1,546 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,746 S.F. - GLASS STOREFRONT AND DOOR AREA OF 202 S.F. = 1,546 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 14.5 %

EAST ELEVATION
SCALE: 3/32" = 1'-0"
2 / P4.4

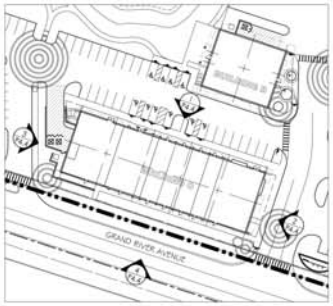
EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	156 S.F.	11.4 %
BRICK	30 % MIN.	434 S.F.	31.7 %
EIFS FACADE	25 %	392 S.F.	28.7 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	52 S.F.	3.8 %
PREFINISHED METAL PANELS (FLAT)	25 %	333 S.F.	24.4 %
TOTAL		1,367 S.F.	100.0 %

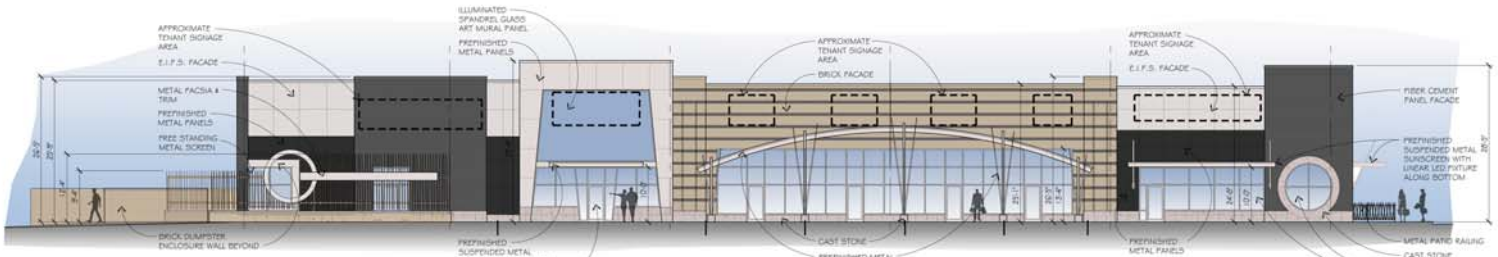
NOTE : 1. TOTAL FACADE = 1,757 S.F. - GLASS STOREFRONT AND DOOR AREA OF 390 S.F. = 1,367 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 3.7 %

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
2. DOOR LOCATIONS SHOWN FOR CONCEPT ONLY, SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
3. ROOF TOP MECHANICAL EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS OR SCREEN ENCLOSURES OF SIMILAR MATERIAL AND CHARACTER AS THE BUILDING.
4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
6. SIGNAGE AREAS SHOWN FOR CONCEPT ONLY. ACTUAL SIGNAGE TO BE SUBMITTED ON A TENANT BY TENANT BASIS, IN CONFORMANCE WITH THE APPROVED PRO AGREEMENT.



KEY PLAN
SCALE: N.T.S.



SOUTH ELEVATION
SCALE: 3/32" = 1'-0"
4 / P4.4

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	340 S.F.	8.3 %
BRICK	30 % MIN.	2,060 S.F.	50.7 %
EIFS FACADE	25 %	475 S.F.	11.6 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	234 S.F.	5.7 %
PREFINISHED METAL PANELS (FLAT)	25 %	704 S.F.	17.2 %
SPANDREL GLASS - ART MURAL PANEL	50 %	269 S.F.	6.5 %
TOTAL		4,102 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,456 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,354 S.F. = 4,102 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.

BUILDING C ELEVATIONS

SAKURA NOVI

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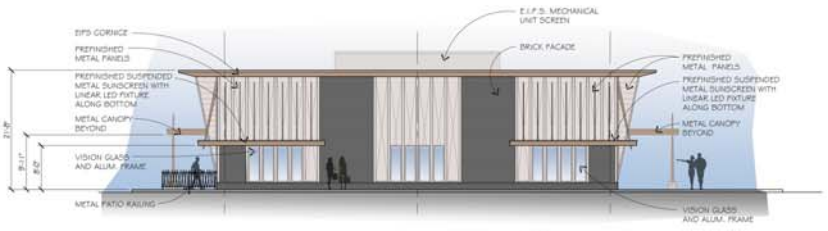
ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160

PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
SEPTEMBER 30, 2019

PRELIMINARY
NOT FOR CONSTRUCTION
(P4.4)

CAD DWG 5035 COLOR P44 9-30-19.DWG



SOUTH ELEVATION

SCALE: 3/32" = 1'-0"

2 / P4.3

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	544 S.F.	34.5 %
EIFS	25 %	198 S.F.	12.6 %
METAL CANOPIES & SUNSCREENS	15 %	50 S.F.	3.2 %
PREFINISHED METAL PANELS (FLAT)	25 %	784 S.F.	49.7 %
TOTAL		1,576 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,774 S.F. - GLASS STOREFRONT AND DOOR AREA OF 198 S.F. = 1,576 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 24.7%.

EAST ELEVATION

SCALE: 3/32" = 1'-0"

1 / P4.3

EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	350 S.F.	26.7 %
EIFS	25 %	207 S.F.	15.8 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.4 %
PREFINISHED METAL PANELS (FLAT)	25 %	670 S.F.	51.1 %
TOTAL		1,312 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,647 S.F. - GLASS STOREFRONT AND DOOR AREA OF 335 S.F. = 1,312 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 26.1 % AND BRICK SHORTAGE OF 3.3 %.

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
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4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
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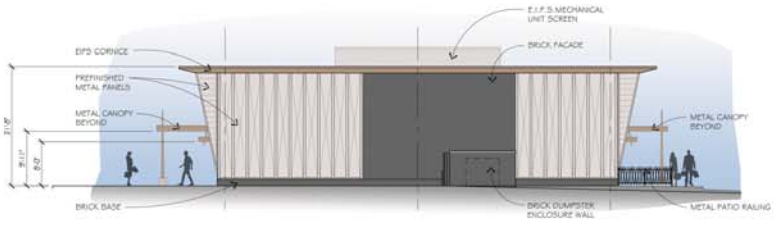


NORTH ELEVATION

SCALE: 3/32" = 1'-0"

4 / P4.3

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	621 S.F.	35.1 %
EIFS	25 %	198 S.F.	11.2 %
METAL CANOPIES & SUNSCREENS	15 %	0 S.F.	0.0 %
PREFINISHED METAL PANELS (FLAT)	25 %	950 S.F.	53.7 %
TOTAL		1,769 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,769 S.F. - GLASS STOREFRONT AND DOOR AREA OF 0 S.F. = 1,769 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 28.7 %.

WEST ELEVATION

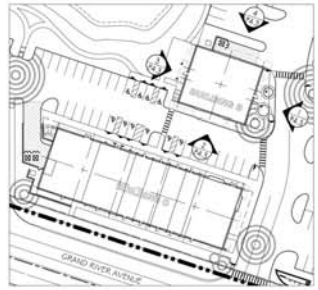
SCALE: 3/32" = 1'-0"

3 / P4.3

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	418 S.F.	30.0 %
EIFS CORNICE & FACADE	25 %	210 S.F.	15.1 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.1 %
PREFINISHED METAL PANELS (FLAT)	25 %	680 S.F.	48.8 %
TOTAL		1,393 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,664 S.F. - GLASS STOREFRONT AND DOOR AREA OF 271 S.F. = 1,393 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 23.8 %.



KEY PLAN

SCALE: N.T.S.

BUILDING B ELEVATIONS

SAKURA NOVI

NOVI, MICHIGAN

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WAH YEE ASSOCIATES
ARCHITECTS & PLANNERS
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NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 26, 2019
PRO REZONING
REVISED SUBMITTAL
SEPTEMBER 30, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

P4.3

CAD DWG 5035 COLOR P43 9-30-19.DWG

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,042 SF	41%
SIDING	0%	689 SF	24%
SHINGLES	25%	614 SF	23%
TRIM	15%	252 SF	10%
TOTAL		2,411 SF	100%

REAR ELEVATION
6 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	431 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,018 SF	38.5%
SIDING	0%	622 SF	23.5%
SHINGLES	25%	449 SF	17%
TRIM	15%	551 SF	21%
TOTAL		2,640 SF	100%

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
6 UNIT BUILDING
SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

ARCHITECTURE

BRIAN NEEPER ARCHITECTURE P.C.
DESIGN - PLANNING - INTERIORS
BLOOMFIELD HILLS, MICHIGAN
BRIANNEEPER.COM
248. 259. 1784

SHEET TITLE
6 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "100 SERIES"
NOVI, MICHIGAN

PRELIMINARY	9-27-19
BID	
PERMITS	
FINAL	
REVISIONS	

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JOB NUMBER	19011
DRAWN BY	BN / JF
CHECKED BY	
SHEET NUMBER	R-3

STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301035053 REGISTERED ARCHITECT

REAR ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	549 SF	15.5%
SIDING	0%	1,748 SF	47.5%
SHINGLES	25%	745 SF	20%
TRIM	15%	629 SF	17%
TOTAL		3,491 SF	100%

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,237 SF	33%
SIDING	0%	1,455 SF	39%
SHINGLES	25%	534 SF	14%
TRIM	15%	518 SF	14%
TOTAL		3,744 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

ARCHITECTURE

BRIAN NEEPER ARCHITECTURE P.C.
DESIGN - PLANNING - INTERIORS
BLOOMFIELD HILLS, MICHIGAN
BRIANNEEPER.COM
248. 259. 1784

SHEET TITLE
8 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "200 SERIES"
NOVI, MICHIGAN

PRELIMINARY	9-27-19
BZA	
PERMITS	
FINAL	
REVISIONS	

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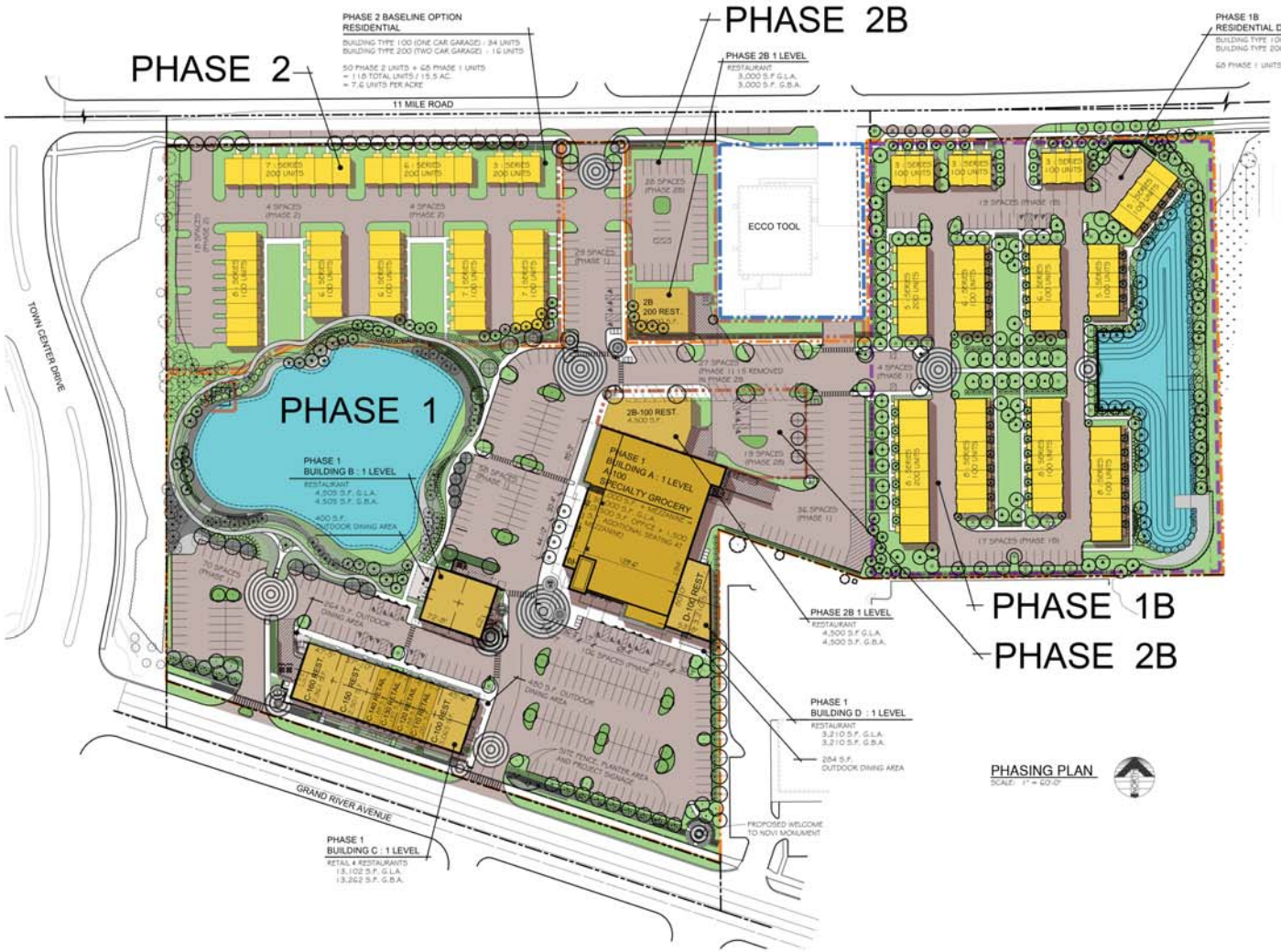
BRIAN NEEPER
ARCHITECTURE P.C.

JOB NUMBER	19011
DRAWN BY	BN / JF
CHECKED BY	
SHEET NUMBER	R-6

STATE OF MICHIGAN
BRIAN NEEPER
ARCHITECT
No. 1301035053
LICENSED ARCHITECT

PRO CONCEPT PLAN
REVISED: DECEMBER 4, 2019


PHASE 2
PHASE 2B
PHASE 1
PHASE 1B
PHASE 2B
11 MILE ROAD
TOWN CENTER DRIVE
GRAND RIVER AVENUE
ECCO TOOL
PHASE 2 BASELINE OPTION
RESIDENTIAL
BUILDING TYPE 100 (ONE CAR GARAGE) : 34 UNITS
BUILDING TYPE 200 (TWO CAR GARAGE) : 16 UNITS
50 PHASE 2 UNITS + 68 PHASE 1 UNITS
= 118 TOTAL UNITS / 15.5 AC.
= 7.6 UNITS PER ACRE
PHASE 2B 1 LEVEL
RESTAURANT
3,000 S.F. G.L.A.
3,000 S.F. G.B.A.
PHASE 1B
RESIDENTIAL DEVELOPMENT
BUILDING TYPE 100 (ONE CAR GARAGE) : 55 UNITS
BUILDING TYPE 200 (TWO CAR GARAGE) : 13 UNITS
68 PHASE 1 UNITS / 12.75 AC. = 5.33 UNITS PER ACRE
PHASE 1
BUILDING B : 1 LEVEL
RESTAURANT
4,505 S.F. G.L.A.
4,505 S.F. G.B.A.
400 S.F. OUTDOOR DINING AREA
PHASE 1
BUILDING A : 1 LEVEL
A-100
SPECIALTY GROCERY
30,000 S.F. MARKET
3,500 S.F. MEZZANINE
3,500 S.F. G.L.A.
3,500 S.F. OFFICE + 1,500
ADDITIONAL SEATING AT
MEZZANINE
UP
2B-100 REST.
4,500 S.F.
D-100 REST.
PHASE 2B 1 LEVEL
RESTAURANT
4,500 S.F. G.L.A.
4,500 S.F. G.B.A.
PHASE 1
BUILDING D : 1 LEVEL
RESTAURANT
3,210 S.F. G.L.A.
3,210 S.F. G.B.A.
264 S.F.
OUTDOOR DINING AREA
450 S.F. OUTDOOR
DINING AREA
SITE FENCE, PLANTER AREA
AND PROJECT SIGNAGE
PROPOSED WELCOME
TO NOVI MONUMENT
PHASE 1
BUILDING C : 1 LEVEL
RETAIL + RESTAURANTS
13,102 S.F. G.L.A.
13,262 S.F. G.B.A.
ECCO
2B
200 REST.
4,500 S.F.
C-100 REST.
C-140 RETAIL
C-100 REST.
C-100 RETAIL
C-100 REST.
C-100 RETAIL
C-100 REST.
C-100

PLANNING REVIEW

PLAN REVIEW CENTER REPORT

November 4, 1019

Planning Review

Sakura Way PRO

JZ 19-31 with Rezoning 18.732

PETITIONER

Sakura Novi, LLC

REVIEW TYPE

Revised: Rezoning Request from OSC (Office Service Commercial), OS-1 (Office Service), and I-1 (Light Industrial) to TC-1 (Town Center - 1) with a Planned Rezoning Overlay (PRO)

PROPERTY CHARACTERISTICS

Section	23	
Site Location	Parcel Ids: 22-23-126-006, 22-23-126-011, 22-23-226-007, 22-23-226-008, 22-23-226-021, 22-23-226-022 North of Grand River Avenue and south of Eleven Mile Road, east of Town	
Site School	Novi Community School District	
Current Site Zoning	OSC (Office Service Commercial), OS-1 (Office Service), and I-1 (Light Industrial)	
Proposed Site	TC-1: Town Center - 1	
Adjoining Zoning	North	OSC: Office Service Commercial and I-1: Light Industrial
	East	B-3: General Business and I-1: Light Industrial
	West	TC: Town Center
	South	TC-1: Town Center - 1
Current Site Use	Vacant; Temporary City Vehicle Storage; Tool & Die shop	
Adjoining Uses	North	Novi Oaks Hotels
	East	Retail/Restaurants
	West	Industrial Office
	South	Industrial Office
Site Size	15.59 Acres	
Plan Date	October 2, 2019	

PROJECT SUMMARY

The applicant is proposing to develop the property as an Asian-themed mixed-use development with access points off of Grand River Avenue and Eleven Mile Road. The first phase of the development proposes a Japanese grocery and food hall concept as the central tenant and anchor. Two additional buildings would contain additional Asian restaurants and retail spaces. Sixty-eight multifamily residential rental units in attached townhome buildings would be located on the eastern portion of the site with access to Eleven Mile Road. For clarity, we refer throughout our review to the commercial portion as Phase 1A and the residential portion as Phase 1B. The existing pond on the west side of the site would serve as a focal point and public gathering space, to be enhanced with Japanese gardens and a walkway around the perimeter.

The revised PRO Concept Plan and narrative presents two options for possible development in Phase 2 of the project and states that what gets built will be “fully dependent on market forces.” In

the "Baseline" scenario, the Phase 2 land area would be developed with 70 townhome units matching the form and style of those proposed for Phase 1B. The Phase 2 "Maximum Density Option" would contain 4 additional buildings, ranging in height from 2 stories to 6 stories, and uses ranging from hotel or senior living, office, retail, restaurant, personal service, and mid-rise residential, among other potential uses. This option also envisions a parking garage to accommodate the parking requirements, although the developer does not commit to building or funding the parking garage themselves. In several places it is referred to as the "City parking structure."

The revised submittal also adds a Phase 3 to the PRO Concept Plan, which would be located on a 3.5-acre non-contiguous parcel to the east along Eleven Mile Road. The plans show Phase 3 to be developed with 52 townhome units matching the form and style of those proposed for Phase 1B.

The table below lists the prospective uses for each building based on the information provided by the applicant.

Building/Area	Size (GLA)	Proposed Height	Proposed Use Category
Phase 1A			
Building A	33,210 sf		Retail, restaurant
Building B	4,505 sf	1 story	Restaurant
Building C	13,102 sf	1 story	Restaurant, retail
Phase 1B			
Attached townhomes	68 two-bedroom units	30 ft 8 in (3 story)	Multifamily residential units
Phase 2 "Baseline"			
Attached townhomes	70 two-bedroom units	30 ft 8 in (3 story)	Multifamily residential units
Phase 2 "Max Density"			
Building E	89,520 sf	6 stories	Restaurant + Spa (2 floors) Residential (32 2-bed units, 16 1-bed units) (Floors 3-6)
Building F	18,540 sf	2 stories	Retail, restaurant, office
Building G	60,605 sf	5 stories	Retail, restaurant, office
Building H	76,840 sf	4 stories	Hotel
Phase 3			
Attached townhomes	52 two-bedroom units	30 ft 8 in (3 story)	Multifamily residential units

PROJECT REVIEW HISTORY

The applicant submitted for a Pre-Application Meeting, which was held on May 8, 2019. Staff indicated that the proposed rezoning would require additional details for the PRO Concept Plan submittal and identified deviations from the ordinance requirements based on the plans provided.

The applicant submitted their PRO Concept Plan on July 1, 2019. Staff reviewed the plans and provided comments on July 29. Several of the reviews were not recommending approval of the PRO Concept Plan. There were a number of items that needed to be clarified and further information was requested for review. Staff met with the applicant on July 25 to discuss the

comments and concerns. It was agreed that further revisions would be required before the PRO Concept Plan could be presented to the Master Planning & Zoning Committee and the Planning Commission.

On October 3, the applicant submitted revised plans to respond to the previous round of comments. In addition to presenting two possible development scenarios for Phase 2 of the project, the plans also add a Phase 3 component involving two parcels that are not contiguous to the main project area.

It has come to our attention that the purchase agreement and the amendments to that agreement with the City of Novi specify which parcels are permitted to be included in the PRO Agreement with the City. Therefore it appears the Phase 3 parcels have not been authorized to be part of this process at this time, and further amendment of the purchase agreement would be required to do so. Although the reviewers have addressed the Phase 3 component in their comments, the lack of specific details for this area has limited the ability to provide a full evaluation. We have only received one notarized authorization of the two current property owners that gives permission to rezone the property.

PRO OPTION

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

RECOMMENDATION

The proposed rezoning category requested by the applicant is not supported by the Future Land Use Map, which indicates TC Gateway. The Master Plan text recommends rezoning the property to TC Town Center. The Master Planning & Zoning Committee reviews proposals that are not supported by the Master Plan to give informal guidance. This will give the applicant additional feedback to consider before presenting the plans to the Planning Commission for public hearing. Staff is able to recommend approval for Phase 1 at this time, albeit with some significant remaining items to be addressed before the PRO Agreement is finalized. However, there is still insufficient detail and ambiguity about Phase 2, which precludes staff recommendation for the full project at this point. Staff feels the Maximum Density Scenario of Phase 2 is preferable to the Baseline Scenario, as it better reflects the Town Center Study and Master Plan vision for this area, but as it now stands the layout and definition of the deviations required still require much work. The same can be said about the overall benefits to the public from this project, many of which—as identified by the applicant—would seem to flow from any redevelopment in the area.

At this point, then, the project seems positive as to Phase 1, provided the applicant can reduce or better justify the list of deviations, and further provided that the applicant can refine/expand the benefits and conditions to be attached to the project such that project can meet the requirement that the *conditions are more restrictive than might otherwise apply to a development under the existing or proposed zoning classification and the plan provides a significant enhancement to the area that could not otherwise be required of a developer*. The lack of definition as to what might really happen in Phase 2 makes that an even harder discussion for that phase, particularly for the "Baseline" scenario of simply all multifamily residential on Phase 2.

Staff does not support the inclusion of Phase 3 in this rezoning request due to the fact that it is not contiguous to the rest of the project and is not included in the Purchase Agreement with the City. Furthermore, the TC-1 District and the residential use proposed does not appear to be appropriate on the small parcel surrounded by Light Industrial zoning.

COMMENTS

It is staff's opinion that the proposed rezoning district of TC-1, Town Center-1 may be a reasonable alternative for the Phase 1 & 2 properties, and is largely supported by the recommendations in the Master Plan and the Town Center Study. The project represents an exciting opportunity to highlight the cultural diversity of Novi and add a vibrant destination in the Town Center area. The integration of residential uses will provide an attractive living option for residents interested in a walkable community context, including millennials and older adults. However, Phase 2 of the Concept plan lacks critical details and there is too much conflicting information for Planning Staff to be able to support the request without further refinement of the plans. Some of the concerns are as follows:

1. At the time of the pre-application meeting, staff asked the applicant to provide proposed parcel lines on the plans in order to fully evaluate deviations that will be required. The revised PRO Concept Plan submittal now shows a future lot line for the residential portion. However, it is unclear whether the Phase 2 area has separate parcel lines, which makes it impossible to determine building and parking setbacks. **The applicant should confirm whether this is the intent, as creating parcels in the future will be problematic if setbacks and other ordinance requirements would not be met. If parcel lines will be created, they must be shown and clearly labeled on the plans. In addition, all building and parking setbacks shall be dimensioned clearly.**
2. The project narrative submitted indicates that the Ecco Tool property would be included in the rezoning to TC-1, and would remain as a non-conforming use. The Ecco Tool property owner has provided a notarized letter indicating they consent to the rezoning, and must be a signatory to the PRO Agreement as they will be subject to its terms and conditions under a PRO approval to TC-1. If rezoned to TC-1, the existing tool & die shop would be subject to the Zoning Ordinance conditions for non-conforming uses in Section 7.1, which permits such uses to "continue until they are removed but not to encourage their survival." This would prohibit the use from being enlarged or increased, "nor extended to occupy a greater area of land."
3. The applicant has submitted a Rezoning Sign Location Plan, as required for rezoning, however revisions are needed to the sign locations. **The sign indicated on parcel 22-23-226-042 shall be removed. This is a City-owned parcel that is not included in the PRO submittal. Signs are not required on each parcel, only each frontage. Contiguous parcels of the same zoning may share one sign.**
4. The revised PRO Concept plan includes two possible development scenarios for Phase 2 uses: a "Baseline" option with 70 townhome units, and a "Maximum Density" option with a mix of hotel, office, retail, restaurant, and residential uses. Each scenario will require a different set of deviations and could result in very different public benefits and conditions offered for Phase 2.
5. The City's Future Land Use map indicates Town Center Gateway, which allows most of the uses proposed such as office, retail and restaurant. The GE district allows additional uses, like multifamily residential, under a Special Development Option process. The 2016 Master Plan Update identified the Anglin Property as one of three sites within the city where redevelopment is desired. The uses recommended by the Master Plan include multi-family and townhome residential, limited commercial uses, and office uses along Grand River. The plan recommends the property be rezoned to TC - Town Center. The plan notes that "It may be necessary to amend the TC district to fully incorporate creative attached residential alternatives and ensure that reduced setback recommendations are reflected in the district standards." The Master Plan does not envision the parcels would be developed under the

existing zoning categories. Because the applicant's requested zoning category, TC-1, is not consistent with the Master Plans' recommendation, the applicant would benefit from presenting the project to the Master Plan and Zoning Committee of the Planning Commission to receive further comment.

The proposed uses and the rezoning category could therefore be acceptable alternative to the current zoning, <u>but the proposed Concept Plan does not conform to multiple requirements of the Ordinance.</u> Staff believes that the applicant should take the opportunity to modify the plan to meet the intent of TC-1 district and note the following for applicant's consideration:

1. **TOWN CENTER AREA STUDY & MASTER PLAN:** The property's proximity to the surrounding retail, restaurants and hotels could make the proposed rezoning category appropriate and integrate the site into the vision described in the Town Center Study and Master Plan. The applicant should be able to refine the site layout to reduce the number of deviations requested. Town Center area study offers the following recommendations for the Anglin Area:
    a. Serve as the eastern "gateway" into the Grand River/Novi Road Business and Main Street Areas.
    b. A wide variety of permitted uses and pedestrian-oriented form will activate the area and provide a logical entranceway.
    c. Preferred land uses include retail, professional offices, research & technology uses.
    d. Other land uses to be considered: personal service establishments, municipal services, and restaurants.
    e. Future development should utilize the existing pond as a site amenity.
    f. Buildings along Grand River should be pedestrian oriented with reduced front setbacks. Pedestrian paths should connect to the Town Center, Grand-River/ Novi Road Business, Hotel/Office and Main Street Areas. The pond and wetland area should be used as a focal point for the new commercial or office space. This green space could also be used to host community events, and the pond used as an outdoor ice rink.
    g. Create stronger, meaningful associations between businesses and Grand River, such as restaurant patios, new construction sited at lot line, or amenities carefully placed. Create opportunities for pedestrians to pause as they cross Grand River by shortening the distance they have to walk. Use pedestrian refuge islands in the center or bump-outs at the sides.

2. **DESIGN AND LAYOUT CONCERNS: The current layout appears to offer a walkable development with a unique mix of uses and could create a vibrant destination in the Town Center area of Novi.** However, the applicant must consider:
    a. The City's emergency apparatus must be able to fully access the entire site, as well as delivery vehicles accessing the loading areas. Provide a plan showing truck turning movements are possible throughout the site (including all loading/service areas, and 50' outside, 30' inside turning radius in the residential portion). Removal of some units may be necessary to provide the required dimensions in the interest of public safety. **The Fire Review continues to indicate issues with turning radii in the residential portion of Phase 1B. These issues are not considered eligible for deviations as they are health and safety concerns. Widening the drive lanes to the appropriate ordinance standards could help resolve this problem.** *<u>(Phase 1B)</u>*
    b. If the Ecco Tool property will continue to operate indefinitely as a non-conforming use, the residential units adjacent to the site must have appropriate protections from any negative impacts. Provide a noise impact study at the time of Preliminary Site Plan to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required. *<u>(Phase 1B)</u>*

c. The location of loading/unloading areas for buildings G and H will interfere with traffic entering the site (Bldg H) or adjacent parking spaces (Bldg G). *(Phase 2 Max. Development Scenario)*
d. Redesign of the Phase 2 Maximum Density Scenario layout should be explored. The proposed parking garage seems to create a barrier in the middle of the site, pinning Building H into a corner and limiting the options for the driveway and loading areas. The garage also blocks views into the site from 11 Mile Road. The applicant could consider wrapping the parking garage with other buildings to provide better integration of the site. *(Phase 2 Max. Development Scenario)*
e. The vinyl siding proposed for residential townhouse buildings is not a material permitted by the Façade Ordinance. **The applicant must revise the material to Cement Fiber siding in order to gain support for the Section 9 façade waiver required by the overage of siding material on the residential buildings.** See Façade letter for more details. *(Phase 1B, Phase 2 Baseline, and Phase 3)*
f. The Phase 2 Baseline scenario would create a much more heavily residential project, with a limited amount of restaurant and retail in Phase 1A. This balance of uses may discourage some users from visiting the site if it is perceived as a neighborhood gathering spot rather than a vibrant cultural destination that is large enough to support a regional draw. *(Phase 2 Baseline)*

3. **INTENT OF THE TC-1 DISTRICT:** As stated in Sec. 3.1.26.A., *'The TC-1, Town Center district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted'. The p*roposed uses (with the exception of Ecco Tool) are all principal permitted uses which align with the intent of TC-1, Town Center-1 district. **However the balance of uses developed will impact whether the area is seen as a mixed-use commercial service district with a residential component, or a residential neighborhood with a restaurant and retail component.**

4. **OFF-STREET PARKING LOTS FOR SEPARATE USES:** *'The TC-1 Town Center district is further designed and intended to discourage the development of separate off-street parking facilities for each individual use, and to encourage the development of off-street parking facilities designed to accommodate the needs of several individual uses'.* The proposed concept plan depicts the parking lots shared among the uses throughout the site, and the applicant has provided a shared parking study. **Staff supports the opportunity to reduce parking through a shared parking arrangement, supported by the shared parking study. This strategy allows additional space for public gathering or usable open space, and to reduce deviations.**

5. **PUBLIC BENEFITS:** The list of public benefits provided by the applicant is reviewed in detail later in this review. Several of the benefits listed are requirements under the Zoning Ordinance, and would be expected with any development in the city, or could be achieved through a traditional rezoning process. Others require additional information in order to be evaluated. **The applicant should continue to refine the list of benefits. Off-site benefits can also be considered. The Town Center Study and Grand River Corridor study in the 2016 Master Plan may have additional ideas for the applicant to consider, such as providing an enhanced pedestrian crossing of Grand River.**

6. **DEVIATIONS:** Five of the original deviations requested have been removed due to modifications of the plans. The applicant has provided a list of 23 remaining deviations with some additional details, as well as justifications. The applicant is asked to continue to revise the list based on staff's comments provided in this letter. **Some of the deviations require more specific details about the deviation requested. Without those specifics, staff cannot endorse open-ended deviations—for example, some of the sign-ordinance related**

requirements and no open space requirement for Phase 2. Limits must be placed on the extent of the deviations for the Planning Commission and City Council to have a clear understanding of the difference between the proposal and the ordinance standards.

7. **FUTURE SITE PLAN REVIEWS:** The proposed development is an ambitious project that will require a carefully laid out implementation plan. Until all construction is completed, the impacts of construction traffic to the surrounding areas/businesses are hard to contemplate. The narrative from the applicant indicates a tentative Grand Opening of Phase 1 approximately 2 years from purchase of the property. **The applicant should consider adding a tentative completion date for each phase as a condition for the PRO agreement.**

   Since the development will be tied to PRO plan, when Phase 2 and Phase 3 site plans are submitted for review, they are expected to conform to the code requirements for all items that are not regulated by the approved deviations and conditions within the PRO Agreement. For these reasons, it **is vital for staff to have a clear understanding of what is being proposed at this time in order to provide clarity for future reviews. The applicant should provide the intent to address possible or anticipated future deviations if they are not requested at this time.**

COMPARISON OF ZONING DISTRICTS

The following table provides a comparison of the current (OS-1 and OSC) and proposed (TC-1) zoning classifications.

	OS-1,OSC and I-1 Zoning (Existing)	**TC-1 (Proposed)**
Intent	The OS-1 district is intended for community office uses. The OSC District is intended for large office buildings or office complexes with related commercial retail and service establishments. The I-1 Distirct is intended for research, office and light industrial uses while protecting residential districts from adverse impacts.	The TC-1, Town Center -1 district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted.
Principal Permitted Uses	See attached copy of Section 3.1.21.B for OS-1 uses, Section 3.1.22.B for OSC uses, and 3.1.18.B for I-1 uses Professional and medical offices and personal service establishments are allowed in OS-1 and OSC districts. OSC district also permits hotels Tool & Die shop permitted use in I-1 District	See attached copy of Section 3.1.26.B All of the proposed uses are permitted except the existing tool & die shop that will remain.
Special Land Uses	See attached copy of Section 3.1.21.C for OS-1 uses, Section 3.1.22.C for OSC uses, and 3.1.18.C for I-1 uses OSC permits retail commercial and sit-down restaurants as part of an office complex with Special Land Use approval	See attached copy of Section 3.1.26.C
Minimum Lot Size **Maximum Lot Coverage**	Section 3.6.2.D determined by lot layout	Sec. 3.6.2.D determined by lot layout
Building Height	OS-1: 30 feet OSC: 65 ft or 5 stories I-1: 40 feet	65 feet or 5 stories whichever is less** (exception in Section 3.27.2.A)

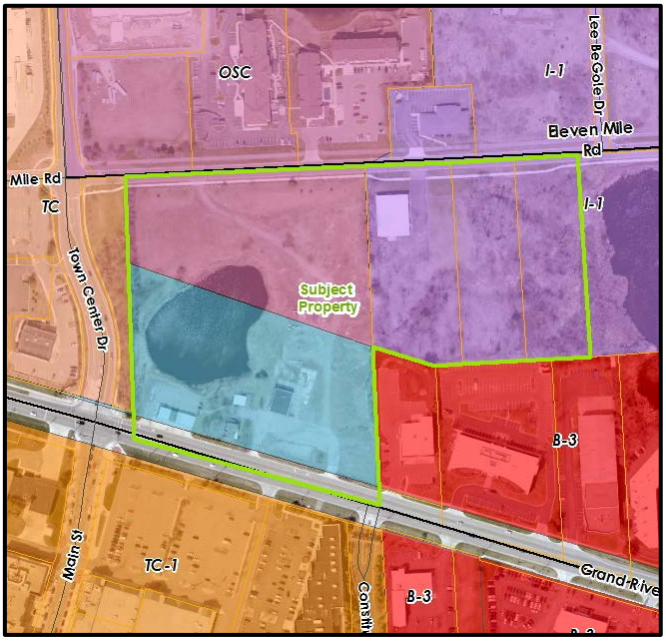
	OS-1,OSC and I-1 Zoning (Existing)	TC-1 (Proposed)
Building Setbacks	OS-1: 20 ft. front and rear, 15 ft side OSC: 35 ft from all sides I-1: 40 ft front, 20 ft side and rear	Sec. 3.27.1.C Depends on type of road frontage; Grand River is an arterial while 11 Mill is classified a non-residential collector; GRA: Front: 80-137 ft from centerline; Side and rear: 50 feet 11 Mile: Front: 0 ft. minimum; 10 feet maximum Side and rear: 0 feet minimum; no maximum
Usable Open Space	Not Applicable	200 sq. ft. Minimum usable open space per dwelling unit 15% gross open space
Minimum Square Footage	Not Applicable	Not Applicable

COMPATIBILITY WITH SURROUNDING LAND USE

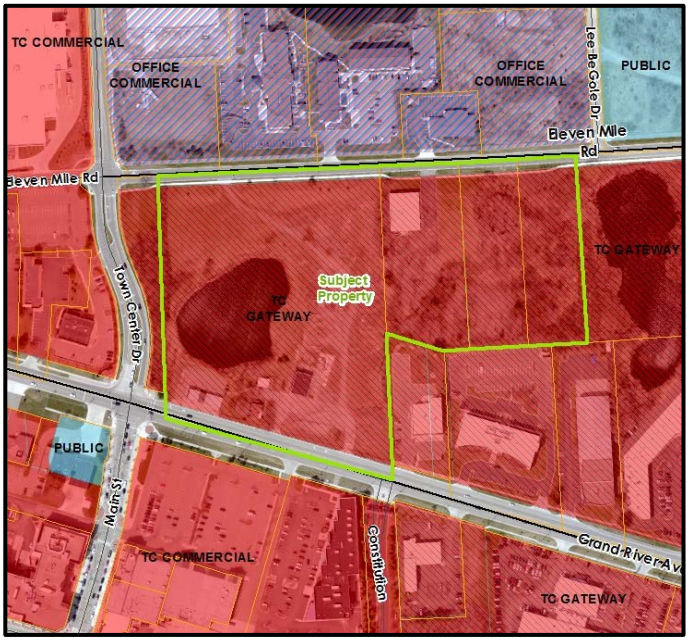
The following table summarizes the zoning and land use status for the subject property and surrounding properties for the Phase 1 and 2 portion of the project. As it is not contiguous, Phase 3 is covered in the subsequent section. The compatibility of the proposed rezoning with the zoning and uses on the adjacent properties should be considered by the Planning Commission in making the recommendation to City Council on the rezoning request.

PHASES 1 & 2

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
Subject Property	Current: OS-1, OSC, and I-1	Vacant/Former car wash/Tool & Die shop	Town Center Gateway (uses consistent with Gateway East Zoning District)
Western Parcels	TC Town Center	Retail/Restaurants	TC Commercial (uses consistent with TC Zoning District)
Eastern Parcels	I-1 Light Industrial and B-3 General Business	11 Mile frontage: Vacant/Wetland GR frontage: Retail Auto parts	Town Center Gateway (uses consistent with Gateway East Zoning District)
Northern Parcels	OSC and I-1	Hotels, Day Care Center, Office building	Office Commercial (uses consistent with OSC Zoning District)
Southern Parcels	TC-1	Main Street retail and restaurants	TC Commercial (uses consistent with TC and TC-1 Zoning Districts)



Zoning



Future Land Use

The subject property for Phases 1 and 2 of the proposed project has frontage along both Grand River Avenue and Eleven Mile Road. The site location provides good connectivity to adjoining properties to north, west and south.

Novi Town Center, located to the **west and northwest**, is a well-established retail center with Walmart as the biggest retail store. There are many restaurants within the center, both sit-down and fast causal, as well.

To the **north** are two older hotel/extended stay properties, as well as a new hotel and child care center developed recently. North of the residential portion of the project is a vacant parcel zoned I-1. This parcel could be developed with uses that could have a negative impact on residential uses. The I-1 district does restrict the uses permitted when there are residential uses adjacent, which would be examined in the site plan approval process if development is proposed at that location. Just east of the residential portion is Lee BeGole drive, which provides access to the City's Department of Public Works facilities, including the maintenance vehicle fleet that is stored there. The existing heavy vehicle traffic could present an undesirable impact if the proposed residential units are built nearby.

Existing Land Use in the Vicinity

South of the residential portion is an area zoned B-3 developed with an auto parts store and office uses. The parking lots of one of the office buildings will be very close to the property line.

Existing land use patterns indicate a concentration of retail and restaurants to the northwest, west and south, with some residential to the south of Grand River Avenue. North of the property are several hotels and office buildings, as well as a recently developed child care center. **The subject property is an ideal candidate for redevelopment.** It is currently zoned as OS-1 (Office Service), OSC (Office Service Commercial), and I-1 (Light Industrial). The Anglin property formerly was the site of a car wash and a garden center until about 2012, and was purchased by the City in 2016. There are a few small buildings on the property along Grand River – one has recently been occupied by the City's maintenance division while their facility on Lee BeGole Drive was under renovation.

It is evident that the proposed Phase 2 Max Density Scenario that includes taller buildings up to 6 stories with unique uses and architectural styles is going to change the existing streetscape dramatically along this portion of Grand River and Eleven Mile Road. The taller buildings proposed would be closer to 11 Mile, with those along Grand River proposed as 1- to 2-story structures. Other buildings in this area range in height from approximately 2-5 stories in height. The applicant is proposing a unified landscape and hardscape design throughout the site to tie the development together.

PHASE 3

	Existing Zoning	Existing Land Use	Master Plan Land Use Designation
Subject Property	I-1 Light Industrial	Vacant	Town Center Gateway (uses consistent with Gateway East Zoning District)
Western Parcels	I-1 Light Industrial	Vacant – City-owned property, contains wetland	Town Center Gateway + Planned N/S road extension to connect Grand River to Lee BeGole Drive
Eastern Parcels	I-1 Light Industrial	Office; Vacant office pad site	Light Industrial
Northern Parcels	I-1 Light Industrial	Partially vacant, City Department of Public Works	Public Facilities (City facilities)
Southern Parcels	I-1 Light Industrial	Cell tower site	Town Center Gateway (uses consistent with Gateway East Zoning District)

The subject property for Phase 3 of the proposed project has frontage along Eleven Mile Road.

To the **north** is a large City-owned parcel, zoned I-1, which contains the recently renovated Department of Public Works building and Gun Range. The city's maintenance vehicle fleet is stored there.

To the **west** of Phase 3 is an area zoned I-1 Light Industrial separating the site from the larger Sakura Novi site of Phase 1 and 2. The City-owned parcel is currently vacant and contains a large area of wetland. The Master Plan indicates a future north-south road connection is planned to be developed to connect Lee BeGole Drive to Grand River Avenue in this area. If the planned roadway is constructed the maintenance vehicle traffic could present an undesirable impact on the proposed residential units in Phase 3.

South of Phase 3 is an area zoned I-1 Light Industrial which is largely vacant except for a cell tower. The health impacts of living near a cell tower may be a concern to some residents, which may

impact the desirability of these units. (The American Cancer Society website indicates it is unlikely that living near such towers would increase cancer risk. The International Agency for Research on Cancer, the National Toxicology Program, and the US Environmental Protection Agency (EPA) have not classified cell phone towers specifically as to their cancer-causing potential.)

To the **east** of Phase 3 is an area zoned I-1 Light Industrial. There is an office complex there with two existing buildings, with a third building approved to be constructed. There is no firm timeline on when that building would be constructed. This area is planned to remain Light Industrial use in the City's Master Plan. If residential uses are located adjacent to the property, the uses permitted in the I-1 district would be severely restricted compared to the list of uses that could otherwise be permitted. In addition, there is no berm separating the properties, as is required when non-residential uses are adjacent to residential uses. It would be the applicant's responsibility to provide the required berm and screening on the parcel to be developed with residential uses. No such berm is currently proposed

The proposed residential use in the Phase 3 area would be surrounded on all sides by industrially zoned properties. There is no obvious connection to the larger Sakura Novi development, except for the sidewalk along 11 Mile Road and identical townhouse product type to be developed. The lack of contiguity to the rest of the project may present a legal issue (is that permitted?) as well as a conceptual one. In addition, locating residential uses here would constrain the future development of each of the parcels surrounding it. Additionally, existing uses in the area may present undesirable conditions for new residents of the development, potentially creating a situation of incompatible land uses. The applicant has also not provided enough detail to adequately review the proposed plans for the area, including showing the necessary buffers from industrially zoned properties, landscaping plans, wetland and woodland impacts, grading, utility and stormwater management details. The public benefit to including this additional property also requires further definition by the applicant/developer.

Existing Zoning ***Future Land Use***

DEVELOPMENT POTENTIAL: ALL THREE PHASES

For the western portion of the project, the current zoning of OS-1 and OSC (9.9 acres) both allow professional and medical offices, personal service establishments, and off street parking lots as permitted uses. OSC also permits hotels, as well as retail and restaurant uses as Special Land Uses. On the parcels zoned I-1, professional and medical office buildings are also permitted, as are research and development, manufacturing, pet boarding, veterinary clinics when not adjacent to residential uses. In total, the Phase 1 & 2 site measures over 15 acres (excluding the Right of Way), of which approximately 2 acres are covered by regulated wetlands. This leaves about 13 acres of contiguous land for development. **The redevelopment potential for the site using the current zoning is entirely possible, given the flexibility that the current zoning districts afford. However that potential has not been pursued seriously by any developer in recent years. In addition, the Master Plan indicates a broader vision for the future development of the area, and recommends a mix of residential, commercial, and office uses which is not achievable under the current zoning district.**

The Phase 3 site measures approximately 3.5 acres, with a small area of wetland in the southwest corner. The development potential for this site is likewise entirely possible under the I-1 zoning district. Since there are no adjacent residential uses present, the site would not be restricted in uses permitted in the I-1 district.

The Future Land Use map recommends Town Center Gateway (Gateway East GE) uses of the site. The GE District allows most of the uses such as professional offices, sit-down restaurants and retail and retail service uses as permitted uses. The GE district allows additional uses, like multifamily residential, under a Special Development Option process.

Although significant opportunities exist to develop the property both as zoned (Office uses primarily and Light Industrial) and as master planned (TC or Gateway East uses), it is staff's opinion that the proposed rezoning to Town Center-1 district is a reasonable alternative and fulfills the intent of the Master Plan recommendation for the Phase 1 and 2 uses proposed, subject to finalizing a Concept plan and PRO Agreement that confirm the benefits to the public required by the zoning ordinance.

For Phase 3, the rezoning to TC-1 is more difficult to justify since it will be surrounded on all sides by I-1 Light Industrial zoning and not connected in a meaningful way to the mixed use district of the larger Sakura Way. In essence this portion could be considered spot zoning as it is not consistent with the Master Plan, would result in incompatible land uses, and would also create hardships on future development of the surrounding parcels by limiting the by-right uses that could be developed. The intent of the TC-1 district does not match what is being proposed for this small area. Further, it is staff's understanding that the Purchase Agreement made no mention of adding this property to the proposed PRO Concept Plan and Agreement. Finally, the lack of contiguity with the other parcels may present an issue under the state zoning laws.

REVIEW CONCERNS

ENGINEERING: The requested rezoning to Town Center-1 will result in utility demands that are approximately equal to the utility demand if the property were to be redeveloped under the current OS-1, OSC zoning and I-1 zoning. The Concept Plans for Phases 1 and 2 meet the general requirements of the City's design and construction standards, Storm Water Management ordinance, and Engineering Design Manual. Additional details will be needed in the site plan approval process. No storm water management information has been provided for Phase 3, and those plans do not meet the general requirements. **Please refer to Engineering review letter for more details.**

LANDSCAPING: The Landscape review has identified significant deviations from ordinance standards. For Phase 1, 9 deviations are required, only 3 of which are supported by staff. For Phase 2, from the information provided it appears two deviations are required, however detailed design and layout may reveal additional waivers may be needed. There was no landscaping plan

provided for Phase 3, so it is assumed that the plans will meet all landscape requirements, or the PRO Agreement would be amended at that time. **Please refer to Landscape review letter for more details.**

TRAFFIC: Based on the initial results of a Traffic Study submitted by the applicant, the development will increase traffic on Grand River by 15%. The City's consultants, in a 2018 traffic study of the area, identified two improvements that would be needed to maintain acceptable levels of service in the vicinity of this project: 1) widening Grand River Avenue to 5 lanes between Meadowbrook Road and Novi Road, and 2) Installing a right-turn overlap phasing for northbound Main Street and southbound Town Center Drive approaches at their intersection of Grand River. The applicant has submitted a Rezoning Traffic Statement and Traffic Impact Study as required. The intersection of Main Street/Town Center Drive and Grand River currently operates under congested conditions, and the Sakura Novi development is expected to increase traffic by 15%. The applicant does not propose to provide the improvements recommended by the City's study, as they state the improvements are necessary regardless of the development they are proposing. Based on the analysis provided, a right turn taper lane is required per City ordinance. However the applicant is not proposing this right turn taper lane. **Please refer to Traffic review letter for more details.**

WOODLANDS: Based on the Tree Protection Plan Sheets T-1.0 and Tree List T-1.1, there appear to be a total of 275 surveyed trees on the Phase 1 & 2 site. Of these, plan sheet L101 indicates 101 trees will be removed (37%), which would require 197 replacement credits. However, the Woodland review letter notes that the applicant has excluded certain trees from the count due to "condition," which is not a provision of the Woodland Ordinance. Without exemptions for those trees, the total number of trees to be removed is 184, with required Woodland Replacement credits totaling 341. This discrepancy should be corrected in future submittals. No Tree Survey has been included for the Phase 3 area of the project.

If the project proceeds forward, we would anticipate any trees on the site that are subject to regulation of the Woodland Ordinance would be accounted for in the tree credit requirements, either as an on-site planting or paid into the Tree Fund. An exact number does not need to be included in the PRO Agreement, unless City Council determines they wish to hold the developer to a minimum number of Woodland Replacement Credits to be planted on site. **In addition, the applicant shall ensure that all proposed woodland replacement trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement granted to the City. Additional comments and concerns are detailed in woodland review letter.**

WETLANDS: There are four wetland areas on the site of Phase 1 and 2: a small forested wetland located just west of Ecco Tool (Wetland 1), the pond on the Anglin property (Wetland 2), a small scrub-shurb wetland on the southwest portion of the site (Wetland 3), and a scrub-shrub wetland on the eastern portion of the site that connects to a larger wetland on the adjacent property (Wetland 4). (On the Phase 3 site, there is a small wetland area in the southwest corner of the property.) The proposed plans indicate impacts to 4 of the 5 wetland and wetland buffer areas with a total of 1.67 acres of wetland impact. Permanent impacts to on-site 25-foot wetland buffers total 1.43 acres. All 5 wetlands meet the essentiality criteria of the Wetland Protection Ordinance and are considered regulated by the City of Novi. The City requires mitigation for impacts greater than .25 acre. A letter included in the submittal from the Atwell, the applicants' consultant, dated October 2, 2019, indicates the applicant is considering two different mitigation options to satisfy the City's requirements. **The applicant's mitigation options include certain strategies that are not currently supported by the City's wetland ordinance. Staff believes further details need to be addressed as part of the PRO Concept plan so as to include them in the PRO Agreement as conditions for approval. Additional comments and concerns are detailed in wetland review letter.**

ARCHITECTURAL DESIGN: The elevations submitted for buildings A-C and the residential townhome buildings have been reviewed by the City's Façade Consultant. A Section 9 waiver is required for minor deviations from the ordinance standards for the commercial buildings, which is supported. The applicant has increased the amount of brick material on the residential buildings in this submittal, but the percentage of siding is still over what the ordinance permits. If the siding were switched to a material permitted by the ordinance a Section 9 waiver could be supported, however vinyl siding is still proposed, which is not permitted by the Façade Ordinance and not supported by staff or the architectural consultant. **Additional comments and concerns are detailed in Facade review letter.**

FIRE: The Fire Marshal has identified several locations throughout the site that do not meet the access requirements for fire truck apparatus. A minimum of 50 feet outside and 30 feet inside turning radii are required. The applicant has provided a truck turning plan (C-2.7, C-2.8) which seems to indicate certain maneuvers will encroach onto curbed areas, which is not permitted. The drive lanes in the residential areas may need to be widened to meet ordinance standards or some of the units may need to be removed in order to provide the necessary turning radii. **Additional comments and concerns are detailed in Fire review letter.**

2016 MASTER PLAN FOR LAND USE: GOALS AND OBJECTIVES

The proposed development could be said to follow several of the objectives listed in the 2016 Master Plan for Land Use update (adopted by Planning Commission on July 26, 2017) as listed below. Staff comments are in **bold.**

1. COMMUNITY IDENTITY

a. Maintain quality architecture and design throughout the City. **The development proposes both commercial and residential buildings that are tied together through modern architectural style with Japanese and Chinese influences. The commercial buildings (A-C) maintain cohesive design themes and materials. The residential buildings have similar bold forms with linear patterns while respecting the smaller residential scale. Building elevations for Phase 2 Maximum Buildout Scenario buildings are not available at this time, but would be expected to maintain a strong relationship with the other non-residential buildings on the site.**

2. ECONOMIC DEVELOPMENT

a. Retain and support the growth of existing businesses and attract new businesses to the City of Novi. **The property is positioned to accomplish this goal with the mix of uses proposed. The anchor tenant One World Market is an existing business that is looking to expand.** (Phase 1A)

b. Support retail commercial uses along established transportation corridors that are accessible for the community at large, such as along Grand River Avenue, to preclude future traffic congestion. **The development proposes retail and restaurant uses along Grand River.**

c. Capture growth opportunities that will enhance short and long-term viability of the community, such as enabling development of concentrations of office space blended with residential. **The office component of the development is anticipated in Phase 2, and would complement the residential uses proposed.** (With Phase 2 Max Density Scenario)

3. ECONOMIC DEVELOPMENT / COMMUNITY IDENTITY

a. Town Center Study Area. Develop the Anglin property in a manner that reflects the importance of this important gateway to the City in terms of its location, visibility, and economic generation. **The subject property falls in that study area and is located at an important gateway to the City. Many of the recommendations for the area have been incorporated into the proposed project.** (With Phase 2 Max Density Scenario)

b. Rezone the Anglin Property to TC (Town Center) to enable a broader mix of uses and incorporation into the Town Center district. **The applicant is pursuing a PRO rezoning to TC-1 rather than TC, but TC-1 allows a similar mix of uses and intensities.** (With Phase 2 Max Density Scenario)

c. Consider amendments to the TC district that would permit a greater mix of uses, including innovative attached housing types; amendments may also consider some public open space and the relationship of buildings to the street in order to create a subdistrict that emphasizes walkability. **Utilizing the TC-1 district achieves this without amending the TC district.**

4. ENVIRONMENTAL STEWARDSHIP

a. *Protect and maintain the City's woodlands, wetlands, water features and open space.* **The proposed concept plan will impact regulated wetlands and woodlands. The applicant indicates they will propose wetland mitigation and protecting woodland replacement trees by way of a conservation easement. However further details are needed to evaluate the mitigation plan.**

5. QUALITY AND VARIETY OF HOUSING

a. Ensure the provision of neighborhood open space within residential developments. **The Phase 1B townhouse portion provides the Ordinance required open space. However the applicant indicates a deviation from open space requirements are requested for Phase 2 of the project, with no indication of any open space being provided.**

b. Attract new residents to the City by providing a full range of quality housing opportunities that meet the housing needs of all demographic groups including singles, couples, first time home buyers, families and the elderly. **The townhouse apartments proposed could theoretically (depending on price point) provide a "missing-middle" type of house set in a walkable context that could be attractive to many different demographic groups.**

MAJOR CONDITIONS OF PLANNED REZONING OVERLAY AGREEMENT

The Planned Rezoning Overlay process involves a PRO concept plan and specific PRO conditions in conjunction with a rezoning request. The submittal requirements and the process are codified under the PRO ordinance (Section 7.13.2). Within the process, which is initiated by the applicant,

the applicant and City Council can agree on a series of conditions to be included as part of the approval which must be reflected in the Concept Plan and or the PRO agreement.

The PRO conditions must be in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district. *Development and use of the property shall be subject to the more restrictive requirements shown or specified on the PRO Plan, and/or in the PRO Conditions imposed, and/or in other conditions and provisions set forth in the PRO Agreement.* **The applicant should submit a list of conditions that they are seeking to include with the PRO agreement. The applicant's narrative does not specifically list any such PRO conditions at this time.**

Staff has started a draft list of possible conditions (other than those specifically related to the "public benefits" identified and addressed later in this memo), which will continue to evolve as the project review continues:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. **2.** The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads until such time that area is needed for Phase 2 uses to be developed. **(Unclear what applicant means by grass-land pads. Further definition would be needed. Meadows were previously suggested by Staff, and we encourage the developer to plant a native meadow mix.)**
3. The maximum number of dwellings to be constructed in Phase 1B shall be 68.
4. The maximum number of dwelling units to be constructed in Phase 2 shall be 70.
5. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.
6. Phase 2 uses shall be no greater than 19,200 square feet of hotel use, 58,000 square feet of office use, 23,000 square feet of retail/restaurant use, 25,000 square feet of personal service use and 48 of multifamily residential units. Changes to the mix of uses of +/-10% shall be permitted to be approved administratively as long as additional deviations are not required and parking requirements can be met.
7. Alternatively, Phase 2 may be developed with a mix of hotel, office, retail/restaurant, personal service, senior living, and/or multifamily residential if the Planning Commission and City Council find that the following standards are met:
    a. A Traffic Impact Statement shall be provided to determine that the proposed development does not increase the traffic impacts above what is expected to be generated by the Phase 2 Maximum Density Scenario.
    b. Other conditions to be added…
8. Woodland tree removals during Phase 1 shall be approximately 101 trees, which shall require 197 woodland replacement credits. Developer will plant a minimum of 82 credits replacements on site. All woodland replacement trees shall be permanently protected via conservation easement or landscape easement. Any credits not planted on site will require a payment of $400 per credit into the Novi Tree Fund.
9. All regulated woodland tree removals in Phase 2 shall meet the requirements of the City of Novi Woodland Protection Ordinance.
10. Proposed parking is being provided as per the Parking Study recommendations, which has been reviewed and approved by the City's traffic consultant. Future phase parking requirements will also be a function of shared parking analysis findings, if supported by City's review and approval.
11. Tentative completion date for Phase 1A shall be XXX.

12. Impacts to wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement conditions.
13. Future Phases beyond Phase 1 will require an optional deviation for Open Space standards to achieve maximum density. *(Phase 2 Max Density Option)*
14. To protect future residents of the Phase 1B units from excessive noise impacts from the existing Ecco Tool business, the developer shall provide a Noise Impact Statement at the time of Preliminary Site Plan submittal to determine if ordinance performance standards will be exceeded. Provide any necessary mitigation measures if required.
15. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions including:
    a. Access for delivery trucks on the retained parcel; which will require cross access rights;
    b. Twelve parking spaces on the retained parcel or access to parking spaces on adjacent areas to make up for any shortfall.

ORDINANCE DEVIATIONS

Section 7.13.2.D.i.c(2) permits deviations from the strict interpretation of the Zoning Ordinance within a PRO agreement. These deviations must be accompanied by a finding by City Council that "*each Zoning Ordinance provision sought to be deviated would, if the deviation were not granted, prohibit an enhancement of the development that would be in the public interest, and that approving the deviation would be consistent with the Master Plan and compatible with the surrounding areas*." Such deviations must be considered by City Council, who will make a finding of whether to include those deviations in a proposed PRO agreement. A proposed PRO agreement would be considered by City Council only after tentative approval of the proposed concept plan and rezoning.

The Concept Plan submitted with an application for a rezoning with a PRO is not required to contain the same level of detail as a preliminary site plan. Staff has reviewed the applicant's Concept Plan in as much detail as possible to determine what deviations from the Zoning Ordinance are currently shown. The applicant may choose to revise the concept plan to better comply with the standards of the Zoning Ordinance, or may proceed with the plan as submitted with the understanding that those deviations would have to be approved by City Council in a proposed PRO agreement. The following are deviations from the Zoning Ordinance and other applicable ordinances shown on the concept plan. The applicant has submitted a narrative describing the requested deviations.

The list of deviations has been revised the list based on staff's comments provided in the previous review letters. See the applicant submittal package for full text of deviations requested and justifications provided.

Summary of deviation requested by the applicant (*in italics*) with staff comments **(in bold):**

1. *Requesting deviation from Section 3.27.1.C for an exterior side yard setback of 10 feet (50 feet required).* **Staff agrees that the adjacent commercial zoning (B-3) is similar to the commercial development proposed along Grand River Avenue in Phase 1. This deviation is supported.** (Phase 1A)
2. *Per section 3.1.26, deviation is requested for reduction of exterior side yard parking setback (10 feet required, 5 feet requested) on the west side adjacent to green space preserve area adjacent.* (Phase 1A) **Unless the plans are revised, a similar deviation for parking setback is also required for the commercial parking area behind Building A adjacent to the B-3 zoned parcel to the south.**
3. ~~*Removed Deviation for 3 site entrances on Grand River Avenue*~~

4. *Deviation requested for reduction to 0' Wetland Setback to accommodate remediation process, development of feature retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin. Noted in Wetland Report.* **This would be a deviation from Section 3.6.2.M of Zoning Ordinance.** (Phase 1A)
5. *Deviation requested from Section 3.1.26.D for existing side/front yard parking along 11 Mile Road. Existing occurs at Ecco Tool shop.* **Include specific required/proposed measurements on the plan. No parking spaces are shown on the Ecco Tool parcel to the measure distance. Staff would support the deviation if it is an existing condition and if it does not conflict with safe traffic movements. It appears the parking lot would need to be restriped anyway, and the width of the existing pavement would only allow parking on one side of the drive aisle.** (Phase 1A)
6. ~~*Deviation Removed for paved parking lot on north end of property.*~~
7. *For Phase 2 Maximum Build-out scenario, Deviation requested from Section 5.5.3.B.ii.f. for reduction in parking setback (10 feet proposed, 20 feet required) for 11 Mile frontage. The deviation could either be for a temporary surface parking lot or a parking structure.* **A parking structure would be treated as a building, so the setback of 10 feet would not require a deviation in that case. In the event a surface parking lot is constructed instead, the deviation would be required.** *(Phase 2 Max Density Option)*
8. *For Phase 2 Maximum Build-out scenario, Deviation requested from section 3.27.2.A.ii to allow building frontage less than 150 feet along Eleven Mile Road. Building E is estimated to be approximately 80 feet along Eleven Mile, with the longer side oriented to face the main on-site drive aisle.* **Section 3.27.2.A.ii, which allows mixed use buildings a height bonus – for each additional floor of office or retail use above the first floor, an additional floor of residential use may be permitted. "All other standards of the ordinance apply to the height bonus, including setback, parking, landscaping, density and subsection i: "Buildings exceeding 65 ft in height shall have a minimum of 150 feet of building frontage on a roadway no less than 28-feet wide." Building E does not have 150 feet of frontage on 11 Mile and therefore this deviation is requested to allow the additional height without meeting the condition of the ordinance. As envisioned by this development, the pedestrian activity is focused around the pond and the internal road network. Eleven Mile is not contemplated to have an active streetscape, and the buildings on the north side of Eleven Mile do not relate to the street as well. However, the ordinance text does not specifically state the 28-foot roadway needs to be existing. If the internal roadway the building fronts on is widened to 28-feet, that would meet the intent of the ordinance and would not require a deviation.** *(Phase 2 Max Density Option)*
9. *For Phase 2 Maximum Build-out scenario, deviation requested from Section 3.27.1.F. for standardized Open Space requirements.* **The applicant has provided a definition of Open Space not utilized in this section in order to justify the deviation. The referenced section specifically states a minimum of 15% of the gross site area "shall be devoted to permanently landscaped open spaces and pedestrian plaza area accessible to the public." Pedestrian plaza areas do not fall under the definition used by the applicant as undeveloped and in its natural state. Further, no details are provided to indicate if any amount of landscaped open spaces and pedestrian plaza areas would be provided.** *(Phase 2 Max Density Option)*
10. ~~*Deviation removed for 11 Mile frontage building setbacks.*~~
11. *Pertaining to the Residential component of Phase 1, Deviation requested for parking setback of 6.1 feet (20 feet required) in the Northeast corner of the project along Eleven Mile Road.* (Phase 1B)
12. ~~*Deviation from 3.27.1.I. for not providing 12.5 foot sidewalk along Eleven Mile Road, a non-residential collector. The applicant has marked this deviation as removed.*~~
13. *Deviation from Section 5.15 and 3.27.1.G. requested for façade materials exceptions included as part of the submittal. Materials boards will be provided for PC meeting. See PRO plan Elevations and design statement from the project architects.* **See Façade review letter for detailed comments. On the Phase 1 commercial buildings, Section 9 façade waivers are**

needed for: an overage of EIFS on the west, east and north facades of Building A, an overage of Flat Metal Panels on the west and east facades of Building B, and an overage of EIFS on the west façade of Building C. These overages are relatively minor in nature and result in an enhancement of the overall design quality of the project; therefore the waivers are supported by Staff. On the residential buildings, the percentage of brick has been increased since the previous review. However there are still overages of vinyl siding on all facades. If the Vinyl siding is changed to Cement Fiber siding or other compliant type of siding, a Section 9 Waiver would be supported by staff. (Phase 1A and 1B)

14. *Deviation requested from* Section 3.27.1.H. and/or Section 5.4 *for loading and unloading spaces not located in the rear yard. Screening will be provided for all trash/loading areas not facing a directly adjacent loading area.* **Include specific required/proposed measurement for each loading area and Section number (Sec. 3.27.1.H. and/or Section 5.4). Screening areas are not apparent at all locations. Loading areas at Buildings H and G appear to interfere with traffic flow and safety and should be relocated.** *(Phase 2 Max Density Option)*
15. *Deviation requested from Section 3.27.2.B to allow for the proposed specialty market and food hall, with a total of 30,000 sf on two levels. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level. Tenant will have entrances on both permanent public building exposures. This deviation provides for the relocation of an existing Novi retailer, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept that is being proposed.* **Section 3.27.2.B states "No retail commercial building within the TC-1 district shall exceed 7,500 square feet in gross leasable floor area (GLA)," except under specific circumstances. The applicant's proposed specialty market and food hall, with a total of 30,000 sf on two levels, does not meet the conditions of any of the circumstances stated. Staff supports the deviation as the specialty market and food hall creates an anchor for the Asian village concept and allows an existing Novi business to expand.** (Phase 1A)
16. ~~*Deviation requested for bicycle parking ratio on residential portion of overall project.*~~ *This deviation has been removed.*
17. *Deviation requested from Section 5.7.3.K for site illumination level variance for multiple walkway areas, and for TC-1 fixture style selection. Site walkway areas will vary below 0.2 fc minimum standard on natural pathway around the water feature. Site walkway areas in residential portion will vary below 0.2 fc minimum standard. Parking area in residential area will fall below 0.2 fc minimum standard.* **The lighting plan indicates no lights will be provided in the parking areas in the residential portion of the project. Lighting is required for multifamily residential projects, and should be modified to meet the ordinance as much as possible.** (Phase 1B)
18. *Deviation from Chapter 28 of the City Code for TC-1 tenant signage standards. The project requires dual-language signage for authentic presentation of international tenants and clientele expectations. Many tenants will have both interior-facing and frontage-facing signage.* (Phase 1A and Phase 2 Max Density Option)
    a. *Per section 28-5.c.1.a: an increase of 200% over area standards is required to accomplish the dual language signage.*
    b. *Per section 28-5.c.1.b: 2 signs of equal permitted size are requested for each typical retail/restaurant tenant, as well as most tenants will have pedestrian entrances on 2 facades.*
    c. *Per section 28-5.c.1.d: 2 signs of equal permitted size are requested for each project interior retial/restaurant tenant (not fronting public streets), consistent with other project lease space, and permitted sign area needs to be calculated as per 28-5.c.1.a.*
    d. *Per Section 28-5.c.2.b.: signage style and type, as well as materials and illumination standards shall not adhere to the Sign Design and Review Manual for Novi TC-1 District. The standards were developed for, and still reference, a single development project undertaken over 20+ years prior.*

e. *Per Section 28-5.e.1.a.: an increase of permitted projecting sign area to match primary signage area allotted up to 72 square feet maximum, an increase of 45 square feet total area.*

19. *Deviation requested from City Code Section 28-10.a.3 to allow string lights, exposed luminaire strip lights or neon tubes along building edges or other locations, and from Section 28-10.a.4 to allow animated signs. These elements, video display screens and/or animated LED lighting systems as part of public entertainment feature opportunity, are crucial to an authentic Asian environmental experience.* **Additional details are required to be able to evaluate. These elements would seem to be more appropriate under the Maximum Density Scenario, but not the Baseline Scenario.** (Phase 1A and Phase 2 Max Density Option)
20. *Deviation from Section 5.3.2 to allow a drive lane reduction in residential Phase 1B.* The site plan shows drive lanes 20-22 feet in width in several areas of Phase 1B. **The ordinance allows lane widths of 22 feet when no parking spaces are present, and 24 feet when adjacent to 90 degree parking spaces. Staff is concerned emergency vehicles will have difficulty accessing the site and recommends the applicant revise the plans to meet the minimum standards.** (Phase 1B)
21. *Deviation from Section 3.27.1.C to allow Phase 1 and 2 buildings internal to the site to exceed the maximum setback limit from Grand River Avenue and Eleven Mile Road.* **The ordinance does not give a maximum setback from arterials, so no deviation is required for Grand River/Phase 1 commercial buildings. Eleven Mile Road is classified non-residential collector, and therefore has a front yard minimum setback of 0 feet and a maximum setback of 10 feet.** (Phase 2 Max Density Option)
22. *Deviation from Section 3.27.1.I to allow a 6 foot sidewalk along 11 Mile Road. The TC-1 district requires 12.5 foot sidewalks along non-residential collector and local streets. .* **As this area was not contemplated for TC-1 zoning, the Non-motorized plan does not necessarily reflect the Zoning Ordinance requirement for 12.5 foot sidewalks. However in seeking a rezoning, the applicant is subject to the requirements of the new district, including 3.27.1.I, which states "Sidewalks within the TC-1 district adjacent to non-residential collect and local streets shall be twelve and one-half (12.5) feet in width." If not provided, this would be a deviation.** (Phase 1B, Phase 2)
23. *Landscaping Deviation from section 5.5.3.A to allow a continuous 6 foot evergreen hedge in lieu of the required 6-8 foot berm required when TC-1 district abuts a B-3 district.* (Phase 1B)
24. ~~*Deviation for buffer between commercial/residential uses: removed as both uses permitted within the TC-1 district.*~~
25. *Landscaping Deviation from section 5.5.3.A for the absence of a 10-15 foot berm between the residential units in Phase 1B and the existing Ecco Tool light industrial use. In lieu of the berm, applicant proposes a 5 foot tall continuous evergreen hedge and densely planted upright canopy trees.* (Phase 1B)
26. *Landscaping deviation from section 5.5.3.C. for deficiency of parking lot interior landscape area, as the total amount of landscaping provided around the pond feature provides a greater amount of contiguous landscaped amenity that benefits the community.* (Phase 1A)
27. *Landscape deviation from section 5.5.3.F.ii to allow a deficiency in building foundation plantings and interior roadway canopy tree requirements.* **The requirement for canopy trees along interior roads excludes driveways, so the area in front of the garages is excluded. The ordinance requirement for 35% of foundation plantings required on the front façade does not apply as stated because the garage side would be considered the rear façade, even though that is the elevation that faces the roadway. This deviation is not required.** (Phase 1B)
28. *Deviation to allow Ecco Tool to continue to operate as a nonconforming use in the TC-1 district until their operations cease.*

Additional Deviations:
See the attached review letters and charts for other possible deviations required. Following is the list of other possible deviations or revisions based on the Planning review of PRO Concept Plan:

1. **Phase 2 Setbacks** (Sec. 3.27.1.F): It is not clear whether parcel lines are proposed for the Phase 2 area. If there are legal parcel lines, deviations will be required in many areas for building and potentially parking setbacks.
2. **Phase 1B Building Setbacks** (Sec. 4.82.2.e)**:** Setbacks for residential buildings in the TC-1 district are required to be 15 feet.

APPLICANT'S BURDEN UNDER PRO ORDINANCE

The Planned Rezoning Overlay ordinance (PRO) requires the applicant to demonstrate that certain requirements and standards are met. The applicant should be prepared to discuss these items, especially in number 1 below, where the ordinance suggests that the enhancement under the PRO request would be unlikely to be achieved or would not be assured without utilizing the Planned Rezoning Overlay. Section 7.13.2.D.ii states the following:

1. *(Sec. 7.13.2.D.ii.a) Approval of the application shall accomplish, among other things, and as determined in the discretion of the City Council, the integration of the proposed land development project with the characteristics of the project area, and result in an enhancement of the project area as compared to the existing zoning, and such enhancement would be unlikely to be achieved or would not be assured in the absence of the use of a Planned Rezoning Overlay.*
2. *(Sec. 7.13.2.D.ii.b) Sufficient conditions shall be included on and in the PRO Plan and PRO Agreement on the basis of which the City Council concludes, in its discretion, that, as compared to the existing zoning and considering the site specific land use proposed by the applicant, it would be in the public interest to grant the Rezoning with Planned Rezoning Overlay; provided, in determining whether approval of a proposed application would be in the public interest, the benefits which would reasonably be expected to accrue from the proposal shall be balanced against, and be found to clearly outweigh the reasonably foreseeable detriments thereof, taking into consideration reasonably accepted planning, engineering, environmental and other principles, as presented to the City Council, following recommendation by the Planning Commission, and also taking into consideration the special knowledge and understanding of the City by the City Council and Planning Commission.*

PUBLIC INTEREST/ BENEFITS TO PUBLIC UNDER PRO ORDINANCE

Section 7.13.2.D.ii states that the City Council must determine that the proposed PRO rezoning would be in the public interest and the benefits to public of the proposed PRO rezoning would clearly outweigh the detriments. The following are being suggested by the applicant (in italics below as listed in their narrative) as benefits resulting from the project. Because staff is indicating that additional information about aspects of the project is needed, our comments (in bold) are minimal at this time:

1. Developer offers to dedicate the Right-of-Way (ROW), and future ROW, along 11 Mile and Grand River. **After reviewing the proposed purchase agreement between the City and the developer, Staff discovered a significant portion of the Right-of-Way is not being included in the property for sale. The applicant shall quantify the amount of additional property to be dedicated to the City/Oakland County for the purposes of Right-of-Way. This could be considered a public benefit, depending on how much property is identified.**

2. Developer offers an easement at the southeast corner of the proposed development for the City to use as for a Welcome sign. **If the easement could also be open to other public purposes, such as art, or another amenity for the public this easement could be considered as a public benefit.**
3. Developer offers that the proposed neighborhood-scaled, mixed-use, pedestrian accessible development would be in line with the intent of the 2016 Master Plan. **Staff agrees; however, this generalized effect of redevelopment could also be achieved using a simple rezoning instead of a PRO.**
4. Developer offers space is being earmarked to accommodate structure parking in Phase 2, which could be used by a central parking agency or Special Assessment District. **Staff agrees that it may be possible to use this space for a parking structure; however, the details of how that would be accomplished have not been proposed, and whether a parking structure in this particular area would be considered a public priority is something that needs to be discussed with the Planning Commission, City Council, and other relevant bodies (e.g., CIA).**
5. Developer indicates that the proposed development complements the 2016 Master Plan vision for a unique, well-designed, mixed-use facility. **Staff agrees, but this seems to be the same as described in item 3 above, and this could also be done using a simple rezoning.**
6. Developer states that growing an important existing Novi retailer (One World Market) would complement the goals and objectives of the 2016 Master Plan. **Again, this growth is a generalized result that could also be accomplished through a traditional rezoning request on the subject property or another location.**
7. Sakura Novi, as a unique development would reinforce the vision of the 2014 Town Center Area Study, namely *to create a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life, and meet their needs for goods, services, housing and entertainment*. **Staff believes that the proposal may assist the City in meeting the vision of the 2014 Town Center Study, provided that the plan provides for the elements that are indicated in the Phase 2 Maximum Density Scenario. The Town Center Area Study did not indicate residential uses for this location.**
8. Developer indicates that the proposed Sakura Novi, with its unique collection of market, restaurants and retail is anticipated to be an economic engine, generating 170 permanent jobs. **While this statement is a testament to the economic benefits of the anticipated development potential, it could also be achieved with a simple rezoning instead of a PRO. Greater economic impacts would be achieved with the Phase 2 Maximum Density Scenario, but would seem to be considerably less if the Phase 2 Baseline option is developed.**
9. The proposed residences at Sakura Novi will provide smaller footprint, middle-market rate residential rental offerings. The new homes would be a draw to Asian ex-patriot professionals and their families, as well as the large corporations that sponsor many of these families. **Staff agrees that the mixed-use components, of restaurants, retail, residential, and potentially office and hotel uses, meets the intent of the Master Plan and the appeal to the many Asian residents in Novi has been well-framed by the developer; however, again, these are generalized results that could also be achieved with a simple rezoning instead of a PRO.**
10. The developer indicates that the proposed Sakura Novi is anticipated to reinforce Novi's tax base beyond the project itself by creating a platform that can foster partnerships among the City of Novi, cultural institutions and the corporate community. An example provided is the partnership with the STAMPS School of Art and Design at UM, and the Japan America Society to create a Japanese themed illuminated applique. **While the application does not include specific details, if the intent is to provide public art within the development for the enjoyment of the general public, that could be considered a public benefit that would not otherwise be achieved through conventional development proposals. We appreciate the concept of collaborations and partnerships but the actual outcomes are difficult to measure in real terms. (It is also worth noting that murals often spark discussion about the proliferation**

to other properties throughout the City; they are considered signs, and therefore present unique issues that bear real discussion by policy-makers.)

11. The development will create a park-like environment around the existing pond, including a walking path around the pond and throughout the site, available to the general public. Landscaping treatments, the pathway, and a small building at the edge of the pond will "activate" the pond. **Staff agrees that enhancing the existing water feature and inviting the public to enjoy the amenities of the site would be considered a public benefit above what may typically be provided on a conventional development proposal. This benefit is also repeated above in item 5.**
12. Fostering walkability and connectivity within an important corner at the heart of Novi by providing the walking path around the perimeter of the pond, as well as the "tree lined boulevard" and "pocket gardens" leading to the residential common area. **This item is closely linked to items 11 and 5. While the walking path around the pond and the common area of the residential portion of Phase 1B are amenities, they are also meeting the requirements for open space of the TC-1 district, which would be expected from any development. Further enhancement of the "boulevard" and identification of the pocket gardens on the plans is needed to classify this as a public benefit.**
13. The walkability of the development can potentially energize other areas in the Town Center core. For example, there is an opportunity to create walkable connectivity to the City-owned lake to the east of the site. **Staff believes there this could be an opportunity for the developer to offer an enhancement that would create a public amenity. It is unclear from the submittal if the developer is offering such an enhancement.**
14. In keeping with the intent to create an Asian village theme, Sakura Novi's design features, as described in the Architects' Design Statements, intends to create a bold, yet refined, aesthetic reminiscent of upscale shopping, dining and entertainment districts one may find in Osaka, Seoul and Hong Kong. **The City's façade consultant indicates that the revisions to the proposed commercial building designs more closely comply with the Façade ordinance compared to the previous submittal. The commercial buildings also include architectural features that substantially enhance the overall design quality of the project. There are also landscape, hardscape (such as decorative paving at key intersections), and accessory details, such as the proposed tea house near the pond, that will elevate and carry the theme through the development. Whether these rise to the level of a benefit to the public is a question for further discussion.**
15. The signage package, although it does not meet the ordinance standards, is meant to underscore that Sakura Novi is a cohesive, singular concept, and a regional destination to help the development team assemble an international blend of new and fresh merchant offerings. **The deviations requested for the signage package are significant. Establishing this development as a culturally diverse destination is warranted, and signage could be a way to distinguish this area of the community from other nearby developments. However, staff does not have enough details of the signage proposed throughout the development to determine whether this would be an enhancement to the community. (It is unusual to describe deviations from City standards as a "benefit.")**

Other Possible Benefits to be considered by the Applicant:

- Consideration of an off-site sidewalk connection (~30 ft) to the plaza on the Northeast corner of Town Center Drive and Grand River Avenue to provide necessary link to surrounding areas.
- Additional bicycle parking spaces above the requirements in the ordinance.

SUMMARY OF OTHER REVIEWS

1. Engineering Review (dated 10.22.19): The plans for Phase 1 and 2 meet the general/preliminary requirements on Chapter 11, Storm water management ordinance and the Engineering Design Manual. Additional comments to be addressed in subsequent submittals. Engineering recommends approval of Phase 1 and 2. **Phase 3 is not recommended for approval as there is no mention of storm water management.**
2. Landscape Review (dated 10.22.19): Landscape review has identified significant deviations that would be required unless further modifications to the plans are made. Staff supports some of them, but encourages the applicant to reduce the number of deviations. Refer to review letter for more comments. **Landscape does not recommend approval at this time.**
3. Wetland Review (dated 10.18.19): **Wetlands does not recommend approval at this time.** Additional information is required in order to recommend approval of the PRO Concept Plan.
4. Woodland Review (dated 10.18.19): A City of Novi woodland permit is required for the proposed plan. **Woodlands does not recommend approval at this time.** See review letter for additional comments to be addressed.
5. Traffic Review & RTIS Review (dated 10.18.19): Additional Comments to be addressed in future submittals. **Traffic does not recommend approval of the PRO Concept Plan at this time.**
6. Facade Review (updated 10.18.19): There are minor deviations on the proposed commercial building elevations. The residential buildings have increased the percentage of brick, however there is an overage of horizontal siding, and vinyl siding is not permitted by the façade ordinance. A Section 9 waiver would be supported for the commercial buildings. A Section 9 waiver for the overage of horizontal siding on the residential buildings would be supported if the siding material is changed to cement fiber.
7. Fire Review (dated 10.11. 19): Fire has provided additional comments and questions that would require clarification. Conditional approval is recommended.

NEXT STEP: MASTER PLANNING & ZONING COMMITTEE

Based on the applicant's request, the revised PRO Concept Plan is scheduled to go before the Planning Commission's Master Planning & Zoning Committee for informal review on November 13, 2019 at 6:00 p.m. Staff and the applicant will present the plans, and Committee members will have an opportunity to ask questions and provide feedback. No decisions or recommendations are made at the meeting. This is not a public hearing, but there will be an opportunity for audience participation if anyone wishes to attend.

PLANNING COMMISSION MEETING

Based on the applicant's request and the project schedule, this item will be scheduled for public hearing before the Planning Commission to make a recommendation to City Council on December 11, 2019. Please provide the following by **noon on December 4, 2019**. **Staff reserves the right to make additional comments based on additional information received.**

1. Concept Plan submittal in PDF format.
2. A response letter addressing ALL the comments from ALL the review letters and **a request for deviations as you see fit based on the reviews.**
3. A color rendering of the Site Plan, if any to be used for presentation purposes.

CITY COUNCIL

After the Planning Commission makes its recommendation, the PRO Concept Plan will be scheduled for consideration by the City Council. If the City Council grants tentative approval at that time, they will direct the City Attorney to draft a PRO Agreement describing the terms of the rezoning approval.

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

_____

Lindsay Bell – Planner

Attachments: Planning Review Chart
Section 3.1.21.B&C –OS-1 Permitted Uses & Special Land Uses
Section 3.1.22.B&C – OSC Permitted Uses & Special Land Uses
Section 3.1.18.B&C – I-1 Permitted uses & Special Land Uses
Section 3.1.26.B&C – TC-1 Permitted Uses & Special Land Uses

PLANNING REVIEW CHART: TC-1 - Town Center 1 District with a Planned Rezoning Overlay(PRO)

Review Date: October 31, 2019
Review Type: Revised PRO Concept Plan
Project Name: **19-31 SAKURA WAY**
Plan Date: October 2, 2019 (Plan sets Received October 3, 2019)
Prepared by: Lindsay Bell, Planner
E-mail: lbell@cityofnovi.org **Phone:** 248.347.0484

- **Bold**: Items that need to be addressed by the applicant prior to the approval of the PRO Concept Plan
- Underlined: Items that need to be addressed prior to the approval of the Preliminary Site Plan
- **Blue and underline:** Items in are items that do not currently conform to the Zoning Ordinance and may be considered as a deviation

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Requirements				
Master Plan *(adopted July 26, 2017)*	Town Center Gateway shown on Future Land Use Map Master Plan recommends rezoning to TC District to fulfill vision for Town Center area	TC-1 Rezoning proposed Phase 1:Market, Restaurants, retail, residential Phase 2: Possible hotel, residential, senior living facility, office, retail, and restaurants	**No**	**The subject property to be rezoned to TC-1 to permit the uses proposed** See Planning Review letter for further analysis
Town Center Area Study 2014	The Anglin Area is intended to serve as the eastern "gateway" into the Grand River/Novi Road Business and Main Street Areas. A wide variety of uses and pedestrian-oriented form will activate the area and provide a logical entranceway. Future development should utilize the existing pond as a site amenity.	The applicant is requesting to rezone to TC-1. Development proposed includes a mix of uses including specialty market and food hall, restaurants, retail, hotel, office, and residential. Proposal includes using the pond as a focal point and site amenity.	Yes	The Anglin property was included in the study, however the Ecco Tool and city parcels on the east proposed for the residential component were not included in the study, nor were the 2 parcels further east proposed for Phase 3 See Planning Review letter for further analysis
Zoning *(Effective Jan. 8, 2015)*	OSC Office Service Commercial, OS-1 Office Service, and I-1 Light Industrial	TC-1: Town Center - 1	**No**	**Rezoning requested**
The applicant has provided the prospective uses. The applicant is asked to limit the type of uses as shown on the PRO concept plan as a condition of the PRO agreement for all phases.				
TC-1 District Uses Permitted (Sec 3.1.26.B & C) Sec. 3.1.25.B. - Principal Uses Permitted.		**Phase 1A:** Japanese Market Restaurants	*Yes*	*Permitted Uses if rezoned*

Item	Required Code	Proposed	Meets Code	Comments
Sec. 3.1.25.C. – Special Land Uses Permitted.		Retail		
		Phase 1B/Phase 2 Baseline: Multifamily Residential	*Yes*	*Permitted Use if rezoned*
		Phase 2 Max Density Option: Hotel Office Residential Senior Living Facility *Retain Tool & Die shop indefinitely	*Yes* ***No***	*Permitted Use if rezoned* **Ecco Tool would be a non-conforming use in the TC-1 district**
		Phase 3: Multifamily Residential	*Yes*	*Permitted Use if rezoned*
Density *Future Land Use Map(adopted July 26, 2017)*	13.6 du/ac	Total site area Phase 1: 12.75 acres 68 multifamily units (townhomes) in Phase 1B *68 units/12.75 ac = 5.44 du/ac* *68 + 70 multifamily units (Townhomes) in Baseline Phase 2:* *Approx: 15.5 ac* *138 units/15.5 ac = 8.9 du/ac*	Yes	*A cap on the number of units in Phase 2 should be included in the PRO Agreement*
Phasing	Show proposed phasing lines on site plan. Describe scope of work for each phase. Each phase should be able to stand on its own with regards to utilities and parking	Phasing lines shown **Phase 1A(South area)** Buildings A, B, and C (Market, Retail, Restaurants) 50,977 sf Surface Parking: 338 spaces **Phase 1B (Eastern area)** 68 Residential 2-bed townhome units 81 garage spaces + 36 surface spaces = 117 spaces **Phase 2 – Baseline (Northern area)** 70 residential 2-bed		**The applicant provides 2 different development scenarios for the Phase 2 portion of the project due to the uncertainty of future development conditions.** **Details and deviations for Phase 2 uses may need to come back for a PRO Amendment if the conditions cannot be agreed to at this time.**

Item	Required Code	Proposed	Meets Code	Comments
		townhome units 108 garage spaces + 40 surface = 148 parking spaces **Phase 2 – Max Density Option (Northern area)** Buildings E, F, G H (Retail, Restaurants, Office, Residential, Hotel, Spa) 168,665 sf 16 1-bd res. units 32 2-bd Res. units Parking Garage: 442 spaces Surface Parking: 68 spaces **Phase 3 (Unattached Eastern area)** 52 Residential 2-bed townhome units Parking: 64 garage + 40 surface = 104 spaces		*How will parking requirements be met if the City does not build the parking garage?*
PRO Concept Plan Submittal: Additional requirements				
Written Statement *(Site Development Manual)* *The statement should describe the items listed to the right*	Potential development under the proposed zoning and current zoning	The applicant has addressed this item in the narrative.	Yes	*Staff agrees that the Town Center-1 District may be a reasonable alternative to the existing zoning for Phase 1&2 given the vision for this area in the Town Center study and Master Plan. Phase 3 was not included in the Town Center Study.*
	Identified benefit(s) of the development	Applicant has provided a list of public benefits proposed at this time.	Yes	**Please refer to Plan Review letter for discussion of public benefits proposed**
	Conditions proposed for inclusion in the PRO Agreement (i.e., Zoning Ordinance deviations, limitation on total units, etc.)	List of deviations are included in the narrative	Yes	**Please refer to Plan Review letter for discussion deviations proposed**
Sign Location Plan *(Page 23,SDM)*	Installed within 15 days prior to public hearing	Provided – sheet C1.6	Yes	**Signs are not required on each parcel, only each**

Item	Required Code	Proposed	Meets Code	Comments
	Located along all road frontages			**frontage, and each zoning district should be represented. Remove sign from City parcel 22-23-226-042 as it is not part of PRO submittal for rezoning. See letter for further details. For 12/11/19 Planning Commission public hearing, signs shall be posted no later than 11/21/19**
Rezoning Traffic Impact Study *(Site development manual)*	Rezoning Traffic Impact Study as required by the City of Novi Site Plan and Development Manual.	A Traffic Impact Statement and Rezoning Traffic Impact Study is provided	Yes? Yes?	**Refer to Traffic review letter for more comments**
Community Impact Statement (CIS) *(Sec. 2.2)*	- Over 30 acres for permitted non-residential projects - Over 10 acres in size for a special land use - All residential projects with more than 150 units - A mixed-use development, staff shall determine	Mixed-use development, based on the number of different uses. A CIS is provided	Yes	**Refer to Planning Review letter for more comments.**
Height, bulk, density and area limitations				
Frontage on a Public Street *(Sec. 5.12)*	Frontage upon a public street.	The sites have frontage and access to Grand River Avenue and Eleven Mile.	Yes	
Access To Major Thoroughfare *(Sec. 5.13)*	Access to major thoroughfare is required, unless the property directly across the street between the driveway and major thoroughfare is either multi-family or non-residential	Site has access to Grand River Avenue and Eleven Mile Road Phase 3 has access to Eleven Mile	Yes	
Open Space Area (Sec. 3.27.1.F)	15% (permanently landscaped open areas and pedestrian plazas).	An Open space plan (sheet L204) is provided. It indicates a total of 1.63 acres (15.08%) of open space in the commercial area for	**Yes?**	**Open space requirement will be met for Phase 1 – however <u>applicant indicates a deviation will be needed for the Maximum Development scenario for</u>**

Item	Required Code	Proposed	Meets Code	Comments
		Phase 1.		**phase 2. No specific deviation given.**
Maximum % of Lot Area Covered (By All Buildings) (Sec. 3.6.2 D)	No Maximum		NA	
Building Height *(Sec.3.1.26.D)*	5 stories or 65 ft, whichever is less ** Section 3.27.2.A.ii allows mixed use buildings a height bonus – for each additional floor of office or retail use above the first floor, an additional floor of residential use may be permitted. "all other standards of the ordinance apply to the height bonus, including setback, parking, landscaping, density and subsection i: "Buildings exceeding 65 ft in height shall have a minimum of 150 feet of building frontage on a roadway no less than 28-feet wide"	Building A: 2 stories	Yes	
		Building B: 2 stories	Yes	
		Building C: 2 stories	Yes	
		Building D: 1 story	Yes	
		Building E: 6 stories (2 levels non-res, 4 levels residential)	Yes?	Provide height of building in feet **Deviation required for lack of required building frontage: 150 ft required on roadway. Applicant could consider widening roadway to 28 feet in front of building E to meet requirement.**
		Building F: 2 stories	Yes	
		Building G: 5 stories	Yes	
		Building H: 4 stories	Yes	
Residential portion of this development is subject to conditions and requirements of Section 4.82: Residential Dwellings in TC and TC-1 districts (Ordinance Amendment 18.279) **Commercial Portion is subject to TC and TC-1 requirements**				
Arterial and Non-residential Collector Streets *Additional setbacks may also be required by Planning Commission or City Council if deemed necessary for better design or functionality.*				
NOTE REGARDING SETBACKS: The current submittal indicates the lot lines at the future ROW line. **Grand River Avenue is classified an arterial while Eleven Mile Road is considered a non-residential collector. Phase 1A buildings will be considered to "front" on Grand River should adhere to "Interior" requirement as there is TC-1 District to the south.** **Phase 2 buildings shall consider Eleven Mile Road as "front" should adhere to Non-Residential Collector requirements.**				
Commercial Building Setbacks *(Sec 3.1.26 D) and (Sec. 3.27.1.C)*				

Item	Required Code	Proposed	Meets Code	Comments
Front (Grand River and Eleven Mile) *See 3.27.1.C for waiver conditions for City Council*	Arterials 15 ft. minimum *Setback may be increased where necessary to obtain clear vision area for vehicular traffic.	Bldg A: 217 ft	Yes	**Indicate the proposed setbacks on sheet C-2.0.** **Proposed parcel lines required to fully evaluate setbacks**
		Bldg B: NA	Yes	
		Bldg C: 15 ft	Yes	
	Non-Residential Collector 0 ft min, 10 ft maximum	Bldg E: 8.04 ft	Yes	**Deviations required for exceeding maximum setbacks for buildings F and G** **Provide measurements on the plans to show building setback distances from each lot line on sheets C-2.1 and C2.2**
		Bldg F: >10	**No**	
		Bldg G: >10	**No**	
		Bldg H: 7.98 ft	Yes?	
		Parking Structure: ~10 ft	Yes?	
		Ecco Tool (Existing) ~52 feet	**No**	**Existing, to be made non-conforming by rezoning**
Side *Western property line is considered Interior (TC district adjacent)* *Eastern property lines considered Exterior (B-3 and I-1 Districts adjacent)*	Arterials 10 ft. Minimum Interior 50 ft Exterior	Bldg A: 10 ft (East: Exterior to B-3)	**No**	**Deviation required: 50 ft required, 10 ft proposed**
		Bldg B > 50 ft	NA	
		Bldg C > 50 ft	NA	
	Non-Residential Collector 0 ft min, no maximum	Bldg E: ~10 ft (East: Ecco Tool)	Yes	
		Bldg F: NA	NA	
		Bldg G: NA	NA	
		Bldg H: ~10 ft	Yes	
		Parking Structure: NA	Yes	
		Ecco Tool (Existing) ~25 feet	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Rear *Western property line is considered Interior (TC district adjacent)* *Northern property lines considered Exterior (OSC Districts adjacent)*	Arterials 10 ft. Minimum Interior 50 ft Exterior	Bldg A: NA (north side)	NA	
		Bldg B: NA	NA	
		Bldg C: NA	NA	
	Non-Residential Collector 0 ft min, no maximum	Bldg E: 8.04 ft	NA	
		Bldg F: 75 ft (to B-3 parcel to south)	Yes	
		Bldg G: NA	NA	
		Bldg H: 8.89 ft	Yes	
		Parking Structure:	NA	
Commercial Parking Setback *(Sec 3.1.26.D)*				
Front Grand River Ave	20 ft. from ROW	Front Grand River: 20 ft Western side yard: **5 ft** Eastern side yard: 10 ft Adj to B-3: **5 ft** Exterior rear yard (11 Mile): **10 ft**	Yes **No** Yes **No** **No**	**Show the setback distances on plans to verify conformance** **Parking setback plan (C-2.5 and C-2.6) indicates incorrect parking setbacks – please correct.** **<u>Deviations requested for western side and exterior rear yard. Also required for parking adjacent to B-3 parcel if not corrected.</u>**
Side/Rear Yard (West, East, South adj to B-3)	10 ft.			
Exterior Rear Yard (11 Mile Road)	20 ft. from ROW			
Note To District Standards *(Sec 3.6.2)*				
Exterior Side Yard Abutting a Street *(Sec 3.6.2.C)*	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	11 Mile Frontage is exterior side yard	Yes	
Minimum lot area and width *(Sec 3.6.2.D)*	Except where otherwise provided in this ordinance, the minimum lot area and width, maximum percentage of lot coverage shall be determined by the requirements set forth.	Proposed	Yes	**Lot boundaries appear to have been added for the Phase 2 portion of the project. If these will be legal parcel lines, provide setback dimensions for all buildings within the lots in order to determine setback deviations.**

Item	Required Code	Proposed	Meets Code	Comments
Yard Setbacks adjacent to Residential Districts *(Sec 3.6.2.H&L)*	If site abuts a residential zone, buildings must be set back at least 3' for each 1' of building height, but in no case can be less than 20' setback	NA	NA	Does not abut residential
Wetland/Watercourse Setback *(Sec 3.6.2.M)*	A setback of 25 ft. from wetlands and from high watermark course shall be maintained	Pond exists on the site – buffer not shown	**No**	**Indicate the buffers on the plan to verify conformance; Refer to Wetland review letter for more details** **Deviation requested**
Parking setback screening *(Sec 3.6.2.P)*	Required parking setback area shall be landscaped per sec 5.5.3.	Berm required		**Refer to landscape review for more details.**
Modification of parking setback requirements *(Sec 3.6.2.Q)*	The Planning Commission may modify parking setback requirements based on its determination according to Sec 3.6.2.Q.	Parking setbacks listed incorrectly in several locations. See 3.1.26.D below	**Yes?**	**Plan does not meet the setback requirements for some areas. Show correct setback lines on the plans. Spaces along southern property line – SE of Bldg F – and parking along Eleven Mile do not comply**
TC-1 District Required Conditions *(Sec 3.27)*				
Site Plans *(Sec. 3.27.1.A.)*	Site area under 5 acres: Requires Planning Commission approval; Site area over 5 acres: Requires City Council approval upon Planning Commission recommendation	Site is over 5 acres (15.59 acres)	Yes	*Site plan requires City Council approval upon Planning Commission recommendation*
Parking Setbacks (3.27.1 D)	20 ft. from ROW		**No**	**Refer to comments on page 6 and 7**
	Surface parking areas must be screened by either a 2.5 ft. brick wall or a landscaped berm from all public ROW	Screening?	**No**	**See Landscape Review Letter.**
	No front yard or side yard parking on any non-residential collector.	Exterior side yard parking on 11 Mile Road		**11 Mile is Non-Residential collector; Deviation requested**
Architecture/ Pedestrian Orientation	No building in the TC-1 district shall be in excess of one-hundred twenty-	This applies to the Commercial buildings.	Yes	**See Façade review for further architectural comment**

Item	Required Code	Proposed	Meets Code	Comments
(3.27.1 E)	five (125) feet in width, unless pedestrian entranceways are provided at least every one-hundred twenty-five (125) feet of frontage.	Several buildings exceed 125 ft width – Phase 1 buildings will have entrances Proposed: Decorative paving at key locations, pond/surrounding garden as focal point		
Open Space Area (Sec. 3.27.1.F)	15% (permanently landscaped open areas and pedestrian plazas accessible to the public) Required: 1.62 ac	Open Space calculations provided show 1.63 ac (15.08%)	Yes	
Façade materials (Sec. 3.27.1 G)	All sides of the building and accessory buildings must have the same materials. Façade materials may deviate from brick or stone with PC approval.			**See Façade Review Letter for comments. Façade sample board is required. Section 9 waivers required – additional detail and 3D color renderings will be needed**
Parking, Loading, Signs, Landscaping, Lighting, Etc (Sec. 3.27.1 H)	All loading in TC-1 shall be in rear yards.	Phase 1A: loading in side and rear yards Phase 2: Several loading areas proposed conflict with parking and traffic movement	**No**	**<u>Deviations requested.</u> Clearly show on plans all loading areas, label area (See Section 5.4 for additional requirements)**
	Off-street parking counts can be reduced by the number of on-street parking adjacent to a use		NA	**Shared parking study provided**
	PC may allow parking requirement reduction when parking areas serve dual functions.	The development proposes mixed uses.	Yes	**Shared parking study provided**
	Special assessment district for structured park	Not proposed	NA	
Sidewalks required (Sec. 3.27.1 I)	Sidewalks required along non-residential collector to be 12.5 ft. wide Sidewalk on Grand River should be 8’	8’ sidewalk on Grand River 6’ sidewalk on 11 Mile?	Yes **No**	**Show sidewalk widths** **<u>Deviation Requested to retain existing 6’ sidewalk where ordinance requires 12.5 ft</u>**

Item	Required Code	Proposed	Meets Code	Comments
	Direct pedestrian access between all buildings and adjacent areas	Appears to be provided, although markings on plans not consistent.	Yes?	
Bicycle Paths (Sec. 3.27.1 J)	Bike paths required to connect to adjacent residential & non-residential areas.	8' Sidewalks proposed along Grand River; Existing sidewalk on 11 Mile to remain on streets proposed	**No**	**See sidewalk comment above**
Development amenities (Sec. 3.27.1 L)	All sites must incorporate amenities such as exterior lighting, outdoor furniture, safety paths in accordance with Town Center Study Area.	L401 shows proposed bench, bike rack, decorative stamped concrete Lighting specs provided sheet 2 of 2	Yes	**No exterior lighting proposed for much of residential portion of Phase 1**
Combining Use Groups within a Structure (Sec. 3.27.1 M)	Commercial and office uses may occupy any number of total floors within a building with residential uses: - Not on same floor as residential Not above residential	Building E: Restaurant/Spa 1st floor Spa 2nd floor Residential 3rd-6th floors Building G: Retail/restaurant/office	Yes	
Retail Space *(Sec.3.27.2.B)*	7,500 sq. ft. GLA max may exceed when: - All floors above 1st floor permitted in TC-1 - No retail above 2nd floor - 2nd floor retail is less than 12,000 sq. ft. or 25% of the floor area - Single user max. is 15,000 sq. ft. - 50% of retail commercial space on 1st floor is devoted to users of 5,000 sq. ft. or less	Details of retail spaces not provided	Yes	Note that single use maximum on first floor is 15,000 sq. ft. and 50% of retail on first floor needs to be dedicated to users of 5,000 sq. ft. or less **<u>Market: 30,000 sf requested deviation</u>**
Street and Roadway Rights-Of-Way (Sec. 3.27.1 N)	Nonresidential collector and local streets shall provide ROWs consistent with DCS standards	**ROW to be dedicated on Grand River and 11 Mile Road**	Yes?	**Quantify additional area of ROW dedication**
Façade materials (Sec. 3.27.1 G)	All sides of the building and accessory buildings must have the same materials. Façade	Bldg A&D	**No**	**Section 9 waivers are required for all buildings with elevations submitted. Please refer to Façade**
		Bldg B	**No**	
		Bldg C	**No**	

Item	Required Code	Proposed	Meets Code	Comments
	materials may deviate from brick or stone with PC approval.	Bldg E: not submitted		**review for more details and missing information.** **If deviations are not identified/ requested at this time, the elevations are expected to conform to the code at the time of Preliminary Site Plan approval.**
		Bldg F: not submitted		
		Bldg G: not submitted		
		Bldg H: not submitted		
		Parking Structure: not submitted		
		Residential Buildings: Vinyl siding is not permitted; Brick percentage has been increased	**No**	
Mixed-Use Developments (Sec. 4.25) To qualify as a mixed-use development, a project must meet the following requirements.				
Each use shall comprise of at least 10% in the TC-1 district of either a. The net site area or b. The total gross floor area of all buildings		Gross site area: 15.5 acres Net site area after ROW dedication & Pond: 14.39 acres Residential Site Area: approx. 4.5 acres Commercial site area: 9.89 acre (~69% of total site area) Phase 2 Baseline:	**Yes?**	**Appears to comply** **In order to subtract to find net site area:** - **<u>Provide ROW area to be dedicated;</u>** Hotel use calculated separately from shopping center (~26%) 10% of net site area: 1.44 acres (each use should attain this minimum size to be considered mixed use)
A development with both conventional multi-family and senior, age-qualified, independent multi-family uses shall not be considered mixed use unless a non-residential use is also included		Not applicable	NA	
A performing arts facility unconditionally dedicated to the public use, under separate agreement with the City, shall be considered a second use, provided that it is a fully enclosed structure with a minimum of 500 seats.		Not applicable	NA	
Residential Dwellings / Mixed-Use in TC/TC-1 (Sec. 4.82)				
Multiple-Housing Dwellings Units *(Sec. 4.82.2)*		Must meet RM-1 district requirements.	Not Applicable	
Mixed Use Guidelines *(Sec. 4.82.2)*				
Number of Rooms and Area of Parcel *(Sec. 4.82.2.a) TC/TC-1, Multiple Family, and Mixed-*	Total number of rooms shall not have more than the area of the parcel in square feet, divided by a factor of	For 14.3 net acres 623,779 sq. ft. / 800 = **779 rooms permitted** <u>Phase 1B</u>: 68 2-BR @ 3	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Use	1200. **For mixed use, it is divided by factor of 800.**	rooms = 204 + Phase 2 Baseline: 70 2-BR @ 3 rooms = 210 Total **414 rooms *** Phase 2 Max Density: 48 units: 16 1-BR @ 2 rooms + 32 2-BR @ 3 rooms = 204 (Phase 1B) + 128 = **332 rooms**		
Allowing increase in number of rooms *(Sec. 4.82.2.b)*	Planning Commission (for sites <5 acres) or City Council (for sites >5 acres) can approve increase in number of rooms subject to conditions listed in Sec. 4.82.2.b. The increase cannot exceed more than two times the rooms otherwise allowed	**Allowed: 779 rooms** Proposed: Phase 1B: 204 rooms Phase 2 Base: 414 rooms Phase 2 Max: 332 rooms	Yes	
Floor plans for Mixed Use developments *(Sec. 4.82.2.c)*	Conceptual floor plans layouts for each dwelling unit is required to establish maximum number of rooms permitted, subject to minor modifications	Floor plans are provided for Phase 1B townhomes; Phase 2 Baseline – same as 1B	Yes	
Minimum Distance between Buildings *(Sec. 4.82.2.d)*	10 ft.	32 ft.	Yes	
Building Setbacks *(Sec. 4.82.2.e)*	- 15ft. minimum, unless conflicts with corner clearance	15 ft from ROW shown for residential buildings fronting on 11 Mile	Yes	
Parking Setbacks Off-street Parking *(Sec. 4.82.2.f)*	10 ft. minimum from any wall of any dwelling structure, which contains openings involving living areas;	Meets requirement	Yes	Residential dwelling are subject to this section, not Sec. 3.1.26.
	5 ft. from any wall with no openings	Meets	Yes	
	10 ft. from any ROW (includes drives and loading)	Meets	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	5 ft. from all other property lines	Meets	Yes	
	30 ft. from property lines adjacent to Single family homes	Not applicable	NA	
Business and Office Uses *(Sec. 4.82.3)*	- Not occupy same floor as residential - No office use above a residential use - Separate entrance, private pedestrian entrance to residential shall be provided		NA	
Parking Location *(Sec. 4.82.5)*	Off-street parking shall be provided within a building, parking structure physically attached, or designed off-street parking within 300 ft. of building.	Off-street proposed on-street, surface parking and individual unit garages	Yes	
Usable Open Space *(Sec. 4.82.6)*	Usable Open Space is defined as balconies, courts and yards that are private recreational uses, and no dimension is less than 50 ft. 200 sq. ft. per dwelling unit 200 x 68 = 13,600 sq. ft. Or 0.31 acre	Usable open space shown on sheet L203 appears to comply with requirement 0.52 acre open space proposed	Yes	
Note: Staff has made a determination for mixed use guidelines that is consistent with non-mixed use guidelines. For purpose of determining compliance, the minimum square footages are associated with number of bedroom as follows: 1 BR- 500 SF min; 2 BR- 750 SF min; 3 BR – 750 SF min; 4+ BR- 1,000 SF min ; **The applicant needs to provide the unit mix proposed. The applicant has provided floor plans of Phase 1B.**				
Maximum Room Count *: Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	1	Not proposed	NA	**All units proposed exceed requirements. Phase 2 Max. Density units not shown**
1 BR: 500 sq. ft.	2	Not proposed	NA	
2 BR: 750sq. ft.	3	3	Yes	
3 BR: 900 sq. ft.	4	Not proposed	NA	
4 BR: 1000 sq. ft.	5	Not proposed	NA	
Maximum Density: *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	--	Proposed density Phase	Yes	Density for residential

Item	Required Code	Proposed	Meets Code	Comments
1 BR: 500 sq. ft.	27.3 DUA (a)	1: 4.8 DUA (68 units/14.3 ac) Allowable Density: 18 DUA; Allowable density is calculated based on maximum number of rooms allowed for this property (779 rooms) and unit type		dwellings in TC-1 is based on the maximum number of rooms allowed.
2 BR: 750sq. ft.	18.15 DUA			
3 BR: 900 sq. ft.	13.61 DUA			
4 BR: 1000 sq. ft.	10.89 DUA			
Maximum Percentage of Units : *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	5%	Not proposed		
1 BR: 500 sq. ft.	50%	0		
2 BR: 750sq. ft.	100%	100	Yes	
3 BR: 900 sq. ft.	100%	0		
4 BR: 1000 sq. ft.	100%	0		
Minimum Off-street parking per unit: *Mixed Use Guidelines(Sec. 4.82.2)*				
Efficiency-400	1 per unit	<u>Phase 1B:</u> 68 units @ 2 spaces **Total 136 spaces required** 36 Surface spaces 81 Garage spaces Total 117 spaces proposed <u>Phase 2 Base:</u> 70 units @ 2 spaces **Total 140 spaces required** Total 148 spaces proposed		Shared parking study provided for overall project site to justify request for reduction in required parking
1 BR: 500 sq. ft.	1 per unit			
2 BR: 750sq. ft.	2 per unit		No	
3 BR: 900 sq. ft.	2 per unit			
4 BR: 1000 sq. ft.	2 per unit			
Parking, Loading, and Dumpster Requirements (5.3 site specific review required)				
Required Parking Calculation *(Sec. 5.2.12)* *(Sec. 4.82.2)* *Shared parking agreement	<u>Shopping Center</u> 1 per 250 sq. ft. of gla 227,948 / 250 = 911 spaces <u>Hotel</u> 1 for each unit, plus 1 for each employee, plus accessory uses <u>Res. Mixed-Use Development</u> Rm count 1-2 = 1 space	<u>Shopping Center</u> 468 spaces <u>Hotel</u> # of rooms: 120 # of employees: ?? Accessory use? **107 surface spaces proposed** <u>Residential Development</u> 0 On-street	Yes?	Shared parking study provided to justify reduction of parking required for Phase 1 and at build-out of Phase 2.

