



cityofnovi.org

## NOVI PET RESORT JSP23-20

### **JSP23-20 NOVI PET RESORT**

Consideration of Preliminary Site Plan and Storm Water Management Plan approval at the request of Stucky Vitale Architects for a pet boarding facility. The subject property is approximately 2.31 acres and is located north of Ten Mile Road on the west side of Novi Road at Gen Mar in the I-1, Light Industrial Zoning District. The applicant is proposing to construct a 9,350 square foot pet boarding facility with 20 parking spaces and a 2,509 square foot outdoor animal play area with artificial turf.

### **Required Action**

Approve or Deny the Preliminary Site Plan and Storm Water Management Plan, along with any applicable waivers.

<b>REVIEW</b>	<b>RESULT</b>	<b>DATE</b>	<b>COMMENT</b>
Planning	Approval recommended	8-9-23	<p><b>Zoning Board of Appeals Variance for building setback of 35 feet (40 feet required, 5 feet proposed) along the west property line</b></p> <p><b>Zoning Board of Appeals Variance for outdoor facilities location in the front yard (interior side or rear yard required) and for a 30 foot variance of setback from the property line (40 feet required, 10 feet proposed) along the west property line</b></p> <p><b>Zoning Board of Appeals Variance for location of dumpster in the front yard (rear yard is required) since all yards must comply with front yard standards</b>  <b>Zoning Board of Appeals Variance for the lack of a loading zone</b></p> <p><b>Planning Commission approval of the modification parking lot setback since adequate overall area provided per the ordinance standards (39,963 square feet required, 39,996 provided)</b></p> <p><b>Planning Commission waiver for Parking Lot Screening from Novi Road and Gen Mar (west frontage)</b>  <i>Landscape supports both waivers</i></p>
Landscape	Approval recommended, with conditions	8-25-23	<p><b>Planning Commission waivers for lack of berm along Novi Road frontage, deficiency of canopy and subcanopy trees along Novi Road, deficiency of subcanopy trees along Gen Mar, and deficiency of street trees along Novi Road</b></p>
Engineering	Approval recommended	6-23-23	Additional comments to be addressed at Final Site Plan
Fire	Approval recommended	6-14-23	Meets fire department standards

Traffic	Approval recommended	8-8-23	
Facade	Approval recommended	6-20-23	

## **Motion sheet**

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

In the matter of Novi Pet Resort, JSP23-35, motion to **approve** the Preliminary Site Plan based on and subject to the following

- a. Zoning Board of Appeals Variance for building setback of 35 feet (40 feet required, 5 feet proposed) along the west property line;
- b. Zoning Board of Appeals Variance for outdoor facilities setback of 30 feet (40 feet required, 10 feet proposed) along the west property line
- c. Zoning Board of Appeals Variance for location of dumpster in the front yard since all yards must comply with front yard standards;
- d. Zoning Board of appeals variance for the lack of a loading zone;
- e. Planning Commission approval of the modification of parking lot setback since adequate overall area is provided per the ordinance standards (39,963 square feet required, 39,996 provided), which is hereby granted because it is found that such modification may result in improved use of the site and/or in improved landscaping:
- f. Landscape waiver for the lack of a berm along Novi Road frontage, due to the existing topography and the existing wall, which is hereby granted;
- g. Landscape waiver for deficiency of subcanopy trees along Gen Mar, which is hereby granted subject to ZBA granting the variance for building setback along Gen Mar;
- h. Landscape waiver for lack of canopy and subcanopy trees along Novi Road, which is hereby granted;
- i. Landscape waiver for the lack of street trees provided along Novi Road, which is hereby granted;
- j. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Electronic Stamping Set submittal; and
- k. *(additional conditions here if any)*

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

**- AND -**

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

In the matter of Novi Pet Resort, JSP23-20, motion to **approve** the Stormwater management Plan based on and subject to the following:

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

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

**- OR -**

**Denial – Preliminary Site Plan**

In the matter of Novi Pet Resort, JSP23-20, motion to **deny** the Preliminary Site Plan...  
*(because the plan is not in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**- AND -**

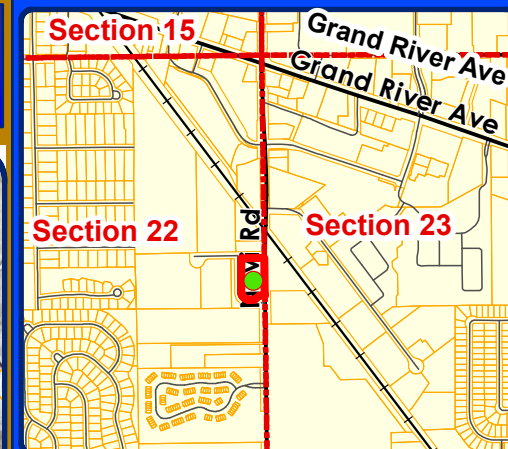
**Denial – Stormwater Management Plan**

In the matter of Novi Pet Resort JSP 23-20, motion to deny the Stormwater Management Plan...  
*(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*



**MAPS**  
**Location**  
**Zoning**  
**Future Land Use**  
**Natural Features**

# NOVI PET RESORT LOCATION



 **Subject Property**



**City of Novi**

Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)

Map Author: James Hill  
Date: 8/22/23  
Project: NOVI PET RESORT  
Version #: 1



1 inch = 138 feet

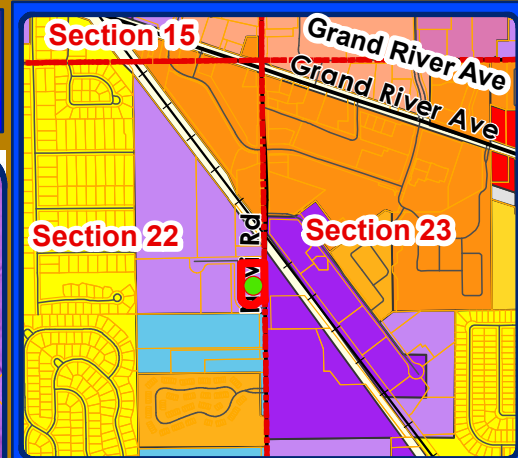
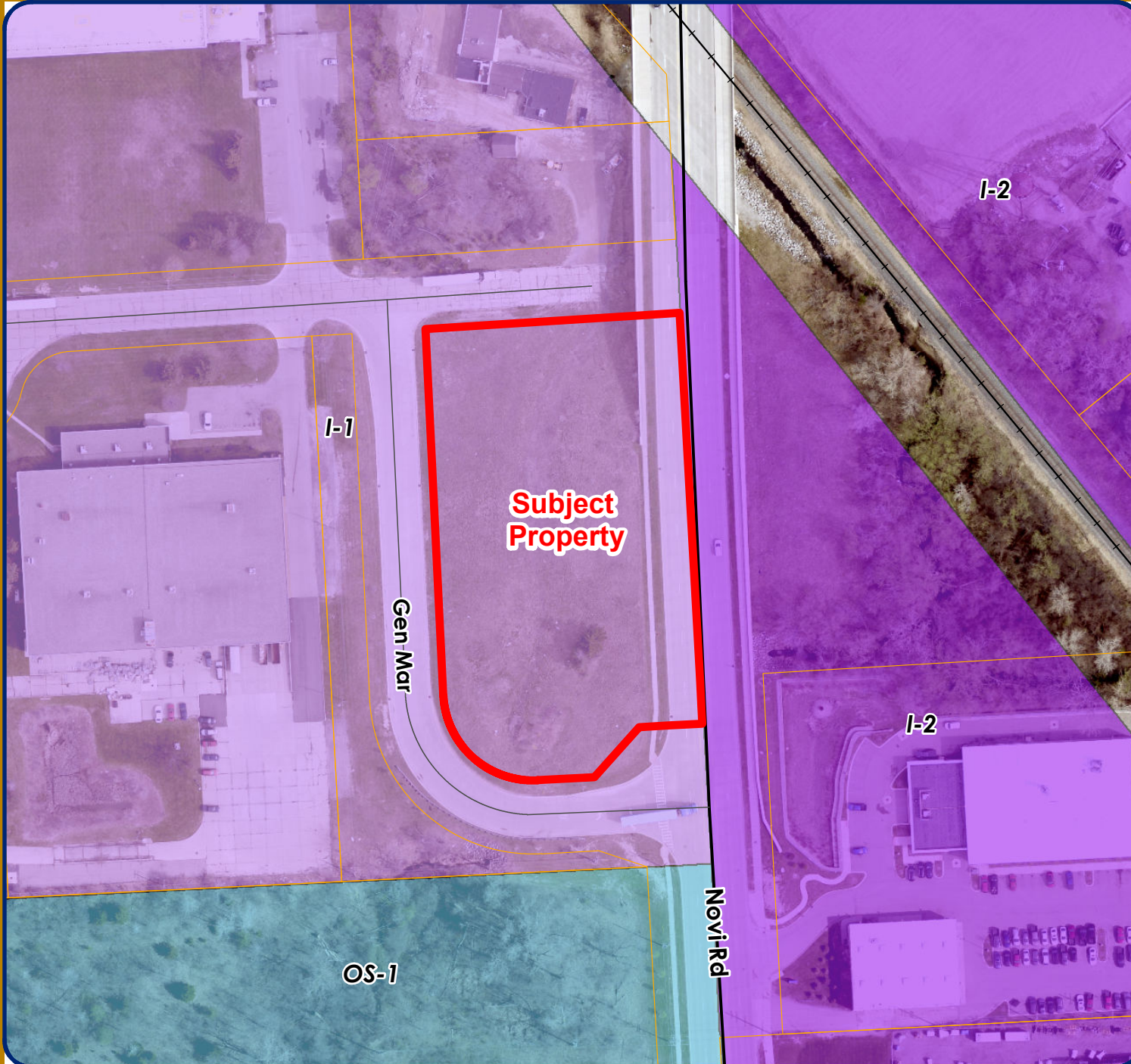


**MAP INTERPRETATION NOTICE**









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.



# NOVI PET RESORT CURRENT ZONING



## Legend

-  R-4: One-Family Residential District
-  RM-2 PRO: RM-2 with Planned Rezone Overlay
-  B-3: General Business District
-  I-1: Light Industrial District
-  I-2: General Industrial District
-  OS-1: Office Service District
-  TC: Town Center District
-  TC-1: Town Center -1 District



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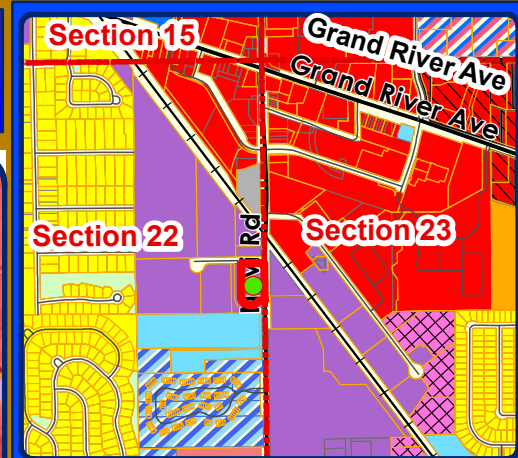
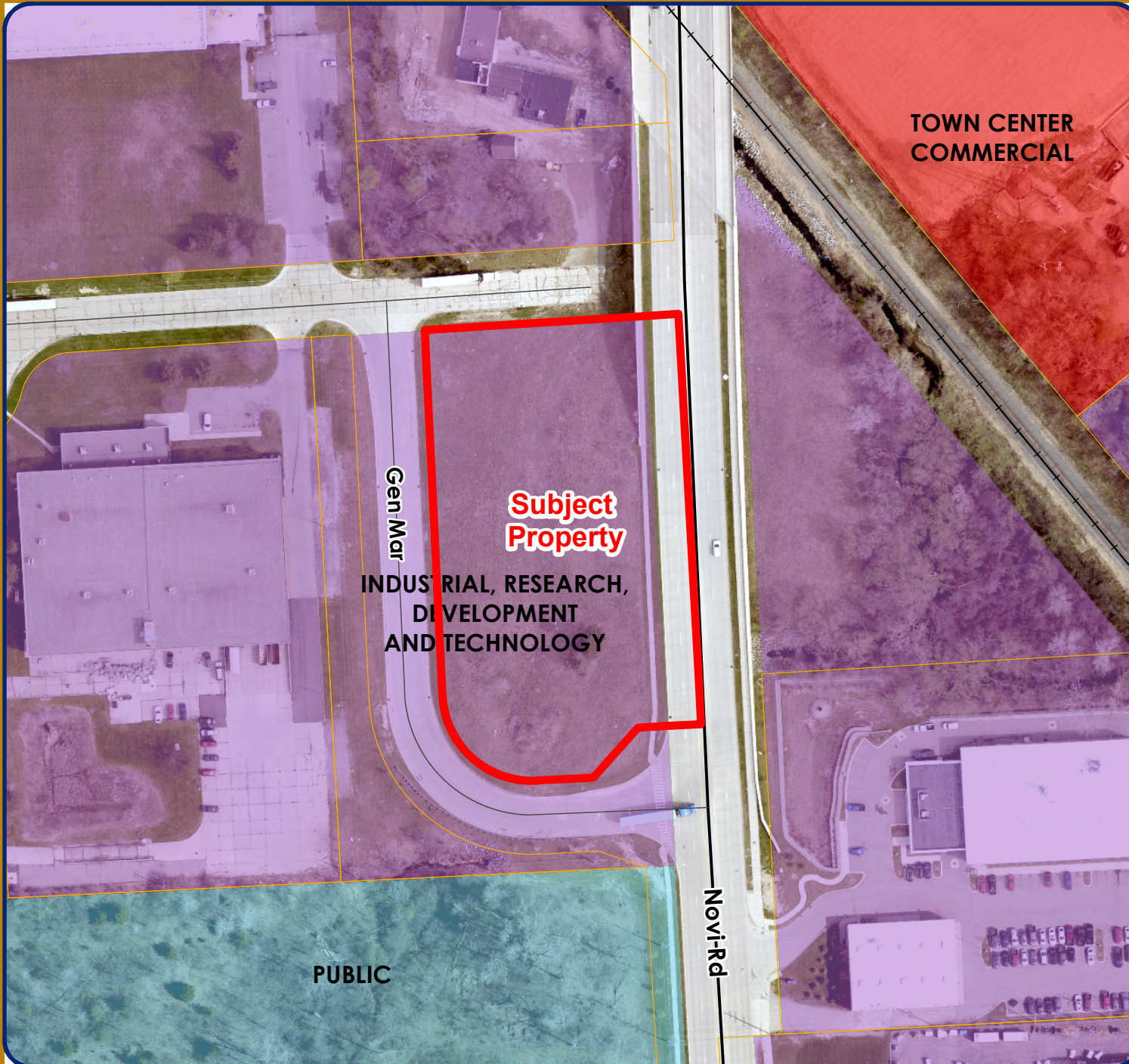


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# NOVI PET RESORT FUTURE LAND USE



### Legend

- Single Family
- Multiple-Family Residential
- Manufactured Home Residential
- Industrial, Research, Development and Technology
- Heavy Industrial
- Town Center Commercial
- Town Center Gateway
- Public
- Private Park
- Cemetery

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0 30 60 120 180

Feet

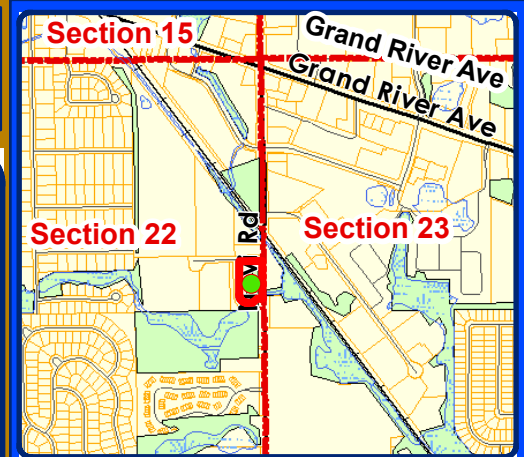
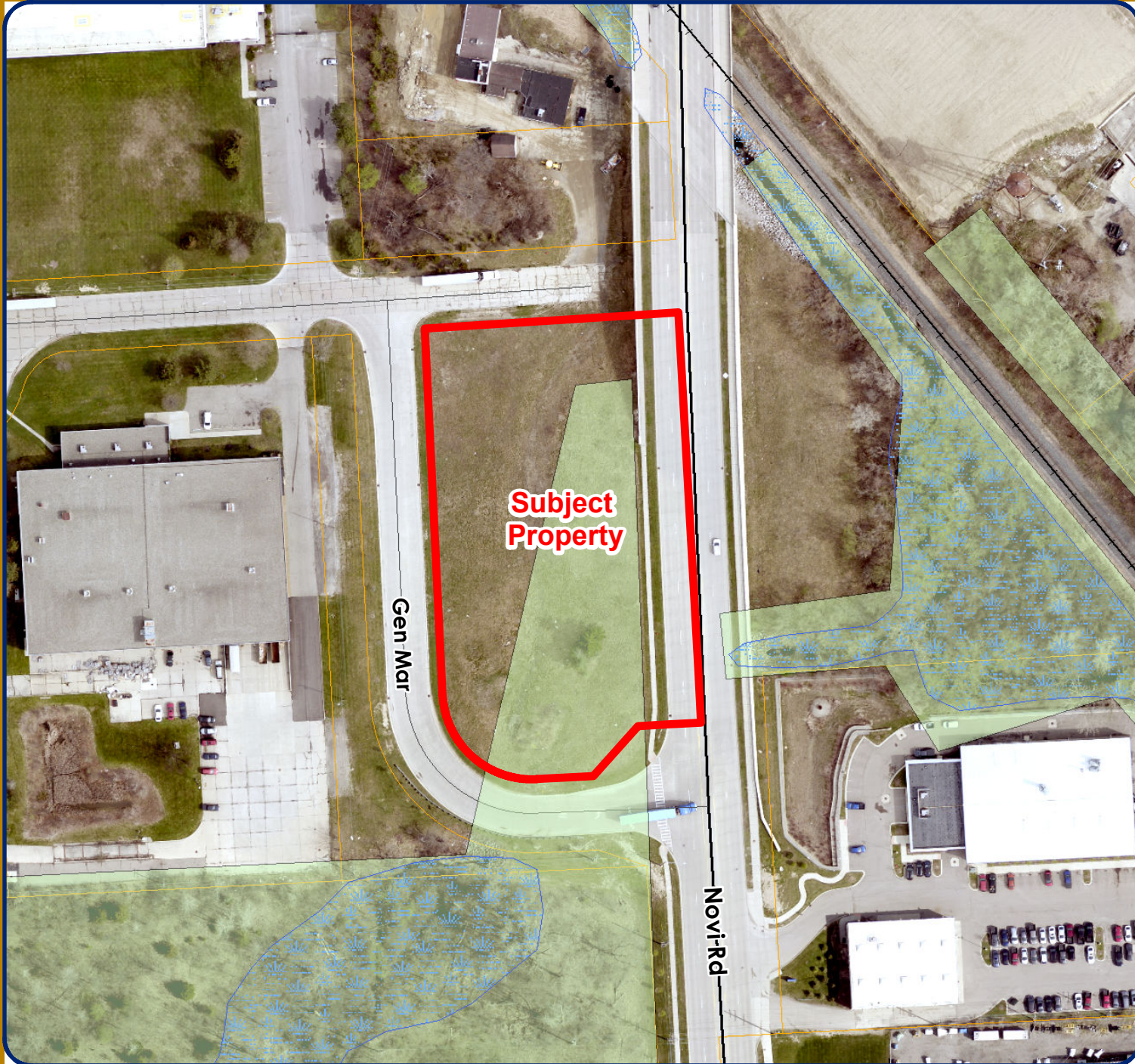
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# NOVI PET RESORT NATURAL FEATURES