Item	Required Code	Proposed	Meets Code	Comments
	Rm count 3-5 = 2 spaces 81 total spaces required	81 garage 38 surface parking		
Parking Space Dimensions and Maneuvering Lanes *(Sec. 5.3.2)*	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed as long as detail indicates a 4" curb at these locations - 60º 9 ft. x 18 ft.	- 9 ft. x 17 ft. parking spaces allowed as long as detail indicates a 4" curb at these locations - 60º 9 ft. x 18 ft. - 9 ft. x 19 ft. spaces - 20 ft 2-way drives	**No**	**Deviation requested for 20 ft drive aisles – 22 feet required when not adj to parking** **Deviation requested for 22 ft drive aisles – 24 feet required adj to parking**
Parking lot entrance offset (Sec. 5.3.6)	Parking lot entrances must be set back 25' from any single-family residential district.	Not applicable	NA	
End Islands *(Sec. 5.3.12)*	- End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. - The end islands shall generally be at least 8 ft. wide, have an outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall		Yes	**Refer to traffic review for additional comments.**
Parking stall located adjacent to a parking lot entrance (public or private) *(Sec. 5.3.13)*	- Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Parking near future building E appears close	**No?**	
Barrier Free Spaces *Barrier Free Code* **No deviations since this is a Michigan Building Code*	Residential Portion: A total of 2% of required parking. 96 x 2% = 2 required 376 spaces for	<u>Residential Development</u> 3 barrier free (1 van accessible) <u>Commercial</u>	Yes	

Item	Required Code	Proposed	Meets Code	Comments
requirement	commercial portion requires: 6 barrier free (2 van accessible)	20 barrier free (8 van accessible)		
Barrier Free Space Dimensions *Barrier Free Code*	- 8‘ wide with an 8’ wide access aisle for van accessible spaces - 8’ wide with a 5’ wide access aisle for regular accessible spaces	Spaces are distributed into 6 locations, appear to have at least 1 van accessible at each Dimensions appear to comply	Yes	Additional barrier free spaces will be required with Phase 2; Number to be provided in parking garage determined by # spaces within the garage
Barrier Free Signs *Barrier Free Code*	One sign for each accessible parking space.	Signs indicated	Yes	
Minimum number of Bicycle Parking *(Sec. 5.16.1)*	Multiple-Family: 1 for each 5 dwellings 68/5 = 14 bike spaces Retail/Shopping Center: Five (5) percent of required automobile spaces 376 spaces * 5% = 19 bike spaces Total = 33 bike spaces	Residential portions: 14 spaces proposed Commercial: 19 spaces proposed	Yes	Future phases will need to provide additional spaces: to be determined and verified at the time of Preliminary Site Plan submittal
Bicycle Parking General requirements *(Sec. 5.16)*	- No farther than 120 ft. from the entrance being served - When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations - Spaces to be paved and the bike rack shall be inverted “U” design - Shall be accessible via 6 ft. paved sidewalk - When 20 or more bicycle parking spaces are required, 25% shall be covered spaces.	Multiple bike rack locations indicated To be verified at the time of PSP submittal Appear to be provided Covered spaces not indicated	Yes Yes Yes Yes NA	**Phase 2 bike parking not indicated at this time – see comment above**
Bicycle Parking Lot layout *(Sec 5.16.6)*	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane	To be determined at the time of PSP submittal		

Item	Required Code	Proposed	Meets Code	Comments
	width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double			
Loading Space Area (*Sec. 5.4.2)*	Within TC zoning, loading space shall be provided in the rear yard (or in the interior side yard beyond the side yard setback for double frontage lots) in the ratio of 10 sq. ft. per front foot of building. Layout shall not cut off or diminish access to off-street parking spaces or service drives. Example: For 100 ff building, 1000 sf of loading area is required for residential and commercial buildings	Phase 1 loading area locations meet requirements for location in rear yard or interior side yard. 4 areas are indicated as loading zones on sheet C-2.1: • Area A1 + A2: 1,320 sf + 475 = 1,795 **< 1,800 sf required** • Area B: 644 sf **>** 620 sf required • Area C: 1,300 sf **< 2,000 sf required** No loading zone areas are given for Phase 2 Max. Build-out option – locations shown on sheet C-2.3: • Building E: **No loading zone** • Building F: **Loading area shared with building A?** • Building G: **layout of loading area diminishes access to parking spaces** • Building H: **located in front yard**	**No** **No**	**Loading areas seem to include area where dumpster is present, which is not allowed. Area occupied by dumpster shall be excluded from loading area.** **<u>Deviations needed for deficiency in loading area requirements for Loading areas A,B, C</u>** **<u>Deviations requested for location of loading areas (Building H: front yard) in Phase 2 Max Build-out option. Building G location conflicting with parking spaces. Lack of loading areas for Buildings E & F.</u>** **Size of loading areas would be expected to meet ordinance standards for Phase 2 if deviations not requested; or PRO Agreement would need to be amended at later date**
Loading Space Screening (Sec. 5.4.2 B)	Loading area must be screened from view from adjoining properties and from the street.	Loading areas (A, B & C) screened with bamboo plantings – others do not appear to be screened	**No?**	**Refer to landscape plan for additional comments.** **<u>Waiver or deviations required if proper screening in not proposed</u>**
Dumpster *Sec 4.19.2.F*	- Located in rear yard - Attached to the building or no closer than 10 ft. from building if not attached - Not located in parking setback (20 ft.)	Phase 1A dumpster locations appear to be acceptable. Will be confirmed at the time of PSP submittal. No dumpsters in Phase 1B area	Yes?	**Clarify trash collection plans for Phase 1B if no dumpsters are provided** **Deviations may be required for placement of some dumpsters in Phase 2**

Item	Required Code	Proposed	Meets Code	Comments
	- Rear lot abuts ROW, 50 ft. setback required. - Away from Barrier free Spaces			
Dumpster Enclosure *Sec. 21-145. (c) Chapter 21 of City Code of Ordinances*	- Screened from public view - A wall or fence 1 ft. higher than height of refuse bin - And no less than 5 ft. on three sides - Posts or bumpers to protect the screening - Hard surface pad. - Screening Materials: Masonry, wood or evergreen shrubbery	Details provided – see façade review for comments	Yes	Appear to comply with façade ordinance – will confirm at the time of site plan approval
Parking, Handicap Parking and Bike Requirements **<u>Staff is unable to make a determination based on the missing information. Information provided below is what was provided based on assumptions made in the traffic and parking study and compares to weekend peak demand numbers.</u>**				
Required Parking Calculation *(Sec. 5.2.12)* *(Sec. 4.82.2)* **See Individual requirements below**	**Phase 1 Required per Use**	**Parking Study Peak Demand**		Shared Parking Study indicates 438 spaces needed for peak demand, Including 10% "Effective Supply"
	Retail 4,508sf/200 = <u>23</u>	15		
	Market 26,500sf/200 = <u>133</u>	90		
	Quality Restaurant 7,460sf/70 = <u>106</u>	122		
	Sit-Down Restaurant 4,505/70 = <u>64</u>	48		
	Fast Casual Restaurant 4,532/70 = <u>65</u>	36		
	Residential Buildings 68 units x 2 ea = <u>136</u>	87		
	Total Ordinance Required: 570 Spaces	TOTAL PROPOSED: 446 Spaces		
	+ Phase 2 Max Density Required per Use	**Parking Study Peak Demand**		***Total number of parking spaces to be provided in Phase 2 not given. Parking Study indicates peak demand would require 885 spaces (includes 10%***
	Retail 16,508 sf/200 = <u>83</u>	62		
	Market	78		

Item	Required Code	Proposed	Meets Code	Comments
	26,500sf/200 = 133			***effective supply)***
	Quality Restaurant 7,460sf/70 = 106	122		
	Sit-Down Restaurant 12,505/70 = 178	107		
	Fast Casual Restaurant 10,532sf/70 = 150	105		
	Residential Units 116 units x 2 ea = 232	129		
	Hotel (120 rms x 1) + 5 employees = 125	46		
	Office 58,000sf/222 = 261	146		
	Spa 25,000sf/ ?? (provide additional information)	48		
	Total Ordinance Required: 1,311+ Spaces	TOTAL PROPOSED: "TBD based on use"		**Includes 10% "Effective Supply"**
Lighting and Photometric Plan *(Sec. 5.7)*				
STAFF COMMENT: Photometric plan and additional information is typically required at the time of Final Site Plan when the site is not abutting a residential district. **If deviations from ordinance requirements are anticipated, they should be identified and included as part of the PRO agreement.**				
Intent *(Sec. 5.7.1)*	Establish appropriate minimum levels, prevent unnecessary glare, reduce spill-over onto adjacent properties & reduce unnecessary transmission of light into the night sky		Yes	
Lighting Plan *(Sec. 5.7.2 A.i)*	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Building outlines, pavement shown for Phase 1A & B only	Yes	**Ensure light fixtures will not conflict with landscaping/utilities**
Building Lighting *(Sec. 5.7.2.A.iii)*	Relevant building elevation drawings	Not provided	**No**	Would be expected to conform to ordinance

Item	Required Code	Proposed	Meets Code	Comments
	showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.			standards at the time of FSP approval unless deviations are identified now
Lighting Plan *(Sec.5.7.2 A.ii)*	Specifications for all proposed & existing lighting fixtures	Appear to be Provided	Yes	
	Photometric data	Provided	Yes	
	Fixture height	Not provided	No	
	Mounting & design	Provided	Yes	
	Glare control devices	Provided	Yes	
	Type & color rendition of lamps	Provided	Yes	
	Hours of operation	Not provided	No	
Required Conditions *(Sec. 5.7.3.A)*	Light pole height not to exceed maximum height of zoning district (65 ft. for TC)		NA	Light pole height not currently provided – will be reviewed in PSP submittal
Required Conditions *(Sec. 5.7.3.B&G)*	- Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation			**Provide standard notes on Plan or incorporate into PRO Conditions**
Security Lighting *(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.			will be reviewed in PSP submittal
Required Conditions *(Sec.5.7.3.E)*	Average light level of the surface being lit to the lowest light of the surface being lit shall not	No indicated for residential portion	**No**	**Deviation requested. Applicant has not proposed lighting in residential parking areas, which is**

Item	Required Code	Proposed	Meets Code	Comments
	exceed 4:1			**required. Lighting plan should be revised to meet the minimum illumination levels indicated below**
Required Conditions *(Sec. 5.7.3.F)*	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	LEDs proposed	Yes	
Min. Illumination *(Sec. 5.7.3.K)*	Parking areas: 0.2 min	0.0 proposed in Phase 1B	**No**	**General parking areas expected to comply with min. requirements**
	Loading & unloading areas: 0.4 min	Phase 1A – lighting behind building A/loading are not shown	**No**	**Provide lighting data behind building A**
	Walkways: 0.2 min	0.0 min noted in several locations	**No**	**Some areas of the public walkway are not illuminated**
	Building entrances, frequent use: 1.0 min	Front of building C – lighting below min levels	**No**	**Adjust lighting to meet min levels**
	Building entrances, infrequent use: 0.2 min	Photometrics not shown for some door locations	**No**	**Provide lighting data at all commercial door locations**
Max. Illumination adjacent to Non-Residential *(Sec. 5.7.3.K)*	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	Photometrics not shown for property line	**No**	**Show property line on plans to verify conformance**
Cut off Angles *(Sec. 5.7.3.L)*	When adjacent to residential districts: - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle	No residential districts adjacent	NA	
Building Code and Other Requirements				
Accessory Structures *(Sec. 4.19)*	-Each accessory building shall meet all setback requirements for the zoning district in which the property is situated -Shall meet the façade ordinance standards		NA	Tea house near pond will be considered an accessory structure, as will generators, transformers, etc.

Item	Required Code	Proposed	Meets Code	Comments
Exterior Building Wall Façade Materials (Sec. 5.15) (Sec. 3.27.1.G)	Façade Region: 1	Elevation drawings submitted for some of the buildings	**No**	**See Façade review for additional comments and further detail**
Roof top equipment and wall mounted utility equipment *Sec. 4.19.2.E.ii*	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Elevations are not provided for all units	**No**	This information can be provided at the time of Preliminary site plan that conforms to the code
Building Code	Building exits must be connected to sidewalk system or parking lot.	Sidewalks not shown on the plans	**No**	This information can be provided at the time of Preliminary site plan that conforms to the code
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	**MUST provide proposed lot lines on the plans**
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Some provided;	Yes	**Refer to review letters for missing information**
Economic Impact	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Provided	**No**	**Should be submitted prior to Planning Commission meeting**
Signage **See link below (Chapter 28, Code of Ordinances)**	- Signage if proposed requires a permit. - Signage is not regulated by the Planning Commission	The current site plan drawings indicate signage areas on some of the elevations provided – however	**No**	**Provide details of deviations requested. Blank check deviations will not be recommended for approval.**

Item	Required Code	Proposed	Meets Code	Comments
	or Planning Division.	most dimensions are missing Deviation requested up to 200% of current Sign ordinance allowance		
Property Address	The applicant should contact the Building Division for an address prior to applying for a building permit.	One is not required at this time. Individual lot address would require separate addresses at a later time	**No**	Submit address application after Final Site Plan approval.
Project and Street Naming Committee	Some projects may need approval from the Street and Project Naming Committee.	The applicant requested Sakura Novi project name. Approved by committee	Yes	**Contact Madeleine Kopko at 248-347-0579 for more information on application and process**
Property Split/Combination	The proposed property split/combination must be submitted to the Assessing Department for approval.	Lot combination required	**No**	**Lot combination/split required prior to final site plan approval. Contact Assessing 248-347-0492**
Master Deed	Master Deed should be approved for site condominiums prior to stamping set approval		NA	**Applicant states commercial portion will remain under single landlord ownership**
Easements	- Utilities - Emergency/Cross-Access Easements - Conservation Easements - ROW dedication - Etc.	Easement plan submitted	Yes?	**Conservation easement will be required for any wetland mitigation areas or woodland replacement trees; Access easements for Ecco Tool property if properties are connected**

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.

I-1 Light Industrial District

User Note: For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

B. PRINCIPAL PERMITTED USES

i. Professional office buildings, offices and office sales and service activities

ii. **Accessory buildings, structures and uses** §4.19 customarily incident to the above permitted uses

iii. Publicly owned and operated parks, parkways and outdoor recreational facilities

iv. **Public or private health and fitness facilities and clubs** §4.34

v. Medical offices, including laboratories and clinics

The following uses are subject to **Section 4.45:**

vi. Research and development, technical training and design of pilot or experimental products

vii. Data processing and computer centers

viii. **Warehousing and wholesale establishments** §4.43

ix. **Manufacturing** §4.43

x. **Industrial office sales, service and industrial office related uses** §4.44

xi. Trade or industrial schools

xii. **Laboratories experimental, film or testing** §4.43

xiii. Greenhouses

xiv. Public utility buildings, telephone exchange buildings, electrical transformer stations and substations, and gas regulator stations, other than outside storage and service yards

xv. Public or private indoor recreation facilities

xvi. Private outdoor recreational facilities

xvii. **Pet boarding facilities** §4.46

xviii. **Veterinary hospitals or clinics** §4.31

xix. **Motion picture, television, radio and photographic production facilities** §4.47

xx. Other uses of a similar and no more objectionable character to the above uses

xxi. **Accessory buildings, structures and uses** §4.19 customarily incident to any of the above permitted uses

C. SPECIAL LAND USES

The following uses shall be permitted where the proposed site does not abut a residentially zoned district:

i. **Metal plating, buffing, polishing and molded rubber products** §4.48

ii. **Uses which serve the limited needs of an industrial district (subject to Section 4.43),** as follows:

   a. Financial institutions, unions, union halls, and industrial trade schools or industrial clinics

   b. Industrial tool and equipment sales, service, storage and distribution

   c. **Eating and drinking establishments and motels** §4.49

iii. **Automobile service establishment** §4.50

iv. **Self-storage facilities** §4.51

v. **Retail sales activities** §4.52

vi. **Central dry cleaning plants or laundries** §4.53

vii. **Railroad transfer, classification and storage yards** §4.43

viii. **Tool, die, gauge and machine shops** §4.43

ix. **Storage facilities for building materials, sand, gravel, stone, lumber, storage of contractor's equipment and supplies** §4.54

x. **Municipal uses** §4.43

xi. **Motion picture, television, radio and photographic production facilities** §4.47

xii. **Outdoor space for parking of licensed rental motor vehicles** §4.90

xiii. **Accessory buildings, structures and uses** customarily incident to any of the above permitted uses

3.1.21

OS-1 Office Service District

A. INTENT

The OS-1, Office Service District is designed to accommodate uses such as offices, banks, facilities for human care and personal services which can serve as transitional areas between residential and commercial districts and to provide a transition between major thoroughfares and residential districts.

User Note: For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

B. PRINCIPAL PERMITTED USES

i. Professional office buildings
ii. Medical office, including laboratories and clinics
iii. **Facilities for human care** §4.64
iv. Financial institution uses with drive-in facilities as an accessory use only
v. Personal service establishments
vi. Off-street parking lots
vii. Places of worship
viii. Other uses similar to the above uses
ix. **Accessory structures and uses** §4.19 customarily incident to the above permitted uses
x. Publicly owned and operated parks, parkways and outdoor recreational facilities
xi. **Public or private health and fitness facilities and clubs** §4.34

C. SPECIAL LAND USES

i. **Mortuary establishments** §4.17
ii. Publicly owned buildings, telephone exchange buildings, and public utility offices, but not including storage yards, transformer stations, or gas regulator stations
iii. **Day Care Centers** and **Adult Day Care Centers** §4.12.2
iv. **Public or private indoor and private outdoor recreational facilities** §4.38
v. An **accessory use** §4.19 customarily related to a use authorized by this Section

3.1.22 OSC Office Service Commercial District

A. INTENT

The OSC, Office Service Commercial district is designed and intended to accommodate a large office building or, more particularly, a planned complex of office buildings with related commercial retail and service establishments which may serve the area beyond the confines of the office complex itself.

The primary intent of this district is to provide limited areas for office buildings of greater height and more intense land use activity in an otherwise low-density community. Because of the greater building height, intensity of land use and associated higher volumes of vehicular and pedestrian traffic, it is further intended that this district be located only in proximity to areas of major commercial or civic development and have direct access to freeway or major thoroughfares.

The OSC district is designed to encourage the combining of mid-rise and low-rise office and office related uses in planned development and to encourage innovation and variety in type, design and arrangement of such uses.

User Note: For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

B. PRINCIPAL PERMITTED USES

i. Professional office buildings
ii. Medical office, including laboratories and clinics
iii. **Facilities for human care** §4.64
iv. Financial institution uses with drive-in facilities as an accessory use only
v. Personal service establishments
vi. Off-street parking lots
vii. Places of worship
viii. Other uses similar to the above uses
ix. Publicly owned and operated parks, parkways and outdoor recreational facilities
x. Professional office buildings, offices and office sales and service
xi. Transient residential uses
xii. Public utility offices and telephone exchange buildings
xiii. **Accessory buildings, structures and uses** §4.19 customarily incident to the above permitted uses
xiv. **The inpatient bed facility portion of general hospitals** §4.65
xv. **Public or private health and fitness facilities and clubs** §4.34

C. SPECIAL LAND USES

i. **Retail commercial business uses** §4.66
ii. **Sit-down restaurants** §4.41.3
iii. **Amusement and entertainment uses** §4.67
iv. **Day care centers, and adult day care centers** §4.12.2
v. **Public or private indoor and private outdoor recreational facilities** §4.38

3.1.26

TC-1 Town Center - 1 District

A. INTENT

The TC-1, Town Center district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted. Each use shall be complementary to the stated function and purpose of the district and shall not have adverse impact upon adjacent street capacity and safety, utilities, and other City services.

The TC-1 Town Center district is further designed and intended to discourage the development of separate off-street parking facilities for each individual use, and to encourage the development of off-street parking facilities designed to accommodate the needs of several individual uses. Furthermore, it is recognized that uses which have as their principal function the sale or servicing of motor vehicles, such as automobile service establishments, car washes, or new and used motor vehicle sales or service establishments, and drive-in restaurants and restaurants with drive-through facilities, have a disruptive effect on the intended pedestrian orientation of the districts.

The TC-1 District is especially designed to encourage developments of an urban "Main Street" with mixed land uses and shared parking. Flexible regulations regarding streetscape design, landscape design, provision of parking facilities, architectural and facade design, residential dwelling units, and setback standards are intended.

User Note: For uses listed in **bold blue**, refer to Article 4, or click on use, for use-specific standards

B. PRINCIPAL PERMITTED USES

i. **Retail businesses** §4.78.3
ii. Retail business service uses
iii. **Dry cleaning establishments, or pick-up stations, dealing directly with the consumer** §4.24
iv. Business establishments which perform services on the premises
v. Professional services
vi. Post office and similar governmental office buildings, serving persons living in the adjacent residential area
vii. Off-street parking lots
viii. Private clubs, fraternal organizations and lodge halls
ix. **Places of worship** §4.10
x. **Retail business** §4.27
xi. **Service establishments of and office showroom or workshop nature** §4.27
xii. **Restaurants (sit-down), banquet facilities or other places serving food or beverage** §4.27
xiii. **Theaters, assembly halls, concert halls, museums or similar places of assembly** §4.27
xiv. **Business schools and colleges or private schools operated for profit** §4.27
xv. Offices and office buildings
xvi. Public and quasi-public
xvii. Indoor commercial recreation facilities

B. PRINCIPAL PERMITTED USES (continued)

xviii. Outdoor theaters, plazas, parks, public gathering places, including those along a river walk, and like public facilities
xix. Hotels
xx. **Financial institutions** §4.81
xxi. **Residential dwellings** §4.82
xxii. **Day care centers and adult day care centers** §4.12.2
xxiii. Instructional Centers
xxiv. Other uses similar to the above uses subject to conditions noted
xxv. **Accessory structures and uses** §4.19 customarily incidental to the above permitted uses

C. SPECIAL LAND USES

The following uses shall be permitted by the City Council, following review and recommendation of the Planning Commission:

i. **Open air business uses** §4.80.1
ii. **Sale of produce and seasonal plant materials outdoors** §4.30
iii. **Veterinary hospitals or clinics** §4.31
iv. **Fast food drive-through restaurants** §4.40
v. **Microbreweries** §4.35
vi. **Brewpubs** §4.35

ENGINEERING REVIEW

PLAN REVIEW CENTER REPORT

October 22, 2019

Engineering Review

Sakura Way PRO
JZ19-0031

Applicant
Sakura Novi, LLC

Review Type
PRO Concept Plan

Property Characteristics

- Site Location: North of Grand River Avenue, East of Town Center Drive
- Site Size: 15.59 Acres
- Plan Date: October 2, 2019
- Design Engineer: PEA, Inc.

Project Summary

- Phase 1 (12.75 acres): Construction of mixed-use buildings (30,000 s.f. market, 5 restaurants, and 4 retail spaces), 68 townhomes, and associated parking.

  Phase 2 (2.75 acres): The baseline option would allow for the construction of 70 townhomes. The maximum buildout option would allow for the construction of a hotel, mixed use buildings (retail/office space, a spa, apartments and restaurants), and a parking structure.

  Phase 3 (3.50 acres): Construction of 52 townhomes and associated parking.

  Site access to phases 1 and 2 would be provided via Grand River Avenue and Eleven Mile Road. Site access to phase 3 would be provided via Eleven Mile Road.

- Water service would be provided by an 8-inch extension from the existing 12-inch water main along the north side of 11 Mile Road. The aforesaid water main extension will have two (2) connections to 11 Mile Road to provide a looped water main system on the proposed site.
- Sanitary sewer service would be provided by an 8-inch extension from the existing 8-inch sanitary sewer along the south side of 11 Mile Road.
- Storm water would be collected by two (2) separate storm sewer collection systems (detention basins). The western detention basin would be discharged to existing 12-inch storm sewer along the north side of Grand River Avenue at a controlled rate. The eastern detention basin would be discharged to a wetland on the abutting parcel to the east owned by the city of Novi.

Recommendation

Approval of the Revised Concept Plan and Revised Concept Storm Water Management Plan for **phases 1 and 2 only is recommended for approval** with items to be addressed during detailed design review. Phase 3 is not recommended for approval because there is no mention of storm water management.

Comments:

The Revised Concept Plan for phases 1 and 2 only meet 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 that must be addressed at the time of Preliminary Site Plan submittal:

General

1. Reference benchmarks established at intervals no greater than 1,200 feet shall be noted on the plans with identification, location, description and established elevation listed. Generally, at least two benchmarks shall be noted on each sheet and one of the two shall be a City established benchmark.
   a. Provide the elevation of the City established benchmark.
   b. Reference at least two benchmarks.
2. No utility information was presented for phases 2 or 3. Thus, no specific utility comments for these phases have been provided.
3. For all non-residential development, a Non-Domestic User Survey form must be submitted to the City so it can be forwarded to Oakland County.
4. Provide a note stating, "If dewatering is anticipated or encountered during construction a dewatering plan must be submitted to the Engineering Department for review".
5. Generally, all proposed trees shall remain outside utility easements. Where proposed trees are required within a utility easement, the trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility.
6. Provide soil borings, at the time of detailed site plan review, in the vicinity of the storm water basins to determine soil conditions and to establish the high water elevation of the groundwater table.
7. The master planned half width right-of-way for Eleven Mile Road is 35 feet. There is a note on the plans indicating the dedication of this right-of-way to the City.
8. The master planned half width right-of-way for Grand River Avenue is 60 feet. There is a note on the plans indicating the dedication of this right-of-way to the City.
9. A letter from either the applicant or the applicant's engineer must be submitted with the Preliminary Site Plan submittal highlighting the changes made to the plans addressing each of the comments in this review.

Water Main

10. It is assumed that the 12-inch water main could be reasonably extended from the north side of Eleven Mile to service phase 2.
11. It is assumed that the 8-inch water main on the west side of parcel 22-23-229-007 could be extended to service phase 3.
12. The as-builts from Advance Auto (parcel 50-22-23-126-015) do not indicate that 8-inch water main was stubbed at the western boundary of their property. A revision to this proposed water main connection may be necessary.
13. Note the diameter and length of all leads (domestic, fire and hydrant leads).
14. Any hydrant lead over 25 feet long must be 8-inches in diameter.
15. There is a gate valve shown on sheet C-5.1 between building 10 and building 'A' that does not appear to be associated with any water main. If this is an error, please remove it from the plans.
16. Provide profile views for all proposed water main 8-inch and larger.
17. Once the water man plans have been reviewed in detail and approved, provide three (3) signed and sealed sets of utility plans along with the MDEGLE permit application (04/2019 rev.) for water main construction. The Streamlined Water Main Permit Checklist should be submitted to the Engineering Division for review, assuming no further design changes are anticipated. Utility plan sets shall include only the cover sheet, any applicable utility sheets and the standard detail sheets.

Sanitary Sewer

18. It is assumed that the 8-inch water main could be reasonably extended from the south side of Eleven Mile to service phase 2.
19. It is assumed that the 8-inch sanitary sewer on the west side of parcel 22-23-229-007 could be extended to service phase 3.
20. According to the City's records, the sanitary sewer along Eleven Mile Road Is a 27-inch sewer, not 8-inch. See attached map. A revision to the sanitary sewer layout may be necessary.
21. Phase 1, building 'B' is proposed to be a restaurant. Therefore, a grease interceptor is required and should be called out.
22. A few of the sanitary sewer leads are missing a label and sizing information. Clearly provide and label a lead to every building.
    a. Building 6 is missing a sanitary lead.
23. Clearly label each sanitary sewer monitoring manhole unique to a non-residential building.
24. Provide profile views for all proposed sanitary sewer greater than 6-inches.
25. Once the sanitary sewer plans have been reviewed in detail and approved, provide three (3) sealed sets, as well as an electronic copy, of the utility plans along with the MDEGLE permit application (01/18 rev.) for sanitary sewer construction and the Streamlined Sanitary Sewer Permit Certification

Checklist. These documents shall 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. Please contact the MDEGLE and the City of Novi if an expedited review is desired.

Storm Sewer

26. Provide a schedule listing the casting type and other relevant information for each proposed storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
27. Provide storm sewer profiles and illustrate all pipes intersecting storm structures.
28. Show and label all roof conductors, and show where they tie into the storm sewer.
29. Provide a four-foot deep sump and an oil/gas separator in the last storm structures prior to discharge to each storm water basin.

Storm Water Management Plan

30. The Storm Water Management Plan for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the new Engineering Design Manual.
    a. A storm water management plan for phase 3 is required.
31. Refer to the Wetland Review letter from ECT to address any concerns with the discharge of the eastern detention basin into the City owned wetland.
32. Provide release rate calculations for the three design storm events (first flush, bank full, 100-year).
33. Provide supporting calculations for the runoff coefficient determination.
    a. The calculations should reflect the two different plans for phase 2, assuming the amount of impervious/pervious cover varies.
34. Label the material proposed for the maintenance access route to the basin outlet structures, and label the 15-foot width and slope (maximum of 1V:5H).
35. Provide an access easement from the public right-of-way for maintenance over the storm water detention system and the pretreatment structure.
36. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin associated with residential development. A **deviation** from this standard would be supported by the Engineering Department if the buffer is not feasible and it should be included in the PRO Agreement.
37. If a 3-foot permanent pool is provided in the detention basin to the west, as indicated in the response letter, then a mechanical treatment unit is not required in the last structure prior to discharge to the basin.
38. Indicate where the mechanical treatment unit for the eastern basin can be found.
39. An emergency spillway must be provided at an elevation that is 6-inches above the 100-year elevation and must have sufficient capacity to convey the peak flow associated with a 100-year design storm.

Paving & Grading

40. The maneuvering lane widths throughout the development shall be 24 feet wide. Any width less than that would be considered a **deviation**.
41. Provide existing and proposed contours for all phases on the Grading Plan.
42. The right-of-way sidewalk shall continue through the drive approach on Eleven Mile Road as well as Grand River Avenue. If like materials are used for each, the sidewalk shall be striped through the approach. Provide additional spot grades as necessary to verify the maximum 2-percent cross-slope is maintained along the walk.
43. Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls. All barrier-free stalls shall comply with Michigan Barrier-Free regulations.
44. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
    a. Curbing and walks adjacent to the end of 17-foot stalls shall be reduced to 4-inches high (rather than the standard 6-inch height to be provided adjacent to 19-foot stalls).

Soil Erosion and Sediment Control

45. A SESC permit is required. A full review has not been completed at this time. An informal review will be completed with the Final Site Plan if SESC plans are included in the submittal.

Off-Site Easements

46. Any off-site utility easements anticipated must be executed **prior to final approval of the plans**. If you have not already done so, drafts of the easements and a recent title search shall be submitted to the Community Development Department as soon as possible for review, and shall be approved by the Engineering Division and the City Attorney prior to executing the easements.

    a. An off-site storm sewer easement may be necessary for the end section and discharge of storm water on the City of Novi's property (parcel 22-23-226-042).

The following must be provided at the time of Preliminary/Final Site Plan submittal:

47. A letter from either the applicant or the applicant's engineer must be submitted with the revised Preliminary Site Plan highlighting the changes made to the plans addressing each of the comments listed on this review letter and indicating the revised sheets involved.
48. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. ***The estimate must be itemized*** for each utility (water, sanitary, storm sewer), on-site paving (square yardage), right-of-way paving

(including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

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

49. A draft copy of the Storm Drainage Facility Maintenance Easement Agreement (SDFMEA), as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the agreement is approved by the City's Legal Counsel, this agreement will then be sent to City Council for approval/acceptance. The SDFMEA will then be recorded at the office of the Oakland County Register of Deeds. This document is available on our website.

50. 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.

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

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

53. A draft copy of the cross access easement for shared access to the drive aisle between Ecco Tool and Sakura Way must be submitted to the Community Development Department. This document is available on our website.

54. A draft copy of the warranty deed for the additional proposed right-of-way along Eleven Mile Road and Grand River Avenue must be submitted for review and acceptance by the City.

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

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 Kate Richardson at (248) 347-0586 with any questions.

Kate R.

Kate Richardson, EIT
Plan Review Engineer

cc: Lindsay Bell, Community Development Department
Ben Croy, PE; Engineering
Victor Boron, Engineering

City of Novi Map

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.

mi
0 0.005 0.01 0.02 0.03

1 inch = 188 feet

Map Print Date:
10/21/2019

City of Novi
45175 Ten Mile Rd
Novi, MI 48375
cityofnovi.org

City of Novi Map

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Map Print Date:
10/21/2019

City of Novi
45175 Ten Mile Rd
Novi, MI 48375
cityofnovi.org

LANDSCAPE REVIEW

PLAN REVIEW CENTER REPORT

October 22, 2019

RevisedPRO Concept Site Plan - Landscaping

Sakura Way

Review Type
Revised PRO Concept Landscape Review

Job #
JZ19-0031

Property Characteristics

- Site Location: Northeast of Town Center and Grand River
- Site Zoning: OSC, OS-1, I-1, to be rezoned to TC-1
- Adjacent Zoning: North: 11 Mile Road, I-1, East: I-1, B-3, South: B-3, Grand River, West: TC
- Plan Date: 10/2/2019

Ordinance Considerations

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

Recommendation

This project is **not recommended for approval for PRO Concept. There are too many significant deviations to recommend approval.** The comments noted below should be addressed prior to submittal for consideration by the Planning Commission and City Council.

LANDSCAPE DEVIATIONS REQUIRED FOR PROPOSED CONFIGURATION:

PHASE 1

COMMERCIAL:

- Insufficient greenbelt landscaping. *Not supported by staff.*
- Insufficient interior parking lot landscaping area and canopy trees provided. *Not supported by staff.*
- Insufficient parking lot perimeter trees. *Not supported by staff*
- Lack of screening wall or berm for parking areas. *Supported by staff*
- Lack of building foundation landscaping. *Not supported by staff.*

RESIDENTIAL:

- No buffering berms for multi-family housing provided between residential buildings and the B-3 and I-1 zoned properties. *Not supported by staff as currently proposed.*
- Lack of interior drive perimeter trees provided. *Not supported by staff.*
- Insufficient greenbelt width and berm between parking lot and 11 Mile Road. *Supported by staff.*
- Use of subcanopy trees for 25% of multifamily unit landscaping trees. *Supported by staff.*

PHASE 2:

- Insufficient greenbelt landscaping. *Not supported by staff.*
- Insufficient parking lot trees. *Not supported by staff.*

PHASE 3:

- No landscaping is proposed – *it is assumed that the Phase 3 landscaping will meet all landscape requirements or go back to Planning Commission/City Council for deviations for that phase.*

Please add a summary table of all landscape deviations sought, the extent of those deviations (ie number of trees not planted) and justification for those deviations, to the landscape plans.

Wherever possible, the plans should be modified or enhanced to reduce and ideally remove as many deviations as possible.

General notes:

1. As no landscape information is provided about Phase 3, it is assumed that all of that phase will meet all landscape requirements, including required landscaped screening berms, right-of-way landscaping, multi-family landscaping, parking lot landscaping and detention basin landscaping. If they do not, the PRO will need to be modified per whatever deviations are sought.
2. The residential section is designed so only the rears of the buildings are facing the drives, with no room for landscaping to soften the views of garages and the backs of townhouses. This would create long stretches of unattractive interior drives between the buildings, especially in the Phase 1 residential area.

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

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

1. The grading plan is not consistent with the Tree Protection Plan in terms of trees to be saved/protected.
2. **Please correct that inconsistency and show all trees to be removed or saved on both plans, with tree protection fence consistently shown between the plans, and the demolition plan.**

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

1. Buildings 3 and 5 are adjacent to I-1 zoning. The required 10-15' tall landscaped berm is not provided. A tall hedge and deciduous trees are proposed. **Please provide a taller buffer that provides significant audible buffering, such as an 8' tall wall instead of the hedge. At the minimum, a noise study indicating that a noise buffering wall is not necessary must be provided.** *As currently configured, the landscape deviation requested is not supported by staff.*
2. Building 9 is adjacent to the commercial section and a loading area for the market where large trucks will travel. The required 6-8' tall landscaped berm between residential and commercial uses is not provided. A 3' tall hedge and deciduous canopy trees are proposed. **Please provide a taller buffer that provides significant audible buffering, such as a 6' tall wall instead of the hedge or proof that such audible buffering is not required.** *As currently proposed, the deviation is not supported by staff.*
3. The southern parking bay is adjacent to B-3 zoning. The required 6-8' tall landscaped berm is not provided. An evergreen hedge and deciduous trees are proposed as a buffer. *The landscape deviation for this frontage is supported if the applicant will agree*

to manage the hedge at a height of 6 feet above ground level.

4. **Phase 3 also has residential adjacent to I-1 zoned and developed property to the east but there doesn't appear to be sufficient room for the required berms or alternate screening.** *This would require a landscape deviation that is not supported by staff.*

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

1. COMMERCIAL:
   a. **Grand River Avenue:**
      i. The required greenbelt width is provided.
      ii. The required berm or brick wall are not provided. A decorative fence with brick piers, with dense landscaping, is proposed instead but no detail is provided in the plans. **Please provide a detail of the proposed fence and piers in the landscape plans.** *The deviation for a lack of wall or berm can still be supported as the landscaping appears to provide 80-90% opacity throughout the year.*
      iii. Based on the frontage, 24 canopy trees are required but only 18 are proposed. *This deviation is not supported by staff.*
   b. **11 Mile Road:**
      i. The required greenbelt width is provided.
      ii. The required berm or brick wall are not provided between the road and the parking lot in Phase 2. *This deviation is not supported by staff.*
      iii. Based on the frontage, the Phase 2 greenbelt needs to have 21 canopy trees or 31 subcanopy trees. 19 canopy trees are proposed. *This deviation is not supported by staff.*
      iv. **Please spread the provided greenbelt trees across the site more, and add two more canopy trees in order to remove the landscape deviation**.
2. PHASE 1 RESIDENTIAL:
   a. The required greenbelt width is provided everywhere along the 11 Mile Road frontage except between the ROW and the Building 4 parking lot, where 20 feet is required but only 7 feet is proposed. **This requires a landscape deviation**. *It is supported because the greenbelt is densely planted with evergreens to screen the parking lot.*
   b. Most of the 11 Mile Road frontage does not front on parking, so no wall or berm is required, except for in front of the small Building 4 parking lot. As noted above, the lot is screened with densely planted evergreens so *the deviation for lack of wall or berm is supported by staff.*
   c. Based on the frontage, 13 deciduous canopy or large evergreen greenbelt trees or 20 subcanopy trees are required. 11 subcanopy trees are provided in the right-of-way. **Please provide the remaining required subcanopy trees**. *The deficiency in plantings is not supported by staff.*
   d. While no street trees are required in the TC-1 district, staff agrees that the addition of the crabapples between the curb and sidewalk as proposed would be an attractive look, so those trees can remain and be counted toward the requirement for subcanopy greenbelt trees.
   e. Please use a more upright variety of crabapple in the right-of-way to provide better vehicle and pedestrian clearance.

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

1. COMMERCIAL:
   a. Based on the vehicular use area calculations provided, a total of 7,026 of interior landscape area and 35 canopy trees are required. A total of 7,032sf of area and 27 trees are provided, some in islands with less than 200sf per tree. **These shortages in interior landscape area and trees require landscape deviations**. *They are not supported by staff.* Please see the landscape chart for a detailed explanation.

b. Please add the area of the Building B loading area to the calculation.

c. Based on the perimeter provided, 81 canopy trees are required but only 59 are provided, some of these are subcanopy trees. *This is also a landscape deviation which is not supported by staff as there is room on the site for more to be provided.* **Please see the landscape chart for a detailed discussion.**

d. Please label all islands counted toward the requirement with their area in SF.

e. Please add islands, trees and endcap landscaping where necessary to minimize or eliminate the landscape deviations.

f. Please adjust the Building A loading area parking lot to allow room for the required perimeter trees along the south edge of the pavement.

2. RESIDENTIAL:
The parking bays are only on one side of the drive, so only perimeter trees are required, at the same rate as for the interior drives (1 tree per 35lf). Please see the Multifamily Residential section of the landscape chart for a detailed discussion of this.

Building Foundation Landscaping (Zoning Sec. 5.5.3.D.)

1. Detailed foundation plantings are provided for Buildings A, B and C. The requirement for 60% of Building C's frontage being landscaped is met.
2. Based on the calculations provided, the requirement for the foundation landscape area for any of the buildings is not met, so **a landscape deviation is required**. *The deviation is not supported by staff.*
3. **Please amend the table provided to include columns with each buildings' perimeters (less doorways and delivery areas), the area required, the area of planted area at the building foundation, the area of decorative pavement adjacent to the building, the total of planted area and decorative paving area provided, and the discrepancy between the area required and the area provided.**
4. **Please add as much foundation planting area around each building as possible to lower the extent of the deviation.**
5. **See the detailed discussion of foundation plantings areas on the landscape chart.**

Multi-Family Residential Landscaping (Zoning Sec. 5.5.3.F.ii.)

1. Unit landscaping
   a. Based on the number of units (68), 204 canopy or evergreen trees are required to be planted throughout the Phase 1 residential section of the site. 204 trees are provided, 46 of which are subcanopy trees (23%).
   b. **A landscape deviation is required to use subcanopy trees instead of large evergreen or canopy trees for unit landscaping.** *Staff supports the use of a mix of subcanopy trees for up to 25% of that requirement in order to increase the diversity of plantings on the site, so the proposed deviation is supported by staff.*
   c. **Unit trees cannot be used to meet the greenbelt requirement along 11 Mile Road. Please reclassify the required number of trees in front of the units facing 11 Mile Road as greenbelt trees to meet the greenbelt requirement and plant the unit trees elsewhere on the site.**
2. Interior drive plantings.
   a. Based on the calculations provided, 66 interior street trees are required but only 41 are provided. *This is a deviation that is not supported by staff*. Please plant all required trees.
   b. Please don't use subcanopy trees as interior drive street trees.
   c. Please see the detailed discussion on the Landscape Chart.
3. Foundation plantings.
   a. 35% of the front of the units' front facade must be landscaped with a mix of planting types. Due to the layout of the residential section of the project, none of the required foundation plantings are located between the building and the internal drives but as the applicant has designated the fronts of all of the buildings except 1, 2 and 3 as

facing the wetland or internal open space, the proposed layout and landscaping does conform to the ordinance requirement.

b. While the proposed layout does meet the ordinance requirements, the applicant is encouraged to provide at least some landscaping on the internal drive side of the buildings to soften what will otherwise be a very barren appearance of wide areas of paving along the long stretches of drive between the buildings. As the drives will be used extensively by residents and visitors it would be very much appreciated to do all that is possible to make those areas as attractive as possible.

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

1. It appears that both ponds have adequate coverage of the rim with shrubs but it appears that many of them are not native to Michigan. **Please make sure that at least 70-75% of both ponds' HWL are planted with large shrubs native to Michigan.**
2. Phragmites is indicated as existing on the site and plans for its removal are provided.

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

1. Provided
2. 18 of 41 species used (44%) are native to Michigan. **Please add or substitute native species on the plan to increase that percentage to at least 50%.**
3. The tree diversity guidelines for non-woodland replacement trees are met.
4. **Please use a native grass/sedge seed mix for the meadow area instead of the Scottish links mixture.**

Planting Notations and Details (LDM)

1. Provided
2. **Please see the Landscape Chart for notes about the details, notes and cost estimate.**

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

1. The proposed landscaping must be provided with sufficient water to become established and survive over the long term.
2. Please provide an irrigation plan or note how this will be accomplished if an irrigation plan is not provided on Final Site Plans. An actual irrigation plan could be provided in the electronic stamping set if desired.

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

Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – Revised PRO Concept

Review Date: October 22, 2019
Project Name: JZ19-0031: Sakura Way
Plan Date: October 2, 2019
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org; Phone: (248) 735-5621

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

LANDSCAPE DEVIATIONS REQUIRED FOR PROPOSED CONFIGURATION:

PHASE 1

COMMERCIAL:

- Insufficient greenbelt landscaping. *Not supported by staff.*
- Insufficient interior parking lot landscaping area and canopy trees provided. *Not supported by staff.*
- Insufficient parking lot perimeter trees. *Not supported by staff*
- Lack of screening wall or berm for parking areas. *Supported by staff*
- Lack of building foundation landscaping. *Not supported by staff.*

RESIDENTIAL:

- No buffering berms for multi-family housing provided between residential buildings and the B-3 and I-1 zoned properties. *Not supported by staff as currently proposed.*
- Lack of interior drive perimeter trees provided. *Not supported by staff.*
- Insufficient greenbelt width and berm between parking lot and 11 Mile Road. *Supported by staff.*
- Use of subcanopy trees for 25% of multifamily unit landscaping trees. *Supported by staff.*

PHASE 2:

- Insufficient greenbelt landscaping. *Not supported by staff.*
- Insufficient parking lot trees. *Not supported by staff.*

PHASE 3:

- No landscaping is proposed – *it is assumed that the Phase 3 landscaping will meet all landscape requirements or go back to Planning Commission/City Council for deviations for that phase.*

Please add a summary table of all landscape deviations sought, the extent of those deviations (ie number of trees not planted) and justification for those deviations, to the landscape plans.

Wherever possible, the plans should be modified or enhanced to reduce and ideally remove as many deviations as possible.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (LDM (2)				
Landscape Plan *(Zoning Sec 5.5.2, LDM 2.e.)*	▪ New commercial or residential developments ▪ Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. ▪ 1"=20' minimum with proper North. Variations from this	Scale: 1"=40'	Yes	

Item	Required	Proposed	Meets Code	Comments
	scale can be approved by LA ▪ Consistent with plans throughout set			
Project Information *(LDM 2.d.)*	Name and Address	Location map is provided on the landscape plan	Yes	
Owner/Developer Contact Information *(LDM 2.a.)*	Name, address and telephone number of the owner and developer or association	Address and business name on the cover sheet.	No	**Please include on landscape plans.**
Landscape Architect contact information *(LDM 2.b.)*	Name, Address and telephone number of RLA	The landscape plan was created by Grissim Metz Andriese	Yes	
Sealed by LA. *(LDM 2.g.)*	Requires original signature	Yes	Yes	A live signature will be required on the stamping sets.
Miss Dig Note (800) 482-7171 *(LDM.3.a.(8))*	Show on all plan sheets	Yes	Yes	
Zoning *(LDM 2.f.)*	Include all adjacent zoning	Site: OSC, OS-1, I-1 – to be rezoned to TC-1 with PRO East: I-1, B-3 South: B-3, Grand River Ave West: TC North: 11 Mile Road, I-1	Yes	**Please use current TC-1 zoning landscape requirements in calculations. Those shown for the greenbelt calculations are not consistent with the current requirements.** **https://cityofnovi.org/Reference/Code-of-Ordinances-and-City-Charter/18-283LandscapeStandards.aspx**
Survey information *(LDM 2.c.)*	▪ Legal description or boundary line survey ▪ Existing topography	Sheets C-1.1, C-1.2, C-1.3	Yes	
Existing plant material Existing woodlands or wetlands *(LDM 2.e.(2))*	▪ Show location type and size. Label to be saved or removed. ▪ Plan shall state if none exists.	▪ It appears on C4.1 that grading along the east end of Phase 2 will eliminate the trees there but T-1.0 shows them as being saved and protected. ▪ Tree survey is provided on T-1.0 and T-1.1 ▪ All on-site trees on the site except for along the	Yes	**1. Please be consistent between sheets regarding trees being saved or removed.** **2. Please show all off-site trees within 50' of the edge of disturbance as they could be negatively impacted by construction.** **3. Please propose protection for all onsite trees to be**

Item	Required	Proposed	Meets Code	Comments
		property edges are proposed to be removed. ▪ Woodland replacement calculations are provided on Sheet L101		**saved and nearby offsite trees and their critical root zones.** **4. See ECT letter for complete review of woodlands and wetlands.**
Soil types *(LDM.2.r.)*	▪ As determined by Soils survey of Oakland county ▪ Show types, boundaries	Sheet L101	Yes	
Existing and proposed improvements *(LDM 2.e.(4))*	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Shown on landscape plans	Yes	**Please don't propose woodland replacement trees where they would need to be removed for future phases of development.**
Existing and proposed utilities *(LDM 2.e.(4))*	• Overhead and underground utilities, including hydrants must be shown on landscape plan. • Proposed light posts must also be shown.	Utilities and light poles are shown.	Yes	**Please make sure the light post locations are consistent with the latest photometric plan (it appears to be).**
Proposed grading. 2' contour minimum *(LDM 2.e.(1))*	Provide proposed contours at 2' interval	• Spot elevations and detention basin contours provided on Sheet C-4.1, C-4.2 • No berms are proposed	Yes (grading is shown)	**See above note about disparity between T-1.0 and grading plan.**
Snow deposit *(LDM.2.q.)*	Show snow deposit areas on plan	▪ An area in Phase 2 is proposed. ▪ Plans for snow deposit should also consider where snow will go when Phase 2 is built.	No	**Please add notes indicating snow deposit areas on the landscape plan that won't hurt proposed landscaping when Phase 2 is developed.**
LANDSCAPING REQUIREMENTS				
Berms, Walls and ROW Planting Requirements				
Berms				
▪ All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours ▪ Berm should be located on lot line except in conflict with utilities. ▪ Berms should be constructed of loam with 6" top layer of top soil.				
Residential Adjacent to Non-residential (Sec 5.5.3.A) & (LDM 1.a)				
Berm requirements	▪ A 6-8 feet high berm	▪ No screening	▪ South	1. **As the required**

Item	Required	Proposed	Meets Code	Comments
(Zoning Sec 5.5.A)	with landscaping providing 80% winter and 90% summer opacity is required along the south property line between multi-family residential and adjacent B-3 properties and between the residential building and the loading area. ▪ A 10-15 feet high berm,, with a 6 foot wide crest with landscaping providing 80% winter opacity and 90% summer opacity is required between the multi-family residential section of the site and the I-1 existing use on 11 Mile Road	berm is proposed for any of the areas in question. ▪ The proposed screening along the south property line is a continuous evergreen hedge and canopy trees placed 25 feet o.c. ▪ The proposed screening between Building 9 and the parking lot/loading area to the west is a continuous evergreen hedge and a line of canopy trees spaced 18 feet o.c.. ▪ The proposed screening between the I-1 zoned and used property and buildings 3 and 5 is a continuous evergreen hedge along the property line with a line of canopy trees spaced 18 feet o.c.. Adjacent to the parking lot is a hedge with a line of canopy trees behind it spaced 16' o.c. ▪ While not required, an evergreen hedge is located along the east	property line: No ▪ Building 9 buffer: No ▪ Buildings 1 & 5 buffer: No	**berms are not provided for the first 3 locations, landscape deviations are required for all 3. See the discussions below for each berm.** 2. **Please correct the detail numbering.** 3. South property line: As the parking lot abuts the south property line, the proposed hedge is acceptable, but **the hedge should be maintained at a height of at least 6 feet above ground level. Please add a note to this effect on Sheet L302.** *The deviation for this is supported by staff if the above change is noted on the plans.* 4. The buffer between Building 9 and the parking lot loading area is not sufficient as proposed. *Staff is concerned about the noise from delivery vehicles using that area. The deviation is not supported by staff without assurance that the proposed buffering will provide sufficient noise blockage, not just visual.* 5. The buffer between Buildings 3 and 5 and the industrial property to the west is visually sufficient. **The applicant needs to provide some**

Item	Required	Proposed	Meets Code	Comments
		property line of the commercial section to screen the parking and loading area from the property to the east. ▪ No heights of the hedges are indicated on the plans.		**assurance that the proposed screening will provide sufficient audible buffering from the existing industrial use such as a noise study.** *Until that is provided, staff does not support this deviation.* 6. **Note: The applicant must show the minimum heights of each hedge on the landscape plan (Sheet L302) and incorporate those minimum heights into the master deed.**
Planting requirements *(LDM 1.a.)*	LDM Novi Street Tree List	NA		
Walls (LDM 2.k & Zoning Sec 5.5.3.vi)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	Four retaining walls are proposed around the site.	TBD	**1. Please clearly show and call out all walls on the landscape plans.** **2. Please match the wall shown near Building 4 with the other sheets in the set.**
Walls greater than 3 ½ ft. should be designed and sealed by an Engineer		TBD		**Detailed plans need to be provided with building plans.**
ROW Landscape Screening Requirements *(Sec 5.5.3.B. ii) and (LDM 1.b)*				
Greenbelt width (2)(3) (5)	▪ Adjacent to pkg: 20 feet ▪ Not adjacent to pkg: 0 feet	<u>COMMERCIAL:</u> <u>Grand River Ave:</u> • 20 feet adj to pkg • 15 feet not adj. <u>11 Mile Road Ph 2:</u> <u>Residential:</u> 17' <u>Commercial:</u> ▪ Adj to pkg: 26' ▪ Not adj: 10' <u>11 Mile Road Residential:</u> Adj to pkg: 7'	<u>Commercial:</u> Yes <u>Residential</u> No (near parking lot) <u>Phase 2:</u> Yes <u>Phase 3:</u>	**1. Please clearly show the right-of-way lines on all of the landscape sheets.** **2. Please provide required greenbelt widths for residences along all frontages.** **3. A landscape deviation is required for the area with less than 20' required greenbelt width adjacent to parking**

Item	Required	Proposed	Meets Code	Comments
		Not adj to pkg: 17' <u>PHASE 3 RESIDENTIAL:</u> Residential: 12-17'	Yes	**in the residential area.** **4.** *As there is dense evergreen landscaping proposed between the lot and the sidewalk for that section, the deviation is supported by staff.*
Berm requirements *(Zoning Sec 5.5.3.A.(5))*				
Min. berm crest width	▪ No berm is required in TC-1 district for frontage not adjacent to parking. ▪ Per Zoning Ordinance 3-27, surface parking lots shall be screened from all public rights-of-way and internal roads by either a 2.5 foot tall ornamental brick wall or a landscaped berm.	▪ No walls or berms are proposed along the rights-of-way. ▪ A note indicates that ornamental piers with metal fencing and significant landscaping is proposed to screen parking along Grand River. No visual image of this is included in the plans. ▪ A Woodward Arborvitae hedge and clumping bamboo are also proposed to screen the parking lots from Grand River Avenue. ▪ No berm, wall or hedge is proposed to block the north commercial parking lot from view of 11 Mile Road.	<u>Grand River:</u> No <u>11 Mile Road:</u> No	**1.** A brick wall or landscaped berm is required along all frontages between parking and the right-of-way **2. As neither a berm nor a wall is proposed for either parking frontages, a landscape deviation is required.** *It is supported by staff for the Grand River frontage as the hedge and bamboo should provide the required screening. It is not supported for the 11 Mile Road as no alternate screening is proposed.* **3. Please add a note to the plan stating that the hedge and bamboo shall be maintained at a height at least as tall as 36", and add that requirement to the master deed.** **4. Please add some sort of continuous screening for the 11 Mile Road commercial lot (wall or hedge).** *A deviation would still*

Item	Required	Proposed	Meets Code	Comments
				be required but it would be supported by staff.
Minimum berm height (9)	If a berm is provided it should be at least 2.5' tall.	None	No	**See above**
3' wall	▪ (4)(7)	No walls are proposed for right-of-way except for Grand River sign.	NA	
Canopy deciduous or large evergreen trees Notes (1) (10)	▪ Adjacent to pkg: 1 tree per 25lf frontage (net of access drives) ▪ Not adjacent to pkg: 1 tree per 30 lf frontage (net of access drives) ▪ Only canopy/ evergreen or subcanopy requirement must be met in TC-1, not both <u>11 Mile Road</u> <u>Ph 2 Commercial OR Residential</u> ▪ Adj: 65/25 = 3 trees ▪ Not adj: 545/30=18 trees <u>Phase 1 Residential</u> ▪ Adj: 80/25 = 3 trees ▪ Not adj: 290/30=10 trees <u>Grand River</u> ▪ Adj: 433/25 = 17 trees ▪ Not adj: 215/30 = 7 trees <u>Phase 3 Residential</u> ▪ Not adj: 468/30=16 trees Please see the illustration of corner clearance zone for 11 Mile road below, and how to deduct them from the basis of calculation in footnote 5.5.3.B.ii.f (19).	<u>11 Mile Road – Phase 2</u> 19 Autumn Blaze Maples (2 fewer than required) <u>Phase 1 Residential</u> 0 canopy trees <u>Grand River Ave</u> 18 Gingko biloba (6 fewer than required) <u>Phase 3 Residential</u> 0 canopy trees	<u>11 Mile:</u> No <u>Grand River:</u> No <u>Phase 3:</u> No	**1. Please revise the calculations to use the current TC-1 requirements.** **2. Please move all greenbelt trees to within the greenbelt (behind the property line, not in the right-of-way), except as noted below (subcanopy trees) at the residential section.** **3. Please plant greenbelt trees along the entire Phase 2 11 Mile road frontage except at the proposed drive as there is no guarantee of the phase's future layout at this time.** **4. The mature width of the Freeman maple is 30-40' wide but they are spaced 15' o.c. Please space the Phase 2 greenbelt trees further apart (at least 25' o.c.)** **5. Unit foundation trees may not be double-counted as greenbelt trees.** **6. A landscape deviation is required for any deficiencies in trees provided.** *They would not be*

Item	Required	Proposed	Meets Code	Comments
				supported by staff without strong justification. **7. Add calculations and landscaping for Phase 3.**
Sub-canopy deciduous trees Notes (2)(10)	▪ Adjacent to pkg: 1 tree per 15lf frontage (net of access drives) ▪ Not adjacent to pkg: 1 tree per 20 lf frontage (net of access drives) ▪ Only canopy/ evergreen or subcanopy requirement must be met in TC-1, not both <u>11 Mile Road</u> <u>Phase 2</u> ▪ Adj: 65/15 = 4 trees ▪ Not adj: 545/20=27 trees <u>Phase 1 Residential</u> ▪ Adj: 80/15 = 5 trees ▪ Not adj: 290/20=15 trees <u>Grand River</u> ▪ Adj: 323/15 = 22 trees ▪ Not adj: 238/20 = 12 trees <u>Phase 3 Residential</u> ▪ Not adj: 468/20 = 23 trees	<u>11 Mile Road – Phase 2</u> 0 subcanopy trees <u>Phase 1 Residential</u> • 11 Sugar Tyme crabapples, in right-of-way (7 fewer than required) • Mix of deciduous and evergreen unit trees proposed in greenbelt <u>Grand River Ave</u> 0 subcanopy trees <u>Phase 3 Residential</u> 0 subcanopy trees	Yes	**1. Please revise the calculations to use the current TC-1 requirements.** **2. Please plant trees along the entire Phase 2 11 Mile road frontage except at the proposed drive as there is no guarantee of the phase's future layout at this time.** **3.** While street trees are not required in the TC-1 district, staff agrees that, since there is room for the trees between the sidewalk/storm line and the curb, the addition of subcanopy flowering trees as proposed in front of the Phase 1 residential units would be an attractive look. The required number of subcanopy greenbelt trees still needs to be provided, but the 11 crabapples shown as street trees can count toward that requirement as proposed. **Please use a variety of crabapple with a more vertical structure to provide better vehicle and pedestrian clearance.**

Item	Required	Proposed	Meets Code	Comments
				4. Please provide the remaining required greenbelt trees behind the right-of-way line. (As noted above, unit foundation trees cannot be double-counted toward the greenbelt requirement.) **5. Unit foundation trees may not be double-counted as greenbelt trees.** **6. A landscape deviation is required for any deficiencies in trees provided.** *They would not be supported by staff without strong justification.* **7. Add calculations and landscaping for Phase 3.**
Canopy deciduous trees in area between sidewalk and curb *(Novi Street Tree List)*	Street trees are not required in the TC-1 district.	▪ None are proposed on Phase 2 or Phase 3 Residential ▪ 13 subcanopy greenbelt trees placed in the ROW of the Phase 1 residential	TBD	**See discussion above regarding proposed crabapple trees in the right-of-way**
Cross-Section of Berms (LDM 2.j)				
Slope, height and width	▪ Label contour lines ▪ Maximum 33% ▪ Constructed of loam ▪ 6" top layer of topsoil	Cross section details are provided on Sheet L-401	Yes	**1. Berms do not meet height requirements.** **2. Please correct detail numbering.**
Type of Ground Cover		None	No	
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	The only overhead utilities are along 11 Mile Road	TBD	**Please space trees appropriately vis a vis the overhead wires**
Parking Area Landscape Requirements LDM 1.c. & Calculations (LDM 2.o.)				
General requirements *(LDM 1.c)*	▪ Clear sight distance within parking islands	Some islands will be planted with Little	Yes	**1. Add clear vision triangles at the**

Item	Required	Proposed	Meets Code	Comments
	▪ No evergreen trees	Bluestem grass		**interior intersections north and south of Building B, and at the intersection between Buildings 5 and 9.** **2. Please move all trees and shrubs taller than 30" out of clear vision zones.**
Name, type and number of ground cover (LDM 1.c.(5))	As proposed on planting islands	Mix of plantings noted above	Yes	
General *(Zoning Sec 5.5.3.C.ii)*				
Parking lot Islands *(a, b. i)*	▪ A minimum of 200 SF to qualify ▪ Minimum 200 SF per tree planted in island ▪ 6" curbs ▪ Islands minimum width 10' BOC to BOC	▪ Islands are shown, and areal quantities are provided for most areas, but not all. ▪ All circular planting areas appear to be significantly less than 200sf. ▪ Some small islands have trees but not sufficient area for their long-term survival. ▪ The interior island west of Building B is not 10 feet wide.	No	**1.** To count toward the required area, an island must have at least 200sf landscape area per tree planted in it, and be 10 feet wide. Many of the circular planting areas do not have this area. **2.** To count toward the requirement, a tree must have at least 200sf in greenspace surrounding it. Many trees do not have this area. **3. If islands/planting areas aren't sufficiently large, please enlarge them as required or don't count the area or trees in them toward the total.** **4. Please add slots or holes in the circular planting "curbs" to allow pavement runoff to get into planting circles.**
Curbs and Parking stall reduction *(c)*	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	It appears that spaces are shortened to 17 ft where possible.	Yes	

Item	Required	Proposed	Meets Code	Comments
Contiguous space limit *(i)*	• Maximum of 15 contiguous spaces • All endcap islands should also be at least 200sf with 1 tree planted in it.	• Several bays with more than 15 spaces are not broken up with a qualifying landscape island with trees or 200sf (Phase 2 interior islands, the bay south of the lake, the bay north of Building C), as required. • Endcap trees are needed at the east end of the bay (south of Building B) and at the west end of the bay south of Building A.	No	**1. Please add endcap islands with at least 200sf greenspace and canopy trees for all parking bays (there are at least 2 endcaps in the commercial section without the required landscaping).** **2. A landscape deviation is required for the current lack of landscaped islands breaking up long bays.** *It is not supported by staff.*
Plantings around Fire Hydrant *(d)*	No plantings with matured height greater than 12' within 10 ft. of fire hydrants of utility structures (manholes, catch basins)	Provided	TBD	**1. Please be sure to provide at least 10 feet between hydrants, manholes and catch basins and trees, and 5 feet from underground lines.** **2. If necessary, islands should be widened to provide proper spacing between hydrants or other utility structures.**
Landscaped area *(g)*	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Provided	Yes	
Clear Zones (LDM 2.3.(5))	25 ft corner clearance required. Refer to Zoning Section 5.9	Provided	Yes	
Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, C, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district *(Zoning Sec 5.5.3.C.iii)*				
A = Total square footage of vehicular use area up to 50,000 sf x 7.5%	1: 8870sf x 7.5%=665 sf 2: 7034sf x 7.5%=548 sf 3: 33488sf x 7.5%=2511 sf 4: 15342sf x 7.5%=1151 sf 5: 11535sf x 7.5%=865 sf 6: 10963sf x 7.5%=822 sf 7: 6184sf x 7.5% =464 sf	1: 690 sf 2: 149 sf 3: 3387 sf 4: 1276 sf 5: 519 sf 6: 800 sf 7: 211 sf	No	**1. Please show the contiguous greenspace area of each island in SF.** **2. Please add totals to the tables provided.** **3. Treed islands must**

Item	Required	Proposed	Meets Code	Comments
	Total: 7026 sf	**Total: 7032 sf**		**have 200sf in contiguous greenspace. If they don't, neither the tree nor the area may count toward the requirement (except edge islands abutting greenspace, as discussed previously)** **4. Please enlarge areas as required to reduce the deviation.** **5. The area of the loading area east of Building B must be added to Parking Area 7 as it is too large to use only perimeter trees.** *6.* **A landscape deviation is requested for the deficiency in landscape area.** *It is not supported by staff at this time.*
B = Total square footage of additional paved vehicular use areas over 50,000 SF) x 1 %	B = x SF x 1% = B sf	NA		
Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C.iii)				
A = Total square footage of vehicular use area up to 50,000 sf x 5%	A = x SF x 5% = A sf	NA		
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5 %	B = (x SF – 50000) x 0.5% = B SF	NA		
All Categories				
C = A+B Total square footage of landscaped islands required	A + B = C SF 7026 + 0 = 6562 sf	7032 sf	TBD	**1. If sufficient area is not provided, a landscape deviation is required.** *It is not supported by staff.*
D = C/200	C/200 = xx Trees	27 trees	No	**1. A landscape**

Item	Required	Proposed	Meets Code	Comments
Number of canopy trees required	7026/200 = 35 trees			**deviation is required for all canopy trees not provided.** *It is not supported by staff.* **2. Please add as many trees as possible, in qualifying landscape islands, as possible to reduce the deviation.** **3. Please indicate the impact (trees not provided) of the deviation and provide justification for the deviation.**
Parking Lot Perimeter Trees (Sec 5.5.3.C.iv)	1 Canopy tree per 35 lf 81 trees	59 trees	No	1. Perimeter areas within 20' of a building 20' or taller do not need canopy trees if subcanopy trees are used as foundation planting **2. Please eliminate the perimeter parking lot table and just show total perimeter lengths for the commercial area separate from the residential area, the number of trees required based on those lengths, and the number of trees provided.** **3. Please add as many perimeter trees within 15 feet of the curb as is reasonably possible to decrease the extent of the deviation.** **4. Please provide required trees within 15 feet of the curb.** **5. Please use a tree with a mature canopy width of at least 20 feet, not subcanopy trees for perimeter trees.**

Item	Required	Proposed	Meets Code	Comments
				6. Please move the trees east of Parking Lot 3 four feet away from the property line. **7. A landscape deviation is required.** *The extent of the deviation must be lowered significantly by adding more trees where possible in order for staff to support the request.* **8. Perimeter trees should be added along the perimeter of Parking area 6 (north and south sides) and Parking Area 5 as there is no definite time when buildings would make them unnecessary.** **9. Consider adjusting the layout of the loading area east of Building A to allow the placement of perimeter trees along the south edge of that large paved area.**
Parking land banked	NA	No		
Other Landscaping				
Non-Residential Zoning Sec 5.5.3.E.iii & LDM 1.d (2) Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Other Screening				
Screening of outdoor storage, loading/unloading *(Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)*		All Phase 1 loading areas are sufficiently screened by buildings and/or landscaping.	Yes	
Transformers/Utility boxes *(LDM 1.e from 1 through 5)*	▪ A minimum of 2ft. separation between box and the plants ▪ Ground cover below 4” is allowed up to	No utility boxes shown		**1. Provide proper screening for any transformers.** **2. Include city standard detail with other**

Item	Required	Proposed	Meets Code	Comments
	pad. ▪ No plant materials within 8 ft. from the doors			**landscape details.** **3. If all transformer locations are not provided on plan, please add a note stating that all transformers and other utility boxes shall be screened per the city detail.**
Building Foundation Landscape Requirements (Sec 5.5.3.D)				
Interior site landscaping SF	▪ Equal to entire perimeter of the building (less paved access areas for vehicles and man-door widths) x 8 with a minimum width of 4 ft. ▪ **xx lf x 8ft = xx SF** ▪ **Building A: 734 * 8 = 4808 sf** ▪ **Building B: 260 * 8 = 2080 sf** ▪ **Building C: 480 * 8 = 3840 sf**	▪ A combination of landscaping and decorative paving is proposed to meet the requirement in the commercial section of the project. ▪ A calculation table is provided on Sheet L203. ▪ Very little foundation landscaping is proposed for Buildings A and B. ▪ Significant landscaping is provided along the north and south sides of Building C. ▪ No landscaping is proposed along the north side of Building A.	No	**1. Please add the area requirement for each commercial building, not just what is provided, to the table on Sheet L203, so the extent of the deviation can be known.** **2. Add the total area of decorative paving near each building to the table as the paved area can count toward the requirement. Please break it out from the actual planting area provided.** **3. Please provide more landscaping bed area around buildings A and B than is currently proposed. It appears there is more room for planting for both buildings. Only a 4' wide strip is required.** **4. Please enlarge the planting area in the circular planting beds with trees to provide more air and water to the roots.** **5. Please add a 4' strip of landscaping (minimum) along the north side of Building A. It doesn't have to**

Item	Required	Proposed	Meets Code	Comments
				be expensive plant material (grasses or bamboo, or other perennials would be fine), but as there is no known date of construction for the building north of Building A, there should be some landscaping there. **6. Please add foundation landscaping along the east side of Building A (not the loading area).** **7. Please add foundation landscaping along the south side of Building B wherever possible.** **8. Any future commercial buildings in Phase 2 would need to meet these requirements.** **9. Landscape deviations are required for any deficiencies in landscaping area provided.** *Those deviations are not supported by staff at this time.*
Zoning Sec 5.5.3.D.ii. All items from (b) to (e)	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	▪ The proposed landscaping for Building C covers virtually the entire frontage as viewed from Grand River. ▪ Buildings A and D are over 235 feet from Grand River. The parking lot screening is sufficient to screen those	Yes	**Any future commercial buildings in Phase 2 would need to meet these requirements.**

Item	Required	Proposed	Meets Code	Comments
		buildings.		
Multi-Family Residential (Sec 5.5.3.F.ii)				
Building Landscaping *(Zoning Sec 5.5.3.E.ii.)*	▪ 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor. ▪ Phase 1: 68 units * 3 = 204 trees required ▪ The table provided on Sheet L203 is not required for residential units. Only the building frontage is regulated (35% of the front of a building must be landscaped). ▪ Phase 3: 52 units * 3 = 156 trees required	**Phase 1 residential** ▪ 204 unit trees are provided on the site, 46 of which are subcanopy trees (23%) **Phase 3 residential** ▪ None provided	Phase 1: Yes Phase 3: No	**1. The greenbelt requirement along 11 Mile road must be met with trees designated for that purpose. Unit trees cannot be double-counted as greenbelt trees. Please show the trees in front of the units fronting 11 Mile Road as greenbelt trees and add unit trees elsewhere to meet the requirement.**
Interior Street Landscaping	▪ 1 deciduous canopy tree along interior roads for every 35 lf (both sides), excluding driveways, interior roads adjacent to public rights-of-way and parking entry drives. ▪ 66 trees (number provided)	▪ 41 interior street trees ▪ Several street trees are subcanopy trees.	No	**1. Please eliminate the table and just show the total perimeter and the total number of trees required based on that total.** **2. Please add the required perimeter trees** **3. Please change the subcanopy trees used as interior street trees to deciduous canopy trees.** **4. The proposed configuration requires a landscape deviation.** *It is not supported by staff.*
Foundation Landscaping	35% of building front façades must be landscaped with plantings other than lawn.	▪ At least 35% of the front facades, as defined by the applicant, of all units are landscaped sufficiently (not the sides facing the road/drives except for Buildings 1, 2 and	Yes	While the proposed layout and landscaping meet the ordinance requirements, the applicant is encouraged to add at least some landscaping between the building garages to soften the appearance of the driveway areas as they

Item	Required	Proposed	Meets Code	Comments
		3, whose fronts face 11 Mile Road) ▪ No plantings are proposed between building rears, which face the interior drives, and the drives.		will be most visible to residents and visitors of the site. As proposed, those areas will have a very barren appearance.
Detention/Retention Basin Requirements (Sec. 5.5.3.E.iv)				
Planting requirements *(Sec. 5.5.3.E.iv)*	▪ Clusters of large native shrubs shall cover 70-75% of the basin rim area ▪ 10" to 14" tall grass along sides of basin ▪ Refer to wetland for basin mix	The required coverage is provided for both ponds but not all shrubs are native to Michigan	No	1. While not required, it is advised to not use *Viburnum trilobum* as they have been hit very hard by the viburnum leaf beetle. The diversity provided by the other species is sufficient so you could use more of those species in its place. **2. Please make sure that 70-75% of both ponds' HWL are planted with shrubs native to Michigan.**
Phragmites Control (Sec 5.5.6.C)	▪ Any and all populations of Phragmites australis on site shall be included on tree survey. ▪ Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.	▪ Phragmites populations are indicated on Sheet C-1.1 ▪ Plans for physical removal and follow-up herbicide treatments are listed on Sheet L101.	Yes	
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date *(LDM 2.l. & Zoning Sec 5.5.5.B)*	• Provide intended dates • Should be between March 15 and November 15.	No dates are proposed	No	**Please include planting dates on Landscape Plan.**
Maintenance & Statement of intent *(LDM 2.m & Zoning Sec 5.5.6)*	• Include statement of intent to install and guarantee all materials for 2 years.	Provided	Yes	

Item	Required	Proposed	Meets Code	Comments
	• Include a minimum one cultivation in June, July and August for the 2-year warranty period.			
Plant source *(LDM 2.n & LDM 3.a.(2))*	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan *(LDM 2.s.)*	• A fully automatic irrigation system and a method of draining is required with Final Site Plan • If a different method of providing water for establishment and long-term survival of the plants will be used, please provide information on that	No		Need for final site plan
Other information *(LDM 2.u)*	Required by Planning Commission			**Please change note 6 to read 3 months instead of 1 year for time of plant replacement**
Establishment period *(Zoning Sec 5.5.6.B)*	**2 yr. Guarantee**	Yes	Yes	
Approval of substitutions. *(Zoning Sec 5.5.5.E)*	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 2.h., 4) – Include all cost estimates				
Quantities and sizes	Refer to LDM suggested plant list	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names		▪ 18 of 41 (44%) species used are native to Michigan ▪ The tree diversity meets the requirements of LDM 4	▪ No ▪ Yes	**1. Please use more native species on the site so at least 50% of the species used are native to Michigan.** **2.** If you have questions about whether a plant is native, you can ask me or consult Michiganflora.net. **3.** It may be difficult to find sources of *Pinus resinosa.* **4. *Abies concolor* and *Tsuga canadensis* are not on the current Woodland**

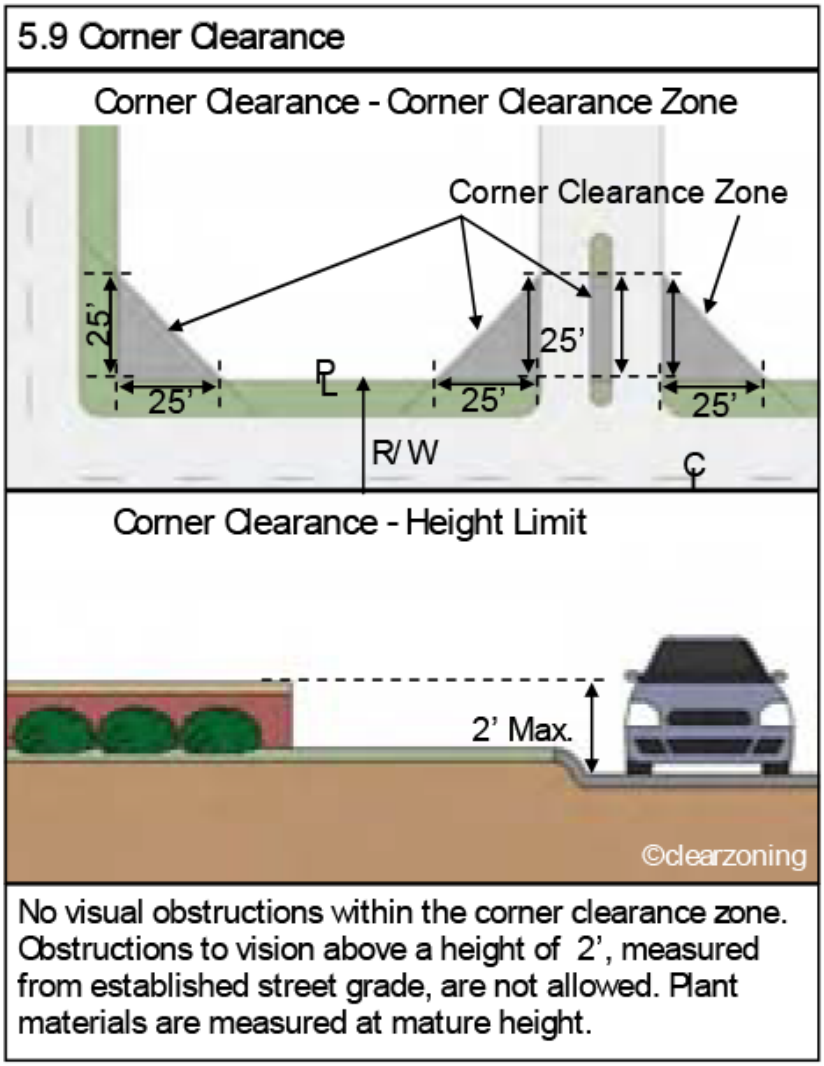
Item	Required	Proposed	Meets Code	Comments
				Replacement Chart in Section 37, so different species should be used. **5.** Per Section 37-8, only 5% of the replacement credits provided can be seed, not the 20% currently proposed. **Please change the woodland replacement calculations.**
Type and amount of lawn		Yes	Yes	**Please use a native seed mix for the large meadow area instead of the non-native Scottish Meadow mix proposed. It can be a mix of just grasses and sedges to still achieve a grassy look.**
Cost estimate *(LDM 2.t)*	For all new plantings, mulch, seed and sod as listed on the plan	No		Please add on Final Site Plans. Use these standard costs: • Canopy tree: $400ea • Subcanopy tree: $250 ea • Evergreen tree: $325 ea • Shrubs: $50 ea • Perennials $15 ea • Seed $3/syd • Sod $3/syd • Mulch $35/cyd
Planting Details/Info (LDM 2.i) – Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection	Located at Critical Root	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
fencing	Zone (1' outside of dripline)			
Other Plant Material Requirements (LDM 3)				
General Conditions *(LDM 3.a)*	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material *(LDM 3.b)*	Clearly show trees to be removed and trees to be saved.	Yes	Yes	**See note above about conflict between grading plan and T-1.0**
Landscape tree credit *(LDM3.b.(d))*	Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. Refer to Landscape tree Credit Chart in LDM	No		
Plant Sizes for ROW, Woodland replacement and others (*LDM 3.c)*	Refer to Landscape Design Manual for requirements	On plant list	Yes	
Plant size credit *(LDM3.c.(2))*	NA	No		
Prohibited Plants *(LDM 3.d)*	No plants on City Invasive Species List	• No prohibited plants proposed • A species of clumping bamboo is used in isolated locations.	Yes	
Recommended trees for planting under overhead utilities *(LDM 3.e)*	Label the distance from the overhead utilities	Yes	Yes	
Collected or Transplanted trees *(LDM 3.f)*		None		
Nonliving Durable Material: Mulch *(LDM 4)*	▪ Trees shall be mulched to 3"depth and shrubs, groundcovers to 2" depth ▪ Specify natural color, finely shredded hardwood bark mulch. Include in cost estimate.	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.

Item	Required	Proposed	Meets Code	Comments
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.				



WETLAND REVIEW

ECT Project No. 190456-0300

October 18, 2019

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

Re: Sakura Way (JZ19-0031)
Wetland Review of the Revised PRO Concept Plan (PSP19-0150)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised PRO Concept Plan for the proposed Sakura Way project prepared by PEA, Inc. and Wah Yee Associates dated October 2, 2019 and stamped "Received" by the City of Novi on October 3, 2019 (Plan). ECT also reviewed the *Wetland Delineation Letter* dated November 16, 2018 and the *Sakura Novi Wetland Mitigation Options* letter dated October 2, 2019, both prepared by Atwell. The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance. ECT previously conducted a wetland evaluation for portions of the proposed site and most recently completed a site inspection on July 16, 2019.

ECT currently does not recommend approval of the Revised PRO Concept Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Plan.

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Required (proposed wetland impacts appear to be >0.25-acre)
Wetland Buffer Authorization	Required
EGLE Permit	To Be Determined. It is the applicant's responsibility to contact EGLE in order to determine the need for a wetland use permit.
Wetland Conservation Easement	Required for any Proposed Wetland Mitigation

The proposed project is located at the northeast corner of Grand River Avenue and Town Center Drive in Section 23. The proposed project currently consists of three (3) phases. Phases 1 and 2 includes a total of four (4) parcels. From west to east these are: 50-22-23-126-006 (West Parcel), 50-22-23-126-011 and 50-22-23-226-007 (previously referred to as East Parcel A), and 50-22-23-226-008 (previously referred to as East Parcel B). Phase 3 has been added to the concept since our review of the previous concept plan. Phase 3 appears to include two (2) parcels east of the Phase 1 and 2 properties; Parcel 50-22-23-226-021 and 50-22-23-226-022. Phase 1 consists of market, retail, restaurant, townhome residential and light industrial use

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(existing ECCO Tool Co., grandfathered in). Phase 2 consists of restaurant, retail, spa, office, hotel, residential and parking structure uses. Phase 3 consists of town-home residential and parking.

Previous plans included integrative green elements that utilize the water feature on the western portion of the site. The Plan appears to route stormwater directly to the wetland/pond located on the western side of the site. One (1) stormwater detention basin appears to be proposed on the eastern side of the site. ECT suggests that subsequent site plans be reviewed by City of Novi Engineering Staff for adherence to all applicable storm water and engineering requirements. The City of Novi's Regulated Wetland & Woodland Map indicates areas of both Regulated Wetland and Regulated Woodland on the subject site (see Figure 1).

Wetland Evaluation

ECT's in-office review of available materials included the City of Novi Regulated Wetland/Watercourse and Regulated Woodlands maps (see Figure 1, attached), USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. The City of Novi Regulated Wetlands Map indicates one (1) area of existing wetland (i.e., pond/Wetland 2) on the westernmost parcel (50-22-23-126-006) as well as a small area of regulated wetland on the eastern portion of the project properties (i.e., Wetland "5" on Parcel No. 50-22-23-226-021).

The Plan identifies a total of five (5) wetland areas on the subject properties. The overall sizes of the existing wetlands do not appear to be clearly indicated on the Plan, however the proposed impacts to these wetlands are noted.

The following is a brief description of the on-site wetland features:

Wetland 1 – A small (+/- 0.01-acre) emergent wetland located in a grassy area (depression) in the northwest portion of the site (west of the existing ECCO Tool Co. building). The delineation report notes that the wetland vegetation within this area includes grass-leaved goldenrod (*Euthamia graminifolia*), yellow nutsedge (*Cyperus esculentus*), reed canary grass (*Phalaris arundinacea*), and sandbar willow (*Salix interior*).

Wetland 2 – An emergent wetland with open water area (+/- 0.74-acre emergent wetland and +/- 0.97-acre open water) located in the southwest portion of the site. The delineation report notes that the wetland vegetation within this area includes broadleaf cattail (*Typha latifolia*), narrow leaf cattail (*Typha angustifolia*), and common reed (*Phragmites australis*). The open water element is referred to as the 'pond'.

Wetland 3 – A small (+/- 0.02-acre) emergent wetland within a constructed ditch in the southwest portion of the site (adjacent to the southwest side of Wetland 2). The delineation report notes that the wetland vegetation within this area includes mainly common reed.

Wetland 4 – A large (+/- 0.90-acre) emergent/scrub-shrub wetland located within the eastern portion of the site (i.e., southeast of the existing ECCO Tool Company building). Portions of this wetland are located on parcels 50-22-23-126-011, 50-22-23-226-007, and 50-22-23-226-008. The delineation report notes that the scrub-shrub wetland vegetation within this area includes common buckthorn (*Rhamnus cathartica*) and silky dogwood (*Cornus amomum*). The herbaceous vegetation within this wetland area included broadleaf cattail, sensitive fern (*Onoclea sensibilis*), grass-leaved goldenrod, purple loosestrife (*Lythrum salicaria*), and fringed willow herb (*Epilobium ciliatum*).

Wetland 5 – A small (+/- 0.04-acre) emergent/scrub-shrub wetland located on the eastern portion of the site (located on Parcel 50-22-23-226-021, east of the existing cell tower gravel access drive). This wetland area is not described in Atwell's November 16, 2018 *Wetland Delineation Letter*. The wetland vegetation within this area includes common buckthorn and reed canary grass.

Based on the on-site wetland flagging, the existing vegetation and topography, it is ECT's assessment that the on-site wetlands were accurately delineated. The wetland boundaries appear to be accurately indicated on the Plan.

Wetland Impact Review

As noted above, several areas of wetland have been confirmed on the subject property by the applicant's wetland consultant. Currently, the Plan indicates impacts to four (4) of the five (5) existing wetland areas. The Plan (Sheets C-1.4 and C-1.5, *Natural Features Impact Plans*) quantify the areas of the proposed wetland and wetland buffer impacts. The total amount of direct (i.e., fill or excavation) impact to on-site wetlands is 1.67 acres. The current impacts to Wetland 1 are for the construction of Residential Building 10. The *Community Impact Statement* provided with the Plan notes that the pond will be maintained but will have its perimeter articulated and upgraded as a site amenity (i.e., Wetland 2 impacts). The pond will be utilized for partial site storm detention with pre-treatment. The impacts to Wetland 3 are for the purpose of constructing parking areas in the southwest portion of the site. The impacts to Wetland 4 are for the purpose of constructing Phase 1 residential development as well as the proposed detention basin. Currently, the Plan does not appear to propose impacts to Wetland 5.

The following table summarizes the proposed wetland impacts as listed on the *Natural Features Impact Plans*:

Table 1. *Proposed Wetland Impacts*

Wetland Impact	*City Regulated?*	*MDEQ Regulated?*	*Wetland Impact Area (acre)*	*Estimated Impact Volume (cubic yards)*
1	**Yes City Regulated /Essential**	**To Be Determined**	0.007	Not Provided
2	**Yes City Regulated /Essential**	**To Be Determined**	0.74-	Not Provided
3	**Yes City Regulated /Essential**	**To Be Determined**	0.02	Not Provided
4	**Yes City Regulated /Essential**	**To Be Determined**	0.90	Not Provided
5	**Yes City Regulated /Essential**	**To Be Determined**	None	None
TOTAL	**--**	**--**	**1.67 acres**	**Not Provided**

In addition to the proposed wetland impacts, the Plan proposes disturbance to on-site 25-foot wetland buffer areas. The proposed impacts to 25-foot wetland buffers are also provided on the *Natural Features Impact Plans*. The Plan indicates a total of 1.43 acres of impact to the on-site 25-foot wetland buffers. These impacts appear to be permanent impacts. The following table summarizes the proposed wetland buffer impacts as listed on the Plan:

Table 2. *Proposed Wetland Buffer Impacts*

Wetland Buffer Impact Area	***Buffer City Regulated?***	***Buffer MDEQ Regulated?***	***Wetland Buffer Impact Area***
			Permanent
			Acre
1	**Yes**	**No**	0.13
2 & 3	**Yes**	**No**	0.71
4	**Yes**	**No**	0.59
5	**Yes**	**No**	None
TOTAL	**--**	**--**	**1.43**

The existing area (square feet or acres) of the on-site wetlands do not appear to have been provided on the Plan. In addition, the impact volume (cubic yards) for each wetland impacts shall be shown on the Plan.

City of Novi Wetland/Watercourse Ordinance Requirements

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications. The City of Novi regulates wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Wetlands deemed regulated by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below.

> *All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city….In making the determination, the city shall find that one (1) or more of the following exist at the particular site:*
>
> *(1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].*
> *(2) The site represents what is identified as a locally rare or unique ecosystem.*
> *(3) The site supports plants or animals of an identified local importance.*
> *(4) The site provides groundwater recharge documented by a public agency.*
> *(5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.*
> *(6) The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.*

> *(7) The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.*
> *(8) The site provides pollution treatment by serving as a biological and chemical oxidation basin.*
> *(9) The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.*
> *(10) The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.*
>
> *After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).*

Based on this information, the existing on-site wetlands are considered regulated by the City of Novi for stormwater storage and/or wildlife habitat criteria.

The applicant is urged to minimize impacts to all wetlands and 25-foot wetland setback areas to the greatest extent practicable. The City regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

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

Wetland Regulation and Required Permits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE, formerly MDEQ) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. It is the applicant's responsibility to contact EGLE in order to confirm the regulatory authority with respect to any on-site wetland or watercourse areas and the need for any permits based on the proposed Plan.

In 1979, the Michigan legislature passed the Geomare-Anderson Wetlands Protection Act, 1979 PA 203, which is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The EGLE has adopted administrative rules which provide clarification and guidance on interpreting Part 303.

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

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

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

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

The applicant's *Wetland Delineation Letter* notes that Wetlands 1, 2, and 3 are likely not regulated by EGLE as these wetlands are isolated and less than 5 acres in size. Wetland 4, however, is adjacent to the off-site pond located on Parcel 50-22-23-226-042 (owned by the City of Novi) and is therefore likely regulated by EGLE. The *Wetland Delineation Letter* does not contain information related to Wetland 5; however no impacts appear to be currently proposed to this wetland area.

Wetland Mitigation

EGLE (formerly MDEQ) generally requires mitigation for impacts greater than one-third (0.33) acre but can require mitigation for any level of impact to EGLE-regulated wetlands. The City requires mitigation for impacts greater than one-quarter (0.25) acre. The Plan indicates a total wetland impact of 1.67 acres (0.90-acre of which appears to be to EGLE-regulated wetland; i.e., Wetland 4).

Proposed wetland mitigation is not indicated on the Plan; however the applicant has submitted a *Sakura Novi Wetland Mitigation Options* letter prepared by Atwell, dated October 2, 2019. Subsequent site plans shall include a wetland mitigation plan. This letter notes that the applicant is committed to satisfying the City's wetland mitigation requirements and is currently considering two (2) different mitigation options to achieve this goal:

Option 1 – The applicant would create 0.9 acres of emergent wetland on Parcel 50-22-23-226-021 (to the east of the Sakura Way project) and 0.5 acres of emergent wetland on Parcel 50-22-23-226-042 currently owned by the City of Novi. It is noted that the available acreage on Parcel 50-22-23-226-042 is large enough to also support the future mitigation needs of the City for the Lee Begole Drive road extension project. The applicant has provided a map with the wetland mitigation options letter showing the approximate space available on this parcel for wetland mitigation. This 1.4 acres of wetland mitigation is designed to offset the EGLE-regulated 0.90-acre impact at a mitigation ratio of 1.5-to-1 (required 1.35 acres of mitigation at 1.5-to-1).

With 1.2 acres of remaining wetland mitigation required to offset the 0.77-acre of City-regulated wetland impacts (required 1.16 acres at 1.5-to-1) the preservation of existing wetlands on Parcel 50-22-17-101-006. This is the southern portion of the Hadley's Towing site south of Grand River Avenue and east of Wixom Road. Atwell notes that the applicant proposes to put approximately 4 acres of existing wetland under conservation easement which would create one large contiguous protected wetland complex as wetlands on the adjoining parcels to the west and east (50-22-17-101-032 and 50-22-17-101-102, respectively) currently have conservation easements on the wetland complexes. Atwell also notes that the surrounding 5 acres of upland could be put under conservation easement to afford further protection and natural habitat within the City.

Option 2 – The applicant is proposing the same mitigation strategy as Option 1 for the EGLE mitigation requirements. The 1.4 acres of constructed wetland is designed to offset the EGLE regulated 0.90-acre

impact at a mitigation ratio of 1.5-to-1. In order to mitigate the remaining 0.77-acre of impact to City-regulated wetland, the applicant proposes to initiate a wetland mitigation fund for the City due to lack of available space for wetland mitigation within the City limits. This strategy is intended to mimic the existing City of Novi Woodland (Tree) Fund.

In terms of Option 1, the preservation of existing wetland areas for mitigation credit is not specifically supported by the City's wetland ordinance. EGLE has an option of ten (10) acres of wetland mitigation for 1.0 acre of impact in situations where the mitigation is in the form of preservation of existing wetland. If the City elected to approve wetland mitigation in the form of preservation of existing wetlands, ECT suggests that EGLE's 10-to-1 ratio of wetland preserved-to-wetland mitigation credit allotted be followed.

It should be noted that Section 12-176. – Mitigation of the City's Wetlands and Watercourse Protection Ordinance states the following:

Mitigation shall be provided onsite where practical and beneficial to the wetland resources. If onsite mitigation is not practical and beneficial, mitigation in the immediate vicinity, within the same watershed, may be considered. Mitigation at other locations within the city will only be considered when the above options are impractical.

In terms of Option 2, the City does not currently have a wetland mitigation 'banking' plan in place. ECT recommends that the details of such a wetland mitigation fund be determined prior to approving this option as an acceptable wetland mitigation scenario. Furthermore, it is recommended that the City follow the standards of EGLE in that the restoration of previously existing wetlands is preferred over the creation of new wetlands where none previously existed. Wetland restoration means the reestablishment of wetland characteristics and functions at a site where they have ceased to exist through the replacement of wetland hydrology, vegetation, or soils. The enhancement of existing wetlands can not be considered as wetland mitigation.

Wetland and Watercourse Comments

The following are repeat comments from our Wetland Review of the PRO Concept Plan (PSP19-0112) letter dated July 19, 2019. The current status of each comment follows in ***bold italics***. ECT recommends that the Applicant address the items noted below in subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site wetlands and 25-foot wetland setbacks to the greatest extent practicable and attempt to incorporate these existing natural features into the site plan.

   This comment still applies.

2. The 25-foot wetland and watercourse setback boundaries shall be indicated on the Plan.

   This comment has been satisfactorily addressed. The wetland buffers have been indicated on the Plan.

3. It is unclear when the on-site wetlands were flagged and delineated. The applicant shall provide the date that the on-site wetlands were delineated and a wetland delineation report for the site if available.

This comment has been satisfactorily addressed. Atwell conducted a wetland delineation on October 24, 2018 and a Wetland Delineation Letter (dated November 16, 2018) has been included with the submittal.

4. The current Plan includes but does not specifically indicate/quantify impacts to wetlands and wetland buffers. The applicant shall indicate, quantify and label all proposed impacts to these natural features on subsequent plan submittals. The area (square feet or acres) of wetland impacts shall be indicated on the Plan in addition to the proposed volumes of these impacts. The area (square feet or acres) of all impacts (both permanent and temporary) to the 25-wetland and watercourse setbacks shall be indicated on the Plan. The cubic yards of proposed wetland fill shall also be provided on subsequent site plan submittals.

   This comment has been partially addressed. The volume (cubic yards) of all wetland impacts shall be provided on the Plan. In addition, the areas (square feet or acres) of the existing wetlands and 25-foot wetland buffer areas shall be clearly indicated and the areas quantified (square feet or acres) on the Plan (not just in the Wetland Delineation Letter).

5. If the applicant is unable to modify the Plan in order to decrease the overall impact to existing wetlands, subsequent site plan submittals shall provide details regarding the proposed wetland mitigation plan. This shall include the location of the proposed wetland mitigation area(s), grading, and planting details. Impacts to emergent wetlands shall be mitigated at a ratio of 1.5-to-1 and impacts to forested wetlands shall be mitigated at a ratio of 2.0-to-1.

   The applicant's wetland consultant (Atwell) has provided two (2) wetland mitigation options in a letter dated October 2, 2019 (Sakura Novi Wetland Mitigation Options). Each of these options includes constructing 1.4 acres of the 2.51 acres of required wetland mitigation. A portion (0.9-acre) of the 1.4 acres would be constructed on Parcel (50-22-23-226-021) to the east of the proposed Sakura Way Project. A 0.5-acre mitigation area is proposed to be constructed on Parcel 50-22-23-226-042 currently owned by the City. Option 1 then proposes to provide the remaining 1.2 acres of required mitigation through the preservation of existing wetland on Parcel 50-22-17-101-006 (i.e., Hadley Towing property). It should be noted that the City's Wetland Ordinance does not specifically support the preservation of existing wetland areas for mitigation. In addition, Option 2 proposes to initiate a wetland mitigation fund for the City due to the lack of available space for wetland mitigation within the City limits. ECT recommends that the details of such a wetland mitigation fund be determined prior to approving this option as an acceptable wetland mitigation scenario

6. It appears as though a City of Novi *Non-Minor Wetland Use Permit* would be required for the proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.

   This comment still applies.

7. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from EGLE (formerly MDEQ) for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands (if applicable) shall be made by EGLE. The Applicant should provide a copy of this Wetland Use Permit application to the City (and our office) for review and a copy of the approved

permit upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.

This comment still applies. ECT recommends that the applicant contact EGLE in order to schedule an on-site pre-application in order to determine the regulatory status of Wetlands 1 through 5. The applicant's response letter notes that the City will be provided with the EGLE permit application when it is submitted.

8. The Plan should address how any temporary impacts to wetland or 25-foot wetland buffers shall be restored, if applicable. Subsequent Plan submittals shall include specifications for any proposed seed mixes proposed for use within these areas. Sod or common grass seed shall not be used to restore temporary impacts within these areas.

   This comment still applies. The Plan shall indicate whether any of the proposed impacts to wetlands or wetland buffers are temporary and therefore require restoration. It appears as if all of the proposed impacts to wetland and wetland buffers are permanent.

9. The applicant should ensure that any proposed snow storage areas are located such that any runoff will not directly affect any remaining on-site wetlands (if applicable) and/or watercourses.

   This comment still applies. The applicant's response letter notes that snow storage areas will be designed so that runoff will not directly affect the remaining on-site wetland.

10. In subsequent plan submittals, ECT suggests that any proposed stormwater management plan be reviewed by the City of Novi Engineering Department to ensure that they meet the City of Novi design requirements.

    This comment still applies.

Wetland Conclusion

The project site appears to contain wetlands that are regulated by the City of Novi, and potentially by EGLE. Any proposed impacts to on-site wetlands will require a City of Novi *Wetland and Watercourse Use Permit*, and an *Authorization to Encroach the 25-Foot Natural Features Setback* for any proposed impacts to the 25-foot wetland buffers. The project may require a Wetland Use Permit from EGLE. Subsequent site plan submittals shall clearly indicate all proposed impacts (permanent or temporary) to the existing wetlands and the associated 25-foot wetland setbacks, including the fill quantities (cubic yards) for all wetland impacts.

The applicant has proposed two (2) Options to meet the wetland mitigation requirement. Option 1 proposes to meet a portion of the required mitigation area through the preservation of existing wetland (on Parcel 50-22-17-101-006, i.e. Hadley Towing property). It should be noted that the City's Wetland Ordinance does not specifically support the preservation of existing wetland areas for mitigation. Option 2 proposes to initiate a wetland mitigation fund for the City due to the lack of available space for wetland mitigation within the City limits. ECT recommends that the details of such a wetland mitigation fund be determined prior to approving this option as an acceptable wetland mitigation scenario.

Recommendation

ECT currently does not recommend approval of the Revised PRO Concept Plan for Wetlands. The Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving Wetland approval of the Plan.

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Pete Hill, P.E.
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Madeleine Kopko, City of Novi Planning Assistant
Rick Meader, City of Novi Landscape Architect

Attachments: Figure 1 – City of Novi Regulated Wetland and Woodland Map
Figure 2 - Site Aerial Photo
Site Photos

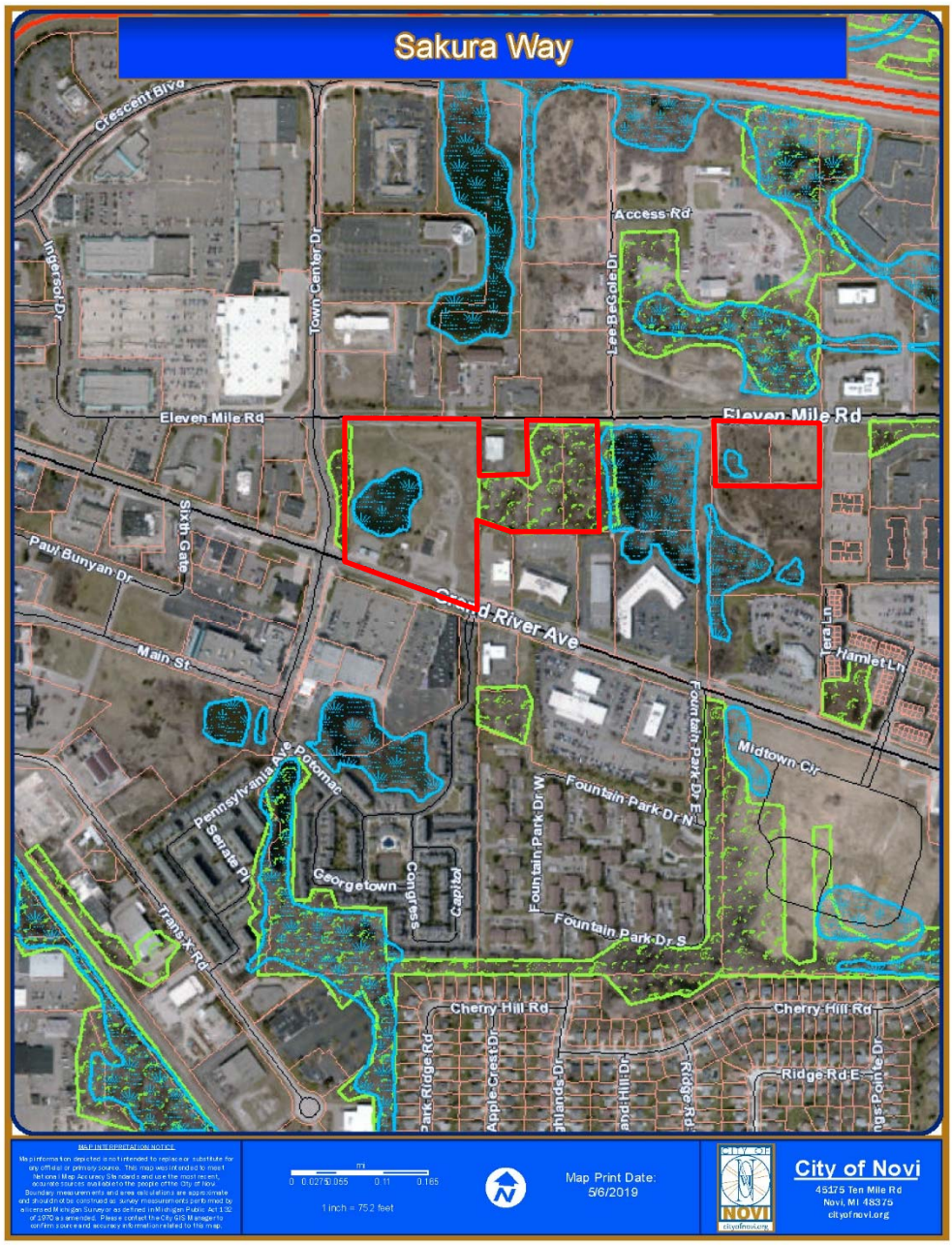


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundaries are shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Figure 2. Site Aerial Photo. Approximate wetland locations are indicated in blue (Photo source: Google Earth).

Site Photos

Photo 1. Looking east at existing Wetland 1 located west of the existing ECCO Tool Co. site, south of Eleven Mile Road (ECT, July 16, 2019).

Photo 2. Looking west at existing wetland/pond (Wetland 2) on the west side of the project site (ECT, July 16, 2019).

Photo 3. Looking east from the ECCO Tool property (50-22-23-126-011) towards area of delineated wetland (Wetland 4). Reed canary grass can be seen in the photo, growing in the wetland area (ECT, July 16, 2019)

Photo 4. Looking east at delineated wetland (Wetland 4) on 50-22-23-226-007 and -008 (ECT, June 19, 2018).

Photo 5. Looking south along the existing gravel drive that is on the western edge of Parcel 50-22-23-226-021. Wetland "5" is located on the left (east) side of the gravel drive (ECT, June 19, 2018).

Photo 6. Looking east at Wetland "5" from existing gravel drive (ECT, June 19, 2018).

WOODLAND REVIEW

ECT Environmental Consulting & Technology, Inc.

ECT Project No. 190456-0400

October 21, 2019

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

Re: Sakura Way (JZ19-0031)
Woodland Review of the Revised PRO Concept Plan (PSP19-0150)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the Revised PRO Concept Plan for the proposed Sakura Way project prepared by PEA, Inc. and Wah Yee Associates dated October 2, 2019 and stamped "Received" by the City of Novi on October 3, 2019 (Plan). The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently does not recommend approval of the Revised PRO Concept Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Plan.

The following woodland related items are required for this project:

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

The proposed project is located at the northeast corner of Grand River Avenue and Town Center Drive in Section 23. The proposed project currently consists of three (3) phases. Phases 1 and 2 includes a total of four (4) parcels. From west to east these are: 50-22-23-126-006 (West Parcel), 50-22-23-126-011 and 50-22-23-226-007 (previously referred to as East Parcel A), and 50-22-23-226-008 (previously referred to as East Parcel B). Phase 3 has been added to the concept since our review of the previous concept plan. Phase 3 appears to include two (2) parcels east of the Phase 1 and 2 properties; Parcel 50-22-23-226-021 and 50-22-23-226-022. Phase 1 consists of market, retail, restaurant, townhome residential and light industrial use (existing ECCO Tool Co., grandfathered in). Phase 2 consists of restaurant, retail, spa, office, hotel, residential and parking structure uses. Phase 3 consists of town-home residential and parking.

The majority of the central portion of the project site is indicated as City-Regulated Woodland on the City's Regulated Woodland Map (see Figure 1, attached). There is also area designated as Regulated Woodland along the western edge of the project property. The majority of the area that contains the open water pond/wetland (i.e. Wetland 2) is not indicated as Regulated Woodland. The parcels contained within Phase 3 of the project are also not indicated as City-Regulated Woodland. It should be noted that the purpose of the City of Novi Woodland Protection Ordinance (Chapter 37) is to:

2200 Commonwealth Blvd., Suite 300
Ann Arbor, MI 48105

(734) 769-3004

FAX (734) 769-3164

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

City of Novi Woodland Review Standards & Woodland Permit Requirements

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

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

In addition,

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

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

Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on July 16, 2019 in order to verify existing woodland information (tree sizes, species, conditions, etc.) shown on the Plan. As noted, the majority of the central portion of the project site, as well as the western edge of the project site, is indicated as City-Regulated Woodland on the City's Regulated Woodland Map (see Figure 1). It should be noted that approximately one-half of the site (the western half) has been previously disturbed and contains few trees of City-regulated size.

The surveyed trees have been marked with metal tree tags allowing ECT to compare the tree diameters reported on the *Tree List* (Sheet T-1.1) to the existing tree diameters in the field. ECT found that the Plan appears to accurately depict the location, species composition, size, and condition of the existing trees. ECT

took a sample of diameter-at-breast-height (DBH) measurements and found that the data provided on the Plan was consistent with the field measurements.

The current Plan includes a *Tree Protection Plan* (Sheet T-1.0) that indicates the locations of the surveyed trees as well as a *Tree List* (Sheet T-1.1) that provides tree tag number, species, diameter, condition of the surveyed trees on the site, save/remove status and number of Woodland Replacement Credits required for each tree proposed for removal. In general, the on-site trees consist of cottonwood (*Populus deltoides*), black locust (*Robinia pseudoacacia*), box elder (*Acer negundo*), silver maple (*Acer saccharium*), red maple (*Acer rubrum*), and several other species. While Sheet C-1.3 (*Topographic Survey – Sakura East*) includes the locations of surveyed trees within Phase 3 of the proposed development, the *Tree Protection Plan* does not currently include Phase 3. The Plan should include a *Tree Protection Plan* that incorporates Phase 3. In addition the *Tree List* does not appear to have been updated to include the existing trees located within Phase 3. This information should be added to the Plan. As Phase 3 is not located within area designated as City-Regulated Woodland, and there do not appear to be any trees 36-inches diameter or greater, it does not appear as if Phase 3 requires any Woodland Replacement Credits.

In terms of habitat quality and diversity of tree species, the overall subject site consists of trees in fair condition. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested areas located on the subject site appear to be considered to be of fair quality. It should be noted that some sections of the forested portion of the site are dominated by invasive species of vegetation such as common buckthorn (*Rhamnus cathartica*).

The proposed Plan includes the removal of City-regulated trees as indicated below.

Proposed Woodland Impacts and Woodland Replacements

The *Woodland Replacement Plan* (Sheet L101) indicates that a total of one hundred one (101) trees of 8-inch DBH and located within mapped City Regulated Woodlands are proposed for removal. In addition, two (2) trees that are over 36-inches DBH located outside of the mapped City Regulated Woodland area are also proposed for removal (i.e., Tree #21 (43" silver maple) and Tree #24 (46" cottonwood). Each of these trees require four (4) Woodland Replacement credits as they are greater than 36-inches in diameter. Sheet L101 indicates that the removal of these 101 trees requires a total of 197 Woodland Replacement Credits. The following tree removals by diameter are indicated on Sheet L101:

- Stems to be Removed 8" to 11": 30 x 1 replacement (Requiring 30 Replacements)
- Stems to be Removed 11" to 20": 49 x 2 replacements (Requiring 98 Replacements)
- Stems to be Removed 20" to 30": 19 x 3 replacements (Requiring 57 Replacements)
- Stems to be Removed 30"+: 3 x 4 replacements (Requiring 12 Replacements)
- Total Stems Removed: 101

Total Woodland Replacement Credits Required 197 Replacements

The *Woodland Replacement Plan* also indicates the following regarding Woodland Replacement Credits:

- Woodland Replacement Required = 197 Tree Credits
- Woodland Replacement Provided On-Site = 82.5 Tree Credits
- Trees Paid into Tree Fund = 114.5

However, an assessment of the *Tree Protection Plan* (Sheet T-1.0) and the *Tree List* (Sheet T-1.1) appears to indicate the following information:

- Total Trees to be Removed = 184
- Total Woodland Replacements Required = 341

It should be noted that the City's Woodland Ordinance does not have specific provisions to exempt regulated trees from replacement due to condition. The applicant should ensure that all trees (aside from dead trees and/or trees that are less than 8-inched DBH) being removed from the areas designated as City Regulated Woodland are proposed to be replaced. The applicant shall review and revise the Plan to ensure that the tree removal and replacement information is consistent on all applicable plans including the *Tree Protection Plan*, the *Tree List*, and the *Woodland Replacement Plan*.

Sheet L101 indicates that the applicant is prepared to meet the Woodland Replacement Credit requirement through the planting of various types of Woodland Replacement material, including canopy trees, evergreen trees, large shrubs, perennials, and ground cover seeding. The following Woodland Replacement materials have been proposed:

Table 1. Woodland Replacement Credits Proposed

Type	Credit Ratio	Proposed Quantity	Woodland Replacement Credits
Canopy Trees (1.5" caliper)	2:1	0	0
Evergreen Trees (36" height)	3:1	56	18.5 (9.4%)
Understory Trees (1" caliper)	5:1	0	0
Large Shrubs (30" height)	6:1	10	10.5 (5.3%)
Small Shrubs (18" height)	8:1	27	3.5 (1.7%)
Tree/Shrub Whips (24" height)	50:1	0	0
Perennials (1 gallon)	25:1	1125	45 (22.8%)
Ground Cover Seeding	70 Sq.Yd.:1	1390	20 (10.2%)
Total			**82.5**

The Plant List (Sheet L404) indicates the trees and shrubs as well as the perennials and ground cover currently proposed as Woodland Replacements. It should be noted that the deciduous trees, evergreen trees and shrubs currently proposed all appear to be acceptable species per the City's Woodland Replacement Tree Chart (attached). The applicant shall review and revise the perennials and ground cover (and grasses) list to ensure that all species being proposed for Woodland Replacement Credit are species native to Michigan. The plants currently listed, aside from prairie dropseed and little bluestem are not native to Michigan.

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

- *The location of replacement trees shall be subject to the approval of the planning commission and shall be such as to provide the optimum enhancement, preservation and protection of woodland areas. Where woodland densities permit, tree relocation or replacement shall be within the same woodland areas as the removed trees. Such woodland replanting shall not be used for the landscaping requirements of the subdivision ordinance or the zoning landscaping;*

- *Where the tree relocation or replacement is not feasible within the woodland area, the relocation or replacement plantings may be placed elsewhere on the project property;*

- *Where tree relocation or replacement is not feasible within the woodland area, or on the project property, the permit grantee shall pay into the city tree fund monies for tree replacement in a per tree amount representing the market value for the tree replacement as approved by the planning commission. The city tree fund shall be utilized for the purpose of woodland creation and enhancement, installation of aesthetic landscape vegetation, provision of care and maintenance for public trees and provision and maintenance of specialized tree care equipment. Tree fund plantings shall take place on public property or within right-of-ways with approval of the agency of jurisdiction. Relocation or replacement plantings may be considered on private property provided that the owner grants a permanent conservation easement and the location is approved by the planning commission;*

- *Where replacements are installed in a currently non-regulated woodland area on the project property, appropriate provision shall be made to guarantee that the replacement trees shall be preserved as planted, such as through a conservation or landscape easement to be granted to the city. Such easement or other provision shall be in a form acceptable to the city attorney and provide for the perpetual preservation of the replacement trees and related vegetation.*

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

Woodland Review Comments

The following are repeat comments from our Woodland Review of the PRO Concept Plan (PSP19-0112) letter dated July 19, 2019. The current status of each comment follows in ***bold italics***. Please consider the following comments when preparing subsequent site plan submittals:

1. ECT encourages the Applicant to minimize impacts to on-site woodlands to the greatest extent practicable. Currently, the Plan appears to indicate that 167 of the 275 surveyed trees (60%) are to be removed.

   This comment still applies. The current Plan (Woodland Replacement Plan; Sheet L101) indicates that a total of 101 existing trees are proposed for removal requiring 197 Woodland Replacement Credits. However, an assessment of the Tree List (Sheet T-1.1) appears to indicate the removal of 184 trees requiring 341 Woodland Replacement Credits. This discrepancy shall be reviewed and revised as necessary.

2. The applicant shall review and revise the Plan to ensure that the tree removal and replacement information is consistent and correct on all applicable sheets including the *Tree Protection Plan*, the *Tree List*, and the *Woodland Replacement Plan*. The Woodland Replacement Plan indicates that 70 regulated trees are to be removed requiring 142 Woodland Replacement Credits. However, an assessment of the *Tree List* (Sheet T-1.1) appears to indicate the removal of 167 trees requiring 286 Woodland Replacement Credits.

   This comment still applies. The proposed woodland removal and replacement quantities have been revised since the previous plan submittal. As noted above, the Woodland Replacement Plan indicates that 101 regulated trees are to be removed requiring 197 Woodland Replacement Credits. However, an assessment of the Tree List (Sheet T-1.1) appears to indicate the removal

of 184 trees requiring 341 Woodland Replacement Credits. This discrepancy shall be reviewed and revised as necessary.

In addition, while Sheet C-1.3 (Topographic Survey – Sakura East) includes the locations of surveyed trees within Phase 3 of the proposed development, the Tree Protection Plan does not currently include Phase 3 of the development. The Plan should include a Tree Protection Plan that incorporates Phase 3. The Tree List does not appear to have been updated to include the existing trees located within Phase 3. This information should be added to the Plan. As Phase 3 is not located within area designated as City-Regulated Woodland, and there do not appear to be any trees 36-inches diameter or greater, it does not appear as if Phase 3 requires any Woodland Replacement Credits.

3. It should be noted that the deciduous trees, evergreen trees and shrubs currently proposed all appear to be acceptable species per the City's Woodland Replacement Tree Chart (attached). The applicant shall review and revise the perennials and ground cover (and grasses) list to ensure that all species being proposed for Woodland Replacement Credit are species native to Michigan. The ground cover, perennials, and grasses, aside from prairie dropseed and little bluestem, are not species native to Michigan.

   This comment still applies. In addition, hemlock is not an approved Woodland Replacement species. Please refer to the Woodland Replacement Tree Chart (attached) for acceptable Woodland Replacement tree species.

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

   This comment still applies. Based on the Woodland Replacement Plan, the applicant proposes to replace 82.5 of the required 197 Woodland Replacement Credits (approximately 41%) on-site.

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

   This comment still applies. Based on the Woodland Replacement Plan (Sheet L101) a total of 82.5 Woodland Replacement Credits are to be provided on-site. Therefore, the Woodland Replacement Performance Guarantee will be $33,000 (82.5 On-Site Woodland Replacement Credits x $400/Credit).

6. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee will then be provided by the applicant. This Woodland Maintenance financial guarantee will

be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation.

This comment still applies. Based on the current Plan, the Woodland Maintenance Guarantee will be $8,250 (82.5 On-Site Woodland Replacement Credits x $400/Credit x 0.25).

7. The Applicant will be required to pay the City of Novi Tree Fund at a value of $400/credit for any Woodland Replacement Tree Credits that cannot be placed on-site. Currently, all of the required Woodland Replacement Credits are proposed through on-site plantings. However, the applicant shall review and confirm that the woodland removal and required Woodland Replacement information is correct and consistent.

   This comment still applies. Currently, the Plan proposes to pay 114.5 Woodland Replacement Credits to the City's Tree Fund. This payment would therefore be $45,800 (114.5 Woodland Replacement Credits x $400/Credit).

8. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees to be installed in a currently non-regulated woodland area. The applicant shall demonstrate that the all proposed woodland replacement trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the City. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. These easement areas shall be indicated on the Plan.

   This comment still applies.

Recommendation

ECT currently does not recommend approval of the Revised PRO Concept Plan for Woodlands. The Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving Woodland approval of the Plan.

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

Respectfully submitted,
ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Pete Hill, P.E.
Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner
Sri Komaragiri, City of Novi Planner
Madeleine Kopko, City of Novi Planning Assistant
Rick Meader, City of Novi Landscape Architect

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

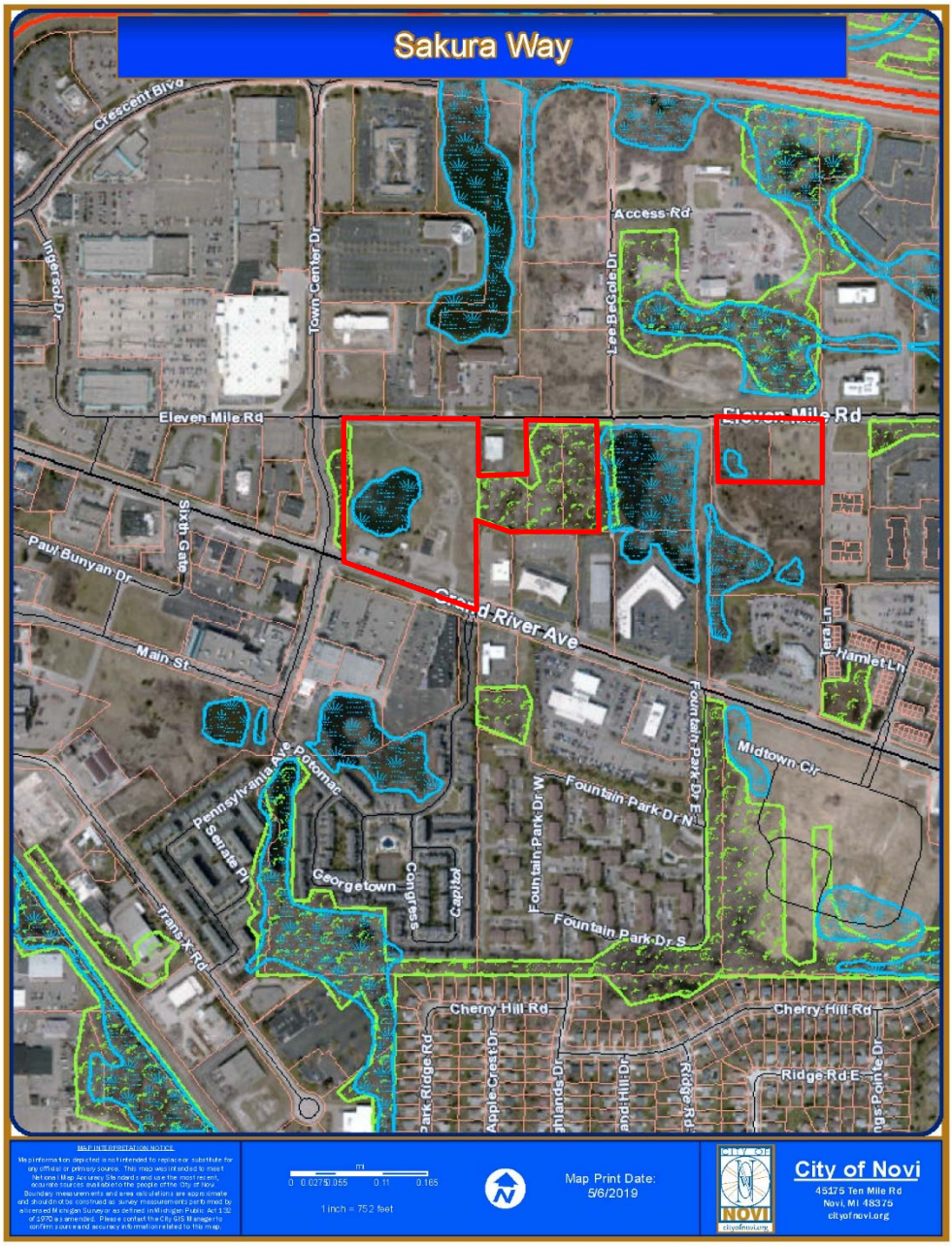


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate parcel boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.

Woodland Tree Replacement Chart

(from Chapter 37 Woodlands Protection)
(All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name
Black Maple	Acer nigrum
Striped Maple	Acer pennsylvanicum
Red Maple	Acer rubrum
Sugar Maple	Acer saccharum
Mountain Maple	Acer spicatum
Ohio Buckeye	Aesculus glabra
Downy Serviceberry	Amelanchier arborea
Smooth Shadbush	Amelanchier laevis
Yellow Birch	Betula alleghaniensis
Paper Birch	Betula papyrifera
American Hornbeam	Carpinus caroliniana
Bitternut Hickory	Carya cordiformis
Pignut Hickory	Carya glabra
Shagbark Hickory	Carya ovata
Northern Hackberry	Celtis occidentalis
Eastern Redbud	Cercis canadensis
Pagoda Dogwood	Cornus alternifolia
Flowering Dogwood	Cornus florida
American Beech	Fagus grandifolia
Thornless Honeylocust	Gleditsia triacanthos inermis
Kentucky Coffeetree	Gymnocladus diocus
Walnut	Juglans nigra or Juglans cinerea
Eastern Larch	Larix laricina
Tuliptree	Liriodendron tulipfera
Tupelo	Nyssa sylvatica
American Hophornbeam	Ostrya virginiana
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana
Red Pine_(1.5:1 ration) (6' ht.)	Pinus resinosa
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus
American Sycamore	Platanus occidentalis
Black Cherry	Prunus serotina
White Oak	Quercus alba
Swamp White Oak	Quercus bicolor
Scarlet Oak	Quercus coccinea
Shingle Oak	Quercus imbricaria
Burr Oak	Quercus macrocarpa
Chinkapin Oak	Quercus muehlenbergii
Red Oak	Quercus rubra
Black Oak	Quercus velutina
American Basswood	Tilia americana

Site Photos

Photo 1. Looking west towards area of mapped City Regulated Woodland on the western side of the project (ECT, July 16, 2019).

Photo 2. Looking south towards regulated Trees #21 and #24 (ECT, July 16, 2019). These two (2) trees are regulated due to their diameter (i.e., greater than 36 inches).

Photo 3. Looking east at area of mapped City Regulated Woodland on the central/eastern portion of the project (near parcel 50-22-23-126-011 and 50-22-23-226-007 boundary), ECT, July 16, 2019.

Photo 4. Tree No. 1290 (21" silver maple) located on ECCO Tool property and proposed for removal. Trees were marked with aluminum tags allowing ECT to compare the tree diameters reported on the Plan with the existing trees in the field.

Photo 5. Tree No. 1290 (21" silver maple) located on ECCO Tool property and proposed for removal. Trees were marked with aluminum tags allowing ECT to compare the tree diameters reported on the Plan with the existing trees in the field.

TRAFFIC REVIEW

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

Project name:
JSP19-0019 Sakura Way Revised PRO Concept Traffic Review
From:
AECOM

Date:
November 1, 2019

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

CC:
Sri Komaragiri, Lindsay Bell, Kate Richardson, Madeleine Kopko, Victor Boron

Memo

Subject: JSP19-0019 Sakura Way Revised PRO Concept Traffic Review

The revised PRO concept site plan was reviewed to the level of detail provided and AECOM recommends **denial** for the applicant to move forward until the condition that the comments provided below are adequately addressed to the satisfaction of the City.

GENERAL COMMENTS

1. The applicant, Sakura Novi, LLC, is proposing a walkable mixed-use community with a hotel, grocery store, office buildings, tea house, restaurant, and 68 townhomes between Eleven Mile Road and Grand River Ave, east of Town Center Drive. A third phase of development would include a 52 unit residential townhome development south of Eleven Mile Road and roughly 1,200 feet west of Meadowbrook Road. Access points for this development would be on Eleven Mile Road only.
2. Eleven Mile Road is under the jurisdiction of the City of Novi. Grand River Avenue is under the jurisdiction of Oakland County.
3. The parcels are zoned OSC, OS-1, and I-1. The applicant is proposing rezoning the area to TC-1 with a PRO.
4. The traffic related deviations requested by the client are discussed in the Requested Deviations section of this letter.

TRAFFIC IMPACTS

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

   ITE Code: 220 Multi-Family housing (Low-Rise), 850 Supermarket
   Development-specific Quantity: 68 (220), 30 (850)
   Zoning Change: As indicated above for PRO

Trip Generation Summary				
	Estimated Trips	**Estimated Peak-Direction Trips**	**City of Novi Threshold**	**Above Threshold?**
AM Peak-Hour Trips	33+115=148	25+69=94	100	Yes

PM Peak-Hour Trips	42+318=360	26+162=188	100	Yes
Daily (One-Directional) Trips	473+3203=3676	N/A	750	Yes

2. The number of trips exceeds the City's threshold of more than 750 trips per day and 100 trips per either the AM or PM peak hour. These estimates include only two (2) of the proposed sections of the development, which indicates that total trips for the development, including the restaurants, hotel, and office buildings, would be even greater. AECOM recommends performing the following traffic impact studies in accordance with the City's requirements.

Trip Impact Study Recommendation	
Type of Study:	**Justification**
Rezoning Traffic Impact Study	The applicant is proposing rezoning the parcels and so a rezoning traffic study comparing the trips possible under the current and proposed zoning, as well as the proposed land use, is required. A TIS Addendum containing the RTS information was submitted and a brief review is included in this letter.
Traffic Impact Study	The proposed developments exceed the City of Novi thresholds for requiring a Traffic Impact Study. A TIS was submitted by the applicant and was reviewed under a separate letter. The TIS Addendum is reviewed below.

RTS/TIS COMMENTS

The following comments relate to the TIS Addendum submitted as part of the revised PRO Concept package.

1. The proposed development is expected to result in more trips on Saturday peak hour than the maximum permitted under the existing zoning. However, the report preparer expects the number of new trips to be less than the total permitted under the existing zoning, due to pass-by trips and internal capture.

2. The preparer conducted a capacity analysis at the driveway for the Phase 3 development. The total trips are expected to be low and the delay for all approaches is expected to be LOS B or better during all peak periods.

3. The preparer conducted a turn lane warrant analysis for the right turns into the development.

    a. The image of the warrant provided lists 76 right turns during the PM peak period. It is unclear how this number was calculated.
    b. The applicant indicates an ADT of 8,936 for 2028.
    c. With the 76 right turns during the PM peak hour and an ADT of 8,936, a right turn taper is required as per City ordinance. Both the TIS and the TIS addendum submitted by the applicant indicate that a taper is required yet the site plan does not show a taper. The site plan provided and should be revised to show a taper.

EXTERNAL SITE ACCESS AND OPERATIONS

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

1. The applicant is proposing four (4) or five (5) points of access to the development, as follows:
    a. Two (2) driveways off of Grand River Avenue.
    b. Two (2) or three (3) driveways off of Eleven Mile Road.

        i. If the non-residential development for phase 2 in the northeast corner of the site is used, there is an additional driveway. If the area is developed using the residential section, only two (2) driveways will be present.
    c. The applicant has provided some driveway dimensions and details that are in compliance with City standards but should label for all driveways, including width and radii, for the proposed access points, and any modifications to the external roadways to review compliance with City and County design standards, as applicable.
2. The east development (Phase 3) has one (1) driveway off Eleven Mile Road
    a. The driveway dimensions are in compliance with City standards.
3. The applicant should review Section 11-216(d)(1) of the City's Code of Ordinances to confirm that the allowable number of site driveways is provided.
4. The applicant should confirm that the proposed driveways meet the same side spacing requirements as indicated in Section 11-216(d)(1)(d) and Figure IX.12 of the City's Code of Ordinances and dimension the spacing on the plans.
    a. The easternmost driveway on Grand River Avenue appears to not meet driving spacing with the driveway to the east.
5. The western driveway on Grand River Avenue is a right-in/right-out only driveway.
6. The applicant has included sight distance measurements for the driveways along Grand River Avenue and Eleven Mile Road that are in compliance with Figure VIII-E of the City's Code of Ordinances.
7. The applicant is proposing sidewalk along Grand River Avenue that connects to existing sidewalk on the east side of the site. There is existing sidewalk along Eleven Mile Road for the length of the site.
    a. The applicant has provided proposed sidewalk and ramp details and included the latest Michigan Department of Transportation (MDOT) sidewalk ramp detail.

REQUESTED DEVIATIONS

The following comments relate to the requested deviations.

1. Deviation 5: The applicant is seeking a deviation for parking setback along 11 Mile Road. Parking is required to be 25' from the ROW line. The proposed distance is 10'. Applicant states this deviation is essential to accommodate existing conditions to avoid excessive modifications for short term use.

    a. *AECOM would support the deviation for the parking lot along 11 Mile Road but not the spaces along the main drive (as shown in Figure 5.3.13 of the Zoning Ordinance).*

2. Deviation 11: The applicant is seeking a deviation for parking setback in the NE corner, which is 6'.

    a. *AECOM would support this deviation.*

3. Deviation 14: The applicant is seeking loading zone requirement reductions, for amounts specified in the site plan.

    a. *AECOM would support the deviation provided the applicant can provide truck turning movements that show the loading zones can be accessed by the relevant vehicles. The applicant provided truck turning movements to loading area A but should also show movements for loading areas B and C to ensure accessibility.*

4. Deviation 20: The applicant is requesting a deviation for drive lane width in Residential Phase 1. A total width of 20' is requested as the deviation width. The ordinance requirement is 24' or 22' where no parking is present, as is the case for this location, resulting in a reduction of 2' requested.

    a. *AECOM would support this deviation in the vicinity listed, as long as signage is put in place indicating no parking is allowed outside of marked spaces in the residential area. While two (2) passenger vehicles can pass each other as indicated in the diagram on sheet C-2.2, emergency vehicles are wider, typically more than 8' wide, making a 20' roadway a tight fit for fire or medical emergency vehicles to access if vehicles are parked.*

INTERNAL SITE OPERATIONS

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

1. General Traffic Flow
    a. The site generally appears to be accessible to passenger vehicles.
    b. The applicant has provided fire truck turning paths to ensure accessibility.
    c. The applicant has provided dimensions for the landscape areas radii throughout the development.
    d. The applicant has generally indicated curb heights adjacent to parking spaces to be 4” throughout the development. Note that 6” curbs are required along all landscape areas, except when in front of a 17’ parking space where a 4” curb is permitted.
    e. The applicant has indicated no more than 15 consecutive parking spaces, which is in compliance with the City’s Zoning Ordinance, Section 5.5.3.C.ii.i.
    f. The applicant is required to provide a loading zone in the amount of 10 square feet for each front foot of building, per TC-1 (planned PRO zoning) district requirements in Section 5.4.
        i. The applicant has identified loading zones for three (3) of the proposed buildings.
        ii. The applicant should provide truck travel patterns throughout the site to confirm accessibility to/from loading zones B and C.
        iii. The applicant has indicated they are seeking a deviation for loading zone areas.
    g. The applicant has proposed trash receptacles at the majority of the proposed buildings.
        i. The applicant should confirm that the trash receptacles are accessible by trash collection vehicles via turning movement paths.
        ii. There are no trash receptacles indicated in the Phase 3 development area.
2. Parking Facilities
    a. The applicant should reference the Planning Review letter for information regarding required off-street parking quantities.
        i. The applicant is proposing surface lot spaces in Phase 1 and parking structure spaces, as well as surface lot spaces, in Phase 2.
    b. The proposed parking lot parking space dimensions are generally in compliance with City standards; however, curb heights should be provided to confirm space length dimensions are appropriate. The applicant should reference Section 5.5.3.C.ii for additional information about required curb heights in relation to parking space length.
        i. If a 17’ space is provided with a 4” curb, a 2’ clear overhang, free from signs or other barriers, must be provided.
    c. The applicant is generally proposing 9’ wide parking spaces within the attached parking facility, which matches the required standard.
    d. The applicant is proposing 23 barrier free parking spaces. A total of nine (9) barrier free spaces are required of the 472 parking spaces proposed in Phase 1. The applicant has indicated the proposed dimensions for the accessible parking spaces.
        i. The applicant has indicated which spaces are intended to have van accessible signs. However, spaces on both sides of the 8’ aisles may be considered van accessible. The applicant could consider marking the spaces on both sides as van accessible. Five (5) spaces are marked van accessible, which exceeds the minimum of two (2).
            1. One (1) of the spaces marked as van accessible, adjacent to building “B”, does not have the required 8’ aisle. The sign should be updated to be non-van accessible or the aisle widened.
    e. Barrier free parking spaces should be indicated at the east development.
    f. The applicant has generally indicated 24’ aisles. Several aisles in the residential area of the development are indicated to be 20’ or 21’ wide. The applicant should increase the widths of these aisles to be 24’ in order to be in compliance with Section 5.3.2 of the City’s Zoning Ordinance.

i. The applicant has indicated they are seeking a deviation for the width of the aisles.

g. If the deviation for reduced parking is granted, the applicant is required to provide 19 bicycle parking spaces for the Phase 1 mixed-use development portion of the proposed area and 14 for the residential area, totaling 33 spaces. The applicant has provided 40 spaces.
   i. The development of the Phase 2 area may require additional bicycle parking in both the mixed-use and residential areas.
   ii. The applicant has indicated bicycle parking on the south and east sides of building A, the west side of building B, and the southwest corner of proposed building E, as well as in the garages of the residential area.
      1. The applicant should indicate the building entrances on the site plan to allow for identifying the distance from the bicycle parking to the entrances. Bicycle parking spaces are to be no more than 120 feet from the building entrances being served.
      2. Bicycle parking is required to be separated from vehicle parking and access aisles by a raised curb, landscape area, sidewalk, or other method, as per Section 5.16.5.D of the City's Zoning Ordinance.
   iii. The Zoning Ordinance, Section 5.16.4 provides the following covered bicycle parking space requirement: *Unless waived or modified as provided in subsection 5E, when twenty (20) or more bicycle parking spaces are required, twenty-five (25) percent of the bicycle parking spaces shall be covered bicycle parking spaces*.
      1. As the spaces in the garages of the residential section are not for public use, the mixed-use portion of the development is considered separately. Under Phase 1, the 19 spaces required do not require any covered spaces. When Phase 2 is constructed, a total of nine (9) spaces (25% of the 36 required) must be provided as covered bicycle parking in the mixed-use portion of the development.
   iv. The applicant has provided the design of proposed bicycle racks.
   v. The applicant has provided the proposed bicycle parking layout. **Paved pathways with a minimum width of 6' are required from the bicycle parking to roadway facilities or other mixed-use pathways**. Ramps should be provided from along the paved pathway.
   vi. The Phase 3 development will require bicycle parking. At one (1) space per five (5) units, a total of 11 spaces will be required as per the Zoning Ordinance.

3. Sidewalk Requirements
   a. The applicant should provide sidewalk width details throughout the site.
   b. The applicant has indicated locations of and details for all proposed sidewalk ramps throughout the site and included the latest MDOT sidewalk ramp detail.
   c. It should be noted that all bicycle parking facilities shall be accessible from adjacent street(s) and pathway(s) via a paved route that has a minimum width of 6'.

SIGNING AND STRIPING

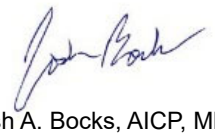
1. All on-site signing and pavement markings shall be in compliance with the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The following is a discussion of the proposed signing and striping.
   a. The applicant has provided a signing quantities table but should additional details (MMUTCD designation and proposed size) in future submittals. This information should be provided in the quantities table.
   b. The applicant should review the location of the applicable signing at the proposed right-in/right-out driveway along Grand River Avenue. The channeling island could be revised to further discourage left turns into and out of the driveway. The orientation of the "No Left Turn" sign in the island is incorrect.
   c. Signing for the Phase 3 development should be provided.
2. The applicant has provided the following notes and details related to the proposed signing.

   a. 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.
   b. The applicant should indicate a bottom height of 7’ from final grade for all signs installed.
   c. The applicant should indicate that all signing shall be placed 2’ from the face of the curb or edge of the nearest sidewalk to the near edge of the sign.
   d. Traffic control signs shall use the FHWA Standard Alphabet series.
   e. Traffic control signs shall have High Intensity Prismatic (HIP) sheeting to meet FHWA retroreflectivity requirements.
3. The applicant has included parking space striping notes to indicate that:
   a. The standard parking spaces shall be striped with four (4) inch white stripes.
   b. The accessible parking space and associated aisle should be striped with four (4) inch blue stripes.
   c. Where a standard space is adjacent to an accessible space, abutting blue and white stripes shall be installed.
4. The applicant has provided a detail for the proposed international symbol for accessibility pavement markings that may be placed in the accessible parking space. The symbol shall be white or white with a blue background and white border with rounded corners.
5. The applicant has provided a detail for the proposed crosswalk markings.

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

Sincerely,

AECOM



Josh A. Bocks, AICP, MBA
Senior Transportation Planner/Project Manager

Patricia Thompson, EIT
Traffic Engineer

FAÇADE REVIEW

DRN & ASSOCIATES, ARCHITECTS, PC
Phone: (248) 880-6523
E-Mail: dnecci@drnarchitects.com
Web: drnarchitects.com
50850 Applebrooke Dr., Northville, MI 48167

October 18, 2019

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

Façade Review Status Summary:
Section 9 Waiver recommended contingent upon revision to façade materials on Residential Units.

Re: FACADE ORDINANCE REVIEW
Sakura Way PRO, JZ19-31
Façade Region: 1, Zoning District: OSC & OS-1,

Dear Ms. McBeth;
The following is the Facade Review for the above referenced project. The review of Buildings A, B and C is based on the drawings prepared by Wah Yee Associates Architects, dated 10/2/19. The review of the residential buildings is based on the drawings prepared by Brian Neeper Architecture and Robertson Brothers Homes, dated 9/27/19. The proposed percentage of materials on each elevation is shown in the table below. The maximum percentage allowed by the Ordinance is shown in the right hand column. The Façade Ordinance requires 30% minimum Brick on all buildings in Façade region 1. In this case all buildings except several of the residential units fall in Façade Region 1. Materials in non-compliance, if any, are highlighted in bold. A sample board as required by Section 5.15.4.D was not available at the time of this review.

Building A & D (Specialty Grocery)	**South (Front)**	**West**	**East**	**North**	Façade Ordinance Section 5.15 Maximum
Brick	31%	38%	31%	37%	100% (30% Minimum)
Concrete "C" Brick	0%	0%	23%	26%	25%
Fiber Cement Siding (Nichiha)	23%	16%	0%	0%	25%
EIFS	18%	**27%**	**36%**	**30%**	25%
GFRC Panels	12%	13%	3%	3%	15%
Precast Concrete	0%	0%	0%	0%	0%
Fabric Awning	4%	3%	0%	0%	10%

Building A - As shown above, the applicant has increased the percentage of Brick and reduced the percentage of Precast Concrete. The only remaining deviation is a minor overage of EIFS on the west, east and north facades. A Section 9 Waiver would be required for this deviation.

Building B (Restaurant)	**South**	**West**	**East**	**North**	Façade Ordinance Section 5.15 Maximum
Brick	35%	35%	27%	30%	100% (30% Minimum)
Flat Metal Panels	49%	**54%**	**51%**	49%	50%
EIFS	13%	11%	16%	15%	25%
Limestone (Cast Stone)	0%	0%	0%	0%	50%
Trim (canopies and sunscreens)	3%	0%	6%	6%	15%

Building B - As shown above the applicant has added Brick and reduced the percentage of EIFS and Flat Metal Panels. The only remaining deviation is a minor overage of EIFS on the west and east facades. A Section 9 Waiver would be required for this deviation.

Building C (Retail Strip)	**South** (Grand River)	**West**	**East**	**North** (Interior Front)	Façade Ordinance Section 5.15 Maximum
Brick	51%	40%	32%	59%	100% (30% Minimum)
Flat Metal Panels	17%	10%	24%	12%	50%
Fiber Cement Siding (Nichiha)	0%	0%	0%	0%	25%
Spandral Glass	7%	0%	0%	0%	50%
EIFS	11%	**40%**	29%	12%	25%
Limestone (Cast Stone)	8%	4%	11%	8%	50%
Concrete "C" Brick	0%	0%	0%	0%	25%
Trim (canopies and sunscreens)	6%	6%	4%	9%	15%

Building C - As shown above the applicant has added Brick and reduced the percentage of Flat Metal Panels. The only remaining deviation is a minor overage of EIFS on the west facade. A Section 9 Waiver would be required for this deviation.

Fence and Dumpster Enclosure	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	95%	95%	95%	95%	100% (30% Minimum)
Cast Stone	5%	5%	5%	5%	50%

Site Fence and Dumpster Enclosure – As shown above, all facades are in full compliance with the Façade Ordinance. The project logo sign is not considered part of the façade materials and should comply with the City's Sign Ordinance.

Residential **100 Series, 3, 5, 6 & 8 -Unit Buildings**	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	39%	41%	53%	53%	100% (30% Minimum)
Vinyl Siding	**23%**	**25%**	**41%**	**41%**	0%
Asphalt Shingles	16%	24%	0%	0%	50%
Trim	22%	10%	6%	6%	15%

100 Series Residential Buildings - As shown above the applicant has increased the Brick and reduced the percentage of Vinyl Siding. Vinyl Siding is not permitted in any Façade Region. We would support a Section 9 Waiver for the overage of siding provided that the type of siding is changed to Cement Fiber Siding or other more compliant type of siding.

Residential **200 Series, 5, & 8 -Unit Buildings**	**Front**	**Rear**	**Right**	**Left**	Façade Ordinance Section 5.15 Maximum
Brick	33%	**16%**	37%	37%	100% (30% Minimum)
Vinyl Siding	**40%**	**47%**	**58%**	**58%**	0%
Asphalt Shingles	14%	20%	0%	0%	50%
Trim	13%	17%	5%	5%	15%

200 Series Residential Buildings - As shown above the applicant has increased the Brick and reduced the percentage of Vinyl Siding. The percentage of Brick on the rear façade remains in noncompliance. Vinyl Siding is not permitted in any Façade Region. We would support a Section 9 Waiver for the overage of siding provided that the type of siding is changed to Cement Fiber Siding or other more compliant type of siding and the percentage of Brick on the rear façade be increased to for consistency with the Series 100 buildings (not less than 30%).

Recommendations (Commercial Buildings) – In response to our prior review the applicant has added significant percentages of Brick and generally revised the percentages of materials to more closely comply with the Façade ordinance. The facades include architectural features such as wood trellises, brise-soleil sunscreen canopies, freestanding metal screens, second story planters and balconies, tension fabric canopies, and large overhanging cornices. Although Building C has its rear elevation facing Grand River Avenue (south) that elevation has been given equal attention to detail as the front (north) facade. These features substantially enhance the overall design quality of the project and have been taken into consideration as part of our recommendation.

Residential Buildings – It is recommended that the type of siding be revised to a compliant type such as Fiber Cement and that the percentage of Brick on the rear façade of the 200 Series buildings be increased for general consistency with the Series 100 buildings (30% minimum).

With the aforementioned revisions we recommend that the application will be consistent with the intent and purpose of the Façade Ordinance and that a Section 9 Waiver be granted for the following deviations:

1. The overage of EIFS on west, east and north facades of Buildings A&D.
2. The overage of Flat Metal Panels on the west and east facades of Building B.
3. The overage of EIFS on the west facade of Building C.
4. The overage of Cement Fiber Siding (changed from vinyl) on all facades of the 100 Series buildings

The applicant should submit revised drawings along with the Façade Material Sample Board required by Section 5.15.4.D of the Ordinance.

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

Sincerely,
DRN & Architects PC

Douglas R. Necci, AIA

FIRE REVIEW

October 11, 2019

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

RE: Sakura Way
PSP# 19-0150
PSP# 19-0112
PSP# 19-0065

Project Description:
Multi building development off of Grand River and Town Ctr Dr.

Comments:

- **All** fire hydrants **MUST** in installed and operational prior to any building construction begins.
- Fire hydrant spacing is 300' from fire hydrant to fire hydrant. Fire hydrant spacing shall be measured as "hose laying distance" from fire apparatus. Hose laying distance is the distance the fire apparatus travels along improved access routes between hydrants or from a hydrant to a structure **(D.C.S. Sec. 11-68 (f)(1)c))**
- The ability to serve at least two thousand (2,000) gallons per minute in single-family detached residential; three thousand (3,000) gallons per school areas; and at least four thousand (4,000) gallons per minute in office, industrial and shopping centers is essential. **(D.C.S. Sec.11-68(a))**
- Fire apparatus access drives to and from buildings through parking lots shall have a minimum fifty (50) feet outside turning radius and designed to support a minimum of thirty-five (35) tons. **(Throughout site) (D.C.S. Sec 11-239(b)(5))**

1. In front of building 9 from the west to the south.
2. In front of building 9 from north to the east.
3. In front of building 11 from the west to the north.
4. In front of building 3 from the south to the west.
5. In front of building 2 from the east to the south.
6. In front of building 5 from the north to the west.
7. Between buildings 2 & 3 from the north to the east and from the north to the west.

- FDC's MUST be put on the plans for review.
- FDC locations MUST be within 100' from a fire hydrant. FDC's MUST be front/road side of the structure. **IFC 912.3**
- The water main on the east side of building 12 MUST be increased to 8". **Novi City Ordinance #11-68(c)(1)c.**

CITY COUNCIL

Mayor
Bob Gatt

Mayor Pro Tem
Dave Staudt

Andrew Mutch

Laura Marie Casey

Kelly Breen

Ramesh Verma

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City Manager
Peter E. Auger

Director of Public Safety
Chief of Police
David E. Molloy

Director of EMS/Fire Operations
Jeffery R. Johnson

Assistant Chief of Police
Erick W. Zinser

Assistant Chief of Police
Scott R. Baetens

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

cityofnovi.org

- **ALL** water mains MUST be put on the plans for review.

Recommendation:
APPROVED WITH CONDITIONS

Sincerely,

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

cc: file

PROJECT NARRATIVE

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON BROTHERS HOMES

October 2nd, 2019

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

Re: PRO Site Plan Submittal Project Narrative
Sakura Novi & The Residences at Sakura Novi
Novi, MI

PROJECT OVERVIEW

Robert B. Aikens & Associates, LLC and Robertson Brothers Homes are pleased to submit a PRO Rezoning and Site Plan application for properties near Town Center Drive between Grand River Avenue and 11 Mile Road. The development team has been working with City staff to develop for the community ***Sakura Novi***, an Asian-themed, mixed-use development in the heart of downtown Novi on land owned by the City of Novi, land owned by Ecco Tool Co. and land owned by the Stoychoff's and M. Roberts.

The Anglin parcel, purchased in 2016 by the City of Novi, was identified in the 2016 Master Plan Update as one of three notable redevelopment sites in the City; and was deemed in the 2014 Town Center Area Study to be one of ten sub-areas in the Town Center Area. During 2016, leaders from the City of Novi and from Oakland County were contemplating the idea of an "Asian Village" to celebrate the cultural diversity for which Novi has come to be known. At the same time, the popular Japanese Grocery Market and long-term Novi institution, One World Market, expressed an interest in creating in Novi a new proto-type Asian Grocery Market and Food Hall. One World Market is a unit of True World Group, the largest distributor of fish to sushi restaurants in the United States. True World Group, along with the City and County, enlisted the services of Robert B. Aikens & Associates, LLC to bring to life this broad vision, now known as Sakura Novi. Anchored by the 25,000 sf Grocery Market / Food Hall, Sakura Novi will also include a carefully curated collection of Asian restaurants and retail uses, a grouping of distinctively appointed townhomes, along with other amenities intended to strengthen Novi's downtown core.

The development team, urged on from the start by members of City Council, extended the land acquisition East across parcels owned by Ecco Tool Co to reach to another parcel owned by the City of Novi. This effort was in order to incorporate up to 68 townhome-style apartments, and more fully realize the City's vision for a walkable, mixed-use facility. This portion of the development, called ***The Residences at Sakura Novi***, is led by Robertson Brothers Homes. The townhomes will range in size between 1100 and 1500 square feet. Over the past decades, Robertson Brothers has had success with this mix of townhomes and is confident the project will be well received in Novi. The Residences at Sakura Novi will be managed in the context of the wider Sakura Novi campus as an apartment community. Elevations of the homes have been attached for consideration. Phase 3 will be known as The Residences at Sakura Novi, East, and this will include an additional 52 residential units.

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON BROTHERS HOMES

Sakura Novi, a walkable mixed-use project, will feature the existing Anglin retention pond carefully reinvented as one of the primary site and community amenities. Understanding the City's stated enthusiasm for the potential of the pond as a community amenity, the developer has striven to resurrect this site and activate the pond as a feature, working in the context of the well-known difficulty with the soils throughout the site. Activation and integration will require a certain amount of building adjacent to the water feature.

With gardens as per Sakura Novi's Asian inspiration, the water feature will be surrounded by natural elements, including a walking path, cherry trees and other distinctive components. These green elements will carry through to a Common lawn in the residential site and through to the city-owned wetlands to the East of the site.

PLANNED REZONING OVERLAY

A Planned Rezoning Overlay zoning district is proposed for the site. The purpose of the PRO district is intended to establish a set-criteria for a given property based on the unique characteristics of the land. Specifically, the proposed project is unique in that, as per the 2016 Master Plan Update, it represents an opportunity to transform an area at the center of the City that has been identified by the City as a potential and desirable redevelopment area. The uniqueness of the site comes from the fact that it is largely unimproved and sits at the heart of downtown Novi.

The proposed use of the land will add an exciting and unique collection of pedestrian-friendly grocery, restaurant and retail uses, and will be integrated with existing and new residential developments, in a green and walkable environment that will open a great swath of Downtown Novi to the on-going development of a more dense, functional downtown core. The project's future residents will help provide a critical mass of customers that will drive the creation and further success of desired commercial activity in the entire district. The townhome units will seek to serve demand for the "missing middle" typology that communities struggle to provide.

PHASING

Sakura Novi is envisioned in 3 basic phases:

- Phase 1 will feature the 25,000 sf Japanese grocery market / food-hall created by True World Group , a restaurant and retail collection, and a 68-unit townhome apartment project. At the completion of Phase 1, the Phase 2 land that remains will be grassed development pads. The time-line for the development of Phase 1 is, at present, a function of meeting the conditions within the Purchase Agreement with the City of Novi. Once we identify the time-line for meeting the conditions within the PA, we will more accurately be able to estimate a Phase 1 project time-line. Once the City land is purchased by the developer, our estimated time-line for Grand Opening is approximately two years.

- The Phase 2 uses are being presented in the current submittal package as two extremes of a range of development options. The plans submitted detail a minimum density scenario seen as immediately viable by the development team, and also a maximum density scenario that has been contemplated with our traffic, parking and comparative development demand studies. The Phase 2 timing and uses are currently TBD, and will be fully dependent on market forces. Phase 2 of Sakura Novi anticipates the possibility of adding more residential units, hotel or senior living facility, office, and more retail and restaurants, among other potential uses. Language pertaining to Phase 2 options will be further refined during the preparation of the PRO Agreement.

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB ROBERTSON BROTHERS HOMES

- Phase 3, The Residences at Sakura Novi, East, is a residential project with 52 additional units directly east of the Phase 1 residential site.

ZONING

Sakura Novi consists of several parcels of land (#22-23-126-006, #22-23-126-011, #22-23-226-007, #22-23-226-008, #22-23-226-021 & #22-23-226-022) under contract with four separate owners totaling approximately 19 acres. The Anglin parcel, owned by the City, contains several vacant buildings that abut Grand River Avenue. These dilapidated structures will be removed to make way for the development. Ecco Tool Co has agreed to sell a portion of their raw land to accommodate the project, while keeping a portion of their site in order to continue to operate the family business.

The land is currently zoned OS-1, OSC and I-1. We are seeking to rezone these parcels to TC-1. The desired land uses for Sakura Novi as requested by Robert B. Aikens & Associates, LLC and Robertson Brothers Homes, as per the 2016 Master Plan Update and as per TC-1, include Retail businesses, Retail business service uses, Business establishments which perform services on the premises, Professional Services, Off-street parking lots, Restaurants, Offices, Outdoor public gathering places, Hotels, and Residential dwellings. All of these uses are included in the TC-1 classification. If appropriate opportunities present themselves, as part of Phase 2 a Special Land Use for the Sale of produce and seasonal plant materials outdoors and Brewpubs may also be sought.

If the land remains zoned as OS-1, OSC and I-1, we will not be able to create Sakura Novi. Sakura Novi and the creation of a walkable central core for Novi's downtown, rely on the lot density permitted as a part of the TC-1 Zoning classification. The basic setback parameters of the current classifications preclude the development of a more dense, walkable, appropriately scaled pedestrian environment. That is a core tenet of Sakura Novi. Phase 1 and possible Phase 2 land uses that will not be permitted if land remains OS-1, OSC and I-1 include Retail Businesses, Restaurants, Hotels, and Residential Buildings. In fact, the only allowable land uses under OS-1, OSC and I-1 featured in Phase 1 of Sakura Novi include Off-street parking lots and public gathering places. Possible Sakura Novi Phase 2 land uses that will be permitted include Retail business services, Business establishments which perform services on the premises, Professional Services, Off-street parking lots, Offices, and outdoor public gathering places.

The two parcels owned by Ecco Tool Co are currently zoned I-1. Ecco Tool Co. intends to retain approximately .9 acres of their land in order to continue to run the family tool and die shop. As per the provisional purchase agreement with Ecoo Tool Co, the land retained by Ecco Tool Co will be rezoned to TC-1. However, the land retained by Ecco Tool Co will need to become an accepted non-conforming use within the TC-1 district, so as to allow Ecco Tool Co to continue as a tool and die shop. The PRO will include the company's access for delivery trucks on the retained parcel; which will require cross access rights. A draft of a Cross Access Agreement is available upon request. The PRO will provide the Ecco Tool Co retained parcel with 12 parking spaces on the retained parcel or access to parking spaces on the non-retained property or on the Anglin property to make up any shortfall.

DUE DILIGENCE

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During Due diligence, the development team developed a better understanding of certain problems with the site. First, during the environmental evaluation, the pond was deemed a facility that will require environmental remediation. Second, the soils through the Anglin parcel have been identified through geo-technical research as unusually poor and loose. The City has expressed its willingness to partner on realizing their vision of the activation of the pond as a central amenity, first, by agreeing to make Brownfield Tax Credits a condition to close on the sale of the City-owned Anglin parcel; and, second, by supporting the creation of a Commercial Rehabilitation District on the site, and the issuance of certificates granting tax abatements for certain defined portions of the development.

WETLANDS

Onsite wetlands have been analyzed by Atwell, LLC as is provided with this submittal package. The pond to the West will function as a primary site feature as well as serve as the storm detention for the commercial portion of the project. There is a detention basin planned on the Eastern border, adjacent to the city retained retention wetland area that will also serve as storm detention for the residential portion and the Ecco parcel to remain in operation. Required wetland mitigation areas are anticipated to be developed as part of the same watershed, with final areas derived during the permitting process.

SECTION 7.13 2.B

Section 7.13 2.B. of the City of Novi Zoning Ordinance identifies conditions required as part of a PRO rezoning request, as follows:

> 1. The location, size, height or other measure for and/or of buildings, structures, improvements, setbacks, landscaping, buffers, design, architecture and other features shown on the PRO Plan.

The Sakura Novi development identifies the proposed setbacks and building sizes, Landscaping, design and other features on the proposed PRO plan submission package.

There are several deviations to be requested from the TC-1 Zoning District regulations, and there are several site specific reasons for this. The TC-1 classification matches recent classifications on adjacent properties, and is suitable for the Novi Downtown district development being proposed. The requested Zoning provides the greatest latitude to develop a walk-able, more dense level of varied occupancies suitable to this core neighborhood. Particular attention is being paid to the Town Center Area Study to create an inviting and connective pedestrian environment with this development, animated with not only dining options, shops and residences, but integrating the natural features of Novi's core in such a way as to delight the patrons and continue to entice people toward the core of this community. The deviations we are seeking pick up on suggestions as provided in the Town Center Area Study, and work together to provide the level of service expected by the residents of Novi and Oakland County.

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2. Specification of maximum density or intensity of development and/or use, expressed in terms fashioned for the particular development and/or use, for example, and in no respect by way of limitation, units per acre, maximum usable floor area, hours of operation, and the like.

Phase 1 of the 19 acre site will feature a 25,000 sf grocery market / food-hall and approximately 20,000 sf of restaurants and retail that will operate at normal business hours for grocery markets, restaurants and retail. The development will additionally include 68 residential units, which is approximately 4.4 units per acre across the entire site. Phase 2 uses will be dictated by market dynamics, and could include more residential units, a hotel, more restaurants and retail, and some professional office uses.

3. Preservation of natural resources and/or features.

The western water feature will be showcased at Sakura Novi as a defining amenity of the site, and the residential community will be situated adjacent to the city-owned retention basin/wetland on the eastern edge of the site.

4. Facilities to address drainage/water quality.

The project will provide for storm detention utilizing the pond in the western portion of the site, and, in the eastern residential portion of the site in accordance with Oakland County standards relating to the use.

5. Facilities to address traffic issues.

A traffic study and parking study has been completed by Bergmann Associates and is included in this submittal package.

6. Preservation of open space.

Open space will be provided as a part of Phase 1 with the water feature and the surrounding walkways on the western portion of the site, through extensive common areas running throughout the commercial and residential portions of the site, and with the wetland on the Eastern edge of the site.

7. A written understanding for permanent maintenance of natural resources, features, and/or facilities to address drainage/water quality, traffic, open space and/or other features or improvements; and, provision for authorization and finance of maintenance by or on behalf of the City in the event the property owner(s) fail(s) to timely perform after notice.

Property Owners shall have an obligation to maintain the Western pond, detention facilities, wetlands, landscaping, drives/parking areas, pursuant to a recorded agreement TBD that runs with the land, and that Property Owners will commit that there is a responsible party who will be in charge of the maintenance of these items. Further, the property owner(s) will enter into any type of storm water facilities management agreement

required by the City which obligates the property owner to maintain all detention facilities and gives the City a self-help right in the event they do not.

Property Owners will grant the City the right pursuant to a recorded agreement(s) TBD to give a notice if the Owner is not maintaining properly, and if the failure is not corrected in a reasonable time, then the City reserves the right to enter the site and perform the repair/maintenance and charge the Owner the cost (plus the City's admin charge), and if not paid, Property Owners will grant the City the right to place it on the tax roll.

8. Other provisions proposed by the applicant and approved by the City.

Refer to the proposed PRO development plan submission.

9. Signage, lighting, landscaping, building materials for the exterior of some or all structures.

Signage, lighting, landscaping, and building materials for the exterior of some or all structures will be in keeping with a contemporary Asian-inspired mixed-use community. Among other things, we are taking our cues from trends in design practiced by national and international food & beverage operators. Our intent is to create an environment amenable for said operators, as well as to create designs that will be unique to Sakura Novi, to Novi, and to Michigan. Our specific recommendations on achieving this are spelled out to the best of our abilities through our submission materials. Furthermore, our plans include development of higher tier possibilities for softscape and hardscape to be realized through partnership with the corporate community and regional institutions. We have already initiated a partnership with the STAMPS School of Art and Design at the University of Michigan to help source critical creative components.

10. Permissible uses of the property.

The requested land uses as per the 2016 Master Plan Update and as per TC-1 for the range of development outlined in the Phasing Plan may include Retail businesses, Retail business service uses, Business establishments which perform services on the premises, Professional Services, Off-street parking lots, Restaurants, Offices, Outdoor public gathering places, Hotels, and Residential dwellings. All of these uses are included in the TC-1 classification. A Special Land Use for the Sale of produce and seasonal plant materials outdoors and Brewpubs may also be sought.

LIST OF REQUESTED DEVIATIONS

Sakura Novi's List of requested deviations from TC-1 Ordinance standards is included here:

1. Per section 3.27.1.C, Deviation is being requested for reduction of Exterior side yard setback dimension of 50' to 10' for Building A, where adjacent to Zoning B-3 commercial property (Advance Auto). RBA believes maintaining the stipulated setback would serve no good purpose as the commercial retail use on the adjacent parcel is similar in use to the uses proposed in Building A and for all GRA accessed components of proposed development. If this deviation is not obtained, the development will suffer from a large swath of the prime frontage along GRA being unusable for building footprints and useful parking, and will be

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unable to accommodate the driving anchor tenant's requirements. Providing cohesively designed and integrated frontage along the GRA corridor, as opposed to fractured and separate, serves the intent of Novi's Master Plan.

2. Per section 3.1.26, Deviation is being requested for reduction of Exterior side yard parking setback dimension of 10' to 5' for the western parcel line near Grand River Avenue, adjacent to Zoning classification TC, a woodland preserve and green space preserve area (in perpetuity) directly adjacent. RBA believes the benefits presented by increasing the main western pedestrian project entrance sidewalk width and landscaping generosity greatly outweigh the value of additional landscaping provided against this natural, mature woodland preserve area. If this deviation is not obtained, the proposed development will provide a less significant public connection to the GRA/Main Street intersection and the adjacent city center developments, or unnecessarily need to reduce the proposed building footprints, reducing income and rendering the project un-viable. Providing cohesively designed and integrated pedestrian connections along the GRA corridor serves the intent of Novi's Master Plan.

3. Deviation per Section 11-216(d)(1) **removed** - ~~Deviation is being requested for 3 entrances from project onto Grand River Avenue, concurrent with the findings of the Traffic Report confirming this third easternmost entrance as proposed and where proposed will ease pressure on left eastbound turning movements out of site during peak times.~~

4. Per Section 3.6.2.M, a Deviation is being requested for reduction to 0' Wetland Setback to accommodate remediation process, development of feature landscaped retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin. Noted in Wetland Report. The deviation is essential to accommodate the environmental remediation process, the integration of the re-contoured and thematically planted perimeter banks, and to develop the central park-like pedestrian paths and water feature area accessible to Novi's public, designed to connect the existing Main Street area to the OSC development areas and hotels to the north. If this deviation is not obtained, creation of the public spaces and urban connectivity as envisioned in Novi's Master Plan will be far too consumptive of linear space for this particular site to be efficiently and effectively developed.

5. Per Section 3.1.26 - Deviation is being requested for existing and proposed side/front yard parking along 11 Mile Road. Existing occurs at Ecco Tool shop. Proposed occurs in two locations – see PRO plan. The deviation is essential to accommodate the existing conditions of an existing use to remain. If this deviation is not obtained, extensive modifications would need to be made for an unimproved, grandfathered use that is anticipated to be relocated in the near term.

6. Deviation per Section 5.5.3.B.ii.f **removed** - ~~Per Section 5.5.3.B.ii.f - Deviation is being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.~~

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7. As a component of the Maximum Build-out scenario, Per Section 5.5.3.B.ii.f - Deviation is being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.

8. As a component of the Maximum Build-out scenario, Per section 3.27.2.A.ii, Deviation is being requested for 11Mile buildings' frontages being less than 150'. Example: Building E currently contemplated as approximately 80'. Seeking height bonus as permitted for 6 level building E, with composition of uses as described/shown in chart on PRO plan. This deviation is essential when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent.

9. As a component of the Maximum Build-out scenario, Per section 3.27.1.f, Deviation is being requested for standardized Open Space requirements for Phase2. Open Space is defined in the ordinance thusly: *Open Space: An area of land that remains primarily undeveloped and in its natural state. For the purpose of this Ordinance, open space may include park lands and park facilities so long as they are provided as a part of an open space area.* There will no longer be ground on this site in its natural state. This standard is not conducive to achieving an effective development result when the goal is dense development where site sizes are limited (under 50 acres or so). This deviation is essential *for all projects* when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. *Phase1 has been designed to meet the city's ordinance, but Phase2 will need the deviation if density beyond townhomes is desired.*

10. Per Section 3.27.1.C - Deviation request is **removed** for 11Mile frontage building setback limits.

11. Per Section 3.1.26 - Deviation is being requested for parking area setback in NE corner of project along 11 Mile Rd., adjacent to Residential Bldg3. See PRO plan. This deviation is of a practical nature as it is used in conjunction with the dropping natural grade along 11Mile Road at the east end of the site. This deviation allows more residential units to have their primary exposure and uninterrupted views toward the natural area to the east, as opposed to being elevated significantly above grade and overlooking 11 Mile Road, clearly less desirable to the occupants, fitting with the City's Master Plan intent of integrating existing natural features into new developments. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration.

12. Per Non-Motorized Master Plan - Deviation request is **removed** along 11 Mile frontage – submission as proposed includes connection to existing bike path on north side of road (considered to be a Neighborhood Connector Route). ~~Per Section 3.27.1.I - Deviation is being requested for reduction in sidewalk width from 12.5' to 6', such that sidewalk as proposed can be combined with adjacent landscaping as added buffer for residential product to be used in conjunction with maximum permitted setback. This condition is proposed for the length of the 11Mile Road project frontage. See PRO Landscape Plans. This deviation is of a practical nature in anticipation of the true quantity of pedestrian activity at the perimeter of the proposed TC-1 district, and is consistent with Novi's Master Plan's intent. An existing bike path is located on the north side of 11Mile Road, meeting the needs of the City's Non-~~

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~~Motorized Master Plan. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration, which is consistent with the City's Master Plan.~~

13. Per Section 5.15 and 3.27.1.g – Deviation is requested for facade material exceptions included as part of the submittal, addressing comments received by city's architectural consultant. See PRO Plan Elevations. Also see included written Design Statements. The deviation is sought to accommodate the expectations of the international tenants and residents for distinctive enhancement and differentiation of this unique development destination project. This deviation allows the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, the significance of this unique, market specific development will be compromised. If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible.

14. Per Sections 3.27.1.H and Section 5.4 – Deviation is being requested for limited reductions in loading/service areas, and locations, as shown - See PRO plan and accompanying chart detail. Deviation is requested for loading areas as positioned. Screening will be provided for all trash/loading areas not facing a directly adjacent loading area. This deviation provides for sufficient tenant loading and trash services, and allows for the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, significantly larger service areas will need to be provided in obtrusive areas that will adversely affect pedestrian traffic, which is not consistent with the City's Master Plan.

15. Per Section 3.27.2.B – Deviation is being requested for prototype store relocation opportunity. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level. Tenant will have entrances on both permanent public building exposures, meeting the 125' maximum spacing criteria. See PRO plan. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, One World Market's development of a new prototype store and as the Asian Village anchor may be forced to relocate outside of Novi, which is not consistent with the City's Master Plan.

16. Deviation per Section 5.16.1 is being **removed** ~~for bicycle parking ratio on residential portion of overall project. Bicycle parking to be provided on Retail portion of project will exceed ordinance in Phase1 based on Parking Study recommendations for overall parking required.~~

17. Per Section 5.7.3.K – Deviation is being requested for site Illumination level variance for multiple walkway areas, and for TC-1 fixture style selection. Site walkway areas will vary below 0.2fc minimum standard on natural pathway around water feature. Site walkway areas in residential portion will vary below 0.2fc minimum standard. Parking area in residential area will fall below 0.2fc minimum standard. See revised PRO photometric plan. This deviation provides for sufficient nighttime illumination levels for the natural pedestrian path around the water feature, and for appropriate site illumination levels within the residential portions of the project. If this deviation is not obtained, the residential portions of the project will exist with an unnatural and undesirably high lighting level during the nighttime hours, which will be detrimental to their occupants and leasing ability, which is not consistent with the City's Master Plan.

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18. Per Chapter 28 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for TC-1 project tenant signage size standards – number and project signage types and shapes and areas calculations based on dual-language signage as part of authentic Asian Village. **Project requires dual-language signage for authentic presentation of international tenants and clientele expectations.** Many tenants will have both front (facing ROW) and rear (primary) entrances. Per 28-5.c.1.a, an increase of 200% over standards is required to accomplish the dual language signage. Per 28-5.c.1.b, (2) signs of equal permitted size are requested for each typical retail/restaurant tenant, as well, as most tenants will have pedestrian entrances on 2 separate facades. Per 28-5.c.1.d, (2) signs of equal permitted size are requested for each project interior retail/restaurant tenant (not fronting public streets), consistent with other project lease space, and permitted sign area needs to be calculated as per 28-5.c.1.a. Per 28-5.c.2.b, Signage style and type, as well as materials and illumination standards shall not adhere to the Sign Design and Review Manual for Novi TC-1 District. TC-1 specific standards were developed, and still reference, a single development project undertaken 20+ years prior. 28-5.e.1.a, an increase of permitted projecting sign area to match primary signage area allotted up to 72sf maximum, 28-5.e.2.a, an increase to 45sf of total area. The deviation is essential to accommodate the needs of the international tenants intended to provide their signage in both the characters of their native language along with the English translation of their names. If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

19. Chapter 28-10 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for removing prohibition of 28-10.a.3 string lights, exposed luminaire strip lights or neon tubes along building edges or other locations, 28-10.a.4 animated signs. These elements, video display screens and/or animated LED lighting systems as part of public entertainment feature opportunity, are crucial to an authentic Asian environmental experience. Certain components are anticipated as part of Phase2 development. The deviation is sought to accommodate the needs of the international corporate community to drive their endorsement and future sponsorship opportunities as the project evolves into its future phase(s). If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible.

20. Per Section 5.3.2 – Deviation is being requested for drive lane reduction in residential Phase1. See supplemental detail on Civil Sheet C-2.2. This deviation provides for sufficient traffic movement clearances to satisfy resident, service and emergency vehicle needs in the residential portions of the project, while enhancing the Mixed-Use vibrancy of the overall development. Sufficient clearance has been provided to lanes to accommodate emergency vehicle turning movements. If this deviation is not obtained, the residential portions of the project will have an inappropriate area allocated between units in the rear/service/alley space, which is not consistent with the City's Master Plan for developing density in this core district.

21. Per Section 3.27.1.C – Deviation is being requested for Phase 1 internal site buildings A and B that exceed permitted setback limit from Grand River Avenue, and for future proposed Phase 2 buildings with setback greater than 10' to 11 Mile Road. Phase 2 buildings will be accessed via internal drive lanes, similar to proposed residential layout for Phase 1. See P1.1. This deviation provides for the ability for any developer to generate density throughout a project of this land area in classification TC-1. If this deviation is not

obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

22. Per Section 3.27.1.i – Deviation is being requested for 11 Mile Road 6' sidewalk width as proposed – see PRO plan. The deviation is essential to provide sufficient landscaping material for the roadway screening for the uses proposed, while maintaining the maximum permitted TC-1 setback limit, and for connecting the natural features of the project to the adjacent land features. If this deviation is not obtained, creation of a beautiful and appropriately landscaped pedestrian thoroughfare will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

23. Per ordinance 18.283 section 5.5.3.A – Landscape Deviation is being requested for landscaping buffer shown. Proposed TC-1 zoning shall have a 6-8 ft ht berm or wall when adjacent to B3 zoning. Because the buffer area is only 12ft wide and the residents' living areas are on the 2nd & 3rd floors, we are proposing a continuous evergreen hedge to be maintained at 6' ht with densely planted deciduous canopy trees. A wall would serve no additional good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

24. Buffer between commercial/residential parking lot and MF building 9 – deviation removed as both uses are permitted uses within proposed TC-1 zoning.

25. Per ordinance 18.283 section 5.5.3.A proposed TC-1 zoning shall have a 10-15ft ht berm planted to achieve 80% opacity in winter and 90% opacity in summer. Because the distance from the face of the residential units to the property line is less than 30 ft. and has the following conditions:

    a. The current I-1 use operates during the day and there are no building openings on the east side facing the TC-1 residential to create noise.
    b. The I-1 parcel is proposed to be rezoned to TC-1 as a part of this project.
    c. The residential unit living areas are on the second and third floors.

    We are proposing a continuous evergreen hedge to be placed and maintained at 5' ht with densely planted upright canopy trees. A wall would serve no good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

26. Per ordinance 18.283 section 5.5.3.C – Parking Area Landscape Requirements - A Landscape Deviation is being requested for parking area landscaping. All parking area layouts have been re-designed to provide additional landscaping and have achieved a net gain of over 2,000 sf of additional interior green space. The size of the parking areas have been reduced so that we now provide the green space required for the parking area total sf on site. Our prior submission provided just over 50% of the requirement. We are requesting a deviation from providing additional landscape as in order to do so, we will have to reduce the large areas devoted to landscaping the west detention pond perimeter. The Town Center Area Study recommends the pond to be a focal point and that it could be used to host community events which we are providing. We believe this large and contiguous landscaped amenity provides a much greater

community benefit. If this deviation is not obtained, the proposed development will be required to provide even larger overall parking lot areas along Grand River Avenue, which is not consistent with the City's Master Plan.

27. Per ordinance 18.283 sections 5.5.3.D and 5.5.3.F - subdivision planting requirements – A Landscape Deviation is requested for foundation plantings and interior roadway canopy tree requirements in front of the building garages. We believe the area in front of the garages should be excluded similarly as driveways are excluded. In order to provide interior roadway canopy trees adjacent to the garages the residential layout would need to change to a more suburban layout which would undermine achieving the density conducive of the TC-1 zoning. The proposed landscape meets all other requirements and we believe the landscaping density of this compact TC-1 development far exceeds the typical amount of landscaping for multifamily developments. If this deviation is not obtained, the proposed development will not be able to provide the density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

28. Ecco Tool will remain as a part of this overall development, though its remaining parcel will be rezoned to TC-1 as a part of this redevelopment initiative. Ecco Tool will then be a non-conforming use until their operations cease. **We require a deviation for this non-conforming use. The** existing parcel occupant will be provided their own separate legal parcel as a division of their existing landholdings within the tracts. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, the proposed development will not be able to provide the amenities and density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

LIST OF PUBLIC BENEFITS

There are many standard and many unique public benefits to Sakura Novi.

1. **Public benefit**: Developers will dedicate the right-of-way and future right-of-way along 11 Mile Road and Grand River Avenue to the City of Novi.

2. **Public benefit**: Developers wish to grant an easement to the City of Novi in the South-East corner of the Sakura Novi site, abutting Grand River Avenue, for the City to fund/provide a "Welcome to Novi" sign. The 2016 Master Plan Update indicates a desire that the Anglin parcel be a gateway to Novi's Town Center. This signage is an opportunity to create a clear statement to this effect, and expand on the original Town Center Area Study's desire to communicate to drivers exclusively, by designing to communicate to all Novi visitors, becoming a pedestrian amenity as well. See C-2.1 for proposed City signage area.

3. **Public benefit**. This proposed neighborhood-scaled development, and necessary Zoning change, will update the suggested parcel zoning to be in line with the intent of the 2016 Master Plan, and permit creation of the desired mixed-use, pedestrian accessible commercial service and residential development being proposed.

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4. **Public benefit**: Space is being earmarked to accommodate structured parking in the Phase 2 development area, that could readily be utilized by a central parking agency or special assessment district in addition to and in coordination with the Developer's Phase 2 potential parking needs. This is a goal outlined as difficult to achieve in the Town Center Area Study.

5. **Public benefit**: Completing the redevelopment of the Anglin Parcel as a cohesive component of a walkable downtown. The Anglin parcel was cited in the 2016 Master Plan Update as one of the critical development opportunities in Novi, MI. A vision was created for a unique, well-designed, mixed-use facility different from anything else in Novi. Delivering a well-articulated plan that adheres to the vision outlined in the 2016 Master Plan is a public benefit.

6. **Public benefit**: Growing an important, existing Novi retailer, a stated objective of the 2016 Master Plan. One World Market, the well-regarded Japanese grocery market will build a new, large foot-print Asian Grocery-Market / Food Hall concept. True World Group, the largest distributor of fish to sushi restaurants in the United States, is investing in their market division through the expansion of their One World Market grocery store into a proto-type Asian Grocery Market / Food Hall. Historically, One World Market has served the large population of Japanese ex-patriots that cluster around Novi and work in the 270 Japanese auto companies and OEM suppliers arrayed from Novi to Ann Arbor. True World Group also operates Noble Fish in Clawson, widely regarded as offering the best sushi in Detroit; as well as the new White Wolf Japanese Patisserie.

7. **Public benefit**: Developer, with this proposed project, seeks to reinforce the overall vision as included in the 2014 Town Center Area Study:

   Development of the Town Center Study Area will create a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life and meet their needs for goods, services, housing, and entertainment.

   Critically, Sakura Novi is a ***unique*** development; the first of its kind in Michigan and possibly the Midwest. The success of One World Market, and their desire to expand, indicates the strength in the area of the large Asian population and is a testament to Novi's diversity. The development of the One World Market Superstore enables the development of an Asian inspired development. The developer was brought into the process by One World Market, the City of Novi and Oakland County to execute on this concept on the City-owned Anglin parcel. This type of development, exemplified by Diamond Jamboree in Irvine, CA, is popular across the West Coast, South Coast and East Coast. Such facilities strengthen the intellectual capital of these regions by bringing critical lifestyle amenities to the highly educated knowledge workers necessary to compete in technology-intensive industries such as the mobility and automobile industries. Sakura Novi will provide metropolitan Detroit and the State of Michigan with such a lifestyle amenity.

8. **Public benefit**: Sakura Novi, with its unique collection of Market, restaurants and retail, is anticipated to be an economic engine downtown Novi; generating approximately 60 construction jobs, and 170 permanent jobs. While it is too early to share specifics, Robert B. Aikens & Associates LLC is widely regarded as one of the region's premier leasing firms and retail operators. Among other achievements, the team has curated the retail and restaurant collection at the Village of Rochester Hills since it was built in 2002. The residents of Rochester Hills benefit from the impact driven by businesses including Whole Foods Market, P.F. Chang's, Kruse & Muer, Mitchell's Fish Market, Bravo, Jagged Fork, Chipotle, Sephora,

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Barnes & Noble, Lululemon Athletica, Pottery Barn, Williams-Sonoma, Evereve, Soft Surroundings, Woodhouse Day Spa, Toyology, and Banana Republic, among others.

9. **Public benefit**: The Residences at Sakura Novi will provide smaller footprint middle-market rate residential rental offerings in downtown. The proximity to office, restaurant and retail uses allows for alternative transportation options. The nearby Main Street Village project is a wait-listed residential community with a population that is approximately 60% Asian. The residents can walk to their Japanese Grocery Store, One World Market, and the families of ex-patriot professionals, whose language skills and driving skills might provide impediments to mobility, have found this feature to be an important draw. Uniquely, as the Japanese Grocery store migrates across Grand River Avenue onto a brand new Asian inspired campus, Sakura Novi is positioned to serve the residential needs of the large Asian community in Novi, as well as the many large corporations that sponsor many of these individuals and families.

10. **Public benefit**: Sakura Novi is anticipated to reinforce Novi's tax base beyond the project itself, as this project provides a unique opportunity to develop an important economic development engine. There are 270 Japanese, 55 Korean, and 50 Chinese automobile companies and OEM's around Novi. The development team seeks to create a platform that can foster partnerships amongst the City of Novi, cultural institutions and the corporate community. The development team is providing a beautiful softscape and hardscape environment for Sakura Novi; and is also developing a higher tier plan that upgrades the environment, through sponsorships and partnerships, with distinctly Asian amenities. For example, we are partnering with the STAMPS School of Art and Design at the University of Michigan and the Japan America Society to source a Japanese-themed illuminated applique that will be placed in a prominent location in a building over-looking Grand River Avenue. This is one example of the kinds of partnerships and applications that will benefit the public. Such work also seeks to facilitate deeper relationships between the City, regional institutions, and the corporate community, so as to open the opportunity for further economic development in Novi.

11. **Public benefit**: To provide a park-like environment around and including the forlorn pond on the Anglin parcel. Activation of the pond as a central community amenity as envisioned by the 2016 Master Plan Update. It is anticipated that the public at large would use the path areas around the water feature and throughout the site for pedestrian activity and commuting; access would not be limited to those that intend to visit specific tenants or uses of the development. The development team has invested heavily to ensure this feature's centrality. Soil conditions around the pond are weak, with pockets of peat and losoe soils throughout the area. Developer plans call for a small building on the edge of the pond, despite extraordinary site work costs estimated at over $1 mm. Without this building the pond might seem forlorn and abandoned. This building, along with landscaping and an engaging public walk, will activate the pond.