## Legend

-  Wetlands
-  Woodlands



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**SITE PLAN**

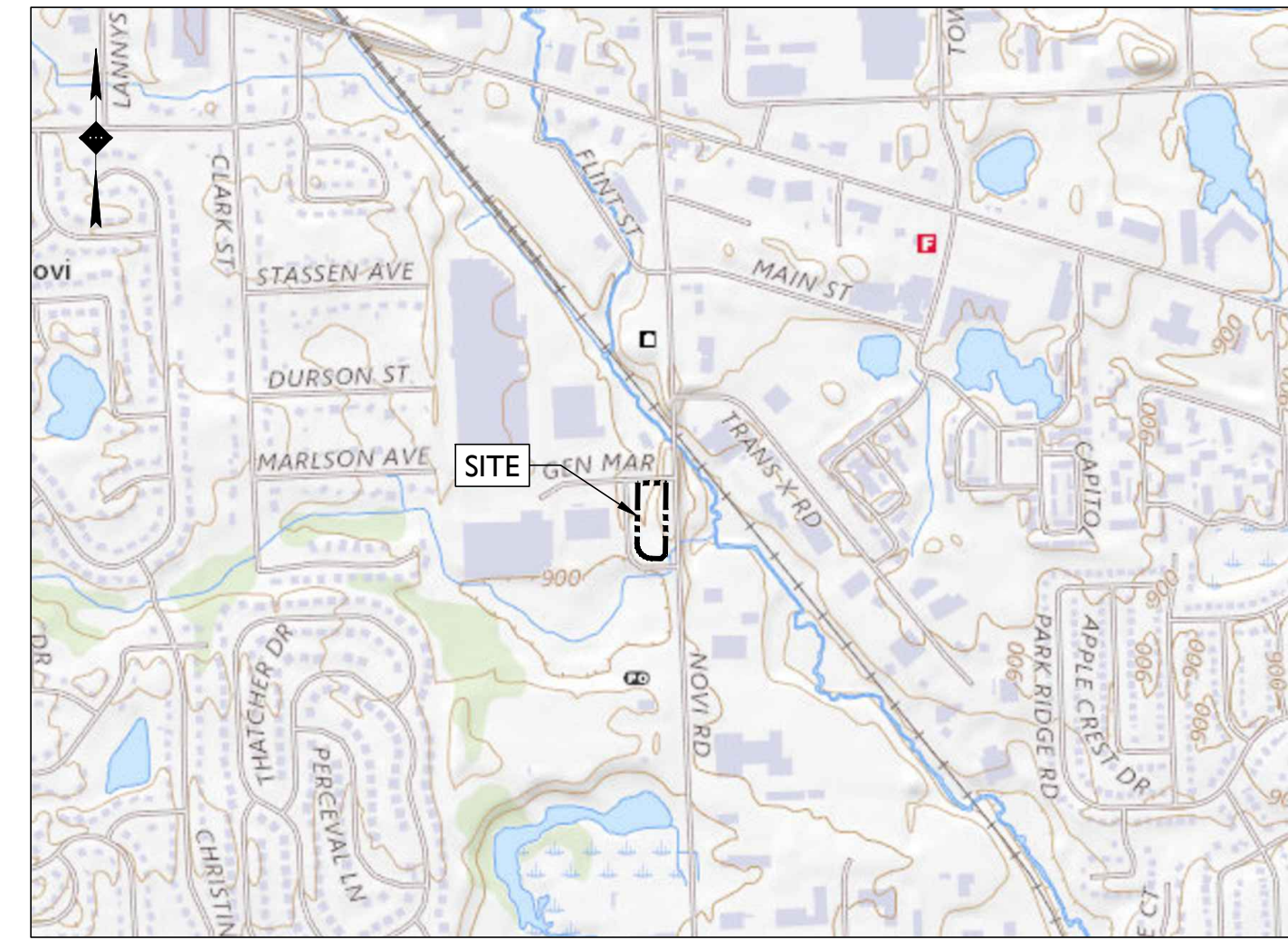
**(Full plan set available for viewing at the Community Development Department)**







# SITE DEVELOPMENT PLANS FOR PET RESORT NOVI PROPOSED PET BOARDING FACILITY



SOURCE: USGS TOPOGRAPHICAL MAPS, DATE RETRIEVED 05/18/2023

## LOCATION MAP

SCALE: 1" = 1000'±

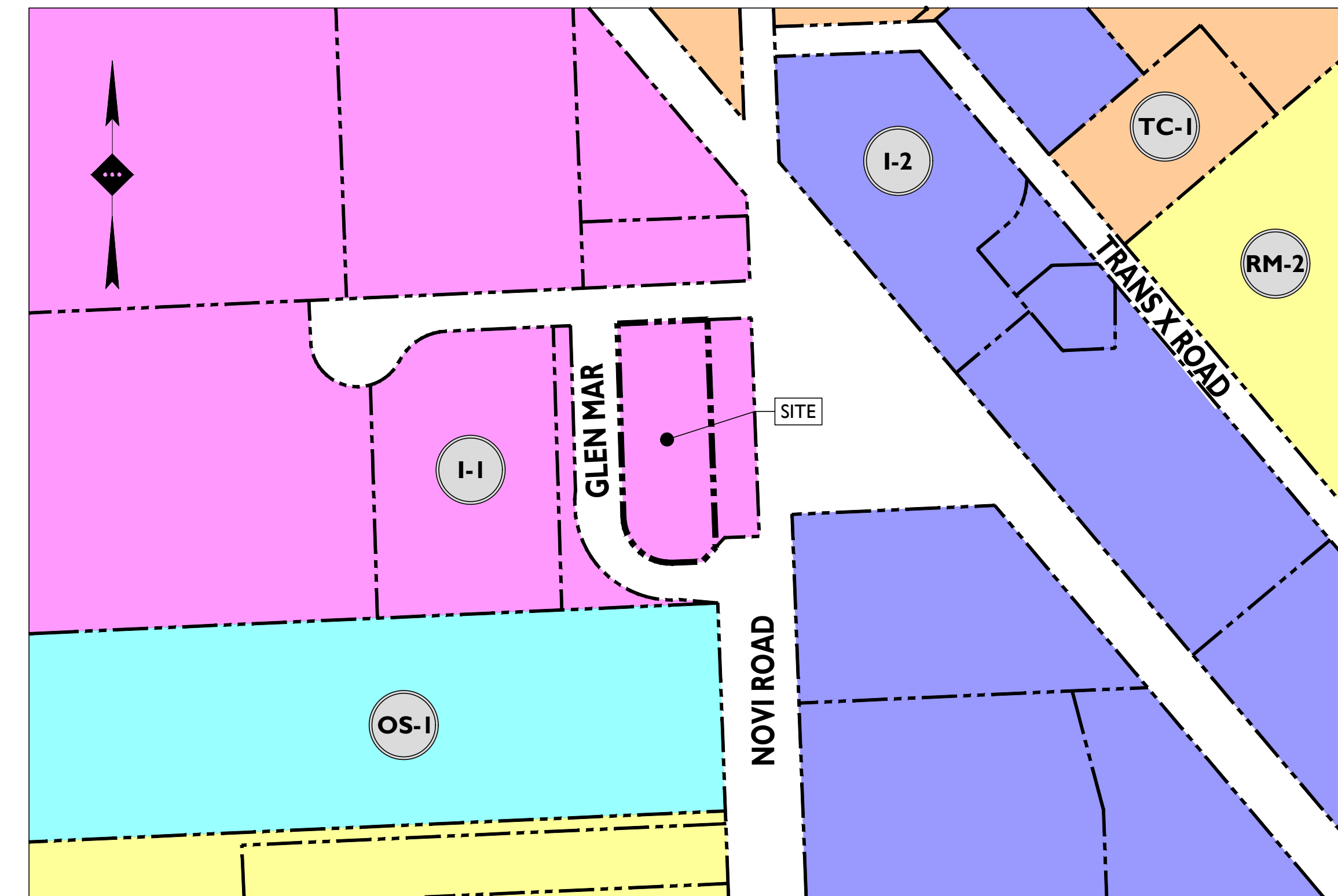
PID: 22-22-276-017  
NORTHWEST CORNER OF NOVI ROAD AND GEN MAR  
CITY OF NOVI, OAKLAND COUNTY, MICHIGAN



SOURCE: NEARMAPS ONLINE MAPPING SYSTEM, DATE RETRIEVED 05/18/2023

## AERIAL MAP

SCALE: 1" = 200'±



SOURCE: CITY OF NOVI LAND RECORDS AND PARCELS MAP, CITY OF NOVI ZONING MAP, DATE RETRIEVED 05/18/2023

## ZONING MAP

SCALE: 1" = 200'±

### LEGAL DESCRIPTION

PARCEL ID# 22-22-276-017  
A PARCEL OF LAND BEING PART OF THE NORTHEAST 1/4 OF SECTION 22, OF TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 22; THENCE NORTH 00 DEGREES 23 MINUTES 56 SECONDS EAST 523.79 FEET ALONG THE EAST LINE OF SAID SECTION 22, SAID LINE ALSO BEING CENTERLINE OF NOVI ROAD (RIGHT OF WAY = 80 FEET); THENCE SOUTH 89 DEGREES 56 MINUTES 56 SECONDS WEST 80.00 FEET TO THE WESTERLY RIGHT OF WAY LINE OF SAID NOVI ROAD AND THE POINT OF BEGINNING; THENCE SOUTH 00 DEGREES 23 MINUTES 56 SECONDS WEST 409.99 FEET ALONG THE WESTERLY RIGHT OF WAY TO A POINT ON THE RIGHT OF WAY LINE GEN MAR DRIVE (VARIABLE WIDTH); THENCE ALONG SAID RIGHT OF WAY LINE THE FOLLOWING FIVE (5) CALLS: (1) SOUTH 45 DEGREES 23 MINUTES 18 SECONDS WEST 35.36 FEET, (2) NORTH 89 DEGREES 37 MINUTES 21 SECONDS WEST 53.99 FEET, (3) 134.08 FEET ALONG THE ARC OF THE CURVE TO THE RIGHT, HAVING A RADIUS 85.00 FEET, CENTRAL ANGLE OF 90 DEGREES 22 MINUTES 43 SECONDS, A CHORD BEARING NORTH 44 DEGREES 25 MINUTES 59 SECONDS WEST 120.60 FEET, (4) NORTH 00 DEGREES 45 MINUTES 22 SECONDS EAST 348.22 FEET, (5) NORTH 89 DEGREES 56 MINUTES 56 SECONDS EAST 161.85 FEET TO THE POINT OF BEGINNING, CONTAINING 1.58 ACRES OF LAND MORE OR LESS. ALSO SUBJECT TO ANY OTHER EASEMENTS OR RESTRICTIONS OF USE OR RECORD.

### PLANS PREPARED BY:



Detroit, MI · New York, NY · Boston, MA  
Princeton, NJ · Tampa, FL · Rutherford, NJ  
www.stonefieldeng.com

607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115



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ALL WORK SHALL CONFORM TO THE  
CURRENT CITY OF NOVI STANDARDS  
& SPECIFICATIONS

### PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
  - BOUNDARY & TOPOGRAPHICAL SURVEY PREPARED BY NOWRY & HALE LAND SURVEYING LLC, DATED 03/15/2023
  - ARCHITECTURAL PLANS PREPARED BY STUCKY VITALE ARCHITECTS, DATED 05/05/2023
  - AERIAL MAP PROVIDED BY NEARMAPS ONLINE MAPPING SYSTEM, DATE RETRIEVED 05/18/2023
  - LOCATION MAP PROVIDED BY USGS TOPOGRAPHICAL MAPS, DATE RETRIEVED 05/18/2023
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

### SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
SITE PLAN	C-2
FIRE TRUCK CIRCULATION	C-3
GRADING PLAN	C-4
STORMWATER MANAGEMENT PLAN	C-5
UTILITY PLAN	C-6
LANDSCAPING PLAN	C-7
LANDSCAPING AREA AND TREE LAYOUT PLAN	C-8
LANDSCAPING DETAILS	C-9
LIGHTING PLAN	C-10
SOIL EROSION AND SEDIMENTATION CONTROL PLAN	C-11
CONSTRUCTION DETAILS	C-12, 13, & 14

### ADDITIONAL SHEETS

DRAWING TITLE	SHEET #
BOUNDARY & TOPOGRAPHIC SURVEY	1 OF 1

### APPLICANT

STUCKY VITALE ARCHITECTS  
27127 WOODWARD AVENUE  
ROYAL OAK, MI 48067-0925  
248-546-6700  
MBLANEK@STUCKYVITALE.COM

NOT APPROVED FOR CONSTRUCTION

**STONEFIELD**  
engineering & design

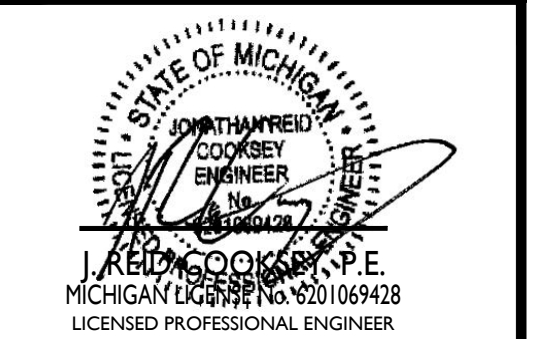
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SITE DEVELOPMENT PLANS

**PET RESORT NOVI**  
**PROPOSED PET BOARDING FACILITY**

PID: 22-22-276-017  
NOVI ROAD AND GEN MAR  
CITY OF NOVI  
OAKLAND COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-230040

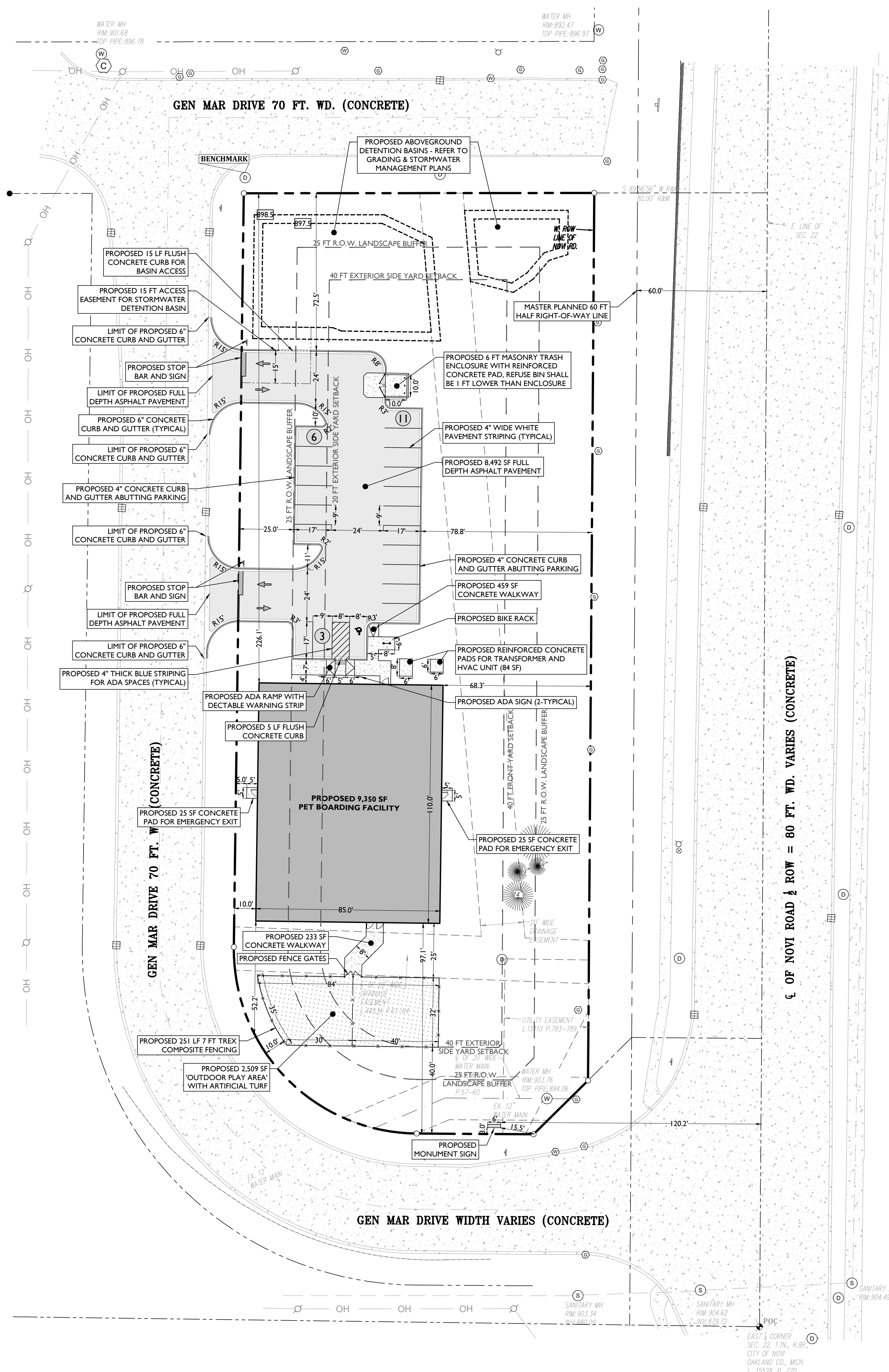
TITLE:

COVER SHEET

DRAWING:

C-1





LAND USE AND ZONING		
PID: 22-22-276-017		
LIGHT INDUSTRIAL DISTRICT (I-1)		
<b>PROPOSED USE</b>	PET BOARDING FACILITY	PERMITTED USE
	OUTDOOR FACILITIES (PLAY AREA)	PERMITTED ACCESSORY USE
<b>ZONING REQUIREMENT</b>	<b>REQUIRED</b>	<b>PROPOSED</b>
MINIMUM LOT AREA	N/A	69,004 SF (1.58 AC)
MAXIMUM BUILDING HEIGHT	40 FT	< 40 FT
MAXIMUM LOT COVERAGE	N/A	13.5% (9,350 SF)
MINIMUM OPEN SPACE AREA	25%	59.9% (41,301 SF)
MINIMUM FRONT YARD SETBACK	40 FT	68.3 FT (M)
MINIMUM SIDE YARD SETBACK	20 FT	N/A
MINIMUM SIDE STREET YARD SETBACK (SOUTH)	40 FT	97.1 FT
MINIMUM SIDE STREET YARD SETBACK (NORTH)	40 FT	226.1 FT (M)
MINIMUM SIDE STREET YARD SETBACK (WEST)	40 FT	10.0 FT (M)
MINIMUM REAR YARD SETBACK	20 FT	N/A
MINIMUM SETBACK AREA	39,963 SF	39,996 SF
MINIMUM R.O.W. LANDSCAPE BUFFER	25 FT	10.0 FT (V)
MINIMUM SIDE & REAR YARD PARKING SETBACK	10 FT	25.0 FT

(M) PROPOSED MODIFICATION - PER SECTION 3.3.6.0 - PLANNING COMMISSION MAY MODIFY SETBACK REQUIREMENTS IN THOSE INSTANCES WHERE IT DETERMINES THAT SUCH MODIFICATION MAY RESULT IN IMPROVED USE OF THE SITE AND/OR IMPROVED LANDSCAPING. PROVIDED, THAT THE MODIFICATION DOES NOT REDUCE THE TOTAL AREA OF SETBACK ON THE SITE BELOW THE MINIMUM REQUIREMENTS.

**MODIFICATIONS:**  
 -INCREASE FRONT YARD SETBACK BY 38.3 FT: 40 + 38.3 = 68.3 FT  
 -INCREASE NORTH SIDE STREET YARD SETBACK BY 10 FT: 40 + 10 = 50 FT  
 -REDUCE WEST SIDE STREET YARD SETBACK BY 30 FT: 40 - 30 = 10 FT

OFF-STREET PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 5.2.12.C	PET BOARDING FACILITIES: 1 SPACE PER 700 SF OF USEABLE FLOOR AREA (8,964 SF) (1 SPACE / 700 SF) = 13 SPACES	20 SPACES
§ 5.3.2	90° PARKING: 19 FT X 9 FT WITH 24 FT AISLE (1)	9 FT X 17 FT W/ 24 FT AISLE
§ 5.3.2	BICYCLE PARKING: 2 SPACES REQUIRED 2 FT X 6 FT WITH 4 FT MANEUVERING LANE	2 SPACES W/ 4 FT AISLE

(1) PARKING SPACES MAY BE REDUCED IN LENGTH BY UP TO 2 FT WHEN ABUTTING LANDSCAPING OR WALKWAYS 7 FT IN WIDTH

PAVEMENT QUANTITIES	
CONCRETE CURB & GUTTER	556 LF
FULL-DEPTH ASPHALT	8,492 SF
CONCRETE SIDEWALK (4")	743 SF
REINFORCED CONCRETE PAD	295 SF

FOR MUNICIPAL REFERENCE ONLY. CONTRACTOR TO VERIFY QUANTITIES PRIOR TO CONSTRUCTION.

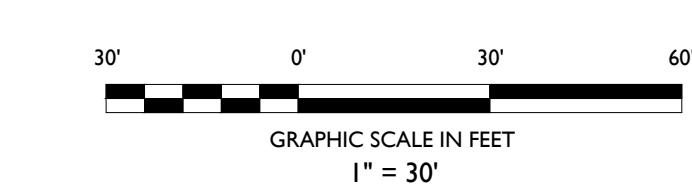
M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT	QUANTITY
		LEGEND	BACKGROUND			
STOP SIGN (R1-1)		WHITE	RED	36"x36"	GROUND	2

NOTE:  
 1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.  
 2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.

**SIGN DATA TABLE**  
NOT TO SCALE

SYMBOL	DESCRIPTION
---	PROPERTY LINE
- - - -	SETBACK LINE
====	PROPOSED CURB & GUTTER
=====	PROPOSED FLUSH CURB
○ ○ ○	PROPOSED SIGNS / BOLLARDS
■	PROPOSED BUILDING
▨	PROPOSED CONCRETE PAVEMENT
▩	PROPOSED ASPHALT PAVEMENT
▧	PROPOSED ARTIFICIAL TURF
— x — x —	PROPOSED TREX COMPOSITE FENCE
∩	PROPOSED BUILDING DOORS
---	PROPOSED DETENTION BASIN

- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
  - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
  - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
  - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
  - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
  - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
  - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
  - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
  - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
  - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
  - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.
  - PETS SHALL NOT STAY OUTSIDE OVERNIGHT.
  - ANIMAL WASTE, BIOHAZARD MATERIALS OR BYPRODUCTS SHALL BE DISPOSED OF AS RECOMMENDED BY THE MICHIGAN DEPARTMENT OF PUBLIC HEALTH AND/OR OTHER DULY APPOINTED AUTHORITY AT THE DISCRETION OF THE CITY.
  - NOISE SHALL BE MINIMIZED AND WILL NOT EXCEED 70 DECIBELS AT NIGHT TIME AND 75 DECIBELS DURING DAYTIME.
  - ANIMAL PICK-UP AND DROP-OFF SHALL BE ACCOMMODATED IN AN EFFICIENT MANNER AS TO NOT DISRUPT TRAFFIC CIRCULATION.



NO.	DATE	ISSUE	BY	DESCRIPTION
1	07/19/2023			RESUBMISSION FOR PRELIMINARY SITE PLAN APPROVAL
2	05/23/2023			PRELIMINARY SITE PLAN APPROVAL

**NOT APPROVED FOR CONSTRUCTION**

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engineering & design

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607 Shelby Suite 200, Detroit, MI 48226  
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**SITE DEVELOPMENT PLANS**

**PET RESORT NOVI**

**PROPOSED PET BOARDING FACILITY**

PID: 22-22-276-017  
NOVI ROAD AND GEN MAR  
CITY OF NOVI  
OAKLAND COUNTY, MICHIGAN

STATE OF MICHIGAN  
  
 KEVIN COOKSEY, P.E.  
 MICHIGAN LICENSE NO. 9201069428  
 LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**  
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-230040

TITLE: **SITE PLAN**

DRAWING: **C-2**

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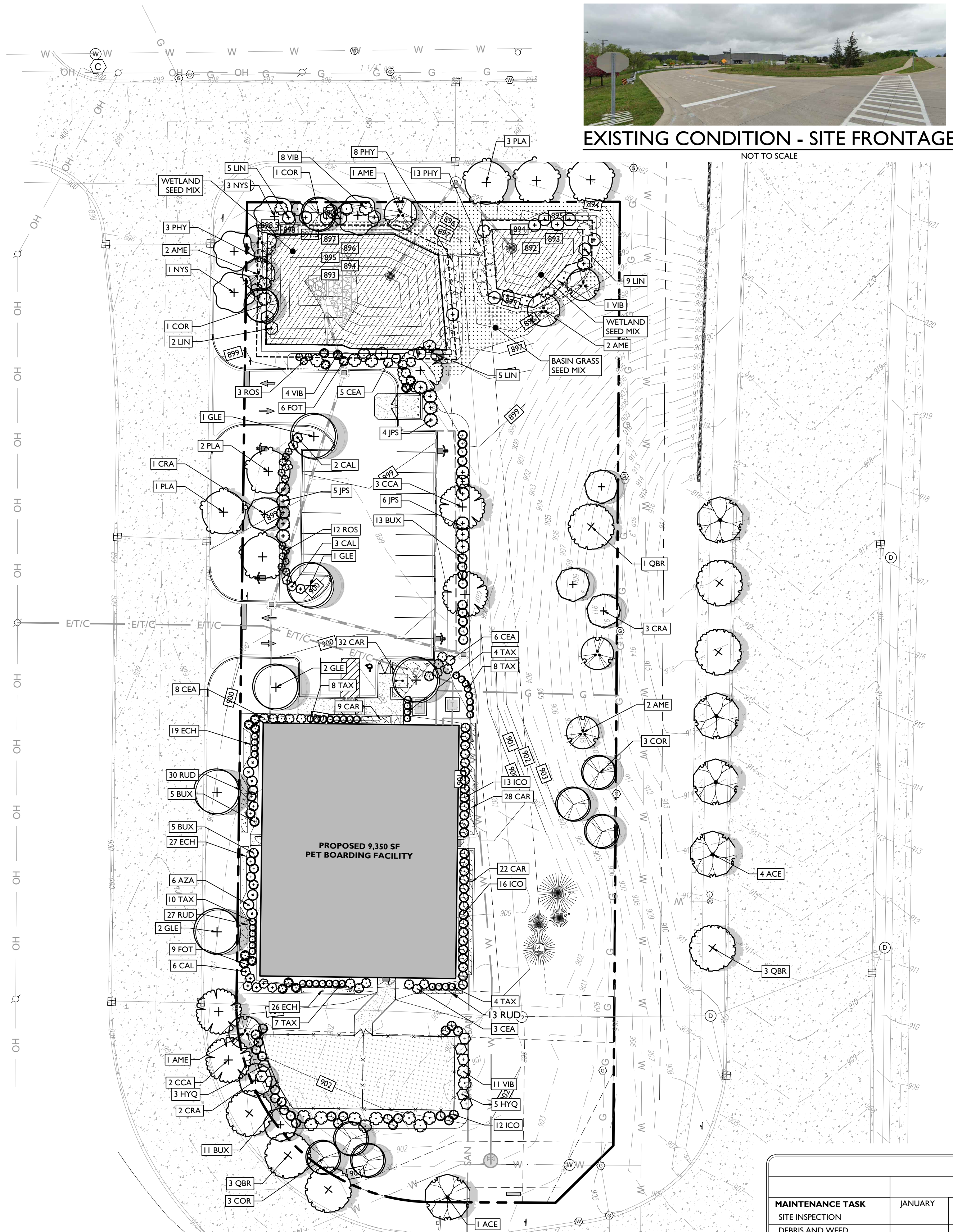












LANDSCAPING AND BUFFER REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§5.5.3.A.(5)	<b>GREENBELT REQUIREMENTS:</b> 3 TALL BERM WITH 3' CREST IS REQUIRED ALONG NOVI ROAD AND WESTERN GEN MAR FRONTAGE	NOT PROPOSED (W) <sup>1</sup>
§5.5.3.B.1	NOVI ROAD: GREENBELT WIDTH: 25 FT NOVI ROAD: MINIMUM BERM HEIGHT: 3 FT NOVI ROAD: 2-1/2 FOOT MASONRY OR DECORATIVE WALL ONE CANOPY OR EVERGREEN TREE PER 40 LF. NOVI ROAD: 420 LF CANOPY TREES: (420 LF <sup>2</sup> ) / 60 LF = 7 REQUIRED TREES SUB-CANOPY TREES: (420 LF <sup>2</sup> ) / 40 LF = 11 REQUIRED TREES ROW TREES: (420 LF <sup>2</sup> ) / 45 LF = 9 REQUIRED TREES	67 FT NOT PROPOSED (W) <sup>1</sup> NOT PROPOSED (W) <sup>1</sup> EVERGREEN PLANTINGS PROVIDED
§5.5.3.F.6	GEN-MAR: NORTH FRONTAGE: 142 LF CANOPY TREES: (142 LF <sup>2</sup> ) / 35 LF = 5 REQUIRED TREES CANOPY ROW: (142 LF <sup>2</sup> ) / 50 LF = 3 REQUIRED TREES SUB-CANOPY TREES: (142 LF <sup>2</sup> ) / 40 LF = 4 REQUIRED TREES SHRUBS: (142 LF <sup>2</sup> ) / 20 LF = 8 REQUIRED SHRUBS PLANT MASSING: 10% OF FRONTAGE (142) * (0.10) = 16 LF GEN-MAR: WEST-SOUTH FRONTAGE: 541 LF - 48 LF = 493 LF CANOPY TREES: (493 LF / 35 LF) = 14 REQUIRED TREES CANOPY ROW: (493 LF / 50 LF) = 10 REQUIRED TREES SUB-CANOPY TREES: (493 LF <sup>2</sup> ) / 40 LF = 12 REQUIRED TREES SHRUBS: (493 LF / 20 LF) = 25 REQUIRED SHRUBS PLANT MASSING: 10% OF FRONTAGE (493) * (0.10) = 49 LF	5 TREES 3 TREES 4 TREES 8 SHRUBS 36 LF 14 TREES 10 TREES 10 TREES (W) 25 SHRUBS 71 LF
§5.5.3.C.g	<b>PARKING LOT ISLAND REQUIREMENTS:</b> EACH ISLAND: MINIMUM 200 SF WITH 10 FT WIDTH MINIMUM 3 FT BACK OF CURB TO TREE TRUNK	COMPLIES COMPLIES
§5.5.3.C.iii	<b>INTERIOR PARKING AREA REQUIREMENTS:</b> TOTAL INTERIOR PARKING LOT ISLAND AREA AND CANOPY TREE CHART: CATEGORY 1, TC ZONE a. [8,363 SF OF PARKING STALLS * 0.05] = 418 SF b. [N/A] NO PARKING AREA OVER 50,000 SF c. TOTAL SF OF LANDSCAPE ISLANDS REQUIRED A+B = TOTAL SF OF ISLANDS [418 + 0.0 = 418 SF] d. NUMBER OF CANOPY TREES REQUIRED C / 200 = TOTAL CANOPY TREES [418 / 200 = 2 REQUIRED TREES] e. INTERIOR CANOPY TREES PERIMETER / 35 [243 LF / 35] = 7 INTERNAL TREES	812 SF 2 TREES 7 TREES
§5.5.3.C.iv	<b>PARKING LOT PERIMETER TREES:</b> ONE PERIMETER CANOPY TREE PER 35 LF REQUIRED ACCESS DRIVE [VIA PERIMETER - BFST LINEAR FEET] / 35 VIA PERIMETER = 382 LF BFST LINEAR FEET = 85 LF ACCESS DRIVES = 54 LF [382 - 85 - 54] = 243 LF / (35) = 7 TREES	3 TREES PROPOSED (W) <sup>1</sup>
§5.5.3.D.ia	<b>BUILDING FOUNDATION LANDSCAPE:</b> MINIMUM FOUNDATION LANDSCAPE SQUARE FOOTAGE IS 8 FT MULTIPLIED BY BUILDING PERIMETER (NOT INCLUDING INGRESS / EGRESS) [367 FT * 8 FT] = 2,936 SF REQUIRED LANDSCAPE PLANTING BEDS MINIMUM 75% OF BUILDING FOUNDATION AREA WITH 4 FT WIDTH. [390 LF * 75%] = 293 LF REQUIRED PLANTING BED [390 LF OF BUILDING FRONTAGE * 0.60] = 183 REQUIRED LF OF GREENSPACE	2,991 SF 365 LF 285 LF (93.4%)
§5.5.3.E	<b>DETENTION/RETENTION BASIN REQUIREMENTS:</b> DETENTION BASIN SHALL BE PLANTED PER THE LDM MANUAL NATIVE PLANTS SHALL COVER 70-75% OF THE BASIN RIM CANOPY TREES PROVIDED AT A RATE OF (1) PER 35 LF (429 LF / 35 LF) = 12 REQUIRED TREES 10' TO 14' TALL GRASS ALONG SIDES OF BASIN	COMPLIES 12 TREES PROVIDED

- (W) WAIVER  
PROPOSED LANDSCAPING TO PROVIDE CONTINUOUS EVERGREEN SCREEN.  
DUE TO SIGHT VISION HINDRANCE A WAIVER IS REQUESTED FOR (4) FOUR ACCESSWAY PERIMETER TREES.  
(1) BERM IS NOT PROPOSED DUE TO EXISTING SITE CONDITIONS REGARDING STEEP GRADE AND EASEMENTS INFLUENCING PLACEMENT OF BUILDING.  
(2) TREES ARE NOT PROPOSED ALONG THE FRONTAGE ADJACENT TO THE WALL FACE: TOTAL OF 120 LF SUBTRACTED FROM THE TOTAL WESTERN BOUNDARY OF 420 LF. (300 LF) / (60) = 5 REQUIRED TREES.  
(3) NOVI ROAD SUB-CANOPY TREE CALCULATION OMITTING WALL FE: (800 LF) / (45) = 7 REQUIRED TREES.  
(4) GEN MAR NORTH CALCULATION OMITTING EASEMENT: (162 LF) - (20 LF EASEMENT) = 142 TOTAL LF  
(5) GEN MAR EAST CALCULATION BUILDING FRONTAGE: (493 LF) - (109 LF BUILDING) = 384 TOTAL LF  
(6)  
(7)

MAINTENANCE TASK	MONTH											
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SITE INSPECTION							X					
DEBRIS AND WEED CONTROL - AS NEEDED			X	X	X	X	X	X	X	X	X	
IRRIGATION MAINTENANCE				X						X		
MULCHING			X									
SEASONAL PLANTINGS					X	X	X	X	X	X	X	
MOWING OF TURF			X	X	X	X	X	X	X	X	X	
MOWING OF WILDFLOWERS											X	
PRUNING			X	X							X	
FERTILIZER AND AMENDMENTS			X	X	X	X	X	X	X	X	X	
INSECT AND DISEASE CONTROL					X	X	X	X	X	X	X	
PLANTING RENOVATION						X				X		
LANDSCAPE STRUCTURES INSPECTION				X								
LIGHTING MAINTENANCE			X	X						X		
PAVED SURFACE MAINTENANCE				X								

- MICHIGAN WILDFLOWER FARM**  
**WETLAND MIX:**  
ANEMONE CANADENSIS  
ANGELICA ATROPURPUREA  
ASPLETIFOLIA INCANATA  
EUPATORIUM MACRANTHUM  
FLUPTADIA PRINCEPS  
HELIOPSIS AUTUMNALIS  
HELIOPSIS SCABER  
HIBISCUS MOERHOUZII  
IRIS VORONCHII  
LATHRUS SPICATUS  
LOBELIA SPICIFLORA  
RUBROCKA FULGIDA SWEET  
SOLIDAGO PATULA  
SYMPHYOTERIS PURPUREA  
VERBENA MASTICA  
VERONICA MISSOURICA  
CAREX SPECIOSA  
VIRGINICA WILD RYE  
SCIRPUS SPP.  
SPARGANIUM EURYCARPUM
- SHORT DRYLAND GRASS MIX:**  
RHOPTILON ELATIPENDULA  
SCHIZACHNE SCARPARIUS  
SORBOLUS HETEROLEPIS  
SIDO-GRASS  
LITTLE BLUESTEM  
PRAIRIE DROPSEED
1. SOW ABOVE HIK AT A RATE OF 40% FORBS, 60% GRASSES/SEDGE/RUSH  
2. 1.0Z/1000 S.F. OR 6.8 LB/Acre  
3. NO MOWING SHALL TAKE PLACE.