12. **Public benefit**: Fostering walkability and connectivity within an important corner at the heart of Novi's downtown. The "Sakura Novi" walking path will loop around the perimeter of the pond and proceed down a tree lined boulevard freckled with interesting stamped concrete patterns and several "pocket gardens" in key pedestrian locations, all connecting Grand River Avenue to the commercial development to a Commons at the center of the residential property.

13. **Public benefit**: Increase publicly accessible amenity quantities in downtown so as to energize areas beyond the Sakura Novi campus. We believe Sakura Novi can be a public-facing, walkable node, and that

this node can potentially serve to energize other areas in the Town Center core. On the South-West corner, Sakura Novi connects naturally to the sleepy Main Street development. As described, Sakura Novi creates a walkable environment internally featuring the Sakura Novi path that wraps the pond in the commercial development and proceeds through the residential district to the East. There is then an opportunity to create walkable connectivity to the City-owned lake to the East of the site; around a pastoral path to The Residences at Sakura Novi, East; thus integrating the Town Center district into a newly designed North-Eastern quadrant in anticipation of the long-anticipated completion of the Novi ring road – the Crescent Boulevard Eastern extension. None of these opportunities are activated without Sakura Novi.

14. **Public benefit**: Sakura Novi's design features, described in Architects' Design Statements, will set it apart and will help set Novi apart from other communities in Oakland County. The development team has strived for an authentic design within the context of Novi's historic ordinances. The team has aimed, to the best of its abilities, to create a bold, yet refined, aesthetic reminiscent of upscale shopping, dining and entertainment districts one may find today in places such as Osaka, Seoul, and Hong Kong.. We believe this distinctive style will reflect well on the diversity that has evolved organically over time in Novi, precipitated, in fact, by the extraordinary success of establishments including One World Market and the Sundai Michigan International Academy.

15. **Public benefit**: The existing TC-1 Sign Design and Review Manual is an outdated and restrictive document when considered with the existing signage ordinance. This document has arguably hindered leasing activity and desirability in current TC-1 zoned developments. Sakura Novi is pursuing a distinctive signage-criteria that will create a public benefit benchmark. The signage criteria will allow larger signs than per ordinance and allow for different materials, lighting, etc. than are permitted in the antiquated and inauthentic TC-1 package. The signage is meant to accommodate the needs of exciting restaurant and retail uses that will bring authenticity and substance to Sakura Novi's contemporary, cool environment. The signage is meant to enable Sakura Novi to utilize both English and Asian characters for the retail or restaurant uses, and still be legible given the speed of vehicular traffic along Grand River Avenue. The signage package is also meant to underscore that Sakura Novi is a cohesive, singular concept, a regional destination, and so help the development team to assemble in Novi an international blend of new and fresh merchant offerings.

LIST OF PROSPECTIVE PRO AGREEMENT CONDITIONS

Developer has started to draft a list of possible conditions, which will continue to evolve as the approval process continues:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads until such time that area is needed for Phase 2 uses to be developed.

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3. The maximum number of dwellings to be constructed in Phase 1 shall be 68.

4. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.

5. Woodland Tree Removals during phase 1 shall be approximately 101 trees, which shall require 197 replacement credits. Developer will plant a minimum of 82.5 credits on site. If mandated, all woodland replacement trees shall be permanently protected via a conservation easement or landscape easement. The remaining 114.5 credits not planted on-site will require a payment of $400 per credit to the City of Novi Tree Fund. Language governing Phase 2 uses to be included within PRO Agreement terms.

6. Proposed parking is being provided as per Parking Study recommendation. Future phase parking requirements will also be a function of shared parking analysis.

7. Tentative completion dates have been added to the Project Narrative, and submitted as part of the PRO package.

8. WETLANDS: Impacts to the wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement Conditions.

9. Deviations language and formatting has been modified to reflect the City's directive. The updated list has been submitted as part of the Narrative in the PRO package. All accepted deviations are to be included in PRO Agreement Conditions.
10. Future Phases beyond Phase 1 will require an optional deviation for Open Space standards to achieve maximum density – see Deviation request #9.

11. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions. The PRO Agreement Conditions will include the company's access for delivery trucks on the retained parcel; which will require cross access rights. The PRO will provide the Ecco Tool Co retained parcel with 12 parking spaces on the retained parcel or access to parking spaces on the non-retained property or on the Anglin property to make up any shortfall.

CONSULTANTS

The outside consultants involved with the project are as follows:

Engineering Consultant:

Jim Butler, PEA,
2430 Rochester Court, Troy, MI 48083
248-689-9090, Ext 1133

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& ASSOCIATES, L.L.C.

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Architecture Consultants:

Matt Niles, Wah Yee Associates (Commercial)
42400 Grand River Avenue, #200, Novi, MI 48375
248-489-9160

Brian Neeper, Brian Neeper Architecture P.C. (Residential)
630 North Old Woodward, Suite 203
248-259-1784

Landscape Consultant:

Sue Grissim, Grissim Metz Andriese Associates
300 E Cady St, Northville, MI 48167
248-347-7010, Ext 222

Traffic Consultant:

Timothy Likens, Bergmann
7050 West Saginaw Hwy, Suite 200, Lansing, MI, 48917
517-827-8693

Wetland Consultant:

Don Berninger, Atwell, LLC
311 North Main, Ann Arbor, MI 48104
734-994-4000

Sakura Novi, LLC is pleased to present this concept plan for PRO consideration by the City. We believe the development will ultimately become a point of pride for responsible development at the heart of a robust downtown Novi.

Please let me know if any additional information is required at this time.

Thank you.

Respectfully,

G. Scott Aikens, Ph.D.

COMMUNITY IMPACT STATEMENT

Robert B. Aikens
& ASSOCIATES, L.L.C.

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Sakura Way Community Impact Statement

1. **Expected annual number of police/ fire responses for the proposed development (can be based on statistics from similar developments);**

ANTICIPATED DEMANDS ON POLICE DEPARTMENT SERVICES

Based on the Police records for the year 2013 and the SEMCOG population estimate for the City of Novi for 2013 of 59,395 persons, the per capita response was one Police Department response for every 2.63 persons.

Commercial estimates provided by the City of Novi based on most recent year for similar size/type/zoned property on adjacent parcel.

For Phase 1 residential, based on an expected residential population of **170** persons (2.5 persons per household), it is estimated that **65** annual Police Department calls would be made from the residential project.

For Phase 1 commercial, based on the estimated proposed development uses and area, it is estimated that **62** annual Police Department calls would be made from the commercial project.

For Phase 2 total residential, based on an expected additional residential population of **120** persons (2.5 persons per household), it is estimated that **111** annual Police Department calls would be made from the residential project.

For Phase 2 total commercial, based on the estimated proposed development uses and area, it is estimated that **186** annual Police Department calls would be made from the commercial project.

ANTICIPATED DEMANDS ON FIRE DEPARTMENT SERVICES

After deducting a 30-percent factor for commercial, industrial, and office uses, the per capita response for the City of Novi during the year 2013, was 102.3 persons per Fire Department run.

Commercial estimates provided by the City of Novi based on most recent year for similar size/type/zoned property on adjacent parcel.

For Phase 1 residential, based on the estimated proposed development population of **170** persons, the total projected annual Fire Department responses is **2**.

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For Phase 1 commercial, based on the estimated proposed development uses and area, the total projected annual commercial Fire Department responses is **19**.

For Phase 2 total residential, based on an expected additional residential population of **120** persons, the total projected annual Fire Department responses is **3**.

For Phase 2 total commercial, based on the estimated proposed development uses and area, the total projected annual commercial Fire Department responses is **57**.

The project is located near Fire Station No. 1 at 42975 Grand River Avenue. Due to the proximity of the fire station, response time is expected to be only a few minutes.

2. **Anticipated number of employees (include both permanent and construction jobs on site);**

   Approximately 60 construction jobs will be generated during Phase 1, lasting approximately 18 months. Approximately 60 construction jobs will be generated during Phase 2, lasting approximately 24 months.

   Phase 1 of the commercial development will generate approximately 170 permanent jobs, and more temporary jobs. The residential development will generate approximately 2 permanent jobs. The number of permanent jobs generated by Phase 2 will range widely depending on whether uses are primarily residential or labor-intensive commercial uses.

3. **Statement regarding compliance with City Performance Standards (Section 2519 of the Zoning Ordinance);**

   Robert B. Aikens & Associates, LLC and Robertson Brothers Homes will meet or exceed all building code requirements relating to performance standards.

4. **Estimated number of sewer and water taps and information on peak hour demand and min/max operating pressures for water system;**

   The estimated number of sewer taps is 16 and the estimated number of water taps is 20 (separate water / fire taps for commercial buildings). Peak hour demand for sewer = 0.69 cfs. Peak hour demand for water = 357,000 gallons per day. At this stage of the process, we do not have an estimate for min/max operating pressures for water system.

5. **Relationship of the proposed development with surrounding uses;**

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Neighboring uses surrounding Sakura Way in the Town Center Area include the Novi Town Center green space on the western border of the site; the Hotel / Office District North of the site; the Ecco Tool Co machine shop, to be rezoned under the PRO and excepted as a non-conforming use, on the Northern border of the site abutting 11 Mile; a City owned wetland to the East of the site; commercial uses to the South of the site and abutting Grand River Avenue to the North including an Auto-Zone, an office building, and an commercial building; and a retail / office TC-1 development across Grand River Avenue to the South.

6. **Description of proposed land use;**

Sakura Novi, LLC is proposing during Phase 1 to include a 25,000 sf grocery store / food hall, 20,000 sf of restaurants and non-restaurant retail, and 68 townhome apartment units. In addition to the physical development, a water feature will be programmed surrounded by a walking path, gardens and Sakura trees, a public common area on the residential parcel, and a wetland area will be preserved on the eastern edge of the site.

7. **Description of the environmental factors and impacts addressing the following:**

a. Natural features on the site (e.g., unusual topography, habitat areas, wetlands, woodlands, historic trees, etc.

i. There is an unused, unmaintained pond that has developed wetland elements on the Western portion of the site. A prior owner of the Anglin parcel actively moved dirt around the site over many years resulting in a variety of materials and unsuitable soils across the site. There is a Wetland on the Eastern border of the site, abutting a city-owned and created storm retention wetland. There is a moderate grade change from the Western edge of the Anglin parcel down to the Eastern edge of the site, and a moderate decreasing grade change across the Anglin parcel from north to south.

b. Temporary and permanent impacts to natural features on the site;

i. The pond on the Western portion of the site will be maintained, will have its perimeter articulated and upgraded as a site amenity, and will be utilized for partial site storm detention with pre-treatment. A detention basin will be developed on the eastern limits of the site being developed, as storm surge storage with pre-treatment prior to release into the city common retention pond/wetland on the Eastern edge of the site. The development will mitigate a portion of the wetland on the Eastern edge of the site, but preserve a portion as permanent wetland preserve.

c. Manufacture, use or storage of any hazardous or toxic materials on the site including Environmental Protection Agency requirements and the need for a Pollution Incidence Prevention Plan (PIPP);

    i. Not required due to use.

d. Location, type, depth and contents of any existing or proposed underground storage tanks.

    i. One existing underground septic system will be removed, and that system user will be connected to city sewer. Otherwise, no underground storage tanks will be required due to use.

e. Environmental use and/or contamination history of the site (i.e., groundwater contamination, landfill, chemical spills, etc.);

    i. A Phase I for the site and a prior Phase 2 ESA for the Anglin parcel indicated that the pond is a facility and will require environmental remediation. Brownfield tax credits are a condition to close on the sale of the Anglin parcel as per the Provisional Purchase Agreement between the City of Novi and Sakura Novi, LLC. The Phase 1 and prior Phase 2 ESA indicated no further major recognized environmental conditions, with the exception of potential pesticides from historic orchards and the potential environmental impact of an underground septic tank that has historically served Ecco Tool Co. A Phase II ESA report is currently being prepared to further understand environmental impact of the septic tank. Results of this study show that there are no new issues.

f. Potential impacts to existing wildlife on site

    i. Any impact on existing wildlife will be temporary.

8. Description of the social impacts addressing the following:

a. Replacement or relocation of any existing uses or occupants on the site;

    i. Currently, the site is being used as storage for city seasonal equipment

b. Traffic impacts (information can come from any required Traffic Impact Study or statistics from other similar developments when a study is not required);

    i. A Traffic Impact Study is provided.

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c. Proposed site amenities (i.e., sidewalks, public parks, bicycle paths, etc.);

    i. The pond on the West-side of the property will be programmed as a garden-like green-way and will be designed with accessible pathways connecting the existing Main Street development and surrounding pedestrian traffic with the improved parcels to the north of 11Mile and all uses within the proposed development. Accessible walks will be provided, as well as bike parking and open space hardscape amenities.

d. Increases in the permanent population of the City as a result of the proposed development (specific number should be identified and statistics from similar developments can be used).

    i. The commercial development will cause negligible change. Similar residential developments have indicated that approximately 2.5 new residents can be expected from each townhome, respectively, as a result of the development.

WETLAND DELINEATION LETTER

&

WETLAND MITIGATION OPTIONS

ATWELL

ONE COMPANY.
INFINITE SOLUTIONS.

November 16, 2018

Mr. Scott Aikens
R.B. Aikens & Associates, LLC
350 N. Old Woodward, Ste. 300
Birmingham, MI 48009

Atwell, LLC Project No. 18003457

Re: Wetland Delineation Letter
Sakura Way
City of Novi, Oakland County, Michigan

Mr. Aikens:

R.B. Aikens & Associates, LLC (Client) contracted Atwell, LLC (Atwell) to conduct a wetland delineation for an approximately 16.8-acre area in Sections 14 and 23 of Novi Township (Township 01 North, Range 08 East), Oakland County, Michigan (hereinafter referred to as "Site") to support a proposed development project. The Site is located in a highly developed area on the eastern side of Town Center Drive, between 11 Mile Road and Grand River Ave. Directly east of the Site is a pond, wooded areas, and commercial buildings. The Site itself is diverse, containing a residential home, commercial buildings, a gravel service road, maintained lawn, grassy areas, a wooded hedgerow, a woodlot, wetlands, and a pond. Refer to the enclosed *Site Location Map*.

The purpose of the wetland determination and delineation was to determine if wetlands, watercourses, and/or bodies of water are present on the Site and, if found, to establish whether they fall under the jurisdiction of the Michigan Department of Environmental Quality (MDEQ) by Part 303, Wetlands Protection; Part 301, Inland Lakes and Streams; or Part 31, Water Resources Protection, of the *Natural Resources and Environmental Protection Act, 1994 PA 451* (NREPA), as amended; and/or local ordinances.

The City of Novi (city) also regulates wetlands and watercourses under Chapter 12, Article V – Wetlands and Watercourse Protection, of the Novi Code of Ordinances. The City of Novi regulates wetlands that are: 1) contiguous to a lake, pond, river or stream; 2) two (2) acres in size or larger; and/or 3) less than two (2) acres in size but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Subsection 12-174(b) states that all noncontiguous wetland areas of less than two (2) acres which appear on the City's wetlands inventory map, or are otherwise identified during a field inspection by the City, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the City (City of Novi 2015b) . Additionally, the City of Novi requires a setback of twenty-five (25) feet from the boundary of a wetland and twenty-five (25) feet from the ordinary high water mark of a watercourse (City of Novi 2015a).

In addition, Atwell reviewed the following data for any ecological and environmental constraints: aerial photography, U.S. Geological Survey (USGS) 7.5-Minute Topographic Maps, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Maps, Flood Insurance Rate Maps (FIRMs) provided by the Federal Emergency Management Agency (FEMA), and soil data from the Natural Resources Conservation Service (NRCS). A review of the wetland delineation site visit conducted on October 24, 2018 is summarized below.

Site Setting and Characteristics

A review of aerial photography and a site visit were conducted to characterize the Site and surrounding area. The surrounding landscape is highly developed, consisting of a mix of residential and commercial development, ponds, wetlands, and isolated forested areas. The Site itself is diverse, containing a residential home, commercial buildings, a gravel service road, maintained lawn, grassy areas, a wooded hedgerow, a woodlot, wetlands, and a pond. The western portion of the Site is primarily maintained lawn with grassy areas. It is currently being used by the City of Novi Field Operations Division to store equipment and vehicles. Within the western portion of the Site also exists an abandoned car wash, a commercial building, and a residential home. The eastern portion of the Site is primarily wooded with another commercial building. Common trees in the eastern portion of the Site include silver maple (*Acer saccharinum*), eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), box elder maple (*Acer negundo*), black locust (*Robinia pseudoacacia*), and common buckthorn (*Rhamnus cathartica*). Brush hogging activities had recently been performed within the woodlot before the site visit. Shrubby or herbaceous plants found on-site include common buckthorn, Eurasian honeysuckle (*Lonicera spp.*), heath aster (*Symphyotrichum ericoides*), frost aster (*Symphyotrichum pilosum*), Canada goldenrod (*Solidago altissima*), giant goldenrod (*Solidago gigantea*), chickory (*Cichorium intybus*), red clover (*Trifolium pratense*), Fuller's teasel (*Dipsacus fullonum*), and common reed (*Phragmites australis*). The Site is relatively flat, but gradually decreases in elevation from west to east. The highest point within the Site is in the northwest corner.

Wetland Delineation

The wetland delineation was performed in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (USACE 2012). The delineation of any wetland depends on three basic parameters. These parameters are: 1) the presence of hydrophytic vegetation (plants adapted to living in saturated soils), 2) hydric soils (distinctive soil types that develop under saturated conditions), and 3) wetland hydrology (the presence of water at or near the surface for a specific period of time). The above parameters are virtually always inter-related and present in wetland systems.

In Michigan, wetlands are regulated by the MDEQ under Part 303, Wetlands Protection, of the NREPA. A wetland is considered regulated by the MDEQ if it is five (5) acres in size or larger, and/or if it is connected to or located within 500 feet of a lake, pond, river, or stream. Watercourses are regulated by the MDEQ under Part 301, Inland Lake or Streams, of the NREPA, if the body of water contains definite banks, a bed, and visible evidence of continued flow or continued occurrence of water.

Atwell conducted a wetland determination and delineation for the Site on October 24, 2018 and identified four (4) wetlands (Wetlands 1-4) on the Site, totaling approximately 2.81 acres. Atwell did not identify any watercourses on the Site. Please refer to the enclosed *Wetland Location Map* for

information and locations of the on-site wetlands or pond. Refer to the *Photographic Log* and *Wetland Data Forms* for site conditions and physical characteristics.

Pond 1 is an open water feature located in the western portion of the Site. The water is clear and submersed aquatic vegetation is visible from shore. It appears the average depth throughout the limnetic zone (open water) is greater than five (5) feet. The surface acreage of the pond is greater than 1 acre; therefore Pond 1 is likely regulated by the MDEQ and the City of Novi.

Wetlands 1 is a small isolated Palustrine Emergent (PEM) wetland located in a depression of the grassy area within the northwest portion of the Site. Hydrological indicators include algal mats and geomorphic position. Wetland vegetation includes grass-leaved goldenrod (*Euthamia gramlnifolia*; FACW), yellow nutsedge (*Cyperus esculentus*; FACW), reed canary grass (*Phalaris arundinacea*; FACW), and sandbar willow (*Salix interior*; FACW) saplings. These species have a wetland indicator status of facultative wetland (FACW) indicating that they typically occur in wetlands under natural conditions. Wetland 1 likely receives water from precipitation and on-site runoff, resulting in a seasonally saturated water regime. Wetland 1 is isolated and less than 5 acres in size; therefore Wetland 1 is likely non-regulated by the MDEQ and potentially regulated by the City of Novi.

Wetland 2 is a PEM wetland containing an open water area, located in the western portion of the Site. Hydrological indicators include saturated soils and geomorphic position. Wetland vegetation includes common cattail (*Typha latifolia*; OBL), narrow leaf cattail (*Typha angustifolia*; OBL), and common reed (FACW). These species have a wetland indicator status of FACW or obligate (OBL), indicating that they typically occur in wetlands or almost always occur in wetlands under natural conditions. Wetland 2 likely receives water from precipitation, on-site runoff, and overflow from the open water area, resulting in a permanently saturated to seasonally inundated water regime. Wetland 2 is isolated and less than 5 acres in size; therefore Wetland 2 is likely non-regulated by the MDEQ and potentially regulated by the City of Novi.

Wetland 3 is a small PEM wetland within a constructed ditch in the southwest corner of the Site. The ditch is adjacent, but not contiguous with the on-site pond. Hydrological indicators include surface water up to approximately six (6) inches and geomorphic position. Wetland vegetation is exclusively common reed. Wetland 3 likely receives water from precipitation and on-site runoff, resulting in a permanently saturated to seasonally inundated water regime. The on-site pond observed to the northeast is located less than 500 feet from Wetland 3 is isolated and less than 5 acres in size; therefore Wetland 3 is likely non-regulated by the MDEQ and potentially regulated by the City of Novi.

Wetlands 4 is a large PEM/Palustrine Scrub-Shrub (PSS) wetland located in the eastern portion of the Site. This wetland extends off-site and is contiguous with another off-site pond. Hydrological indicators include saturated soils, surface water up to approximately three (3) inches, algal mats, and geomorphic position. Wetland scrub-shrub vegetation includes common buckthorn (FAC) and silky dogwood (*Cornus amomum*; FACW). Common herbaceous vegetation includes common cattail, sensitive fern (*Onoclea sensibilis*; FACW), grass-leaved goldenrod, purple loosestrife (*Lythrum salicaria*; OBL), and fringed willow herb (*Epilobium ciliatum*; FACW). These species have a wetland indicator status ranging from facultative (FAC) to OBL indicating that they are either equally likely to occur in wetlands or non-wetlands, usually occur in wetlands, or almost always occur in wetlands under natural conditions. Wetland 4 likely receives water from precipitation, on-site runoff, and overflow from the off-site pond, resulting in a

permanently saturated to seasonally inundated water regime. Wetland 4 is contiguous with the off-site pond; therefore Wetland 4 is likely regulated by the MDEQ and the City of Novi.

According to the U.S. Department of Agriculture (USDA) NRCS Web Soil Survey, the soils contained within the Site have been mapped as Marlette sandy loam, 1 to 6 percent slopes (10B) and Capac sandy loam, 0 to 4 percent slopes (11B), both of which are considered hydric soils. The entire Site is classified as having hydric soils. Hydric soils are conducive to the growth and regeneration of hydrophytic vegetation by their ability to hold water for extended periods of time (USDA-NRCS 2010).

FEMA FIRMs were reviewed to determine if portions of the Site are mapped as floodplains, floodways, or other flood prone areas. These maps record the following data: 100-year (1% chance of annual flooding) and 500-year (0.2% annual chance of flooding) floodplains, the height of the base flood elevation, and the risk to premium areas developed across a floodplain. FEMA FIRM number 26125C0627F revealed that the Site does not contain a mapped 100-year floodplain. Atwell did not identify any watercourses on the Site. Therefore, it is Atwell's professional opinion that the Site likely does not contain state regulated floodplains under Part 31 of NREPA.

Conclusions and Recommendations

In conclusion, based on the desktop review of online databases and a site visit, the Site contains four (4) wetlands (Wetlands 1-4) and no watercourses. It is Atwell's professional opinion that one (1) of the delineated wetlands (Wetland 4) within the Site appear to meet the requirements of Part 303, Wetlands Protection, of NREPA. Therefore, Wetland 4 should be considered regulated by the MDEQ. Additionally, all four (4) wetlands are likely considered regulated by the City of Novi. FEMA FIRM number 26125C0627F revealed there are no mapped 100-year floodplains on the Site. Atwell did not identify any watercourses on the Site. Therefore, it is Atwell's professional opinion that the Site likely does not contain state regulated floodplain under Part 31 of NREPA.

A permit is required by the MDEQ for any proposed work (e.g., filling, dredging, construction, draining, and/or other development) that takes place within the boundaries of a regulated wetland, watercourse, or floodplain. Although most construction activities that take place outside of these boundaries do not require a permit from the MDEQ, the MDEQ has the final authority on the extent of regulated wetlands, lakes, streams, ponds, and floodplains in the State of Michigan. Additionally, a wetland use permit from the City of Novi is required for any work (e.g., filling, dredging, structures, construction, etc.) within a wetland or watercourse that is considered regulated by the City of Novi. Additionally, the City of Novi requires a setback of twenty-five (25) feet from the boundary of a wetland and twenty-five (25) feet from the ordinary high water mark of a watercourse (City of Novi 2015a).

We appreciate the opportunity to be of service to you on this project. Should you have any questions, please contact us at (248) 447-2000.

Sincerely,

ATWELL, LLC

Ernest Schenk
Environmental Technician
Environmental Services Group

Don Berninger
Team Leader
Environmental Services Group

Enclosures: Site Location Map
Wetland Location Map
Photographic Log
Wetland Data Forms

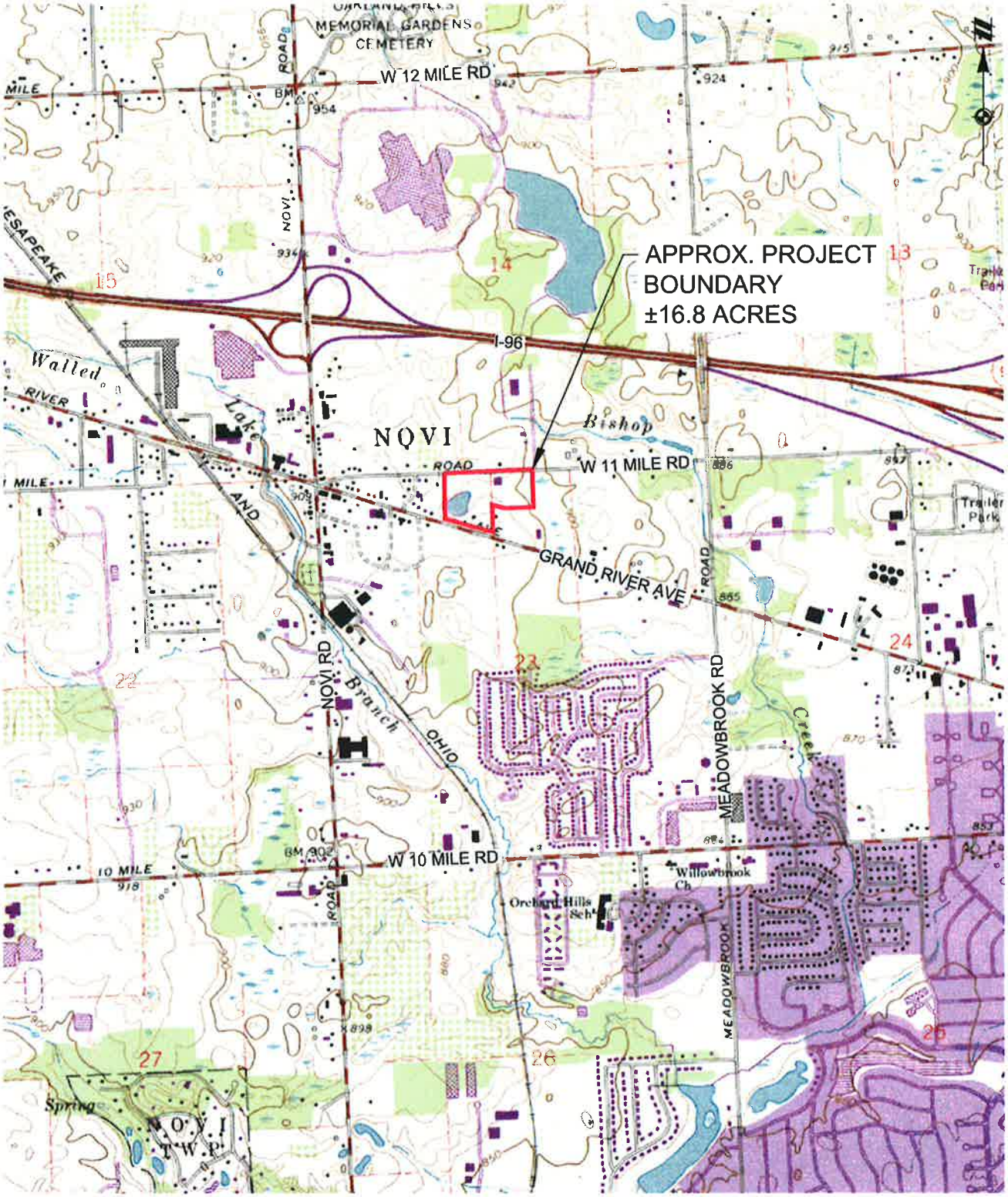
REFERENCES

City of Novi. 2015a. *City of Novi Zoning Ordinance*. http://www.cityofnovi.org/City-Services/Community-Development/Codes,-Ordinances-and-Master-Plan/ZoningOrdinance.aspx.

———. 2015b. *City of Novi Code of Ordinances*. https://www.municode.com/library/mi/novi/codes/code_of_ordinances.

USACE. 2012. "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)." ERDC/ EL TR-12-1. U.S. Army Engineer Research and Development Center. http://www.usace.army.mil/missions/civilworks/regulatoryprogramandpermits/reg_supp.aspx.

USDA-NRCS. 2010. "Field Indicators of Hydric Soils in the United States (Version 7.0)." http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1046970.pdf.



LEGEND

APPROX. PROJECT BOUNDARY (±16.8 AC)

ATWELL
866.850.4200 www.atwell-group.com
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MI 48076
248.447-2000

SAKURA WAY
SITE LOCATION MAP

SCALE 0 1000 2000
1" = 2000 FEET

SECTIONS: 14, 23	TWP: NOVI
TOWN,RANGE: T01N, R08E	COUNTY: OAKLAND

JOB: 18003457
DATE: OCTOBER 31, 2018

SHEET NO.
01

NOTE: THIS ILLUSTRATION IS AN APPROXIMATE DEPICTION OF THE WETLANDS AND POND THAT APPEAR TO BE LOCATED ON THE SUBJECT PROPERTY AS DELINEATED BY ATWELL ON OCTOBER 24, 2018. THE EGLE HAS THE FINAL AUTHORITY ON THE EXTENT OF REGULATED WETLANDS, LAKES, AND STREAMS IN THE STATE OF MICHIGAN.

ALL WETLANDS AND POND FEATURES ON-SITE ARE LIKELY REGULATED BY THE CITY OF NOVI UNDER CHAPTER 12, ARTICLE V - WETLANDS AND WATERCOURSE PROTECTION, OF THE NOVI CODE OF ORDINANCES

LEGEND

- SITE (±16.8 ACRES)
- EXISTING WETLAND
- OPEN WATER AREA

ATWELL
866.850.4200 www.atwell-group.com
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MI 48076
248.447.2000

SAKURA WAY
WETLAND LOCATION MAP

SCALE 1" = 200 FEET 0 100 200

SECTIONS: 14, 23	CITY OF NOVI
TOWN, RANGE: T01N, R08E	COUNTY: OAKLAND

JOB: 18003457
DATE: NOVEMBER 16, 2018

SHEET NO. 01

PHOTOGRAPHIC LOG

Photo # 1	
Date: 10/24/2018	
Feature: Grassy Area	
Direction: North	
Description: A grassy area within the northwest portion of the Site.	

Photo # 2	
Date: 10/24/2018	
Feature: Gravel Access Road	
Direction: South	
Description: A representative photo of the gravel access road that traverses the western portion of the Site.	

PHOTOGRAPHIC LOG

Photo # 3	
Date: 10/24/2018	
Feature: Abandoned Car Wash	
Direction: South	
Description: One of the four existing buildings within the Site.	

Photo # 4	
Date: 10/24/2018	
Feature: Woodlot	
Direction: East	
Description: A representative photo of the upland woodlot within the eastern portion of the Site.	

PHOTOGRAPHIC LOG

Photo # 5	
Date: 10/24/2018	
Feature: Wetland 1	
Direction: West	
Description: Wetland 1, a small emergent wetland within the northwest portion of the Site.	

Photo # 6	
Date: 10/24/2018	
Feature: Wetland 2	
Direction: West	
Description: Wetland 2, an emergent wetland fringe surrounding Pond 1 within in the western portion of the Site.	

PHOTOGRAPHIC LOG

Photo # 7
Date: 10/24/2018
Feature: Wetland 3
Direction: North
Description: Wetland 3, an emergent wetland within a constructed ditch in the southwestern corner of the Site.

Photo # 8
Date: 10/24/2018
Feature: Wetland 4
Direction: South
Description: Wetland 4, an emergent/scrub-shrub wetland within the eastern portion of the Site.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sakura Way City/County: Novi, Oakland Sampling Date: 10/24/2018

Applicant/Owner: Aikens State: MI Sampling Point: WL1

Investigator(s): E. Schenk, Atwell LLC Section, Township, Range: 23, 1N, 8E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 0-2

Subregion (LRR or MLRA): LRR K Lat: 42°28'51.54"N Long: 83°28'1.39"W Datum: WGS84

Soil Map Unit Name: Marlette sandy loam, 1 to 6 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 1

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): ____

Water Table Present? Yes ____ No ____ Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No ____ Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WL1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1. *Salix interior*	30	Yes	FACW
2. *Solidago altissima*	20	Yes	FACU
3. *Euthamia graminifolia*	20	Yes	FAC
4. *Cyperus esculentus*	10	No	FACW
5. *Phalaris arundinacea*	10	No	FACW
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	50	x 2 =	100
FAC species	20	x 3 =	60
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	90 (A)		240 (B)

Prevalence Index = B/A = 2.67

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _X_ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WL1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10Y 4/2		10YR 7/6	30			Loamy/Clayey	silt-loam
4-12	10Y 4/1			10			Loamy/Clayey	silt-loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sakura Way City/County: Novi, Oakland Sampling Date: 10/24/2018

Applicant/Owner: Aikens State: MI Sampling Point: WL2

Investigator(s): E. Schenk, Atwell LLC Section, Township, Range: 23, 1N, 8E

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave Slope %: 5-10

Subregion (LRR or MLRA): LRR K Lat: 42°28'49.46"N Long: 83°28'6.38"W Datum: WGS84

Soil Map Unit Name: Marlette sandy loam, 1 to 6 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 2

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No ____	Depth (inches): ____
Water Table Present?	Yes ____	No ____	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WL2

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1. *Phragmites australis*	50	Yes	FACW
2. *Typha angustifolia*	20	Yes	OBL
3. *Typha latifolia*	10	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	50	x 2 =	100
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		130 (B)

Prevalence Index = B/A = 1.63

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

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Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _X_ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WL2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10Y 4/2		10YR 7/6	30			Loamy/Clayey	silt-loam
4-12	10Y 4/1			10			Loamy/Clayey	silt-loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sakura Way City/County: Novi, Oakland Sampling Date: 10/24/2018

Applicant/Owner: Aikens State: MI Sampling Point: WL3

Investigator(s): E. Schenk, Atwell LLC Section, Township, Range: 23, 1N, 8E

Landform (hillside, terrace, etc.): Constructed Ditch Local relief (concave, convex, none): Concave Slope %: 10-20

Subregion (LRR or MLRA): LRR K Lat: 42°28'47.26"N Long: 83°28'8.17"W Datum: WGS84

Soil Map Unit Name: Marlette sandy loam, 1 to 6 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 3

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 6
Water Table Present?	Yes ____	No ____	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No ____	Depth (inches): ____

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: WL3

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size:)			
1. *Phragmites australis*	80	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		160 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

_X_ 2 - Dominance Test is >50%

_X_ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _X_ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WL3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10Y 4/2		10YR 7/6	30			Loamy/Clayey	silt-loam
4-12	10Y 4/1			10			Loamy/Clayey	silt-loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Sakura Way City/County: Novi, Oakland Sampling Date: 10/24/2018

Applicant/Owner: Aikens State: MI Sampling Point: WL4

Investigator(s): E. Schenk, Atwell LLC Section, Township, Range: 23, 1N, 8E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope %: 2-4

Subregion (LRR or MLRA): LRR K Lat: 42°28'49.25"N Long: 83°27'53.29"W Datum: WGS84

Soil Map Unit Name: Capac sandy loam, 0 to 4 percent slopes NWI classification: PSS/PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: Wetland 4

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- X Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 3
Water Table Present?	Yes ____	No ____	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: WL4

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharinum*	2	No	FACW
2.			
3.			
4.			
5.			
6.			
7.			
	2	=Total Cover	
Sapling/Shrub Stratum (Plot size:)			
1. *Rhamnus cathartica*	30	Yes	FAC
2. *Cornus amomum*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	40	=Total Cover	
Herb Stratum (Plot size:)			
1. *Typha latifolia*	10	Yes	OBL
2. *Onoclea sensibilis*	15	Yes	FACW
3. *Euthamia graminifolia*	5	No	FAC
4. *Lythrum salicaria*	5	No	OBL
5. *Epilobium leptophyllum*	2	No	OBL
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	37	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	17	x 1 =	17
FACW species	27	x 2 =	54
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	79 (A)		176 (B)

Prevalence Index = B/A = 2.23

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point WL4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 2/1						Mucky Loam/Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- X Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
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- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

ATWELL

CONSULTING. ENGINEERING. CONSTRUCTION.

October 2, 2019

Lindsey Bell
City of Novi - Planner
Address Line 1
Address Line 2

RE: Sakura Novi Wetland Mitigation Options
Atwell Project Number: **18003457**

Dear Ms. Bell,

The proposed Sakura Novi project currently proposes to impact 1.67 acres of emergent wetland. Of this acreage, 0.90 is anticipated to be EGLE regulated with the remaining 0.77 acres as non-EGLE regulated. The Applicant is committed to satisfy the City of Novi's wetland ordinance (*Chapter 12 – Drainage and Flood Damage Prevention, Article V. – Wetlands and Watercourse Protection, Division 2. – Use Permit, Section 12-176. Mitigation)*. Currently, the Applicant is considering two different mitigation options to achieve this goal. However, as the Project progresses, additional mitigation options may be considered.

Option 1
The applicant may create 0.9 acres of emergent wetlands on parcel 22-23-226-021 to the east of the proposed Sakura Novi Project and 0.5 acres of emergent wetlands on parcel 22-23-226-042 currently owned by the City of Novi. The current available acreage on parcel 22-23-226-042 is large enough to also support the future mitigation needs of the City for the Fountain Park Drive road extension Project. Refer to the attached map for a detail showing the approximate available space for wetland mitigation on 22-23-226-042 and the anticipated future City of Novi wetland impacts. This 1.4 acres is designed to offset the EGLE regulated 0.90 acres impact at a mitigation ratio of 1.5 to 1. The remaining 1.2 acre of wetland mitigation required to offset the 0.77 acres of City regulated wetlands at an approximate 4 to 1 ratio is proposed on parcel 22-17-101-006 through preservation of existing wetlands. Currently, wetlands on adjoining parcels (22-17-101-032 and 22-17-101-012) have conservation easements on the existing wetland complexes. The Applicant proposes to put approximately 4 acres of existing wetland under conservation easement which would create one large contiguous protect wetland complex under protection in perpetuity. Additionally, the surrounding 5 acres of upland could be put under conservation easement to afford further protection and natural habitat within the City of Novi.

Option 2
The Applicant is proposing the same mitigation strategy as Option 1 for the EGLE mitigation requirements. This 1.4 acres is designed to offset the EGLE regulated 0.90 acres impact at a mitigation ratio of 1.5 to 1. In order to mitigate for the remaining 0.77 acres of City regulated wetland impact, the Applicant proposes to initiate a wetland mitigation fund for the City of Novi due to the lack of available space for wetland mitigation within the City limits. This strategy is intended to mimic the existing City of Novi woodland mitigation fund.

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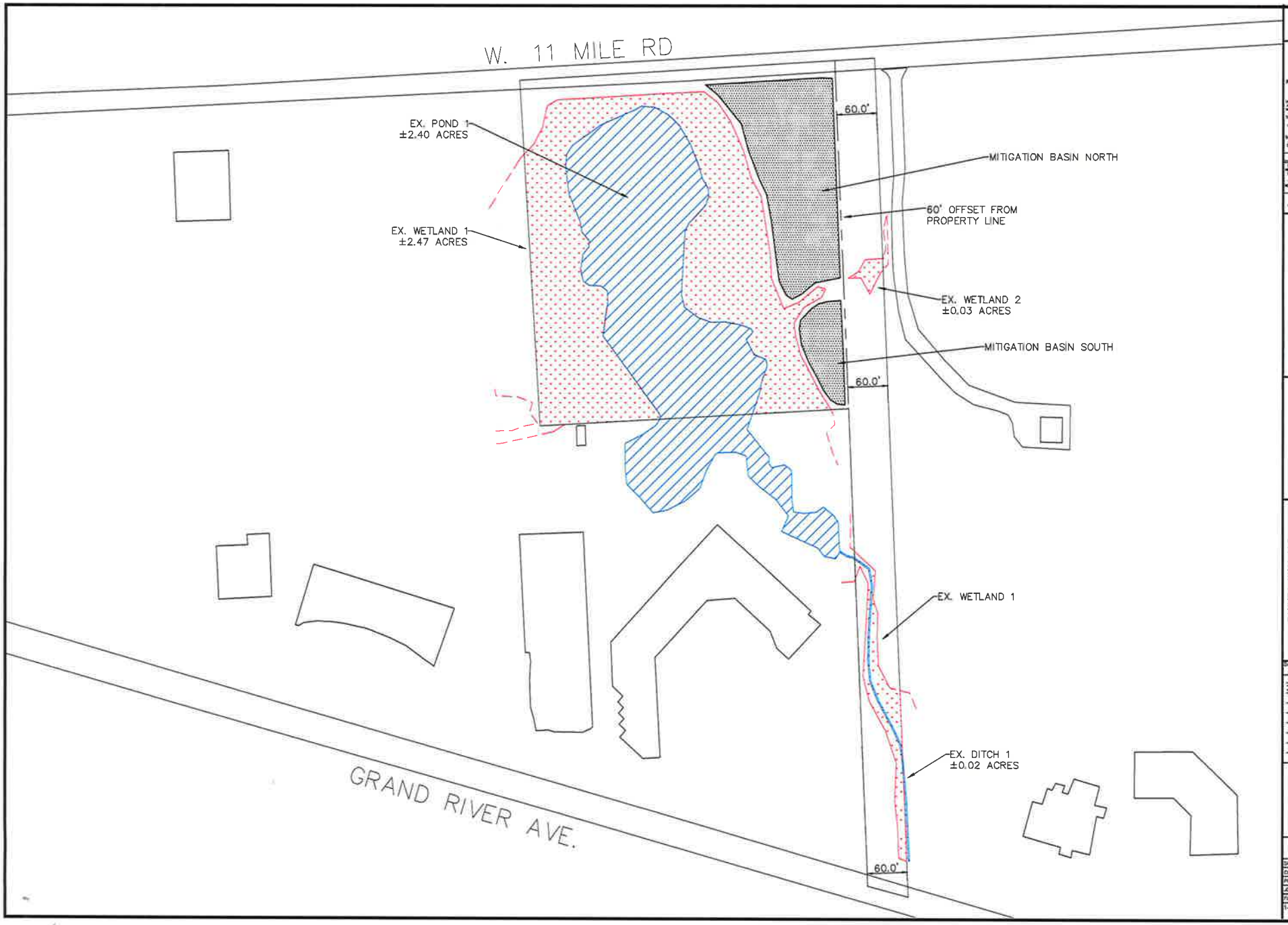

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NOVI
OAKLAND, MI

SAKURA WAY, LLC
MITIGATION PARCEL
WETLAND DELINEATION

DATE
7 JANUARY, 2019
REVISIONS/SUBMITTALS

SCALE 1"=60'
DRAWN BY: MH
CHECKED BY: DB
PROJECT MANAGER: DB
JOB # 180040115
FILE CODE: -
SHEET NO. 1.1

TRAFFIC IMPACT STUDY

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

TECHNICAL MEMORANDUM

To:	**Mr. Scott Aikens** **Robert B Aikens & Associates, LLC**	**Re:**	**Sakura Way – City of Novi, MI** **Traffic Impact Study Addendum**
From:	**Steven J. Russo, PE** **Transportation Engineer**	**Date:**	**September 24, 2019**

This memorandum is intended as an addendum to the original Traffic Impact Study (TIS) dated June, 2019 for the proposed Sakura Way development in the City of Novi, Oakland County, Michigan. A Trip Generation Memorandum issued by Bergmann on July 25th, 2019 is also referenced herein. The project site is located in the northeast quadrant of the Grand River Avenue & Main Street / Town Center Drive intersection. Overall site development plans include construction in two phases for an approximately 300,000 square foot (SF) mixed-use community featuring multifamily residential, office, retail, restaurant, spa, and hotel uses.

This addendum and the associated analyses have been completed in response to a phase two development alternative which would be comprised of 70 multi-family dwelling units, in lieu of proposed commercial space. Additionally, Bergmann has come to understand that a third phase including 52 residential units on the existing vacant parcel directly east of the originally proposed Sakura Way development has been incorporated into the project and planned rezoning overlay (PRO).

The data and methodologies of the original TIS were implemented for the addendum analyses, except as specifically indicated herein. In order to address the items outlined above, the following items have been completed, as detailed in subsequent sections of this memorandum:

1. Trip generation forecast and comparison for the lower density phase two alternative.
2. Revised trip generation comparison between the maximum density allowed under existing zoning versus the proposed development program with the phase three residential parcel.
3. Capacity analysis at the proposed phase three residential site driveway.
4. Right turn lane warrant analysis at the proposed phase three residential site driveway in accordance with City standards.

PHASE TWO TRIP GENERATION COMPARISION

The proposed development plans include two (2) phase two development alternatives for the project. The first alternative as outlined in the original TIS includes a hotel, spa, and mix of retail, restaurant, residential, and office uses, while the second alternative would be comprised of 70 multi-family dwelling units only. As the secondary residential alternative was not included as part of the original TIS a trip generation comparison was completed between the phase two alternatives.

Consistent with the TIS, the number of vehicle trips that would be generated was forecast based on the methodologies and data published by ITE in *Trip Generation, 10th Edition* and the *Trip Generation*

Handbook, 3rd Edition. Internal capture and pass-by trips were calculated based on ITE data / methodologies and the rates applied by AECOM for the City area-wide study. The overall project trip generation forecast with the alternative phase two residential scenario is summarized in **Table 1** and a comparison of total trips generated by the overall project with each phase two alternative is summarized in **Table 2**.

Table 1: Overall Project Trip Generation with Phase Two Residential Alternative

Land Use	ITE Code	Amount	Units	Average Daily	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
					In	Out	Total	In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	220	138	Dwellings	1,002	15	50	65	50	29	79	58	58	116
		Internal Capture		-240	-1	-6	-7	-16	-8	-24	-26	-19	-45
Retail	820	4,508	SF	170	2	2	4	8	9	17	10	10	20
		Internal Capture		0	0	0	0	0	0	0	0	0	0
		Pass-By (34% PM/26% SAT)		*58*	*0*	*0*	*0*	*3*	*2*	*5*	*3*	*3*	*6*
		New Trips		112	2	2	4	5	7	12	7	7	14
Market	850	26,500	SF	2,830	61	40	101	147	142	289	181	174	355
		Internal Capture		-550	-5	-6	-11	-23	-32	-55	-51	-55	-106
		Pass-By (36%)		*821*	*16*	*15*	*31*	*42*	*41*	*83*	*45*	*45*	*90*
		New Trips		1,459	40	19	59	82	69	151	85	74	159
Fast-Casual Restaurant	930	4,532	SF	640	6	3	9	35	29	64	59	48	107
		Internal Capture		-130	-2	-1	-3	-6	-7	-13	-14	-16	-30
		Pass-By (50%)		*255*	*0*	*0*	*0*	*13*	*13*	*26*	*20*	*19*	*39*
		New Trips		255	4	2	6	16	9	25	25	13	38
Quality Restaurant	931	10,460	SF	877	6	2	8	55	27	82	66	46	112
		Internal Capture		-160	-2	0	-2	-9	-7	-16	-16	-16	-32
		Pass-By (44%)		*315*	*0*	*0*	*0*	*14*	*14*	*28*	*17*	*17*	*34*
		New Trips		402	4	2	6	32	6	38	33	13	46
High-Turnover Sit-Down Restaurant	932	4,505	SF	505	25	20	45	27	17	44	26	24	50
		Internal Capture		-80	-7	-4	-11	-4	-4	-8	-7	-8	-15
		Pass-By (43%)		*183*	*8*	*7*	*15*	*8*	*8*	*16*	*8*	*7*	*15*
		New Trips		242	10	9	19	15	5	20	11	9	20
Total Site Trips		Internal Capture		-1,160	-17	-17	-34	-58	-58	-116	-114	-114	-228
		Pass-By Trips		*1,632*	*24*	*22*	*46*	*80*	*78*	*158*	*93*	*91*	*184*
		New Trips		3,232	74	78	152	184	117	301	193	155	348
		TOTAL EXTERNAL TRIPS		4,864	98	100	198	264	195	459	286	246	532

Table 2: Overall Project Trip Generation Comparison for Phase Two Alternatives

TOTAL	Phase Two Scenario	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
EXTERNAL TRIPS	Original TIS Mix of Uses	254	162	416	424	367	791	452	384	836
	Residential Only	98	100	198	264	195	459	286	246	532
NEW TRIPS	Original TIS Mix of Uses	217	125	342	308	251	559	315	247	562
	Residential Only	74	78	152	184	117	301	193	155	348

The results of this comparison indicate that the phase two alternative comprised exclusively of residential uses would generate significantly less trips than the higher density mix of uses included in the original TIS. Therefore, the analysis in the original TIS represents a conservative worst-case scenario for the development and no additional improvements would be necessary to accommodate the lower density phase two residential alternative.

REVISED REZONING TRIP GENERATION COMPARISON

With the addition of the vacant parcel directly east of the proposed Sakura Way development as part of the planned rezoning overlay (PRO), the rezoning trip generation comparison (previously documented in the Trip Generation Comparison memo dated July 25th, 2019) was updated to include the additional phase

three residential units. For this update, the higher density phase two development alternative was utilized as it represents the worst-case scenario for development of the overall project. Consistent with the previous trip generation comparison, the maximum density of development under existing zoning was determined based on the Applicant's experience with development projects and site planning, the uses permitted by-right under the existing OS-1, OSC, and I-1 zoning districts, and general consideration of ordinance requirements.

Consistent with the TIS, the number of vehicle trips that would be generated under existing zoning was forecast based on the methodologies and data published by ITE in *Trip Generation, 10th Edition* and the *Trip Generation Handbook, 3rd Edition*. Internal capture and pass-by trips were calculated based on ITE data / methodologies and the rates applied by AECOM for the City area-wide study. The new phase three parcel does not have the capability for internal connection with the other parcels included in the Sakura Way development, due to physical (wetlands / pond) constraints. Therefore, no internal capture reductions were applied specific to the eastern new parcel. A detailed trip generation forecast for the existing zoning scenario, along with a comparison to the results detailed in the TIS for the proposed development program are summarized in **Table 3** and **Table 4**.

Table 3: Maximum Development under Existing Zoning with Additional Parcel

Zoning	Land Use	ITE Code	Amount	Units	Average Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	SAT Peak Hour In	SAT Peak Hour Out	SAT Peak Hour Total
OS-1	Office	710	70,000	SF	751	79	13	92	13	68	81	20	17	37
			Internal Capture		-40	-6	-5	-11	-1	-3	-4	-1	-4	-5
OSC	Office	710	71,000	SF	761	80	13	93	13	69	82	21	17	38
			Internal Capture		-40	-6	-5	-11	-1	-3	-4	-1	-4	-5
	Medical Office	720	71,000	SF	2,640	129	36	165	68	175	243	125	95	220
			Internal Capture		-40	-6	-5	-11	-1	-3	-4	-1	-4	-5
	Retail	820	4,000	SF	151	2	2	4	7	8	15	9	9	18
			Internal Capture		0	0	0	0	0	0	0	0	0	0
			Pass-By (34% PM/26% SAT)		*51*	*0*	*0*	*0*	*2*	*2*	*4*	*3*	*3*	*6*
			New Trips		100	2	2	4	5	6	11	6	6	12
	Market	850	25,000	SF	2,670	58	38	96	141	136	277	174	167	341
			Internal Capture		-790	-15	-9	-24	-40	-39	-79	-56	-41	-97
			Pass-By (36%)		*677*	*13*	*13*	*26*	*35*	*35*	*70*	*44*	*44*	*88*
			New Trips		1,203	30	16	46	66	62	128	74	82	156
	High-Turnover Sit-Down Restaurant	932	15,000	SF	1,683	82	67	149	91	56	147	86	82	168
			Internal Capture		-600	-17	-17	-34	-33	-27	-60	-32	-41	-73
			Pass-By (43%)		*466*	*25*	*25*	*50*	*19*	*19*	*38*	*21*	*21*	*42*
			New Trips		617	40	25	65	39	10	49	33	20	53
I-1	Motel	320	150	Rooms	514	21	36	57	31	26	57	39	43	82
			Internal Capture		-170	-1	-9	-10	-10	-7	-17	-13	-8	-21
	Office	710	150,000	SF	1,572	144	23	167	27	140	167	43	37	80
			Internal Capture		-80	-7	-8	-15	-2	-6	-8	-3	-5	-8
Total Site Trips			Internal Capture		-1,760	-58	-58	-116	-88	-88	-176	-107	-107	-214
			Pass-By Trips		*1,194*	*38*	*38*	*76*	*56*	*56*	*112*	*68*	*68*	*136*
			New Trips		7,788	499	132	631	247	534	781	342	292	634
			TOTAL EXTERNAL TRIPS		8,982	537	170	707	303	590	893	410	360	770

Table 4: Trip Generation Comparison with Additional Parcel

TOTAL	Scenario	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	SAT Peak Hour In	SAT Peak Hour Out	SAT Peak Hour Total
EXTERNAL TRIPS	Existing Zoning	537	170	707	303	590	893	410	360	770
	Proposed Development	260	182	442	445	379	824	464	395	859
NEW TRIPS	Existing Zoning	499	132	631	247	534	781	342	292	634
	Proposed Development	223	145	368	329	263	592	327	258	585

The results of this comparison indicate that the site is still capable of generating significantly more "new trips" under existing zoning, with the addition of the phase three residential parcel. This is due to the

allowable density and nature of office trip generation; whereby office trip generation is more intense during weekday peak periods, and the proposed uses would generate slightly higher demands on a Saturday. Furthermore, the proposed (phase one and two) retail / restaurant uses would capture a greater proportion of "pass-by" trips that are already present on the adjacent road network as compared to office use. The proposed phase three residential uses would result in a marginal increase to the overall site traffic generation potential.

PHASE THREE RESIDENTIAL DRIVE CAPACITY ANALYSIS

A capacity analysis was completed for the proposed site driveway to 11 Mile Road for the phase three 52-unit residential development. The vehicle trips generated by the development were forecast based on the rates and equations published by ITE in *Trip Generation, 10th Edition* and summarized in **Table 5**. The trips were assigned to the study network using the same distribution methodology as outlined in the original TIS.

Table 5: Phase Three Residential Trip Generation Forecast

Land Use	ITE Code	Amount	Units	Average Daily	AM Peak Hour			PM Peak Hour			SAT Peak Hour		
					In	Out	Total	In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	220	52	Dwellings	352	6	20	26	21	12	33	12	11	23

Future peak hour vehicle delays and LOS at the proposed phase three residential site driveway to 11 Mile Road were calculated based on the existing lane configurations and traffic control, future traffic volumes, and HCM methodologies. The results of the future conditions analysis as summarized in **Table 6** indicate that all driveway movements will operate acceptably at a LOS B or better during all peak periods.

Table 6: Future Phase Three Residential Driveway Conditions

Intersection	AM Peak Hour Approach			PM Peak Hour Approach			SAT Peak Hour Approach		
9. 11 Mile Road & Phase 3 Residential Drive	EB	Free		EB	Free		EB	Free	
Minor STOP	WB 0.1 A	7.7 A	Free	WB 0.1 A	7.7 A	Free	WB 0.1 A	7.6 A	Free
	NB 10.4 B	10.4 B		NB 12.6 B	12.6 B		NB 10.3 B	10.3 B	

PHASE THREE RESIDENTIAL DRIVE TURN LANE WARRANT ANALYSIS

The City of Novi warrants for right-turn lanes were evaluated at the proposed phase three residential site access point to 11 Mile Road. A center lane for left turns exists on 11 Mile Road. As 24-hour volumes were not available along the study section of 11 Mile Road, 24-hour volumes were forecast based on existing PM peak hour volumes from the AECOM traffic study with application of a 10% K-factor. Additionally, daily site-generated traffic volumes from the Sakura Way development were included. The results of this analysis indicate that neither a right turn lane nor taper are warranted.

CONCLUSIONS

The following conclusions are based on the information outlined herein:

1. A secondary phase two development alternative is comprised exclusively of residential uses. As cited in the original TIS, the commercial phase two uses and densities were conservatively assumed; however, are speculative at this point.
2. Phase two residential uses would generate significantly less trips than the higher density mix of uses included in the original TIS. Therefore, the analysis in the original TIS represents a conservative worst-case scenario for the development and no additional improvements would be necessary to accommodate the lower density phase two residential alternative.
3. A third phase on the existing vacant parcel directly east of the originally proposed development is proposed for residential development. The proposed use and density would result in a marginal increase to the overall site traffic generation potential.
4. The site is still capable of generating significantly more "new trips" under existing zoning as compared to the proposed development plans with the addition of the phase three residential parcel.
5. All approaches and movements at the phase three residential site driveway to 11 Mile Road will operate acceptably at a LOS B or better.
6. Neither a right turn lane nor taper are warranted at the proposed phase three residential site driveway to 11 Mile Road based on City standards. A center lane for left turns exists.

The referenced traffic data, calculations, and simulation results are attached. Please direct any questions regarding this memorandum to Bergmann.

Attached: Synchro Outputs
Right Turn Lane Warrant

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	204	4	2	108	15	5
Future Vol, veh/h	204	4	2	108	15	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	75	75	92	92
Heavy Vehicles, %	3	0	0	8	0	0
Mvmt Flow	246	5	3	144	16	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	251	0	399	249
Stage 1	-	-	-	-	249	-
Stage 2	-	-	-	-	150	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1326	-	611	795
Stage 1	-	-	-	-	797	-
Stage 2	-	-	-	-	883	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1326	-	610	795
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	883	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	687	-	-	1326	-
HCM Lane V/C Ratio	0.032	-	-	0.002	-
HCM Control Delay (s)	10.4	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	178	16	5	510	9	3
Future Vol, veh/h	178	16	5	510	9	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	81	81	92	92
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	205	18	6	630	10	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	223	0	856	214
Stage 1	-	-	-	-	214	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1358	-	331	831
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	528	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1358	-	330	831
Mov Cap-2 Maneuver	-	-	-	-	427	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	528	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	486	-	-	1358	-
HCM Lane V/C Ratio	0.027	-	-	0.005	-
HCM Control Delay (s)	12.6	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	0.3

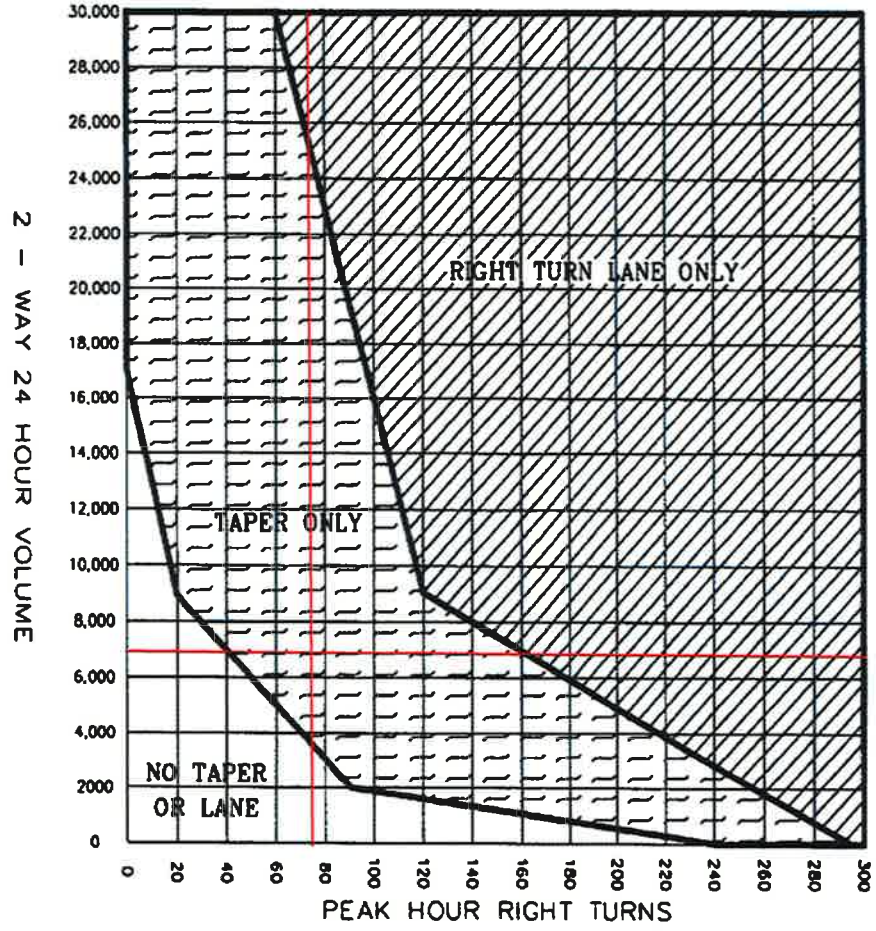
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	175	9	3	174	9	2
Future Vol, veh/h	175	9	3	174	9	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	95	95	92	92
Heavy Vehicles, %	2	0	0	2	0	0
Mvmt Flow	201	10	3	183	10	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	211	0	395	206
Stage 1	-	-	-	-	206	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1372	-	614	840
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	848	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1372	-	613	840
Mov Cap-2 Maneuver	-	-	-	-	662	-
Stage 1	-	-	-	-	831	-
Stage 2	-	-	-	-	848	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	689	-	-	1372	-
HCM Lane V/C Ratio	0.017	-	-	0.002	-
HCM Control Delay (s)	10.3	-	-	7.6	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

11 MILE ROAD & PHASE 3 RESIDENTIAL SITE DRIVE RIGHT TURN LANE WARRANT



2018 PM PEAK = 566
10% K-FACTOR = 5,660 ADT
+ 0.5% GROWTH TO 2028
+ 50% OF SITE TRAFFIC
= 2028 ADT OF 8,936

PM: 76 RIGHT TURNS

WARRANT FOR RIGHT TURN DECELERATION LANE OR TAPER
NO SCALE

FIGURE IX.10

CITY OF NOVI

STANDARD WARRANT FOR RIGHT TURN DECELERATION LANE OR TAPER

DATE: 27-Jan-99

(Ord. No. 99-124.11, Pt. XXXIII, 7-26-99)

Figure IX.10

https://library.municode.com/print.aspx?h=&clientID=11201&HTMRequest=https%3a%2f%2flibrary.municode.com%2fshowDocument.aspx%3fclientID%3d11... 16/18

Municode

DESIGN STATEMENTS

Sakura Novi Design Statement

The development of Sakura Novi has incorporated specific design imperatives to create a retail development both rich in authentic Asian spirit and a unique one of a kind retail destination in Metro Detroit...

- Light
- Landscape
- Water
- Architecture

These 4 individual features are combined in readily interactive and dramatic Asian centric public retail events. (Please note these 4 "imperatives" drive the design discipline aesthetic of the "place" — however Tenant Signage in both English letters and Asian script characters dramatically communicate Sakura Novi's unique intent for both the driver and the strolling pedestrian.)

- Light
  - Lighting at landscape to highlight its specialness — create night-time drama,
  - Lighting at storefronts per lit facades and backlit screens,
  - Lighting of tenant signs that introduces the energy of the Asian marketplace, through the use of neon formed Asian script characters in team with letter lit English lettering,
  - Lighting at the water — a night show.
- Landscape
  - Japanese and Chinese — Asian influences, philosophy of composition, sensitive incorporation of naturalist site and water features, plant selection and form,
  - Landscape provides an impactful and signature event at Sakura Novi and a primary visual departure from typical shopping center norms.
- Water
  - Dramatic feature amenity and experiential centerpiece of the project,
  - Primary contributor to an Asian garden tradition important to the project and integral to the project's long-term success.
- Architecture
  - Recent Japanese and Chinese architecture, in all forms, has utilized modern technology to celebrate traditional wood, masonry and metal materials, in many instances, setting the new modern agenda for architecture everywhere,
  - At Sakura Novi we use simple bold expanses of intersecting and overlapping planes to define building forms consistent with contemporary Asian themes,
  - Unadorned textured brick surfaces juxtaposed to plain smooth finished gridded walls accented by structurally expressive canopy apparatus that provide focused locations for tenant sign placement.

1401 WOODGLEN LN. BLOOMFIELD HILLS, MI 48304 PHONE 248 217 3974 EMAIL DAVEPETERHANS@GMAIL.COM

Sakura Novi Design Statement – Residential Building Types

The residential design concept focuses on how the building and site design serve as a continuation of theme through a transition of typology. The site design has intentionally created strong visual and physical connections between the townhomes, retail and site amenities using light, landscape, water and architecture.

The residential building design achieves transition through an architecture which plays off simple, bold forms and linear patterns consistent with modern Asian architecture while respecting the scale of the residential vernacular. The exterior architecture focuses on the use of scale, proportion and balance to break down the building mass by delineating the individual units and providing appropriate residential scaled details. The units maximize the connection to outdoor space with ample fenestration in a modern expression on the façade. The main living spaces open to second floor balcony vistas and ground level porches flow into garden and lawn spaces. The landscape design connects these garden spaces through interconnected walks creating a social, walkable neighborhood that seeks to be connected to the other site amenities and commercial sectors of the development.

The building materials have been chosen based on their qualities of durability, sustainability, longevity, vernacular appearance, scale and low maintenance. The layered and light expressions of timber frame structures in traditional Asian architecture have influenced our desire to deviate from the use of primarily brick and stone on the facades. The base of the buildings are anchored to the ground with the use of a dark earth tone brick as a foundation facade material. The building fronts rise into distinctive parapet elevations clad in white horizontal vinyl siding, 4" in width. The use of the slender siding material portrays a lightness of material weight consistent to traditional Asian architecture contrasting the weight of the brick base. The use of traditional residential building materials in a modern expression of pure form aims to create a transitional yet timeless architecture.

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APPLICANT RESPONSE LETTERS

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON
BROTHERS
HOMES

December 4th, 2019

Ms. Lindsay Bell
City of Novi
Planning Department
45175 Ten Mile Road
Novi, MI 48375

Re: PRO Site Plan Submittal Response Letter
Sakura Novi & The Residences at Sakura Novi
Novi, MI

Dear Ms. Bell,

Thank you for your Plan Review Center Report dated November 4th, 2019. We are very pleased that your team is able to recommend approval of Phase 1 for Sakura Novi at this time, with anticipated adjustments.

It has been a great experience working with the City of Novi since August 2016 to bring the Sakura Novi concept to the community. This concept was only in the visioning phase when the City purchased the Anglin parcel at the end of 2016, and enacted in December 2016 Ordinance No. 18.276 to amend Ordinance No. 97-18. The purpose of Ordinance No. 18.276 was to "incorporate recommendations provided in town center area study to facilitate the development of existing and vacant parcels into a viable and active 'Town Center' area." Specifically, Ordinance No 18.276 amended Section 3.27 "TC and TC-1 Town Center District Required Conditions" to read as follows: "The TC-1 District is especially designed to encourage developments of an urban 'Main Street' with mixed land uses and shared parking. Flexible regulations regarding streetscape design, landscape design, provision of parking facilities, architectural and façade design, residential dwelling units, and setback standards are intended".

We are proud of what we are seeking to accomplish with Sakura Novi, and we appreciate the work the City has done in procuring the land and pushing for flexibility to introduce vital new offerings within the City's downtown. We can only hope that Sakura Novi meets the City's vision within the context of the conditions of the land in question. We are striving to add further public benefits for the community. In all cases, we thank the leadership in the City for their support to date.

We agree with Novi staff's assessment that there is insufficient detail and ambiguity about Phase 2. There are just too many unknown variables in the Max Density Plan for us to satisfactorily provide the

Robert B. Aikens & ASSOCIATES, L.L.C.

RB ROBERTSON BROTHERS HOMES

required information to move forward the Max Density Plan. Upon consideration, we have decided to focus in this response letter and moving forward with a revised Baseline plan for consideration. We can, at the present time, address in adequate detail the specifics of this plan so as to eliminate ambiguity from the entitlement process.

As we discussed with staff, we want to emphasize that we are not precluding the possibility that compelling opportunities will emerge as we move forward. It is unknown what such opportunity might be, and so it is not currently possible to satisfactorily meet the requirements for information involved in the PRO process. Our intent would be to resolve this, if parties are so inclined, by initiating a PRO Amendment process. We would also look to initiate a PRO Amendment process should Ecco Tool Co decide to join our cause and include their remaining parcel in a transaction. The PRO Amendment process will likely be necessary, in any case, whenever Ecco Tool Co is prepared to act now or in the future.

We were heartened at the 11.13.19 Master Planning and Zoning Committee meeting, that Planning Commissioners Pehrson and Anthony expressed enthusiasm about Sakura Novi Phase 3, which contemplates a harmonious residential use on a parcel nearby the main Sakura Novi campus. At the same time, we do understand that there are issues with Phase 3, including, among others, that City perceives there to be legal issues vis a vis to Purchase Agreement with the City of Novi with proceeding with this plan at present; that the intent for the land in question is TC-Gateway East rather than TC-1; and that TC-Gateway East calls for parcels that are larger than the Phase 3 parcel in question. We do continue to believe that Phase 3 is a compelling addition to the Sakura Novi plan and to the downtown core. Robertson Brothers Homes, as the developer of Phase 3, will continue to advocate for its approval. Perhaps, Phase 3 can also be an opportunity that we focus on with any prospective PRO Amendment process.

We are also considering seriously other comments raised at the 11.13.19 Master Plan and Zoning Committee meeting by Commissioner Pehrson, Commissioner Anthony, Commissioner Gronachan, members of the public, and other meeting participants.

- First, as safety is a paramount priority, we are taking all measures to ensure appropriate turning radii for fire and safety vehicles.

- Second, we understand the importance of additional public benefits, and we interested in satisfying the community's expectations. We look forward to implementing the many ways we plan to program Sakura Novi as a community entity. We are working hard and at great cost to make the pond and surrounding walking path into a signature public amenity. Our intention is to partner with the corporate community in order to program this new facility. We have also agreed with True World Group that their community room in their facility may be usable by the broader community as a public benefit. As a follow-up to suggestions at the Master Plan and

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Zoning Committee meeting, we are initiating a process of exploring a partnership with Novi Public Library. We have scheduled an introductory meeting with library staff to further discuss opportunities for a multi-lingual Little Free Library program. True World Group has agreed to allow us to use space for this purpose as a public benefit.

- Third, we understand that traffic is an issue in downtown Novi. We have further studied traffic flow issues created by the Baseline Plan as opposed to the Max Density Plan, and any resulting need for road improvements. The results of this study, as stated in Bergmann's addendum, is that a tapering lane on 11 Mile Road is unnecessary. We are, however, currently studying whether parallel parking on 11 Mile is feasible as a significant public benefit. We will also further consider Commissioner Pehrson's concerns about stacking and vehicular flow through the parking lots.

- Fourth, we have worked extensively to design and create this unique destination within the boundaries of the City's Ordinances, and to refine and limit the number of deviations necessary for incorporation. Our decision to focus, at this point, primarily on Baseline Plan Phase 2, has helped with this effort. Our intensive team focus has reduced the necessary quantity by 43%.

- Fifth, as per Commissioner Anthony's suggestions, we will further investigate the impact of the residential uses on sanitary sewers and other infrastructure.

- Sixth, we heard repeatedly at the meeting that Sakura Novi must strive to be authentic; whether this pertains to the restaurant and retail collection, or the architecture, or the landscaping. We appreciated these comments because the Sakura Novi team takes great satisfaction professionally in this effort to present an offering that the community regards as authentic.

Sincerely,

G. Scott Aikens, Ph.D.

Robert B. Aikens & ASSOCIATES, L.L.C.

RB ROBERTSON BROTHERS HOMES

As per the City's request in the Plan Review Center Report dated November 4th, 2019, we will respond below to each of the comments in the report marked in bold.

###

"At the time of the pre-application meeting, staff asked the applicant to provide proposed parcel lines on the plans in order to fully evaluate deviations that will be required. The revised PRO Concept Plan submittal now shows a future lot line for the residential portion. However, it is unclear whether the Phase 2 area has separate parcel lines, which makes it impossible to determine building and parking setbacks. ***The applicant should confirm whether this is the intent, as creating parcels in the future will be problematic if setbacks and other ordinance requirements would not be met. If parcel lines will be created, they must be shown and clearly labeled on the plans. In addition, all building and parking setbacks shall be dimensioned clearly."***

As I mentioned above, we are at present proceeding with more specific information about Phase 2 Baseline Plan. We are consulting with attorneys as to the relative merits of creating separate parcel lines along the back of the Anglin parcel, or creating a site condominium. We will resolve this issue shortly.

###

The City's emergency apparatus must be able to fully access the entire site, as well as delivery vehicles accessing the loading areas. Provide a plan showing truck turning movements are possible throughout the site (including all loading/service areas, and 50' outside, 30' inside turning radius in the residential portion). Removal of some units may be necessary to provide the required dimensions in the interest of public safety. ***The Fire Review continues to indicate issues with turning radii in the residential portion of Phase 1B. These issues are not considered eligible for deviations as they are health and safety concerns. Widening the drive lanes to the appropriate ordinance standards could help resolve this problem.***

Safety is of primary importance to us. We are seeking to better understand the discrepancy between our updated plans and the City's latest review. Please see updates below from our Civil Engineer.

###

The vinyl siding proposed for residential townhouse buildings is not a material permitted by the Façade Ordinance. ***The applicant must revise the material to Cement Fiber siding in order to gain support for the Section 9 façade waiver required by the overage of siding material on the residential buildings.*** *See Façade letter for more details. (Phase 1B, Phase 2 Baseline, and Phase 3)*

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Sakura Novi is exploring options other than vinyl siding for compliance with remaining Section 9 Waiver requirements.

###

INTENT OF THE TC-1 DISTRICT: *As stated in Sec. 3.1.26.A., 'The TC-1, Town Center district is designed and intended to promote the development of a pedestrian accessible, commercial service district in which a variety of retail, commercial, office, civic and residential uses are permitted'. The proposed uses (with the exception of Ecco Tool) are all principal permitted uses which align with the intent of TC-1, Town Center-1 district.* ***However the balance of uses developed will impact whether the area is seen as a mixed-use commercial service district with a residential component, or a residential neighborhood with a restaurant and retail component.***

Sakura Novi, an approximately 8-acre development abutting Grand River Avenue, incorporates a 25,000 sf Japanese Food Hall / Grocery, a collection of best-in-class Asian restaurants, and a 2 acre pond with gardens. This project has enough mass to stand on its own. The integrated residential town-home community will make this regional point of interest into a functioning 24 / 7 place, and this will do nothing but add strength to the integrated concept.

###

OFF-STREET PARKING LOTS FOR SEPARATE USES: *'The TC-1 Town Center district is further designed and intended to discourage the development of separate off-street parking facilities for each individual use, and to encourage the development of off-street parking facilities designed to accommodate the needs of several individual uses'. The proposed concept plan depicts the parking lots shared among the uses throughout the site, and the applicant has provided a shared parking study.* ***Staff supports the opportunity to reduce parking through a shared parking arrangement, supported by the shared parking study. This strategy allows additional space for public gathering or usable open space, and to reduce deviations.***

The success of the Food Hall / Grocery Market and the restaurant collection are the most important elements to the success of Sakura Novi. We have parked Sakura Novi within the constraints of our parking study to enable this success. There is, as a result, no more space in the commercial site for public gathering or usable open space. We believe the pond, the gardens and the Village of Rochester Hills-caliber land-scaping will be points of pride in the City of Novi for years to come.

###

PUBLIC BENEFITS: *The list of public benefits provided by the applicant is reviewed in detail later in this review. Several of the benefits listed are requirements under the Zoning Ordinance, and would be expected with any development in the city, or could be*

achieved through a traditional rezoning process. Others require additional information in order to be evaluated. ***The applicant should continue to refine the list of benefits. Off-site benefits can also be considered.***

We will continue to work on our list of Public Benefits throughout this process and in response to the process. As per the response letter above, as an outcome of the Master Plan and Rezoning Committee meeting on November 13th, we are interested further fleshing out the pond as a Public Benefit, in adding a partnership with Novi Public Library as a public benefit, as well as incorporating a Community Room integrated into the Market as Public Benefit. While our revised traffic study indicates that a tape lane is not called for, we are studying the feasibility of parallel parking on 11 Mile as a Public Benefit.

###

DEVIATIONS: *Five of the original deviations requested have been removed due to modifications of the plans. The applicant has provided a list of 23 remaining deviations with some additional details, as well as justifications. The applicant is asked to continue to revise the list based on staff's comments provided in this letter.* ***Some of the deviations require more specific details about the deviation requested. Without those specifics, staff cannot endorse open-ended deviations—for example, some of the sign-ordinance related requirements and no open space requirement for Phase 2. Limits must be placed on the extent of the deviations for the Planning Commission and City Council to have a clear understanding of the difference between the proposal and the ordinance standards.***

See our detailed update on deviations that have been eliminated, as well as requested deviations. We have also included a detailed study of our signage program to better inform the City Council on plans.

###

FUTURE SITE PLAN REVIEWS: *The proposed development is an ambitious project that will require a carefully laid out implementation plan. Until all construction is completed, the impacts of construction traffic to the surrounding areas/businesses are hard to contemplate. The narrative from the applicant indicates a tentative Grand Opening of Phase 1 approximately 2 years from purchase of the property.* ***The applicant should consider adding a tentative completion date for each phase as a condition for the PRO agreement.***

We are working on an updated time-line as part of the recently initiated dialogue on the PRO Agreement and conditions to the agreement. Our decision to focus solely on a revised Baseline Plan will help facilitate this process.

###

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Since the development will be tied to PRO plan, when Phase 2 and Phase 3 site plans are submitted for review, they are expected to conform to the code requirements for all items that are not regulated by the approved deviations and conditions within the PRO Agreement. For these reasons, it ***is vital for staff to have a clear understanding of what is being proposed at this time in order to provide clarity for future reviews. The applicant should provide the intent to address possible or anticipated future deviations if they are not requested at this time.***

With the revised Baseline Plan we will now be able to more easily provide possible or anticipated future deviations.

###

For Phase 3, the rezoning to TC-1 is more difficult to justify since it will be surrounded on all sides by I-1 Light Industrial zoning and not connected in a meaningful way to the mixed use district of the larger Sakura Way. In essence this portion could be considered spot zoning as it is not consistent with the Master Plan, would result in incompatible land uses, and would also create hardships on future development of the surrounding parcels by limiting the by-right uses that could be developed. The intent of the TC-1 district does not match what is being proposed for this small area. Further, it is staff's understanding that the Purchase Agreement made no mention of adding this property to the proposed PRO Concept Plan and Agreement. Finally, the lack of contiguity with the other parcels may present an issue under the state zoning laws.

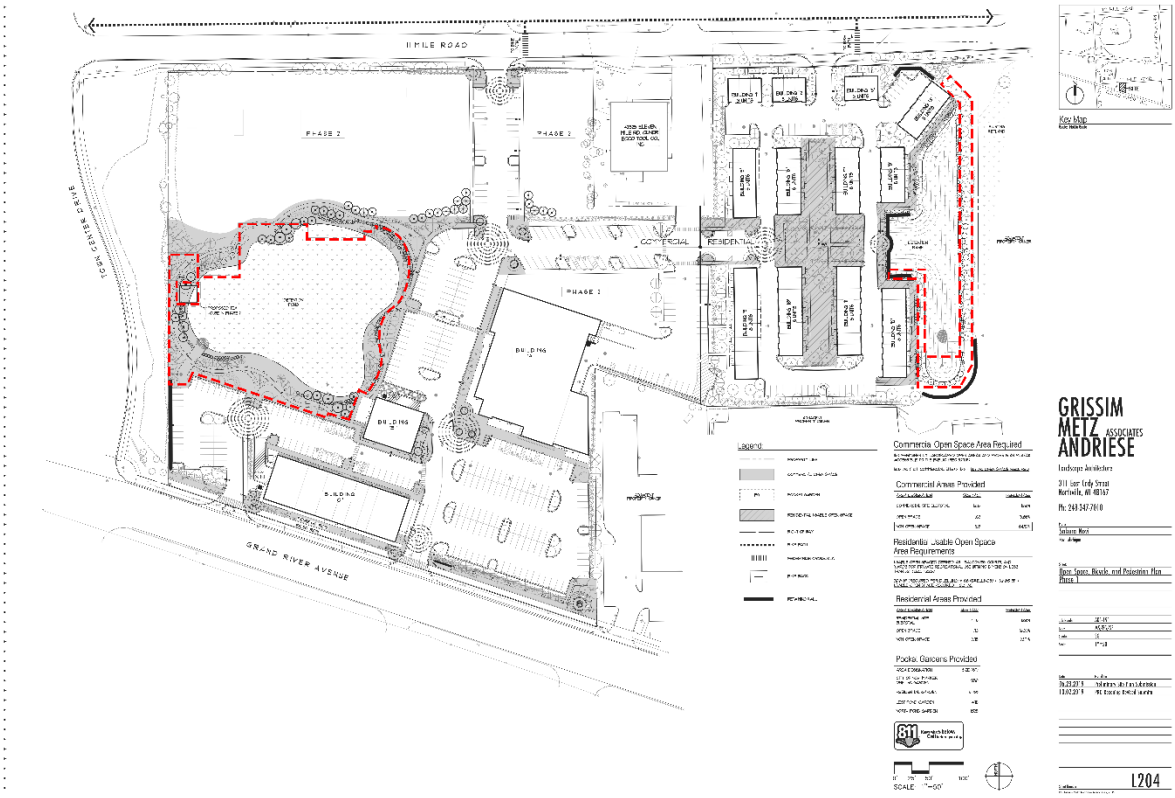
We believe that the residential proposed to be included as Phase3 is a crucial component of the critical mass envisioned for the ultimate success and significance of Sakura Novi's brand. However, due to Staff's apparent concerns that this land is not appropriate for inclusion in Sakura Novi at this time, the Phase3 Residential Development land will be removed for the time being from this TC-1 PRO Submittal. Ultimately, we hope to work with City representatives to include this portion of land into the Sakura Novi development as a Phase 3.

###

In addition, the applicant shall ensure that all proposed woodland replacement trees will be guaranteed to be preserved as planted within a conservation easement or landscape easement granted to the City. Additional comments and concerns are detailed in woodland review letter.

All proposed on-site woodland replacement trees have been grouped to be easily designated within landscape or conservation easements granted to the city. It should be noted that the shape of the Western easement, which encompasses the pond water feature and a stretch of the site's western

boundary, is contingent upon phase 2 final structure locations and limit of work.



###

The applicant's mitigation options include certain strategies that are not currently supported by the City's wetland ordinance. Staff believes further details need to be addressed as part of the PRO Concept plan so as to include them in the PRO Agreement as conditions for approval. Additional comments and concerns are detailed in wetland review letter.

Please see the update from our Wetland Consultant.

###

Protect and maintain the City's woodlands, wetlands, water features and open space.
The proposed concept plan will impact regulated wetlands and woodlands. The applicant indicates they will propose wetland mitigation and protecting woodland replacement trees by way of a conservation easement. However further details are needed to evaluate the mitigation plan.

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Please see updates from our Woodland consultant and our Wetland Consultant.

###

Ensure the provision of neighborhood open space within residential developments. ***The Phase 1B townhouse portion provides the Ordinance required open space. However the applicant indicates a deviation from open space requirements are requested for Phase 2 of the project, with no indication of any open space being provided.***

As mentioned above, we are at present proceeding with more specific information about Phase 2 Baseline Plan.

###

The PRO conditions must be in material respects, more strict or limiting than the regulations that would apply to the land under the proposed new zoning district. Development and use of the property shall be subject to the more restrictive requirements shown or specified on the PRO Plan, and/or in the PRO Conditions imposed, and/or in other conditions and provisions set forth in the PRO Agreement. ***The applicant should submit a list of conditions that they are seeking to include with the PRO agreement. The applicant's narrative does not specifically list any such PRO conditions at this time.***

For the sake of efficiency, we are now focusing more intently on conditions to the PRO Agreement as we gain clarity from the City of Novi. For example, the process has helped us determine to focus on our revised Baseline Plan for Phase 2. Such a decision has a large impact on prospective conditions.

Our development team, our attorney, the City Manager, and the City's Attorney have now started meeting to detail conditions and commence work on the PRO Agreement.

Lest anyone forget, maintaining the unregulated central water feature as a public amenity is the most restrictive component of the entire development, reducing our available development area 1+ acres. In fact, we are confident that the Anglin parcel will never be developed by itself given this restriction required by the City in the 2016 Master Plan Update, particularly in light of the very poor soils surrounding the water feature that impose extraordinary costs on site-work in these locations. Our discipline for 3.5 years has been to preserve the vision for Sakura Novi that we share with the City of Novi, while managing the facts on the ground so as to yield a project that can be financed and, therefore, achieved.

###

PUBLIC INTEREST:

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1.Developer offers to dedicate the Right-of-Way (ROW), and future ROW, along 11 Mile and Grand River. ***After reviewing the proposed purchase agreement between the City and the developer, Staff discovered a significant portion of the Right-of-Way is not being included in the property for sale. The applicant shall quantify the amount of additional property to be dedicated to the City/Oakland County for the purposes of Right-of-Way. This could be considered a public benefit, depending on how much property is identified.***

We will work on this calculation.

###

2. Developer offers an easement at the southeast corner of the proposed development for the City to use as for a Welcome sign. ***If the easement could also be open to other public purposes, such as art, or another amenity for the public this easement could be considered as a public benefit.***

The intent is to be collaborative about this amenity as a public benefit.

###

3. Developer offers that the proposed neighborhood-scaled, mixed-use, pedestrian accessible development would be in line with the intent of the 2016 Master Plan. ***Staff agrees; however, this generalized effect of redevelopment could also be achieved using a simple rezoning instead of a PRO.***

We are driven by the task of gathering the collection of uses that we, after 3.5 years of collaboration with the City of Novi, are seeking to put together. We are personally neutral as to whether we use a simple rezoning or a PRO. The June 2018 Purchase Agreement negotiated between the City of Novi and Sakura Novi, LLC contemplates the use of a PRO to rezone the land to TC. The April 2019 Third Amendment adjusted the Purchase Agreement to contemplate using a PRO to rezone the land to TC-1.

###

4. Developer offers space is being earmarked to accommodate structure parking in Phase 2, which could be used by a central parking agency or Special Assessment District. ***Staff agrees that it may be possible to use this space for a parking structure; however, the details of how that would be accomplished have not been proposed, and whether a parking structure in this particular area would be considered a public priority is something that needs to be discussed with the Planning Commission, City Council, and other relevant bodies (e.g., CIA).***

We are no longer recommending a possible parking structure as a public benefit. Here are two, among other, reasons that have caused us to the conclude that a City parking structure, upon

consideration, may well not be practical. First, we have found the market for a hotel to be very soft, and the hotel use is a condition for the structure. Second, even if we were to procure a hotel operator, the legal clauses in a land deal now regulating the shut-down of parking at an operating hotel at a future date so that the City can build a structure would be prohibitively onerous.

###

5. Developer indicates that the proposed development complements the 2016 Master Plan vision for a unique, well-designed, mixed-use facility. ***Staff agrees, but this seems to be the same as described in item 3 above, and this could also be done using a simple rezoning.***

First, item 3 describes the updating of the zoning itself. Item 5 describes the prospective completion of the envisioned plan.

Second, we are driven by the task of gathering the collection of uses that we, through 3.5 years of collaboration with the City of Novi, are seeking to put together. We are neutral as to whether we use a simple rezoning or a PRO.

###

6. Developer states that growing an important existing Novi retailer (One World Market) would complement the goals and objectives of the 2016 Master Plan. ***Again, this growth is a generalized result that could also be accomplished through a traditional rezoning request on the subject property or another location.***

We are driven by the task of gathering the collection of uses that we, after 3.5 years of collaboration with the City of Novi, are seeking to put together. We are personally neutral as to whether we use a simple rezoning or a PRO. The June 2018 Purchase Agreement negotiated between the City of Novi and Sakura Novi, LLC contemplates the use of a PRO to rezone the land to TC. The April 2019 Third Amendment adjusted the Purchase Agreement to contemplate using a PRO to rezone the land to TC-1.

###

7. Sakura Novi, as a unique development would reinforce the vision of the 2014 Town Center Area Study, namely to create a dynamic, attractive city core that provides residents and visitors with unique opportunities to participate in active community life, and meet their needs for goods, services, housing and entertainment. ***Staff believes that the proposal may assist the City in meeting the vision of the 2014 Town Center Study, provided that the plan provides for the elements that are indicated in the Phase 2 Maximum Density Scenario. The Town Center Area Study did not indicate residential uses for this location.***

As mentioned, our intent is to proceed with Baseline Plan Phase 2. This eliminates a great deal of ambiguity.

Sakura Novi, an 8-acre development abutting Grand River Avenue, incorporates a 25,000 sf Japanese Food Hall / Grocery Market, a collection of best-in-class Asian restaurants, and a 2-acre pond with gardens. Sakura Novi has enough mass to stand on its own. The integrated residential town-home community will make this regional point of interest into a functioning 24 / 7 place, and this will do nothing but add strength to the integrated concept.

The 2014 Town Center Area Study indicated the Anglin parcel should be re-zoned to TC classification to better accommodate viable uses perceived for that site. TC zoning includes residential uses. Therefore, the 2014 Town Center Area Study recommends residential uses on Anglin parcel, by right. TCGateway also includes residential as a development option.

###

8. Developer indicates that the proposed Sakura Novi, with its unique collection of market, restaurants and retail is anticipated to be an economic engine, generating 170 permanent jobs. ***While this statement is a testament to the economic benefits of the anticipated development potential, it could also be achieved with a simple rezoning instead of a PRO. Greater economic impacts would be achieved with the Phase 2 Maximum Density Scenario, but would seem to be considerably less if the Phase 2 Baseline option is developed.***

We are driven by the task of gathering the collection of uses that we, after 3.5 years of collaboration with the City of Novi, are seeking to put together. We are personally neutral as to whether we use a simple rezoning or a PRO. The June 2018 Purchase Agreement negotiated between the City of Novi and Sakura Novi, LLC contemplates the use of a PRO to rezone the land to TC. The April 2019 Third Amendment adjusted the Purchase Agreement to contemplate using a PRO to rezone the land to TC-1.

Sakura Novi, an 8-acre development abutting Grand River Avenue, incorporates a 25,000 sf Japanese Food Hall / Grocery Market, a collection of best-in-class Asian restaurants, and a 2-acre pond with gardens. Sakura Novi has enough mass to stand on its own. The integrated residential town-home community will make this regional point of interest into a functioning 24 / 7 place, and this will do nothing but add strength to the integrated concept.

###

9. The proposed residences at Sakura Novi will provide smaller footprint, middle-market rate residential rental offerings. The new homes would be a draw to Asian ex-patriot professionals and their families, as well as the large corporations that sponsor many of these families. ***Staff agrees that the mixed-use components, of restaurants, retail, residential, and potentially office and hotel uses, meets the intent of the Master Plan and the appeal to the***

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many Asian residents in Novi has been well-framed by the developer; however, again, these are generalized results that could also be achieved with a simple rezoning instead of a PRO.

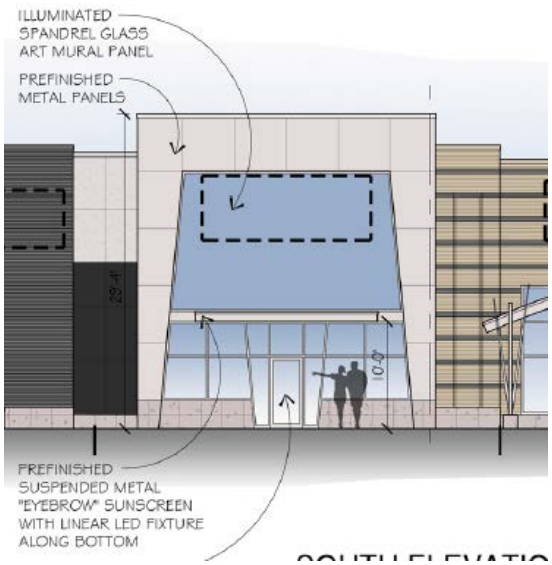
We are driven by the task of gathering the collection of uses that we, after 3.5 years of collaboration with the City of Novi, are seeking to put together. We are personally neutral as to whether we use a simple rezoning or a PRO. The June 2018 Purchase Agreement negotiated between the City of Novi and Sakura Novi, LLC contemplates the use of a PRO to rezone the land to TC. The April 2019 Third Amendment adjusted the Purchase Agreement to contemplate using a PRO to rezone the land to TC-1.

###

10. The developer indicates that the proposed Sakura Novi is anticipated to reinforce Novi's tax base beyond the project itself by creating a platform that can foster partnerships among the City of Novi, cultural institutions and the corporate community. An example provided is the partnership with the STAMPS School of Art and Design at UM, and the Japan America Society to create a Japanese themed illuminated applique. ***While the application does not include specific details, if the intent is to provide public art within the development for the enjoyment of the general public, that could be considered a public benefit that would not otherwise be achieved through conventional development proposals. We appreciate the concept of collaborations and partnerships but the actual outcomes are difficult to measure in real terms. (It is also worth noting that murals often spark discussion about the proliferation to other properties throughout the City; they are considered signs, and therefore present unique issues that bear real discussion by policy-makers.)***

If Novi wishes to proceed with the cited partnership, we will be sensitive to any unique issues raised by our proposal to source public art to be incorporated at a critical point in the Sakura Novi façade facing Grand River Avenue. The back-lit piece will be laid over glass. We do believe this proposal would result in a place-marker for Sakura Novi within the downtown core that has aesthetic merit.

The location for this piece facing Grand River Avenue is the area shaded in blue in the colored elevation below:



###

11. The development will create a park-like environment around the existing pond, including a walking path around the pond and throughout the site, available to the general public. Landscaping treatments, the pathway, and a small building at the edge of the pond will "activate" the pond. ***Staff agrees that enhancing the existing water feature and inviting the public to enjoy the amenities of the site would be considered a public benefit above what may typically be provided on a conventional development proposal. This benefit is also repeated above in item 5.***

Item 11 is about the pond in specific, while Item 5 does not specifically call out the pond. There are lost opportunities for revenue generation involved in incorporating the pond, and extraordinary costs in time and money with conceptualizing, building and maintaining the pond. These are large and costly public benefits that pertain specifically to how we have sensitively prioritized the pond.

###

12. Fostering walkability and connectivity within an important corner at the heart of Novi by providing the walking path around the perimeter of the pond, as well as the "tree lined boulevard" and "pocket gardens" leading to the residential common area. ***This item is closely linked to items 11 and 5. While the walking path around the pond and the common area of the residential portion of Phase 1B are amenities, they are also meeting the requirements for open space of the TC-1 district, which would be expected from any development. Further enhancement of the "boulevard" and identification of the pocket gardens on the plans is needed to classify this as a public benefit.***

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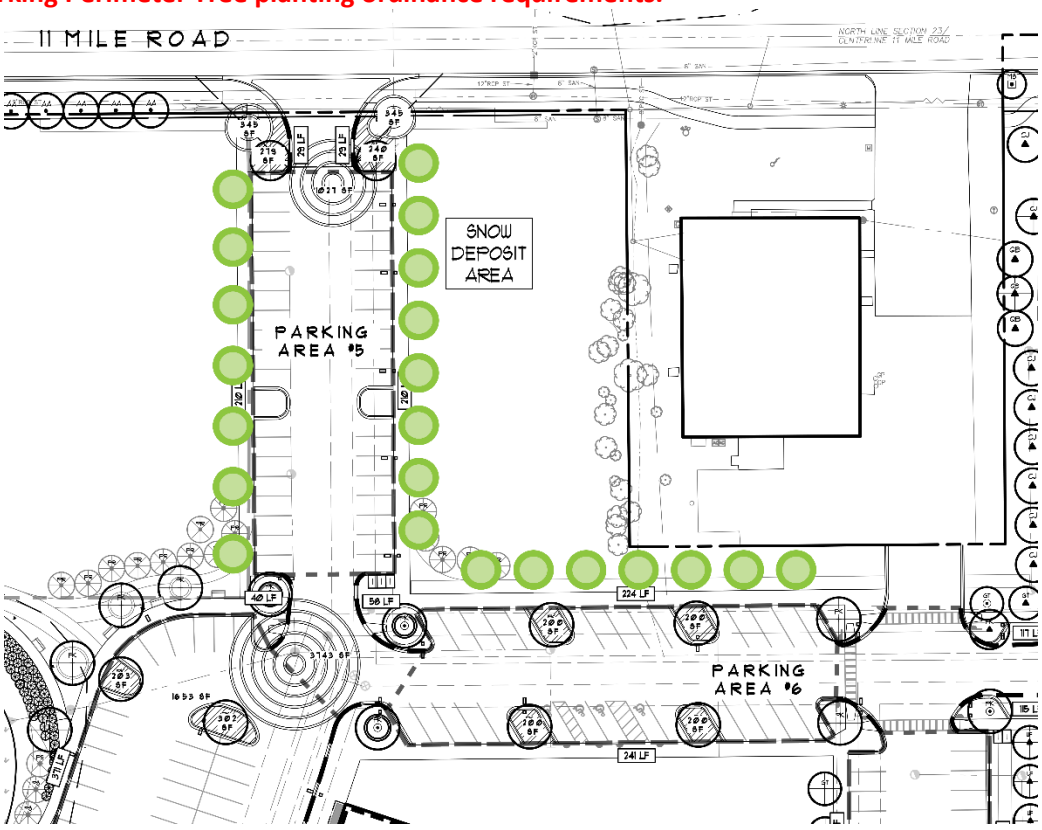
The item that truly will drive walkability and connectivity in Novi or anywhere is the collection of uses (the Food Hall / Grocery Market, the restaurant collection, the residents circulating around the site 24/7), embedded in a strong softscape / hardscape environment that is on par with the Village of Rochester Hills. The landscaping on the commercial site cannot be enhanced to that point at which further enhancement would impinge on the needs of the dynamic commercial uses that will truly be bringing walkability and connectivity to this part of Novi's downtown core. This includes the need for parking, the needs of retailers and restaurants for site-line visibility from streets and parking fields, and the need to not encumber future Phase 2 uses with unnecessary landscaping features.