**APPLICANT**

STUCKY VITALE ARCHITECTS  
27127 WOODWARD AVENUE  
ROYAL OAK, MI 48067-0925  
248-546-6700  
M.BLANEK@STUCKYVITALE.COM

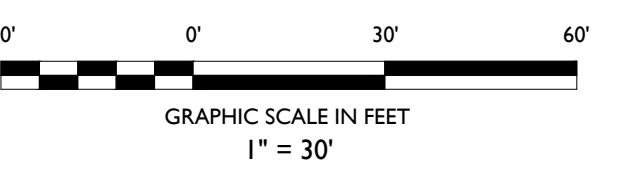
PLANT SCHEDULE											
DECIDUOUS TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
ACE	ACE	ACER RUBRUM	RED MAPLE	2.5" - 3" CAL	B&B	5	\$400	\$2,000	NATIVE		
CCA	CCA	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	2.5" - 3" CAL	B&B	5	\$400	\$2,000	NATIVE		
GLE	GLE	GLEDITSIA TRIACANTHOS	HONEY LOCUST	2.5" - 3" CAL	B&B	6	\$400	\$2,400	NATIVE		
NYS	NYS	NYSSA SYLVATICA	SOUR GUM	2.5" - 3" CAL	B&B	4	\$400	\$1,600	NATIVE		
PLA	PLA	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2.5" - 3" CAL	B&B	6	\$400	\$2,400	NATIVE		
QBR	QBR	QUERCUS RUBRA	RED OAK	2.5" - 3" CAL	B&B	7	\$400	\$2,800	NATIVE		
ORNAMENTAL TREES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
AME	AME	AMELANCHER LAEVIS	ALLEGHENY SERVICEBERRY	7" - 8" HT	B&B	8	\$400	\$3,200	NATIVE		
COR	COR	CORNUS FLORIDA	FLOWERING DOGWOOD	2.5" - 3" CAL	B&B	8	\$400	\$3,200	NATIVE		
CRA	CRA	CRATAEGUS CRUS-GALLI	COCKSPUR HAWTHORN	2.5" - 3" CAL	B&B	6	\$400	\$2,400	NATIVE		
SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
AZA	AZA	AZALEA 'SILVER SWORD'	SILVER SWORD AZALEA	3 GAL	POT	6	\$50	\$300	NOT NATIVE		
CEA	CEA	CEANOTHUS AMERICANUS	NEW JERSEY TEA	24" - 30"	B&B	22	\$50	\$1,100	NATIVE		
CAL	CAL	CLETHRA ALABOLIA	SUMMERSWEET CLETHRA	18" - 24"	POT	11	\$50	\$550	NATIVE		
FOT	FOT	FOTHERGILLIA GARDNERII	DWARF FOTHERGILLIA	18" - 24"	POT	15	\$50	\$750	NOT NATIVE		
HYQ	HYQ	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	24" - 30"	POT	8	\$50	\$400	NOT NATIVE		
LYN	LYN	LINDERA BENZONI	SPIREBUSH	24" - 30"	POT	21	\$50	\$1,050	NATIVE		
PHY	PHY	PHYSCALOPUS OPULIFOLIUS	NINEBARK	24" - 30"	POT	24	\$50	\$1,200	NATIVE		
ROS	ROS	ROSA CAROLINA	CAROLINA ROSE	24" - 30"	B&B	15	\$50	\$750	NATIVE		
VIB	VIB	VIBURNUM DENTATUM	VIBURNUM	36" - 42"	POT	24	\$50	\$1,200	NATIVE		
EVERGREEN SHRUBS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
BUX	BUX	BUXUS MICROPHYLLA 'WINTER GEM'	GLOBE WINTER GEM BOXWOOD	18" - 24"	B&B	34	\$50	\$1,700	NOT NATIVE		
ICO	ICO	ILEX GLABRA 'COMPACTA'	COMPACT HOLLER	18" - 24"	POT	41	\$50	\$2,050	NOT NATIVE		
JPS	JPS	JUNIPERUS X PRITZERIANA 'SEA GREEN'	SEA GREEN PRITZER JUNIPER	24" - 30"	POT	15	\$50	\$750	NOT NATIVE		
TAX	TAX	TAXILUX X MEDIA 'DENSIFORMIS'	DENSE ANGLO-JAPANESE YEW	30" - 36"	B&B	41	\$50	\$2,050	NOT NATIVE		
GRASSES	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
CAR	CAR	CAREX PENNSYLVANICA	PENNSYLVANIA SEDGE	1 GAL	POT, 24" O.C.	91	\$15	\$1,365	NATIVE		
PERENNIALS	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY	UNIT COST	TOTAL	REMARKS		
ECH	ECH	ECHINACEA PURPUREA	CONEFLOWER	1 GAL	POT, 18" O.C.	72	\$15	\$1,080	NATIVE		
RUD	RUD	RUBROCKA FULGIDA	LITTLE GOLDSTAR	1 GAL	POT, 18" O.C.	70	\$15	\$1,050	NATIVE		
LANDSCAPE MATERIAL	CODE	DESCRIPTION	QTY	UNIT COST	TOTAL	REMARKS					
SEED	-	-	4341	\$3.00	\$13,024						
SOIL	-	-	0	\$6.00	\$0.00						
MULCH	-	-	60	\$35.00	\$2,100						
					\$15,124						

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.  
\* LANDSCAPE COST MAY VARY PER AVAILABILITY AND MARKET RATES.  
\*\* 16 OF 19 PROPOSED PLANTS ARE NATIVE (84.2%).

- THE STORMWATER BASIN IS DESIGNED TO BE EMPTY 24 - 48 HOURS AFTER RAINFALL EVENT
- NO PROPOSED LOADING ZONE ON SITE
- TREES SHALL BE PLANTED:  
• 10 FEET FROM HYDRANTS AND UTILITY STRUCTURES  
• 5 FEET FROM UTILITY LINES  
• 3 FEET FROM CURBS
- CITY MUST APPROVE ANY SUBSTITUTIONS IN WRITING PRIOR TO INSTALLATION
- NO EXISTING OR PROPOSED OVERHEAD UTILITY LINES ON SITE
- ANY TREE ON SITE WHICH IS REMOVED THAT IS NOT PERMITTED MUST BE REPLACED.
- DEAD OR DECLINING TREES ON SITE SHALL BE REPLACED.
- IRRIGATION PLANS ARE REQUIRED AND SHALL BE PROVIDED AS PART OF THE FINAL SITE PLAN
- SHOULD JAPANESE KNOTWEED OF PHRAGMITES BE PRESENT ON SITE THEY SHALL BE REMOVED FROM THE PREMISES
- TREE PROTECTION FENCE SHALL BE (1) ONE FOOT OUTSIDE OF THE DRIPLINE

- LANDSCAPING NOTES**
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
  - THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
  - THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
  - THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
  - THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
  - THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPED AREAS.
  - ALL TRANSFORMERS MUST BE SCREENED PER THE CITY OF NOVI STANDARDS AND SPECIFICATIONS.

PAUL DEVITTO, L.L.A.  
MICHIGAN LICENSE No. 3901001797  
LICENSED LANDSCAPE ARCHITECT



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DATE	ISSUE	BY	DESCRIPTION
07/19/2023	2		RESUBMISSION FOR PRELIMINARY SITE PLAN APPROVAL
05/23/2023	1		PRELIMINARY SITE PLAN APPROVAL

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Phone 248.247.1115

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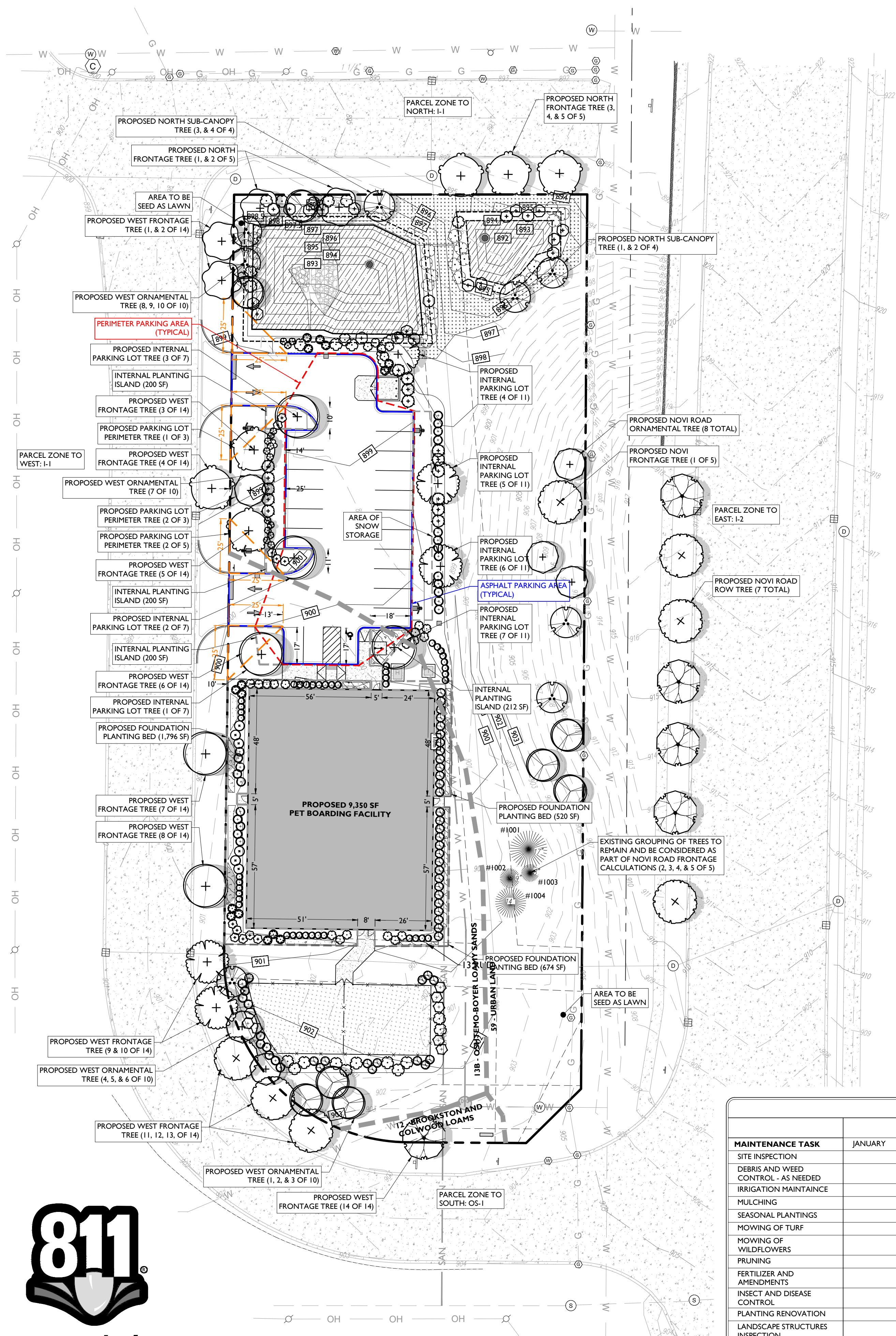
**PET RESORT NOVI**  
PROPOSED PET BOARDING FACILITY

J. REID COOKSEY, P.E.  
MICHIGAN LICENSE No. 6201069428  
LICENSED PROFESSIONAL ENGINEER

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SCALE: 1" = 30' PROJECT ID: DET-230040  
TITLE:  
LANDSCAPING PLAN  
DRAWING:  
C-7





**EXISTING TREE INVENTORY**

TREE ID NUMBER	SIZE	COMMON NAME	CONDITION	RECOMMENDATION
#1001	17"	NORWAY SPRUCE	FAIR	TO REMAIN
#1002	9"	NORWAY SPRUCE	FAIR	TO REMAIN
#1003	8"	NORWAY SPRUCE	FAIR	TO REMAIN
#1004	14"	NORWAY SPRUCE	FAIR	TO REMAIN

**SOIL CHARACTERISTICS CHART**

TYPE OF SOIL	BROOKSTON AND COLWOOD LAOMS
PERCENT OF SITE COVERAGE	5.2%
HYDROLOGIC SOIL GROUP	B/C/D
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	0.20 TO 1.98 IN / HR
DEPTH TO WATER TABLE	ABOUT 0 INCHES
TYPE OF SOIL	OSHTOMO-BOYER LOAMY SANDS
PERCENT OF SITE COVERAGE	24.8%
HYDROLOGIC SOIL GROUP	A
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	1.98 TO 5.95 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES
TYPE OF SOIL	URBAN LAND
PERCENT OF SITE COVERAGE	69.9%
HYDROLOGIC SOIL GROUP	C
DEPTH TO RESTRICTIVE LAYER	20 TO 36 INCHES
SOIL PERMEABILITY	0.06 TO 0.20 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES
TYPE OF SOIL	SLOAN - MARLETTE
PERCENT OF SITE COVERAGE	0.1%
HYDROLOGIC SOIL GROUP	B/D
DEPTH TO RESTRICTIVE LAYER	0 TO 12 INCHES
SOIL PERMEABILITY	0.20 TO 1.98 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES

**MAINTENANCE REQUIREMENT SCHEDULE**

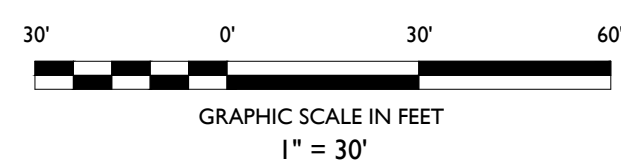
MAINTENANCE TASK	MONTH											
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
SITE INSPECTION			X				X				X	
DEBRIS AND WEED CONTROL - AS NEEDED			X	X	X	X	X	X	X	X	X	
IRRIGATION MAINTENANCE			X							X		
MULCHING			X									
SEASONAL PLANTINGS					X	X	X	X	X	X	X	
MOWING OF TURF			X	X	X	X	X	X	X	X	X	
MOWING OF WILDFLOWERS											X	
PRUNING			X	X							X	
FERTILIZER AND AMENDMENTS			X	X	X	X	X	X	X	X	X	
INSECT AND DISEASE CONTROL					X	X	X	X	X	X	X	
PLANTING RENOVATION			X							X		
LANDSCAPE STRUCTURES INSPECTION				X								
LIGHTING MAINTENANCE			X							X		
PAVED SURFACE MAINTENANCE				X								

- TREE PROTECTION FENCE SHALL BE (1) ONE FOOT OUTSIDE OF THE DRIPLINE
- SHOULD JAPANESE KNOTWEED OR PHRAGMITES BE PRESENT ON SITE THEY SHALL BE REMOVED FROM THE PREMISES
- IRRIGATION PLANS ARE REQUIRED AND SHALL BE PROVIDED AS PART OF THE FINAL SITE PLAN
- THE STORMWATER BASIN IS DESIGNED TO EMPTY 24 - 48 HOURS AFTER RAINFALL EVENT
- NO PROPOSED LOADING ZONE ON SITE
- TREES SHALL BE PLANTED:
  - 10 FEET FROM HYDRANTS AND UTILITY STRUCTURES
  - 5 FEET FROM UTILITY LINES
  - 3 FEET FROM CURBS
- CITY MUST APPROVE ANY SUBSTITUTIONS IN WRITING PRIOR TO INSTALLATION
- NO EXISTING OR PROPOSED OVERHEAD UTILITY LINES ON SITE
- ANY TREE ON SITE WHICH IS REMOVED THAT IS NOT PERMITTED MUST BE REPLACED.
- DEAD OR DECLINING TREES ON SITE SHALL BE REPLACED.

**IRRIGATION NOTE:**  
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

FOR COMMON AREA IRRIGATION SYSTEMS CONNECTED TO PUBLIC WATER SUPPLIES: INSTALL A BACKFLOW PREVENTION REDUCED PRESSURE ZONE ASSEMBLY (RPZ) WITH AN ASSE 013 LISTING APPROVAL AT EACH TAP TO THE PUBLIC WATER SUPPLY. A MINIMUM CLEARANCE OF 12-INCHES MEASURED FROM THE BOTTOM OF PRESSURE RELIEF VALVE TO THE FINISHED LANDSCAPED GRADE SHALL BE REQUIRED. PROVIDE A DETAIL SHOWING THE RPZ INSTALLATION SETUP AND HEIGHT ABOVE GRADE. IF BACKFLOW PREVENTER IS TO BE ENCLOSED, PROVIDE A DETAIL OF THE ENCLOSURE WITH REQUIRED DRAINAGE OUTLETS. SHOW ALL LOCATIONS ON A SITE PLAN. A PLUMBING PERMIT IS REQUIRED FOR THE INSTALLATION OF THE BACKFLOW PREVENTER. INSTALLATION OF THE BACKFLOW PREVENTER SHALL BE IN SUCH A MANNER AS TO NOT REQUIRE BLOWING OUT THE SYSTEM THROUGH THE BACKFLOW PREVENTER. DRAIN PORTS AND BLOW OUT PORTS SHALL BE INCLUDED. ANY DEVIATIONS FROM THESE REQUIREMENTS MUST BE APPROVED THROUGH THE NOVIO WATER & SEWER DIVISION CROSS CONNECTION CONTROL SPECIALIST (248-735-5661).

- LANDSCAPING NOTES**
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  - THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
  - THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
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www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115

**SITE DEVELOPMENT PLANS**

**PET RESORT NOVIO**

**PROPOSED PET BOARDING FACILITY**

22-22-274-017  
NOVIO ROAD AND GEN MAR  
CITY OF NOVIO  
OAKLAND COUNTY, MICHIGAN

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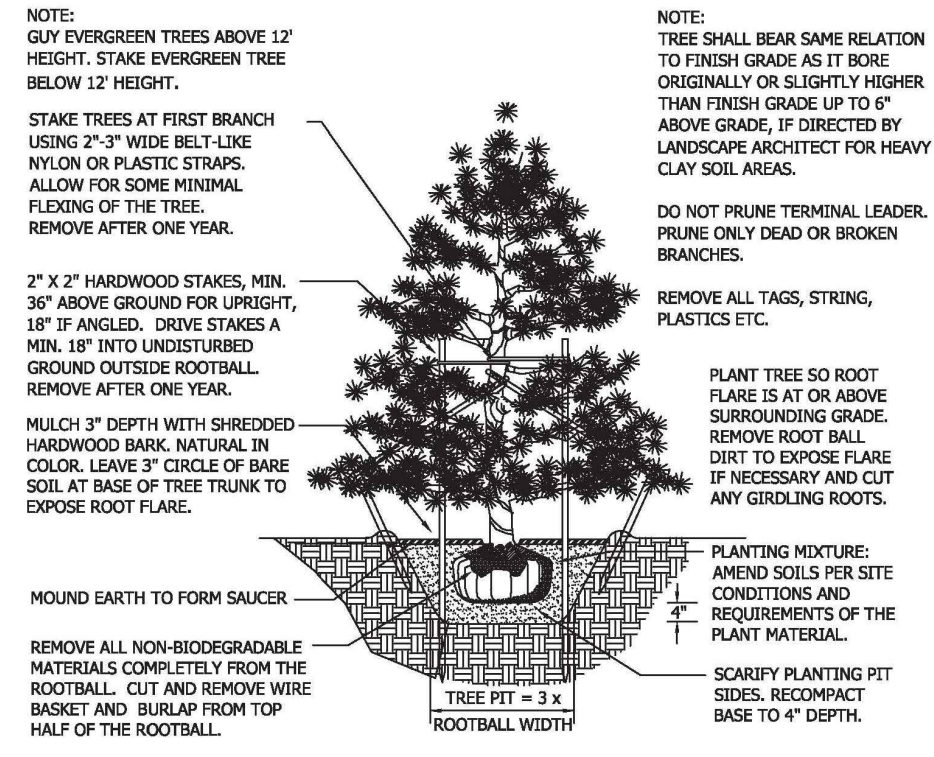
J. REID COOKSEY, P.E.  
MICHIGAN LICENSE No. 6201069428  
LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 30' PROJECT ID: DET-230040

TITLE:  
**LANDSCAPING AREA AND TREE LAYOUT PLAN**

DRAWING:  
**C-8**

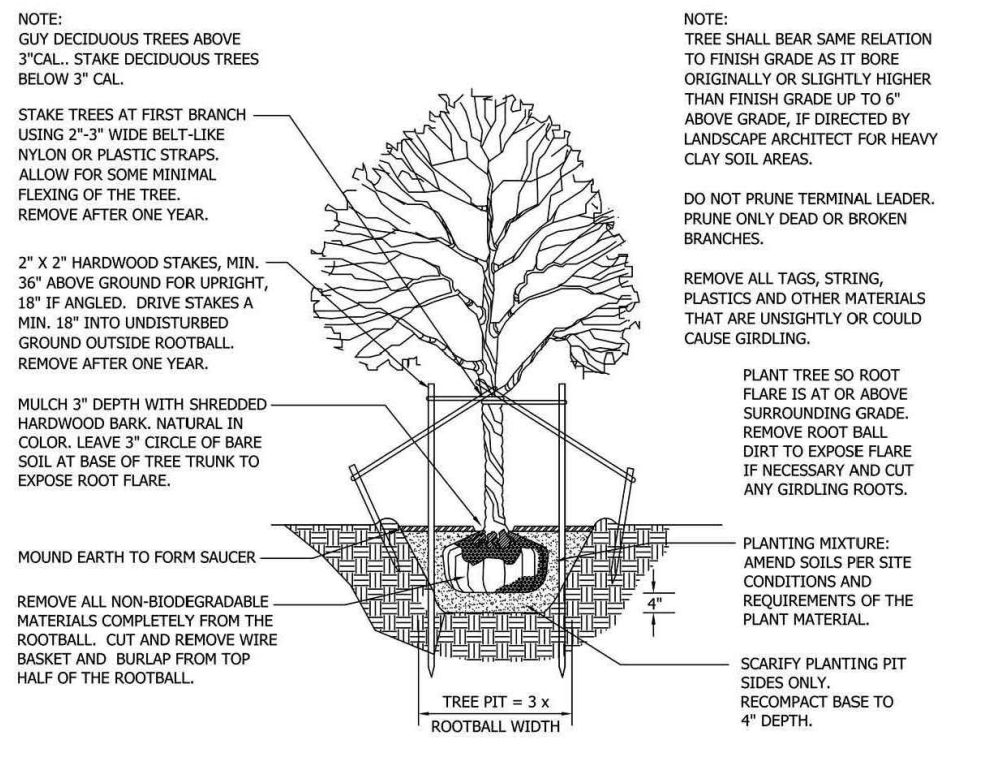




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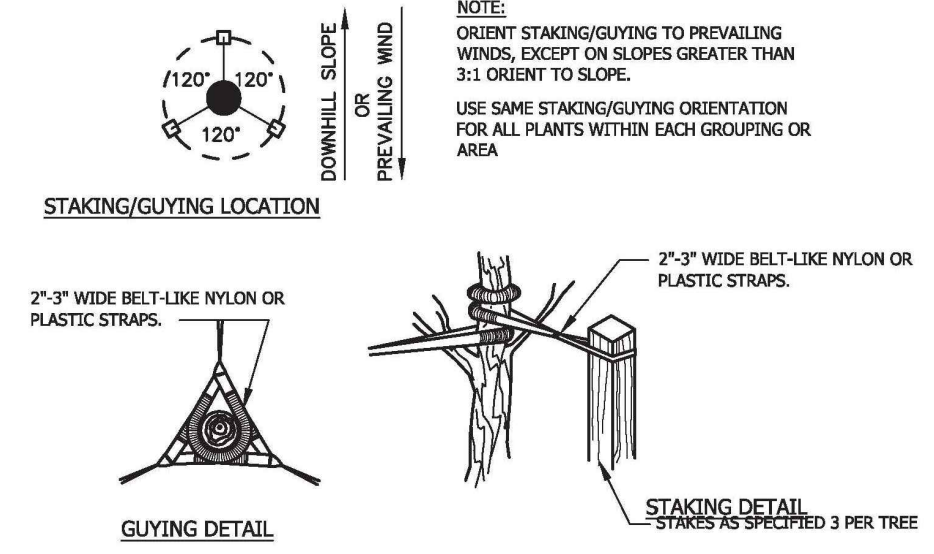
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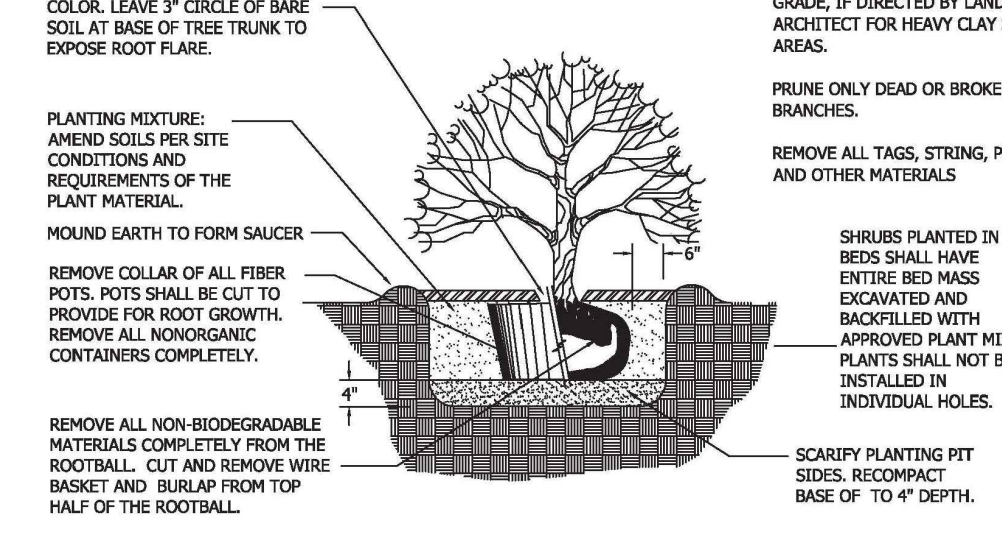
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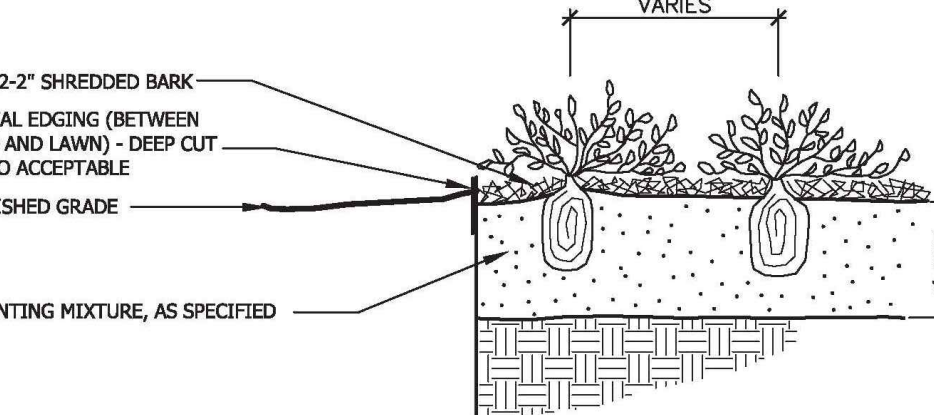
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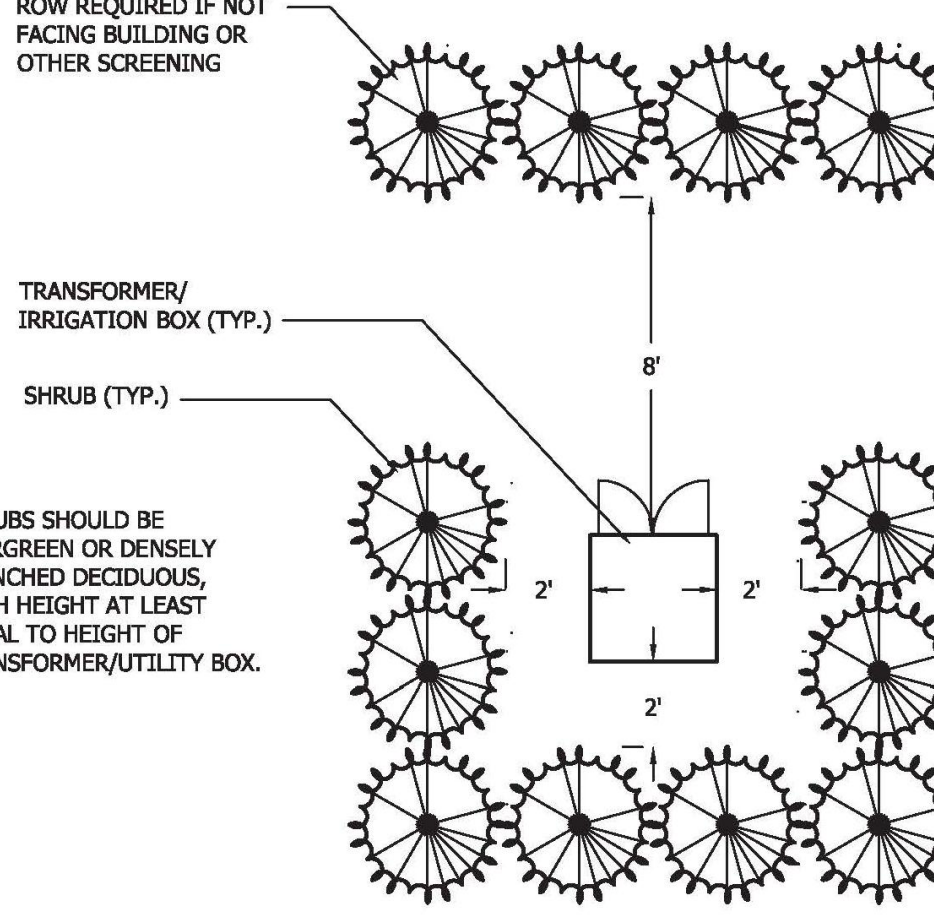
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### GROUND COVER/PERENNIAL/ANNUAL PLANTING DETAIL

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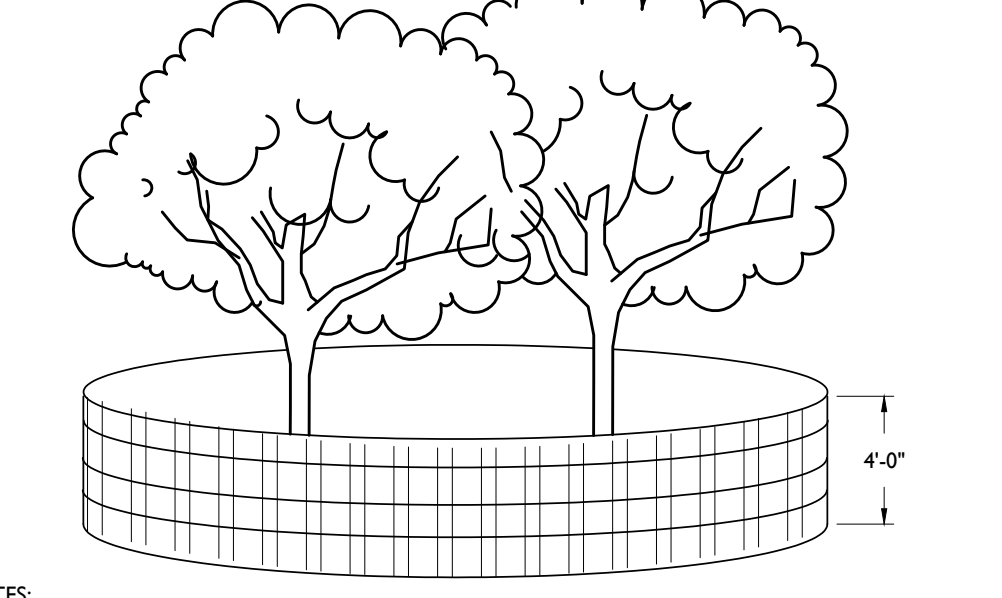
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### TRANSFORMER SCREENING DETAIL

NOT TO SCALE

6



### TREE PROTECTION DETAIL

NOT TO SCALE

7

#### GENERAL LANDSCAPING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
2. WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.