The boulevard in question has been enhanced through additional tree plantings connecting the residential portion of the site to the walking paths surrounding the pond. 22 trees have been added in the area, which serve the added benefit of bringing the overall planting plan into alignment with the city's Parking Perimeter Tree planting ordinance requirements.



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13. The walkability of the development can potentially energize other areas in the Town Center core. For example, there is an opportunity to create walkable connectivity to the City-owned lake

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to the east of the site. ***Staff believes there this could be an opportunity for the developer to offer an enhancement that would create a public amenity. It is unclear from the submittal if the developer is offering such an enhancement.***

This is another way to say that the uses will be driving pedestrian traffic that will spill over to other areas around the site. The developer will not enhance a pedestrian path at the city-owned eastern municipal retention basin, as Phase3 residential connectivity is no longer necessary. This city-owned eastern municipal retention basin, it should be noted, has been cited as another prospective site for a public benefit.

###

14. In keeping with the intent to create an Asian village theme, Sakura Novi's design features, as described in the Architects' Design Statements, intends to create a bold, yet refined, aesthetic reminiscent of upscale shopping, dining and entertainment districts one may find in Osaka, Seoul and Hong Kong. ***The City's façade consultant indicates that the revisions to the proposed commercial building designs more closely comply with the Façade ordinance compared to the previous submittal. The commercial buildings also include architectural features that substantially enhance the overall design quality of the project. There are also landscape, hardscape (such as decorative paving at key intersections), and accessory details, such as the proposed tea house near the pond, that will elevate and carry the theme through the development. Whether these rise to the level of a benefit to the public is a question for further discussion.***

This discussion is ongoing.

###

15. The signage package, although it does not meet the ordinance standards, is meant to underscore that Sakura Novi is a cohesive, singular concept, and a regional destination to help the development team assemble an international blend of new and fresh merchant offerings. ***The deviations requested for the signage package are significant. Establishing this development as a culturally diverse destination is warranted, and signage could be a way to distinguish this area of the community from other nearby developments. However, staff does not have enough details of the signage proposed throughout the development to determine whether this would be an enhancement to***

Final results will be a function of the dynamic business uses we sign to be Tenants at Sakura Novi. We are seeking deviations that give us the leeway to work hand-in-hand with Tenant's to put them in the best possible light.

Robert B. Aikens & ASSOCIATES, L.L.C.

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December 4, 2019

Ms. Lindsay Bell
City of Novi
Planning Department
45175 Ten Mile Road
Novi, MI 48375

Re: PRO Site Plan Submittal Project Narrative
Sakura Novi & The Residences at Sakura Novi
Novi, MI

LIST OF REQUESTED DEVIATIONS

Sakura Novi's List of requested deviations from TC-1 Ordinance standards is included here:

1. Per section 3.27.1.C, Deviation is being requested for reduction of Exterior side yard setback dimension of 50' to 10' for Building A, where adjacent to Zoning B-3 commercial property (Advance Auto). RBA believes maintaining the stipulated setback would serve no good purpose as the commercial retail use on the adjacent parcel is similar in use to the uses proposed in Building A and for all GRA accessed components of proposed development. If this deviation is not obtained, the development will suffer from a large swath of the prime frontage along GRA being unusable for building footprints and useful parking, and will be unable to accommodate the driving anchor tenant's requirements. Providing cohesively designed and integrated frontage along the GRA corridor, as opposed to fractured and separate, serves the intent of Novi's Master Plan.

2. Per section 3.1.26, Deviation is being requested for reduction of Exterior side/rear yard parking setback dimension of 10' to 5' for the western parcel line near Grand River Avenue, adjacent to Zoning classification TC, a woodland preserve and green space preserve area (in perpetuity) directly adjacent, and for the southern parcel line to the rear of the Auto Parts store parcel, zoned B-3. RBA believes the benefits presented by increasing the main western pedestrian project entrance sidewalk width and landscaping generosity greatly outweigh the value of additional landscaping provided against this natural, mature woodland preserve area. Additionally, separating identical use areas (delivery/trash) between like uses with excessive landscape separation serves no useful purpose. If this deviation is not obtained, the proposed development will provide a less significant public connection to the GRA/Main Street intersection and the adjacent city center developments, or unnecessarily need to reduce the proposed building footprints, reducing income and rendering the project un-viable. Providing cohesively designed and integrated pedestrian connections along the GRA corridor serves the intent of Novi's Master Plan.

3. Deviation per Section 11-216(d)(1) **removed** - ~~Deviation is being requested for 3 entrances from project onto Grand River Avenue, concurrent with the findings of the Traffic Report confirming this third~~

~~easternmost entrance as proposed and where proposed will ease pressure on left eastbound turning movements out of site during peak times.~~

4. Per Section 3.6.2.M, a Deviation is being requested for reduction to 0' Wetland Setback to accommodate remediation process, development of feature landscaped retention basin on western portion of site and for careful integration of on-site detention on far eastern portion of site, abutting city-owned retention/wetland basin. Noted in Wetland Report. The deviation is essential to accommodate the environmental remediation process, the integration of the re-contoured and thematically planted perimeter banks, and to develop the central park-like pedestrian paths and water feature area accessible to Novi's public, designed to connect the existing Main Street area to the OSC development areas and hotels to the north. If this deviation is not obtained, creation of the public spaces and urban connectivity as envisioned in Novi's Master Plan will be far too consumptive of linear space for this particular site to be efficiently and effectively developed.

5. Per Section 3.1.26 - Deviation is being requested for existing and proposed side/front yard parking along 11 Mile Road. Existing occurs at Ecco Tool shop. Proposed occurs in three locations – see PRO plan. The deviation is essential to accommodate the existing conditions of an existing use to remain. If this deviation is not obtained, extensive modifications would need to be made for an unimproved, grandfathered use that is anticipated to be relocated in the near term.

6. Deviation per Section 5.5.3.B.ii.f **removed** - ~~Per Section 5.5.3.B.ii.f - Deviation is being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.~~

7. As a component of the Maximum Build-out scenario, Per Section 5.5.3.B.ii.f - **Deviation is removed.** ~~being requested for reduction in setback from 20' to 10' for temporary paved parking field along 11Mile ROW in Phase2 section of development, to be supplanted with future structured parking. See PRO plan. This deviation is of a practical nature in anticipation of, and when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. If this deviation is not obtained, significant construction complications are anticipated for the maximum potential build-out foreseeable for this city central project site.~~

8. As a component of the Maximum Build-out scenario, Per section 3.27.2.A.ii, **Deviation is removed.** ~~being requested for 11Mile buildings' frontages being less than 150'. Example: Building E currently contemplated as approximately 80'. Seeking height bonus as permitted for 6 level building E, with composition of uses as described/shown in chart on PRO plan. This deviation is essential when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent.~~

9. As a component of the Maximum Build-out scenario, Per section 3.27.1.f, **Deviation is removed.** ~~being requested for standardized Open Space requirements for Phase2. Open Space is defined in the ordinance thusly: *Open Space: An area of land that remains primarily undeveloped and in its natural state. For the*~~

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~~*purpose of this Ordinance, open space may include park lands and park facilities so long as they are provided as a part of an open space area.* There will no longer be ground on this site in its natural state. This standard is not conducive to achieving an effective development result when the goal is dense development where site sizes are limited (under 50 acres or so). This deviation is essential *for all projects* when considering the maximum potential build-out foreseeable for this city central project site, consistent with Novi's Master Plan's intent. *Phase1 has been designed to meet the city's ordinance, but Phase2 will need the deviation if density beyond townhomes is desired.*~~

10. Per Section 3.27.1.C - **Deviation request is removed** ~~for 11Mile frontage building setback limits.~~

11. Per Section 3.1.26 - Deviation is being requested for parking area setback in NE corner of project along 11 Mile Rd., adjacent to Residential Bldg3. See PRO plan. This deviation is of a practical nature as it is used in conjunction with the dropping natural grade along 11Mile Road at the east end of the site. This deviation allows more residential units to have their primary exposure and uninterrupted views toward the natural area to the east, as opposed to being elevated significantly above grade and overlooking 11 Mile Road, clearly less desirable to the occupants, fitting with the City's Master Plan intent of integrating existing natural features into new developments. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration.

12. Per Non-Motorized Master Plan - Deviation request is **removed** along 11 Mile frontage – submission as proposed includes connection to existing bike path on north side of road (considered to be a Neighborhood Connector Route). ~~Per Section 3.27.1.I - Deviation is being requested for reduction in sidewalk width from 12.5' to 6', such that sidewalk as proposed can be combined with adjacent landscaping as added buffer for residential product to be used in conjunction with maximum permitted setback. This condition is proposed for the length of the 11Mile Road project frontage. See PRO Landscape Plans. This deviation is of a practical nature in anticipation of the true quantity of pedestrian activity at the perimeter of the proposed TC-1 district, and is consistent with Novi's Master Plan's intent. An existing bike path is located on the north side of 11Mile Road, meeting the needs of the City's Non-Motorized Master Plan. If this deviation is not obtained, a harsh and unnecessary condition will be created, inconsistent with the project's desire for more natural features integration, which is consistent with the City's Master Plan.~~

13. Per Section 5.15 and 3.27.1.g – Deviation is requested for facade material exceptions included as part of the submittal, addressing comments received by city's architectural consultant. See PRO Plan Elevations. Also see included written Design Statements. The deviation is sought to accommodate the expectations of the international tenants and residents for distinctive enhancement and differentiation of this unique development destination project. This deviation allows the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, the significance of this unique, market specific development will be compromised. If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible.

14. Per Sections 3.27.1.H and Section 5.4 – Deviation is being requested for limited reductions in loading/service areas, and locations, as shown - See PRO plan and accompanying chart detail. Note that conditions for maximum density scenario have been removed. Deviation is requested for loading areas as positioned. Screening will be provided for all trash/loading areas not facing a directly adjacent loading

area. This deviation provides for sufficient tenant loading and trash services, and allows for the creation of environments more specifically tuned to the thematic Asian Village concept development that is being proposed, consistent with the intent of the City's Master Plan. If this deviation is not obtained, significantly larger service areas will need to be provided in obtrusive areas that will adversely affect pedestrian traffic, which is not consistent with the City's Master Plan.

15. Per Section 3.27.2.B – Deviation is being requested for prototype store relocation opportunity. Tenant will contain 25,000sf on main level with 3,500sf support office use and 1,500sf overflow seating on mezzanine level. Tenant will have entrances on both permanent public building exposures, meeting the 125' maximum spacing criteria. See PRO plan. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, One World Market's development of a new prototype store and as the Asian Village anchor may be forced to relocate outside of Novi, which is not consistent with the City's Master Plan.

16. Deviation per Section 5.16.1 is being **removed** ~~for bicycle parking ratio on residential portion of overall project. Bicycle parking to be provided on Retail portion of project will exceed ordinance in Phase1 based on Parking Study recommendations for overall parking required.~~

17. Per Section 5.7.3.K – Deviation is being requested for site Illumination level variance for multiple walkway areas, and for TC-1 fixture style selection. Site walkway areas will vary below 0.2fc minimum standard on natural pathway around water feature. Site walkway areas in residential portion will vary below 0.2fc minimum standard. Parking area in residential area will fall below 0.2fc minimum standard. See revised PRO photometric plan. This deviation provides for sufficient nighttime illumination levels for the natural pedestrian path around the water feature, and for appropriate site illumination levels within the residential portions of the project. If this deviation is not obtained, the residential portions of the project will exist with an unnatural and undesirably high lighting level during the nighttime hours, which will be detrimental to their occupants and leasing ability, which is not consistent with the City's Master Plan.

18. Per Chapter 28 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for TC-1 project tenant signage size standards – number and project signage types and shapes and areas calculations based on dual-language signage as part of authentic Asian Village. **Please refer to attached Signage Deviation Letter and supporting documents.** Project requires dual-language signage for authentic presentation of international tenants and clientele expectations. Many tenants will have both front (facing ROW) and rear (primary) entrances. Per 28-5.c.1.a, an increase of 100% over standards is required to accomplish the dual language signage. Per 28-5.c.1.b, (2) signs of equal permitted size are requested for each typical retail/restaurant tenant, as well, as most tenants will have pedestrian entrances on 2 separate facades. Per 28-5.c.1.d, (2) signs of equal permitted size are requested for each project interior retail/restaurant tenant (not fronting public streets), consistent with other project lease space, and permitted sign area needs to be calculated as per 28-5.c.1.a. Per 28-5.c.2.b, Signage style and type, as well as materials and illumination standards shall not adhere to the Sign Design and Review Manual for Novi TC-1 District. 28-5.e.1.a, an increase of permitted projecting sign area to match primary signage area allotted up to 72sf maximum, 28-5.e.2.a, an increase to 45sf of total area. The deviation is essential to accommodate the needs of the international tenants intended to provide their signage in both the characters of their native language along with the English translation of their names.

If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

19. Chapter 28-10 of the City Code, and per the Sign Design and Review Manual for Novi TC-1 District – Deviation is being requested for removing prohibition of 28-10.a.3 string lights, exposed luminaire strip lights or neon tubes along building edges or other locations, 28-10.a.4 animated signs. These elements, video display screens and/or animated LED lighting systems as part of public entertainment feature opportunity, are crucial to an authentic Asian environmental experience. The deviation is sought to accommodate the needs of the international corporate community to drive their endorsement and future sponsorship opportunities as the project evolves into its future phase(s). If this deviation is not obtained, creation of an authentically presented Asian Village will not be possible.

20. Per Section 5.3.2 – Deviation is being requested for drive lane reduction in residential Phase1. See supplemental detail on Civil Sheet C-2.2. This deviation provides for sufficient traffic movement clearances to satisfy resident, service and emergency vehicle needs in the residential portions of the project, while enhancing the Mixed-Use vibrancy of the overall development. Sufficient clearance has been provided to lanes to accommodate emergency vehicle turning movements. If this deviation is not obtained, the residential portions of the project will have an inappropriate area allocated between units in the rear/service/alley space, which is not consistent with the City's Master Plan for developing density in this core district.

21. Per Section 3.27.1.C – **Deviation is removed**. - ~~being requested for Phase 1 internal site buildings A and B that exceed permitted setback limit from Grand River Avenue, and for future proposed Phase 2 buildings with setback greater than 10' to 11 Mile Road. Phase 2 buildings will be accessed via internal drive lanes, similar to proposed residential layout for Phase 1. See P1.1. This deviation provides for the ability for any developer to generate density throughout a project of this land area in classification TC-1. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.~~

22. Per Section 3.27.1.i – Deviation is being requested for 11 Mile Road 6' sidewalk width as proposed – see PRO plan. The deviation is essential to provide sufficient landscaping material for the greenbelt screening for the uses proposed, while maintaining the negotiated permitted TC-1 setback limit at the residential uses (11' to porch, 16' to townhouse facade), and for connecting the natural features of the project to the adjacent land features. If this deviation is not obtained, creation of a beautiful and appropriately landscaped pedestrian thoroughfare will not be possible as envisioned by Novi, and as supported by the intent of the City's Master Plan.

23. Per ordinance 18.283 section 5.5.3.A – Landscape Deviation is being requested for landscaping buffer shown. Proposed TC-1 zoning shall have a 6-8 ft ht berm or wall when adjacent to B3 zoning. Because the buffer area is only 12ft wide and the residents' living areas are on the 2nd & 3rd floors, we are proposing a continuous evergreen hedge to be maintained at 6' ht with densely planted deciduous canopy trees. A wall would serve no additional good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

Robert B. Aikens & ASSOCIATES, L.L.C.

ROBERTSON BROTHERS HOMES

24. Buffer between commercial/residential parking lot and MF building 9 – **deviation removed** ~~as both uses are permitted uses within proposed TC-1 zoning.~~

25. Per ordinance 18.283 section 5.5.3.A proposed TC-1 zoning shall have a 10-15ft ht berm planted to achieve 80% opacity in winter and 90% opacity in summer. Because the distance from the face of the residential units to the property line is less than 30 ft. and has the following conditions:

    a. The current I-1 use operates during the day and there are no building openings on the east side facing the TC-1 residential to create noise.
    b. The I-1 parcel is proposed to be rezoned to TC-1 as a part of this project.
    c. The residential unit living areas are on the second and third floors.

    We are proposing a continuous evergreen hedge to be placed and maintained at 5' ht with densely planted upright canopy trees. A wall would serve no good purpose and the proposed plantings will provide a more aesthetic screen in keeping with the landscape design. If this deviation is not obtained, the proposed development will not be able to provide the future density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

26. Per ordinance 18.283 section 5.5.3.C.ii.B – Parking Area Landscape Requirements – A parking deviation is being requested for the landscaped area endcap island requirements of Section 5.3.12.; *"In order to delineate on-site circulation, improve sight distance at the intersection of parking aisles, ring roads, and private roads, protect the vehicle at the end of a parking bay, and define the geometry of internal intersections, end islands (landscaped with raised curb) shall be required at the end of all parking bays that abut traffic circulation aisles in off-street parking lots."* A. The required square footage of interior parking lot landscaping has been provided.
    B. The required number of interior parking lot canopy trees have been provided.
    C. The required Endcap islands have not been provided.
    We are requesting a deviation from providing additional landscape as in order to do so, we will have to reduce the large areas devoted to landscaping the west detention pond perimeter. The Town Center Area Study recommends the pond to be a focal point and that it could be used to host community events which we are providing. We believe this large and contiguous landscaped amenity provides a much greater community benefit. If this deviation is not obtained, the proposed development will be required to provide even larger overall parking lot areas along Grand River Avenue, which is not consistent with the City's Master Plan.

27. A: Per ordinance 18.283 section 5.5.3.D – Building Foundation Requirements - A Landscape **Deviation is removed.** for foundation plantings around all Phase 1 Commercial buildings. Plantings have been proposed along the façade of all phase 1 commercial buildings in beds measuring at least 4' wide. These plantings, combined with adjacent decorative paving areas, extend across at least 75% of all commercial building perimeters. With regard to the square footage requirement, we are requesting a waiver per Ordinance 5.5.3.D.ii.g; *"With respect to projects in the TC and TC-1 districts, the Planning Commission may waive the 8 foot width calculation requirements if significant additional planting and/or decorative paving or amenities are added adjacent to the building."*

    B: Per ordinance 18.283 section 5.5.3.F – Subdivision Planting Requirements – A Landscape **Deviation is removed.** for foundation plantings in front of the building garages and interior street tree requirements.

We believe the area in front of the garages should be excluded similarly as driveways are excluded. In order to provide building foundation plantings adjacent to the garages the residential layout would need to change to a more suburban layout which would undermine achieving the density conducive of the TC-1 zoning. The proposed landscape meets all street tree requirements (Sec 5.5.3.F.c) and we believe the landscaping density of this compact TC-1 development far exceeds the typical amount of landscaping for multifamily developments. If this deviation is not obtained, the proposed development will not be able to provide the density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

28. Ecco Tool will remain as a part of this overall development, though its remaining parcel will be rezoned to TC-1 as a part of this redevelopment initiative. Ecco Tool will then be a non-conforming use until their operations cease. **We require a deviation for this non-conforming use.** The existing parcel occupant will be provided their own separate legal parcel as a division of their existing landholdings within the tracts. This deviation provides for the relocation of an existing Novi retailer, consistent with the City's Master Plan, and allows for the creation of an environment more specifically tuned to the thematic Asian Village concept development that is being proposed. If this deviation is not obtained, the proposed development will not be able to provide the amenities and density desired and envisioned as part of this particular development site, which is not consistent with the City's Master Plan.

LIST OF PROSPECTIVE PRO AGREEMENT CONDITIONS

Developer has started to draft a list of possible conditions, which will continue to evolve as the approval process continues:

1. Developer shall develop the Land in accordance with all applicable laws, ordinances, and regulations, including all applicable setback requirements of the Zoning Ordinance under the Proposed Classification, except as expressly authorized herein, and all storm water and soil erosion requirements and measures throughout the site during the design and construction phases of the Development, and during the subsequent use of the Land as contemplated in this Agreement.

2. The grass-land pads shown on the landscape plans shall be properly maintained as grass-land pads until such time that area is needed for Phase 2 uses to be developed.

3. The maximum number of dwellings to be constructed in Phase 1 shall be 68.

4. Phase 1 non-residential uses shall be limited to a 30,000 sf market; and restaurants and retail space totaling approximately 25,000 sf as shown on the PRO Concept Plan.

5. Woodland Tree Removals during phase 1 shall be approximately 101 trees, which shall require 197 replacement credits. Developer will plant a minimum of 82.5 credits on site. If mandated, all woodland replacement trees shall be permanently protected via a conservation easement or landscape easement. The remaining 114.5 credits not planted on-site will require a payment of $400 per credit to the City of Novi Tree Fund. Language governing Phase 2 uses to be included within PRO Agreement terms.

6. Proposed parking is being provided as per Parking Study recommendation. Future phase parking requirements will also be a function of shared parking analysis.

7. Tentative completion dates have been added to the Project Narrative, and submitted as part of the PRO package.

8. WETLANDS: Impacts to the wetland and wetland buffer areas have been indicated and quantified and submitted as part of the PRO package. Specific remedies to be included in the PRO Agreement Conditions.

9. Deviations language and formatting has been modified to reflect the City's directive. The updated list has been submitted as part of the Narrative in the PRO package. All accepted deviations are to be included in PRO Agreement Conditions.
10. Future Phases beyond Phase 1 will require an optional deviation for Open Space standards to achieve maximum density – see Deviation request #9.

11. The adjacent non-conforming Light Industrial use owned by Ecco Tool Co is to be addressed in the PRO Agreement conditions. The PRO Agreement Conditions will include the company's access for delivery trucks on the retained parcel; which will require cross access rights. The PRO will provide the Ecco Tool Co retained parcel with 12 parking spaces on the retained parcel or access to parking spaces on the non-retained property or on the Anglin property to make up any shortfall.

CONSULTANTS

The outside consultants involved with the project are as follows:

Engineering Consultant:

Jim Butler, PEA,
2430 Rochester Court, Troy, MI 48083
248-689-9090, Ext 1133

Architecture Consultants:

Matt Niles, Wah Yee Associates (Commercial)
42400 Grand River Avenue, #200, Novi, MI 48375
248-489-9160

Brian Neeper, Brian Neeper Architecture P.C. (Residential)
630 North Old Woodward, Suite 203
248-259-1784

Landscape Consultant:

Sue Grissim, Grissim Metz Andriese Associates
300 E Cady St, Northville, MI 48167

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON BROTHERS HOMES

248-347-7010, Ext 222

Traffic Consultant:

Timothy Likens, Bergmann
7050 West Saginaw Hwy, Suite 200, Lansing, MI, 48917
517-827-8693

Wetland Consultant:

Don Berninger, Atwell, LLC
311 North Main, Ann Arbor, MI 48104
734-994-4000

Sakura Novi, LLC is pleased to present this concept plan for PRO consideration by the City. We believe the development will ultimately become a point of pride for responsible development at the heart of a robust downtown Novi.

Please let me know if any additional information is required at this time.

Thank you.

Respectfully,

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON BROTHERS HOMES

December 4, 2019

Ms. Lindsay Bell
City of Novi
Planning Department
45175 Ten Mile Road
Novi, MI 48375

Re: PRO Site Plan - Signage, TC-1 Signage Deviation authenticity detail
Sakura Novi & The Residences at Sakura Novi,
Novi, MI

Robert B. Aikens & Associates, LLC and Robertson Brothers Homes is pleased to submit a PRO Rezoning and Site Plan application for properties near Town Center Drive between Grand River Avenue and 11 Mile Road. The development team has been working with City staff to develop for the community an Asian-themed, mixed use development in the heart of downtown Novi on land owned by the City of Novi and land owned by Ecco Tool Co. As part of the Proposed rezoning to a TC-1 district, a deviation from the TC-1 specific signage criteria will be required for this project. This document intends to justify the necessity for that requested deviation for the authenticity, success and vibrancy this project.

The initial deviation will be to use TC signage standards with minor modifications, as opposed to the TC-1 “Main Street” project specific criteria. In addition, the project will require a 100% increase over the TC permitted sign areas such that “Dual-Language” signage can be employed for each tenant. Additionally, as many tenants will employ 2 customer entrances, we will require equal size signage for the primary entrance and for the secondary entrance for each tenant space providing 2 customer entrances. Lastly, exposed luminaires may be sought by tenants as part of their signage, and will be encouraged by the developer, to increase the authenticity of the environment.

The unique signage intended as an integral part of this project’s distinctive design will include dual-language signage. This means that each tenant will be allowed and encouraged to provide the signage marketing their business in their respective native language characters or symbols as well as in English. As the business names will be presented in 2 languages, the area allotment for signage will need to be doubled to accommodate the additional line of characters/symbols, using Novi’s measurement methodology.

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB ROBERTSON BROTHERS HOMES

The existing TC-1 Signage Design and Review Manual criteria was adopted in 1998. The TC-1 Signage Design and Review Manual criteria appears to have been developed for 0' setback, historic urban areas with very low vehicular traffic speeds. Grand River Avenue, upon which the Sakura Novi project has its Phase1 primary commercial frontage, has a vehicular speed limit of 50mph. Sakura Novi is being responsive to the existing required arterial design setbacks maintained along Grand River Avenue, further increasing the distance of many buildings from the ROW, unlike the sign format relationships contemplated in the existing TC-1 Signage Design and Review Manual.

Sakura Novi is proposing/demonstrating that proportional, legible dual language signage elements will be required to occupy 2x that amount of space allotted, typically. See Phase1 Signage Sheets included as part of this submittal.

Sign Types as permitted in the existing TC-1 Signage Design and Review Manual criteria are also far too restrictive to create an authentic and dynamic environment for a campus-style project layout as Sakura Novi is being proposed. See these TC compliant representative tenant signage type images for reference:

Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
ROBERTSON
BROTHERS
HOMES

Robert B. Aikens
& ASSOCIATES, L.L.C.

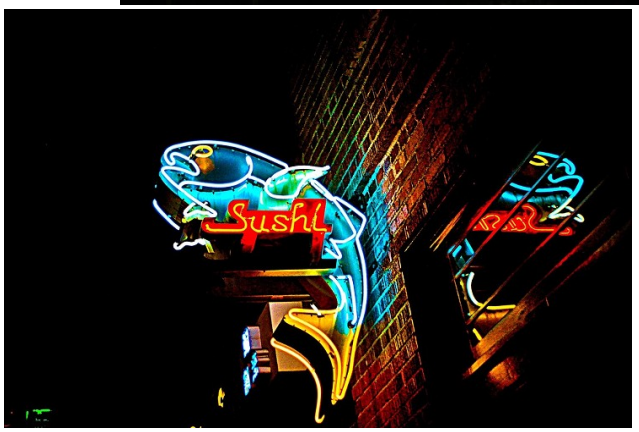
ROBERTSON BROTHERS HOMES

Sakura Novi will require the opportunity for sign cabinet and illumination systems currently prohibited in the existing TC-1 Signage Design and Review Manual. Authentic Asian signage – signage that the ex-patriot workforce and first generation immigrant population are accustomed to seeing in the their native communities is very bright, and often overwhelming. This next photo is not the look that we are seeking for Sakura Novi, but should be considered as a point of reference.

The careful and restrained use of exposed element signage, however, is an element for which we are seeking a deviation in the Sakura Novi signage options package. See the following images for reference:

Robert B. Aikens
& ASSOCIATES, L.L.C.

ROBERTSON BROTHERS HOMES



Robert B. Aikens
& ASSOCIATES, L.L.C.

ROBERTSON BROTHERS HOMES

We intend to incorporate our Project Monument signage ID with the parking lot screening element we are being required to provide in the setback area along Grand River Avenue. We will require deviations for sign construction and illumination of this element from the standards in the existing TC-1 Signage Design and Review Manual.

There will be Project Monument sign(s) for the Residential entrance(s) on 11 mile.

Phase2 project Monument signage will be shown as a part of the Phase2 Amendment plans.

Please consider these items in context of the Sakura Novi project as a whole, as an integral part of the Asian Village Campus development we are proposing. Sakura Novi is a project that will benefit from careful attention to these details.

Please contact us with questions or concerns such that we can have an open dialogue on this most crucial topic going forward.

Thank you.

Respectfully,

G. Scott Aikens, Ph.D.

Robert B. Aikens
& ASSOCIATES, L.L.C.

ROBERTSON BROTHERS HOMES

Typical Asian Commercial District Signage examples:

Robert B. Aikens
& ASSOCIATES, L.L.C.

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Reduced Density Asian Commercial District Signage examples:

Robert B. Aikens
& ASSOCIATES, L.L.C.

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Dual-Language Signage examples:

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& ASSOCIATES, L.L.C.

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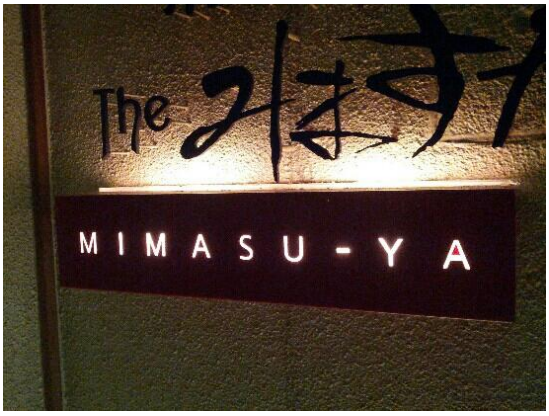
Desirable Sakura Novi Signage examples:



Robert B. Aikens
& ASSOCIATES, L.L.C.

RB
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HOMES

Civil Engineers | Land Surveyors | Landscape Architects
experienced. responsive. passion for quality.
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t: 248.689.9090 • f: 248.689.1044 • www.peainc.com

December 2, 2019

Lindsay Bell
Planner
City of Novi
45175 Ten Mile Road
Novi, MI 48375

RE: Plan Review Center Report – Planning Review
Sakura Novi PRO Concept Plan
JZ19-31

Dear Ms. Bell:

We have received your Plan Review Center Report dated November 9, 2019. We offer the following responses corresponding to your comments, as follows:

2a. **Design and Layout Concerns** *(page 5)*

- Vehicle Circulation - We have reached out to the acting Fire Marshal regarding the vehicle circulation comments in the Fire Department review letter dated October 11, 2019. We understand that the City is in the process of purchasing a new ladder truck, and these specifications shall be used as a basis for navigating through the development. We will update the plans as necessary to satisfactorily address their concerns.

4. **Woodland Review dated 10.21.19** (page 24)

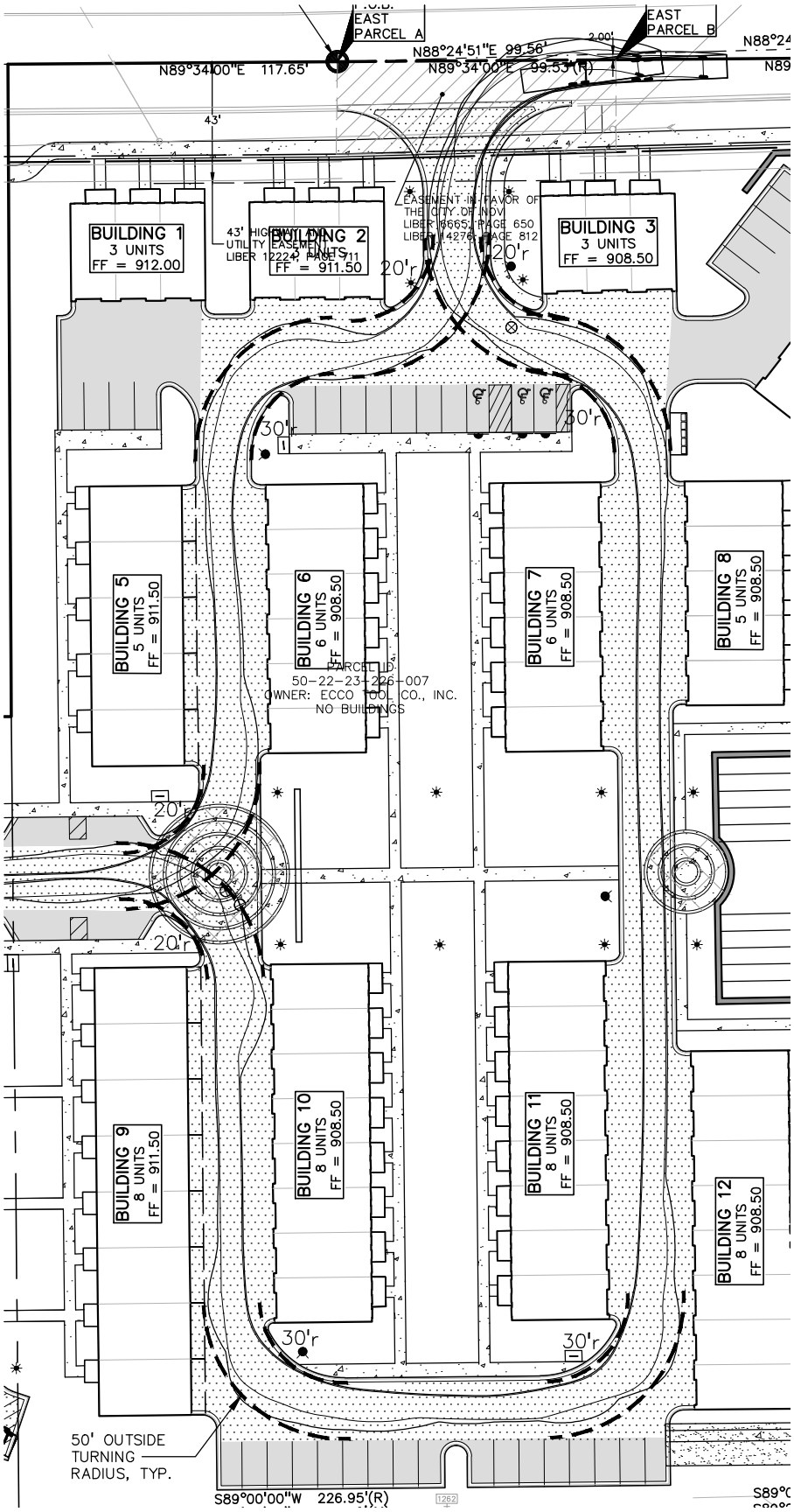
- Woodland replacement calculations have been updated, along with the Tree Protection Plan (T-1.0) and Tree List (T-1.1,) per ECT comments. These updates have been provided directly to ECT as part of ongoing coordination to determine the source of the differential between what was calculated to be required in the plan set versus what was determined to be required by ECT. Further coordination with ECT will take place in order to determine the required replacement quantities, and the plans will be updated accordingly.

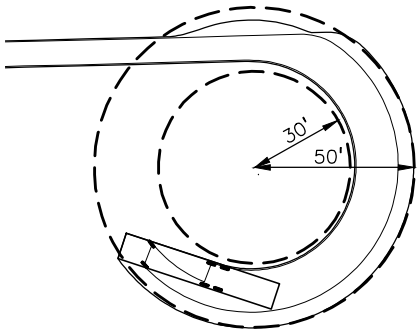
We appreciate your review and hope that we have satisfied your concerns. If you should have any questions or require any additional information, please feel free to contact this office.

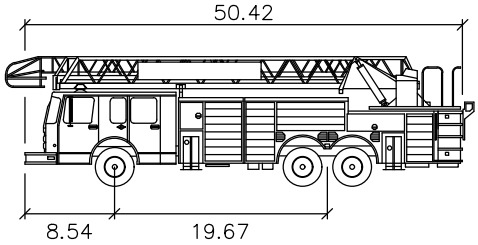
Sincerely,

PEA, Inc.

Gregory Bono, P.E.
Project Coordinator







LADDER TRUCK

	feet
Width	: 8.33
Track	: 7.61
Lock to Lock Time	: 5.0
Steering Angle	: 50.0

Landscape Architecture
311 East Cady St. Northville, MI 48167
248.347.7010 gma-la.com

GRISSIM
METZ ASSOCIATES
ANDRIESE

Ms. Lindsay Bell
City of Novi
Planning Department
45175 Ten Mile Road
Novi, MI 48375

Re: PRO Site Plan Submittal Response Letter
Sakura Novi & The Residences at Sakura Novi
Novi, MI

Dear Ms. Bell,

We are grateful for your November 4th Plan Review Center Report and all the great guidance that it has provided us. We are very pleased to offer the following responses to each note from the reviewers, given in the order that they appeared in the report. Please note the reviewer comments listed below in black, and then our responses in red.

Landscape Deviation List -- Response Section:

Landscape Deviations – Commercial

1. Insufficient Greenbelt Landscaping – We offer the following to **remove this deviation:**
   A. Instead of the required berm or brick wall along GRA, a decorative fence with brick piers and dense landscaping is proposed. This fence detail is provided on Sheet P 4.5 and referenced with note 6 on Landscape Plan Sheets L301 and L302.
   B. There is 581 LF of frontage along GRA, 261 LF of which is adjacent to parking, and 320 LF of which is non-adjacent to parking. 261/25=10.44 (10 trees), 320/30-10.66 (11 trees). We will provide a total of 21 proposed canopy greenbelt trees along Grand River Avenue.
   C. There is 586 LF of frontage along the commercial portion of 11 Mile Road, all of which are non-adjacent to parking. 586/30=19.5. We will provide 20 Deciduous Canopy trees along the commercial stretch of 11 Mile Road, spaced 30' O.C.
   D. There is 362 LF of frontage along the residential portion of 11 Mile Road, 60 LF of which are adjacent to parking. Due to the 15' wide setback and presence of overhead utility lines, we propose 15 subcanopy trees within the ROW and the remaining 4 to be provided between the sidewalk and the bldgs. 302/20=15.1 (15 trees), 60/15=4 (4 trees). We will provide 19 subcanopy trees along the residential portion of 11 mile road.

2. Insufficient Interior Parking Lot Landscaping – We offer the following to **minimize this deviation:**

A. The required square footage of interior parking lot landscaping has been provided.
B. The required number of interior parking lot canopy trees will be provided.
C. The required Endcap islands have not been provided. **This will remain a deviation.**

3. Insufficient Parking Lot Perimeter Trees – We offer the following to **remove this deviation:**

A. The required number of parking lot perimeter trees will be provided across the site.

4. Lack of Screening Wall or Berm For Parking Areas – We offer the following to **remove this deviation:**

A. The Phase 2 Lot in question is no longer proposed as parking, and thus does not require a berm or wall.
B. We shall add vegetation along the north side of the parking spaces within parking area 5, screening them from 11 Mile Road.

5. Lack of Building Foundation Planting – We offer the following to **remove this deviation:**

A. The Building Foundation Planting Calculation Table has been revised for clarity and simplicity
B. Building C meets building foundation requirements, with the exception of the 8' square footage calculation. Due to the project's goal of meeting TC-1 district design intent, as well as the extensive planting and decorative paving areas adjacent to the building, **a waiver from this calculation requirement will be sought.**
C. Building B foundation planting/decorative paving will be expanded to meet all building foundation requirements, with the exception of the 8' square footage calculation. Due to the project's goal of meeting TC-1 district design intent, as well as the extensive planting decorative paving areas adjacent to Building B, **a waiver from this calculation requirement will be sought.**
D. A 4' wide bamboo hedge will be proposed along the northern façade of Building A, bringing the total proposed foundation planting/decorative paving into alignment with the required linear footage (75% of building façade). Due to the project's goal of meeting TC-1 district design intent, as well as the extensive planting decorative paving areas adjacent to the building A, **a waiver from the 8' square footage calculation requirement will be sought.**
E. Sec 5.5.3.D.ii.g: *"With respect to projects in the TC and TC-1 districts, the Planning Commission may waive the 8 foot calculation requirements if significant planting and/or decorative paving or amenities are added adjacent to the building.*

Landscape Deviations – Residential

1. Sound Barriers/Buffers, or Audio Study
   A. Residential partner has declined to provide a sound study. Deviation remains.
2. Lack of Interior Drive Perimeter Trees Provided – We offer the following to **remove this deviation:**

A. The Interior Drive Perimeter Tree Calculation Table has been revised for clarity and simplicity. Residential streets are shown as one lump number, while commercial streets remain broken up by individual street.
B. There are 28 required Interior Drive Perimeter Trees in the residential section. 30 have been provided – all of which are suitable canopy species.

Landscape Letter – Response Section:

Ordinance Considerations: Existing Trees

The grading plan is not consistent with the Tree Protection Plan in terms of trees to be saved/protected.
All discrepancies between the grading plan and tree protection plans will be remedied.

Please correct that inconsistency and show all trees to be removed or saved on both plans, with tree protection fence consistently shown between the plans, and the demolition plan.
All discrepancies between tree removals and protection fencing have been remedied.

Ordinance Considerations: Adjacent to Residential – Buffer

Buildings 3 and 5 are adjacent to I-1 zoning. The required 10-15' tall landscaped berm is not provided. A tall hedge and deciduous trees are proposed. Please provide a taller buffer that provides significant audible buffering, such as an 8' tall wall instead of the hedge. At the minimum, a noise study indicating that a noise buffering wall is not necessary must be provided. As currently configured, the landscape deviation requested is not supported by staff.
Residential partner has declined to provide a sound study. Deviation remains.

Building 9 is adjacent to the commercial section and a loading area for the market where large trucks will travel. The required 6-8' tall landscaped berm between residential and commercial uses is not provided. A 3' tall hedge and deciduous canopy trees are proposed. Please provide a taller buffer that provides significant audible buffering, such as a 6' tall wall instead of the hedge or proof that such audible buffering is not required. As currently proposed, the deviation is not supported by staff.
Both uses described above are permitted within the TC and TC-1 zoning districts. As such, no buffering is required. This deviation has been removed.

The southern parking bay is adjacent to B-3 zoning. The required 6-8' tall landscaped berm is not provided. An evergreen hedge and deciduous trees are proposed as a buffer. The landscape deviation for this frontage is supported if the applicant will agree to manage the hedge at a height of 6 feet above ground level.

The client does agree – a note regarding maintenance of this hedge at a height of 6' will be added to the landscape details sheet L403.

Phase 3 also has residential adjacent to I-1 zoned and developed property to the east but there doesn't appear to be sufficient room for the required berms or alternate screening. This would require a landscape deviation that is not supported by staff.
Phase 3 has been removed from the scope of this project and will be developed as a separate project at a later date.

Ordinance Considerations: Adjacent to Public Rights of Way

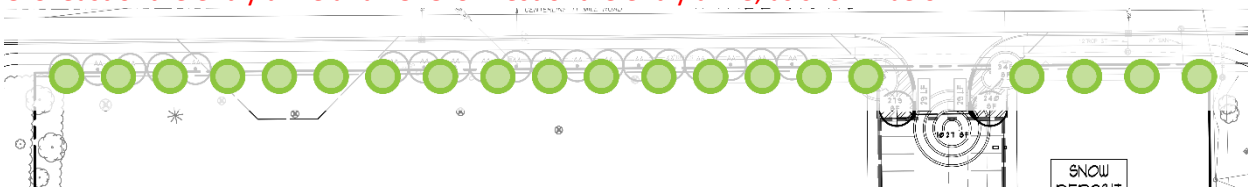
Commercial; Grand River Ave:
The required berm or brick wall are not provided. A decorative fence with brick piers, with dense landscaping, is proposed instead but no detail is provided in the plans. Please provide a detail of the proposed fence and piers in the landscape plans. The deviation for a lack of wall or berm can still be supported as the landscaping appears to provide 80-90% opacity throughout the year.
Detail is provided In Sheet P4.5 and a note (Note 6) referencing this detail will be added to Landscape Sheets L301 and L302.

Commercial; Grand River Ave:
Based on the frontage, 24 canopy trees are required but only 18 are proposed. This deviation is not supported by staff.
There is 581 LF of frontage along GRA, 261 LF of which is adjacent to parking, and 320 LF of which is non-adjacent to parking. 261/25=10.44 (10 trees), 320/30-10.66 (11 trees). We will provide a total of 21 proposed canopy greenbelt trees along Grand River Avenue.

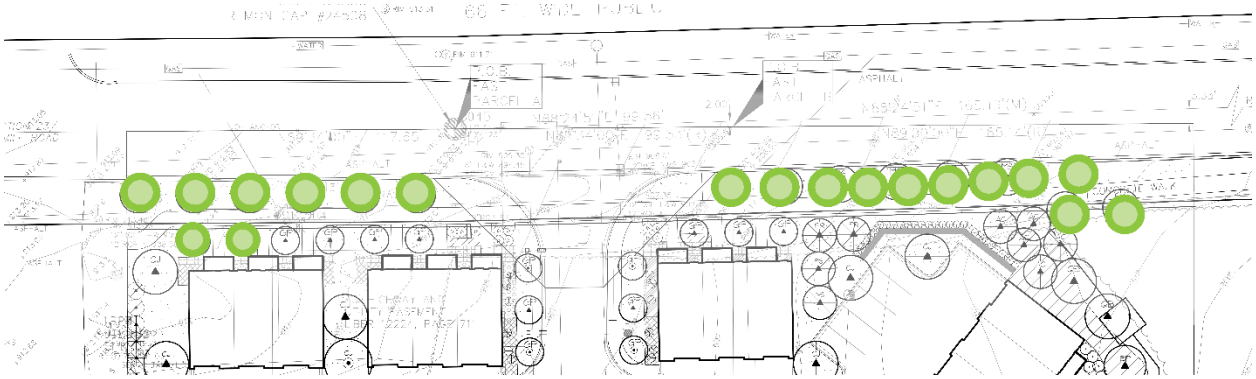
Commercial; 11 Mile Road:
The required berm or brick wall are not provided between the road and the parking lot in Phase 2. This deviation is not supported by staff.
The Phase 2 Lot in question is no longer proposed as parking, and thus does not require a berm or wall. We shall add vegetation along the north side of the parking spaces within parking area 5, screening them from 11 Mile Road.

Commercial; 11 Mile Road:
Based on the frontage, the Phase 2 greenbelt needs to have 21 canopy trees or 31 subcanopy trees. 19 canopy trees are proposed. This deviation is not supported by staff.
There is 586 LF of frontage along the commercial portion of 11MR, all of which are non-adjacent to parking. 586/30=19.5. We will provide 20 Deciduous Canopy trees along the commercial stretch of 11MR, spaced 30' O.C.

Commercial; 11 Mile Road:
Please spread the provided greenbelt trees across the site more and add two more canopy trees in order to remove the landscape deviation.
We will provide 20 Deciduous Canopy trees along the commercial stretch of 11MR, spaced 30' O.C. east of the entry drive and 28' O.C. west of the entry drive, as shown below:



Residential; 11 Mile Road
20 subcanopy trees are required. 11 subcanopy trees are provided in the right-of-way. Please provide the remaining required subcanopy trees. The deficiency in plantings is not supported by staff.
There is 362 LF of frontage along the residential portion of 11 Mile Road, 60 LF of which are adjacent to parking. Due to the 15' wide setback and presence of overhead utility lines, we propose 15 subcanopy trees within the ROW and the remaining 4 to be provided between the sidewalk and the bldgs. 302/20=15.1 (15 trees), 60/15=4 (4 trees). We will provide 19 subcanopy trees along the residential portion of 11 mile road. See graphic of approximate layout below:



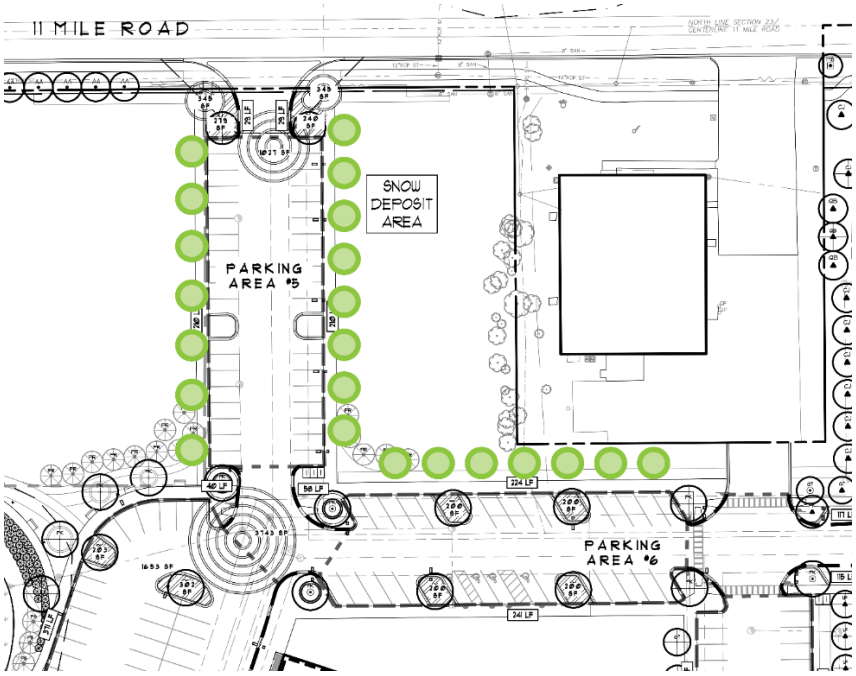
Residential; 11 Mile Road
Please use a more upright variety of crabapple in the right-of-way to provide better vehicle and pedestrian clearance.
We are proposing Malus 'Adirondack' as the variety of crabapple along the residential stretch of 11 Mile Road, which has a regular height of 18' and a spread of 10'. The trees will be spaced approximately 20' apart, except in front of parking areas, where they will be spaced 15' apart to meet ordinance.

Ordinance Considerations: Parking Lot Landscaping
Commercial: Based on the vehicular use area calculations provided, a total of 7,026 of interior landscape area and 35 canopy trees are required. A total of 7,032sf of area and 27 trees are

provided, some in islands with less than 200sf per tree. These shortages in interior landscape area and trees require landscape deviations. They are not supported by staff. Please see the landscape chart for a detailed explanation.
We are proposing interior parking lot landscaping that exceeds the required square footage for the project by 7 sf. Landscape islands which have a minimum dimension under 10 lf, or which are under 200 sf and are not directly contiguous with larger landscape areas have not been included in this calculation. All ordinance-conforming islands will also be planted with canopy trees per the city ordinance.

Commercial: Please add the area of the Building B loading area to the calculation.
We will add the area in question to the VUA for Parking Area 4 and all calculations will be revised accordingly.

Commercial: Based on the perimeter provided, 81 canopy trees are required but only 59 are provided, some of these are subcanopy trees. This is also a landscape deviation which is not supported by staff as there is room on the site for more to be provided.
We are proposing 22 additional trees along the perimeter of Parking Area 5, as well as along the northern boundary of Parking Area 6 to meet this requirement (see graphic below).



Commercial: Please label all islands counted toward the requirement with their area in SF.
All parking islands will have their square footage labeled on Landscape Sheet L203.

Commercial: Please add islands, trees and endcap landscaping where necessary to minimize or eliminate the landscape deviations.
Interior parking islands and canopy trees have been added wherever possible. Endcap landscaping per the city ordinance is included wherever possible, and **any remaining deficit in parking lot endcap landscaping will be addressed in a deviation request.**

Commercial: Please adjust the Building A loading area parking lot to allow room for the required perimeter trees along the south edge of the pavement.
We are reviewing changes to the layout of this parking area to create space between the edge of pavement and the property line for the required parking perimeter trees.

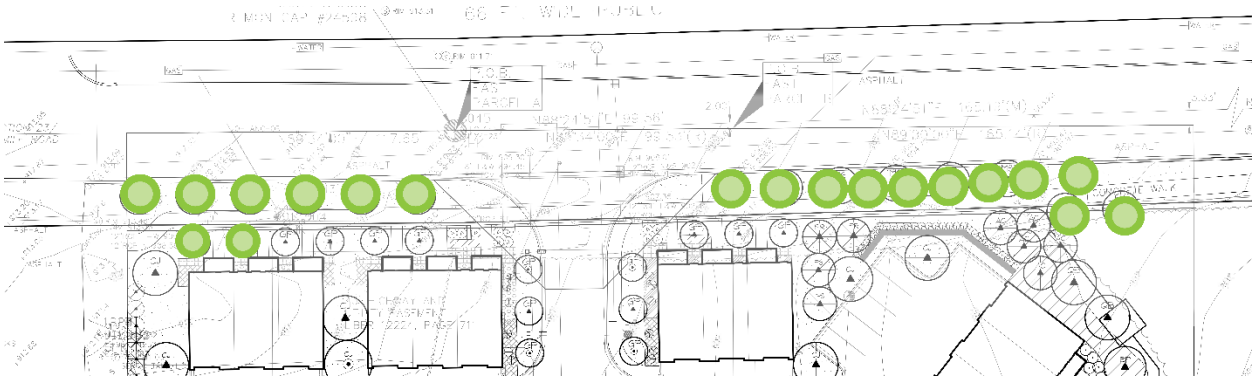
Ordinance Considerations: Building Foundation Landscaping

Based on the calculations provided, the requirement for the foundation landscape area for any of the buildings is not met, so a landscape deviation is required. The deviation is not supported by staff.
We are proposing additional building foundation landscape planting areas supplemented with decorative paving areas and potted plants which meet the requirements stated in the city ordinance.

Please add as much foundation planting area around each building as possible to lower the extent of the deviation.
We are proposing additional building foundation landscape planting areas which meet some, but not all, of the requirements stated in the city ordinance. Per Section 5.5.3.D.g, *"With respect to projects within the TC and TC-1 districts, the Planning Commission may waive the 8 foot width calculation requirements if significant additional planting and/or decorative paving or amenities are added adjacent to the building." The applicant will be appealing to the Planning Commission to waive the 8' calculation requirement as described in the ordinance.*

Ordinance Considerations: Multi-Family Residential Landscaping

Unit Landscaping: Unit trees cannot be used to meet the greenbelt requirement along 11 Mile Road. Please reclassify the required number of trees in front of the units facing 11 Mile Road as greenbelt trees to meet the greenbelt requirement and plant the unit trees elsewhere on the site.
Two trees previously designated as Unit Trees will be reclassified into greenbelt trees. No unit trees will be used to meet the greenbelt tree requirements. See graphic below.



Interior Drive Plantings: Based on the calculations provided, 66 interior street trees are required but only 41 are provided. This is a deviation that is not supported by staff. Please plant all required trees.
66 interior street trees are required for the entire project, but only 28 are required for the residential portion of the site. We are proposing 30 total interior drive street trees in the residential portion of the site.

Ordinance Considerations: Storm Basin Landscaping
Please make sure that at least 70-75% of both ponds' HWL are planted with large shrubs native to Michigan.
We are proposing to cover 75% of the rim of both ponds with large native shrubs, chosen from the list of approved native species.

Ordinance Considerations: Plant List
18 of 41 species used (44%) are native to Michigan. Please add or substitute native species on the plan to increase that percentage to at least 50%.
We are proposing to replace 3 species from the building foundation plantings with Native Michigan alternatives, resulting in a revised plant list consisting of 50% native Michigan species.

Please use a native grass/sedge seed mix for the meadow area instead of the Scottish links mixture.
We will provide temporary meadow lawn with native species in the areas described above, as recommended by Rick Meader.

<u>Landscape Review Summary Chart; Landscape Plan Requirements – Response Section:</u>

Owner/Developer Contact Information:
Please Include on Landscape Plans.
Owner/Developer Contact Information will be included in Titleblock on all Landscape Plans

Zoning:
Please use current TC-1 zoning landscape requirements in calculations. Those shown for the

greenbelt calculations are not consistent with the current requirements.
All ordinance calculations including those regarding all greenbelt areas will be revised per the TC-1 ordinance requirements.

Existing Plant Material/Existing Woodlands or Wetlands:
Please be consistent between sheets regarding trees being saved or removed.
All inconsistencies regarding trees being saved or removed will be resolved.

Please show all offsite trees within 50' of the edge of disturbance as they could be negatively impacted by construction.
All offsite trees within 50' of the edge of disturbance will be shown on all relevant sheets.

Please propose protection for all onsite trees to be saved and nearby offsite trees and their critical root zones.
Protection will be proposed for all onsite trees to be saved and all nearby offsite trees and their critical root zones.

Existing and proposed improvements:
Please don't propose woodland replacement trees where they would need to be removed for future phases of development.
All proposed woodland replacement trees will be planted within areas that will remain untouched.

Snow deposit:
Please add notes indicating snow deposit areas on the landscape plan that won't hurt proposed landscaping when Phase 2 is developed.
Snow Deposit notes will be expanded to include removal/storage plans for Phase 2 development. No designated snow-storage areas will hurt proposed landscaping in Phase 2.

<u>Landscape Review Summary Chart; Landscaping Requirements; Berms – Response Section:</u>

Berm requirements:
South property line: As the parking lot abuts the south property line, the proposed hedge is acceptable, but the hedge should be maintained at a height of at least 6 feet above ground level. Please add a note to this effect on Sheet L302.
The note will be added to sheet L302 as requested.

The buffer between Building 9 and the parking lot loading area is not sufficient as proposed. Staff is concerned about the noise from delivery vehicles using that area. The deviation is not supported by staff without assurance that the proposed buffering will provide sufficient noise blockage, not just visual.

Both uses in the area described above are permitted uses within the TC and TC-1 zoning districts. As such, no buffering is required. This deviation has been removed.

The buffer between Buildings 3 and 5 and the industrial property to the west is visually sufficient. The applicant needs to provide some assurance that the proposed screening will provide sufficient audible buffering from the existing industrial use such as a noise study. Until that is provided, staff does not support this deviation.
Residential partner has declined to provide a sound study. Deviation remains.

Landscape Review Summary Chart; Landscaping Requirements; Walls – Response Section:

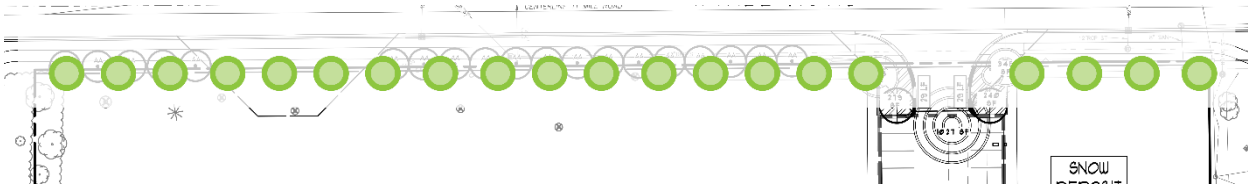
Material, height and type of construction footing:
Please clearly show and call out all walls on the landscape plans.
We will clearly show and call out all walls on the landscape plans.

Please match the wall shown near Building 4 with the other sheets in the set.
This discrepancy will be resolved.

Landscape Review Summary Chart; Landscaping Requirements; ROW – Response Section:

Min. Berm Crest Width:
Please add a note to the plan stating that the hedge and bamboo shall be maintained at a height at least as tall as 36", and add that requirement to the master deed.
The note will be added to the plan as requested.

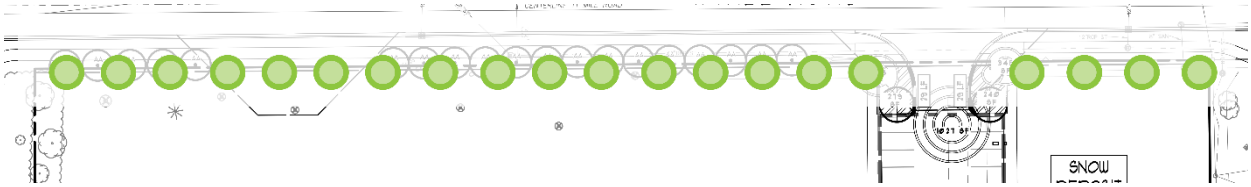
Canopy deciduous or large evergreen trees:
Please move all greenbelt trees to within the greenbelt (behind the property line, not in the right-of- way), except as noted below (subcanopy trees) at the residential section.
We are proposing all greenbelt trees to be planted within the greenbelt, behind the property line.



Please plant greenbelt trees along the entire Phase 2 11 Mile road frontage except at the proposed drive as there is no guarantee of the phase's future layout at this time.

We are proposing to spread out all 11 mile road frontage greenbelt trees to extend along the entire phase 2 11 mile road frontage.

The mature width of the Freeman maple is 30-40' wide but they are spaced 15' o.c. Please space the Phase 2 greenbelt trees further apart (at least 25' o.c.)
All proposed Freeman Maple frontage trees will be spaced at 30' o.c. east of the entry drive, and 28' o.c. west of the entry drive. See Graphic Below:



Cross-Section of Berms:
Please correct detail numbering.
Detail numbering will be fixed.

Landscape Review Summary Chart; Parking Area Landscape Requirements – Response Section:

General requirements:
Add clear vision triangles at the interior intersections north and south of Building B, and at the intersection between Buildings 5 and 9.
All clear vision triangles at interior intersections will be added to Landscape Plans
Please move all trees and shrubs taller than 30" out of clear vision zones.
We are not proposing any trees or shrubs taller than 30" in clear vision zones.

General; Parking Lot Islands:
Please add slots or holes in the circular planting "curbs" to allow pavement runoff to get into planting circles.
We will propose a method for pavement runoff to infiltrate into the planting circles.

General; Contiguous Space Limit:
Please add endcap islands with at least 200sf greenspace and canopy trees for all parking bays.
Endcap landscaping per the city ordinance is included wherever possible, and **any remaining deficit in parking lot endcap landscaping will be addressed in a deviation request.**

General: Plantings around Fire Hydrants:
Please be sure to provide at least 10 feet between hydrants, manholes and catch basins and trees, and 5 feet from underground.
All appropriate distances to the utility structures described above will be maintained.

Landscape Review Summary Chart; Other Screening – Response Section:

Transformers/Utility boxes:

Include city standard detail with other landscape details.

City Standard transformer screening detail is included on Landscape Detail Sheet L402. Note 15 on Landscape Detail Sheet L403 indicates that all transformers are to be screened per the city ordinance.

Landscape Review Summary Chart; Building Foundation Landscape Requirements – Response Section:

Interior site landscaping SF:

Please add the area requirement for each commercial building, not just what is provided, to the table on Sheet L203, so the extent of the deviation can be known.

Building Foundation Planting Calculation table will be revised as requested.

Add the total area of decorative paving near each building to the table as the paved area can count toward the requirement. Please break it out from the actual planting area provided.

Building Foundation Planting Calculation table will be revised as requested.

Please provide more landscaping bed area around buildings A and B than is currently proposed. It appears there is more room for planting for both buildings. Only a 4' wide strip is required.

Please enlarge the planting area in the circular planting beds with trees to provide more air and water to the roots.

Additional plantings will be added as requested.

Please add a 4' strip of landscaping (minimum) along the north side of Building A. It doesn't have to be expensive plant material (grasses or bamboo, or other perennials would be fine), but as there is no known date of construction for the building north of Building A, there should be some landscaping there.

A 4' wide bamboo hedge will be added to the north façade of Building A.

Please add foundation landscaping along the east side of Building A (not the loading area).

Additional plantings will be added as feasible.

Please add foundation landscaping along the south side of Building B wherever possible.

Additional plantings will be added as feasible.

Landscape Review Summary Chart; Landscape Notes – Response Section:

Installation date:

Please include planting dates on Landscape Plan.

Planting dates are provided in the General Notes on Landscape Plan Sheets L301 and L302

Other information:
Please change note 6 to read 3 months instead of 1 year for time of plant replacement.
The note in question will be changed as requested.

Landscape Review Summary Chart; Plant List – Response Section:

Botanical and Common Names:
Please use more native species on the site so at least 50% of the species used are native to Michigan.
The plant list will be revised to ensure that at least 50% of the species used are native to Michigan.

ECT Woodland Review Letter – Response Section:

1. ECT encourages the Applicant to minimize impacts to on-site woodlands to the greatest extent
practicable. Currently, the Plan appears to indicate that 167 of the 275 surveyed trees (60%) are to be
removed.
We have reviewed the discrepancy and are currently verifying the removal and replacement credits with ECT. We will provide the ECT confirmed quantities on the next submittal.

2. The applicant shall review and revise the Plan to ensure that the tree removal and replacement information is consistent and correct on all applicable sheets including the Tree Protection Plan, the Tree List, and the Woodland Replacement Plan. The Woodland Replacement Plan indicates that 70 regulated trees are to be removed requiring 142 Woodland Replacement Credits. However, an assessment of the Tree List (Sheet T-1.1) appears to indicate the removal of 167 trees requiring 286 Woodland Replacement Credits.
Our next submittal will include a revised Woodland Replacement Plan and Tree List to make them consistent with each other.

3. It should be noted that the deciduous trees, evergreen trees and shrubs currently proposed all appear to be acceptable species per the City's Woodland Replacement Tree Chart (attached). The applicant shall review and revise the perennials and ground cover (and grasses) list to ensure that all species being proposed for Woodland Replacement Credit are species native to Michigan. The ground cover, perennials, and grasses, aside from prairie dropseed and little bluestem, are not species native to Michigan.
We will replace the Hemlocks noted as woodland tree replacements with an acceptable woodland replacement tree species.

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

5. A Woodland Replacement Performance financial guarantee for the planting of on-site replacement trees will be required. This financial guarantee will be based on the number of on-site woodland replacement trees (credits) being provided at a per tree value of $400.
We will update the Woodland Replacement Performance Financial Guarantee based on the ECT confirmed quantities noted in response 1 above.

6. Based on a successful inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement financial guarantee will be returned to the Applicant. A Woodland Maintenance financial guarantee in the amount of twenty-five percent (25%) of the original Woodland Replacement financial guarantee will then be provided by the applicant. This Woodland Maintenance financial guarantee will be kept for a period of 2-years after the successful inspection of the on-site woodland replacement tree installation.
We will update the Woodland Maintenance Financial Guarantee based on the ECT confirmed quantities noted in response 1 above.

7. The Applicant will be required to pay the City of Novi Tree Fund at a value of $400/credit for any Woodland Replacement Tree Credits that cannot be placed on-site. Currently, all of the required Woodland Replacement Credits are proposed through on-site plantings. However, the applicant shall review and confirm that the woodland removal and required Woodland Replacement information is correct and consistent.
We will update the amount to be paid into the City's Tree Fund based on the ECT confirmed quantities noted in response 1 above.

8. The Applicant shall provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees to be installed in a currently non-regulated woodland area. The applicant shall demonstrate that the all proposed woodland replacement trees will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the City. This language shall be submitted to the City Attorney for review. The executed easement must be

returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. These easement areas shall be indicated on the Plan.

We shall provide preservation/conservation easements for all areas where Woodland Replacements are planted and provide all documentation as required.

ATWELL

CONSULTING. ENGINEERING. CONSTRUCTION.

Lindsey Bell
City of Novi - Planner
45175 W. 10 Mile Rd
Novi, MI 48375

RE: Sakura Novi Wetland Mitigation Options
Atwell Project Number: **18003457**

Dear Ms. Bell,

Please see the Applicant's response to each of the items identified within the Wetland Review of the Revised PRO Concept Plan: Planning Review dated November 4, 2019.

4. Original Comment: The current Plan includes but does not specifically indicate/quantify impacts to wetlands and wetland buffers. The applicant shall indicate, quantify and label all proposed impacts to these natural features on subsequent plan submittals. The area (square feet or acres) of wetland impacts shall be indicated on the Plan in addition to the proposed volumes of these impacts. The area (square feet or acres) of all impacts (both permanent and temporary) to the 25-wetland and watercourse setbacks shall be indicated on the Plan. The cubic yards of proposed wetland fill shall also be provided on subsequent site plan submittals.

Follow-up Comment: This comment has been partially addressed. The volume (cubic yards) of all wetland impacts shall be provided on the Plan. In addition, the areas (square feet or acres) of the existing wetlands and 25-foot wetland buffer areas shall be clearly indicated and the areas quantified (square feet or acres) on the Plan (not just in the Wetland Delineation Letter).

The existing wetlands and 25-foot wetland buffer areas will be clearly indicated and the areas will be quantified on the Plan in subsequent submittals. Additionally, the total volume (cubic yards) of fill located within delineated wetlands will be detailed in subsequent submittals.

5. Original Comment: If the applicant is unable to modify the Plan in order to decrease the overall impact to existing wetlands, subsequent site plan submittals shall provide details regarding the proposed wetland mitigation plan. This shall include the location of the proposed wetland mitigation area(s), grading, and planting details. Impacts to emergent wetlands shall be mitigated at a ratio of 1.5-to-1 and impacts to forested wetlands shall be mitigated at a ratio of 2.0-to-1.

Follow-up Comment: The applicant's wetland consultant (Atwell) has provided two (2) wetland mitigation options in a letter dated October 2, 2019 (Sakura Novi Wetland Mitigation Options). Each of these options includes constructing 1.4 acres of the 2.51 acres of required wetland mitigation. A portion (0.9-acre) of the 1.4 acres would be constructed on Parcel (50-22-23-226-021) to the east of the proposed Sakura Way Project. A 0.5-acre mitigation area is proposed to be constructed on Parcel 50-22-23-226-042 currently owned by the City. Option 1 then proposes to provide the remaining 1.2 acres of required mitigation through the preservation of existing wetland on Parcel 50-22-17-101-006 (i.e., Hadley Towing property). It should be noted that the City's Wetland Ordinance does not specifically support the preservation of existing wetland areas for mitigation. In addition, Option 2 proposes to initiate a wetland mitigation fund for the City due to the lack of available space for

wetland mitigation within the City limits. ECT recommends that the details of such a wetland mitigation fund be determined

The Applicant is currently working with the City of Novi and ECT to determine potential mitigation options for the Project. The Applicant is attempting to mitigate for all wetland impacts within the City of Novi; however, it may not be practical due to available land within the City. Recent discussions have included pursuing the potential to mitigate outside of the City of Novi. Atwell is currently reviewing other municipality ordinances to provide example language to the City of Novi that allows mitigation outside of the associated municipality.

6. <u>Original Comment:</u> It appears as though a City of Novi *Non-Minor Wetland Use Permit* would be required for the proposed impacts to on-site wetlands. A City of Novi *Authorization to Encroach the 25-Foot Natural Features Setback* would be required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.

<u>Follow-up Comment:</u> This comment still applies

The Applicant will apply for a City of Novi Non-Minor Wetland Use Permit and a City of Novi Authorization to Encroach the 25-Foot Natural Features Setback.

Respectfully,
ATWELL, LLC

Don Berninger
Environmental – Team Leader

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

TECHNICAL MEMORANDUM

To: Mr. Scott Aikens
Robert B Aikens & Associates, LLC

Re: Sakura Novi – City of Novi, MI
Traffic Impact Study Addendum #2

From: Steven J. Russo, PE
Transportation Engineer

Date: December 6, 2019

This memorandum is intended as an addendum to the original Traffic Impact Study (TIS) dated June, 2019 for the proposed Sakura Novi development in the City of Novi, Oakland County, Michigan. A TIS addendum issued by Bergmann on September 24th, 2019 is also referenced herein. The project site is located in the northeast quadrant of the Grand River Avenue & Main Street / Town Center Drive intersection.

This addendum and the associated analyses have been completed in response to a phase two development alternative which would be comprised of 70 multi-family dwelling units, in lieu of proposed commercial space. As a result, the incremental impact to the adjacent road network with this lower density alternative was calculated as detailed below. Additionally, at the request of the applicant, Bergmann completed a right turn lane warrant analysis for phase one at the proposed site driveway to 11 Mile Road in accordance with City standards. The data and methodologies of the original TIS were implemented for the addendum analyses, except as specifically indicated herein.

PHASE TWO RESIDENTIAL INCREMENTAL IMPACT

The proposed development plans include two (2) development alternatives for phase two of the project. The first alternative as outlined in the original TIS includes a hotel, spa, and mix of retail, restaurant, residential, and office uses, while the second alternative would be comprised of 70 multi-family dwelling units only. As outlined in the original TIS, the high-density phase two alternative comprised predominantly of commercial uses will result in an approximate 15% increase to traffic volumes along Grand River Avenue.

In order to calculate the incremental impact for the lower density phase two residential alternative, the vehicle trips that would be generated by the proposed development (as summarized in the previous TIS addendum) were assigned to the study road network utilizing the trip distribution model outlined in the original TIS. The results of this analysis indicate that the lower density alternative will result in an approximate 7% increase to traffic volumes along Grand River Avenue in relation to baseline traffic volumes. Therefore, the phase two residential uses would result significantly less increase to Grand River Avenue traffic volumes as compared to the commercial alternative, and negligible increase as compared to the Phase 1 condition.

PHASE ONE 11 MILE ROAD DRIVE TURN LANE WARRANT ANALYSIS

The City of Novi warrants for right-turn lanes were evaluated at the proposed phase one site access point to 11 Mile Road. A center lane for left turns exists on 11 Mile Road. As 24-hour volumes were not available along the study section of 11 Mile Road, 24-hour volumes were forecast based on existing PM peak hour volumes from the AECOM traffic study with application of a 10% K-factor. Additionally, daily site-generated traffic volumes from the Sakura Way development were included. The results of this analysis indicate that neither a right turn lane nor taper are warranted under phase one.

CONCLUSIONS

The following conclusions are based on the information outlined herein:

1. The lower density residential phase two alternative will result in an approximate 7% increase to traffic volumes along Grand River Avenue in relation to baseline traffic volumes.
2. Neither a right turn lane nor taper are warranted at the proposed site driveway to 11 Mile Road during phase one based on City standards. A center lane for left turns exists.

The referenced traffic data, calculations, and simulation results are attached. Please direct any questions regarding this memorandum to Bergmann.

Attached: Right Turn Lane Warrant

SAKURA • NOVI

NOVI, MICHIGAN

OWNER:

Robert B. Aikens & Associates, L.L.C.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

ARCHITECTS & PLANNERS:

Wah Yee Associates
Architects & Planners
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160

CIVIL ENGINEERS:

PEA, Inc.
2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
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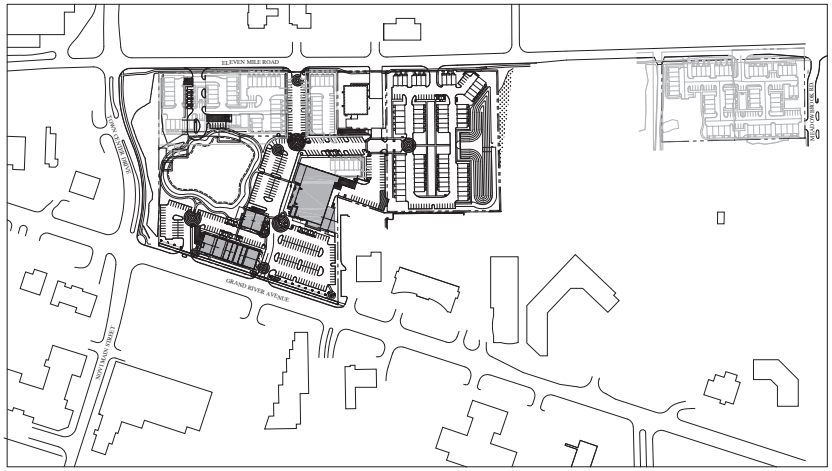
f: 248.689.1044
www.peainc.com

LANDSCAPE ARCHITECTS:

Grissim Metz Associates Andriese
Landscape Architecture
311 East Cady St., Suites A & B
Northville, MI 48167



VICINITY MAP
SCALE: NOT TO SCALE

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1 OF 2	PHOTOMETRIC PLAN
2 OF 2	DETAILS AND FIXTURE CUT SHEETS

REVISED PRO SUBMITTAL

SAKURA • NOVI

NOVI, MICHIGAN

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NOVI, MICHIGAN 48375
PHONE 248.489.9160

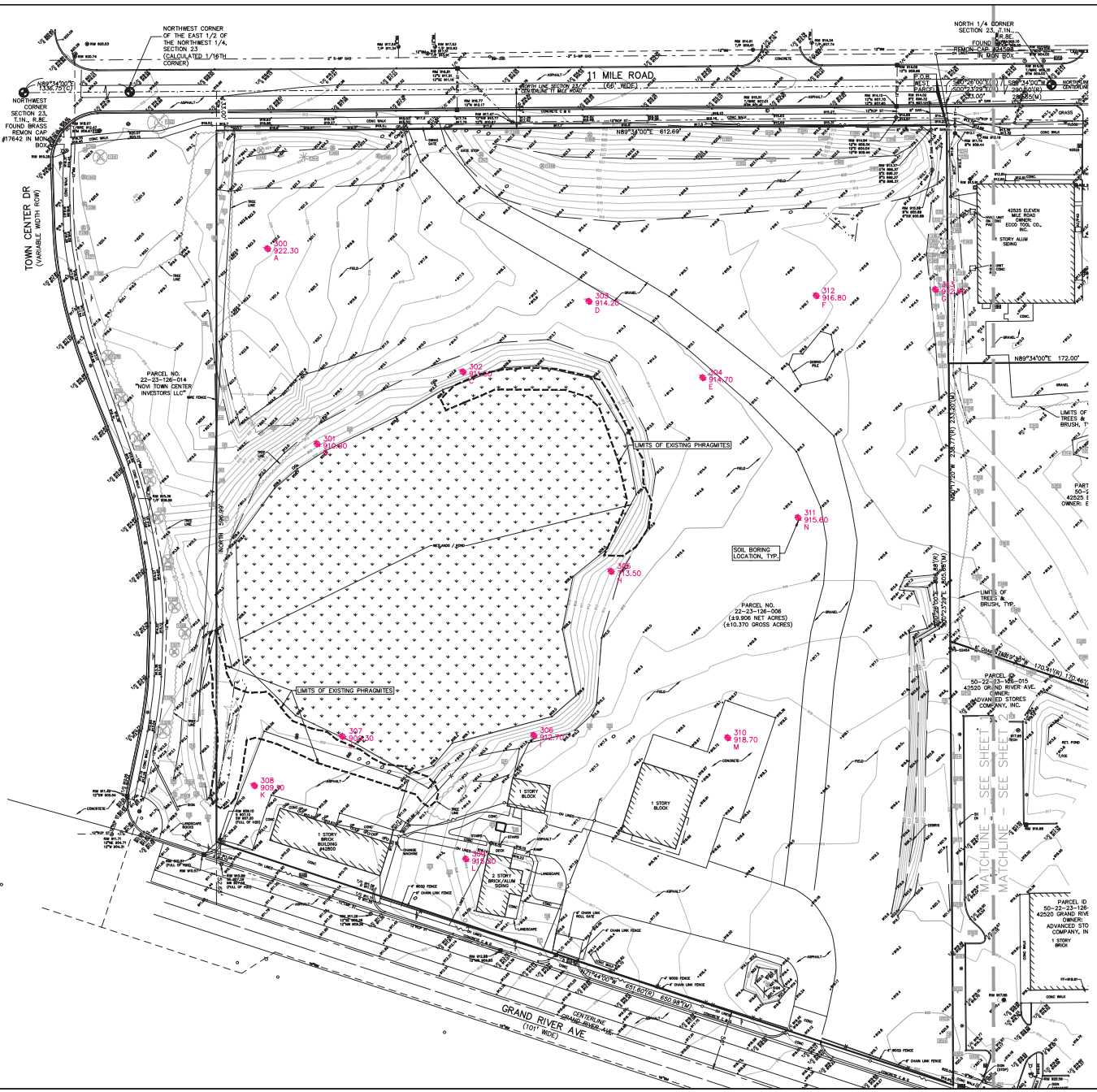
PROJECT NO. 5035

ISSUED FOR
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
OCTOBER 2, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

P0.0

CAD DWG 5035 P00 10-2-19.DWG



NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TBUC-18033.DWG

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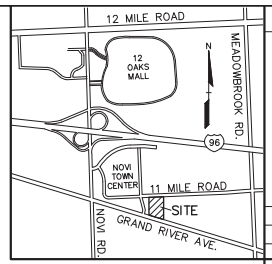

LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING

- ELEC., PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

•HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

NO.	BY	DESCRIPTION	DATE
1	KRD	CMB PROJECT/ZONING/ADDRESS SUBMITTAL	1/2/19
2	BTT	CMB PROJECT/ZONING/ADDRESS SUBMITTAL	1/28/19

REVISIONS

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

CAUTION!!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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BIRMINGHAM, MI 48009

TOPOGRAPHIC SURVEY - WEST SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES	GMB
DN	JKS
SUR	
GWC	P.M.
	JPB

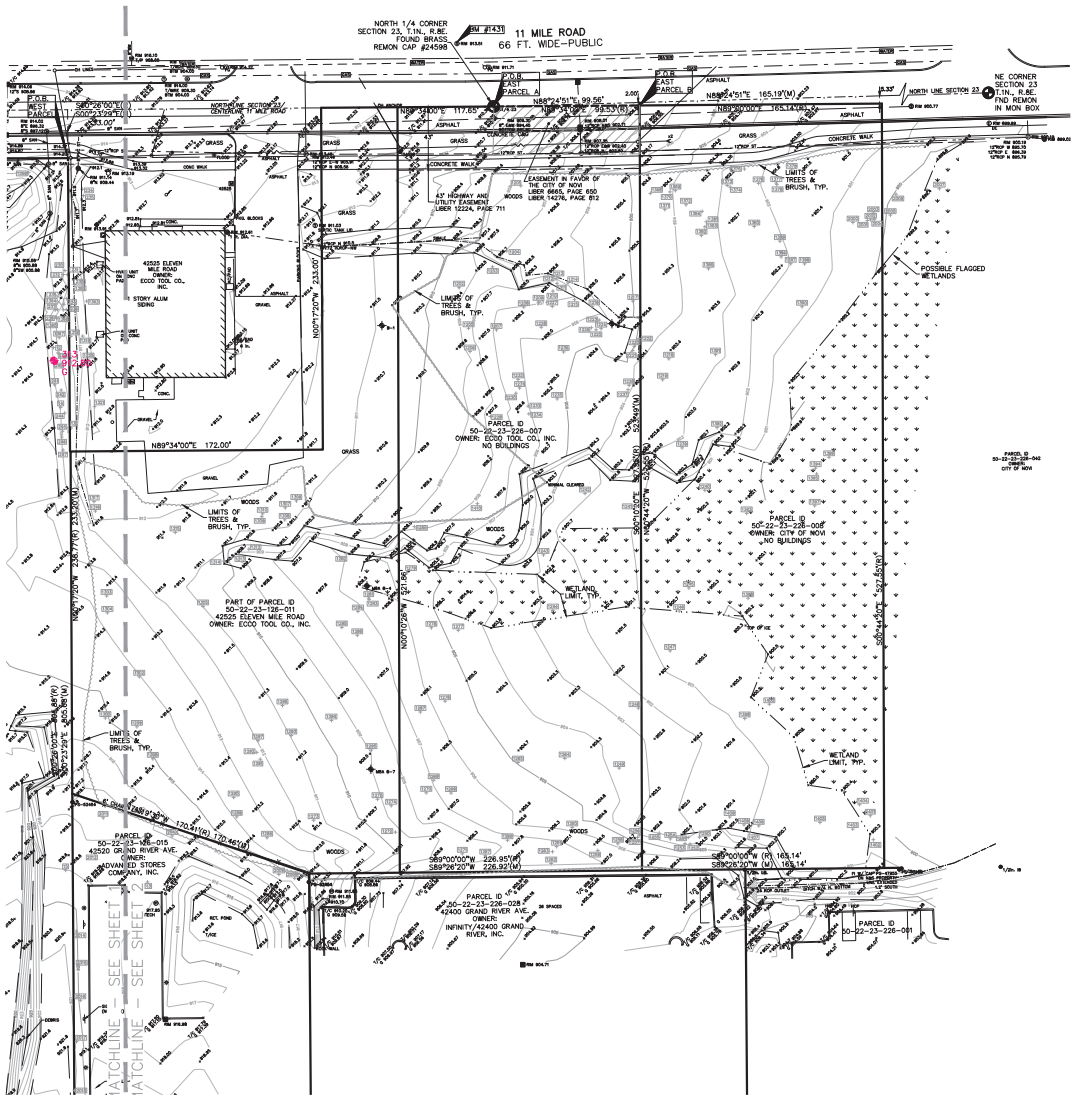
S:\PROJECTS\2018\2018-033 AIKEN HOA-APPLEBY\SITE PLANS\C-1.1SITEPLAN-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-1.1

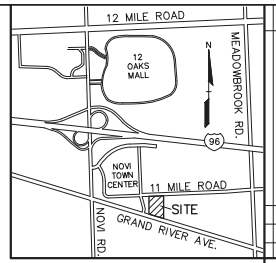


GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- GRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING

- ELEC., PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
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- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

•HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C−0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22−23−126−011, 22−23−226−007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33−foot right−of−way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22−23−226−008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PROFESSIONAL REVISED SUBMITTAL	1/23/19
2	GMB	PROFESSIONAL REVISED SUBMITTAL	2/28/19
3	KRD	PROFESSIONAL REVISED SUBMITTAL	3/29/19

REVISIONS

STATE OF MICHIGAN
GREGORY MARK BONO
ENGINEER
No. 47907
REGISTERED PROFESSIONAL ENGINEER

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BIRMINGHAM, MI 48009

TOPOGRAPHIC SURVEY - EAST SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

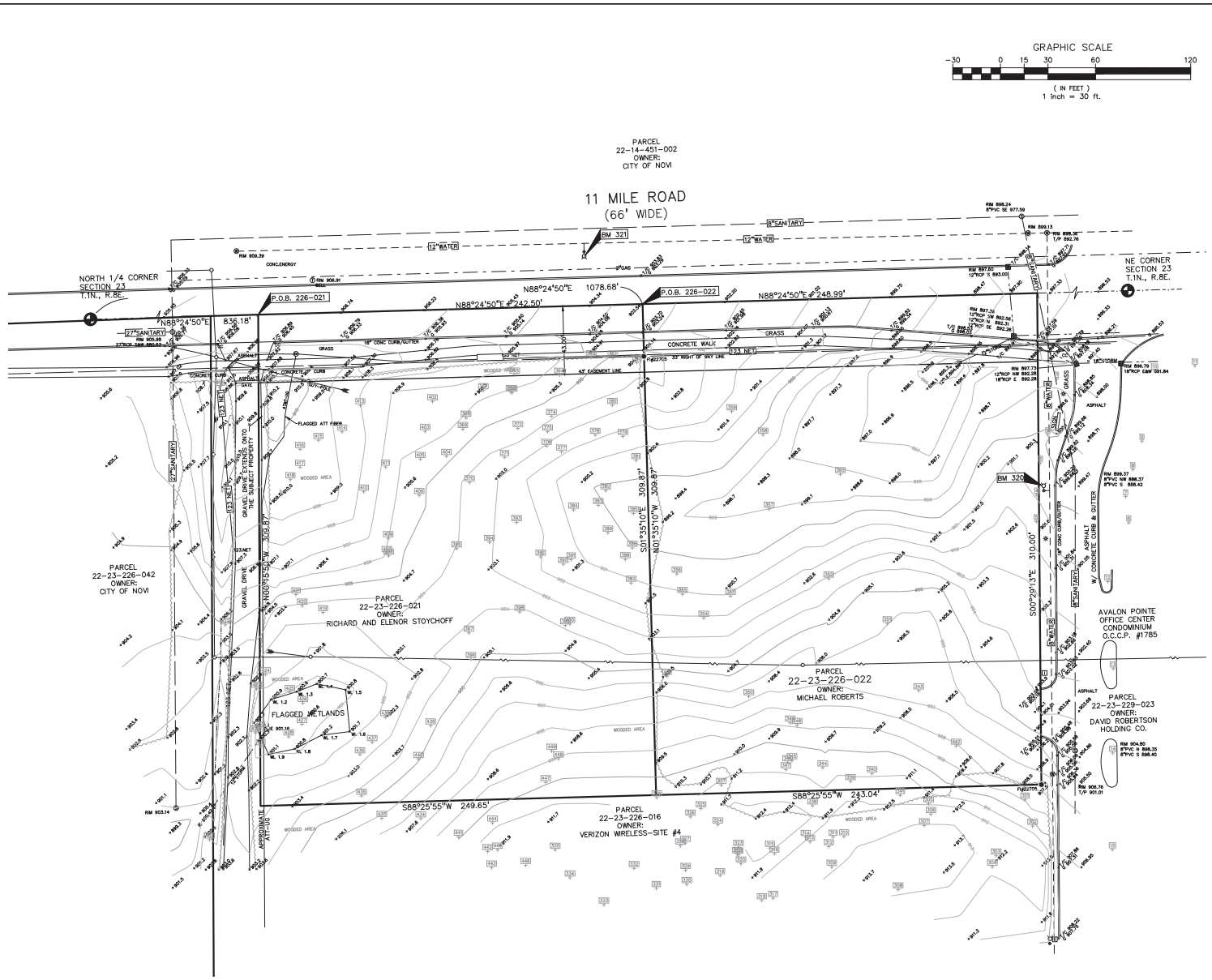
S:\PROJECTS\2018\2018-033 KRBA NOVI-APPLEBY,LITE PLANE\DC-18033.dwg

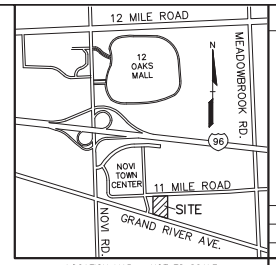
ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-1.2





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	GRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING

-OH-ELEC-W-	ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
-UG-CATV-	UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-PHONE-T-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC-E-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
	GAS MAIN, VALVE & GAS LINE MARKER
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
	SANITARY SEWER, CLEANOUT & MANHOLE
	STORM SEWER, CLEANOUT & MANHOLE
	COMBINED SEWER & MANHOLE
	SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
	POST INDICATOR VALVE
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
M	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
T	UNIDENTIFIED STRUCTURE
916.06	SPOT ELEVATION
870	CONTOUR LINE
	FENCE
	GUARD RAIL
	STREET LIGHT
	SIGN
CONC.	CONCRETE
ASPH.	ASPHALT
GRAVEL	GRAVEL SHOULDER
	WETLAND

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STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 07-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

•HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

NO.	BY	DESCRIPTION	DATE
1	KRD	PROFESSIONAL/REVISED SUBMITTAL	1/23/19

REVISIONS

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
LICENSED PROFESSIONAL ENGINEER

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TOPOGRAPHIC SURVEY - SAKURA EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AIKEN KOA-APR\SURVEY\ PLANS\SV-1-TOPO EAST-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

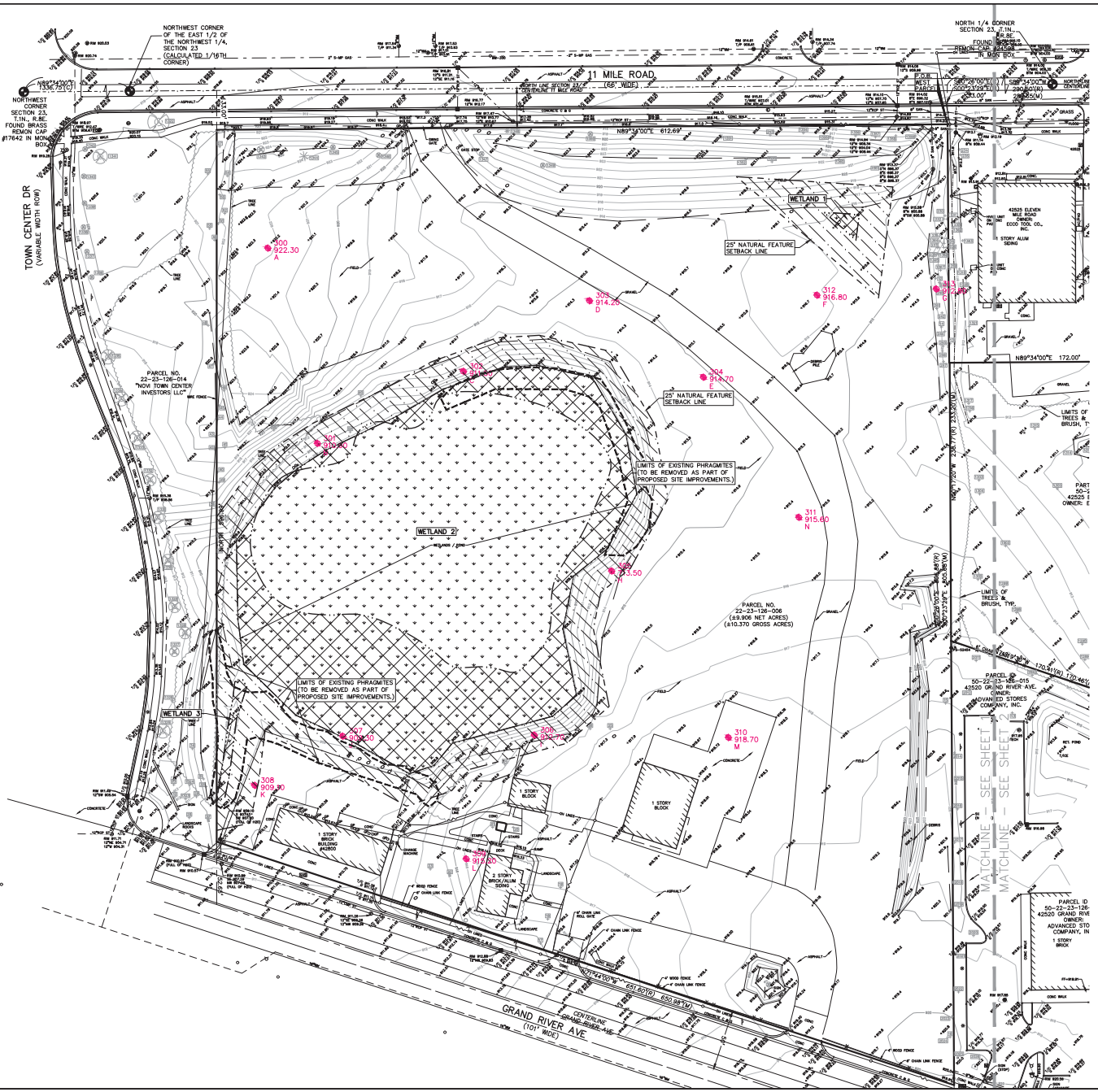
PEA JOB NO. 2018-033

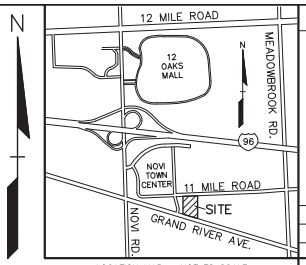
SCALE: 1" = 30'

DRAWING NUMBER:
C-1.3

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\SV-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\SV-TRUC-18033.DWG





LOCATION MAP – NOT TO SCALE

N

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING

- ELEC., PHONE OR CABLE TV GUY LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONC. CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

-40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGEND:

NATURAL FEATURES SETBACK IMPACT

WETLAND IMPACT

WETLAND NOTE:

NATURAL FEATURES SETBACK IMPACT:	AREA
WETLAND 1:	0.13 AC
WETLAND 2 & 3:	0.71 AC
TOTAL:	0.84 AC
WETLAND IMPACT:	**AREA**
WETLAND 1:	0.007 AC
WETLAND 2:	0.74 AC
WETLAND 3:	0.02 AC
TOTAL:	0.77 AC

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\J018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\J018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\J018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLAN REVIEW COMMENTS	10/7/19
2	KRD	PER PLAN REVIEW COMMENTS	12/9/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!!