#### PROTECTION OF EXISTING VEGETATION NOTES:

1. BEFORE COMMENCING WORK, ALL EXISTING VEGETATION WHICH COULD BE IMPACTED AS A RESULT OF THE PROPOSED CONSTRUCTION ACTIVITIES MUST BE PROTECTED FROM DAMAGE BY THE INSTALLATION OF TREE PROTECTION FENCING. FENCING SHALL BE LOCATED AS DEPICTED WITHIN THE APPROVED OR FINAL PLAN SET, ESTABLISHING THE TREE PROTECTION ZONE. FENCE INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE PROTECTION FENCE DETAIL". NO WORK MAY BEGIN UNTIL THIS REQUIREMENT IS FULFILLED. THE FENCING SHALL BE INSPECTED REGULARLY BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
2. IN ORDER TO AVOID DAMAGE TO ROOTS, BARK OR LOWER BRANCHES, NO VEHICLE, EQUIPMENT, DEBRIS, OR OTHER MATERIALS SHALL BE DRIVEN, PARKED OR PLACED WITHIN THE TREE PROTECTION ZONE. ALL ON-SITE CONTRACTORS SHALL USE ANY AND ALL PRECAUTIONARY MEASURES WHEN PERFORMING WORK AROUND TREES, WALKS, PAVEMENTS, UTILITIES, AND ANY OTHER FEATURES EITHER EXISTING OR PREVIOUSLY INSTALLED UNDER THIS CONTRACT.
3. IN RARE INSTANCES WHERE EXCAVATING, FILL, OR GRADING IS REQUIRED WITHIN THE DRIP-LINE OF TREES TO REMAIN, THE WORK SHALL BE PERFORMED AS FOLLOWS:
  - TRENCHING: WHEN TRENCHING OCCURS AROUND TREES TO REMAIN, THE TREE ROOTS SHALL NOT BE CUT, BUT THE TRENCH SHALL BE TUNNELED UNDER OR AROUND THE ROOTS BY CAREFUL HAND DIGGING AND WITHOUT INJURY TO THE ROOTS. NO ROOTS, LIMBS, OR WOODS ARE TO HAVE ANY PAINT OR MATERIAL APPLIED TO ANY SURFACE.
  - RAISING GRADES: WHEN THE GRADE AT AN EXISTING TREE IS BELOW THE NEW FINISHED GRADE, AND FILL NOT EXCEEDING 6 INCHES (6") IS REQUIRED, CLEAN, WASHED GRAVEL FROM ONE TO TWO INCHES (1" - 2") IN SIZE SHALL BE PLACED DIRECTLY AROUND THE TREE TRUNK. THE GRAVEL SHALL EXTEND OUT FROM THE TRUNK ON ALL SIDES A MINIMUM OF 18 INCHES (18") AND FINISH APPROXIMATELY TWO INCHES (2") ABOVE THE FINISH GRADE AT TREE. INSTALL GRAVEL BEFORE ANY EARTH IS PLACED. NEW EARTH FILL SHALL NOT BE LEFT IN CONTACT WITH THE TRUNK OF ANY TREE REQUIRING FILL. WHERE FILL EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID TREE WELL SHALL BE CONSTRUCTED. IF APPLICABLE, TREE WELL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE WELL DETAIL".
  - LOWERING GRADES: EXISTING TREES LOCATED IN AREAS WHERE THE NEW FINISHED GRADE IS TO BE LOWERED, SHALL HAVE RE-GRADING WORK DONE BY HAND TO THE INDICATED ELEVATION. NO GREATER THAN SIX INCHES (6"). ROOTS SHALL BE CUT CLEANLY THREE INCHES (3") BELOW FINISHED GRADE UNDER THE DIRECTION OF A LICENSED ARBORIST. WHERE CUT EXCEEDING 6 INCHES (6") IS REQUIRED, A DRY LAID RETAINING WALL SHALL BE CONSTRUCTED. IF APPLICABLE, THE RETAINING WALL INSTALLATION SHALL BE IN ACCORDANCE WITH THE PROVIDED "TREE RETAINING WALL DETAIL".

#### SOIL PREPARATION AND MULCH NOTES:

1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIMES AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL ADJUSTMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM.
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL, OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1").
4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT.
5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
6. CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
7. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF RE-GRADING WITHIN THE DISTURBED AREA OF THE SITE.
8. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL), IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
11. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2") TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
13. SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILLING EQUIPMENT UNLESS THE SOIL IS FROZEN OR EXCESSIVELY WET. TILLING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILLING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER THE AREA IS LOOSENED IT SHALL NOT BE DRIVEN OVER BY ANY VEHICLE.
14. APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
15. ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:
  - MYCORB® TREE SAVER - A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS.
  - DIRECTIONS FOR USE: USE 3-0Z PER EACH FOOT DIAMETER OF THE ROOT BALL, OR 3-0Z PER INCH CALIPER. MIX INTO THE BACKFILL WHEN TRANSPLANTING TREES AND SHRUBS. MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8 INCHES, AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8 INCHES INTO THE BACKFILL. APPLY WATER TO THE SOIL SATURATION.
  - MYCORB® TREE SAVER IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ENCOID MYCORRHIZAE.
  - SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9.
  - FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON THE INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION.
  - OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.

#### CITY OF NOVI GENERAL 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 SHALL BE INSTALLED BETWEEN MARCH 15TH AND NOVEMBER 15TH.
3. ALL PLANT MATERIALS ARE TO BE NORTHERN NURSERY GROWN NO. 1 GRADE AND INSTALLED ACCORDING TO ACCEPTED PLANTING PROCEDURES. ALL PLANT MATERIALS SHALL CONFORM TO THE CURRENT ANSA STANDARDS FOR NURSERY STOCK. PERFORMANCE WITH 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 TO NOT MEET THE STANDARDS OF THE ZONING ORDINANCE.
4. 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 (BBB).
5. ANY DECIDUOUS CANOPY TREES WITH BRANCHES THAT MIGHT TEND TO DEVELOP INTO "Y" CROTCHES SHALL BE SUBORDINATED SO AS NOT TO BECOME DOMINANT BRANCHES.
6. MULCH SHALL BE NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK FOR ALL PLANTINGS. 3" THICK FOR TREES IN 4-FOOT DIAMETER CIRCLE WITH 3" PULLED AWAY FROM TRUNK. 2" THICK FOR SHRUBS AND SHRUB BEDS AND 2" THICK BARK FOR PERENNIALS.
7. ALL PLANT MATERIAL SHALL BE WARRANTED FOR TWO (2) FULL YEARS AFTER DATE OF ACCEPTANCE BY THE CITY OF NOVI. ALL UNHEALTHY AND DEAD MATERIAL SHALL BE REPLACED WITHIN THREE (3) MONTHS OR THE NEXT APPROPRIATE PLANTING PERIOD AS DETERMINED BY THE CITY OF NOVI.
8. ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION, INCLUDING WATERING, CULTIVATION, WEED CONTROL AND SOIL ENRICHMENTS AS MAY BE NECESSARY.

#### PLANT QUALITY AND HANDLING NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z601-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLAN SET SHALL TAKE PRECEDENCE OVER COMMON NAMES.
3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEALTHY, TIGHTLY KNIT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT FEESTS, EGGS OR LARVAE.
4. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY LOCATED WHEN IN LEAF.
7. ALL PLANTS DESIGNATED BALL AND BURLAP (BBB) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEM NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK AND ALL BURLAP IS TO BE REMOVED.
8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.
10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIME AND COVERED WITH MOISTENED MULCH OR AGED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED TO ALL PLANTS TO PREVENT DRY OUT. PLANTINGS SHALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
11. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
12. PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT.
14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF EIGHT FEET (8) ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2) ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
  - PLANTS (MARCH 15 - NOVEMBER 15)
  - LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
16. THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPORT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15):
 

ABIES CONCOLOR	CORNUS VARIETIES	OSTRYA VIRGINIANA
ACER BUEBERIANUM	CRATAEGUS VARIETIES	PINUS NIGRA
ACER FREESIA VARIETIES	CUPRESSOCYPERUS LEYLANDII	PLATANUS VARIETIES
ACER RUBRUM	FAGUS VARIETIES	PORULUS VARIETIES
ACER SACCHARINUM	HALESIA VARIETIES	PRUNUS VARIETIES
BETULA VARIETIES	ILEX X FOSTERI	PRUNUS VARIETIES
CARPINUS VARIETIES	ILEX NELLE STEVENS	QUERCUS VARIETIES (NOT Q. PALUSTRIS)
CEDRUS DEODARA	ILEX OPACA	SALIX WEEPING VARIETIES
CORNUS VARIETIES	JUNIPERUS VIRGINIANA	SORBUS VARIETIES
CERDIPHYLLUM VARIETIES	KOELFUERTIA PANICULATA	TAXODIUM VARIETIES
LIQUIDAMBAR VARIETIES	LIQUIDAMBAR VARIETIES	TAXUS B REPANDENS
CORNUS VARIETIES	LIRIODENDRON VARIETIES	TILIA TOMENTOSA VARIETIES
CRATAEGUS VARIETIES	MALUS IN LEAF	ULMUS PARVIFOLIA VARIETIES
	NYSSA SYLVATICA	ZELKOVIA VARIETIES
17. IF A PROPOSED PLANT IS UNAVAILABLE OR ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER AND CITY LANDSCAPE ARCHITECT PRIOR TO ORDERING AND INSTALLATION.
18. DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.
19. THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY.
20. PLANT MATERIAL MUST BE GUARANTEED FOR A PERIOD OF 2 YEARS DURING THE MAINTENANCE PERIOD AND SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.
21. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUY'S IF ORIGINALLY REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING, PRUNING, SPRAYING, FERTILIZING, MOWING THE LAWN, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
22. MOW ALL GRASS AREAS AT REGULAR INTERVALS TO KEEP THE GRASS HEIGHT FROM EXCEEDING THREE INCHES (3"). MOWING SHALL BE PERFORMED ONLY WHEN GRASS IS DRY. MOWER BLADE SHALL BE SET TO REMOVE NO MORE THAN ONE THIRD (1/3) OF THE GRASS LENGTH. WHEN THE AMOUNT OF GRASS IS HEAVY, IT SHALL BE REMOVED TO PREVENT DESTRUCTION OF THE UNDERLYING TURF. MOW GRASS AREAS IN SUCH A MANNER AS TO PREVENT CLIPPINGS FROM BLOWING ON PAVED AREAS AND SIDEWALKS. CLEANUP AFTER MOWING SHALL INCLUDE SWEEPING OR BLOWING OF PAVED AREAS AND SIDEWALKS TO CLEAR THEM FROM MOWING DEBRIS.
23. GRASS AREAS DAMAGED DURING THE PROCESS OF THE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL RESTORE THE DISTURBED AREAS TO A CONDITION SATISFACTORY TO THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE. THIS MAY INCLUDE FILLING TO GRADE, FERTILIZING, SEEDING, AND MULCHING.
24. SHOULD THE OWNER REQUIRE MAINTENANCE BEYOND THE STANDARD 90-DAY MAINTENANCE PERIOD, A SEPARATE CONTRACT SHALL BE ESTABLISHED.
25. LANDSCAPE CONTRACTOR SHALL WATER NEW PLANTINGS FROM TIME OF INSTALL AND THROUGHOUT REQUIRED 90-DAY MAINTENANCE PERIOD UNTIL PLANTS ARE ESTABLISHED. IF ON-SITE WATER IS NOT AVAILABLE AT THE PROJECT LOCATION, THE LANDSCAPE CONTRACTOR SHALL FURNISH IT BY MEANS OR A WATERING TRUCK OR OTHER ACCEPTABLE MANNER.
26. THE QUANTITY OF WATER APPLIED AT ONE TIME SHALL BE SUFFICIENT TO PENETRATE THE SOIL TO A MINIMUM OF EIGHT INCHES (8") IN SHRUB BEDS AND SIX INCHES (6") IN TURF AREAS AT A RATE WHICH WILL PREVENT SATURATION OF THE SOIL.
27. IF AN AUTOMATIC IRRIGATION SYSTEM HAS BEEN INSTALLED, IT CAN BE USED FOR WATERING PLANT MATERIAL. HOWEVER, FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY OF PLANT HEALTH AND ESTABLISHMENT.

#### PLANT MATERIAL GUARANTEE NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF TWO YEARS (2 YR) FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE.
2. THE LANDSCAPE CONTRACTOR SHALL REMOVE AND REPLACE DYING, DEAD, OR DEFECTIVE PLANT MATERIAL AT HIS EXPENSE. THE LANDSCAPE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS COMPANY'S OPERATIONS.
3. ALL REPLACEMENT PLANTS SHALL BE OF THE SAME SPECIES AND SIZE AS SPECIFIED ON THE APPROVED OR FINAL PLAN LIST. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
4. THE CONTRACTOR SHALL INSTRUCT THE OWNER AS TO THE PROPER CARE AND MAINTENANCE OF ALL PLANTINGS.

#### LAWN (SEED OR SOD) NOTES:

1. SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS.
2. SEED OR SOD SHALL BE PURCHASED FROM A RECOGNIZED DISTRIBUTOR AND SHALL BE COMPOSED OF THE MIX OR BLEND WITHIN THE PROVIDED "SEED SPECIFICATION" OR "SOD SPECIFICATION."
3. REFERENCE LANDSCAPE PLAN FOR AREAS TO BE SEED OR LAID WITH SOD.
4. SEEDING SHALL NOT BE PERFORMED IN WINDY WEATHER. IF THE SEASON OF THE PROJECT COMPLETION PROHIBITS PERMANENT STABILIZATION, TEMPORARY STABILIZATION SHALL BE PROVIDED IN ACCORDANCE WITH THE "TEMPORARY SEEDING SPECIFICATION."
5. PROTECT NEW LAWN AREAS AGAINST TRESPASSING WHILE THE SEED IS GERMINATING. FURNISH AND INSTALL FENCES, SIGNS, BARRIERS OR ANY OTHER NECESSARY TEMPORARY PROTECTIVE DEVICES. DAMAGE RESULTING FROM TRESPASS, EROSION, SETTLEMENT, OR OTHER CAUSES SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR AT HIS EXPENSE. REMOVE ALL FENCES, SIGNS, BARRIERS OR OTHER TEMPORARY PROTECTIVE DEVICES ONCE LAWN HAS BEEN ESTABLISHED.

#### CITY OF NOVI NONLIVING DURABLE MATERIAL NOTES:

1. MULCH FOR ALL PLANTINGS SHALL BE PREMIUM SHREDDED HARDWOOD AND SHALL NOT BE ARTIFICIALLY COLORED. NO CYPRESS WOOD MULCH OR RUBBER MULCH ARE TO BE USED.
2. TREES SHALL BE MULCHED TO A 3 INCHES OVERALL DEPTH AT PLANTING.
3. SHRUBS, GROUNDCOVERS AND PERENNIALS SHALL BE MULCHED TO A 2 INCHES OVERALL DEPTH AT PLANTING.
4. ALL LAWN TREES SHALL BE PLANTED WITH A 4 FOOT DIAMETER CIRCLE OF THE SHREDDED HARDWOOD BARK MULCH.
5. MULCH SHALL BE PULLED BACK 3 INCHES FROM THE TREE TRUNK IN A CIRCLE DOWN TO THE ROOT BALL DIRT TO EXPOSE THE ROOT COLLAR TO AIR. NO "VOLCANO" MULCHING IS ALLOWED AT PLANTING OR IN FUTURE APPLICATIONS OF MULCH. IF A ROOTBALL'S DIRT IS LIFTED UP ON THE TRUNK, IT SHOULD BE REMOVED TO EXPOSE THE ROOT FLARE.
6. FOR FIRE SAFETY, SHREDDED HARDWOOD BARK IS NOT TO BE INSTALLED ADJACENT TO OR WITHIN 4 FEET OF BUILDINGS THAT ARE CONSTRUCTED OF COMBUSTIBLE MATERIALS. PLANTINGS ADJACENT TO COMBUSTIBLE BUILDINGS SHALL BE MULCHED WITH A NON-COMBUSTIBLE MATERIAL, TYPICALLY MARKETED AS LANDSCAPE MULCH. THE COLOR OF SUCH MATERIALS SHALL BE NATURAL AND COMPATIBLE WITH THE BUILDING.
7. GRAVEL TYPE MULCHES ARE NOT PERMITTED ADJACENT TO PAVED PARKING LOTS OR ROADWAYS. APPROVAL OF TYPE, DEPTH AND SPECIFIC LOCATION FOR GRAVEL MULCH IS TO BE APPROVED BY THE CITY.
8. SPAGNUM PEAT/BOG PEAT IS HARVESTED FROM FUNCTIONING WETLANDS SO IT SHALL NOT BE USED FOR LANDSCAPE PURPOSES. COMPOST MAY BE USED AS AN ALTERNATIVE.

RESUBMISSION FOR PRELIMINARY SITE PLAN APPROVAL	NB	07/19/2023	2	ISSUE
PRELIMINARY SITE PLAN APPROVAL	NB	05/27/2023	1	DATE
DESCRIPTION	BY	DATE	ISSUE	DATE

### NOT APPROVED FOR CONSTRUCTION

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**PET RESORT NOVI**  
PROPOSED PET BOARDING FACILITY

SITE DEVELOPMENT PLANS

PID: 22-22-274-017  
NOVI ROAD AND GEN MAR  
CITY OF NOVI  
OAKLAND COUNTY, MICHIGAN

J. REID COOKSEY, P.E.  
MICHIGAN LICENSE No. 6201069428  
LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**  
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SCALE: AS SHOWN PROJECT ID: DET-230040

TITLE:

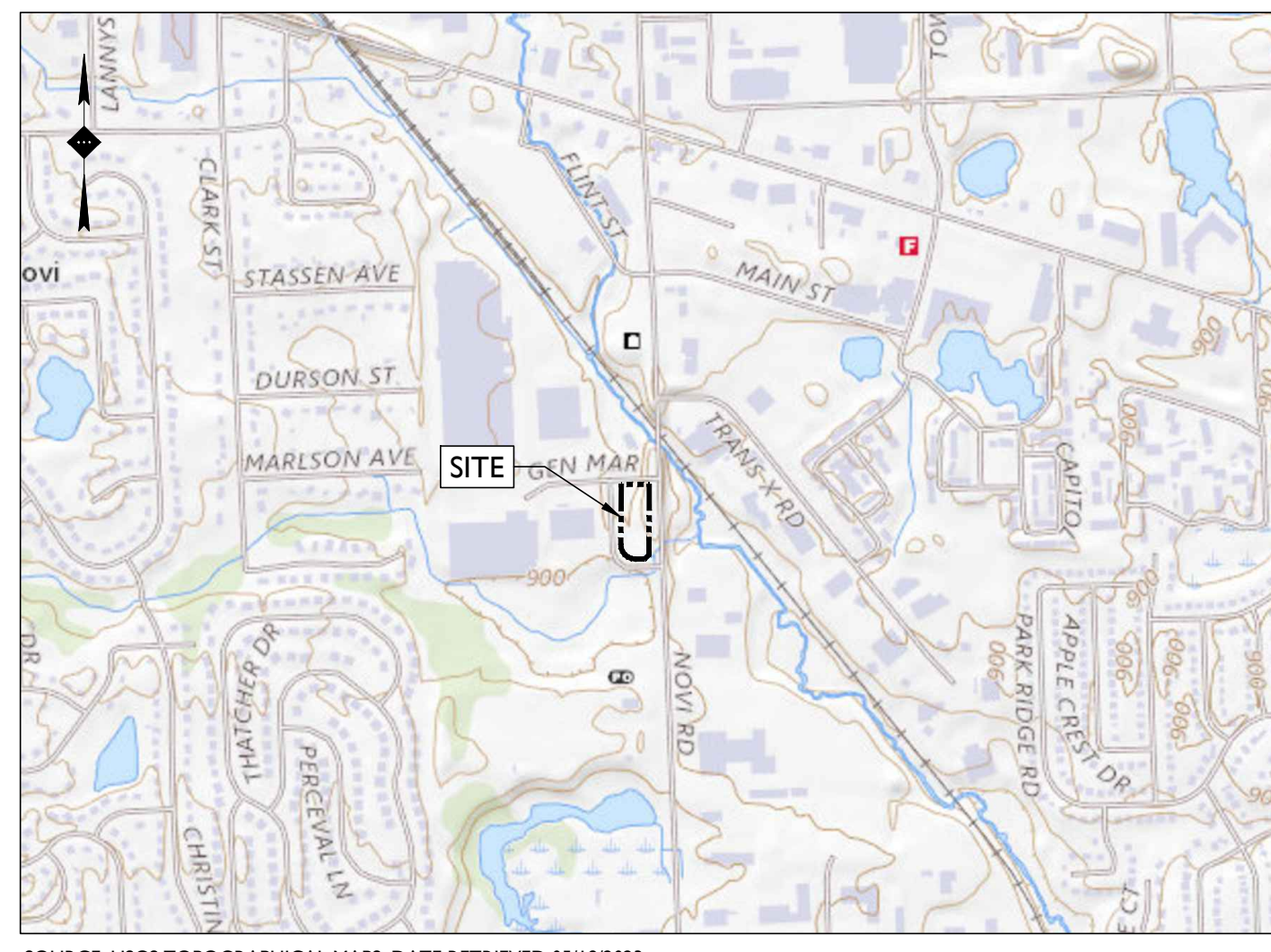
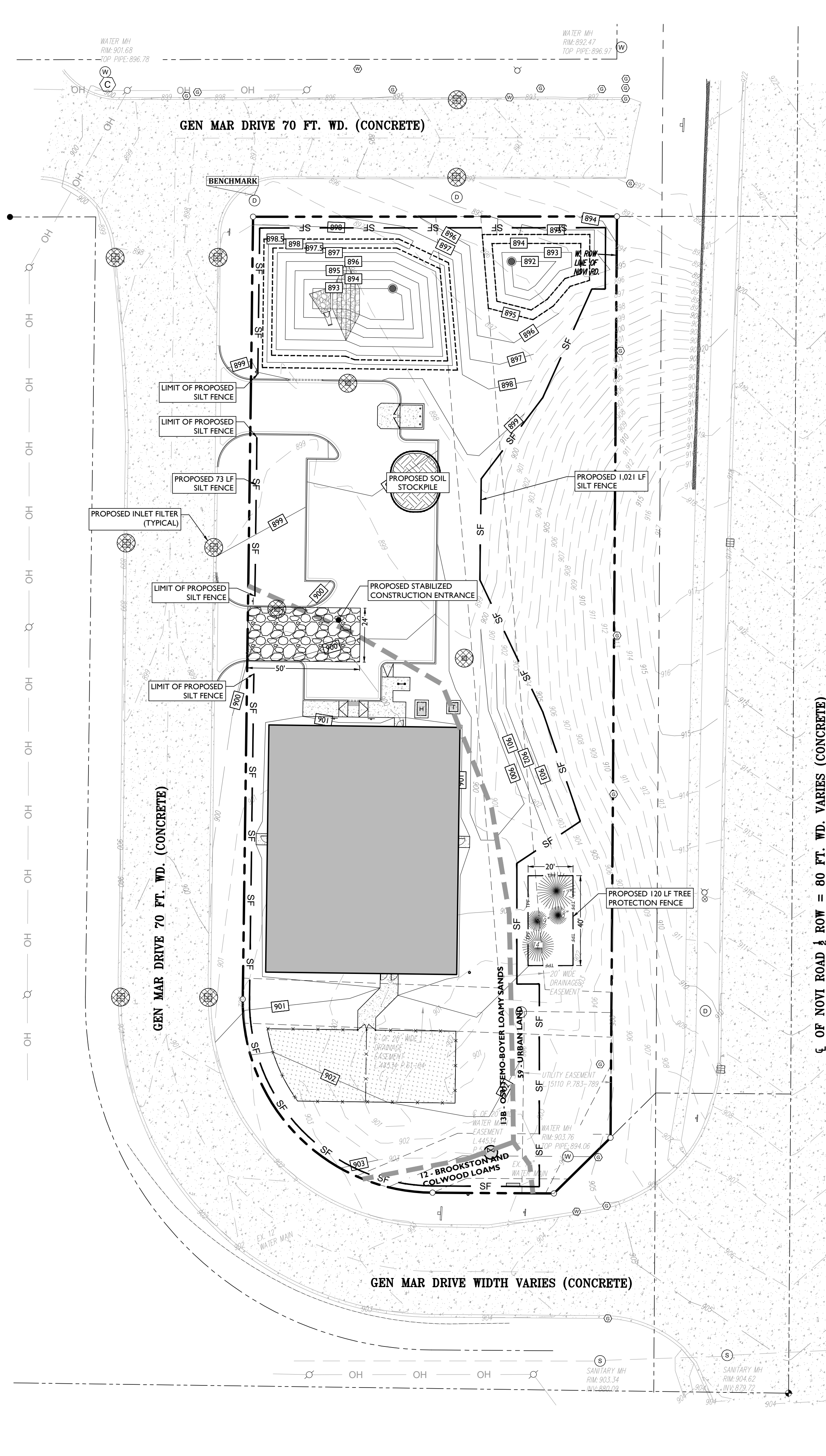
LANDSCAPING DETAILS

DRAWING: C-9







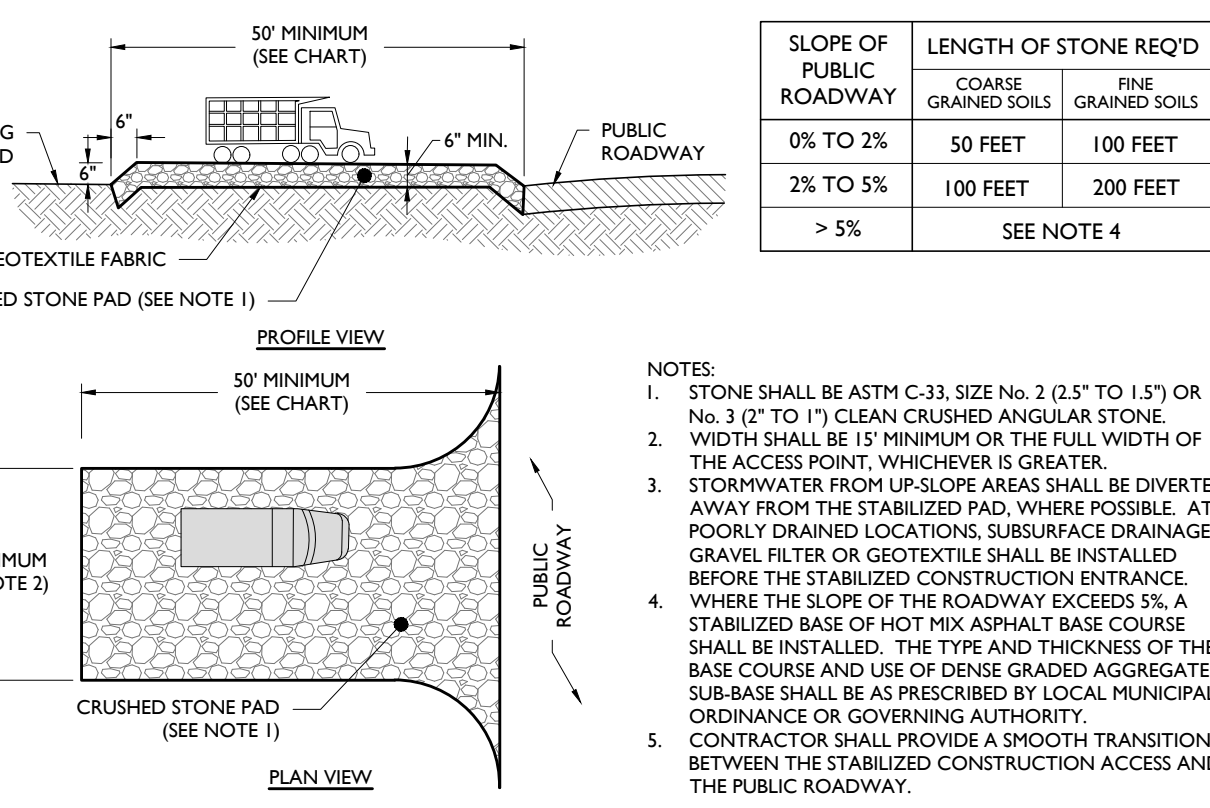


### LOCATION MAP

SCALE: 1" = 1000'±

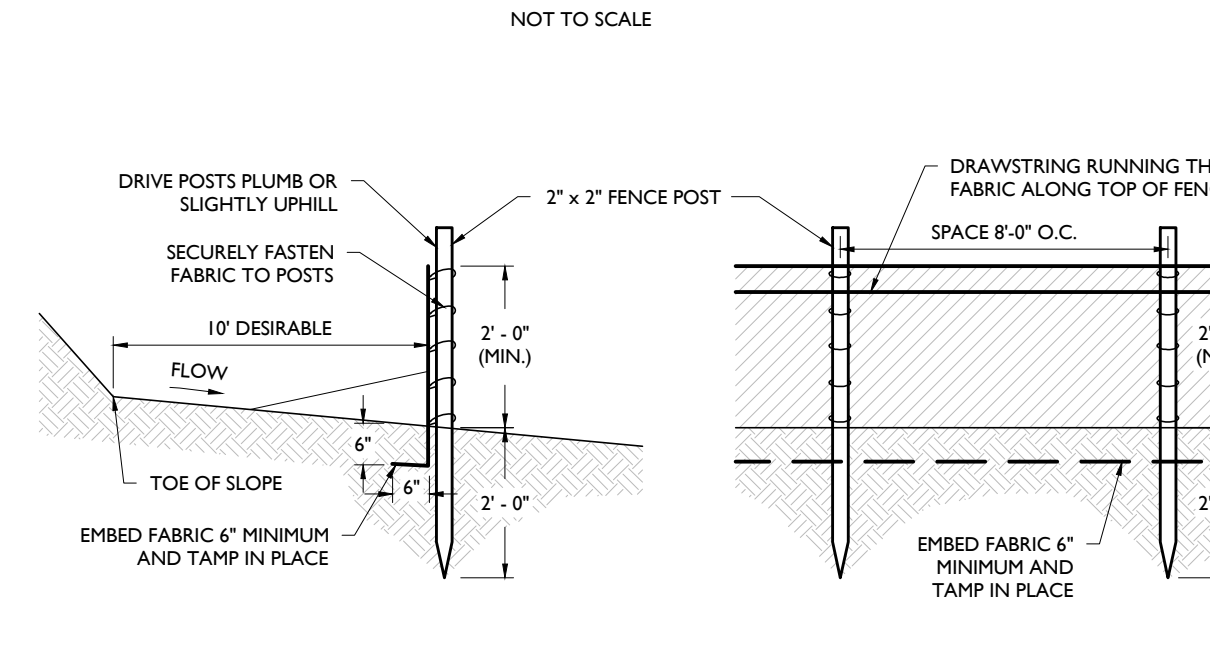
#### LEGAL DESCRIPTION

PARCEL ID# 22-22-276-017  
 A PARCEL OF LAND BEING PART OF THE NORTHEAST 1/4 OF SECTION 22, OF TOWN 1 NORTH, RANGE 8 EAST, CITY OF NOVI, OAKLAND COUNTY, MICHIGAN BEING MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 22; THENCE NORTH 00 DEGREES 23 MINUTES 56 SECONDS EAST 523.79 FEET ALONG THE EAST LINE OF SAID SECTION 22, SAID LINE ALSO BEING CENTERLINE OF NOVI ROAD (1/2 RIGHT OF WAY = 80 FEET); THENCE SOUTH 89 DEGREES 56 MINUTES 56 SECONDS WEST 80.00 FEET TO THE WESTERLY RIGHT OF WAY LINE OF SAID NOVI ROAD AND THE POINT OF BEGINNING; THENCE SOUTH 00 DEGREES 23 MINUTES 56 SECONDS WEST 409.99 FEET ALONG THE WESTERLY RIGHT OF WAY TO A POINT ON THE RIGHT OF WAY LINE GEN MAR DRIVE (VARIABLE WIDTH); THENCE ALONG SAID RIGHT OF WAY LINE THE FOLLOWING CURVE (S) CALLS: (1) SOUTH 45 DEGREES 23 MINUTES 18 SECONDS WEST 35.36 FEET, (2) NORTH 89 DEGREES 37 MINUTES 21 SECONDS WEST 53.99 FEET, (3) 134.08 FEET ALONG THE ARC OF THE CURVE TO THE RIGHT, HAVING A RADIUS 85.00 FEET, CENTRAL ANGLE OF 90 DEGREES 22 MINUTES 43 SECONDS, A CHORD BEARING NORTH 44 DEGREES 25 MINUTES 59 SECONDS WEST 120.60 FEET, (4) NORTH 00 DEGREES 45 MINUTES 22 SECONDS EAST 348.22 FEET, (5) NORTH 89 DEGREES 56 MINUTES 56 SECONDS EAST 161.85 FEET TO THE POINT OF BEGINNING, CONTAINING 1.58 ACRES OF LAND MORE OR LESS. ALSO SUBJECT TO ANY OTHER EASEMENTS OR RESTRICTIONS OF USE OR RECORD.



#### STABILIZED CONSTRUCTION ACCESS DETAIL

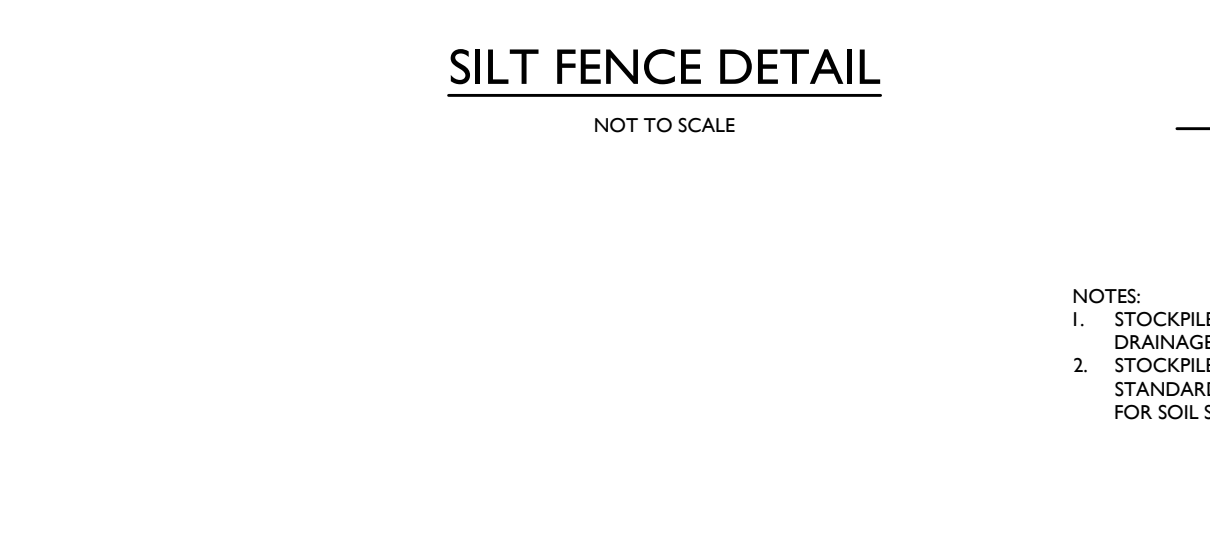
NOT TO SCALE



NOTES:  
 1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES OR POCKETS. FOUR TO SIX FASTENERS PER POST.  
 2. GEOTEXTILE FABRIC TO BE EMBEDDED 6" (MIN) AND TAMP IN PLACE.  
 3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. SPLICING OF INDIVIDUAL ROLLS SHALL NOT OCCUR AT LOW POINTS.  
 4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.