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Troy, MI 48083-1872
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f: 248.689.1044
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

NATURAL FEATURES IMPACT PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES	GMB	DN	JKS	SUR	GWC	P.M.	JPB

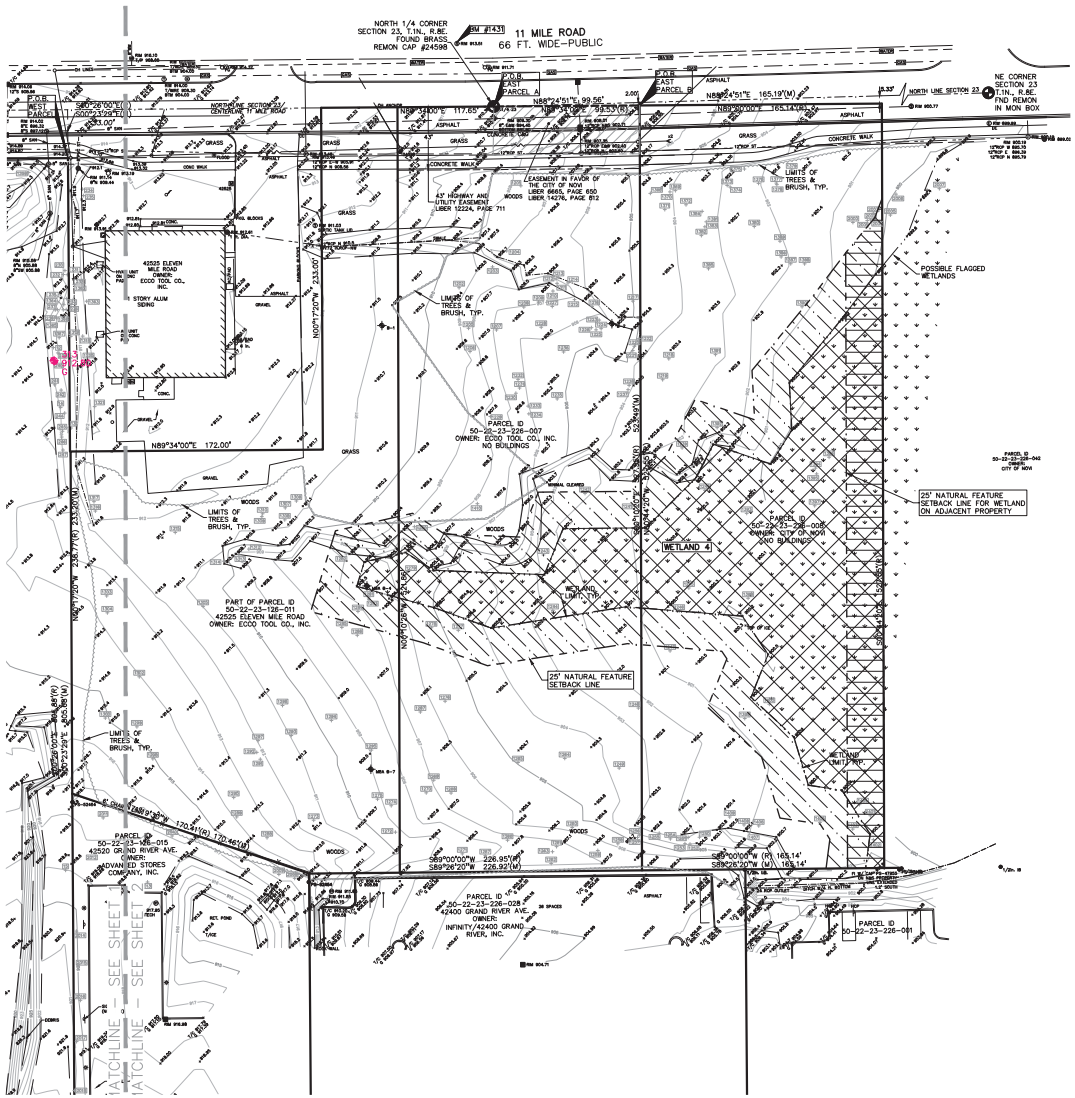
S:\PROJECTS\2018\J018-033 AIKEN ROA-APPLICATS\SITE PLANS\C1-1 PLAN.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.4

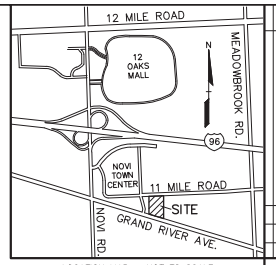


GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SECT. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
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- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

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STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 07-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGEND:

- NATURAL FEATURES SETBACK IMPACT
- ADJ. PARCEL NATURAL FEATURES SETBACK IMPACT
- WETLAND IMPACT

WETLAND NOTE:

NATURAL FEATURES SETBACK IMPACT:	AREA
WETLAND 4:	0.59 AC
WETLAND ON ADJ. PARCEL:	0.25 AC
TOTAL:	0.84 AC
WETLAND IMPACT:	**AREA**
WETLAND 4:	0.90 AC
TOTAL:	0.90 AC

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PC/ZONING/ENG REVISED SUBMITTAL	10/7/19

REVISIONS

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

CAUTION!!

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NATURAL FEATURES IMPACT PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AIKEN HOA-APPLEBY\SITE PLANS\C-1.5NAT FEA-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-1.5

ZONING CHANGE PROPOSED FROM OSC TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

SIGN #1
N.T.S.

ZONING CHANGE PROPOSED FROM I-1 TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

SIGN #2
N.T.S.

ZONING CHANGE PROPOSED FROM OS-1 TO TC-1

For more information call:
Novi Community Development Department
248-347-0475

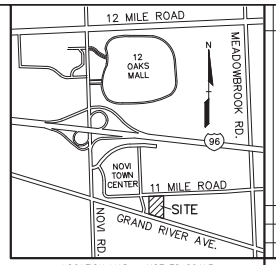
SIGN #3
N.T.S.

GRAPHIC SCALE

−80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

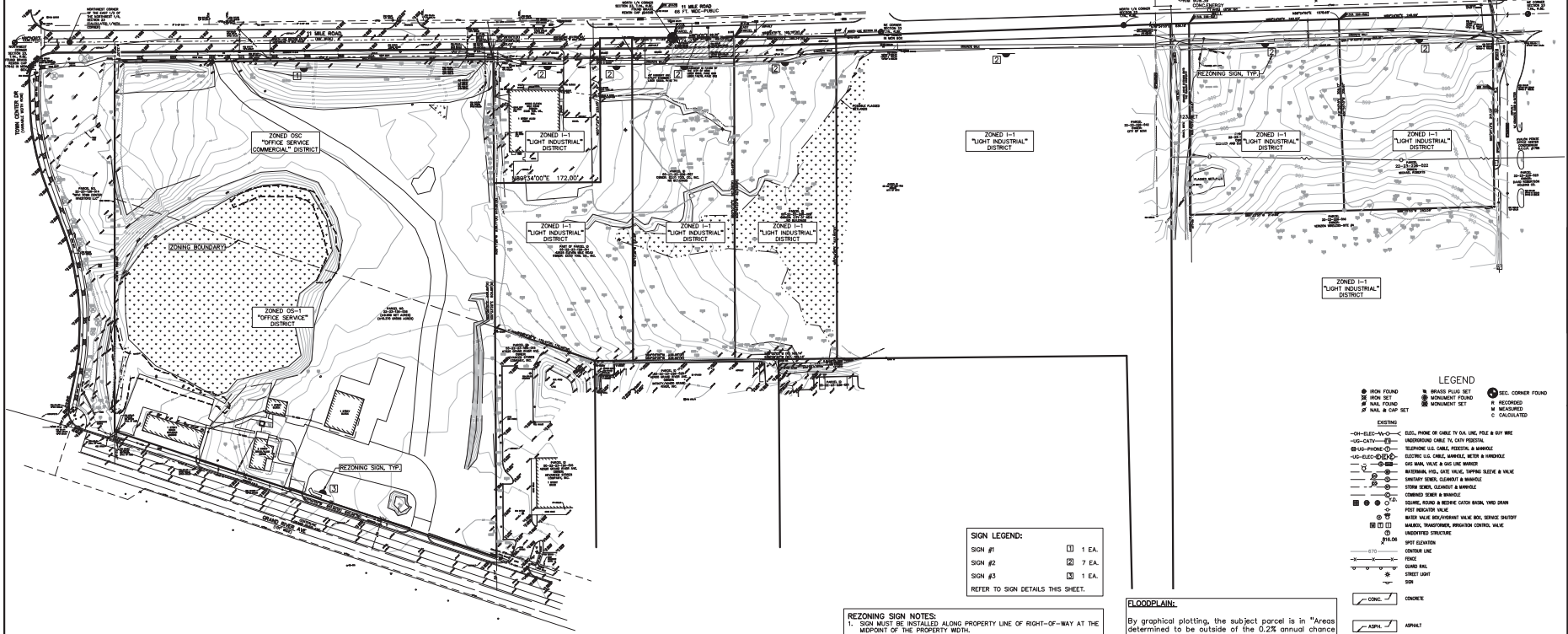
N



LOCATION MAP – NOT TO SCALE

NO.	BY	DESCRIPTION	DATE
1	KRD	GMB	PROVIDED AS REVISED SUBMITTAL	10/2/19

REVISIONS



SIGN LEGEND:

SIGN #1	1	1 EA.
SIGN #2	2	7 EA.
SIGN #3	3	1 EA.

REFER TO SIGN DETAILS THIS SHEET.

REZONING SIGN NOTES:

1. SIGN MUST BE INSTALLED ALONG PROPERTY LINE OF RIGHT-OF-WAY AT THE MIDPOINT OF THE PROPERTY WIDTH.
2. SIGN MUST BE A MINIMUM OF FOUR FEET (VERTICAL) BY SIX FEET (HORIZONTAL).
3. SIGN FACE MUST BE EXTERIOR PLYWOOD, ALUMINUM OR A SIMILAR DURABLE WALL-WEATHER MATERIAL.
4. SIGN SUPPORT SYSTEM MUST BE STRUCTURALLY SOUND AND ABLE TO WITHSTAND LATERAL WIND OF FOURTEEN POUNDS PER SQUARE FOOT.
5. SIGNS MUST BE REMOVED WITHIN:
   - SEVEN DAYS OF ENACTMENT OF THE REZONING REQUEST BY CITY COUNCIL;
   - OR
   - SEVEN DAYS OF DENIAL OF REZONING REQUEST BY CITY COUNCIL

FLOODPLAIN:

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BENCHMARKS

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LEGEND

IRON FOUND, IRON SET, NAIL FOUND, NAIL & CAP SET, BRASS PLUG SET, MONUMENT FOUND, MONUMENT SET, SEC. CORNER FOUND, R RECORDED, M MEASURED, C CALCULATED

EXISTING

ELEC., PHONE OR CABLE TV D.A. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
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SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
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MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
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ASPHALT
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

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STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP, DATED 09-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

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NOT FOR CONSTRUCTION

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XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
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STATE OF MICHIGAN
GREGORY BONO
ENGINEER
LICENSED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

REZONING SIGN LOCATION PLAN
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 sheet set\24 SHEETS\site plans\C-1.6SIGN-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 60'

DRAWING NUMBER:
C-1.6

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows:
Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence
North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

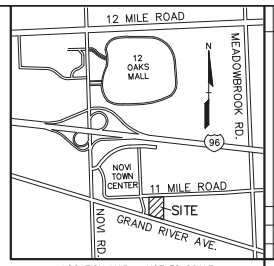
Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

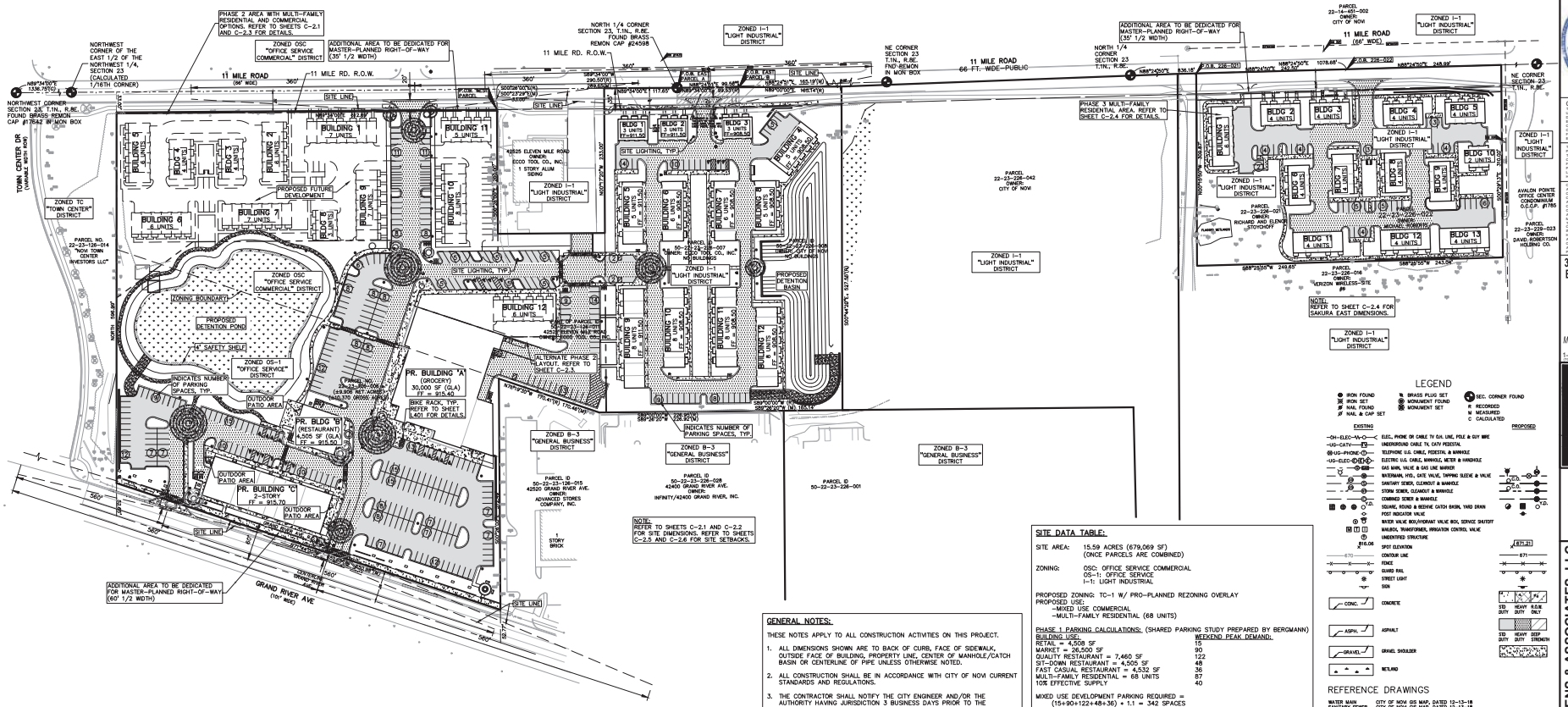
Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

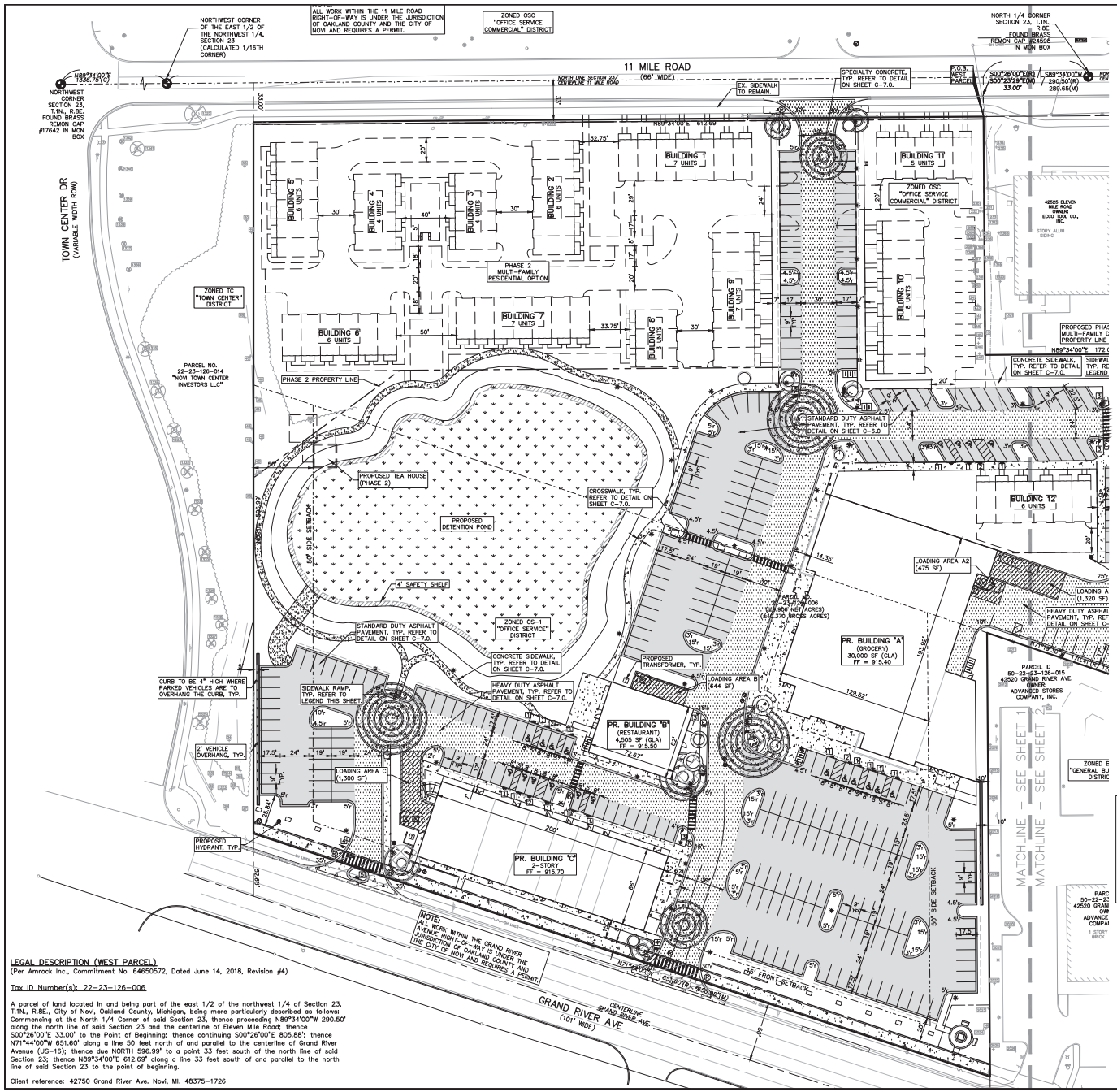
GRAPHIC SCALE
−80 0 40 80 160 320
(IN FEET)
1 inch = 80 ft.

N



LOCATION MAP – NOT TO SCALE



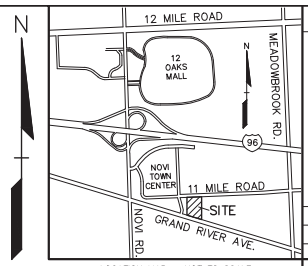


LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726



LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

SIGN LEGEND:

'BARRIER FREE PARKING' SIGN	[1]	18 EA.
'VAN ACCESSIBLE' SIGN	[2]	5 EA.
'CROSSWALK' SIGN	[3]	12 EA.
'STOP' SIGN	[4]	2 EA.
'NO LEFT TURN' SIGN	[5]	1 EA.

ALL TRAFFIC SIGNAGE SHALL COMPLY WITH CURRENT MMUTCD STANDARDS. REFER TO SHEET C-7.0 FOR SIGN DETAILS.

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP 'TYPE R' Ⓡ
SIDEWALK RAMP 'TYPE F' Ⓕ
REFER TO LATEST M.D.O.T. R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

LOADING CALCULATIONS:

LOADING AREA:	REQUIRED:	PROVIDED:
A1	1,295 SF	1,320 SF
A2	537 SF	475 SF*
B	620 SF	644 SF
C	2,000 SF	1,300 SF*

*VARIANCE REQUESTED

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. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS 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.
5. 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.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW LETTER	1/29/19
2	GMB	PER PLANNING REVIEW SUBMITTAL	3/13/19

GREGORY BONO ENGINEER — LICENSED PROFESSIONAL ENGINEER — STATE OF MICHIGAN

CAUTION!!!
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f: 248.689.1044
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - WEST
SAKURA NOVI
PART OF THE E. 1/2 OF THE NW. 1/4 OF SECTION 23, T.1N. R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

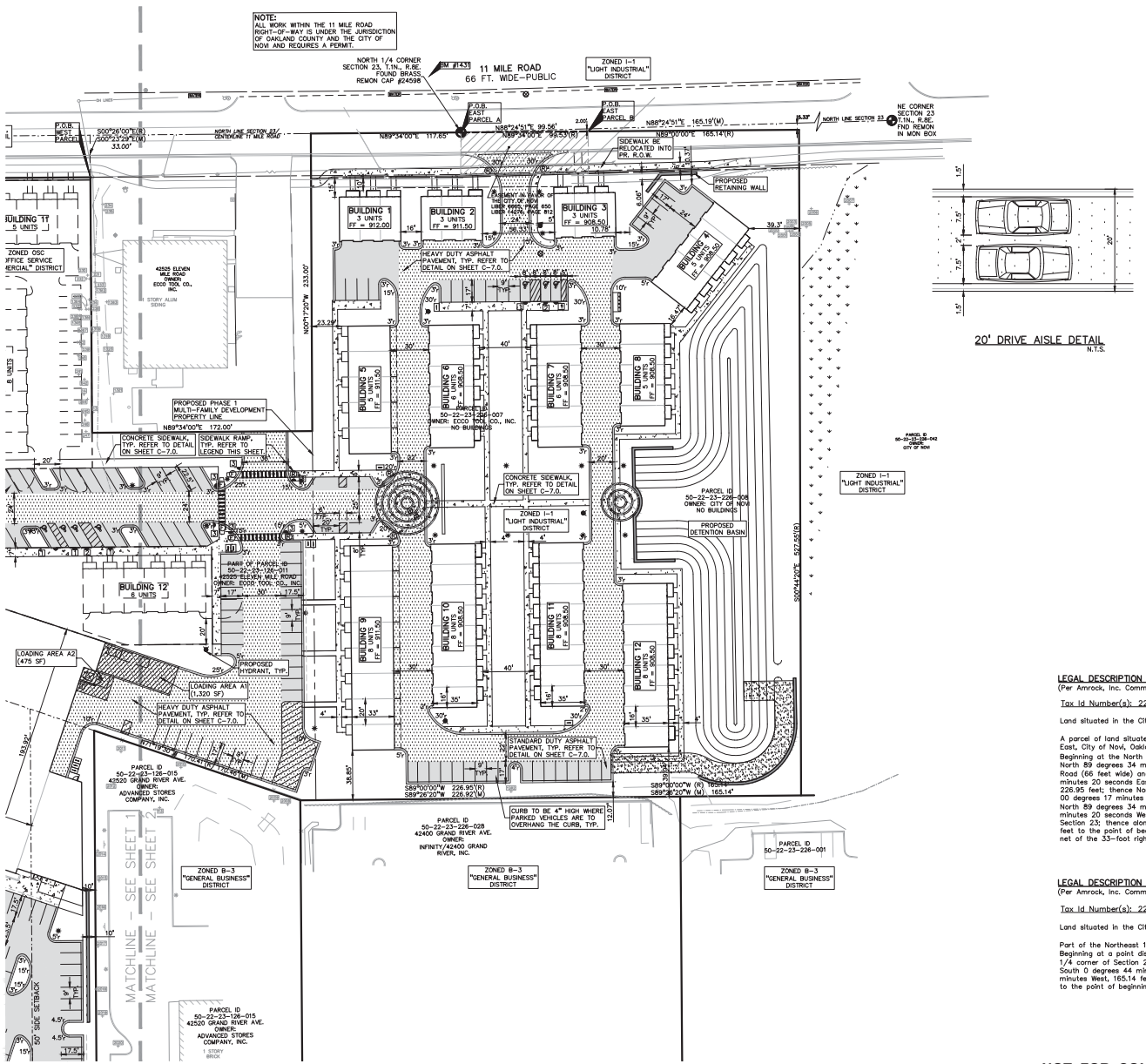
S:\PROJECTS\2018\2018033\DWG\18033-SITE.dwg 3/13/2019 1:49:39 PM jbarber

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.1



LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
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- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. — ASPHALT
- GRAVEL — GRAVEL SHOULDER
- WETLAND

STD DUTY / HEAVY DUTY / R.O.W. ONLY
STD DUTY / HEAVY DUTY / DEEP STRENGTH

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 07-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\JOB033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\JOB033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\JOB033\DWG\SITE PLANS\X-TRUC-18033.DWG

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NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	1/23/19

REVISIONS

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

DIMENSION AND PAVING PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

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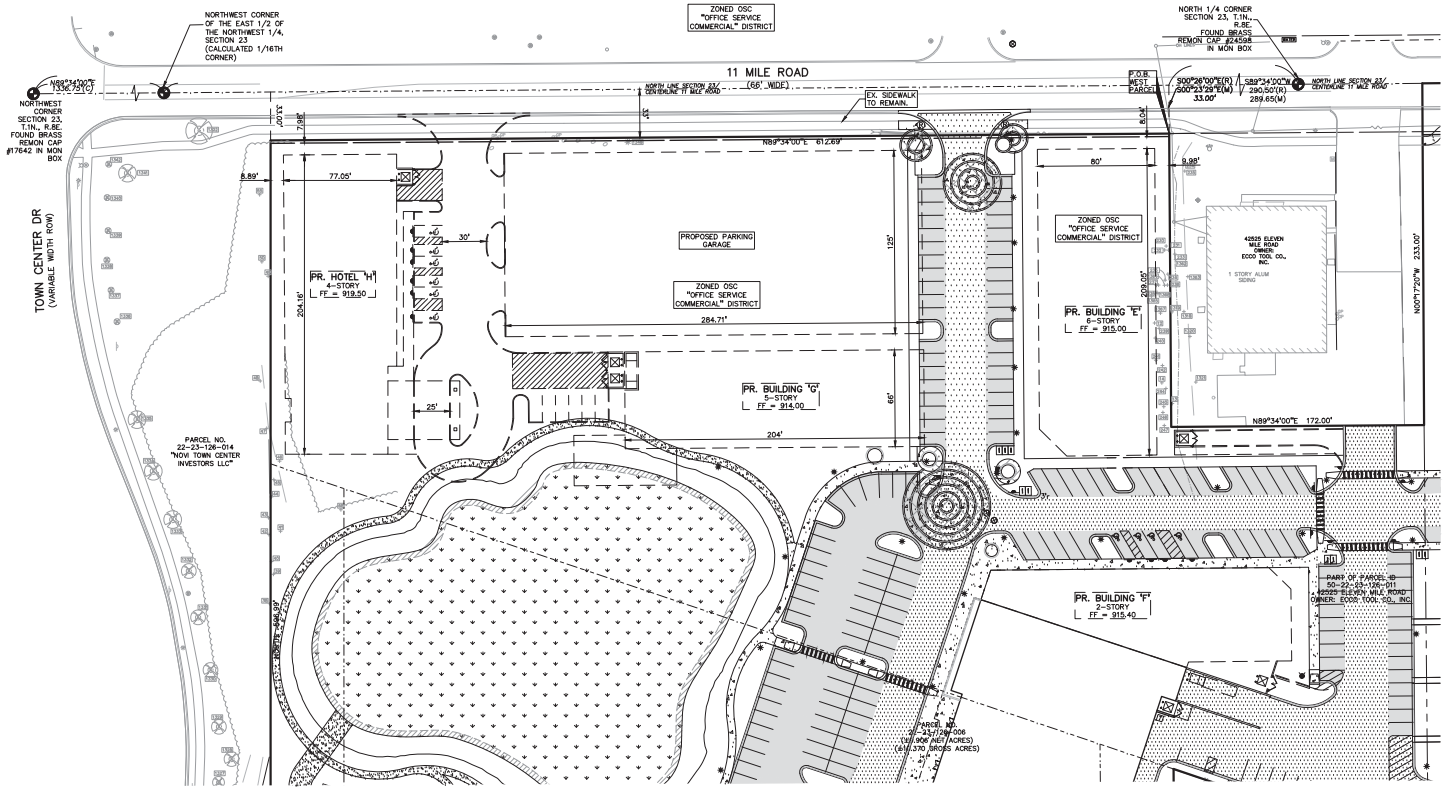
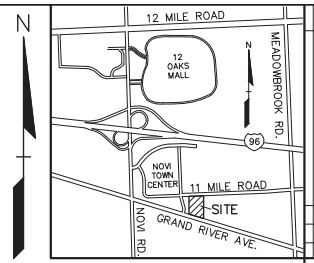
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.2





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING	PROPOSED
OH-ELEC-W-O	ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
UG-CATV	UNDERGROUND CATV
UG-PHONE-T	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
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	SQUARE, ROUND & RECHYE CATCH BASIN, YARD DRAIN
	POST INDICATOR VALVE
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
	UNIDENTIFIED STRUCTURE
916.00	SPOT ELEVATION
670	CONTOUR LINE
	FENCE
	GUARD RAIL
	STREET LIGHT
	SIGN
CONC.	CONCRETE
ASPH.	ASPHALT
GRAVEL	GRAVEL SHOULDER
	WETLAND

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(IN FEET)
1 inch = 40 ft.

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NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	10/2/19

REVISIONS

GREGORY BONO ENGINEER 47391 LICENSED PROFESSIONAL ENGINEER STATE OF MICHIGAN

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ALTERNATE PHASE 2 DIMENSION PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AIKEN NOV–APPLIED\SITE PLANS\2D–SUPPS DIM – 18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.3

LEGAL DESCRIPTION

Parcel 22-23-226-021
(Per First American Title Insurance Company Commitment No. 849041, effective date May 08, 2019)

Land in the City of Novi, Oakland County, MI, described as follows:

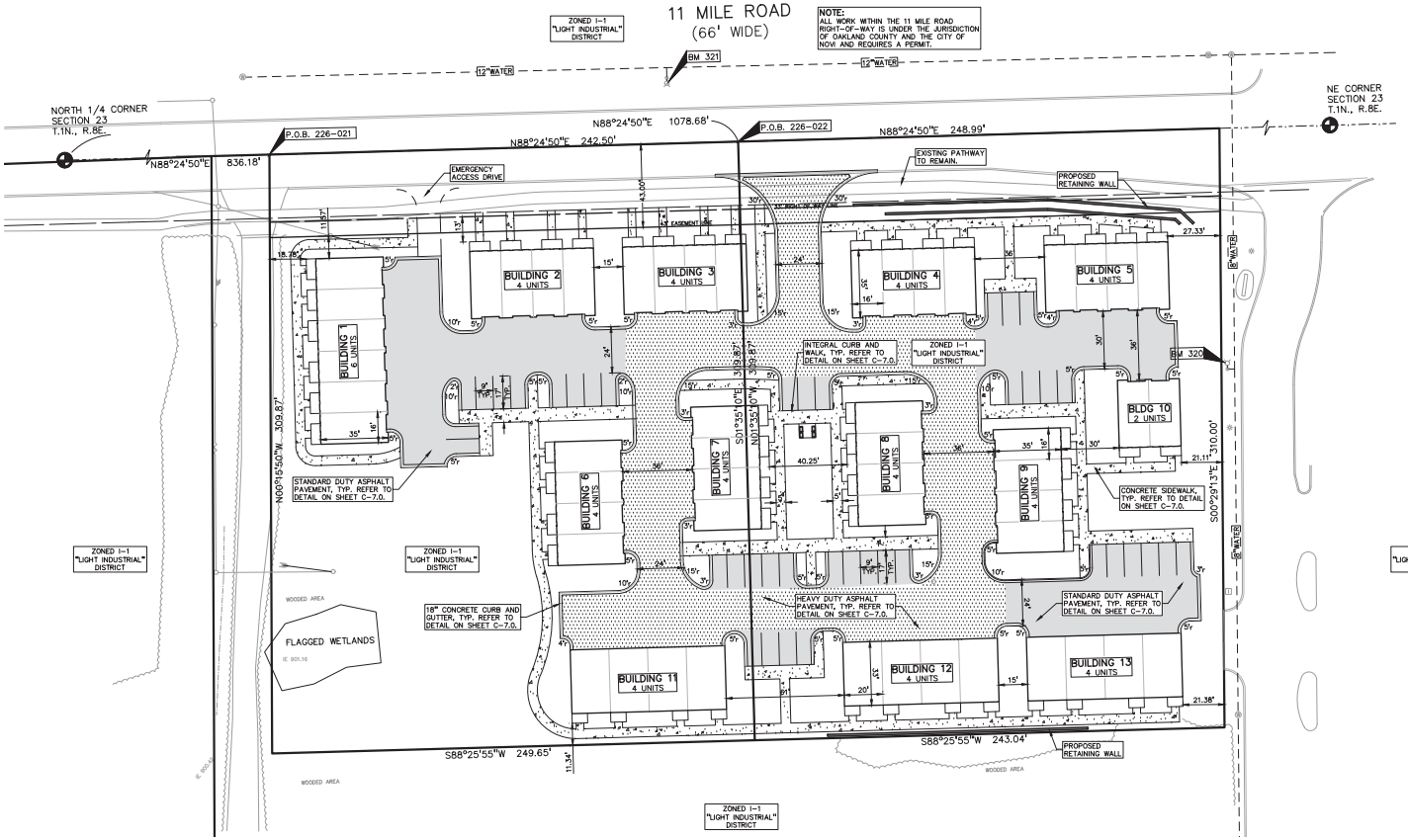
Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, City of Novi, Oakland County, Michigan, being more particularly described as beginning at a point North 88 degrees 24 minutes 50 seconds East, 836.18 feet along the North line of Section 23 from the North 1/4 corner of said Section 23; thence continuing North 88 degrees 24 minutes 50 seconds East, 242.50 feet; thence South 01 degree 35 minutes 10 seconds East, 309.87 feet; thence South 88 degrees 25 minutes 55 seconds West, 249.65 feet; thence North 00 degrees 15 minutes 50 seconds West, 309.87 feet to the Point of Beginning.

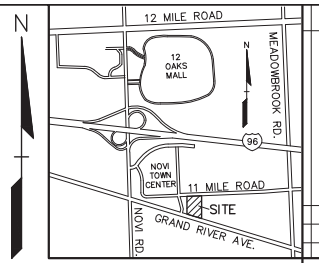
LEGAL DESCRIPTION

Parcel 22-23-226-022
(Per First American Title Insurance Company Commitment No. 849037, effective date May 03, 2019)

Land in the City of Novi, Oakland County, MI, described as follows:

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, City of Novi, Oakland County, Michigan, being more particularly described as beginning at a point North 88 degrees 24 minutes 50 seconds East, 1078.68 feet along the North line of Section 23 from the North 1/4 corner of said Section 23; thence continuing North 88 degrees 24 minutes 50 seconds East, 248.99 feet; thence South 00 degrees 29 minutes 13 seconds East, 310.00 feet; thence South 88 degrees 25 minutes 55 seconds West, 243.04 feet; thence North 01 degree 35 minutes 10 seconds West, 309.87 feet to the Point of Beginning.





LOCATION MAP – NOT TO SCALE

LEGEND

EXISTING		PROPOSED
●	IRON FOUND	
⊠	IRON SET	
⊞	NAIL FOUND	
⊠	NAIL & CAP SET	
⊡	GRASS PLUG SET	
◉	MONUMENT FOUND	
■	MONUMENT SET	
⊕	SEC. CORNER FOUND	
R	RECORDED	
M	MEASURED	
C	CALCULATED	
-OH-ELEC-W-	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	
-UG-CATV-	UNDERGROUND CABLE TV, CATV PEDESTAL	
-UG-PHONE-T-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
-UG-ELEC-E-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS	GAS MAIN, VALVE & GAS LINE MARKER	
W	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
S	SANITARY SEWER, CLEANOUT & MANHOLE	
ST	STORM SEWER, CLEANOUT & MANHOLE	
C	COMBINED SEWER & MANHOLE	
	SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
	POST INDICATOR VALVE	
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
	UNIDENTIFIED STRUCTURE	
816.08	SPOT ELEVATION	871.21
870	CONTOUR LINE	871
	FENCE	
	GUARD RAIL	
	STREET LIGHT	
	SIGN	
CONC.	CONCRETE	STD DUTY / HEAVY DUTY / R.O.W. DUTY
ASPH.	ASPHALT	STD DUTY / HEAVY DEEP DUTY / STRENGTH
GRAVEL	GRAVEL SHOULDER	
	WETLAND	

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

−30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

BENCHMARKS
(NAVD88 DATUM GPS DERIVED)

BM 321
Arrow on hydrant on the north side of 11 Mile Road, 325'± west of the driveway to Avalon Center.

Elevation 908.27

BM 320
Arrow on hydrant 90 feet south of the south curb of 11 Mile Road on the west line of Avalon Center.
Elevation 902.77

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Number 26125C-0627F, Effective September 29, 2006.

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. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF NOVI CURRENT STANDARDS AND REGULATIONS.
3. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS 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.
5. 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.
6. ALL PARKING SPACE PAVEMENT MARKINGS SHALL BE 4" WHITE WITH THE EXCEPTION OF THE BARRIER FREE PARKING SPACES.
7. PROVIDE 4" BLUE STRIPING FOR BARRIER FREE PARKING SPACES AND WHITE FOR BARRIER FREE PARKING SYMBOL. NOTE THAT WHERE A BARRIER FREE PARKING SPACE ABUTS A NON-BARRIER FREE SPACE, THE TWO SPACES SHALL BE SEPARATED BY ABUTTING BLUE AND WHITE STRIPES.
8. SIGNS NOTED TO BE MOUNTED ON BUILDING FACADE SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET AND A MAXIMUM MOUNTING HEIGHT OF 7 FEET.

CITY OF NOVI FIRE DEPARTMENT NOTES:

1. ALL WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 35 TONS ARE TO BE PROVIDED FOR FIRE APPARATUS PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
2. ALL WATER MAINS AND FIRE HYDRANTS ARE TO BE INSTALLED AND BE IN SERVICE PRIOR TO CONSTRUCTION ABOVE THE FOUNDATION.
3. THE BUILDING ADDRESS IS TO BE POSTED FACING THE STREET THROUGHOUT THE CONSTRUCTION. THE ADDRESS IS TO BE AT LEAST 3 INCHES HIGH ON CONTRASTING BACKGROUND.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	1.03.19

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

THIS DRAWING AND DESIGNS ARE THE PROPERTY OF PEA, INC. AND ARE NOT TO BE USED IN ANY WAY THAT THEY ARE NOT TO BE USED, REPRODUCED, OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO OTHERS, WITHOUT THE PRIOR WRITTEN CONSENT OF PEA, INC. ALL COMMON LAW, STATUTORY AND OTHER RESERVED RIGHTS ARE HEREBY SPECIFICALLY RESERVED. © 2019 PEA, INC.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND CONSTRUCTION CONTRACTOR SHALL FURTHER AGREE TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

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BIRMINGHAM, MI 48009

SAKURA EAST DIMENSION PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

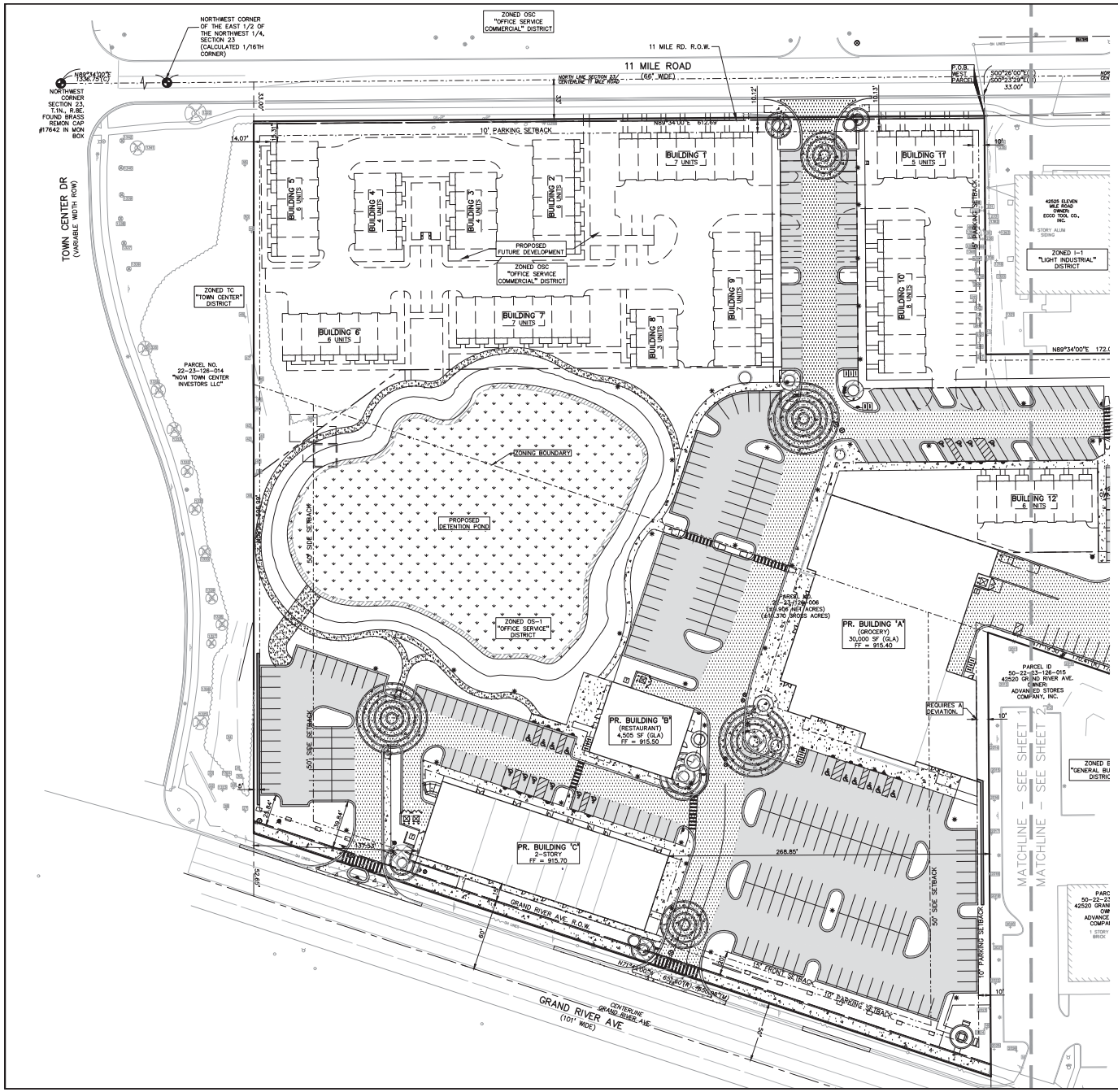
S:\PROJECTS\2018\2018033\DWG\18033-SDP.dwg

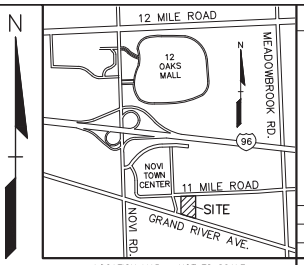
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 30'

DRAWING NUMBER:
C-2.4





LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV OH. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MARKER, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECHYE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. ASPHALT
- GRAVEL GRAVEL SHOULDER
- WETLAND

STD DUTY CONC. | HEAVY DUTY CONC. | R.O.W. ONLY CONC.
STD DUTY ASPH. | HEAVY DUTY ASPH. | DEEP STRENGTH ASPH.

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	10/7/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

SETBACK PLAN - WEST
SAKURA NOVI
PART OF THE E. 1/2 OF THE NW. 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

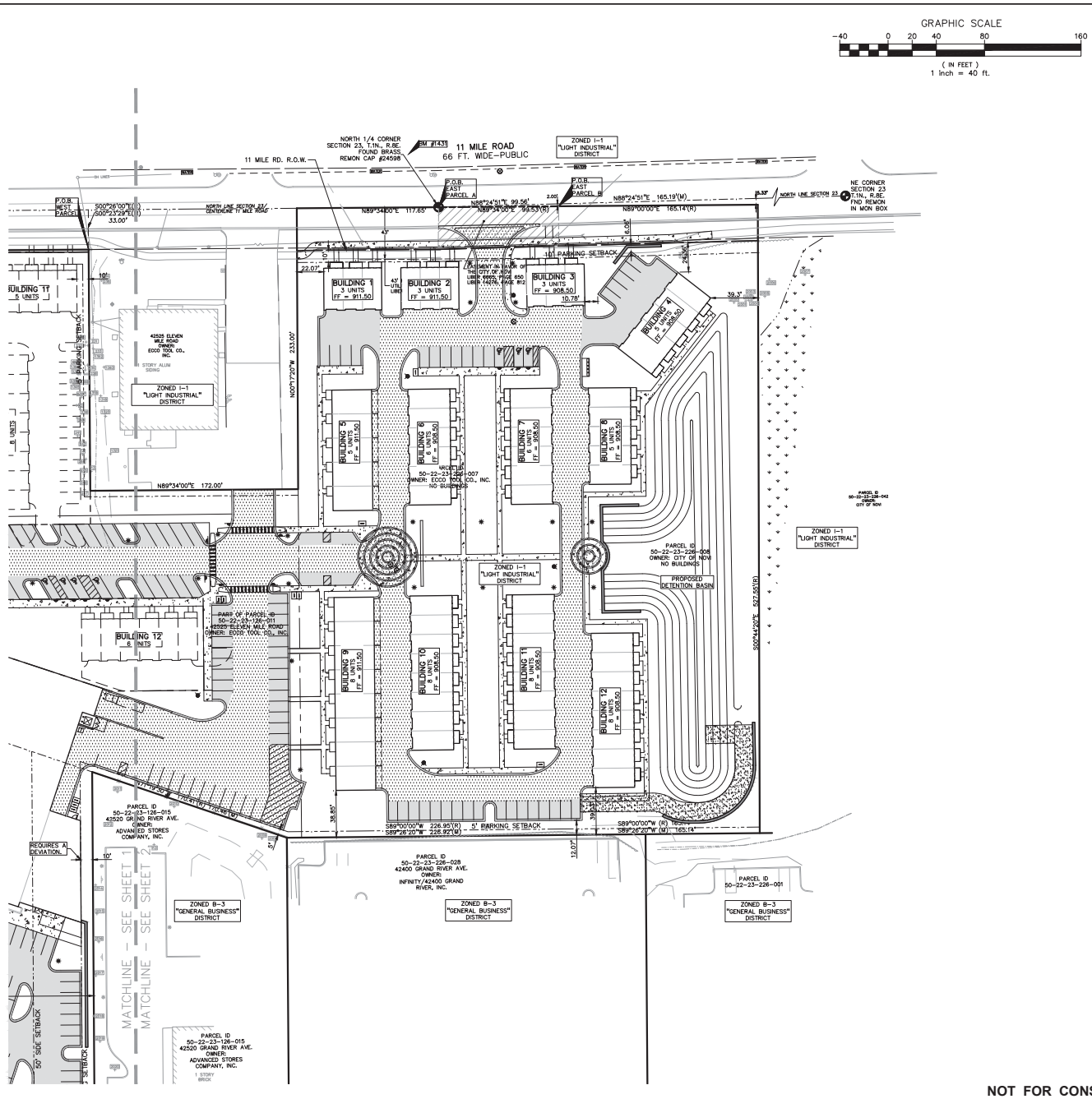
S:\PROJECTS\2018\2018-033 AIKEN NOVI-APARTMENTS PLANS\SD-SUBBASE-18033.dwg

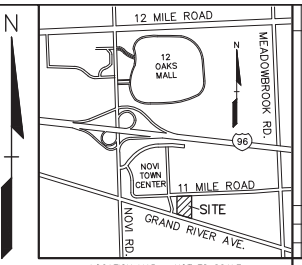
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.5





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING / PROPOSED

-OH-ELEC-W-O-	ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
-UG-CATV-	UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-PHONE-	TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
-UG-ELEC-	ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
	GAS MAIN, VALVE & GAS LINE MARKER
	WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
	SANITARY SEWER, CLEANOUT & MANHOLE
	STORM SEWER, CLEANOUT & MANHOLE
	COMBINED SEWER & MANHOLE
	SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
	POST INDICATOR VALVE
	WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
	MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
	UNIDENTIFIED STRUCTURE
816.06	SPOT ELEVATION
670	CONTOUR LINE
	FENCE
	GUARD RAIL
	STREET LIGHT
	SIGN
CONC.	CONCRETE
ASPH.	ASPHALT
GRAVEL	GRAVEL SHOULDER
	WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-SB-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	10/2/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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SETBACK PLAN - EAST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018-033 AIKEN HOA-APK\SITE PLANS\C-2.6SBACK-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

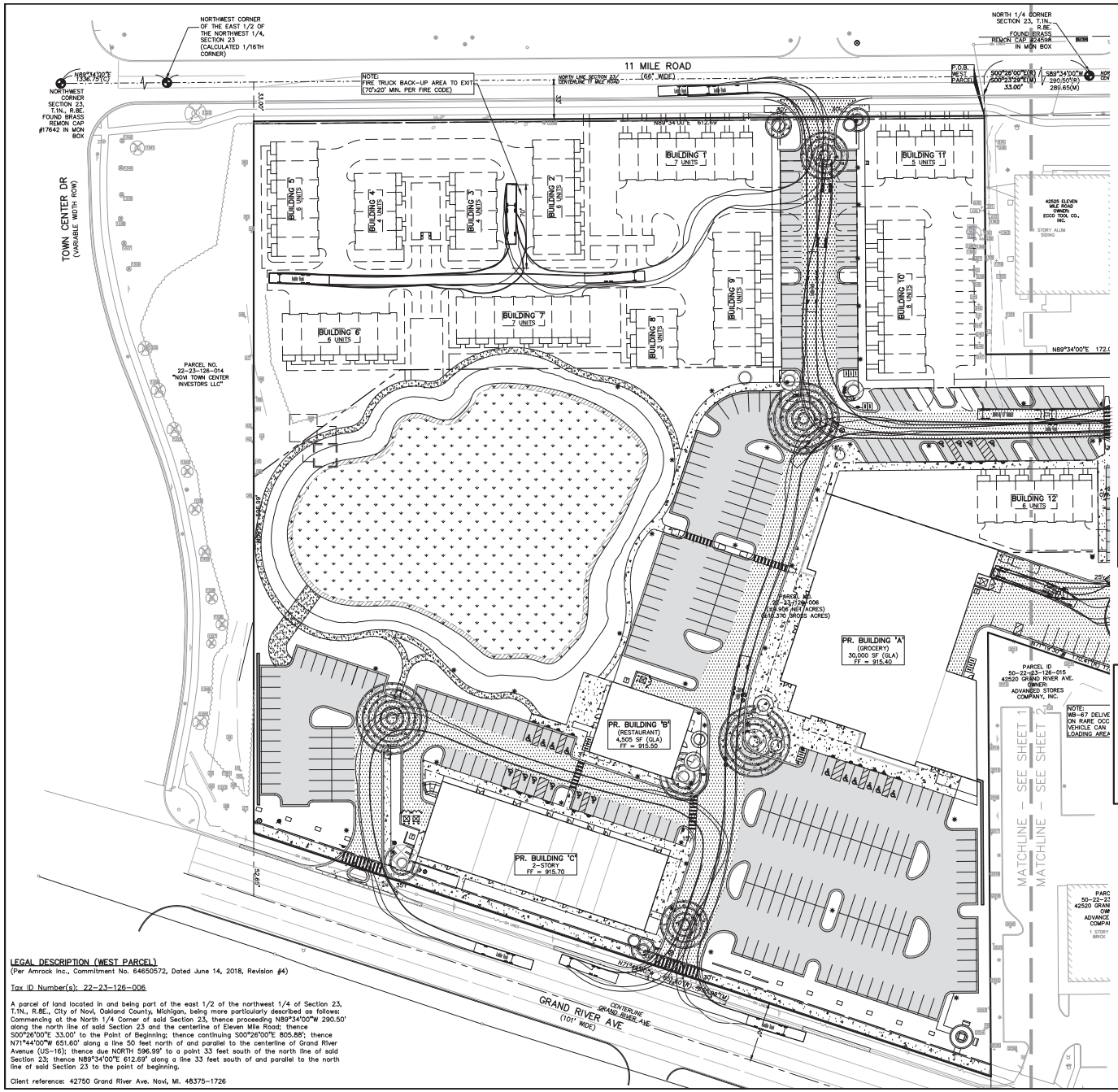
PEA JOB NO. 2018-033

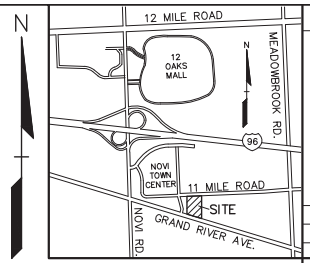
SCALE: 1" = 40'

DRAWING NUMBER: C-2.6

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING	PROPOSED
ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECHYE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
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GRAVEL SHOULDER	
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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

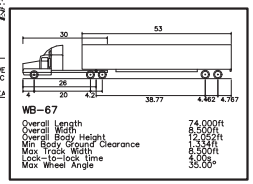
BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

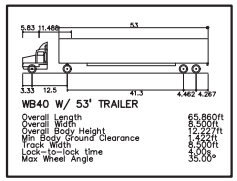
By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.



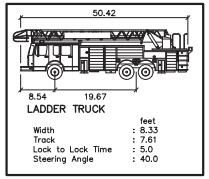
WB-67

Overall Length	74.000ft
Overall Width	8.500ft
Overall Body Height	12.667ft
Min Body Ground Clearance	1.433ft
Max Track Width	8.500ft
Lock-to-lock time	4.0s
Max Wheel Angle	35.00°



WB40 W/ 53' TRAILER

Overall Length	65.860ft
Overall Width	8.500ft
Overall Body Height	12.667ft
Min Body Ground Clearance	1.433ft
Track Width	8.500ft
Lock-to-lock Time	4.0s
Max Wheel Angle	35.00°



LADDER TRUCK

	feet
Width	: 8.33
Track	: 7.61
Lock to Lock Time	: 5.0
Steering Angle	: 40.0

LEGAL DESCRIPTION (WEST PARCEL)

(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US–16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375–1726

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLAN REVIEW COMMENTS	10/7/19
2	KRD	PER PROTECTION AUTH REVIEW COMMENTS	12/3/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!

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f: 248.689.1044
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

VEHICLE ACCESS PLAN - WEST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	CK.	JKS	SUR.	GWC	P.M.	JPB

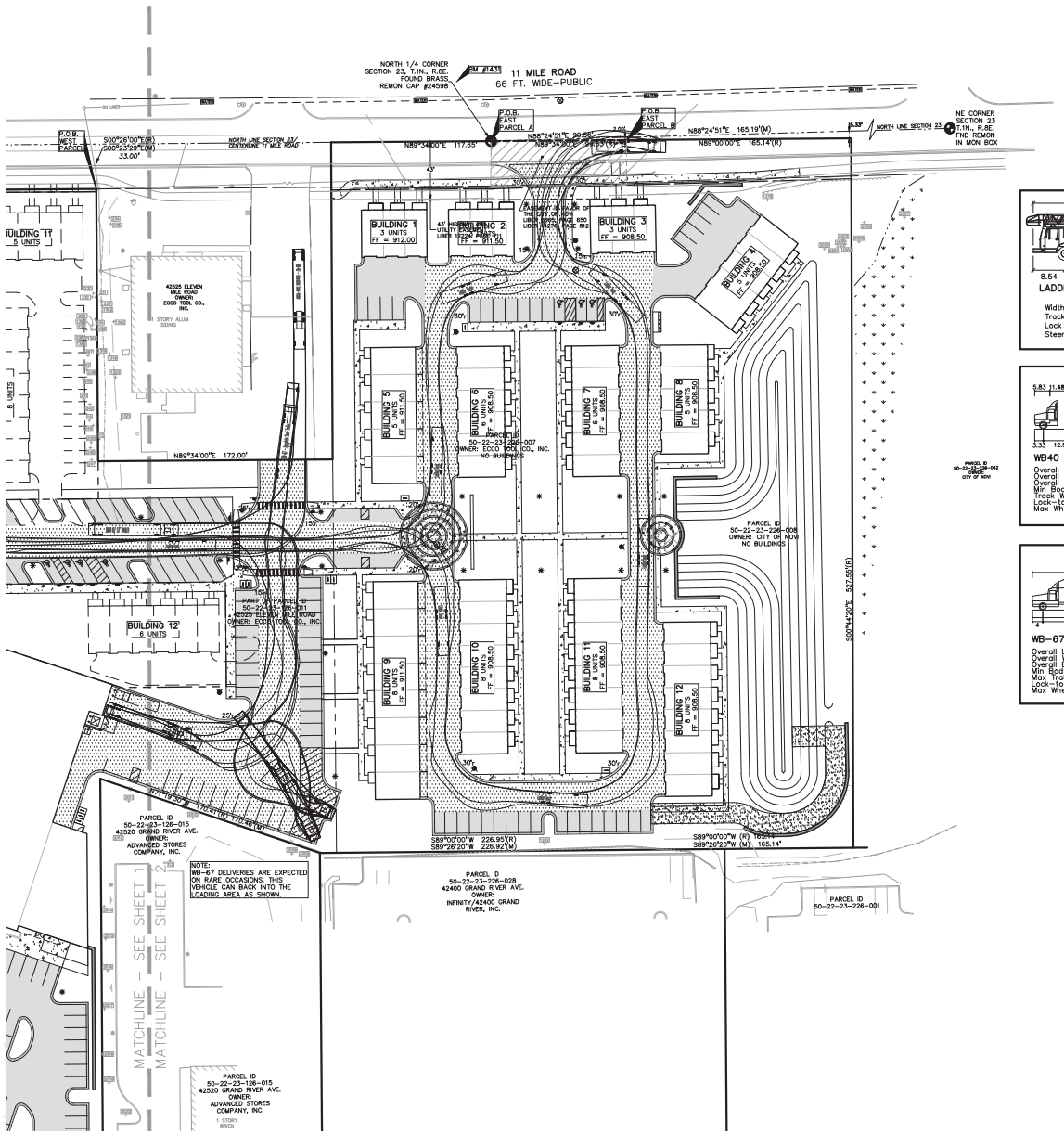
S:\PROJECTS\2018\2018-033 AIKEN HOA-APARTMENTS PLANS\DWG\18033.dwg

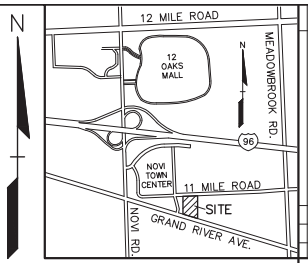
ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-2.7





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
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WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL
GRAVEL SHOULDER
WETLAND
STD DUTY
HEAVY DUTY
R.O.W. ONLY
HEAVY DUTY
DEEP STRUCTURE

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH OF BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PC/ZONING/ENG REVISED SUBMITTAL	1/2/19

REVISIONS

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

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VEHICLE ACCESS PLAN - EAST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

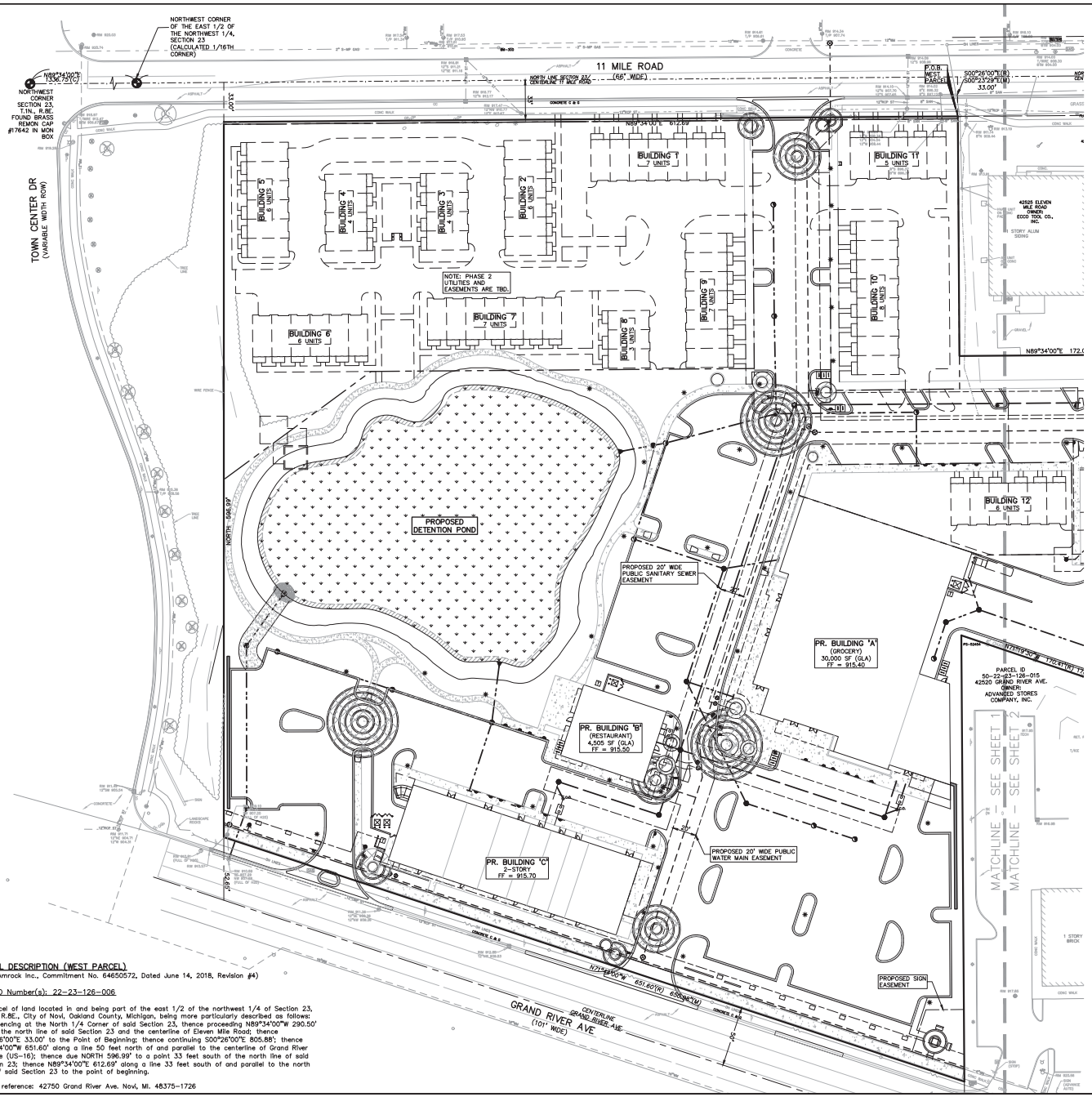
S:\PROJECTS\2018\2018-033 AIKEN NOVI-APPLEBY\SITE PLANS\C2-2018033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-2.8

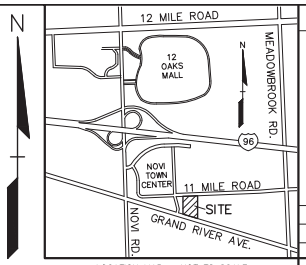


LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows: Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client references: 42750 Grand River Ave. Novi, MI. 48375-1726



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SECT. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV GUY, LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
- STORM SEWER, CLEANOUT & MANHOLE
- COMBINED SEWER & MANHOLE
- SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
- POST INDICATOR VALVE
- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
- UNIDENTIFIED STRUCTURE
- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPHALT
- GRAVEL SHOULDER
- WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

GRAPHIC SCALE
−40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

PUBLIC UTILITY EASEMENTS:
ALL WATER MAIN AND SANITARY SEWER IS TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

REVISIONS	DATE
NO. REVISIONS/ADDED SUBMITTAL	10/7/19
NO. PER PROPOSED/REVISED SUBMITTAL	12/9/19

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
LICENSED PROFESSIONAL ENGINEER

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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

EASEMENT PLAN - WEST
SAKURA NOVI
PART OF THE E. 1/2 OF THE NW. 1/4 OF SECTION 23, T.1N., R.8E.,
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

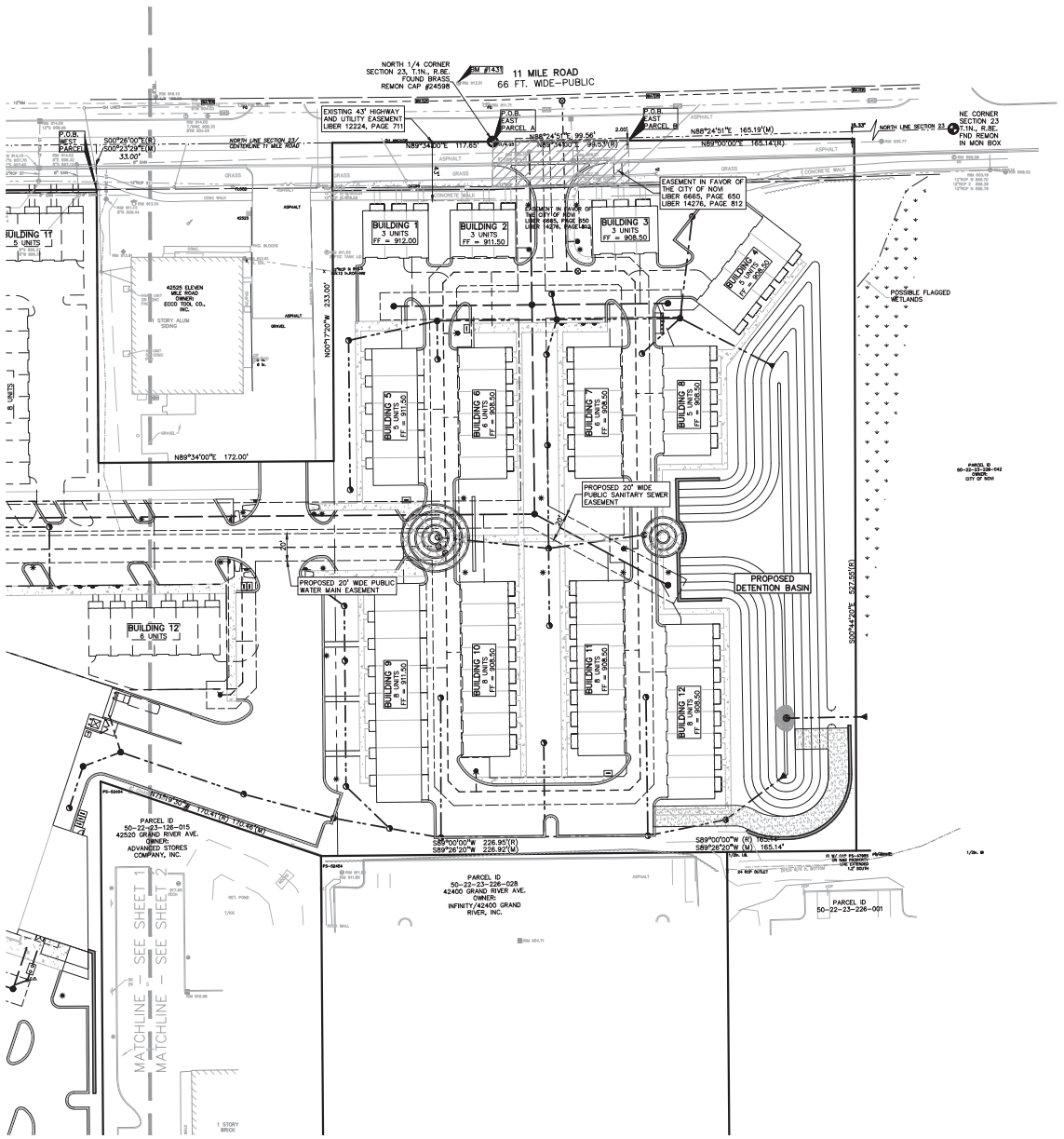
D:\PROJECTS\2018\2018-033 AIKEN HOA-APARTMENTS PLANS\2018-033 ESM - 18033.dwg

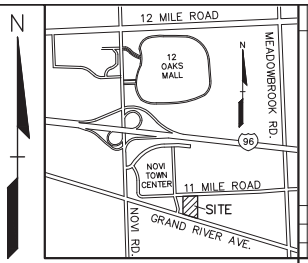
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-3.1





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	GRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV GUY LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL, & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
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SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
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"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows: Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as: Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PC/SP/ENGINEERING REVIEW SUBMITTAL	10/7/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!
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EASEMENT PLAN - EAST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

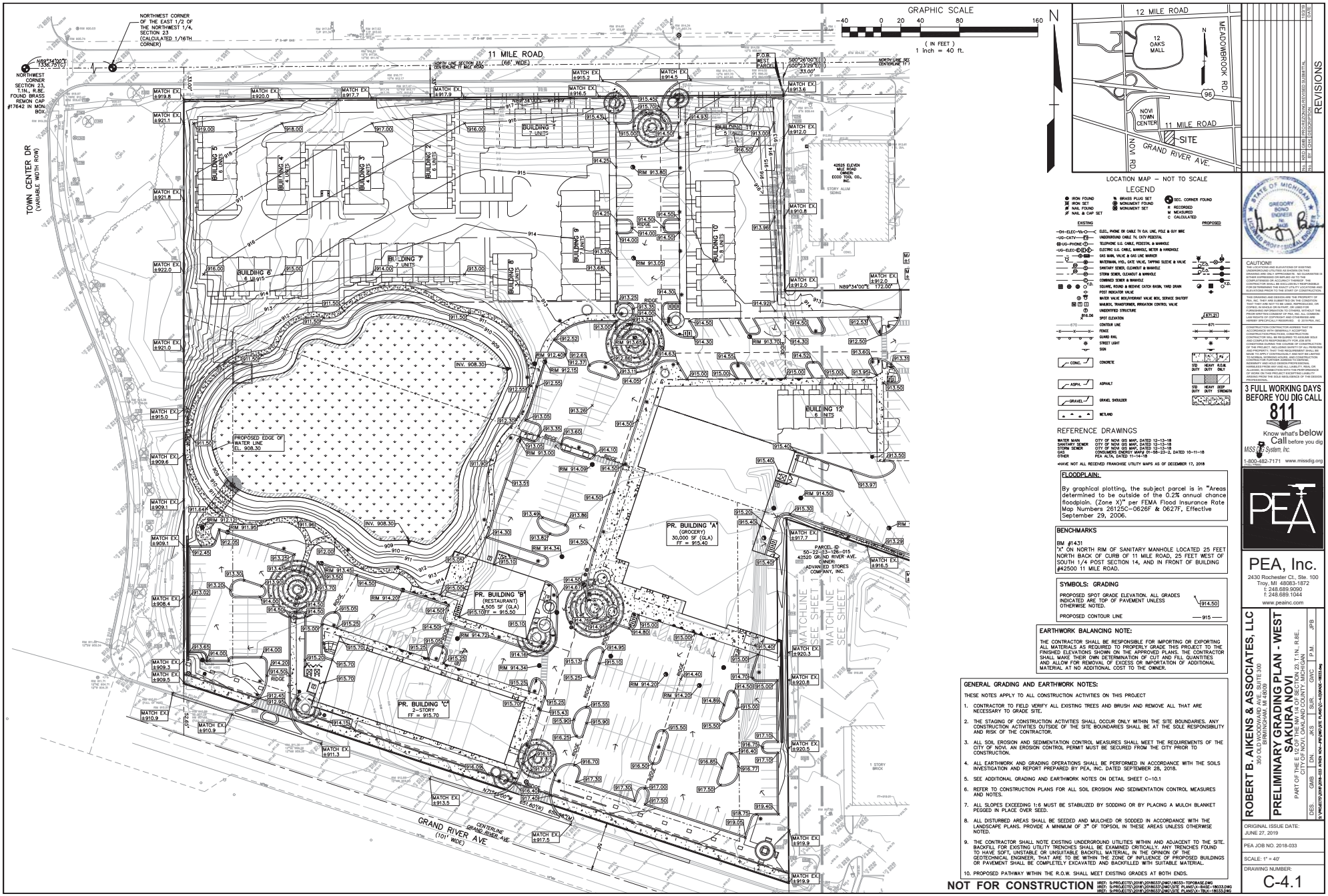
S:\PROJECTS\2018\2018-033 AIKEN NOVI-APM\SITE PLANS\18-33 ESM - 18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-3.2



LOCATION MAP – NOT TO SCALE

LEGEND

- IRON FOUND
- IRON SET
- NAIL FOUND
- NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
- SEC. CORNER FOUND
- R RECORDED
- M MEASURED
- C CALCULATED

EXISTING / PROPOSED

- ELEC., PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
- UNDERGROUND CABLE TV, CATV PEDESTAL
- TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
- GAS MAIN, VALVE & GAS LINE MARKER
- WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
- SANITARY SEWER, CLEANOUT & MANHOLE
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- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIGN
- CONCRETE
- ASPH. — ASPHALT
- GRAVEL — GRAVEL SHOULDER
- WETLAND

STD DUTY — HEAVY DUTY — R.O.W. ONLY

STD DUTY — HEAVY DUTY — DEEP STRENGTH

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

SYMBOLS: GRADING

PROPOSED SPOT GRADE ELEVATION. ALL GRADES INDICATED ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED. 914.50

PROPOSED CONTOUR LINE 915

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

1. CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
2. THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
3. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE CITY OF NOVI. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE CITY PRIOR TO CONSTRUCTION.
4. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT PREPARED BY PEA, INC. DATED SEPTEMBER 28, 2016.
5. SEE ADDITIONAL GRADING AND EARTHWORK NOTES ON DETAIL SHEET C–10.1
6. REFER TO CONSTRUCTION PLANS FOR ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
7. ALL SLOPES EXCEEDING 1:6 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
8. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
9. THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE GEOTECHNICAL ENGINEER, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
10. PROPOSED PATHWAY WITHIN THE R.O.W. SHALL MEET EXISTING GRADES AT BOTH ENDS.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PC/ZONING/ENGINEERING REVISED SUBMITTAL	10/7/19

REVISIONS

GREGORY BONO ENGINEER 6201053 LICENSED PROFESSIONAL ENGINEER STATE OF MICHIGAN

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BIRMINGHAM, MI 48009

PRELIMINARY GRADING PLAN - WEST
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

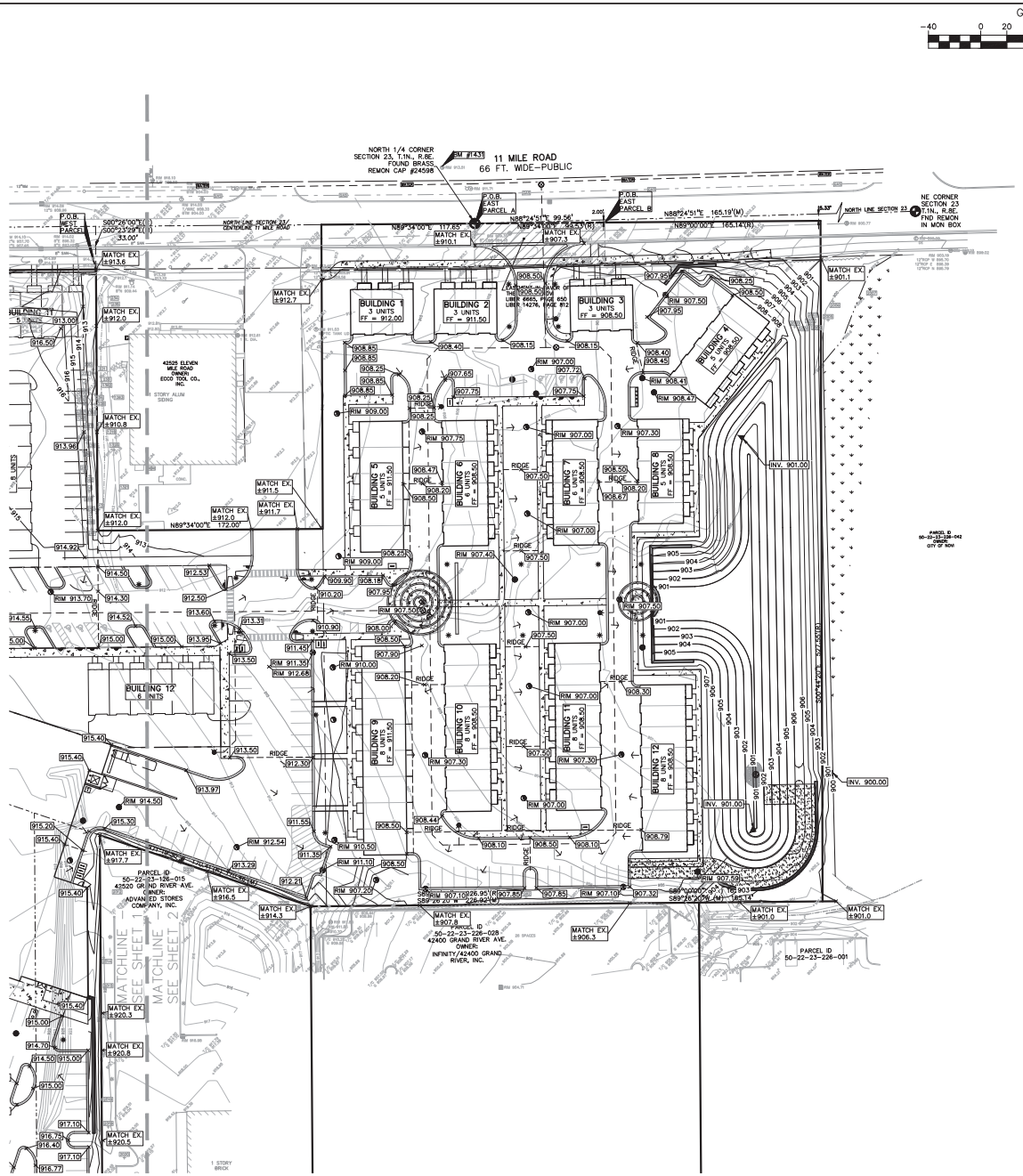
S:\PROJECTS\2018\2018-033 AIKEN HOA-APPLEBY\SITE PLANS\C-10GRADE-18033.dwg

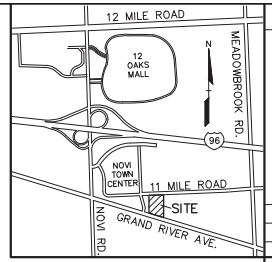
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-4.1





LOCATION MAP – NOT TO SCALE

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IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
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EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV GUY LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL, & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
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UNIDENTIFIED STRUCTURE	
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STREET LIGHT	
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CONCRETE	
ASPHALT	
GRAVEL	
WETLAND	

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GAS	CONSUMERS ENERGY MAP# 07-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

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REVISIONS			
NO.	BY	DESCRIPTION	DATE
1	KRD	PC/ZONING/ENG REVISED SUBMITTAL	10/3/19

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

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PRELIMINARY GRADING PLAN - EAST
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CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

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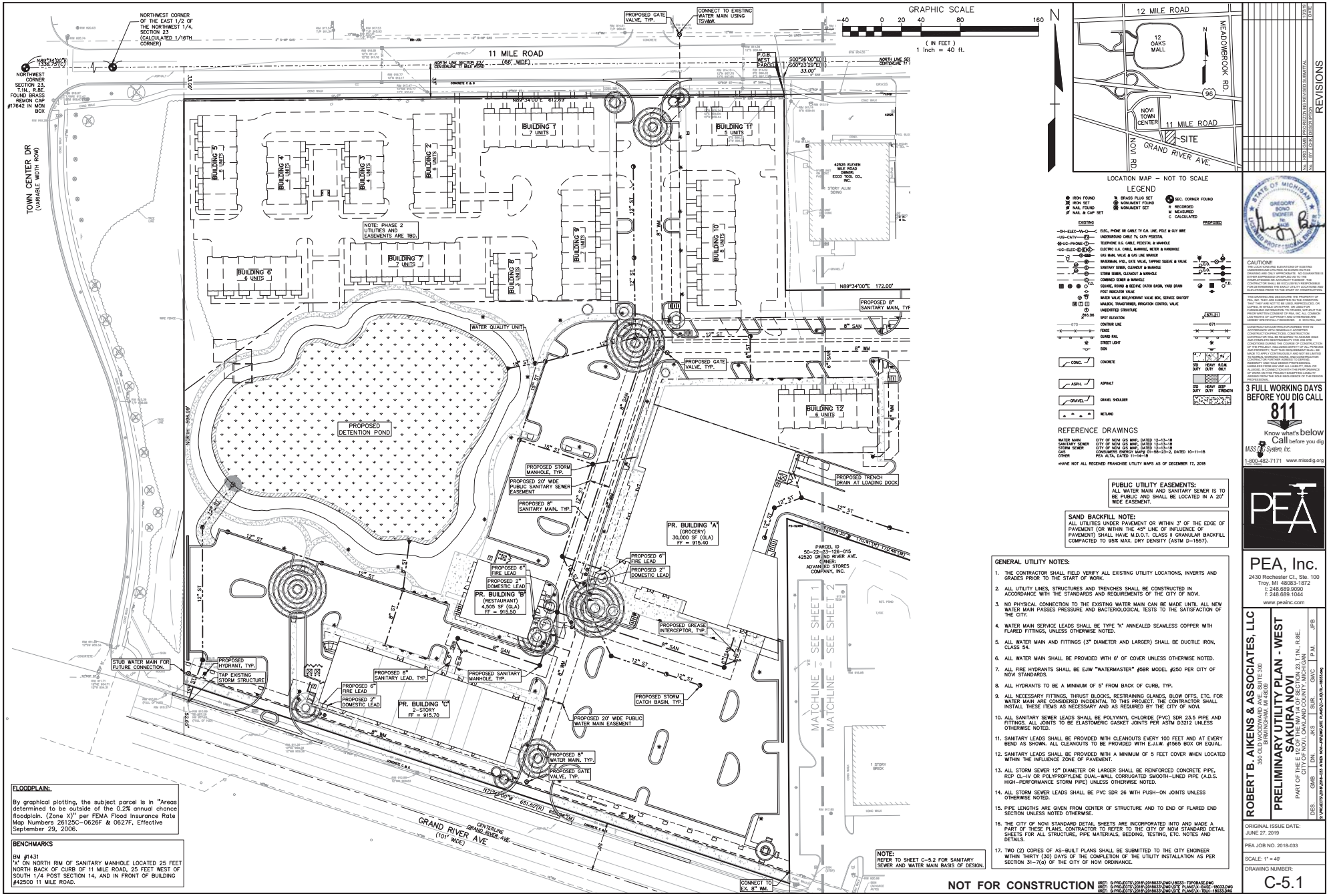
ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER:
C-4.2



LOCATION MAP – NOT TO SCALE

LEGEND

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- IRON SET
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- NAIL & CAP SET
- GRASS PLUG SET
- MONUMENT FOUND
- MONUMENT SET
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- M MEASURED
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SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAPS 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

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PUBLIC UTILITY EASEMENTS: ALL WATER MAIN AND SANITARY SEWER IS TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT.

SAND BACKFILL NOTE: ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

GENERAL UTILITY NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, INVERTS AND GRADES PRIOR TO THE START OF WORK.
2. ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF NOVI.
3. NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE CITY.
4. WATER MAIN SERVICE LEADS SHALL BE TYPE 'K' ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
5. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
6. ALL WATER MAIN SHALL BE PROVIDED WITH 6' OF COVER UNLESS OTHERWISE NOTED.
7. ALL FIRE HYDRANTS SHALL BE EJIW "WATERMASTER" 6BR MODEL #250 PER CITY OF NOVI STANDARDS.
8. ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
9. ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE CITY OF NOVI.
10. ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
11. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.
12. SANITARY LEADS SHALL BE PROVIDED WITH A MINIMUM OF 5 FEET COVER WHEN LOCATED WITHIN THE INFLUENCE ZONE OF PAVEMENT.
13. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE, RCP CL-IV OR POLYPROPYLENE DUAL-WALL CORRUGATED SMOOTH-LINED PIPE (A.D.S. HIGH-PERFORMANCE STORM PIPE) UNLESS OTHERWISE NOTED.
14. ALL STORM SEWER LEADS SHALL BE PVC SDR 26 WITH PUSH-ON JOINTS UNLESS OTHERWISE NOTED.
15. PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
16. THE CITY OF NOVI STANDARD DETAIL SHEETS ARE INCORPORATED INTO AND MADE A PART OF THESE PLANS. CONTRACTOR TO REFER TO THE CITY OF NOVI STANDARD DETAIL SHEETS FOR ALL STRUCTURE, PIPE MATERIALS, BEDDING, TESTING, ETC. NOTES AND DETAILS.
17. TWO (2) COPIES OF AS-BUILT PLANS SHALL BE SUBMITTED TO THE CITY ENGINEER WITHIN THIRTY (30) DAYS OF THE COMPLETION OF THE UTILITY INSTALLATION AS PER SECTION 31-7(a) OF THE CITY OF NOVI ORDINANCE.

NOTE: REFER TO SHEET C-5.2 FOR SANITARY SEWER AND WATER MAIN BASIS OF DESIGN.

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C-0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

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NO.	BY	DESCRIPTION	DATE
1	KRD	PER CITY COMMENTS	1/23/19
2	KRD	PER CITY COMMENTS	3/27/19
3	KRD	PER CITY COMMENTS	5/28/19
4	KRD	PER CITY COMMENTS	6/28/19
5	KRD	PROVED/ZONING/REVISED SUBMITTAL	10/7/19

REVISIONS

STATE OF MICHIGAN — GREGORY BONO — ENGINEER — REGISTERED PROFESSIONAL ENGINEER

CAUTION!!

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f: 248.689.1044
www.peainc.com

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

PRELIMINARY UTILITY PLAN - WEST
SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N, R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

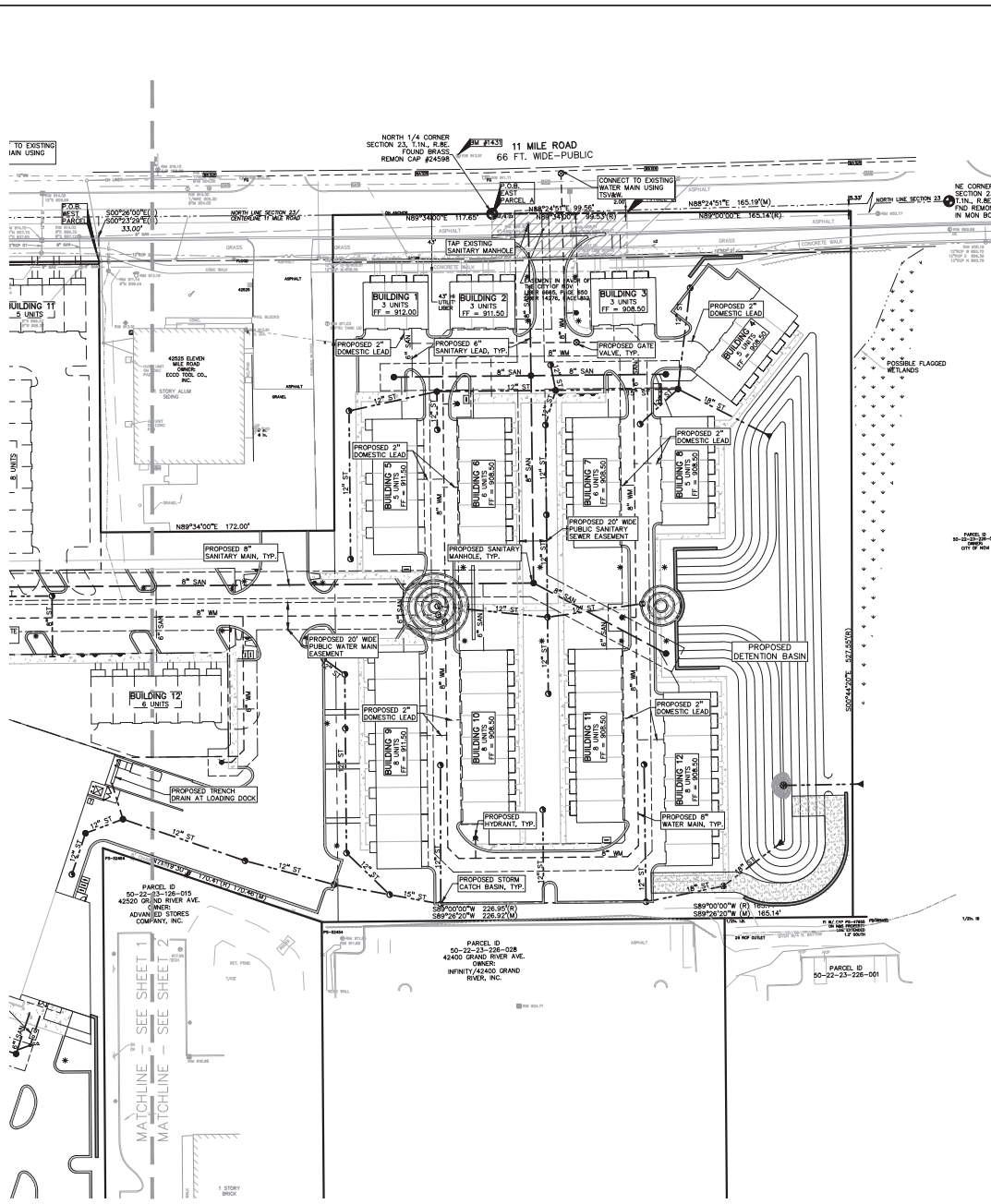
S:\PROJECTS\2018\2018033\DWG\18033-SITE PLANS(C-5.0)TO-18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-5.1

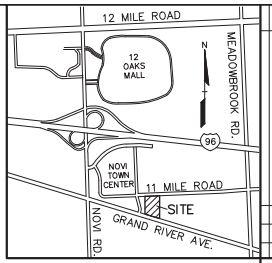


GRAPHIC SCALE

−40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N



LOCATION MAP – NOT TO SCALE

SANITARY SEWER BASIS OF DESIGN:

(Unit Factors Based City of Novi Sewer Unit Factors)

Building	Description	Units	Unit Factor	REU	Population (3.2 people/REU)
Initial					
Building A	Specialty Grocery	26,500 sf	0.31 per 1000 sf	8.22	26
Building A	Office	1,500 sf	0.40 per 1000 sf	0.60	2
Building B	Restaurant with Liquor	125 seats	0.13 per seat	16.25	52
Building B	Outdoor Dining Area	15 seats	0.13 per seat * 5/12	0.81	3
Building C	Retail	4,570 sf	0.34 per 1000 sf	1.55	5
Building C	Restaurant with Liquor	370 seats	0.13 per seat	48.10	154
Building C	Outdoor Dining Area	25 seats	0.13 per seat * 5/12	1.35	4
Building D	Restaurant with Liquor	100 seats	0.13 per seat	13.00	42
Building D	Outdoor Dining Area	10 seats	0.13 per seat * 5/12	0.54	2
	Multi-Family Residential	68 units	1.00 per dwelling	68.00	218
Ultimate					
Building E	First Level - Retail	8,320 sf	0.34 per 1000 sf	2.83	9
Building E	First Level - Restaurant with Liquor	280 seats	0.13 per seat	36.40	116
Building E	5 Levels - Residential	50 units	1.00 per residence	50.00	160
Building F	First Level - Retail	5,271 sf	0.34 per 1000 sf	1.79	6
Building F	First Level - Restaurant with Liquor	175 seats	0.13 per seat	22.75	73
Building F	1 Level - Office	10,542 sf	0.40 per 1000 sf	4.22	13
Building G	First Level - Retail	6,732 sf	0.34 per 1000 sf	2.29	7
Building G	First Level - Restaurant with Liquor	200 seats	0.13 per seat	26.00	83
Building G	4 Levels - Office	53,856 sf	0.40 per 1000 sf	21.54	69
Building H	4 Levels - Hotel	120 rooms	0.38 per room	45.60	146
			totals	371.8	1,190
TOTAL					
		Initial REU	(bldgs A-D & MF Res.	158.4	
				507	People
		Average Flow (100 GPCPD)		50,700	G.P.D.
				0.078	C.F.S.
				0.051	M.G.D.
		P (1000s)		0.507	
		Peaking Factor (PF)		3.97	
		PF = (18+sqrt(P))/(4+sqrt(P))			
		Peak Flow (G.D.P.)		201,335	
		Peak Flow (C.F.S.)		0.312	
		8" Pipe Capacity Provided =		1.10	C.F.S.
		Ultimate REU		371.8	
				1190	People
		Average Flow (100 GPCPD)		119,000	G.P.D.
				0.184	C.F.S.
				0.119	M.G.D.
		P (1000s)		1.190	
		Peaking Factor (PF)		3.75	
		PF = (18+sqrt(P))/(4+sqrt(P))			
		Peak Flow (G.D.P.)		446,252	
		Peak Flow (C.F.S.)		0.690	
		8" Pipe Capacity Provided =		1.10	C.F.S.

WATER MAIN BASIS OF DESIGN:

(Unit Factors Based on OCCC Unit Assignment Factors)

Building	Description	Units	Unit Factor	REU	Population (3.2 people/REU)
Initial					
Building A	Specialty Grocery	26,500 sf	0.31 per 1000 sf	8.22	26
Building A	Office	1,500 sf	0.40 per 1000 sf	0.60	2
Building B	Restaurant with Liquor	125 seats	0.13 per seat	16.25	52
Building B	Outdoor Dining Area	15 seats	0.13 per seat * 5/12	0.81	3
Building C	Retail	4,570 sf	0.34 per 1000 sf	1.55	5
Building C	Restaurant with Liquor	370 seats	0.13 per seat	48.10	154
Building C	Outdoor Dining Area	25 seats	0.13 per seat * 5/12	1.35	4
Building D	Restaurant with Liquor	100 seats	0.13 per seat	13.00	42
Building D	Outdoor Dining Area	10 seats	0.13 per seat * 5/12	0.54	2
	Multi-Family Residential	68 units	1.00 per dwelling	68.00	218
Ultimate					
Building E	First Level - Retail	8,320 sf	0.34 per 1000 sf	2.83	9
Building E	First Level - Restaurant with Liquor	280 seats	0.13 per seat	36.40	116
Building E	5 Levels - Residential	50 units	1.00 per residence	50.00	160
Building F	First Level - Retail	5,271 sf	0.34 per 1000 sf	1.79	6
Building F	First Level - Restaurant with Liquor	175 seats	0.13 per seat	22.75	73
Building F	1 Level - Office	10,542 sf	0.40 per 1000 sf	4.22	13
Building G	First Level - Retail	6,732 sf	0.34 per 1000 sf	2.29	7
Building G	First Level - Restaurant with Liquor	200 seats	0.13 per seat	26.00	83
Building G	4 Levels - Office	53,856 sf	0.40 per 1000 sf	21.54	69
Building H	4 Levels - Hotel	120 rooms	0.38 per room	45.60	146
			totals	371.8	1,190
TOTAL					
		Initial REU	(bldgs A-D & MF Res.)	158.4	
				507	People
		Average Flow (150 GPCPD)		76,050	G.P.D.
				0.118	C.F.S.
				0.076	M.G.D.
		Design Max. Flow = (2*avg)		152,100	G.P.D.
				0.235	C.F.S.
				0.152	M.G.D.
		Building Type =		various	
		Required Fire Flow =		1500 gpm for 2 hours	
		Ultimate REU		371.8	
				1190	People
		Average Flow (150 GPCPD)		178,486	G.P.D.
				0.276	C.F.S.
				0.178	M.G.D.
		Design Max. Flow = (2*avg)		356,972	G.P.D.
				0.552	C.F.S.
				0.357	M.G.D.
		Building Type =		various	
		Required Fire Flow =		1500 gpm for 2 hours	

LEGEND

IRON FOUND
IRON SET
NAIL FOUND
NAIL & CAP SET
BRASS PLUG SET
MONUMENT FOUND
MONUMENT SET
SEC. CORNER FOUND
R RECORDED
M MEASURED
C CALCULATED

EXISTING / PROPOSED

ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE
UNDERGROUND CABLE TV, CATV PEDESTAL
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
GAS MAIN, VALVE & GAS LINE MARKER
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE
SANITARY SEWER, CLEANOUT & MANHOLE
STORM SEWER, CLEANOUT & MANHOLE
COMBINED SEWER & MANHOLE
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN
POST INDICATOR VALVE
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
UNIDENTIFIED STRUCTURE
SPOT ELEVATION
CONTOUR LINE
FENCE
GUARD RAIL
STREET LIGHT
SIGN
CONCRETE
ASPHALT
GRAVEL SHOULDER
WETLAND

REFERENCE DRAWINGS

WATER MAIN	CITY OF NOVI GIS MAP, DATED 12-13-18
SANITARY SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
STORM SEWER	CITY OF NOVI GIS MAP, DATED 12-13-18
GAS	CONSUMERS ENERGY MAP# 01-08-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

*HAVE NOT ALL RECEIVED FRANCHISE UTILITY MAPS AS OF DECEMBER 17, 2018

FLOODPLAIN:

By graphical plotting, the subject parcel is in "Areas determined to be outside of the 0.2% annual chance floodplain. (Zone X)" per FEMA Flood Insurance Rate Map Numbers 26125C–0626F & 0627F, Effective September 29, 2006.

BENCHMARKS

BM #1431
"x" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\A-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PER ZONING/ENGINEERING REVIEW & SUBMITTAL	10/2/19

REVISIONS

GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER

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350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

PRELIMINARY UTILITY PLAN - EAST

SAKURA NOVI

PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E., CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	DN.	JKS	SUR.	GWC	P.M.	JPB
GMB						

S:\PROJECTS\2018\2018-033 AIKEN HOA-APARTMENTS PLANS\DC-533\TS--18033.dwg

ORIGINAL ISSUE DATE: JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: 1" = 40'

DRAWING NUMBER: C-5.2

LEGAL DESCRIPTION (WEST PARCEL)
(Per Amrock Inc., Commitment No. 64650572, Dated June 14, 2018, Revision #4)

Tax ID Number(s): 22-23-126-006

A parcel of land located in and being part of the east 1/2 of the northwest 1/4 of Section 23, T.1N., R.8E., City of Novi, Oakland County, Michigan, being more particularly described as follows:
Commencing at the North 1/4 Corner of said Section 23, thence proceeding N89°34'00"W 290.50' along the north line of said Section 23 and the centerline of Eleven Mile Road; thence S00°26'00"E 33.00' to the Point of Beginning; thence continuing S00°26'00"E 805.88'; thence N71°44'00"W 651.60' along a line 50 feet north of and parallel to the centerline of Grand River Avenue (US-16); thence due NORTH 596.99' to a point 33 feet south of the north line of said Section 23; thence N89°34'00"E 612.69' along a line 33 feet south of and parallel to the north line of said Section 23 to the point of beginning.

Client reference: 42750 Grand River Ave. Novi, MI. 48375-1726

LEGAL DESCRIPTION (EAST PARCEL A)
(Per Amrock, Inc. Commitment File No. 64650648, effective date June 13, 2018)

Tax Id Number(s): 22-23-126-011, 22-23-226-007

Land situated in the City of Novi in the County of Oakland in the State of MI

A parcel of land situated in a part of the North 1/2 of Section 23, Town 01 North, Range 08 East, City of Novi, Oakland County, Michigan, being more particularly described as follows:
Beginning at the North 1/4 corner of Section 23, Town 01 North, Range 08 East, thence North 89 degrees 34 minutes 02 seconds East 99.53 feet along the centerline of 11 Mile Road (66 feet wide) and the North line of said Section 23; thence South 00 degrees 10 minutes 20 seconds East 527.55 feet; thence South 89 degrees 34 minutes 00 seconds West 226.95 feet; thence North 71 degrees 19 minutes 30 seconds West 170.41 feet; thence North 00 degrees 17 minutes 20 seconds West 238.77 feet; thence
North 89 degrees 34 minutes 00 seconds East 172.00 feet; thence North 00 degrees 17 minutes 20 seconds West 233.00 feet to said centerline of 11 Mile Road and the North line of Section 23; thence along said North line North 89 degrees 34 minutes 00seconds East 117.65 feet to the point of beginning. Containing 3.68± acres of land gross and 3.52± acres of land net of the 33-foot right-of-way.

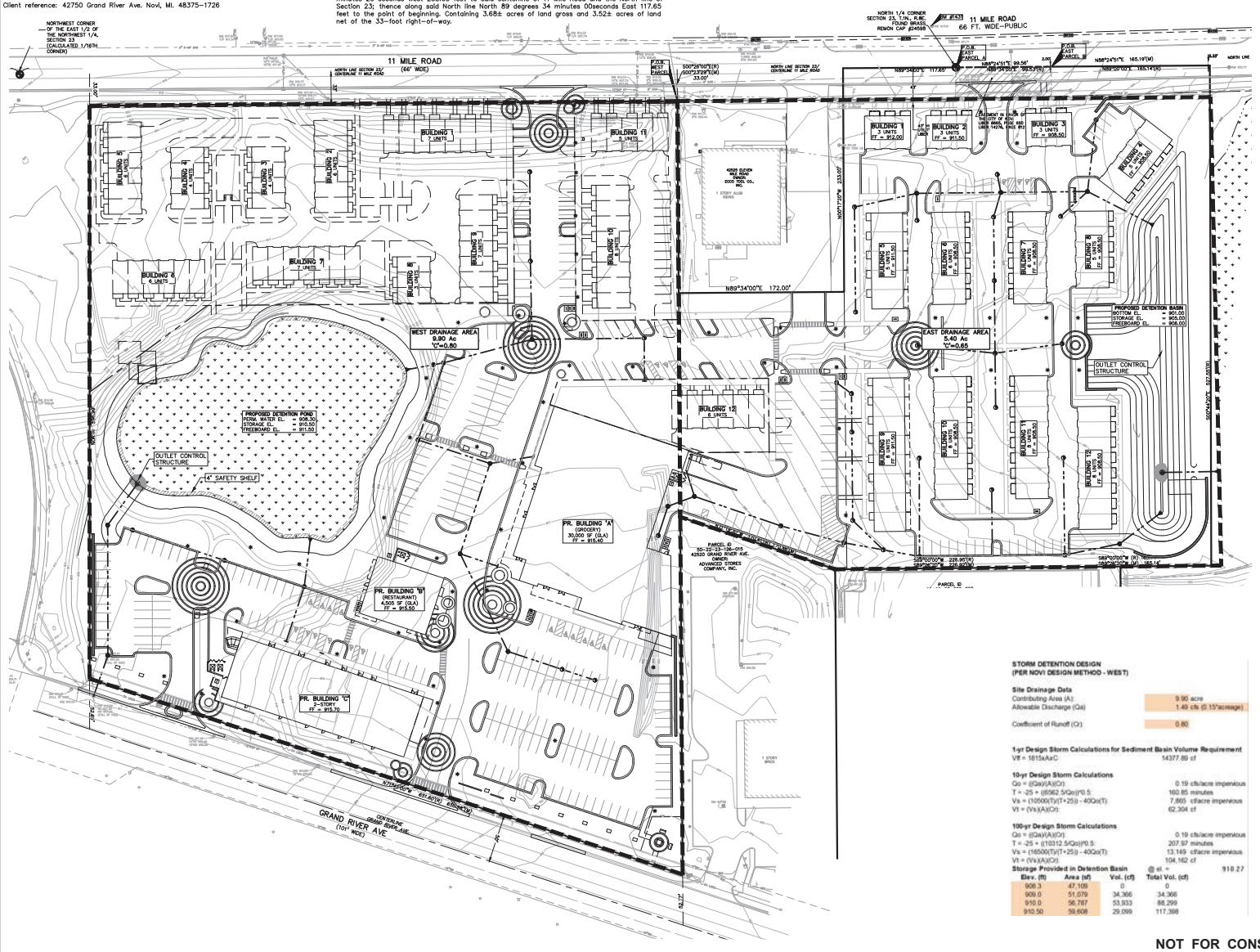
LEGAL DESCRIPTION (EAST PARCEL B)
(Per Amrock, Inc. Commitment File No. 65113081, effective date October 24, 2018)

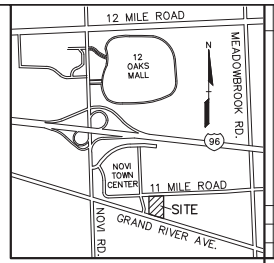
Tax Id Number(s): 22-23-226-008

Land situated in the City of Novi in the County of Oakland in the State of MI

Part of the Northeast 1/4 of Section 23, Town 1 North, Range 8 East, described as:
Beginning at a point distant North 89 degrees 00 minutes East, 99.53 feet from the North 1/4 corner of Section 23, thence North 89 degrees 00 minutes East, 165.14 feet; thence South 0 degrees 44 minutes 20 seconds East, 527.55 feet; thence South 89 degrees 00 minutes West, 165.14 feet; thence North 0 degrees 44 minutes 20 seconds West, 527.55 feet to the point of beginning.

GRAPHIC SCALE
−50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.





LOCATION MAP – NOT TO SCALE

LEGEND

IRON FOUND	BRASS PLUG SET
IRON SET	MONUMENT FOUND
NAIL FOUND	MONUMENT SET
NAIL & CAP SET	SEC. CORNER FOUND
	R RECORDED
	M MEASURED
	C CALCULATED

EXISTING	PROPOSED
ELEC., PHONE OR CABLE TV O/H. LINE, POLE & GUY WIRE	
UNDERGROUND CABLE TV, CATV PEDESTAL	
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE	
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE	
GAS MAIN, VALVE & GAS LINE MARKER	
WATERMAIN, HYD., GATE VALVE, TAPPING SLEEVE & VALVE	
SANITARY SEWER, CLEANOUT & MANHOLE	
STORM SEWER, CLEANOUT & MANHOLE	
COMBINED SEWER & MANHOLE	
SQUARE, ROUND & RECEIVE CATCH BASIN, YARD DRAIN	
POST INDICATOR VALVE	
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	
MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE	
UNIDENTIFIED STRUCTURE	
SPOT ELEVATION	
CONTOUR LINE	
FENCE	
GUARD RAIL	
STREET LIGHT	
SIGN	
CONCRETE	
ASPHALT	
GRAVEL SHOULDER	
WETLAND	

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GAS	CONSUMERS ENERGY MAP# 01-05B-23-2, DATED 10-11-18
OTHER	PEA ALTA, DATED 11-14-18

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BENCHMARKS

BM #1431
"X" ON NORTH RIM OF SANITARY MANHOLE LOCATED 25 FEET NORTH BACK OF CURB OF 11 MILE ROAD, 25 FEET WEST OF SOUTH 1/4 POST SECTION 14, AND IN FRONT OF BUILDING #42500 11 MILE ROAD.

STORM DETENTION DESIGN (PER NOVI DESIGN METHOD - WEST)

Site Drainage Data
Contributing Area (A): 9.90 acre
Allowable Discharge (Qa): 1.49 cfs (0.15"acreage)
Coefficient of Runoff (Cr): 0.80

1-yr Design Storm Calculations for Sediment Basin Volume Requirement
Vff = 1815xAxC: 14377.89 cf

10-yr Design Storm Calculations
Qo = ((Qa)/(A)(Cr): 0.19 cfs/acre impervious
T = -25 + ((8562.5/Qo))^0.5: 160.65 minutes
Vs = (10500(T)/(T+25)) - 40Qo(T): 7,865 cf/acre impervious
Vt = (Vs)(A)(Cr): 62,304 cf

100-yr Design Storm Calculations
Qo = ((Qa)/(A)(Cr): 0.19 cfs/acre impervious
T = -25 + ((10312.5/Qo))^0.5: 207.97 minutes
Vs = (16500(T)/(T+25)) - 40Qo(T): 13,149 cf/acre impervious
Vt = (Vs)(A)(Cr): 104,162 cf

Storage Provided in Detention Basin @ el. = 910.27

Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
908.3	47,109	0	0
909.0	51,079	34,366	34,366
910.0	56,787	53,933	88,299
910.50	59,608	29,099	117,398

STORM DETENTION DESIGN (PER NOVI DESIGN METHOD - EAST)

Site Drainage Data
Contributing Area (A): 5.40 acre
Allowable Discharge (Qa): 0.81 cfs (0.15"acreage)
Coefficient of Runoff (Cr): 0.65

1-yr Design Storm Calculations for Sediment Basin Volume Requirement
Vff = 1815xAxC: 6368.78 cf

10-yr Design Storm Calculations
Qo = ((Qa)/(A)(Cr): 0.23 cfs/acre impervious
T = -25 + ((8562.5/Qo))^0.5: 143.92 minutes
Vs = (10500(T)/(T+25)) - 40Qo(T): 7,622 cf/acre impervious
Vt = (Vs)(A)(Cr): 26,745 cf

100-yr Design Storm Calculations
Qo = ((Qa)/(A)(Cr): 0.23 cfs/acre impervious
T = -25 + ((10312.5/Qo))^0.5: 186.75 minutes
Vs = (16500(T)/(T+25)) - 40Qo(T): 12,834 cf/acre impervious
Vt = (Vs)(A)(Cr): 45,034 cf

Storage Provided in Detention Basin

Elev. (ft)	Area (sf)	Vol. (cf)	Total Vol. (cf)
901.0	3,275	0	0
902.0	7,606	5,441	5,441
903.0	12,158	9,882	15,323
904.0	16,936	14,547	29,870
905.0	21,940	19,438	49,308

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

GREGORY BONO ENGINEER LICENSED PROFESSIONAL ENGINEER STATE OF MICHIGAN

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Troy, MI 48083-1872
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f: 248.689.1044
www.peainc.com

NO.	BY	DESCRIPTION	DATE
1	KRD	PER PLANNING REVIEW SUBMITTAL	1/29/19
2	GMB	PER ENGINEERING SUBMITTAL	2/28/19
3	KRD	PER PLANNING REVIEW SUBMITTAL	3/27/19

REVISIONS

ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

STORM WATER MAINTENANCE PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

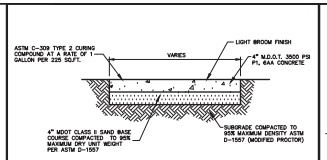
S:\PROJECTS\2018\2018-033 AIKEN HOA-APARTMENTS, PLANS\SD-42STORM-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

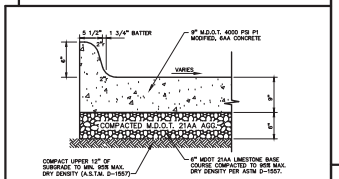
PEA JOB NO. 2018-033

SCALE: 1" = 50'

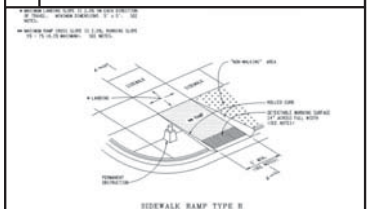
DRAWING NUMBER:
C-6.0

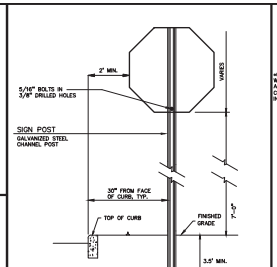


BIKE RACK PAD DETAIL
NOT TO SCALE



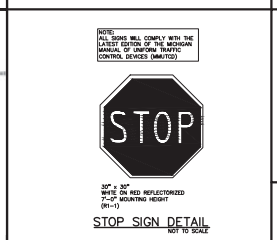
DRIVE APPROACH CONCRETE PAVEMENT
(TO BE USED FOR RIGHT-OF-WAY PAVEMENT)
NOT TO SCALE



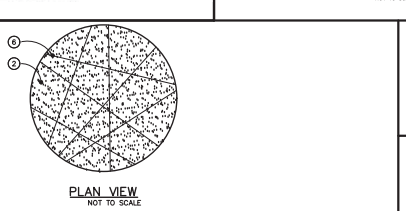


SIGN AND POST INSTALLATION IN LANDSCAPED AREAS
NOT TO SCALE

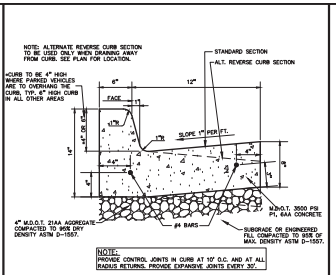
CROSSWALK SIGNS DETAIL
NOT TO SCALE



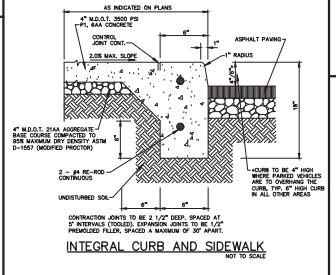
STOP SIGN DETAIL
NOT TO SCALE



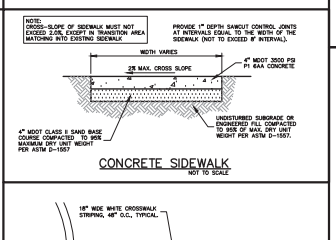
HEAVY DUTY COLORED CONCRETE PAVEMENT
SCALE: 1" = 1'-0"



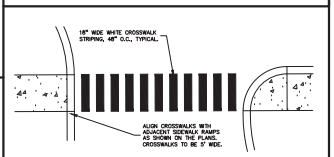
18" CONCRETE CURB AND GUTTER DETAIL
NOT TO SCALE



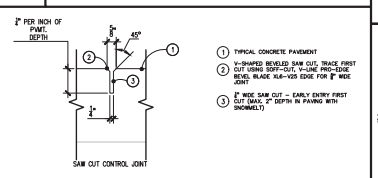
INTEGRAL CURB AND SIDEWALK
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



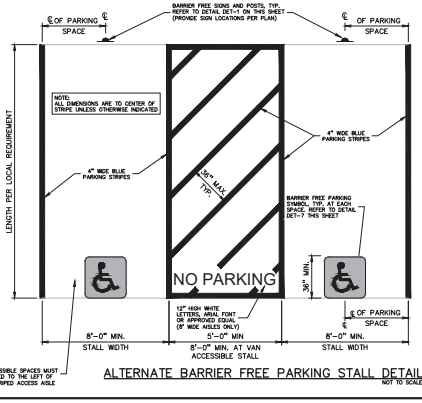
STRIPED CROSSWALK DETAIL
NOT TO SCALE



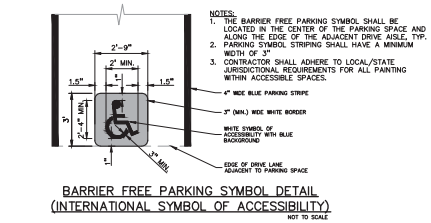
TYPICAL SAW CUT CONTROL JOINT DETAIL
NOT TO SCALE

PROPOSED SIGN NOTES:

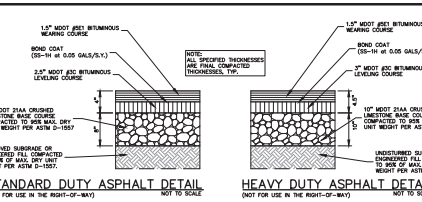
1. SINGLE SIGNS WITH NORMAL DIMENSIONS OF 12" x 18" OR SMALLER IN SIZE SHALL BE MOUNTED ON A GALVANIZED 2 LB. U-CHANNEL POST. MULTIPLE SIGNS AND/OR SIGNS WITH NOMINAL DIMENSION GREATER THAN 12" x 18" SHALL BE MOUNTED ON A GALVANIZED 3 LB. OR GREATER U-CHANNEL POST AS DICTATED BY THE WEIGHT OF THE PROPOSED SIGNS.
2. THE APPLICANT SHOULD INDICATE A BOTTOM HEIGHT OF 7' FROM FINAL GRADE FOR ALL SIGNS INSTALLED.
3. THE APPLICANT SHOULD INDICATE THAT ALL SIGNING SHALL BE PLACED 2' FROM THE FACE OF THE CURB OR EDGE OF THE NEAREST SIDEWALK TO THE NEAR EDGE OF THE SIGN.
4. TRAFFIC CONTROL SIGNS SHALL USE THE FHWA STANDARD ALPHABET SERIES.
5. TRAFFIC CONTROL SIGNS SHALL HAVE HIGH INTENSITY PRISMATIC (HIP) SHEETING TO MEET FHWA RETROREFLECTIVITY REQUIREMENTS.



ALTERNATE BARRIER FREE PARKING STALL DETAIL
NOT TO SCALE



BARRIER FREE PARKING SYMBOL DETAIL
(INTERNATIONAL SYMBOL OF ACCESSIBILITY)
NOT TO SCALE

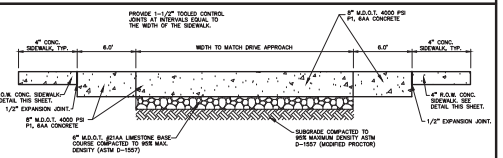


STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

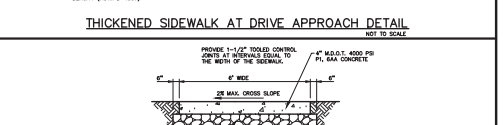
HEAVY DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION DESIGN ASSUMES THE USE OF MDOT 21AA CRUSHED LIMESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 902 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LIMESTONE MATERIAL, PER THE MDOT, REQUIRES A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, RESTRICTIONS ON THE USE OF CRUSHED CONCRETE MATERIAL MAY APPLY. IF THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 902, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SP501(E), THE BINDER GRADE FOR THIS WORK IS PG58-22. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT "TIER 1" OR "TIER 2" REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA, INC. FOR REVIEW PRIOR TO CONSTRUCTION



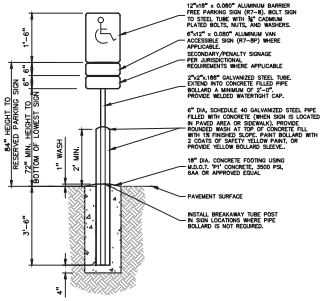
THICKENED SIDEWALK AT DRIVE APPROACH DETAIL
NOT TO SCALE



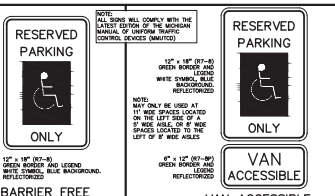
R.O.W. CONCRETE SIDEWALK
NOT TO SCALE

BARRIER FREE SIGN NOTES:

1. ONE SIGN IS REQUIRED AT EACH BARRIER FREE PARKING SPACE.
2. ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
3. WHEN TWO BARRIER FREE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
4. SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
5. ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST, A MINIMUM OF 3 FEET LONG.
6. IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
7. ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH A.D.A. GUIDELINES AND LOCAL REQUIREMENTS.

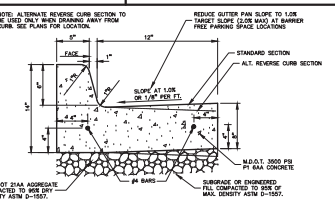


BARRIER FREE SIGN AND POST DETAIL
NOT TO SCALE

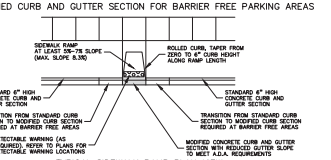


BARRIER FREE PARKING SIGN DETAIL
NOT TO SCALE

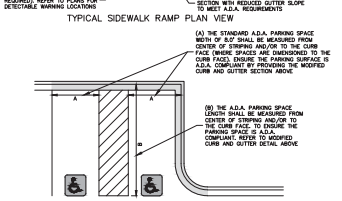
VAN ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



MODIFIED CURB AND GUTTER SECTION FOR BARRIER FREE PARKING AREAS



TYPICAL SIDEWALK RAMP PLAN VIEW



TYPICAL BARRIER FREE PARKING SPACES

MODIFIED 18"x6" CONCRETE CURB AND GUTTER DETAIL TO BE USED IN BARRIER FREE AREAS
NOT TO SCALE

NOT FOR CONSTRUCTION

XREF) S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF) S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF) S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
	KRD	CMB	PROVIDED FOR APPROVED SUBMITTAL	10/7/19
	BTT	DRH	REVISIONS	

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2430 Rochester Ct., Ste. 100
Troy, MI 48083-1872
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350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

NOTES AND DETAILS
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T1N, R8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

P:\PROJECTS\2018\2018-033 sakura novi\34-DWG\site plans\C-7.0DETAILS-18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

SCALE: N.T.S.

DRAWING NUMBER:
C-7.0

STATE OF MICHIGAN
GREGORY BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

CAUTION!!
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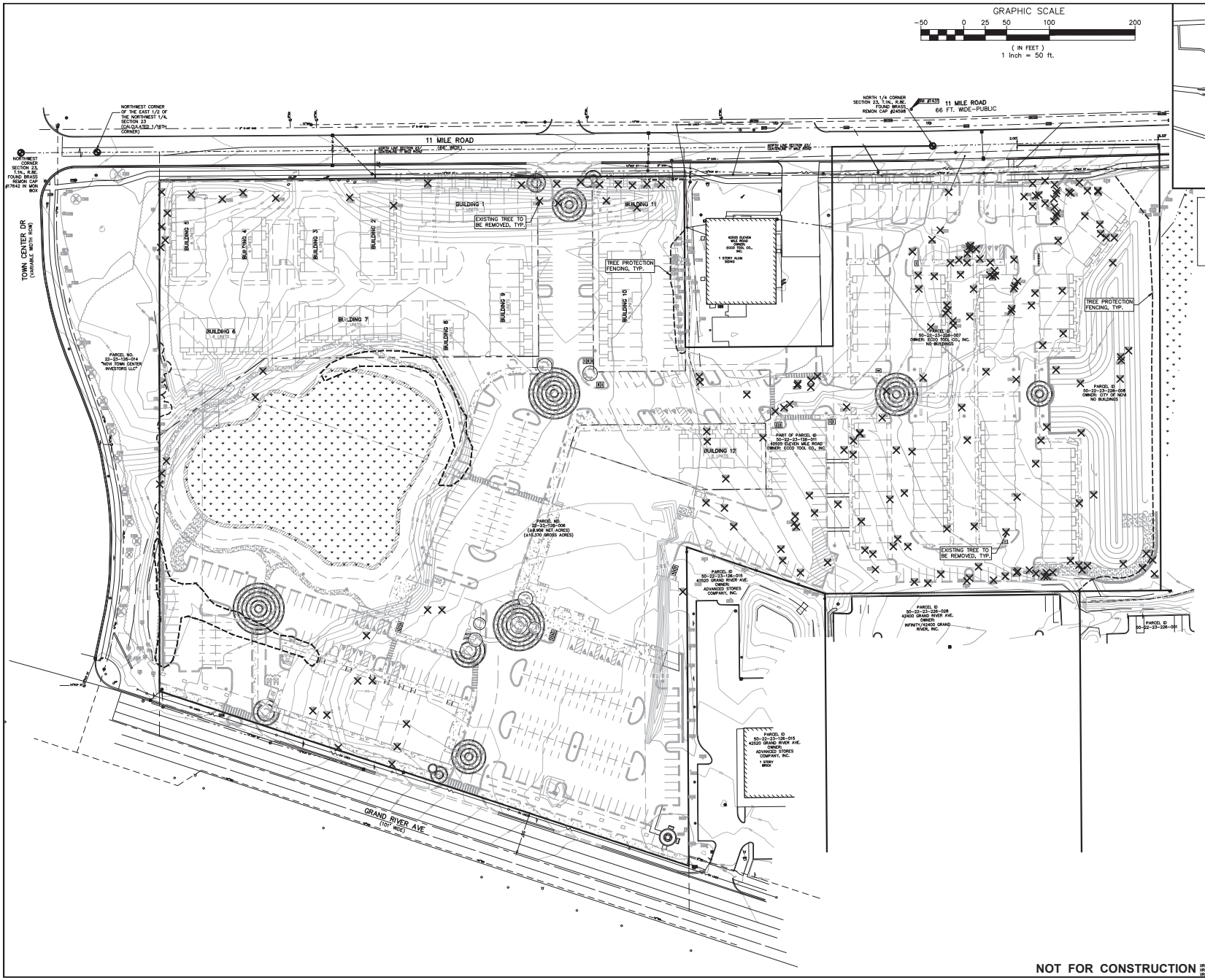

NOT FOR CONSTRUCTION

XREF: S:\PROJECTS\2018\2018033\DWG\18033-TOPOBASE.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-BASE-18033.DWG
XREF: S:\PROJECTS\2018\2018033\DWG\SITE PLANS\X-TRUC-18033.DWG

NO.	BY	DESCRIPTION	DATE
1	KRD	PC/ZONING/ENGINEERING REVISED SUBMITTAL	10/7/19
2	GMB	PC/ZONING/ENGINEERING REVISED SUBMITTAL	12/9/19

REVISIONS

STATE OF MICHIGAN
GREGORY M. BONO
ENGINEER
REGISTERED PROFESSIONAL ENGINEER

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f: 248.689.1044
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ROBERT B. AIKENS & ASSOCIATES, LLC
350 OLD WOODWARD AVE. SUITE 300
BIRMINGHAM, MI 48009

TREE PROTECTION PLAN
SAKURA NOVI
PART OF THE E 1/2 OF THE NW 1/4 OF SECTION 23, T.1N., R.8E.
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN

DES.	GMB	DN.	JKS	SUR.	GWC	P.M.	JPB

S:\PROJECTS\2018\2018033\DWG\SITE PLANS\T-1.0 TREE - 18033.dwg

ORIGINAL ISSUE DATE:
JUNE 27, 2019

PEA JOB NO. 2018-033

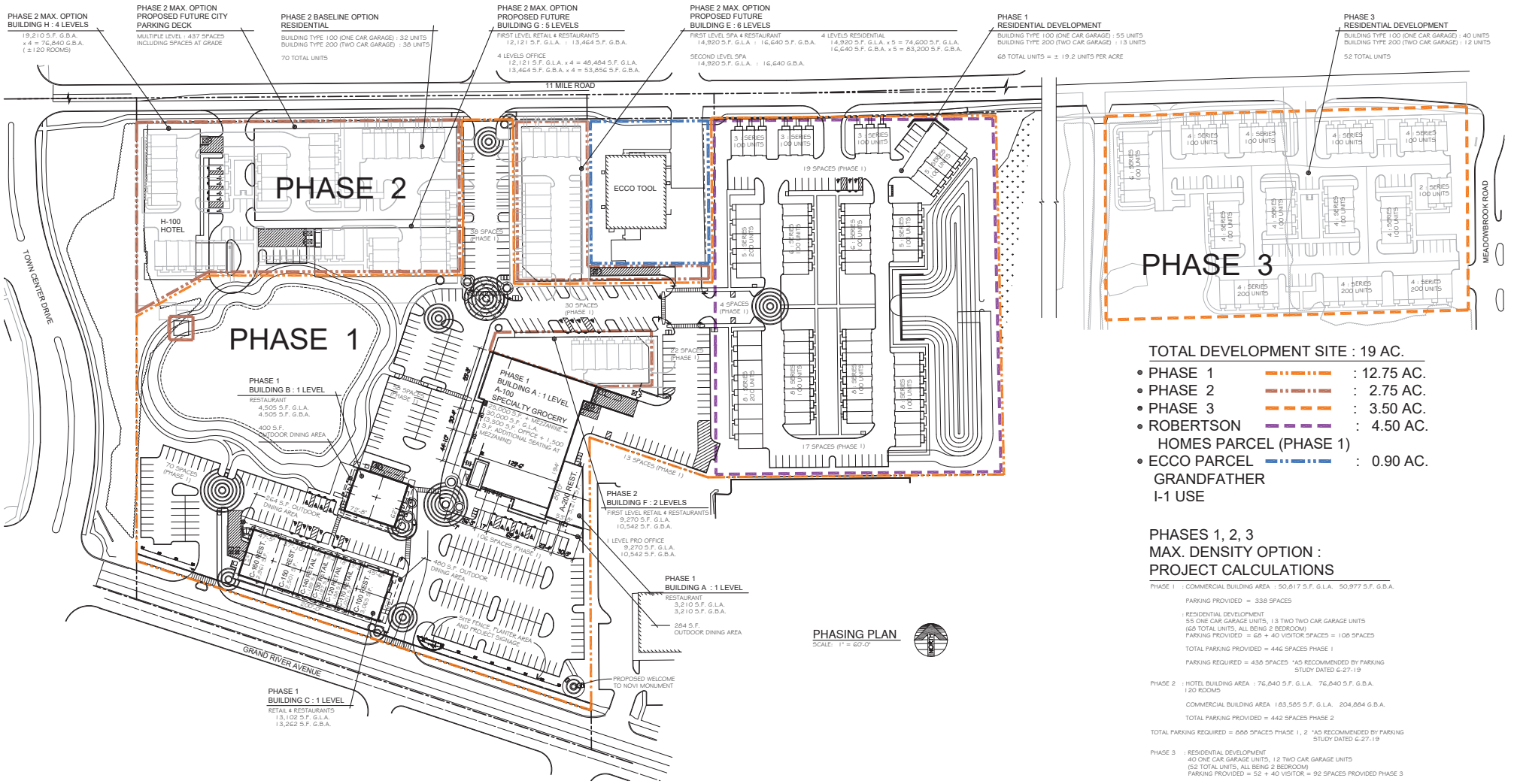
SCALE: 1" = 50'

DRAWING NUMBER:
T-1.0

TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	SAVE / REMOVE	REPLACEMENTS REQ'D
12	CW	8	Crack Willow	Salix fragilis	Good			REMOVE	REMOVE	1 Tree
13	CT	16	Cottonwood	Populus deltoides	Good			SAVE	SAVE	-
14	CT	10	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	1 Tree
15	RM	13	Red Maple	Acer rubrum	Good			REMOVE	REMOVE	2 Trees
16	BP	13	Bradford Pear	Pyrus calleryanna	Good			SAVE	SAVE	-
17	SM	22	Silver Maple	Acer saccharinum	Good			REMOVE	REMOVE	3 Trees
18	SM	20	Silver Maple	Acer saccharinum	Good			REMOVE	REMOVE	3 Trees
19	SM	16	Silver Maple	Acer saccharinum	Fair	13		REMOVE	REMOVE	2 Trees
20	SM	17	Silver Maple	Acer saccharinum	Good			REMOVE	REMOVE	2 Trees
21	SM	43	Silver Maple	Acer saccharinum	Good			REMOVE	REMOVE	4 Trees
22	SM	25	Silver Maple	Acer saccharinum	Good	21		REMOVE	REMOVE	3 Trees
23	CA	17	Crab Apple	Malus coronaria	Good			REMOVE	REMOVE	2 Trees
24	CT	46	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	4 Trees
25	BS	9	Blue Spruce	Picea pungens	Good			REMOVE	REMOVE	1 Tree
26	BS	9	Blue Spruce	Picea pungens	Good			REMOVE	REMOVE	1 Tree
27	AU	13	Austrian Pine	Pinus nigra	Poor		EXEMPT-COND.	SAVE	SAVE	-
28	AU	12	Austrian Pine	Pinus nigra	Poor		EXEMPT-COND.	SAVE	SAVE	-
29	AU	13	Austrian Pine	Pinus nigra	DEAD		EXEMPT-COND.	SAVE	SAVE	-
30	CT		Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
31	CT		Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
32	AU	14	Austrian Pine	Pinus nigra	Poor		EXEMPT-COND.	SAVE	SAVE	-
33	AU	14	Austrian Pine	Pinus nigra	Poor		EXEMPT-COND.	SAVE	SAVE	-
34	CT		Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
35	BL	16	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
36	BL	12	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
37	BL	21	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
38	BL	20	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
39	BL	17	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
40	E	16	American Elm	Ulmus americana	Good			SAVE	SAVE	-
41	BL	21	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
42	BL	23	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
43	BL	23	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
44	BL	24	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
45	BL	17	Black Locust	Robinia pseudoacacia	Poor	8, 6	EXEMPT-COND.	SAVE	SAVE	-
46	BL	24	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
47	BL	22	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
48	RM	18	Red Maple	Acer rubrum	Good			SAVE	SAVE	-
49	BL	16	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT-COND.	SAVE	SAVE	-
50	BL	20	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
51	BL	18	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
52	BL	20	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	3 Trees
53	BL	16	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	2 Trees
54	BL	24	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	3 Trees
55	EE	8	Siberian Elm	Ulmus pumila	Good			SAVE	SAVE	-
56	BL	20	Black Locust	Robinia pseudoacacia	Good			SAVE	SAVE	-
57	BL	24	Black Locust	Robinia pseudoacacia	Good			REMOVE	REMOVE	3 Trees
58	BC	14	Wild Black Cherry	Prunus serotina	Fair			SAVE	SAVE	-
59	BL	9	Black Locust	Robinia pseudoacacia	Good	4,3,3		REMOVE	REMOVE	1 Tree
60	BL	11	Black Locust	Robinia pseudoacacia	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
			#N/A	#N/A				SAVE	SAVE	-
2433	AU	12	Austrian Pine	Pinus nigra	Good			REMOVE	REMOVE	2 Trees
			#N/A	#N/A				SAVE	SAVE	-
230	CT	17	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
231	CT	16	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
232	CT	15	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
233	CT	20	Cottonwood	Populus deltoides	Good	12		SAVE	SAVE	-
234	CT	16	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
235	CT	15	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
236	CT	10	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	1 Tree
237	CT	14	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
238	CT	15	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
239	CT	9	Cottonwood	Populus deltoides	Good	9		REMOVE	REMOVE	1 Tree
240	CT	11	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	1 Tree
241	CT	15	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
242	CT	10	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	1 Tree
243	CT	9	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	1 Tree
244	CT	13	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
245	CT	15	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
246	CT	13	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
247	CT	12	Cottonwood	Populus deltoides	Good			REMOVE	REMOVE	2 Trees
			#N/A	#N/A				SAVE	SAVE	-
1201	BX	19	Box elder	Acer negundo	DEAD	3 (dead) main leader d	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1202	CT	46	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	4 Trees
1203	BX	16	Box elder	Acer negundo	Poor	14	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1204	BX	8	Box elder	Acer negundo	DEAD	On the ground	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1205	BX	9	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1206	CT	25	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
1207	CT	9	Cottonwood	Populus deltoides	Poor	5	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1208	CT	12	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1209	CT	21	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	3 Trees
1210	BX	11	Box elder	Acer negundo	Fair			REMOVE	REMOVE	1 Tree
1211	CT	9	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1212	CT	13	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1213	CT	16	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1214	CT	17	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1215	CT	19	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1216	CT	15	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1217	BX	13	Box elder	Acer negundo	Poor	5	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1218	BX	10	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1219	CT	21	Cottonwood	Populus deltoides	Fair	18,17		REMOVE	REMOVE	3 Trees
1220	CT	24	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	3 Trees
1221	CT	13	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1222	CT	13	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1223	CT	13	Cottonwood	Populus deltoides	Fair	10		REMOVE	REMOVE	2 Trees
1224	CT	6	Cottonwood	Populus deltoides	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1225	CT	9	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	1 Tree
1226	CT	10	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1227	CT	18	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1228	CT	9	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree

TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	SAVE / REMOVE	REPLACEMENTS REQ'D
1229	CT	32	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	4 Trees
1230	CT	20	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
1231	CT	20	Cottonwood	Populus deltoides	Poor	11	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
1232	CT	18	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1233	CT	12	Cottonwood	Populus deltoides	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1234	CT	16	Cottonwood	Populus deltoides	Poor	15	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1235	CT	21	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
1236	CT	14	Cottonwood	Populus deltoides	Poor	12	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1237	CT	23	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	3 Trees
1238	CT	10	Cottonwood	Populus deltoides	Fair	8		REMOVE	REMOVE	1 Tree
1239	BX	8	Box elder	Acer negundo	Poor	6	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1240	BX	12	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1241	SM	21	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	3 Trees
1242	BX	6	Box elder	Acer negundo	DEAD		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1243	SM	13	Silver Maple	Acer saccharinum	Fair	12,12		REMOVE	REMOVE	2 Trees
1244	BX	12	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1245	BX	17	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1246	BX	12	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1247	SM	29	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	3 Trees
1248	WC	13	White Cedar	Thuja occidentalis	Fair			REMOVE	REMOVE	2 Trees
1249	SM	33	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	4 Trees
1250	BX	8	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1251	BX	9	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1252	BX	10	Box elder	Acer negundo	Poor	6	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1253	BX	13	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1254	BX	6	Box elder	Acer negundo	DEAD		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1255	CT	17	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1256	CT	14	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1257	CT	16	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1258	BX	12	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1259	CT	12	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1260	WC	11	White Cedar	Thuja occidentalis	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1261	CT	17	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1262	BX	9	Box elder	Acer negundo	Poor		EXEMPT-SIZE	SAVE	SAVE	-
1263	BX	7	Box elder	Acer negundo	DEAD		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1264	BX	12	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1265	BX	8	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1266	CT	12	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1267	BX	8	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1268	BX	12	Box elder	Acer negundo	DEAD	7,4	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1269	WA	12	White Ash	Fraxinus americana	Fair			REMOVE	REMOVE	2 Trees
1270	WC	9	White Cedar	Thuja occidentalis	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1271	BX	9	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1272	WC	13	White Cedar	Thuja occidentalis	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1273	E	16	American Elm	Ulmus americana	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1274	E	9	American Elm	Ulmus americana	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1275	BX	18	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1276	BX	19	Box elder	Acer negundo	DEAD		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1277	GA	6	Green Ash	Fraxinus pennsylvanica	Poor		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1278	SM	12	Silver Maple	Acer saccharinum	Fair	9,6		REMOVE	REMOVE	2 Trees
1279	SM	16	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	2 Trees
1280	RU	19	Russian Olive	Elaeagnus augustifolia	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1281	BX	9	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1282	SM	14	Silver Maple	Acer saccharinum	Poor	12,9,8	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1283	SM	13	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	2 Trees
1284	WA	6	White Ash	Fraxinus americana	Poor		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1285	SM	13	Silver Maple	Acer saccharinum	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1286	WC	12	White Cedar	Thuja occidentalis	DEAD	no leader	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1287	SM	14	Silver Maple	Acer saccharinum	Poor	12,11,9,2	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1288	SM	11	Silver Maple	Acer saccharinum	Fair	9		REMOVE	REMOVE	1 Tree
1289	E	14	American Elm	Ulmus americana	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1290	SM	21	Silver Maple	Acer saccharinum	Fair	13		REMOVE	REMOVE	3 Trees
1291	BX	6	Box elder	Acer negundo	Poor		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1292	BX	6	Box elder	Acer negundo	Poor		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1293	SM	9	Silver Maple	Acer saccharinum	Fair	7,7		REMOVE	REMOVE	1 Tree
1294	SM	9	Silver Maple	Acer saccharinum	Fair	9,6		REMOVE	REMOVE	1 Tree
1295	BA	15	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1296	WC	17	White Cedar	Thuja occidentalis	DEAD	No leader	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1297	BX	7	Box elder	Acer negundo	Poor		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1298	E	14	American Elm	Ulmus americana	Fair			REMOVE	REMOVE	2 Trees
1299	BX	10	Box elder	Acer negundo	Poor	9	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1300	SM	13	Silver Maple	Acer saccharinum	Poor	13	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1302	BX	8	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
			#N/A	#N/A				SAVE	SAVE	-
1303	WC	18	White Cedar	Thuja occidentalis	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1304	WC	9	White Cedar	Thuja occidentalis	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1305	BX	16	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1306	CT	17	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1307	CT	10	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	1 Tree
1308	CT	9	Cottonwood	Populus deltoides	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1309	CT	7	Cottonwood	Populus deltoides	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1310	CT	9	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	1 Tree
			#N/A	#N/A				SAVE	SAVE	-
1312	BX	13	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1313	E	16	American Elm	Ulmus americana	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1314	BX	9	Box elder	Acer negundo	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1315	BX	16	Box elder	Acer negundo	Poor	12,9,8	EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	2 Trees
1316	CT	27	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	3 Trees
1317	SM	9	Silver Maple	Acer saccharinum	Fair	7		REMOVE	REMOVE	1 Tree
1318	CT	18	Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
1319	CT	23	Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
1320	SM	8	Silver Maple	Acer saccharinum	Poor	3,3	EXEMPT-COND.	SAVE	SAVE	-
1321	SM	8	Silver Maple	Acer saccharinum	Fair	4		SAVE	SAVE	-
1322	SM	27	Silver Maple	Acer saccharinum	Fair			SAVE	SAVE	-
1323	AU	17	Austrian Pine	Pinus nigra	Fair			SAVE	SAVE	-
1324	CT	24	Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
1325	CA	7	Crab Apple	Malus coronaria	Fair	5,5,3,2	EXEMPT-SIZE	SAVE	SAVE	-
1326	CA	8	Crab Apple	Malus coronaria	Fair	7,2,3		SAVE	SAVE	-
1327	CA	10	Crab Apple	Malus coronaria	Fair			SAVE	SAVE	-
1328	CA	7	Crab Apple	Malus coronaria	DEAD		EXEMPT-SIZE	SAVE	SAVE	-

TAG #	CODE	DBH	COMMON NAME	LATIN NAME	CON	COMMENT	EXEMPT?	SAVE / REMOVE	SAVE / REMOVE	REPLACEMENTS REQ'D
1329	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	SAVE	-
1330	LL	10	Littleleaf Linden	Tilia Cordata	Good			SAVE	SAVE	-
1331	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	SAVE	-
1332	LL	10	Littleleaf Linden	Tilia Cordata	Good			SAVE	SAVE	-
1333	LL	14	Littleleaf Linden	Tilia Cordata	Fair			SAVE	SAVE	-
1334	LL	13	Littleleaf Linden	Tilia Cordata	Good			SAVE	SAVE	-
1335	LL	12	Littleleaf Linden	Tilia Cordata	Fair			SAVE	SAVE	-
1336	RM	5	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1337	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1338	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1339	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1340	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1341	CA	8	Crab Apple	Malus coronaria	Good	7,5,4,6		SAVE	SAVE	-
1342	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1343	RO	27	Red Oak	Quercus rubra	Good			REMOVE	REMOVE	3 Trees
1344	BS	6	Blue Spruce	Picea pungens	Good		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1345	RO	6	Red Oak	Quercus rubra	Good		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1346	BP	6	Bradford Pear	Pyrus calleryanna	Good		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1347	BP	4	Bradford Pear	Pyrus calleryanna	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1348	BS	9	Blue Spruce	Picea pungens	Fair			SAVE	SAVE	-
1349	RM	4	Red Maple	Acer rubrum	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1350	BP	10	Bradford Pear	Pyrus calleryanna	Fair			REMOVE	REMOVE	1 Tree
1351	AU	15	Austrian Pine	Pinus nigra	Fair			REMOVE	REMOVE	2 Trees
1352	BS	6	Blue Spruce	Picea pungens	Good		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1353	BS	4	Blue Spruce	Picea pungens	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1354	HO	14	Horsechestnut	Aesculus hippocastanum	Fair			REMOVE	REMOVE	2 Trees
1355	SM	10	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	1 Tree
1356	SM	8	Silver Maple	Acer saccharinum	Good			REMOVE	REMOVE	1 Tree
1357	JL	6	Japanese Lilac	Syringa reticulata	DEAD	No leaves	EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1358	JL	4	Japanese Lilac	Syringa reticulata	DEAD		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1359	SM	11	Silver Maple	Acer saccharinum	Fair			REMOVE	REMOVE	1 Tree
1360	BS	6	Blue Spruce	Picea pungens	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1361	BP	3	Bradford Pear	Pyrus calleryanna	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1362	CT	15	Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
1363	CT	17	Cottonwood	Populus deltoides	Fair			SAVE	SAVE	-
1364	CT	9	Cottonwood	Populus deltoides	Fair	236		REMOVE	REMOVE	1 Tree
1365	CT	11	Cottonwood	Populus deltoides	Fair	237-tag		REMOVE	REMOVE	1 Tree
1366	CT	13	Cottonwood	Populus deltoides	Fair	138		REMOVE	REMOVE	2 Trees
1367	CT	13	Cottonwood	Populus deltoides	Fair			REMOVE	REMOVE	2 Trees
1368	BX	6	Box elder	Acer negundo	Fair	3	EXEMPT-SIZE	SAVE	SAVE	-
1369	BL	7	Black Locust	Robinia pseudoacacia	Fair	4	EXEMPT-SIZE	SAVE	SAVE	-
1370	BL	7	Black Locust	Robinia pseudoacacia	Fair		EXEMPT-SIZE	SAVE	SAVE	-
1371	BL	9	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	1 Tree
1372	BL	10	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	1 Tree
1373	BL	13	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
1374	BL	12	Black Locust	Robinia pseudoacacia	Fair	10		SAVE	SAVE	-
1375	BL	13	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
1376	BL	13	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
1377	BL	9	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
1378	BL	10	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	SAVE	SAVE	-
1379	BL	11	Black Locust	Robinia pseudoacacia	Fair			SAVE	SAVE	-
1380	BL	8	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1381	BL	8	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	1 Tree
1382	BL	8	Black Locust	Robinia pseudoacacia	Fair			REMOVE	REMOVE	1 Tree
1383	BL	6	Black Locust	Robinia pseudoacacia	Fair		EXEMPT-SIZE	REMOVE-EXEMPT-SIZE	REMOVE	-
1384	BL	11	Black Locust	Robinia pseudoacacia	Poor		EXEMPT-COND.	REMOVE-EXEMPT-COND.	REMOVE	1 Tree
1385	BL	12	Black Locust	Robinia pseudoacacia	Fair	x1		REMOVE	REMOVE	2 Trees
1386	BL	8	Black



PHASING PLAN
SCALE: 1" = 60'-0"

TOTAL DEVELOPMENT SITE : 19 AC.

- PHASE 1 : 12.75 AC.
- PHASE 2 : 2.75 AC.
- PHASE 3 : 3.50 AC.
- ROBERTSON HOMES PARCEL (PHASE 1) : 4.50 AC.
- ECCO PARCEL : 0.90 AC.
  GRANDFATHER I-1 USE

PHASES 1, 2, 3 MAX. DENSITY OPTION : PROJECT CALCULATIONS

PHASE 1 : COMMERCIAL BUILDING AREA : 50,817 S.F. G.L.A. 50,977 S.F. G.B.A.

PARKING PROVIDED = 338 SPACES

: RESIDENTIAL DEVELOPMENT
55 ONE CAR GARAGE UNITS, 13 TWO TWO CAR GARAGE UNITS
(68 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 68 + 40 VISITOR SPACES = 108 SPACES

TOTAL PARKING PROVIDED = 446 SPACES PHASE 1

PARKING REQUIRED = 438 SPACES *AS RECOMMENDED BY PARKING STUDY DATED 6-27-19

PHASE 2 : HOTEL BUILDING AREA : 76,840 S.F. G.L.A. 76,840 S.F. G.B.A.
120 ROOMS

COMMERCIAL BUILDING AREA 183,585 S.F. G.L.A. 204,884 G.B.A.

TOTAL PARKING PROVIDED = 442 SPACES PHASE 2

TOTAL PARKING REQUIRED = 888 SPACES PHASE 1, 2 *AS RECOMMENDED BY PARKING STUDY DATED 6-27-19

PHASE 3 : RESIDENTIAL DEVELOPMENT
40 ONE CAR GARAGE UNITS, 12 TWO CAR GARAGE UNITS
(52 TOTAL UNITS, ALL BEING 2 BEDROOM)
PARKING PROVIDED = 52 + 40 VISITOR = 92 SPACES PROVIDED PHASE 3

PHASE 1 USES :

- 30,000 S.F. MARKET (25,000 S.F. + 3,500 S.F. MEZZ. OFFICE + 1,500 S.F. MEZZ. ADDITIONAL SEATING)
- 5 RESTAURANTS
- 4 RETAIL SPACE
- 68 TOWN-HOME APARTMENTS
  (55 - 1,184 S.F. & 13 - 1,541 S.F. UNITS)
  121 PARKING SPACES
  ± 19.2 UNITS PER ACRE
- LIGHT INDUSTRIAL USE ECCO TOOL CO.
  PARCEL GRANDFATHERED IN

PHASE 2 MAX. DENSITY OPTION POTENTIAL PHASE 2 USES :

- BUILDING E PODIUM : 5,000 S.F. RESTAURANT (GROUND FLR.)
  25,000 S.F. SPA (GROUND FLR. & 2ND FLR.)
  48 RESIDENTIAL UNITS (FLR.S 3, 4, 5 & 6)
  (16 - 1 BEDROOM & 32 - 2 BEDROOM UNITS)
- BUILDING F : 3,000 S.F. RESTAURANT (GROUND FLR.)
  6,000 S.F. RETAIL (GROUND FLR.)
  10,000 S.F.MULTI-TENANT PRO OFFICE (2ND FLR.)
- BUILDING G : 2 - 3,000 S.F. RESTAURANTS (GROUND FLR.)
  6,000 S.F. RETAIL (GROUND FLR.)
  48,000 S.F. MULTI-TENANT OFFICE / PRO OFFICE (FLR.S 2, 3, 4 & 5)
- BUILDING H : 120 ROOM HOTEL
- PARKING DECK : 442 SPACES INCLUDING SPACES AT GRADE

PHASE 2 BASELINE OPTION RESIDENTIAL :

- 70 TOWN-HOME APARTMENTS
  (32 - 1,184 S.F. & 38 - 1,541 S.F. UNITS)
  148 PARKING SPACES

PHASE 3 :

- 52 TOWN-HOME APARTMENTS
  (40 - 1,184 S.F. & 12 - 1,541 S.F. UNITS)
  104 PARKING SPACES

PHASING PLAN

SAKURA • NOVI

NOVI, MICHIGAN

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ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
CONCEPT MEETING
FEB. 27, 2019
PRE-APP. MEETING
MAY 8, 2019
PRO REZONING
JUNE 28, 2019
PRO REZONING
REVISED SUBMITTAL
OCTOBER 2, 2019

PRELIMINARY
NOT FOR CONSTRUCTION

CAD DWG 5035 P11 PHASING PLAN REVISED 10-2-19.DWG

NORTH ELEVATION
SCALE: 3/32" = 1'-0"

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	292 S.F.	7.8 %
BRICK	30 % MIN.	2,186 S.F.	58.4 %
EIFS FACADE	25 %	467 S.F.	12.4 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	352 S.F.	9.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	455 S.F.	12.1 %
TOTAL		3,764 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,320 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,556 S.F. = 3,764 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.

WEST ELEVATION
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	55 S.F.	3.6 %
BRICK	30 % MIN.	625 S.F.	40.4 %
EIFS FACADE	25 %	610 S.F.	39.5 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	96 S.F.	6.3 %
PREFINISHED METAL PANELS (FLAT)	25 %	158 S.F.	10.2 %
TOTAL		1,546 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,746 S.F. - GLASS STOREFRONT AND DOOR AREA OF 202 S.F. = 1,546 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 14.5 %.

EAST ELEVATION
SCALE: 3/32" = 1'-0"

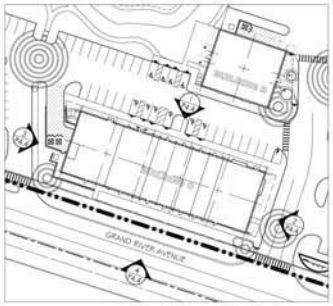
EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	156 S.F.	11.4 %
BRICK	30 % MIN.	434 S.F.	31.7 %
EIFS FACADE	25 %	392 S.F.	28.7 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	52 S.F.	3.8 %
PREFINISHED METAL PANELS (FLAT)	25 %	333 S.F.	24.4 %
TOTAL		1,367 S.F.	100.0 %

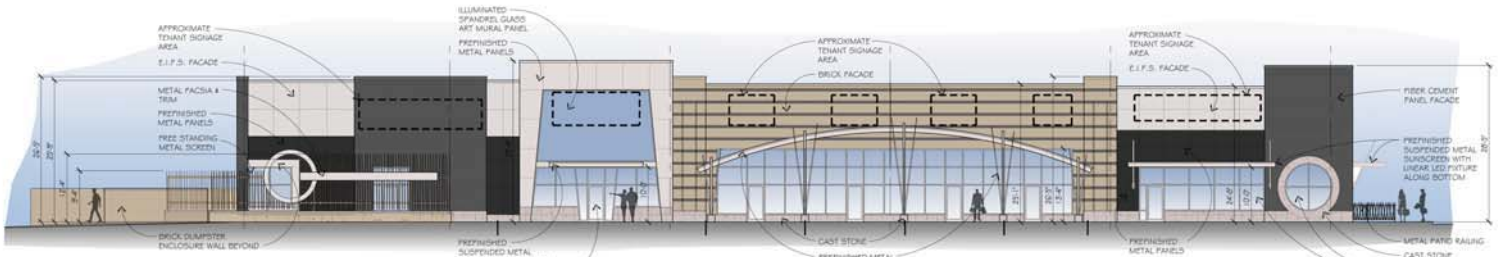
NOTE : 1. TOTAL FACADE = 1,757 S.F. - GLASS STOREFRONT AND DOOR AREA OF 390 S.F. = 1,367 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR E.I.F.S. OVERAGE OF 3.7 %.

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
2. DOOR LOCATIONS SHOWN FOR CONCEPT ONLY, SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
3. ROOF TOP MECHANICAL EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS OR SCREEN ENCLOSURES OF SIMILAR MATERIAL AND CHARACTER AS THE BUILDING.
4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
6. SIGNAGE AREAS SHOWN FOR CONCEPT ONLY. ACTUAL SIGNAGE TO BE SUBMITTED ON A TENANT BY TENANT BASIS, IN CONFORMANCE WITH THE APPROVED PRO AGREEMENT.



KEY PLAN
SCALE: N.T.S.



SOUTH ELEVATION
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	340 S.F.	8.3 %
BRICK	30 % MIN.	2,060 S.F.	50.7 %
EIFS FACADE	25 %	475 S.F.	11.6 %
METAL CANOPIES, SUNSCREENS & TRIM	15 %	234 S.F.	5.7 %
PREFINISHED METAL PANELS (FLAT)	25 %	704 S.F.	17.2 %
SPANDREL GLASS - ART MURAL PANEL	50 %	269 S.F.	6.5 %
TOTAL		4,102 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 5,456 S.F. - GLASS STOREFRONT AND DOOR AREA OF 1,354 S.F. = 4,102 S.F.
2. NO SECTION 9 FACADE WAIVERS ARE REQUIRED.

BUILDING C ELEVATIONS

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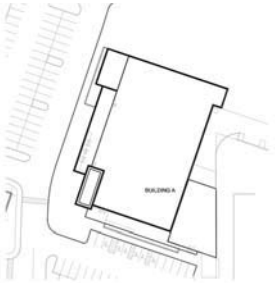
PRO REZONING
REVISED SUBMITTAL
SEPTEMBER 30, 2019

PRELIMINARY
NOT FOR CONSTRUCTION
(P4.4)

CAD DWG 5035 COLOR P44 9-30-19.DWG



KEY PLAN
SCALE: N.T.S.

BR-1
Belden
Gray Bricks
Beacon Velour

FCP-1
Nichiha
VintageWood
Cedar EPC762F

EIFS-1
Dryvit
Commercial Cement Plaster
PPG Gray Palomino 521-3

MTL-1
Alpolic
Alpolic/PE
CLR Anodized Clear

GFRC-1
ConcreteWorks East
GFRC Wall Panels
Cumulus G

A WEST ELEVATION
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,569 S.F.	37.5 %
MTL-1	FLAT METL PANEL	25 %	141 S.F.	3.0 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	630 S.F.	15 %
GFRC-1	G.F.R.C CLADDING SYSTEM	25 %	498 S.F.	12.0 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	1,143 S.F.	27.3 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	113 S.F.	3 %
	TOTAL		4,027 S.F.	100.0 %

B SOUTH ELEVATION
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

TAG	MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BR-1	BRICK	100 % 30% MIN	1,547 S.F.	31%
MTL-1	FLAT METL PANEL ALUMINUM COMPOSITE (ALPOLIC)	25%	607 S.F.	12 %
FCP-1	FIBER CEMENT PANEL(NICHIHA)	25 %	1,159 S.F.	23 %
GFRC-1	G.F.R.C CADDING SYSTEM	25 %	604 S.F.	12 %
EIFS-1	E.I.F.S.(DRYVIT)	25 %	871 S.F.	17.5 %
	AWNINGS: FABRIC OR MEMBRANE	10 %	247 S.F.	4.5 %
	TOTAL		5,031 S.F.	100.0 %

ONE WORLD MARKET
NOVI MICHIGAN

BUILDING A ELEVATIONS
SAKURA WAY
NOVI, MICHIGAN

P4.1

PRELIMINARY
NOT FOR CONSTRUCTION

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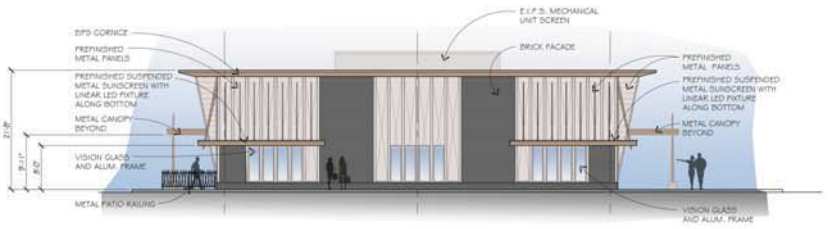
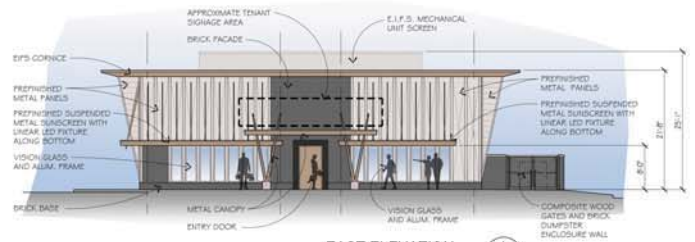


SOUTH ELEVATION (2 / P4.3)
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	544 S.F.	34.5 %
EIFS	25 %	198 S.F.	12.6 %
METAL CANOPIES & SUNSCREENS	15 %	50 S.F.	3.2 %
PREFINISHED METAL PANELS (FLAT)	25 %	784 S.F.	49.7 %
TOTAL		1,576 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,774 S.F. - GLASS STOREFRONT AND DOOR AREA OF 198 S.F. = 1,576 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 24.7%.



EAST ELEVATION (1 / P4.3)
SCALE: 3/32" = 1'-0"

EAST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	350 S.F.	26.7 %
EIFS	25 %	207 S.F.	15.8 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.4 %
PREFINISHED METAL PANELS (FLAT)	25 %	670 S.F.	51.1 %
TOTAL		1,312 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,647 S.F. - GLASS STOREFRONT AND DOOR AREA OF 335 S.F. = 1,312 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 26.1 % AND BRICK SHORTAGE OF 3.3 %.

GENERAL NOTES :

1. CANOPIES AND AWNINGS TO BE BY TENANTS SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
2. DOOR LOCATIONS SHOWN FOR CONCEPT ONLY,SUBJECT TO CHANGE PER INDIVIDUAL TENANT REQUIREMENTS.
3. ROOF TOP MECHANICAL EQUIPMENT TO BE SCREENED BY BUILDING PARAPETS OR SCREEN ENCLOSURES OF SIMILAR MATERIAL AND CHARACTER AS THE BUILDING.
4. ALL OUTDOOR PATIO / DINING AREAS SERVING ALCOHOL WILL BE ENCLOSED WITH A METAL RAILING SYSTEM.
5. OUTDOOR SEATING SHALL BE PERMITTED BETWEEN MARCH 1ST AND NOVEMBER 30TH, WITH ALL FURNITURE AND FIXTURES INCLUDING, BUT NOT LIMITED TO, TABLES, CHAIRS AND WASTE RECEPTACLES REMOVED FROM THE EXTERIOR PREMISES BY NOVEMBER 30TH. OUTDOOR SEATING SHALL NOT BE THE PRIMARY SEATING OF THE RESTAURANT.
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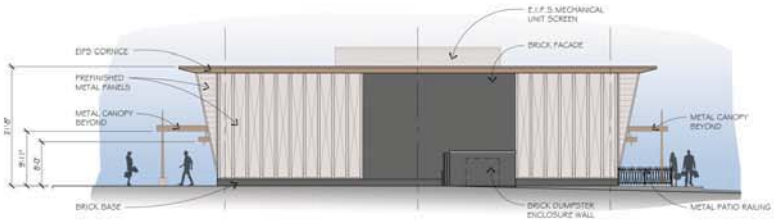


NORTH ELEVATION (4 / P4.3)
SCALE: 3/32" = 1'-0"

NORTH ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	621 S.F.	35.1 %
EIFS	25 %	198 S.F.	11.2 %
METAL CANOPIES & SUNSCREENS	15 %	0 S.F.	0.0 %
PREFINISHED METAL PANELS (FLAT)	25 %	950 S.F.	53.7 %
TOTAL		1,769 S.F.	100.0 %

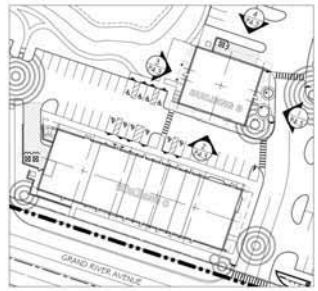
NOTE : 1. TOTAL FACADE = 1,769 S.F. - GLASS STOREFRONT AND DOOR AREA OF 0 S.F. = 1,769 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 26.7 %.

WEST ELEVATION (3 / P4.3)
SCALE: 3/32" = 1'-0"

WEST ELEVATION MATERIALS

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
CAST STONE	25 %	0 S.F.	0.0 %
BRICK	30 % MIN.	418 S.F.	30.0 %
EIFS CORNICE & FACADE	25 %	210 S.F.	15.1 %
METAL CANOPIES & SUNSCREENS	15 %	85 S.F.	6.1 %
PREFINISHED METAL PANELS (FLAT)	25 %	680 S.F.	48.8 %
TOTAL		1,393 S.F.	100.0 %

NOTE : 1. TOTAL FACADE = 1,664 S.F. - GLASS STOREFRONT AND DOOR AREA OF 271 S.F. = 1,393 S.F.
2. A SECTION 9 FACADE WAIVER WILL BE REQUESTED AS REQUIRED FOR PREFINISHED METAL PANEL OVERAGE OF 23.8 %.



KEY PLAN
SCALE: N.T.S.

BUILDING B ELEVATIONS

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PRELIMINARY
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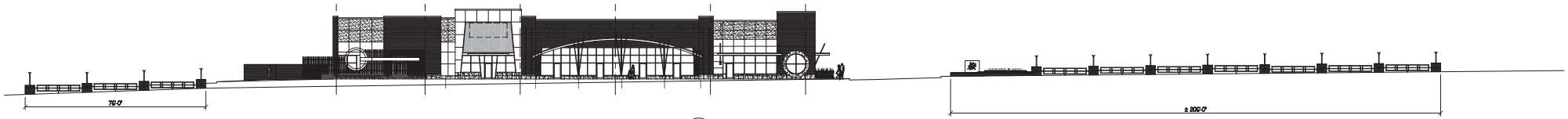
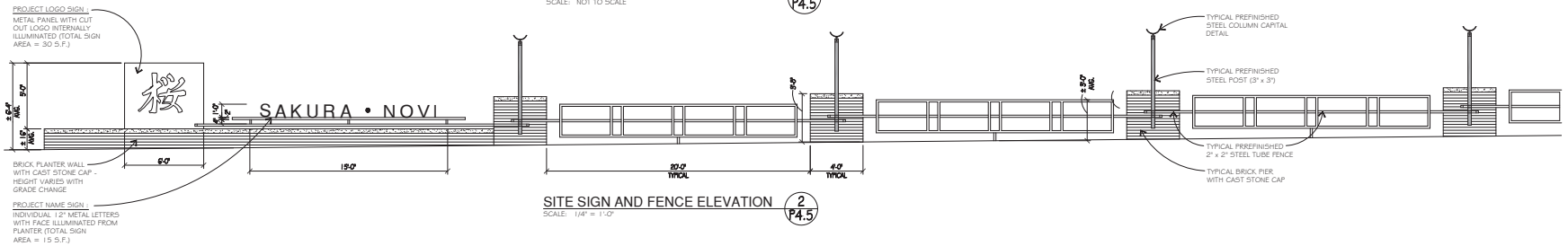
P4.3

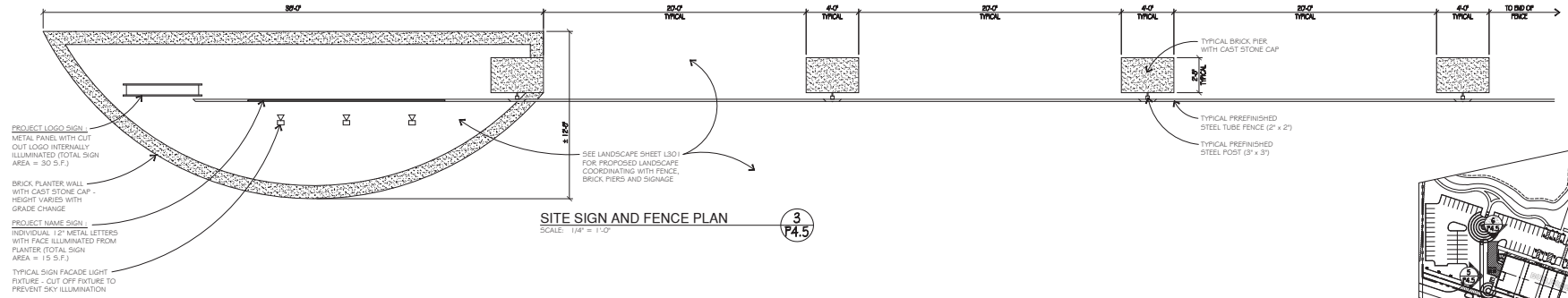
CAD DWG 5035 COLOR P43 9-30-19.DWG



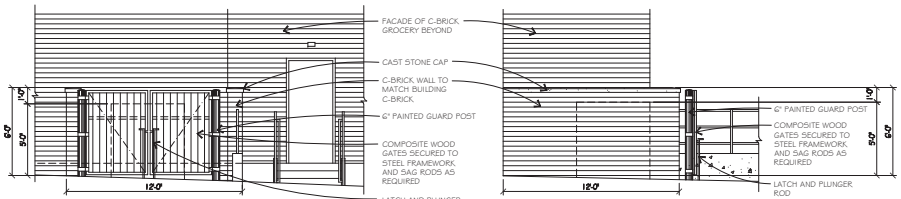
SITE SIGN AND FENCE ELEVATION (1/P4.5)
SCALE: NOT TO SCALE



SITE SIGN AND FENCE ELEVATION (2/P4.5)
SCALE: 1/4" = 1'-0"

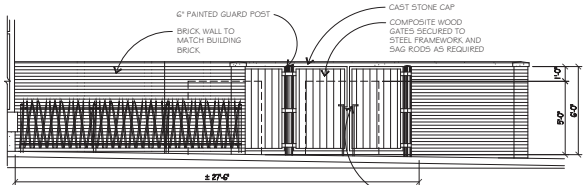


SITE SIGN AND FENCE PLAN (3/P4.5)
SCALE: 1/4" = 1'-0"

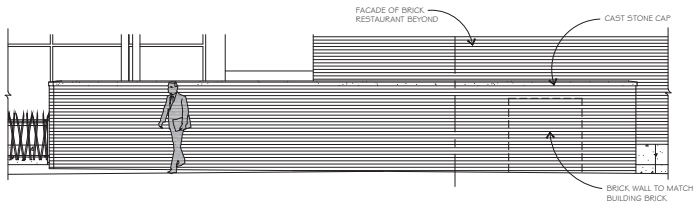


BUILDING A RESTAURANT
DUMPSTER ENCLOSURE ELEVATION (7/P4.2)
SCALE: 1/4" = 1'-0"

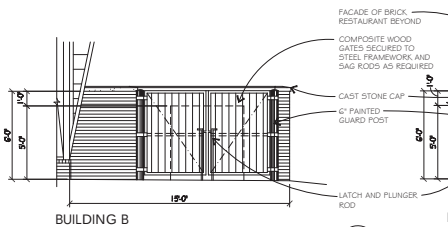
BUILDING A RESTAURANT
DUMPSTER ENCLOSURE ELEVATION (8/P4.2)
SCALE: 1/4" = 1'-0"



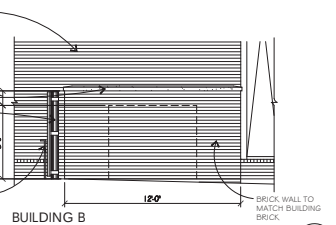
BUILDING C
DUMPSTER ENCLOSURE ELEVATION (6/P4.2)
SCALE: 1/4" = 1'-0"



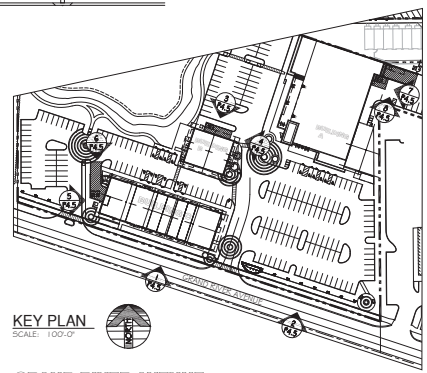
BUILDING C
DUMPSTER ENCLOSURE ELEVATION (5/P4.2)
SCALE: 1/4" = 1'-0"



BUILDING B
DUMPSTER ENCLOSURE ELEVATION (4/P4.2)
SCALE: 1/4" = 1'-0"



BUILDING B
DUMPSTER ENCLOSURE ELEVATION (3/P4.2)
SCALE: 1/4" = 1'-0"



KEY PLAN
SCALE: 100'-0"

GRAND RIVER AVENUE
SITE FENCE & SIGNAGE DETAILS
DUMPSTER ENCLOSURE DETAILS

SAKURA • NOVI

NOVI, MICHIGAN

Robert B. Aikens & ASSOCIATES, L.L.C.
350 N. Old Woodward Avenue, Suite 300
Birmingham, MI 48009 ph: 248-283-1071

WAH YEE ASSOCIATES
ARCHITECTS & PLANNERS
42400 GRAND RIVER AVENUE, SUITE 200
NOVI, MICHIGAN 48375
PHONE 248.489.9160
PROJECT NO. 5035

ISSUED FOR
PRO REZONING
REVISED SUBMITTAL
OCTOBER 2, 2019

PRELIMINARY
NOT FOR CONSTRUCTION
P4.5

CAD DWG 5035 P42 10-2-19.DWG

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	537 SF	41%
SIDING	0%	344 SF	25.5%
SHINGLES	25%	308 SF	23.5%
TRIM	15%	124 SF	10%
TOTAL		1,315 SF	100%

REAR ELEVATION
3 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	514 SF	39%
SIDING	0%	310 SF	23%
SHINGLES	25%	214 SF	16%
TRIM	15%	286 SF	22%
TOTAL		1,324 SF	100%

FRONT ELEVATION
3 UNIT BUILDING
SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

ARCHITECTURE

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SHEET TITLE
3 UNIT BUILDING
ELEVATIONS

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TOWNHOME UNITS - "100 SERIES"
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STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301038353 LICENSED ARCHITECT

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	843 SF	40%
SIDING	0%	596 SF	27%
SHINGLES	25%	512 SF	23%
TRIM	15%	213 SF	10%
TOTAL		2,184 SF	100%

REAR ELEVATION
5 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	850 SF	39%
SIDING	0%	513 SF	23%
SHINGLES	25%	374 SF	17%
TRIM	15%	462 SF	21%
TOTAL		2,201 SF	100%

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
5 UNIT BUILDING
SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

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SHEET TITLE
5 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "100 SERIES"
NOVI, MICHIGAN

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SHEET NUMBER	R-2

STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301035053 LICENSED ARCHITECT

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,042 SF	41%
SIDING	0%	689 SF	24%
SHINGLES	25%	614 SF	23%
TRIM	15%	252 SF	10%
TOTAL		2,411 SF	100%

REAR ELEVATION
6 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	431 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,018 SF	38.5%
SIDING	0%	622 SF	23.5%
SHINGLES	25%	449 SF	17%
TRIM	15%	551 SF	21%
TOTAL		2,640 SF	100%

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
6 UNIT BUILDING
SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

ARCHITECTURE

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248. 259. 1784

SHEET TITLE
6 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "100 SERIES"
NOVI, MICHIGAN

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JOB NUMBER	19011
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SHEET NUMBER	R-3

STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301035053 LICENSED ARCHITECT

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,314 SF	38%
SIDING	0%	1,005 SF	29%
SHINGLES	25%	819 SF	23%
TRIM	15%	342 SF	10%
TOTAL		3,484 SF	100%

REAR ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	631 SF	53%
SIDING	0%	490 SF	41%
SHINGLES	25%	0 SF	0%
TRIM	15%	68 SF	6%
TOTAL		1,189 SF	100%

LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,354 SF	38%
SIDING	0%	811 SF	23%
SHINGLES	25%	628 SF	18%
TRIM	15%	724 SF	21%
TOTAL		3,517 SF	100%

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

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SHEET TITLE
8 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
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SHEET NUMBER	R-4

STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301035053 LICENSED ARCHITECT

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	342 SF	14%
SIDING	0%	1,090 SF	47%
SHINGLES	25%	466 SF	20%
TRIM	15%	393 SF	17%
TOTAL		2,311 SF	100%

REAR ELEVATION
5 UNIT BUILDING
SCALE: 1/8" = 1'-0"

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	611 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	777 SF	33%
SIDING	0%	937 SF	40%
SHINGLES	25%	317 SF	13.5%
TRIM	15%	313 SF	13.5%
TOTAL		2,344 SF	100%

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
5 UNIT BUILDING
SCALE: 1/8" = 1'-0"

RB ROBERTSON BROTHERS HOMES

ARCHITECTURE

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248.259.1784

SHEET TITLE
5 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "200 SERIES"
NOVI, MICHIGAN

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SHEET NUMBER	R-5

STATE OF MICHIGAN BRIAN NEEPER ARCHITECT No. 1301035353 LICENSED ARCHITECT

REAR ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

REAR ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	549 SF	15.5%
SIDING	0%	1,748 SF	47.5%
SHINGLES	25%	745 SF	20%
TRIM	15%	629 SF	17%
TOTAL		3,491 SF	100%

LEFT/ RIGHT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	394 SF	37%
SIDING	0%	617 SF	58%
SHINGLES	25%	0 SF	0%
TRIM	15%	49 SF	5%
TOTAL		1,060 SF	100%

FRONT ELEVATION

MATERIAL	ALLOWABLE	PROPOSED	PERCENTAGE
BRICK	100%	1,237 SF	33%
SIDING	0%	1,455 SF	39%
SHINGLES	25%	534 SF	14%
TRIM	15%	518 SF	14%
TOTAL		3,744 SF	100%

LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"

ELEV. 'A' ELEV. 'B' ELEV. 'C' ELEV. 'B' ELEV. 'C' ELEV. 'C' ELEV. 'B' ELEV. 'A'

FRONT ELEVATION
8 UNIT BUILDING

SCALE: 1/8" = 1'-0"

ROBERTSON BROTHERS HOMES

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SHEET TITLE
8 UNIT BUILDING
ELEVATIONS

CLIENT / PROJECT
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "200 SERIES"
NOVI, MICHIGAN

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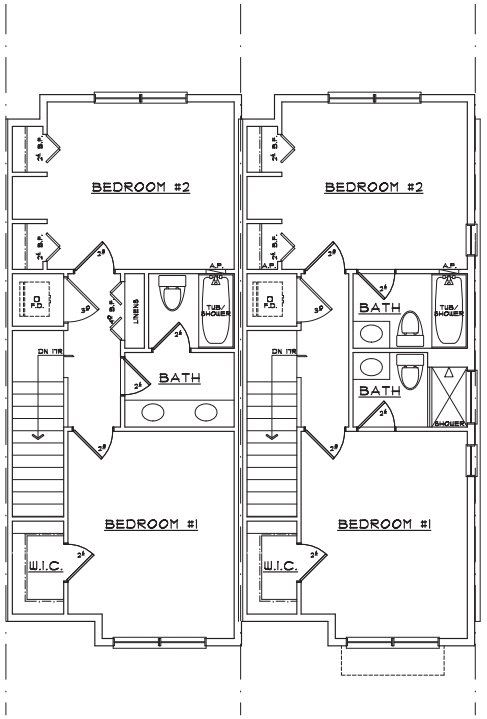
SHEET NUMBER	R-6

STATE OF MICHIGAN
BRIAN NEEPER
ARCHITECT
No. 1301035053
LICENSED ARCHITECT

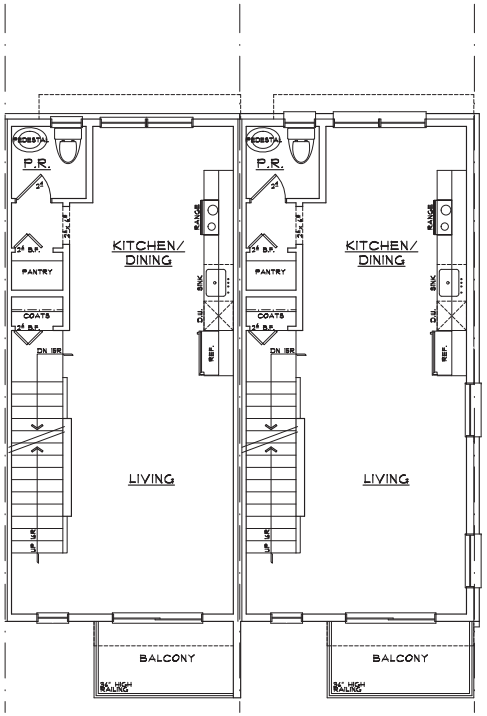
SQUARE FOOTAGE	
LOWER LEVEL	36 SQ FT
IST FLOOR	548 SQ FT
2ND FLOOR	601 SQ FT
TOTAL	1184 SQ FT



"B / C" END UNIT - "A"
SECOND FLOOR PLAN

STANDARD INTERIOR LAYOUT

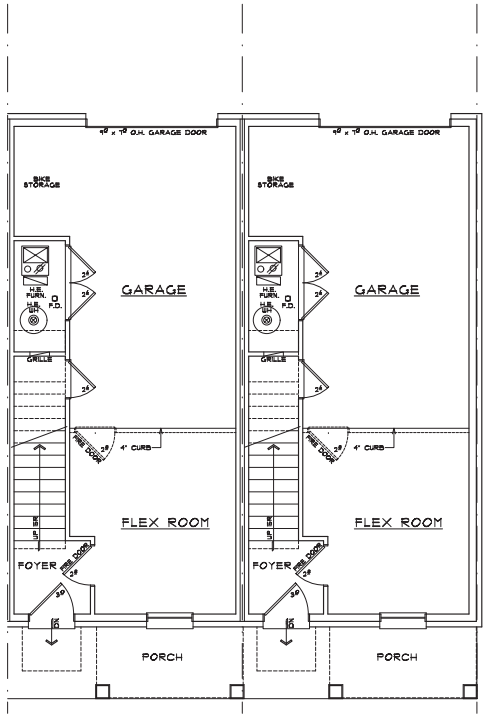
SCALE: 1/4" = 1'-0"



"B / C" END UNIT - "A"
FIRST FLOOR PLAN

STANDARD INTERIOR LAYOUT

SCALE: 1/4" = 1'-0"



"B / C" END UNIT - "A"
GROUND FLOOR PLAN

STANDARD INTERIOR LAYOUT

SCALE: 1/4" = 1'-0"

ROBERTSON BROTHERS HOMES

ARCHITECTURE

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SHEET TITLE
UNIT PLANS

CLIENT / PROJECT
ROBERTSON HOMES
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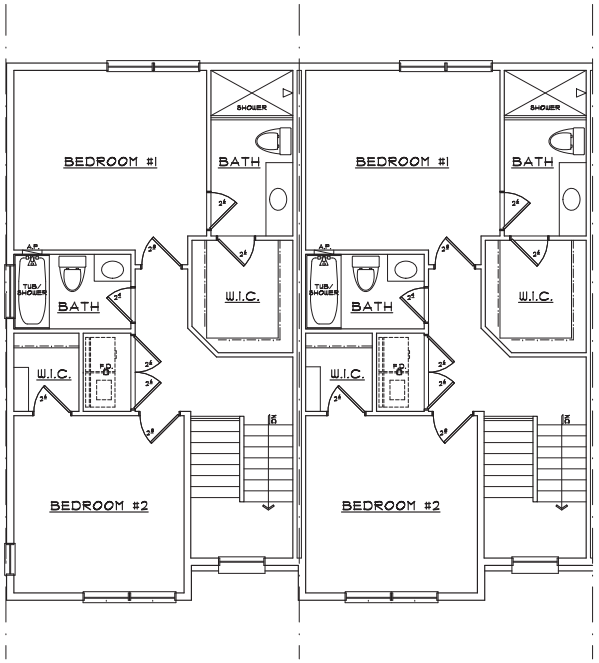
SHEET NUMBER	R-7

STATE OF MICHIGAN
BRIAN NEEPER
ARCHITECT
No. 1301033053
LICENSED ARCHITECT

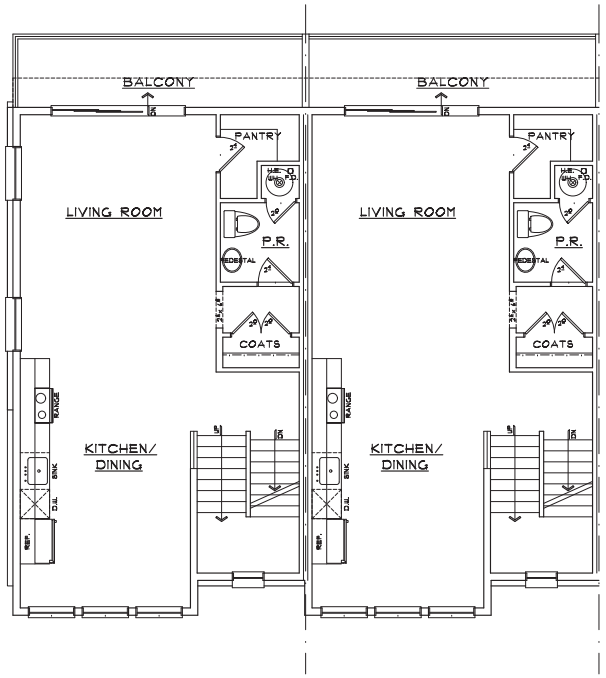
SQUARE FOOTAGE	
LOWER LEVEL	215 SQ FT
1ST FLOOR	684 SQ FT
2ND FLOOR	642 SQ FT
TOTAL	1,541 SQ FT



END UNIT - "A" "B / C"
SECOND FLOOR PLAN

STANDARD INTERIOR LAYOUT

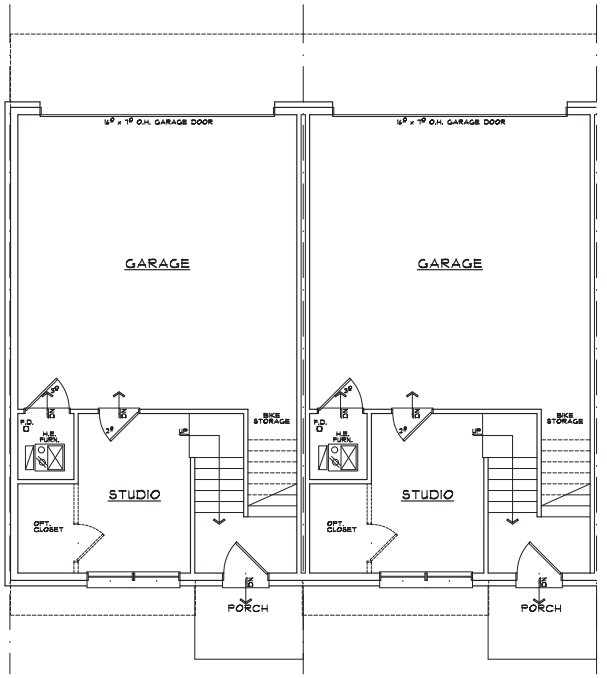
SCALE: 1/4" = 1'-0"



END UNIT - "A" "B / C"
FIRST FLOOR PLAN

STANDARD INTERIOR LAYOUT

SCALE: 1/4" = 1'-0"



END UNIT - "A" "B / C"
GROUND FLOOR PLAN

STANDARD INTERIOR LAYOUT

SCALE: 1/4" = 1'-0"

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SHEET TITLE: UNIT PLANS

CLIENT / PROJECT:
ROBERTSON HOMES
SAKURA NOVI
TOWNHOME UNITS - "200 SERIES"
NOVI, MICHIGAN

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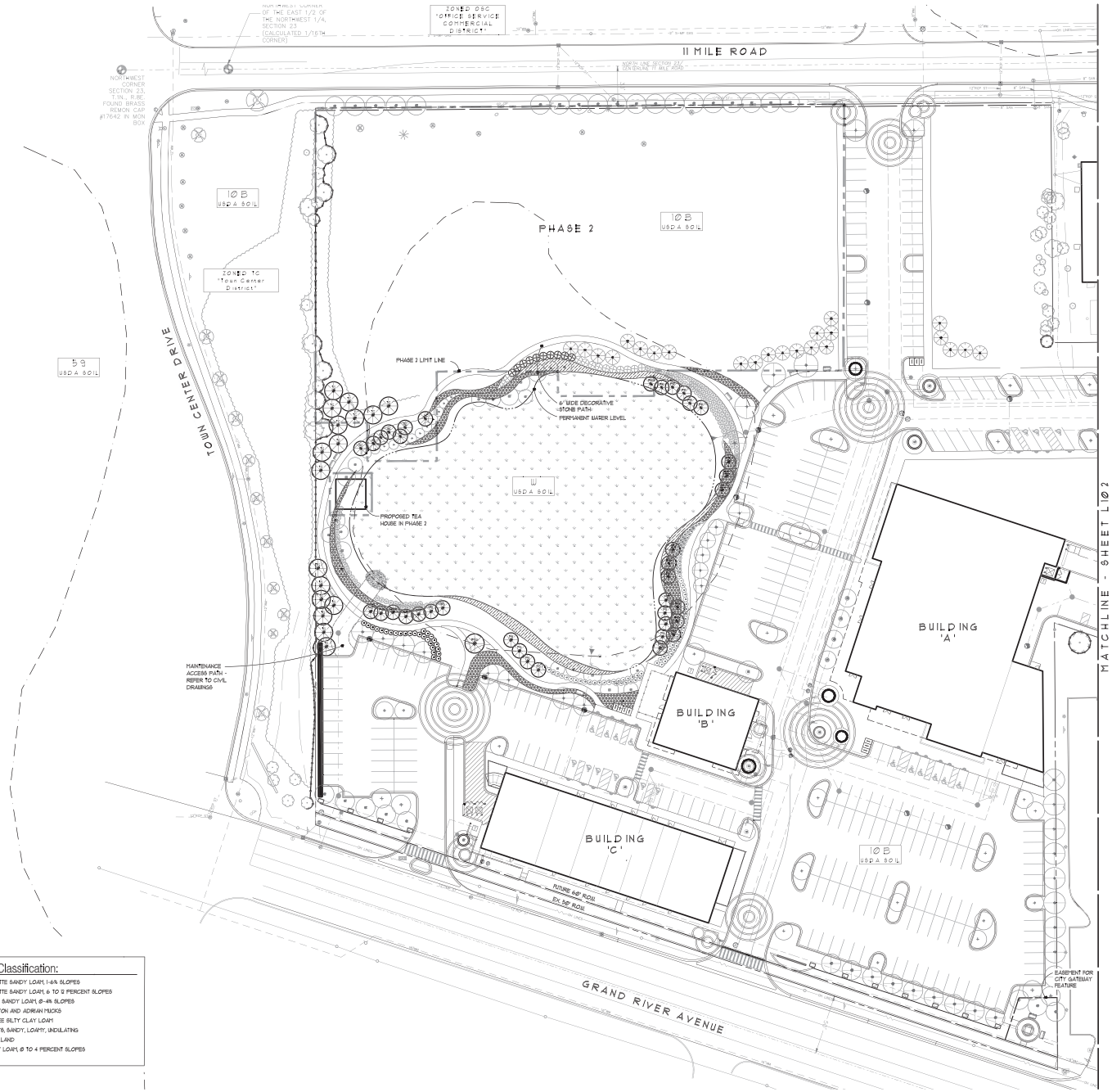


USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BmaaB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Ordinance Considerations:

Woodland Tree Replacement Chart — 64-EE76 L101-L102

REQUIREMENTS

1. Replace impacted trees within a City of Novi regulated woodland by planting new 2.5" caliper sized deciduous trees (or six of other vegetation), pay a fee into the City's Tree Fund or a combination of both.
2. Refer to Woodland Tree Replacement Chart below to quantify the number of replacement trees required.

DBH	8<11	11<20	20<29	>30	Total
Replacement Ratio	1 to 1	1 to 2	1 to 3	1 to 4	Replacement Ratio
Quantity Removed	30	49	19	3	181 DI Trees to be removed
Credits Required	30	98	57	12	197 Tree Credits Required

PROPOSED

1. Applicant is proposing to remove 181 trees which are over 8" DBH and located within a city-regulated woodland, as well as 2 trees which are over 36" DBH and not located within a city-regulated woodland, as part of the construction for the new Sakura Novi development.
2. The Woodland/Tree Replacement Plans (Sheets L101 and L102) equate to 80.5 Woodland Tree Replacement Credits. (56 evergreen trees plus an additional 36.5 credits from planting other woodland plant materials) - see below.

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant Required Placement	Max. Size Percentage
Canopy Trees	2.5" caliper	2:1	70%
Evergreen Trees	26" height	2:1	30%
Understory Trees	1" caliper	5:1	30%
Large Shrubs	30" height	6:1	30%
Small Shrubs	18" height	8:1	30%
Tree, Shrub Whips	24" height	50:1	5%
Perennials	1 gallon cont.	20:1	30%
Groundcover Seeding	Per seed source recommendation	78 SF over 1	5%

Woodland Replacement Credit Conversion

Type	Credit Conversion Ratio	Proposed Plant Quantities	Amount of Tree Credits per Plant Type
Canopy Trees	2:1	0	0
Evergreen Trees	2:1	56	18.5 (9.4%)
Understory Trees	5:1	0	0
Large Shrubs	6:1	10	10.5 (5.3%)
Small Shrubs	8:1	27	3.5 (1.7%)
Tree, Shrub Whips	50:1	0	0
Perennials	20:1	1125	45 (22.8%)
Groundcover Seeding	78 SF over 1	1398 SF	18 (18.2%)
		Total Credits Provided On Site	82.5
Additional Credits to be Paid into City Tree Fund			114.5
		Total Credits Required	197

Legend:

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PLANT SPECIES, SPECIFICATION, AND QUANTITIES
- WOODLAND REPLACEMENT TREES - CANOPY AND EVERGREEN
- PROPOSED TREES - REFER TO LANDSCAPE ORDINANCE PLANS, PLANTING PLANS, AND PLANT LIST
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT PERENNIAL PLANTING BED - REFER TO PLANT LIST AND DETAILS
- WOODLAND REPLACEMENT GROUNDCOVER SEEDING - REFER TO PLANT LIST
- WOODLAND REPLACEMENT SHRUB - REFER TO LANDSCAPE ORDINANCE AND PLANTING PLANS
- STORM BASIN SHRUB - REFER TO PLANTING PLANS
- TREE PROTECTION FENCE - SEE TYP. DETAIL AND CIVIL DRAWINGS
- DETENTION BASIN - REFER TO CIVIL DRAWINGS
- USDA SOIL DESIGNATION BOUNDARY
- RETAINING WALL - REFER TO CIVIL DRAWINGS

Phragmites Removal and Management:

PHRAGMITES HAVE BEEN IDENTIFIED ON THE SITE. REFER TO CIVIL TOPOGRAPHIC SURVEY PLANS FOR LOCATIONS OF EXISTING PHRAGMITES. REFER TO CIVIL NATURAL FEATURES PLANS FOR LIMITS OF REMOVALS. ALL EXISTING PHRAGMITES ON THE SITE WILL BE PHYSICALLY REMOVED DURING SITE CONSTRUCTION. ANY LEFT OVER POPULATIONS WILL BE TREATED WITH HERBICIDES PER MDEQ GUIDELINES.

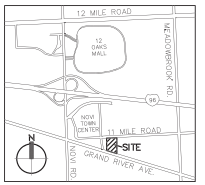
General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
2. REFER TO CIVIL DRAWINGS FOR EXISTING TREE SURVEY, TREE LIST, EXISTING PHRAGMITES LOCATIONS, REMOVALS, WOODLAND IMPACTS AND PROTECTION.
3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES
5. ALL PROPOSED WOODLAND REPLACEMENT TREES WILL BE GUARANTEED TO BE PROTECTED IF PLANTED ON SITE WITHIN A CONSERVATION EASEMENT OR LANDSCAPE EASEMENT GRANTED TO THE CITY.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map
Scale: Not to Scale

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project: Sakura Novi
Novi, Michigan

Sheet: Woodland Replacement Plan

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=40'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal

Sheet Number: L101

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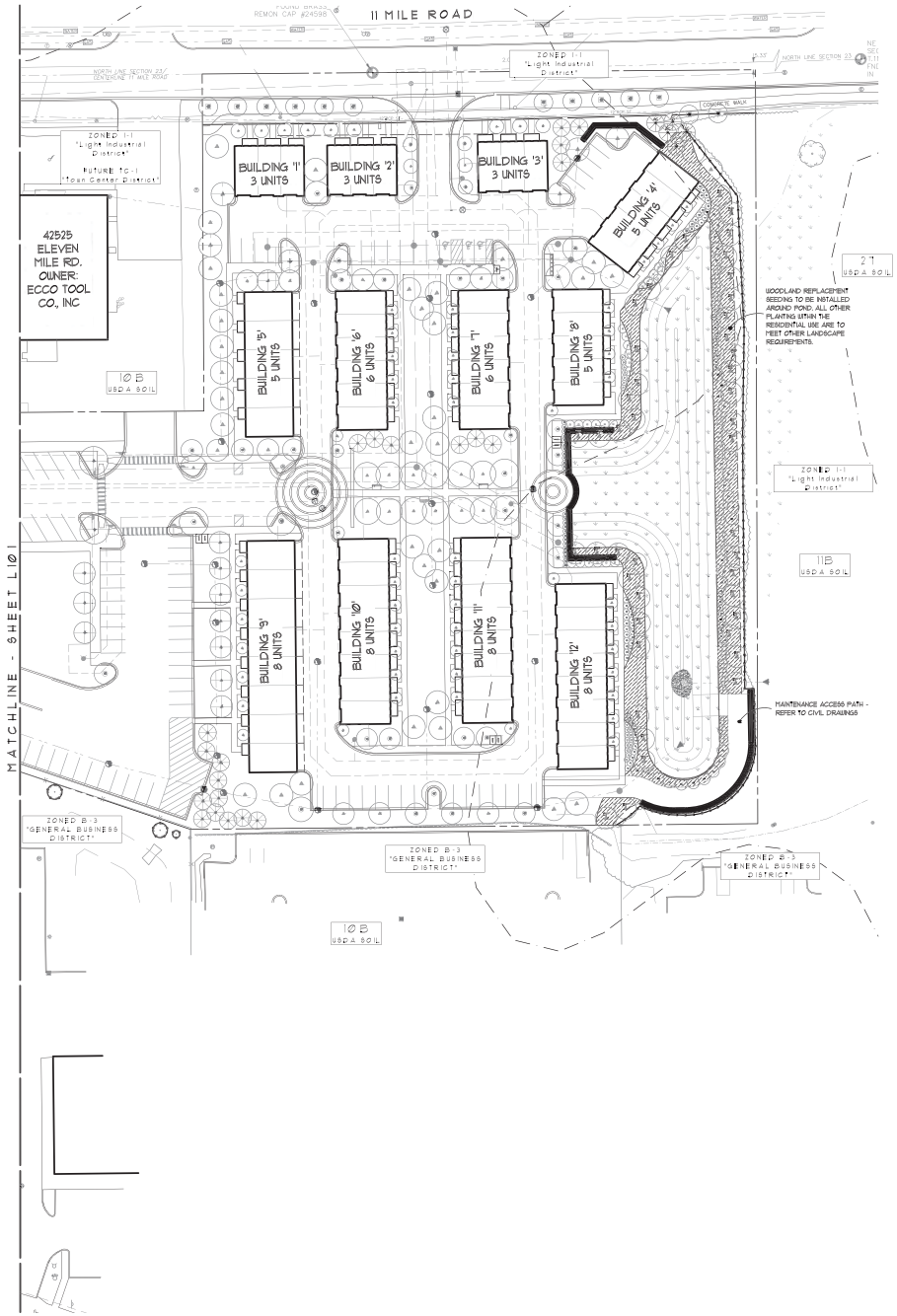

USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
27	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
99	URBAN LAND
BmaoB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Ordinance Considerations:

Woodland Tree Replacement Chart — 64-EE76 L101-L102

REQUIREMENTS

1. Replace impacted trees within a City of Novi regulated woodland by planting new 2.5" caliper sized deciduous trees (or six of other vegetation), pay a fee into the City's Tree Fund or a combination of both.
2. Refer to Woodland Tree Replacement Chart below to quantify the number of replacement trees required.

DBH	8<11	11<20	20<29	>30	Total
Replacement Ratio	1 to 1	1 to 2	1 to 3	1 to 4	Replacement Ratio
Quantity Removed	30	49	19	5	101 DI Trees to be removed
Credits Required	30	98	57	12	197 Tree Credits Required

PROPOSED

1. Applicant is proposing to remove 181 trees which are over 8" DBH and located within a city-regulated woodland, as well as 2 trees which are over 36" DBH and not located within a city-regulated woodland, as part of the construction for the new Sakura Novi dev-elopment.
2. The Woodland/Tree Replacement Plans (Sheets L101 and L102) equate to 80.5 Woodland Tree Replacement Credits. (56 evergreen trees plus an additional 36.5 credits from planting other woodland plant materials) - see below.

Reforestation Credit Table

Type	Minimum Size	DBH Credit Proposed Plant Required Placement	Max. Size Percentage
Canopy Trees	2.5" caliper	2:1	50%
Evergreen Trees	36" height	2:1	50%
Understory Trees	1" caliper	5:1	50%
Large Shrubs	30" height	6:1	50%
Small Shrubs	18" height	8:1	50%
Tree, Shrub Whips	24" height	50:1	5%
Perennials	1 gallon cont.	20:1	50%
Groundcover Seeding	Per seed source recommendation	78 SF over: 1	5%

Woodland Replacement Credit Conversion

Type	Credit Conversion Ratio	Proposed Plant Quantities	Amount of Tree Credits per Plant Type
Canopy Trees	2:1	0	0
Evergreen Trees	2:1	56	18.5 (9.4%)
Understory Trees	5:1	0	0
Large Shrubs	6:1	10	10.5 (5.3%)
Small Shrubs	8:1	27	3.5 (1.7%)
Tree, Shrub Whips	50:1	0	0
Perennials	20:1	1125	45 (22.8%)
Groundcover Seeding	78 SY over: 1	1398 SY	35 (18.2%)
		Total Credits Provided On Site	82.5
Additional Credits to be Paid into City Tree Fund			114.5
		Total Credits Required	197

Legend:

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PLANT SPECIES, SPECIFICATION, AND QUANTITIES
- WOODLAND REPLACEMENT TREES - CANOPY AND EVERGREEN
- PROPOSED TREES - REFER TO LANDSCAPE ORDINANCE PLANS, PLANTING PLANS, AND PLANT LIST
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT PERENNIAL PLANTING BED - REFER TO PLANT LIST AND DETAILS
- WOODLAND REPLACEMENT GROUNDCOVER SEEDING - REFER TO PLANT LIST
- WOODLAND REPLACEMENT SHRUB - REFER TO LANDSCAPE ORDINANCE AND PLANTING PLANS
- STORM BASIN SHRUB - REFER TO PLANTING PLANS
- TREE PROTECTION FENCE - SEE TYP. DETAIL AND CIVIL DRAWINGS
- DETENTION BASIN - REFER TO CIVIL DRAWINGS
- USDA SOIL DESIGNATION BOUNDARY
- RETAINING WALL - REFER TO CIVIL DRAWINGS

Phragmites Removal and Management:

PHRAGMITES HAVE BEEN IDENTIFIED ON THE SITE. REFER TO CIVIL TOPOGRAPHIC SURVEY PLANS FOR LOCATIONS OF EXISTING PHRAGMITES. REFER TO CIVIL NATURAL FEATURES PLANS FOR LIMITS OF REMOVALS. ALL EXISTING PHRAGMITES ON THE SITE WILL BE PHYSICALLY REMOVED DURING SITE CONSTRUCTION. ANY LEFT OVER POPULATIONS WILL BE TREATED WITH HERBICIDES PER MDEQ GUIDELINES.

General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
2. REFER TO CIVIL DRAWINGS FOR EXISTING TREE SURVEY, TREE LIST, EXISTING PHRAGMITES LOCATIONS, REMOVALS, WOODLAND IMPACTS AND PROTECTION.
3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES
5. ALL PROPOSED WOODLAND REPLACEMENT TREES WILL BE GUARANTEED TO BE PROTECTED IF PLANTED ON SITE WITHIN A CONSERVATION EASEMENT OR LANDSCAPE EASEMENT GRANTED TO THE CITY.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'

Key Map
Scale: Not to Scale

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

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Novi, Michigan

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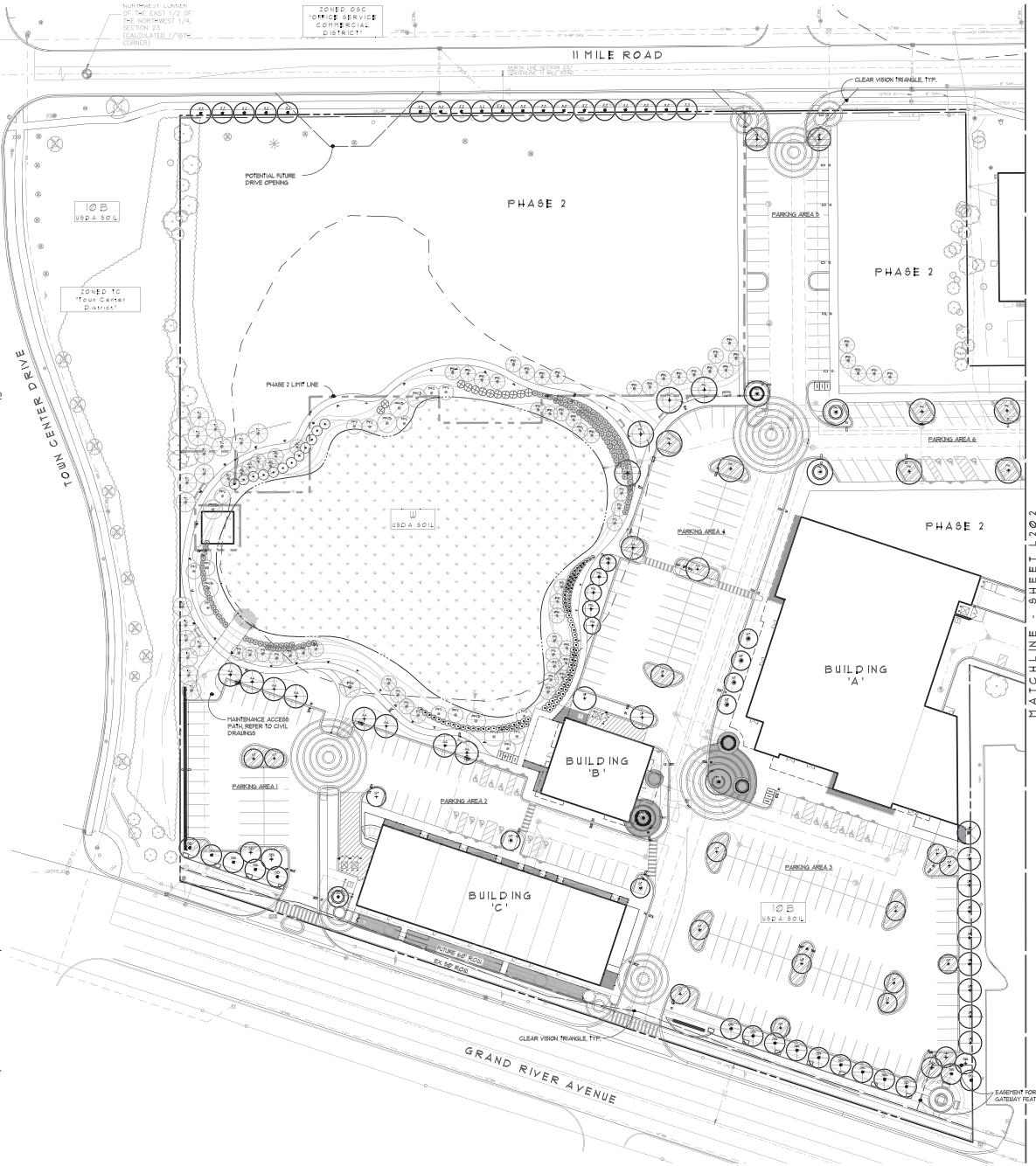

Landscape Ordinance Legend:

SHEETS L201-L203

- PLANT TAG - REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR SPECIFICATION AND QUANTITIES
- GREEN BELT CANOPY STREET TREES (SECTION 5.5.3.B.iii)
- ROW/ GREEN BELT SUB-CANOPY STREET TREES (SECTION 5.5.3.B.iii)
- INTERIOR STREET TREES (SECTION 5.5.3.E.ii.b.2.)
- PARKING LOT INTERIOR TREES (SECTION 5.5.3.C.iv.)
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.C.v.)
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.E.ii.b.1)
- ADDITIONAL PROJECT IDENTITY TREES
- FOUNDATION TREE
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT TREES - REFER TO WOODLAND REPLACEMENT PLANS
- STORM BASIN RIM PLANTING SHRUBS - REFER TO PLANTING PLANS
- BUILDING FOUNDATION PLANTING/DECORATIVE PAVERS/PLANTERS (SECTION 5.5.3.D.iv.)
- PARKING LOT INTERIOR PLANTING (SECTION 5.5.3.C.iv.)
- PARKING PERIMETER CALCULATION LINE
- DETENTION BASIN - REFER TO CIVIL DOCUMENTS
- USDA SOIL DESIGNATION BOUNDARY
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- CONCRETE LANDSCAPE EDGE OR PLANTER CURB
- MASONRY SEATWALL
- RETAINING WALL - REFER TO CIVIL PLANS

USDA Soils Classification:

IØB	MARLETTE SANDY LOAM, 1-6% SLOPES
IØC	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
115	CAPAC SANDY LOAM, Ø-4% SLOPES
27	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
419	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BmadB	BLOUNT LOAM, Ø TO 4 PERCENT SLOPES
W	WATER

General Notes:

1. REFER TO COVER SHEET FOR DEVELOPER AND OWNER CONTACT INFORMATION
2. REFER TO CIVIL DRAWINGS FOR EXISTING TREE SURVEY, EXISTING PHRAGMITES TREE LIST, REMOVALS, WOODLAND IMPACTS AND PROTECTION.
3. REFER TO CIVIL DRAWINGS FOR EXISTING SURVEY, PROPOSED SITE LAYOUT, AND DIMENSIONS
4. REFER TO LANDSCAPE PLANTING PLANS AND PLANT LIST FOR PROPOSED PLANT SPECIES, SPECIFICATION, AND QUANTITIES

Ordinance Consideration Notes: Commercial

11 Mile Frontage (Sec. 5.5.3.B.ii)

Requirement
1. 20' wide greenbelt along 11 Mile Rd wherever adjacent to parking, 6' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen parking from public ROW.
3. One canopy tree or large evergreen/35 LF of frontage. (2 trees are required (486/35 = 13.9 trees) (OR) one sub-canopy tree/20 LF of frontage. 16 Sub-canopy trees are required (486/20 = 24.3 trees).

Proposed
1. 19 deciduous canopy trees have been provided along the 11 Mile ROW.

Grand River Frontage (Sec. 5.5.3.B.ii)

Requirement
1. 20' wide greenbelt along Grand River Ave and 11 Mile Rd wherever adjacent to parking, 6' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick wall with piers or combination masonry, metal fencing and plant materials to screen parking from public ROW.
3. One canopy tree or large evergreen/35 LF of frontage. 16 trees required (563/35 = 16.8 trees) (OR) one sub-canopy tree/20 LF of frontage. 28 Sub-canopy trees required (563/20 = 27.65 trees)

Proposed
1. 16 deciduous canopy trees have been provided along the Grand River ROW and ornamental piers with metal fencing and a continuous row of evergreen shrubs are proposed to screen all parking areas.

Parking Area Landscape (Sec. 5.5.3.C.ii)

1. Refer to Sheet L203 for parking interior greenspace square footages, perimeter lines, and ordinance calculations.

Parking Lot Perimeter Canopy Trees (Sec. 5.5.3.c.ii)

Requirement
1. One canopy tree/35 LF of parking lot boundary (2681/35 = 77 trees)

Proposed
1. 53 parking lot perimeter canopy trees have been provided - see elevation request.

Building Foundation Landscape (Sec. 5.5.3.D.ii)

Requirement
1. Building Foundation Landscaping equal to entire perimeter of the building (less paved access areas) x 8 with a minimum width of 4'
2. Per Sec 5.5.3.D.v.c. "With respect to projects within the TC and TC-1 districts, the Planning Commission may waive the eight (8) foot width calculation requirements, if significant additional planting and/or decorative paving or amenities are added adjacent to the building.
3. If visible from a public street a minimum of 60% of the exterior building perimeter should be covered in green space.

Proposed
1. Building Foundation Landscape requirements have been met for proposed TC-1 zoning through a combination of built-in planters, planting beds, and amenities including decorative pavement, pocket gardens, and benches.

Storm Basin Landscape - West (LDM Sec. 3)

Requirement
1. A total of 76-114 of the storm basin rim area is required to be planted with large shrubs. Rim area is 891 LF. 10% of rim area is 608 LF.

Proposed
1. 671 LF (75%) of rim area has been planted with large native shrubs. 18 (5%) of these shrubs are designated as woodland replacement shrubs, leaving 651 LF of shrubs (73%) to satisfy the storm basin landscape requirement.

Woodland Tree Replacement Plan (Sec. 37)

1. Refer to Sheets L101 - L102

Irrigation (LDM 1.A.(1)(e) and 2.S)

1. A permanent, automatic irrigation system will be provided for planting and woodland tree areas as required per the ordinance.

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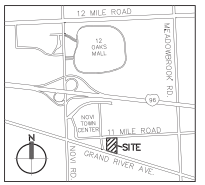
0' 20' 40' 80'
SCALE: 1"=40'



Key Map
Scale: Not to Scale

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Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

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- PARKING LOT INTERIOR TREES (SECTION 5.5.3.C.iv)
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.C.ii)
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN (SECTION 5.5.3.E.iii.b)
- ADDITIONAL PROJECT IDENTITY TREES
- FOUNDATION TREE
- EXISTING TREE TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- WOODLAND REPLACEMENT TREES - REFER TO WOODLAND REPLACEMENT PLANS
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- BUILDING FOUNDATION PLANTING/DECORATIVE PAVERS/PLANTERS (SECTION 5.5.3.D.iv)
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USDA Soils Classification:

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General Notes:

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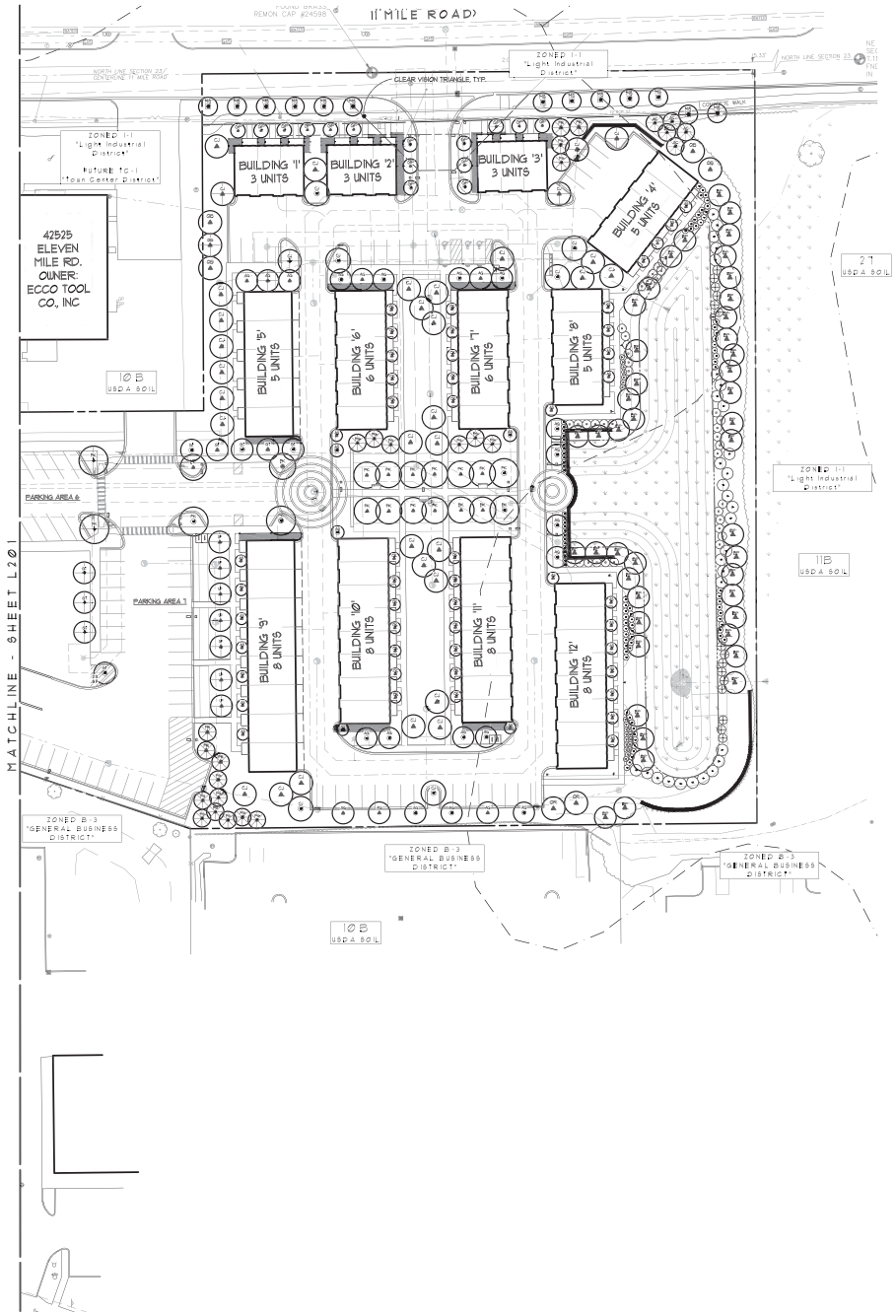

Ordinance Consideration Notes: Residential

11 Mile Frontage (Sec. 5.5.3.B.ii)

Requirement
1. L 20' wide greenbelt along Grand River Ave and 11 Mile Rd wherever adjacent to parking, 8' wide greenbelt required elsewhere.
2. Town Center Area Study recommends use of a low, ornamental brick sell with piers or combination masonry, metal fencing and plant materials to screen site from public ROW.
3. One canopy tree or large evergreen/35 LF of frontage. 9 trees are required (310/35 = 8.51 trees) (OR) one sub-canopy tree/30 LF of frontage. 16 Sub-canopy trees are required (310/20 = 15.5 trees).

Proposed
1. L 13 Sub-canopy trees proposed between sidewalk and road under overhead utility lines along 11 Mile Road with some deciduous trees within the greenbelt due to 5' wide building set back.
2. Due to presence of overhead utility lines, no canopy/large evergreen trees are proposed for the public ROW along 11 Mile.
3. Trees to be located between sidewalk and curb wherever possible. 2 street trees will be planted south of the sidewalk near the eastern edge of the site.

West Property Line (Sec. 5.5.3.A.ii)

Requirement
1. L 10'-15' tall berm required along border between site and adjacent I-1 Zoning District.

Proposed
1. L Refer to sections and elevation requests.

South Property Line (Sec. 5.5.3.A.ii)

Requirement
1. L 6'-8' tall berm required along border between site and adjacent B-3 Zoning District. A screen opacity shall be provided and maintained at 80% during winter and 90% percent during summer within 2 years of acceptance by the city.

Proposed
1. L Refer to section and elevation request.

Interior Street Tree Requirements (Sec. 5.5.3.F.ii)

Requirement
1. L One street tree/35 LF of frontage (1258 LF proposed). 36 street trees are required (1258/35 = 37 trees)

Proposed
1. L 37 canopy trees are planted along stretches of roads designated as interior residential streets, less all paved areas in front of unit garages - refer to elevation request.

Parking Area Landscape (Sec. 5.5.3.C.ii)

Requirement
1. L Greenspace/ interior parking lot area landscape for total square footage of parking spaces based upon Category 1 of Chart. Due to the location of driveways throughout the site, only the parking areas south of Building 1 and north of Building 4 have been considered for the requirement.
2. Per Sec. 5.5.3.C.v.vii. If a parking bay abuts a drive and no other parking, only parking perimeter trees are required (no interior greenspace).

Proposed
1. L No interior parking trees are proposed, as they are not required in the residential portion of the site.

Parking Lot Perimeter Canopy Trees (Sec. 5.5.3.B.ii)

Requirement
1. L 1 Perimeter trees are required. One canopy tree/35 LF of parking lot boundary. 243 / 35 = 6.94

Proposed
1. L 1 Canopy trees provided for 243 LF of parking lot boundary (243/35 = 6.94 trees)

Building Foundation Landscape (Sec. 5.5.3.F.ii)

Requirement
1. L 35% of building facades facing road/drives shall be landscaped with plantings other than lawn.

Proposed
1. L Planting beds have been added to all building facades facing internal drives, except where adjacent to driveway of the units - refer to elevation request.
2. Building foundation planting beds are planted with a mixture of herbaceous perennial plants, shrubs and ornamental grasses.

Building Landscape (Sec. 5.5.3.F.ii)

Requirement
1. L 3 deciduous canopy trees or large evergreen trees per dwelling unit on the first floor. 68 dwelling units*3 trees = 204 trees.

Proposed
1. L 204 trees are shown throughout the site that are intended to meet the Unit tree requirement. This figure includes all trees also intended to meet parking area perimeter requirements.
2. Verbal permission has been received from city to allow up to 25% of the required unit trees to be subcanopy trees.

Storm Basin Landscape - East (LDM Sec. 3)

Requirement
1. L A total of 75'-75% of the east storm basin rim area is required to be planted with large shrubs. Rim area is 785 LF. 75% of rim area is 632 LF.

Proposed
1. L 631 LF (80.3%) of rim area has been planted with large native shrubs.

Woodland Tree Replacement Plan (Sec. 37)

1. L Refer to Sheets L101 - L102

Irrigation (LDM 1.A.(1)(e) and 2.S)

1. L A permanent, automatic irrigation system will be provided for planting and sodded lawn areas as required per the ordinance.

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0' 20' 40' 80'

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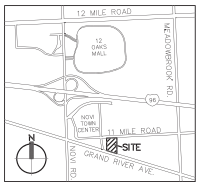

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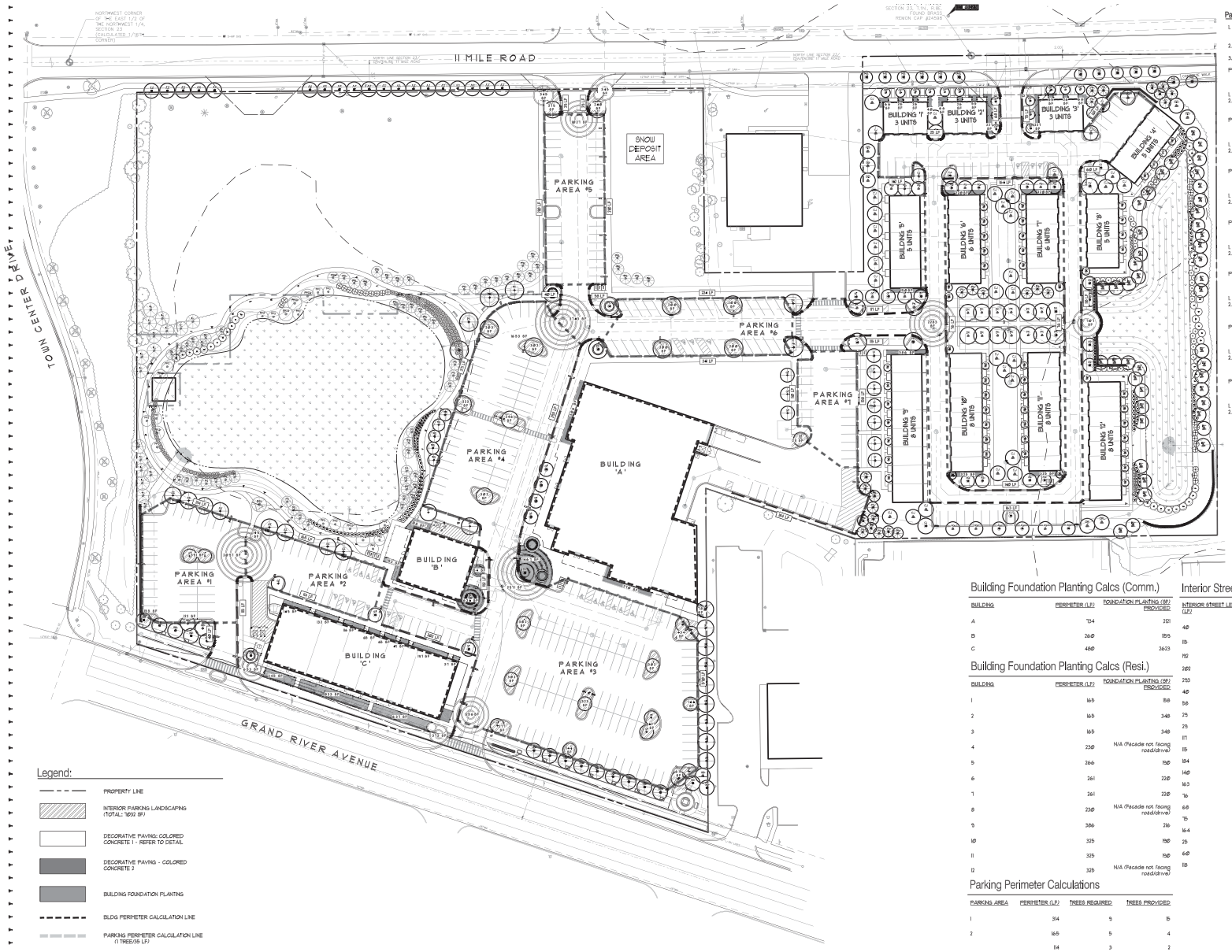


Parking Area Landscape (Sec. 5.5.3.c.ii)

1. Greenspace/ interior parking lot area landscape for total square footage of Vehicular Use Area based upon Category I of Table 5.5.3.C.iii.
2. Provide parking lot canopy trees (SF landscape area / 200). 1,032/200= 35 (35)
3. Provide parking lot islands (1032 SF)

Parking Area 1
AJ 8810 SF x .075 (7.5%) = 665 SF
EJ @ SF x .01 (1%) = @ SF
665 SF REQ'D.
1. 3 canopy trees required (665 / 200 = 3 trees)
2. 698 SF parking island landscaping has been provided. 3 canopy interior trees have been provided.

Parking Area 2
AJ 7234 SF x .075 (7.5%) = 548 SF
EJ @ SF x .01 (1%) = @ SF
548 SF REQ'D.
1. 3 canopy trees required (548 / 200 = 3 trees)
2. 149 SF parking island landscaping has been provided. @ canopy interior trees have been provided. Refer to deviation request.

Parking Area 3
AJ 33488 SF x .075 (7.5%) = 2511 SF
EJ @ SF x .01 (1%) = @ SF
2511 SF REQ'D.
1. 13 canopy trees required (2511 / 200 = 13 trees)
2. 3387 SF parking island landscaping has been provided. 13 canopy interior trees have been provided.

Parking Area 4
AJ 8342 SF x .075 (7.5%) = 1811 SF
EJ @ SF x .01 (1%) = @ SF
1811 SF REQ'D.
1. 6 canopy trees required (1811 / 200 = 6 trees)
2. 1216 SF parking island landscaping has been provided. 6 canopy interior trees have been provided.

Parking Area 5
AJ 11535 SF x .075 (7.5%) = 865 SF
EJ @ SF x .01 (1%) = @ SF
865 SF REQ'D.
1. 4 canopy trees required (865 / 200 = 4 trees)
2. 515 SF parking island landscaping has been provided. @ canopy interior trees have been provided. Refer to deviation request.

Parking Area 6
AJ 10963 SF x .075 (7.5%) = 822 SF
EJ @ SF x .01 (1%) = @ SF
822 SF REQ'D.
1. 4 canopy trees required (822 / 200 = 4 trees)
2. 868 SF parking island landscaping has been provided. 4 canopy interior trees have been provided. Refer to deviation request.

Parking Area 7
AJ 6184 SF x .075 (7.5%) = 463 SF
EJ @ SF x .01 (1%) = @ SF
463 SF REQ'D.
1. 2 canopy trees required (463 / 200 = 2 trees)
2. 211 SF parking island landscaping has been provided. 1 canopy interior tree has been provided - refer to deviation request.

Building Foundation Planting Calcs (Comm.)

BUILDING	PERIMETER (LF)	FOUNDATION PLANTING (SF) PROVIDED
A	734	2121
B	266	1196
C	486	2623

Building Foundation Planting Calcs (Resi.)

BUILDING	PERIMETER (LF)	FOUNDATION PLANTING (SF) PROVIDED
1	165	156
2	165	348
3	165	348
4	236	N/A (Facade not facing road/drive)
5	266	156
6	261	226
7	261	226
8	236	N/A (Facade not facing road/drive)
9	386	216
10	325	156
11	325	156
12	325	N/A (Facade not facing road/drive)

Parking Perimeter Calculations

PARKING AREA	PERIMETER (LF)	TREES REQUIRED	TREES PROVIDED
1	314	9	15
2	165	5	4
	114	3	2
3	978	16	28
4	371	11	11
5	218	6	1
	218	6	1
6	224	6	1
	241	7	1
7	118	3	3
	158	5	

Interior Street Perimeter Calculations

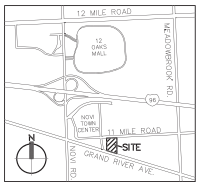
INTERIOR STREET LENGTH (LF)	TREES REQUIRED	TREES PROVIDED
48	1	0
115	3	0
152	5	1
203	5	1
253	8	5
48	1	0
58	2	1
29	1	0
29	1	0
117	3	3
115	3	2
184	5	0
140	4	4
163	5	5
76	2	3
68	2	2
75	2	2
164	5	5
29	1	1
68	2	2
118	3	4

Legend:

- PROPERTY LINE
- INTERIOR PARKING LANDSCAPING (TOTAL: 1032 SF)
- DECORATIVE PAVING: COLORED CONCRETE 1 - REFER TO DETAIL
- DECORATIVE PAVING - COLORED CONCRETE 2
- BUILDING FOUNDATION PLANTING
- BLDG PERIMETER CALCULATION LINE
- PARKING PERIMETER CALCULATION LINE (1 TREE/35 LF)
- LENGTH DEDUCTED FROM PERIMETER CALCULATION
- INTERIOR STREET PERIMETER CALCULATION LINE (1 TREE/35 LF)
- RETAINING WALL
- BIKE RACKS
  18 TOTAL = 36 BIKES - COMMERCIAL
  7 TOTAL = 14 BIKES - RESIDENTIAL

811 Know what's below. Call before you dig.

0' 25' 50' 100'
SCALE: 1"=50'



Key Map
Scale: Not to Scale

SUSAN L. GRISSIM LANDSCAPE ARCHITECT No. 1381 STATE OF MICHIGAN

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Ordinance Plan

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=50'

Date:	Issued for:
06.28.2019	Preliminary Site Plan Submission
10.02.2019	PRO Rezoning Revised Submittal

Sheet Number: L203

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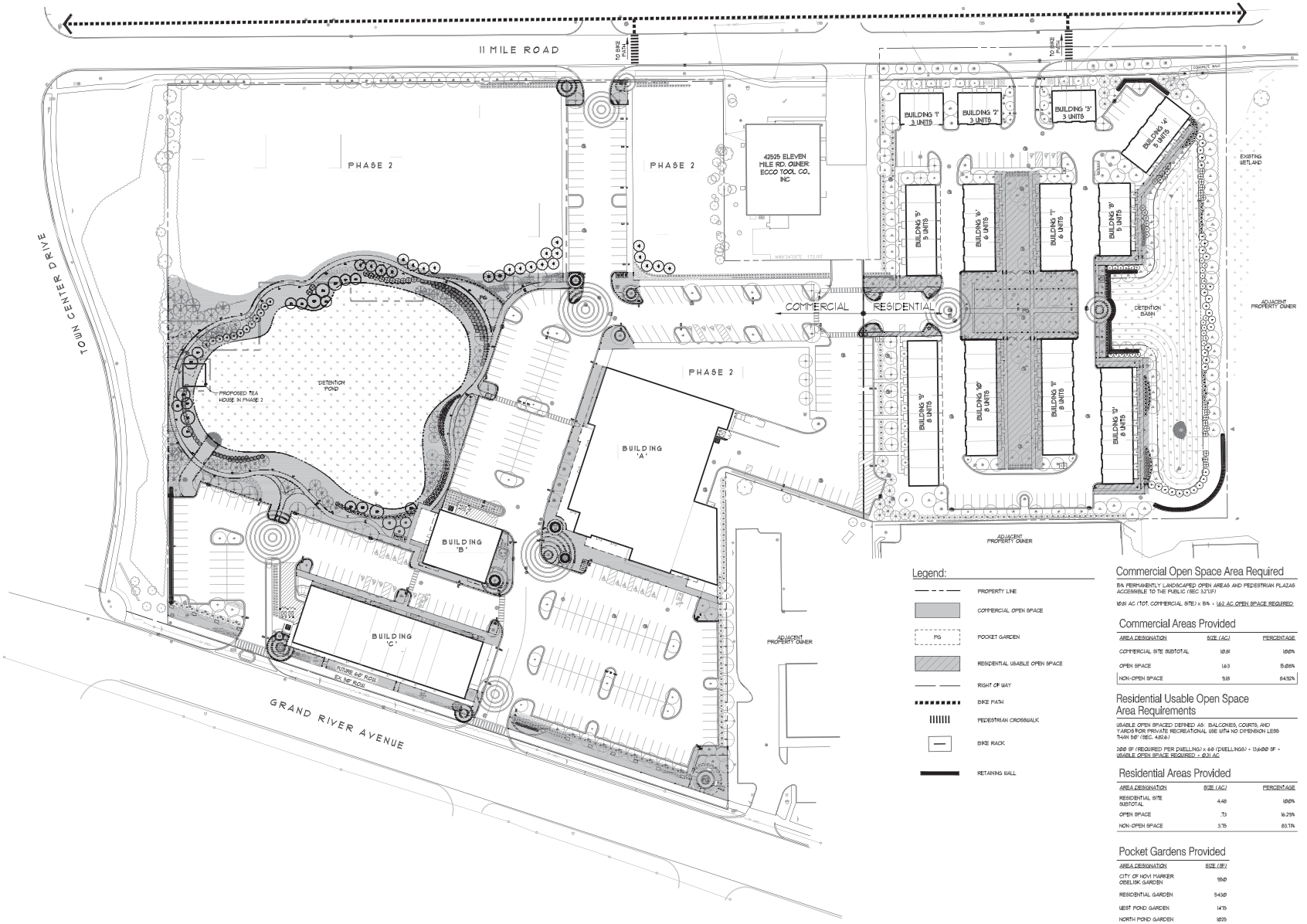

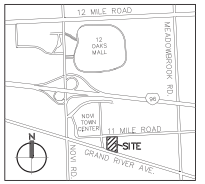

Key Map
Scale: Not to Scale

Legend:

- PROPERTY LINE
- COMMERCIAL OPEN SPACE
- PG — POCKET GARDEN
- RESIDENTIAL USABLE OPEN SPACE
- RIGHT OF WAY
- BIKE PATH
- PEDESTRIAN CROSSWALK
- BIKE RACK
- RETAINING WALL

Commercial Open Space Area Required

8% PERMANENTLY LANDSCAPED OPEN AREAS AND PEDESTRIAN PLAZAS ACCESSIBLE TO THE PUBLIC (SEC 3.27.1.F)

10.81 AC (TOT. COMMERCIAL SITE) x 8% = 1.62 AC OPEN SPACE REQUIRED

Commercial Areas Provided

AREA DESIGNATION	SIZE (AC)	PERCENTAGE
COMMERCIAL SITE SUBTOTAL	10.81	100%
OPEN SPACE	1.63	15.08%
NON-OPEN SPACE	9.18	84.92%

Residential Usable Open Space Area Requirements

USABLE OPEN SPACED DEFINED AS: BALCONIES, COURTS, AND YARDS FOR PRIVATE RECREATIONAL USE WITH NO DIMENSION LESS THAN 50' (SEC. 4.82.6)

200 SF (REQUIRED PER DWELLING) x 68 (DWELLINGS) = 13,600 SF = USABLE OPEN SPACE REQUIRED = 0.31 AC

Residential Areas Provided

AREA DESIGNATION	SIZE (AC)	PERCENTAGE
RESIDENTIAL SITE SUBTOTAL	4.48	100%
OPEN SPACE	.73	16.29%
NON-OPEN SPACE	3.75	83.71%

Pocket Gardens Provided

AREA DESIGNATION	SIZE (SF)
CITY OF NOVI MARKER OBELISK GARDEN	1590
RESIDENTIAL GARDEN	8430
WEST POND GARDEN	1475
NORTH POND GARDEN	1609

811 Know what's below. Call before you dig.

0' 25' 50' 100'
SCALE: 1"=50'

NORTH

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Open Space, Bicycle, and Pedestrian Plan
Phase 1

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=50'

Date:	Issued for:
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10.02.2019	PRO Rezoning Revised Submittal

Sheet Number: L204

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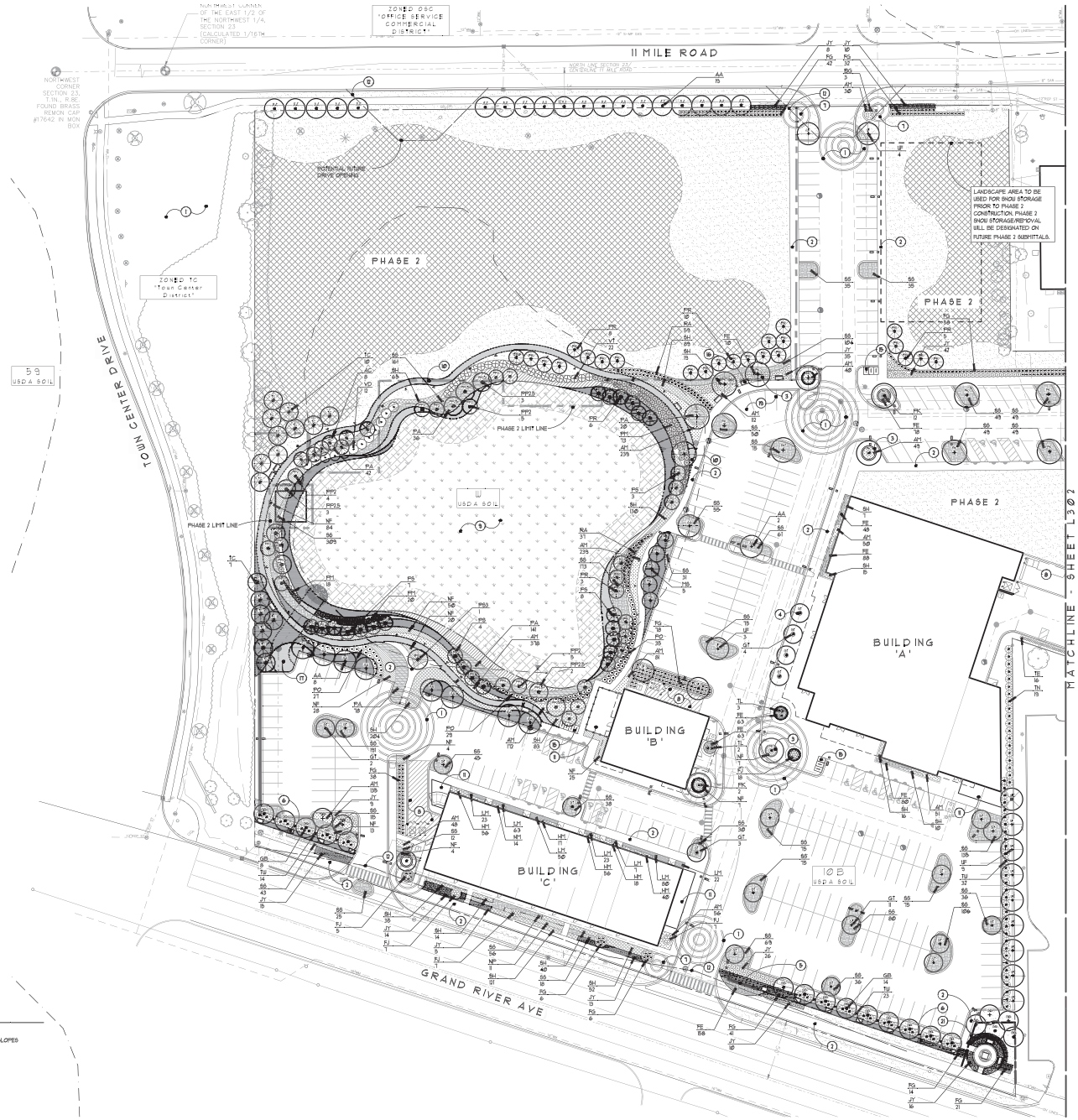


USDA Soils Classification:

10B	MARLETTE SANDY LOAM, 1-6% SLOPES
10C	MARLETTE SANDY LOAM, 6 TO 12 PERCENT SLOPES
11B	CAPAC SANDY LOAM, 0-4% SLOPES
21	HOUGHTON AND ADRIAN MUCKS
33	LENAWEE SILTY CLAY LOAM
41B	AQUENTS, SANDY, LOAMY, UNDULATING
59	URBAN LAND
BwadB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Landscape Planting Legend:

- PLANT TAG - REFER TO PLANT LIST FOR SPECIFICATION AND QUANTITIES ON L404
- GREENBELT CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- ROW / GREENBELT SUB-CANOPY STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- INTERIOR STREET TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT INTERIOR TREES SEE LANDSCAPE ORDINANCE PLANS
- PARKING LOT PERIMETER TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- RESIDENTIAL BUILDING UNIT TREES - DECIDUOUS AND EVERGREEN. SEE LANDSCAPE ORDINANCE PLANS
- WOODLAND REPLACEMENT TREES SEE WOODLAND REPLACEMENT PLANS
- ADDITIONAL IDENTITY TREES
- FOUNDATION TREE
- EXISTING TREES TO REMAIN - PROTECT THROUGHOUT CONSTRUCTION
- SODDED LAWN
- MEADOW LAWN - TYPE 'A' ON 2" TOPSOIL
- STORMWATER SEED MIXTURE TYPE 'B' ON 2" TOPSOIL
- EMERGENT WETLAND SEED MIXTURE TYPE 'C' - SEED TO EXISTING WATER LINE AT TIME OF CONSTRUCTION
- BIKE RACKS - SEE TYP. DETAIL
- BENCH - SEE TYP. DETAIL
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'A' OVER NON-WOVEN FILTER FABRIC
- 4" DEPTH DECORATIVE STONE MULCH TYPE 'B' OVER NON-WOVEN FILTER FABRIC
- CROSSWALK
- RETAINING WALL - REFER TO CIVIL DOCUMENTATION
- LIGHT POLES - REFER TO LIGHTING PLAN
- LIGHT BOLLARDS - REFER TO LIGHTING PLAN
- MAIL BOXES REFER TO DETAIL

Note Key:

(APPLIES TO SHEETS L301 - L303, NOT ALL APPLY PER SHEET)

1. HEAVY DUTY COLORED CONCRETE ACCENT PAVING, TYP. - REFER TO DETAIL AND CIVIL PLANS
2. CONCRETE WALK, TYP.
3. IN-GROUND PLANTERS WITH ORNAMENTAL TREES OR PLANTINGS - REFER TO DETAILS
4. STREET TREES IN TREE GRATES
5. SAKURA NOVI IDENTIFICATION SIGNAGE - REFER TO ARCHITECTURAL PLANS
6. MASONRY PIERS WITH ORNAMENTAL FENCING - REFER TO ARCHITECTURAL PLANS
7. PEDESTRIAN PLAZA WITH COLORED CONCRETE ACCENT PAVING AND ORNAMENTAL PLANTINGS
8. SERVICE/LOADING AREA WITH PLANTING SCREEN
9. DETENTION POND / WATER FEATURE WITH AERATING FOUNTAINS
10. 6' WIDE DECORATIVE STONE WALKWAY
11. OUTDOOR DINING
12. SIGHT VISION TRIANGLE
13. TERRACE OVERLOOK
14. RESIDENTIAL IDENTIFICATION MONUMENT SIGN
15. BIKE RACK, TYP. - REFER TO DETAIL
16. BENCH, TYP. - REFER TO DETAIL
17. STORM BASIN MAINTENANCE ACCESS ROUTE - REFER TO CIVIL DRAWINGS
18. OPEN LAWN GAME AREA
19. RIDE SHARING PICK UP / DROP OFF AREA
20. ORNAMENTAL MOON GATE
21. EASEMENT FOR CITY GATEWAY FEATURE
22. DETENTION BASIN - REFER TO CIVIL DRAWINGS

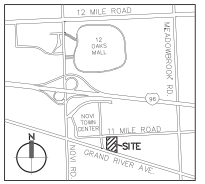
General Notes:

1. ALL PLANTS SHALL BE LOCATED TO PROVIDE THE MINIMUM REQUIRED SET BACK FROM UTILITIES AND PROPERTY LINES. THE LANDSCAPE PLANTING PLANS IN THE FINAL SITE PLAN SUBMISSION WILL PROVIDE DIMENSION TO THE UTILITIES AND PROPERTY LINES.
2. THE LANDSCAPE IMPROVEMENTS ARE SCHEDULED FOR SPRING 2021.
3. REFER TO SHEET L403 FOR ADDITIONAL LANDSCAPE NOTES AND DETAILS.
4. WE ARE PROPOSING 11 BIKE RACKS TO ACCOMMODATE 34 BIKES TO BE INSTALLED IN LOCATIONS SHOWN IN PHASE 1. 18 BIKE RACKS ARE IN THE COMMERCIAL AREA AND 1 ARE IN THE RESIDENTIAL AREA. ADDITIONAL BIKE RACKS WILL BE ADDED IN PHASE 2 AS REQUIRED.

811 Know what's below. Call before you dig.

0' 20' 40' 80'

SCALE: 1"=40'



Key Map
Scale: Not to Scale

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project: Sakura Novi
Novi, Michigan

Sheet: Landscape Planting Plan

Job Number: A01-191
Drawn: MS/EG/SE
Checked: SG
Scale: 1"=40'

Date:	Issued for:
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10.02.2019	PRO Rezoning Revised Submittal

Sheet Number: L301

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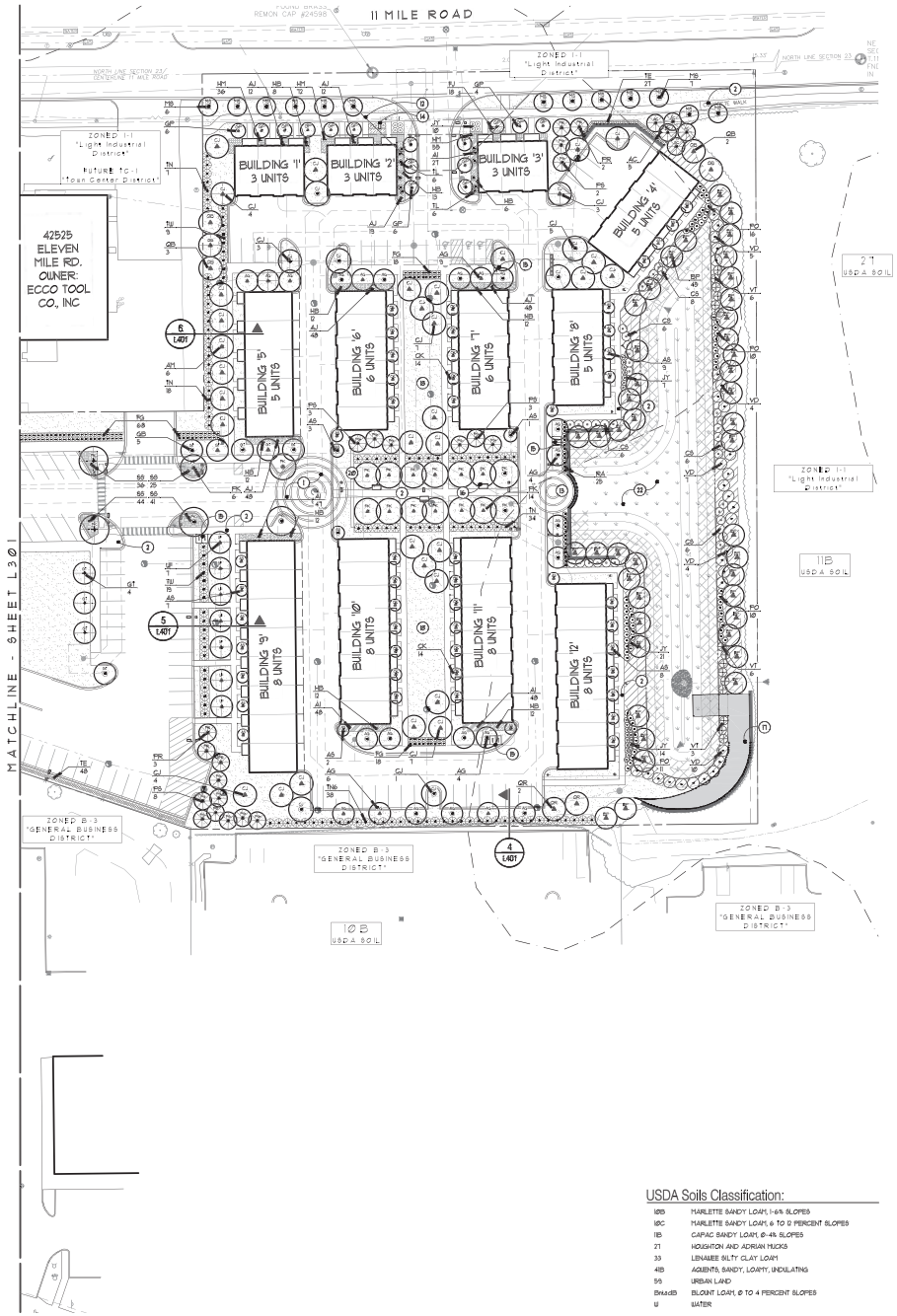

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Note Key:

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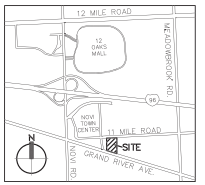
59	URBAN LAND
BwaxB	BLOUNT LOAM, 0 TO 4 PERCENT SLOPES
W	WATER

Know what's below. Call before you dig. 811

0' 20' 40' 80'

SCALE: 1"=40'



Key Map
Scale: Not to Scale

GRISSIM METZ ASSOCIATES ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Landscape Planting Plan

Job Number:	A01-191
Drawn:	MS/EG/SE
Checked:	SG
Scale:	1"=40'

Date:	Issued for:
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Sheet Number: L302

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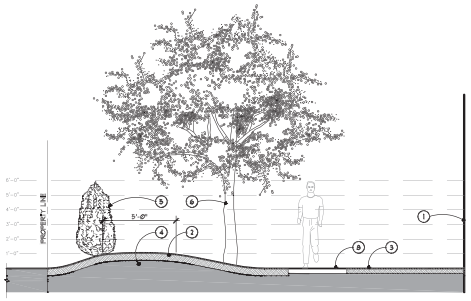
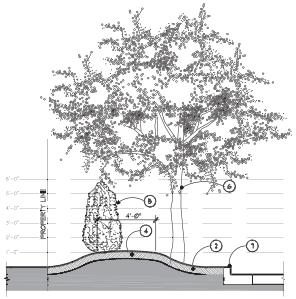


8 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"

7 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"



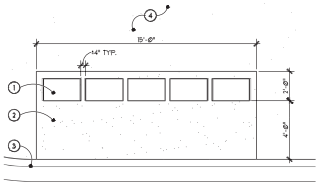
6 L302 Cross Section Through Planting Buffer
SCALE: 1/4" = 1'-0"

Note Key: DETAILS 6-8 (NOT ALL APPLY TO EACH)

1. LINE OF BUILDING FACE
2. SODDED LAWN ON 6" DEPTH TOPSOIL ON LOAM FILL BERM
3. SODDED LAWN
4. LOAM FILL BERM WITH 5'-0" WIDE MIN. CROWN AND 13 MAX. SLOPES
5. EVERGREEN HEDGE - REFER TO LANDSCAPE PLAN
6. DECIDUOUS TREE - REFER TO LANDSCAPE PLAN
7. CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
8. CONCRETE SIDEWALK - REFER TO CIVIL DOCUMENTS

16 UNIT MAILBOX - CLUSTER BOX UNIT
MANUF. SALSBURY INDUSTRIES
WEBSITE MAILMAILBOXES.COM
MODEL 3346BLK-U
COLOR BLACK

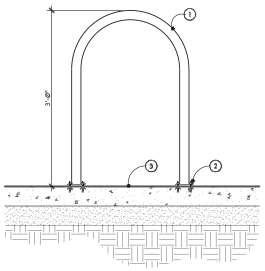
5 Typical 16 Unit Mailbox
NOT TO SCALE



1. 36"H x 15"D x 62"H 16 UNIT MAILBOX - INSTALLED PER MANUFACTURER
2. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS
3. CONCRETE CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
4. LAWN - REFER TO LANDSCAPE PLAN

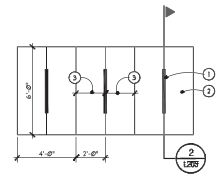
4 Typical Mailbox Layout Plan
SCALE: 1/4" = 1'-0"

3 Typical Bench
NOT TO SCALE



1. 'U' SHAPED ORNAMENTAL BIKE RACK MANUF. BAI PRODUCTS PHONE# 5713-48-3348 COLOR BLACK MATTE FINISH
2. MODEL # 2441 SURFACE MOUNT (CONCRETE INSTALL) FLANGE MOUNT TO CONCRETE SLAB W/HILTI EXPANSION ANCHORS - SIZE & INSTALL PER MANUFACTURER RECOMMENDATIONS
3. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS

2 Typical Bicycle Rack Detail
SCALE: 1" = 1'-0"



1. 'U' SHAPED ORNAMENTAL BIKE RACK
2. CONCRETE SLAB - REFER TO CIVIL DOCUMENTS
3. BIKE PARKING SPACE, TYP.

1 Typical Bicycle Parking Layout Plan
SCALE: 1/4" = 1'-0"

GRISSIM
METZ ASSOCIATES
ANDRIESE
Landscape Architecture
311 East Cady Street
Northville, MI 48167
Ph: 248-347-7010

Project:
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Novi, Michigan

Sheet:
Site Details

Job Number:	A01-191
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Checked:	SG
Scale:	As Noted

Date:	Issued for:
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Sheet Number: L401

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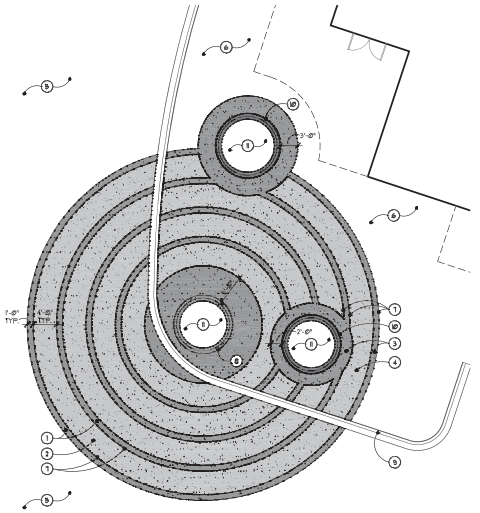
Precedent Image



Note Key:

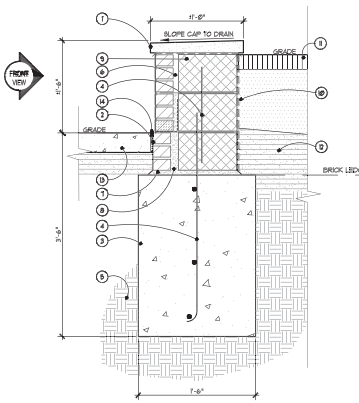
1. HEAVY DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR A
2. HEAVY DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR B
3. LIGHT DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR A
4. LIGHT DUTY INTEGRALLY COLORED CONCRETE PAVING WITH RAKED FINISH, COLOR B
5. ASPHALT PAVING
6. NON-COLORED LIGHT DUTY CONCRETE PAVING WITH MEDIUM BROOM FINISH
7. PROVIDE DOWELED EXPANSION JOINTS WITH BACKER ROD AND SEALANT BETWEEN CONCRETE POURS. SEALANT COLOR TO MATCH COLORED CONCRETE BANDS. SUBMIT SAMPLES FOR APPROVAL
8. CONCRETE PLANTER CURB POURED INTEGRALLY WITH COLORED CONCRETE PAVING, COLOR 'A' - REFER TO DETAIL
9. CONCRETE CURB AND GUTTER - REFER TO CIVIL DOCUMENTS
10. MASONRY SEATWALL - REFER TO DETAIL
11. PLANTED AREA - REFER TO LANDSCAPE PLANS

NOTE: REFER TO CIVIL DOCUMENTS FOR TYPICAL PAVING DETAILS

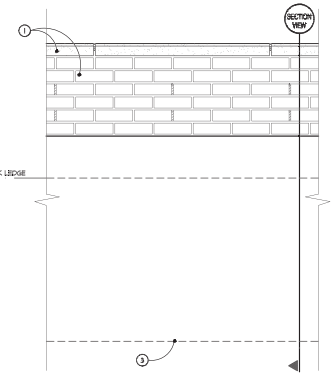
Colored Concrete:

MANUFACTURER: L.M. SCOFIELD
COLOR A: CHROMIX, C-34, DARK GRAY
COLOR B: CHROMIX, C-80, COOL GRAY
CURING COMPOUND AND SEALER: LITHOCHROME COLORMAX SEALER, COLOR-MATCH TO COLORED CONCRETE, APPLY (2) COATS, SPRAYED THEN ROLLED

1 L402 Typical Decorative Paving Enlargement
SCALE: 1" = 10'-0"



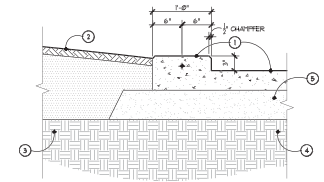
Section View



Front View

1. BRICK PLANTER WALL WITH CAST STONE CAP MATERIAL AND BRICK COURSING PATTERN TO MATCH PLANTER WALL AT ENTRY FROM GRAND RIVER AVENUE - REFER TO ARCHITECTURAL DRAWINGS
2. (3) COURSES BELOW GRADE, TYP. DAMP PROOF FACE OF ALL MASONRY BELOW GRADE, TYP.
3. CONCRETE FOUNDATION
4. VERT. BAR REINFORCING
5. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR
6. VOID SPACE
7. 1" MORTAR SETTING BED
8. GROUT FILL FULL VOID SPACE BELOW FLASHING, TYP.
9. 12" CMU BACKUP - GROUT FILL ALL CORES AND VOID SPACES BETWEEN BLOCKS
10. DAMP PROOF FACE OF CMU BLOCK WHERE ADJACENT TO BACKFILL
11. LANDSCAPE AREA - REFER TO LANDSCAPE PLANS AND DETAILS
12. ENGINEERED SAND BACKFILL COMPACTED TO 98% MOD-FIED PROCTOR
13. TYPICAL INTEGRALLY COLORED CONCRETE SIDEWALK
14. EXPANSION JOINT WITH BACKER ROD AND SEALANT, SEALANT COLOR TO MATCH COLORED CONCRETE

2 L402 18" Masonry Seatwall
NOT TO SCALE



1. TYPICAL CONCRETE SIDEWALK WITH INTEGRALLY FORMED PLANTER CURB WITH MEDIUM BROOM FINISH. PROVIDE (1) #4 REBAR CONTINUOUS. SAWCUT VERTICAL CONTROL JOINTS EVERY 1.4' O.C.
2. LANDSCAPE AREA
3. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR UNDER PLANT BED
4. COMPACTED SUBGRADE TO 95% MODIFIED PROCTOR UNDER PAVING AND CURBS
5. 4" DEPTH SAND BASE COMPACTED TO 95% MODIFIED PROCTOR

3 L402 Typical Concrete Planter Curb Detail
SCALE: 1" = 1'-0"

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Landscape Architecture

311 East Cady Street
Northville, MI 48167

Ph: 248-347-7010

Project:
Sakura Novi
Novi, Michigan

Sheet:
Site Details

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Drawn:	MS/EG/SE
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Scale:	As Noted

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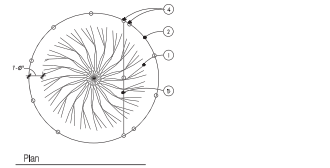
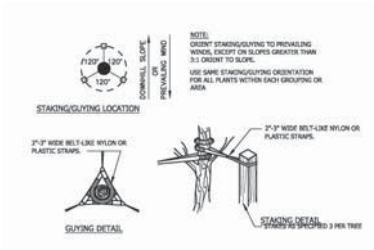
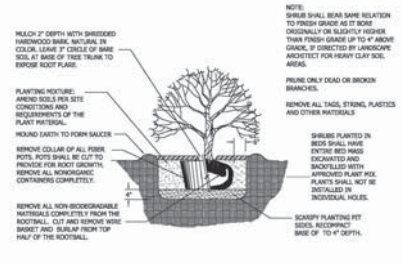


8 L403 Tree Protection Detail
NOT TO SCALE



6 L403 Tree Staking Detail
NOT TO SCALE

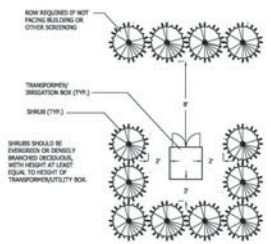


3 L403 Shrub Planting Detail
NOT TO SCALE

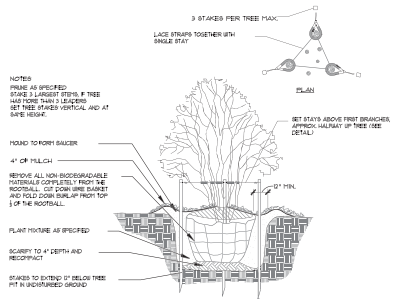
CITY OF NOVI LANDSCAPE NOTES:

1. ALL PLANT MATERIALS ARE TO BE INSTALLED IN A SOUND, WORKMAN-LIKE MANNER AND IN ACCORDANCE WITH THE CURRENT CITY OF NOVI PLANTING REQUIREMENTS
2. ALL PLANT MATERIALS ARE TO BE NORTHERN NURSERY GROWN NO1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL CONFORM TO THE CURRENT AAN STANDARDS FOR NURSERY STOCK. THEY SHALL BE PLANTED ACCORDING TO THE CITY OF NOVI PLANTING DETAILS AND SPECIFICATIONS. THE CITY SHALL HAVE THE RIGHT TO INSPECT THE PLANT MATERIALS PRIOR TO PLANTING AND TO REJECT ANY PLANT MATERIALS DEEMED NOT TO MEET THE STANDARDS OF THE ZONING ORDINANCE.
3. ALL TREES SHALL HAVE A CENTRAL LEADER AND A RADIAL BRANCHING STRUCTURE. PARK GRADE TREES ARE NOT ACCEPTABLE. ALL TREES SHALL BE BALLED AND BURLAPPED (B&B)
4. ANY DECIDUOUS CANOPY TREES WITH BRANCHES THAT MAY TEND TO DEVELOP INTO "V" CROTCHES SHALL BE SUBORDINATED SO AS NOT TO BECOME DOMINANT BRANCHES.
5. MULCH SHALL BE NATURAL COLOR FINELY SHREDDED HARDWOOD BARK FOR ALL PLANTINGS. 3" THICK FOR TREES IN 4-FOOT DIAMETER CIRCLE WITH 3" PILLED AWAY FROM TRUNK. 2" THICK FOR SHRUBS AND SHRUB BEDS AND 1½" THICK BARK FOR PERENNIALS
6. ALL PLANT MATERIAL SHALL BE WARRANTED FOR TWO (2) FULL YEARS AFTER DATE OF ACCEPTANCE BY THE CITY. IF NOVI, ALL UNHEALTHY AND DEAD MATERIAL SHALL BE REPLACED WITHIN ONE (1) YEAR OR THE NEXT APPROPRIATE PLANTING PERIOD, WHICH EVER COMES FIRST.
7. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION, INCLUDING WATERING, CULTIVATION, WEED CONTROL AND SOIL ENRICHMENTS AS MAY BE NECESSARY.
8. A MINIMUM OF ONE WEED CONTROL CULTIVATION PER MONTH OCCURRING IN JUNE, JULY AND AUGUST SHALL BE PERFORMED DURING THE TWO-YEAR ESTABLISHMENT PERIOD.
9. ANY SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED IN WRITING BY THE CITY OF NOVI PRIOR TO INSTALLATION.
10. ALL TREE WRAP, STAKES, AND GUYS MUST BE REMOVED BY JULY 1ST FOLLOWING THE FIRST WINTER SEASON AFTER INSTALLATION.
11. ALL LANDSCAPE AREAS ARE TO BE MAINTAINED IN HEALTHY GROWING CONDITION FREE OF DEBRIS AND REFUSE AND IN CONFORMANCE WITH THE APPROVED LANDSCAPE PLAN
12. ALL LANDSCAPE AREAS ARE TO BE WATERED BY A FULLY AUTOMATIC IRRIGATION SYSTEM EXCEPT AROUND THE DETENTION PONDS WHICH WILL HAVE QUICK COUPLERS LOCATED 100' APART TO ACCESS FOR HOSE WATERING.
13. CONTRACTOR TO REMOVE ALL CONSTRUCTION DEBRIS AND EXCESS MATERIALS FROM THE SITE PRIOR TO FINAL ACCEPTANCE.
14. PLANT MATERIALS EXCEPT SOD, GROUND COVERS, AND CREEPING VINE TYPE PLANTINGS, SHALL NOT BE LOCATED WITHIN FOUR (4) FEET OF THE PROPERTY LINE.
15. ALL TRANSFORMERS ARE TO BE SCREENED ON THREE SIDES (YIN) IN ACCORDANCE WITH THE CITY OF NOVI ORDINANCE AND SO AS TO NOT CONFLICT WITH DTE RESTRICTIONS. (SEE DETAIL THIS SHEET)
16. ALL BERMS MUST BE PLANTED WITH A COMBINATION OF TREES, SHRUBS, LAWN OR OTHER GROUND COVERS
17. THE OWNER IS RESPONSIBLE FOR REQUEST OF FINAL INSPECTION AND ACCEPTANCE OF THE LANDSCAPE AT THE END OF THE 2-YEAR GUARANTEE PERIOD.
18. THE PROVIDER OF THE FINANCIAL GUARANTEE FOR THE LANDSCAPE INSTALLATION SHALL BE FULLY RESPONSIBLE FOR COMPLETION OF THE LANDSCAPE INSTALLATION AND MAINTENANCE PER THE APPROVED LANDSCAPE PLAN AND APPLICABLE CITY ORDINANCES.
19. MISS DIG MUST BE NOTIFIED TO LOCATE ALL UNDERGROUND BEFORE PLANTING BEGINS.
20. THE CONTRACTOR SHALL INSTALL AND GUARANTEE ALL PLANT MATERIALS FOR 2 YEARS AND MAINTAIN ALL SOD LANDSCAPE AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF NOVI ZONING ORDINANCE.

THE DETAILS AND NOTES SHOWN ON THIS PAGE ARE STANDARDS. THESE DETAILS ARE NOT ALL INCLUSIVE AND ARE NOT MEANT TO SUBSTITUTE FOR ANY ORDINANCE OR CODE REQUIREMENT. FOR COMPLETE LANDSCAPE REQUIREMENTS, SEE THE ZONING ORDINANCE LANDSCAPE SECTION 5.5, THE LANDSCAPE DESIGN MANUAL AND THE APPROPRIATE REFERENCES WITHIN THE APPLICABLE ZONING CLASSIFICATION AND ANY OTHER APPLICABLE CODE REQUIREMENTS.



7 L403 Transformer Screening Detail
NOT TO SCALE



4 L403 Multi-stem Tree Planting Detail
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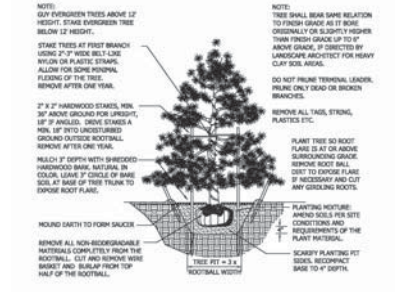
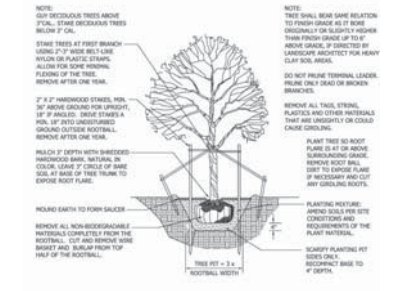
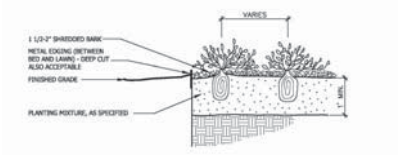


1 L403 Evergreen Tree Planting Detail
NOT TO SCALE



2 L403 Deciduous Tree Planting Detail
NOT TO SCALE



5 L403 Groundcover / Perennial Planting Detail
NOT TO SCALE

Key Map
Scale: Not to Scale

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Seed Mix Type 'A' - Low Maintenance, No-Mow Meadow Lawn

SCOTTISH LINKS MIXTURE:

COMMON NAME	LBS/AC
ARUBA RED FESCUE	21.18
JS CHEWINGS FESCUE	21.18
ECOSTAR HARD FESCUE	21.18
MARCO POLO SHEEP'S FESCUE	21.18
	87.72
TOTAL	

PROPORTION = 25%
MINIMUM PURITY = 95%
MINIMUM GERMINATION = 85%

Seed Mix Type 'B' - Stormwater Seed Mix

SCIENTIFIC NAME	COMMON NAME	LBS/AC
PERMANENT GRASSES/SEDGES/RUSHES:		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX CRISTATELLA	CRESTED OVAL SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	3.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELYTRUS VIRGINICUS	VIRGINIA WILD RYE	24.00
GLYCERIA STRIATA	FOWL MANNA GRASS	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	1.00
PANICUM VIRGATUM	SWITCH GRASS	2.00
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	3.00
SCIRPUS ATROVIRENS	DARK GREEN RUSH	2.00
SCIRPUS CYPERINUS	WOOL GRASS	1.00
TOTAL		41.50
TEMPORARY COVER:		
AVENA SATIVA	COMMON OAT	340.00
LOLIUM MULTIFLORUM	ANNUAL RYE	100.00
TOTAL		440.00
FORBS & SHRUBS:		
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.50
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2.00
BIDENS SPP.	BIDENS SPECIES	2.00
EUPATORIUM PERFOLIATUM	COMMON BONESET	1.00
HELENIUM AUTUMNALE	SNEEZEWEED	2.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	4.00
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	0.50
MIMULUS RINGENS	MONKEY FLOWER	1.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN	1.00
RUDBECKIA TRILOBA	BROWN-EYED SUSAN	1.50
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	1.00
SENNA HEBECARPA	WILD SENNA	2.00
SYMPHYOTRICHUM LANCEOLATUM	PANICLED ASTER	0.50
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50
THALICTRUM DASYCARPUM	PURPLE MEADOW RUE	2.00
TOTAL		26.00

Seed Mix Type 'C' - Emergent Wetland Seed Mix

SCIENTIFIC NAME	COMMON NAME	LBS/AC
PERMANENT GRASSES/SEDGES/RUSHES:		
BOLBOSCHOENUS FLUVIATILIS	RIVER BULRUSH	1.00
CAREX CONOSA	BRISTLY SEDGE	2.50
CAREX LACUSTRIS	COMMON LAKE SEDGE	0.50
CAREX LURIDA	BOTTLEBRUSH SEDGE	4.00
CAREX STRICTA	COMMON TUSSOCK SEDGE	1.00
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00
ELEOCHARIS PALUSTRIS	GREAT SPIKE RUSH	1.00
JUNCUS EFFUSUS	COMMON RUSH	1.00
LEERSIA ORYZOIDES	RICE CUT GRASS	3.00
SCHOENOPLECTUS ACUTUS	HARD-STEMMED BULRUSH	2.50
SCHOENOPLECTUS PUNGENS	CHAIRMAKER'S RUSH	1.50
SCHOENOPLECTUS TABERNAEMONTANI	GREAT BULRUSH	6.00
TOTAL		26.00
TEMPORARY COVER:		
AVENA SATIVA	COMMON OAT	340.00
LOLIUM MULTIFLORUM	ANNUAL RYE	100.00
TOTAL		440.00
FORBS:		
ACORUS AMERICANUS	SWEET FLAG	1.00
ALISMA SUBCORDATUM	COMMON WATER PLANTAIN	2.00
ASCLEPIAS INCARNATA	SWAMP MILKWEED	1.00
BOEHMERIA CYLINDRICA	FALSE NETTLE	1.00
CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	6.00
DECODON VERTICILLATUS	SWAMP LOOSESTRIFE	0.50
EUTROCHIUM MACULATUM	SPOTTED JOE-PYE WEED	0.50
HIBISCUS SPP.	ROSE MALLOW SPECIES	4.00
IRIS VIRGINICA V. SHREVEI	BLUE FLAG	6.00
LOBELIA CARDINALIS	CARDINAL FLOWER	0.25
LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	0.25
LYCOPUS AMERICANUS	COMMON WATER HOREHOUND	1.00
MIMULUS RINGENS	MONKEY FLOWER	1.00
PELTANDRA VIRGINICA	ARROW ARUM	16.00
PENTHORUM SEDOIDES	DITCH STONECROP	0.50
PERSICARIA SPP.	PINKWEED SPECIES	2.00
PONTEDERIA CORDATA	PICKEREL WEED	4.00
SAGITTARIA LATIFOLIA	COMMON ARROWHEAD	2.00
SPARGANIUM EURYCARPUM	COMMON BUR REED	6.00
VERBENA HASTATA	BLUE VERVAIN	1.00
TOTAL		56.00

Plant List - Woodland Replacement

Evergreen Trees

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
AC	7	Abies concolor	8' Ht.	B&B, unsheared
		White Fir		full to ground
PR	11	Pinus resinosa	8' Ht.	B&B, unsheared
		Red Pine		full to ground
PS	20	Pinus strobus	8' Ht.	B&B, unsheared
		Eastern White Pine		full to ground
PS3	1	Pinus strobus	12' Ht.	B&B, unsheared
		Eastern White Pine		full to ground
TC	17	Tsuga canadensis	8' Ht.	B&B, unsheared
		Canadian Hemlock		full to ground

Shrubs

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
PO	10	Physocarpus opulifolius	36"	plant 4' o.c.
		Common Ninebark	spd, min.	
VT	27	Viburnum trilobum	36"	plant 6' o.c.
		American Cranberrybush	spd, min.	

Grasses

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
SH	482	Sporobolus heterolepis	24" Ht./spd.	plant 24" o.c.
		Prairie Dropseed	min. cont.	
SS	643	Schizachyrium scoparium 'The Blues'	24" Ht./spd.	plant 19" o.c.
		Little Bluestem	min. cont.	

Plant List

Grasses

CODE	QTY.	DESCRIPTION	SIZE	COMMENTS
FE	668	Festuca glauca 'Elijah Blue'	10" Ht./spd.	plant 12" o.c.
		Elijah Blue Fescue	min. cont.	
FG	223	Fargesia nitida 'Great Wall'	5' Ht.	plant 3' o.c.
		Great Wall Blue Fountain Clumping Bamboo		
FJ	57	Fargesia nitida 'Jiuzhaigou'	3' Ht.	plant 24" o.c.
		Red Clumping Bamboo		
HM	364	Hakonechloa macra	18" Ht./spd.	plant 18" o.c.
		Japanese Forest Grass	min. cont.	
SH	418	Sporobolus heterolepis	24" Ht./spd.	plant 24" o.c.
		Prairie Dropseed	min. cont.	
SS	2111	Schizachyrium scoparium 'The Blues'	24" Ht./spd.	plant 24" o.c.
		Little Bluestem	min. cont.	

Plant List

Deciduous Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
AG	23	Acer saccharum 'Green Mountain'	3" cal.	12.9%	9.9%	B&B
		Green Mountain Sugar Maple				
AA	29	Acer x freemanii 'Autumn Blaze'	3" cal.	12.9%	7%	B&B
		Autumn Blaze Maple				
AB	30	Amelanchier canadensis 'Autumn Brilliance'	8' Ht.	7.3%	7.3%	B&B, multi-stem
		Autumn Brilliance Serviceberry				
BP	45	Betula papyrifera	8' Ht.	10.3%	10.3%	B&B, multi-stem
		Canoe Birch				
CJ	40	Cercidiphyllum japonicum 'Red Fox'	7' Ht.	9.7%	9.7%	
		Red Fox Katsura Tree				
CK	24	Cornus kousa	8' Ht.	5.8%	5.8%	B&B, multi-stem
		Kousa Dogwood				
GB	22	Ginkgo biloba	3" cal.	9%	5.3%	B&B
		Maidenhair Tree				
GP	15	Ginkgo biloba 'Princeton Sentry'	3" cal.	9%	3.6%	B&B
		Princeton Sentry Maidenhair Tree				
GT	29	Gleditsia triacanthos f.inermis 'Skyline'	3" cal.	7%	7%	B&B
		Skyline Honeylocust				
MS	18	Malus 'Sugar Tyme'	2" cal.	4.4%	4.4%	B&B
		Sugar Tyme Crabapple				
PK	35	Prunus serrulata 'Kwanzan'	3" cal.	13.3%	8.5%	B&B
		Japanese Flowering Cherry Tree				
PP 2	14	Prunus subhirtella 'Pendula'	2" cal.	13.5%	5%	B&B
		Higan Cherry				
PP 2.5	8	Prunus subhirtella 'Pendula'	2.5" cal.	13%	5%	B&B
		Higan Cherry				
QB	5	Quercus bicolor	3" cal.	1.7%	1.2%	B&B
		Swamp White Oak				
QR	1	Quercus rubra	3" cal.	1.7%	0.2%	B&B
		Red Oak				
UF	24	Ulmus 'Frontier'	3" cal.	5.8%	5.8%	B&B
		Frontier Hybrid Elm				

Evergreen Trees

CODE	QTY.	DESCRIPTION	SIZE	GENUS %	SPECIES %	COMMENTS
AC	5	Abies concolor	8' Ht.	1.2%	1.2%	B&B, unsheared
		White Fir				full to ground
PR	28	Pinus resinosa	8' Ht.	10.7%	6.8%	B&B, unsheared
		Red Pine				full to ground
PS	16	Pinus strobus	8' Ht.	10.7%	3.9%	B&B, unsheared
		Eastern White Pine				full to ground

Shrubs

CODE	QTY.	DESCRIPTION	SIZE			COMMENTS
BG	3	Buxus 'Green Velvet'	18" Ht./spd.			plant 18" o.c.
		Green Velvet Boxwood	cont.			
CS	38	Cornus sericea	36"			plant 6' o.c.
		Redtwig Dogwood	spr. min.			
JY	235	Juniperus horizontalis 'Youngstown'	24"-30"			plant 36" o.c.
		Youngstown Andorra Juniper	spd. min.			
PM	110	Pinus mugo	30"			plant 4' o.c.
		Mugo Pine	spd. min.			
PO	130	Physocarpus opulifolius	36"			plant 4' o.c.
		Common Ninebark	spd. min.			
RA	121	Rhus aromatica 'Gro-Low'	30"			plant 3' o.c.
		Gro-Low Fragrant Sumac	spd. min.			
TE	91	Thuja occidentalis 'Smaragd'	5' Ht.			plant 30" o.c.
		Emerald Green Arborvitae				
TL	17	Thuja occidentalis 'Little Giant'	30"			plant as shown
		Little Giant Arborvitae	spd. min.			
TN	78	Thuja occidentalis 'Nigra'	5' Ht.			B&B, 6' o.c.
		Dark Green Arborvitae				
TNB	38	Thuja occidentalis 'Nigra'	6' Ht.			B&B, 8' o.c.
		Dark Green Arborvitae				
TW	97	Thuja occidentalis 'Woodwardii'	30"			plant 6' o.c.
		Woodward Arborvitae	spd. min.			
VD	42	Viburnum dentatum	36"			plant 5' o.c.
		Arrowwood Viburnum	spd. min.			
VT	27	Viburnum trilobum	36"			plant 6' o.c.
		American Cranberrybush	spd. min.			

Groundcover and Perennials

CODE	QTY.	DESCRIPTION	SIZE			COMMENTS
AI	170	Astilbe chinensis 'Vision Inferno'	24" Ht./spd.			plant 18" o.c.
		Chinese Astilbe	min. cont.			
AJ	187	Astilbe japonica 'Sister Teresa'	24" Ht./spd.			plant 18" o.c.
		Sister Teresa Astilbe	min. cont.			
AM	1680	Allium millenium	12" Ht./spd.			plant 14" o.c.
		Ornamental Onion	min. cont.			
HS	99	Hosta 'Blue Angel'	24" Ht./spd.			plant 36" o.c.
		Blue Angel Hosta	min. cont.			
LM	268	Liriope muscari 'Big Blue'	10" Ht./spd.			plant 16" o.c.
		Big Blue Lilyturf	min. cont.			
NF	201	Nepeta 'Walkers Low'	24" Ht./spd.			plant 36" o.c.
		Walkers Low Catmint	min. cont.			
PA	317	Perovskia atriplicifolia 'Longin'	12" Ht./spd.			plant 30" o.c.
		Russian sage	min. cont.			

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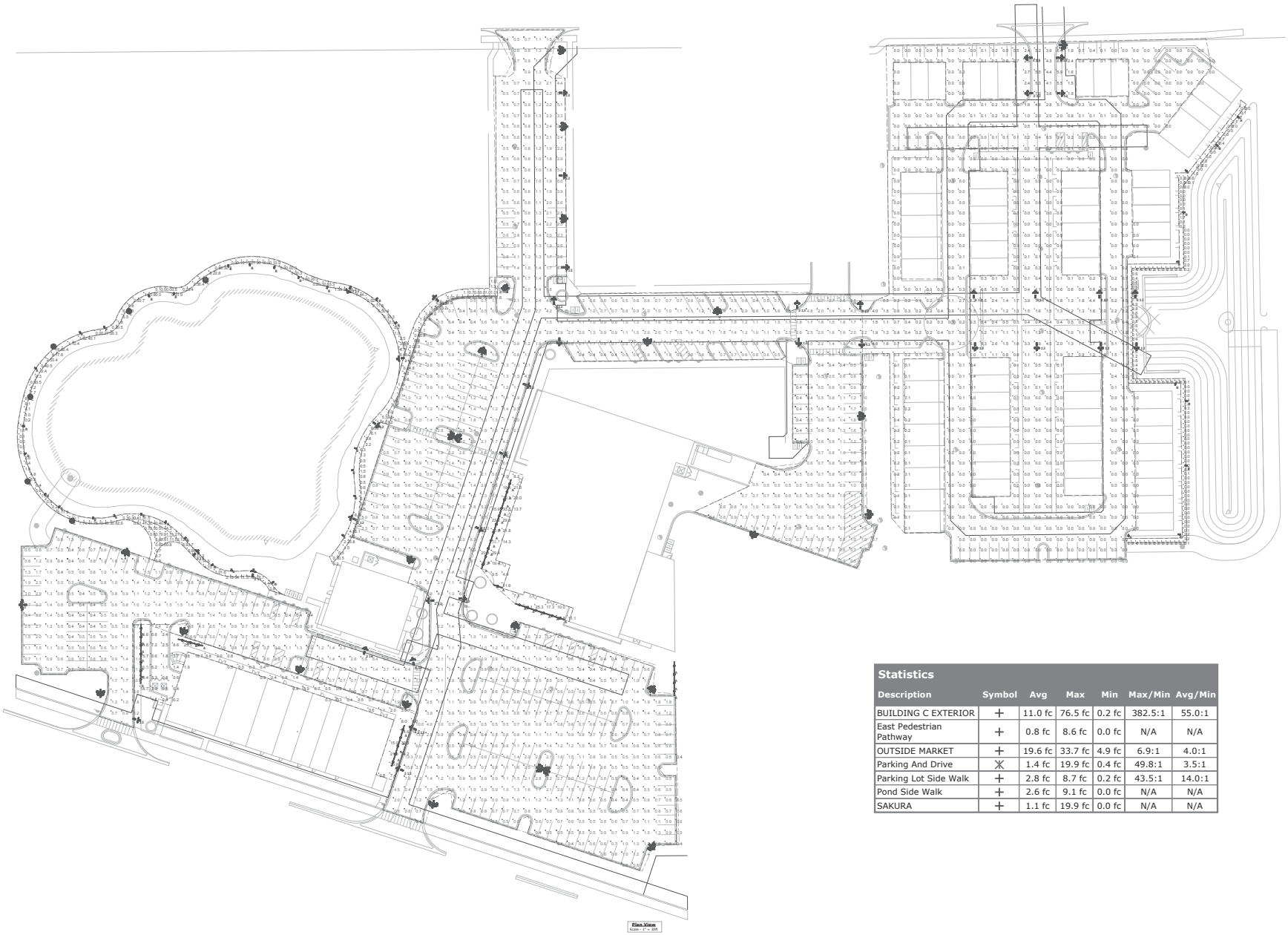


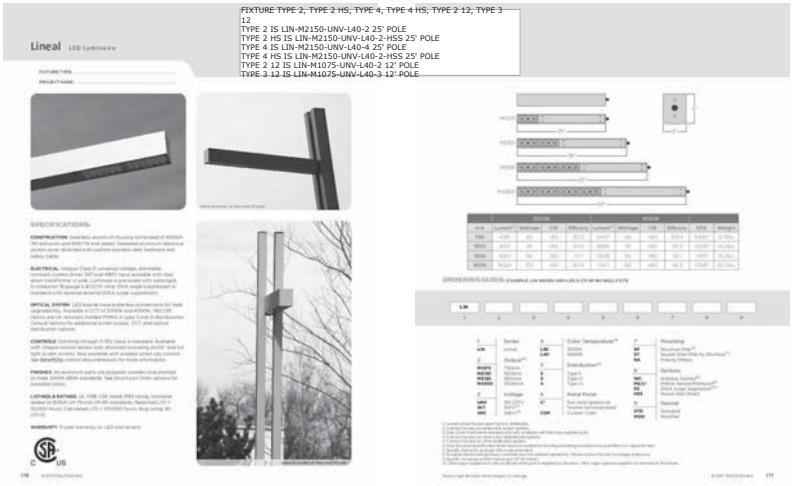
Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
BUILDING C EXTERIOR	+	11.0 fc	76.5 fc	0.2 fc	382.5:1	55.0:1
East Pedestrian Pathway	+	0.8 fc	8.6 fc	0.0 fc	N/A	N/A
OUTSIDE MARKET	+	19.6 fc	33.7 fc	4.9 fc	6.9:1	4.0:1
Parking And Drive	X	1.4 fc	19.9 fc	0.4 fc	49.8:1	3.5:1
Parking Lot Side Walk	+	2.8 fc	8.7 fc	0.2 fc	43.5:1	14.0:1
Pond Side Walk	+	2.6 fc	9.1 fc	0.0 fc	N/A	N/A
SAKURA	+	1.1 fc	19.9 fc	0.0 fc	N/A	N/A

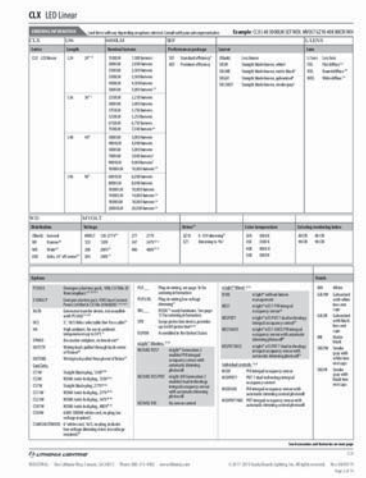
SAKURA WAY
NOVI, MICHIGAN

Designer
TJA
Date
9/25/2019
Scale
Not to Scale
Drawing No.
Summary

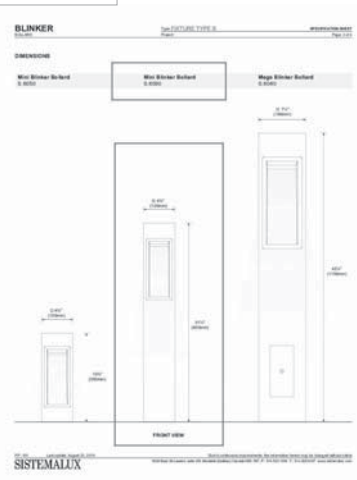
FIXTURE TYPE 2, TYPE 2 HS, TYPE 4, TYPE 4 HS, TYPE 2 12, TYPE 3 12
TYPE 2 IS LIN-M2150-UNV-L40-2 25' POLE
TYPE 2 HS IS LIN-M2150-UNV-L40-2-HSS 25' POLE
TYPE 4 IS LIN-M2150-UNV-L40-4 25' POLE
TYPE 4 HS IS LIN-M2150-UNV-L40-2-HSS 25' POLE
TYPE 2 12 IS LIN-M107S-UNV-L40-2 12' POLE
TYPE 3 12 IS LIN-M107S-UNV-L40-3 12' POLE



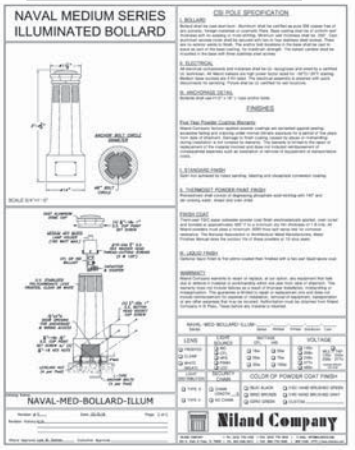
FIXTURE TYPE A IS CLX-L96-6000LM-SEF-L/LENS-WD-MVOLT-40K



FIXTURE TYPE B IS S6090N



FIXTURE TYPE C IS NAVAL-MED-BOLLARD-ILLUM-LED-30W-TYPE V



Schedule Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	2HS	0	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	LIN-M107S-UNV-L30-2-C(X)-XX-HSS-STO	Structura Inc. - Pole mount roadway luminaire. Product ID: LIN-M107S-UNV-L30-2-C(X)-XX-HSS-STO Black painted extruded aluminum housing. 12 LEDs in one 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI09SC270V054865S1 Operating at 120 VAC and 60 Hz. With added house side shield.		12	LIN-M107S-3000K-TYPE II-HSS.IES	288.9405	1.95	40.3
	2	1	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	Lineal	Structura Inc. - Pole mount roadway luminaire. Product ID: Lineal Black painted cast aluminum housing. 12 LEDs in 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI05SC105V052BNY1 Operating at 120 VAC and 60 Hz.		12	LIN-M107S-3000K-TYPE II.IES	334.647	1.95	37.4
	4HS	4	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	LIN-M107S-UNV-L30-4-C(X)-XX-HSS-STO	Structura Inc. - Pole mount roadway luminaire. Product ID: LIN-M107S-UNV-L30-4-C(X)-XX-STO Black painted extruded aluminum housing. 12 LEDs in one 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI09SC270V054865S1 Operating at 120 VAC and 60 Hz. With added house side shield.		12	LIN-M107S-3000K-TYPE IV-HSS.IES	236.2096	1.95	40.2
	4	21	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	LIN-M107S-UNV-L30-4-C(X)-XX-STO	Structura Inc. - Pole mount roadway luminaire. Product ID: LIN-M107S-UNV-L30-4-C(X)-XX-STO Black painted extruded aluminum housing. 12 LEDs in one 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI09SC270V054865S1 Operating at 120 VAC and 60 Hz. With added house side shield.		12	LIN-M107S-3000K-TYPE IV.IES	340.1394	1.95	40.3
	2 12	17	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	Lineal	Structura Inc. - Pole mount roadway luminaire. Product ID: Lineal Black painted cast aluminum housing. 12 LEDs in 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI05SC105V052BNY1 Operating at 120 VAC and 60 Hz.		12	LIN-M107S-3000K-TYPE II.IES	334.647	0.95	37.4
	3 12	21	Structura, Inc., 19922 W 162nd St., Olathe, KS 66062	Lineal	Structura Inc. - Pole mount roadway luminaire. Product ID: Lineal Black painted cast aluminum housing. 12 LEDs in 6 x 2 array with sheet of clear plastic individual lenses. One Philips Advance Xitanium LED driver. Model: XI05SC105V052BNY1 Operating at 120 VAC and 60 Hz.		12	LIN-M107S-3000K-TYPE III.IES	328.011	0.95	37.4
	A	37	Lithonia Lighting	CLX L96 10000LM 60F WDL MVOLT 40K BKDG CLXRWW	CLX LED Strip Light 96", 10000LM, 60 Foot Candle, 4000K, Wide Diffuse, 4000K, 80CRI, Wide Decorative 96" reflector	LED	1	CLX_L96_10000LM_SEF_WDL_MVOLT_40K_80CRI_CLXRWW.ies	9045.102	0.6	66.47
	B	38	Sirrex S.p.A.	SK0909.L48	Mini Blinker LED Citizen CLU028 1204 4500mA Neutral White	LED Citizen CLU028 1204CX 4K3 HS K2 Neutral White	1	SK0909.ies	314	0.95	17
	C	6	MATECH		42H V WITH MATECH D4 LED LIGHT ENGINE WITH SILICONE LENS		1	products_files2746.ies	3898	0.95	30.2

SAKURA WAY
NOVI, MICHIGAN

Designer	
TJA	
Date	
7/25/2019	
Scale	
Not to Scale	
Drawing No.	
Summary	

Exterior Packages – Proposed The Residences at Sakura Novi

	Siding - Horizontal	*Roof (tamko or equal)*	*Brick - Queen Size*	*Trim and corners*	*Garage Door*	*Front Door*
Package	Wolverine American Legend 4" Clapboard - Colonial White (Certainteed or equal)	Weathered Wood	Grey Ash (Glengery Queen Sized)	White	White	Turkish Coffee - SW6076

ROBERTSON BROTHERS HOMES 70 Years

SAKURA • NOVI

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Birmingham, MI 48009 ph: 248-283-1671

Wah Yee Associates
Architects & Planners
42400 Grand River Avenue, Suite 200
Novi, Michigan 48375
Phone: 248.489.9140
Project No. 3556

PRELIMINARY
NOT FOR CONSTRUCTION

COLOR LEGEND

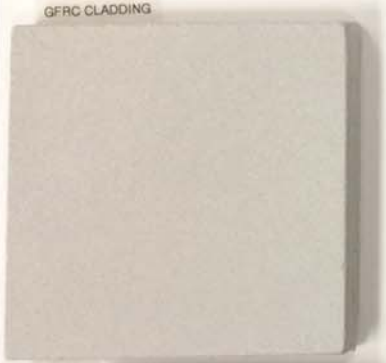
TAG	MANUFACTURER	COLOR
BRICK-1	BELDEN	BEACON GRAY +FLOOR (MODULAR)
BRICK-2	GLEN GERY	COAL CITY BLACK (MODULAR)
CAST STONE	SHOUDICE	DOVER (TAPESTRY)
METAL PANEL, CANOPIES-1	ALPOLIC	BRM BLACK
METAL PANEL, CANOPIES-2	ALPOLIC	CLEAR ANODIZED
METAL CANOPIES-3	BERRIDGE	MEDIUM BRONZE
FIBER CEMENT PANEL	NICHIHA	CEDAR SPECIALTY
GFRC CLADDING	CONCRETEWORKS-EAST	CUMULUS-D
EIFS	DRYVIT	TO MATCH PPG - GRAY PALOMINO, 7521-3
STOREFRONT ALUM.		CLEAR ANODIZED

BUILDING C

BUILDING A

METAL CANOPIES-3

GFRC CLADDING



FIBER CEMENT PANEL

EIFS

METAL PANEL, CANOPIES-2

METAL PANEL, CANOPIES-1

STOREFRONT ALUM.

BRICK-1

CAST STONE

BRICK-2

ラーメン屋敷
RAMEN HOUSE
ONE
WORLD
MARKET
桜
SAKURA NOVI