#### SILT FENCE DETAIL

NOT TO SCALE



#### SOIL STOCKPILE DETAIL

NOT TO SCALE

#### SOIL CHARACTERISTICS CHART

TYPE OF SOIL	BROOKSTON AND COLWOOD LAOMS
PERCENT OF SITE COVERAGE	5.2%
HYDROLOGIC SOIL GROUP	B/C/D
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	0.20 TO 1.98 IN / HR
DEPTH TO WATER TABLE	ABOUT 0 INCHES

#### SOIL CHARACTERISTICS CHART

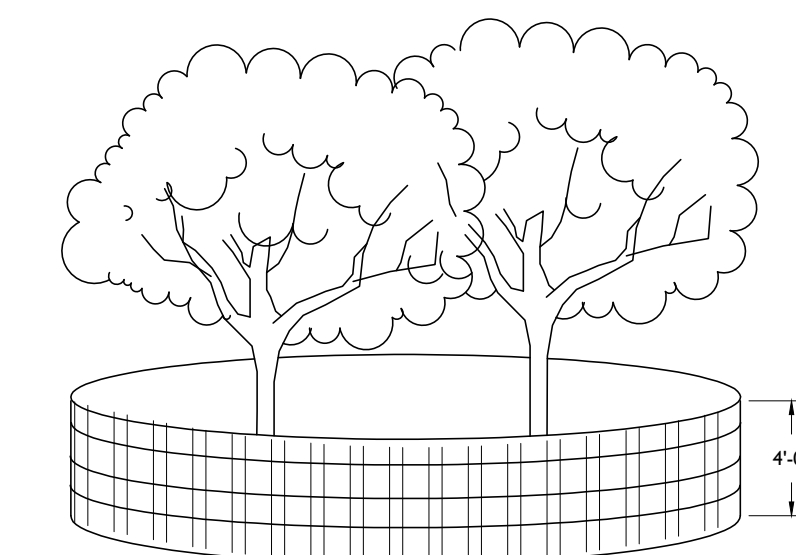
TYPE OF SOIL	OSHTEMO-BOYER LOAMY SANDS
PERCENT OF SITE COVERAGE	24.8%
HYDROLOGIC SOIL GROUP	A
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	1.98 TO 5.95 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES

#### SOIL CHARACTERISTICS CHART

TYPE OF SOIL	URBAN LAND
PERCENT OF SITE COVERAGE	69.8%
HYDROLOGIC SOIL GROUP	C
DEPTH TO RESTRICTIVE LAYER	20 TO 36 INCHES
SOIL PERMEABILITY	0.06 TO 0.20 IN / HR
DEPTH TO WATER TABLE	> 80 INCHES

#### BENCHMARK:

CITY OF NOVI #2311  
 "X" ON NORTH RIM OF SANITARY MANHOLE LOCATED ACROSS FROM INTERSECTION OF GEN-MAR AND NOVI ROAD, 45 EAST OF CENTERLINE OF NOVI ROAD AND 80 FEET NORTH OF CENTERLINE OF GEN-MAR.  
 ELEVATION = 892.08980 NAVD88  
 ON-SITE  
 THE NORTH RIM OF STORM MANHOLE LOCATED 7 FEET NORTH AND 1 FEET FROM THE NORTHWESTERLY MOST PROPERTY CORNER.  
 ELEVATION = 897.57 NAVD88



NOTES:  
 1. SNOW FENCING IS TO BE 4'-0" HIGH AND SELF-SUPPORTED.  
 2. DO NOT STOCKPILE MATERIALS OR STORE EQUIPMENT WITHIN THE TREE PROTECTION FENCING.  
 3. SNOW FENCE TO BE INSTALLED AT DRIP LINE OF EXISTING TREE OR TREE CLUSTER TO BE PROTECTED OR NO CLOSER THAN 6" FROM TREE TRUNK IF NECESSARY.  
 4. IF THE PROJECT AREA ENCOMPASSES A PORTION OF THE DRIP LINE OF THE TREE, NO MORE THAN ONE THIRD OF THE OF THE TOTAL AREA OF WITHIN THE DRIP LINE SHOULD BE DISTURBED BY CONSTRUCTION OR REGRADING AND A 3" THICK LAYER OF MULCH SHALL BE INSTALLED OVER THE AREA OF THE DRIP LINE WHICH IS NOT PROTECTED BY FENCING TO PROVIDE A CUSHION.

#### TREE PROTECTION DETAIL

NOT TO SCALE

#### SYMBOL DESCRIPTION

---	PROPERTY BOUNDARY
- - - -	ADJACENT PROPERTY BOUNDARY
---	LOD
---	PROPOSED SILT FENCE
---	PROPOSED TREE PROTECTION FENCE
---	PROPOSED STOCKPILE & EQUIPMENT STORAGE
---	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED INLET PROTECTION FILTER

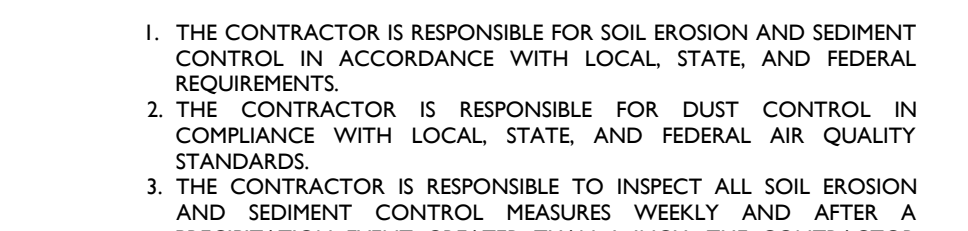
#### SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

#### SEQUENCE OF CONSTRUCTION

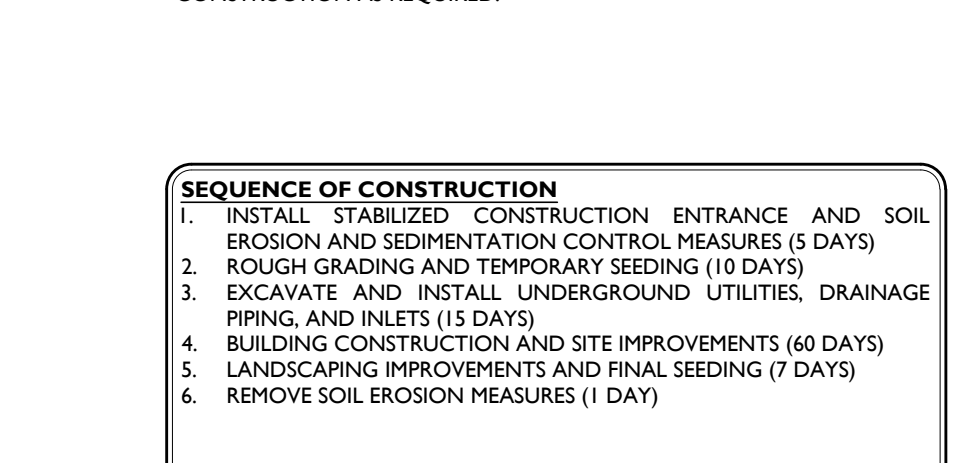
1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SOIL EROSION AND SEDIMENTATION CONTROL MEASURES (5 DAYS)
2. ROUGH GRADING AND TEMPORARY SEEDING (10 DAYS)
3. EXCAVATE AND INSTALL UNDERGROUND UTILITIES, DRAINAGE PIPING, AND INLETS (15 DAYS)
4. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (60 DAYS)
5. LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS)
6. REMOVE SOIL EROSION MEASURES (1 DAY)

NOTE:  
 TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO CITY AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.



#### INLET FILTER BAG DETAIL

NOT TO SCALE



#### SOIL STOCKPILE DETAIL

NOT TO SCALE

NOTES:  
 1. STOCKPILES SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.  
 2. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, AS APPROPRIATE (SEE SOIL EROSION NOTES).

NO.	DATE	ISSUE	DESCRIPTION
2	07/19/2023	NB	RESUBMISSION FOR PRELIMINARY SITE PLAN APPROVAL
1	05/23/2023	NB	PRELIMINARY SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

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## PET RESORT NOVI

### PROPOSED PET BOARDING FACILITY

SCALE: 1" = 30' PROJECT ID: DET-230040

TITLE: SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING: C-11

## STONEFIELD

engineering & design

SCALE: 1" = 30' PROJECT ID: DET-230040

TITLE: SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING: C-11























# PET RESORT | NOVI

## NEW CONSTRUCTION NOVI ROAD & GEN MAR DRIVE NOVI, MI 48375

### ARCHITECT:

STUCKY VITALE ARCHITECTS  
27172 WOODWARD AVENUE  
ROYAL OAK, MICHIGAN 48067  
(248) 546-6700

### CIVIL:

STONEFIELD ENGINEERING  
607 SHELBY SUITE 200  
DETROIT, MI 48226  
(248) 247-1115

### PROJECT DATA:

BUILDING CODE AUTHORITY:  
CITY OF NOVI

OWNER:  
CHRISTOPHER AULEPP  
DC 121 INC.  
114 BEDDINGHAM CT.  
SALINE, MI 48176  
(248) 2893250

TYPE OF CONSTRUCTION: ---  
II-B

USE GROUP: ---  
B-BUSINESS

PROJECT AREA:  
TOTAL PROJECT AREA = 9,350 SF

OCCUPANT LOAD: ---  
9,350SF / 100 OCCUPANTS = 94 OCCUPANTS

EGRESS WIDTH:  
REQUIRED (2" PER OCCUPANT) = 94X.2 = 19"  
PROVIDED = 36" x 3 DOORS = 108"

PLUMBING FIXTURE COUNTS:  
WATER CLOSETS REQUIRED 1 PER 25 PEOPLE = 2  
WATER CLOSETS PROVIDED = 2

LAVATORIES REQUIRED 1 PER 40 PEOPLE = 2  
LAVATORIES PROVIDED = 2

DRINKING FOUNTAINS REQUIRED 1 PER 100 = 1  
DRINKING FOUNTAINS PROVIDED = 1

SERVICE SINK REQUIRED = 1  
SERVICE SINK PROVIDED = 1

### APPLICABLE CODES: (COMMERCIAL):

BUILDING CODE:  
2015 MICHIGAN BUILDING CODE (MBC) AS AMENDED

MECHANICAL CODE:  
2015 MICHIGAN MECHANICAL CODE AS AMENDED

PLUMBING CODE:  
2018 MICHIGAN PLUMBING CODE AS AMENDED

ELECTRICAL CODE:  
2017 NATIONAL ELECTRIC CODE (NEC) AS AMENDED & MICHIGAN AMENDMENTS PART 8.

ENERGY CODE:  
2015 MICHIGAN BUILDING CODE (CHAPTER 13)  
2015 MICHIGAN ENERGY CODE

ASHRAE 90.1-2013 ENERGY STANDARDS FOR BUILDINGS

FIRE CODE:  
2015 INTERNATIONAL FIRE CODE REFERENCED IN 2015 MICHIGAN BUILDING CODE

BARRIER FREE REQUIREMENTS:  
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (DOJ)  
MBC-2012 (CHAPTER 11)  
ICC / ANSI 117.1 - 2009, EXCEPT SECTION 611 & 707

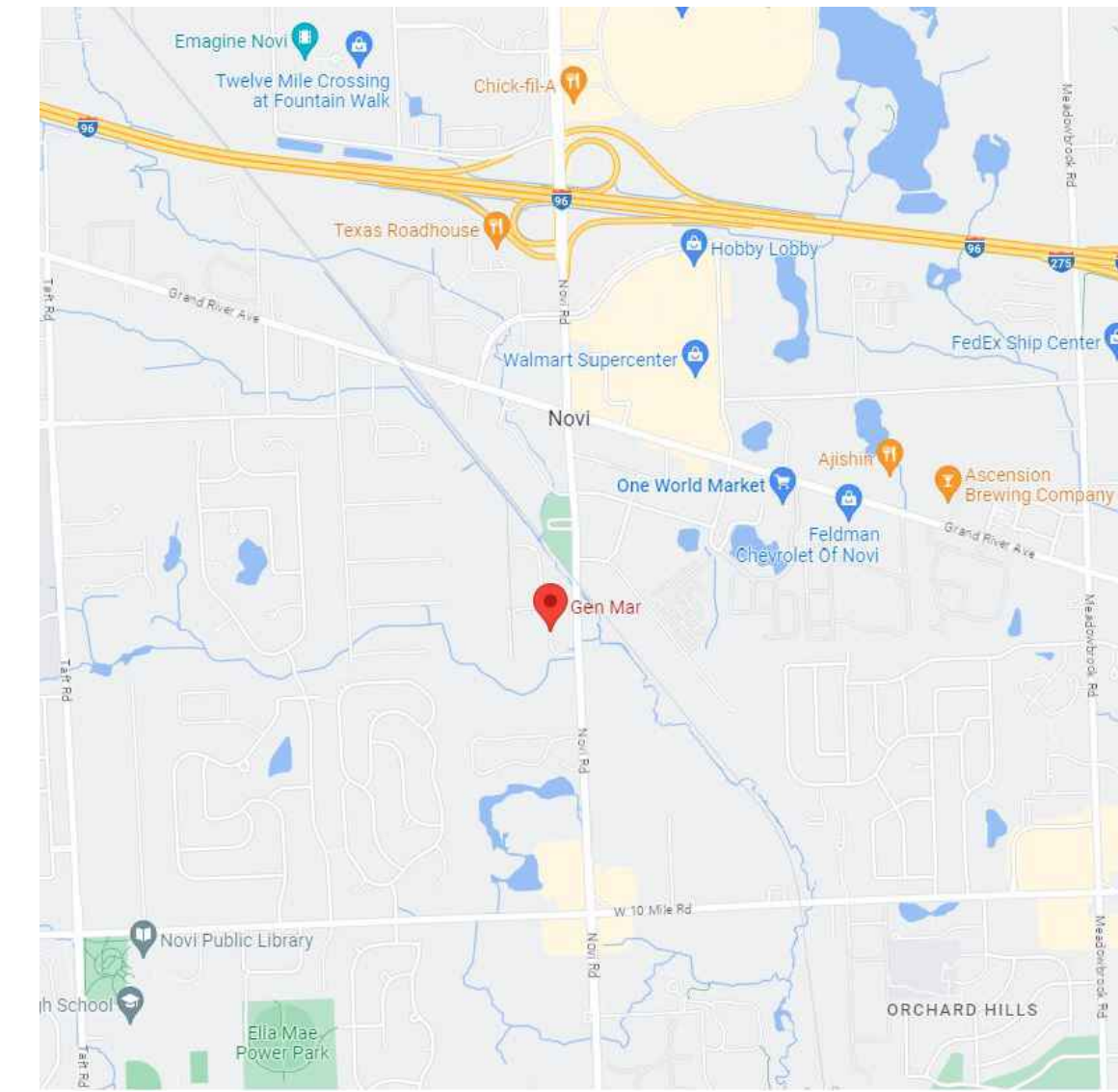
LIFE SAFETY CODES:  
2015 NFPA 101 LIFE SAFETY CODE  
2013 NFPA 72 NATIONAL FIRE ALARM CODE

SHEET INDEX		ISSUED FOR	
DRAWING INDEX KEY:		07.21.23 SITE PLAN APPROVAL	
<input type="checkbox"/>	NOT ISSUED		
<input checked="" type="checkbox"/>	PREVIOUSLY ISSUED		
<input checked="" type="checkbox"/>	ISSUED		
<input checked="" type="checkbox"/>	REFERENCE		
GENERAL			
TS1.1	TITLE SHEET AND SHEET INDEX AND LOCATOR PLAN	<input checked="" type="checkbox"/>	
CIVIL			
C-1	COVER SHEET	<input checked="" type="checkbox"/>	
C-2	SITE PLAN	<input checked="" type="checkbox"/>	
C-3	GRADING PLAN	<input checked="" type="checkbox"/>	
C-4	STORM WATER MANAGEMENT PLAN	<input checked="" type="checkbox"/>	
C-5	UTILITY PLAN	<input checked="" type="checkbox"/>	
C-6	LANDSCAPING PLAN	<input checked="" type="checkbox"/>	
C-7	LANDSCAPING AREA & TREE LAYOUT PLAN	<input checked="" type="checkbox"/>	
C-8	LANDSCAPING DETAILS	<input checked="" type="checkbox"/>	
C-9	SOIL EROSION & SEDIMENT CONTROL PLAN	<input checked="" type="checkbox"/>	
C-10	CONSTRUCTION DETAILS	<input checked="" type="checkbox"/>	
C-11	CONSTRUCTION DETAILS	<input checked="" type="checkbox"/>	
T of 1	BOUNDARY & TOPOGRAPHIC SURVEY	<input checked="" type="checkbox"/>	
ARCHITECTURAL			
A1.1	ARCHITECTURAL FLOOR PLAN	<input checked="" type="checkbox"/>	
A3.1	EXTERIOR ELEVATIONS	<input checked="" type="checkbox"/>	

NOTE:  
THESE CONSTRUCTION DRAWINGS WERE PREPARED FOR COMPLIANCE WITH THE MICHIGAN CONSTRUCTION CODES IN EFFECT AT THE TIME OF PERMIT SUBMITTAL. ALL ENGINEERS, CONTRACTORS AND SUPPLIERS INVOLVED WITH THIS PROJECT SHALL COMPLY WITH THE SAME CODES, ISSUED AND APPROVED CODE MODIFICATIONS AND/OR CITY CODE AUTHORITY CONSTRUCTION BOARDS OF APPEALS RULINGS AND WHENEVER REQUIRED SHALL PROVIDE SHOP DRAWINGS AND SUBMITTALS CLEARLY DESCRIBING COMPLIANCE TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW AND APPROVAL.

SYMBOL LEGEND		ABBREVIATION	
	DARKENED ARROW INDICATES ELEVATED SECTION	@	ACOUST.
	ELEVATION NUMBER	A.C.T.	ACOUSTIC CEILING TILE
	SHEET NUMBER WHERE ELEVATION IS LOCATED	ADJ.	ADJACENT
	ELEVATION NUMBER	A.F.F.	ABOVE FINISH FLOOR
	SHEET NUMBER WHERE ELEVATION IS LOCATED	ALUM.	ALUMINUM
	DETAIL REFERENCE NUMBER	ANOD.	ANODIZED
	SHEET NUMBER WHERE DETAIL IS LOCATED	BD.	BOARD
	DETAIL NUMBER	BLDG.	BUILDING
	DETAIL NAME	BLK.	BLOCK
	DRAWING SCALE	BLKG.	BLOCKING
	SHEET NUMBER WHERE DETAIL IS REFERENCED	CEM.	CEMENT
	REFERENCE POINT OF ELEVATION	C.J.	CONTROL JOINT
	HEIGHT ABOVE FINISHED FLOOR	CLG.	CEILING
	HEIGHT ABOVE FINISHED FLOOR	CL.	CENTER LINE
	DATUM SYMBOL INDICATES A SPECIFIC REFERENCE HEIGHT OF MATERIAL INDICATED	C.O.	CLEAN OUT
	ROOM NAME	COL.	COLUMN
	ROOM NUMBER	CONC.	CONCRETE
	FINISH TAG	C.G.	CORNER GUARD
	NUMBERS DESIGNATE VERTICAL COLUMN LINES	CONST.	CONSTRUCTION
	LETTERS DESIGNATE HORIZONTAL COLUMN LINES	CONT.	CONTINUOUS
	CIRCLES REPRESENT NEW COLUMN LINES	CORR.	CORROGATED
	DIAMOND REPRESENT EXISTING COLUMNS	CPY.	CARPET
	EXISTING DOOR SYMBOL	C.T.	CERAMIC TILE
	NEW DOOR SYMBOL	DET.	DETAIL
	DOOR DESIGNATION	DIA.	DIAMETER
	WALL TYPE DESIGNATION NUMBER - COORDINATE WITH SCHEDULE	DM.	DIMENSION
	EQUIPMENT DESIGNATION NUMBER - COORDINATE WITH PLAN NOTES	DN.	DOWN
	KEY NOTE DESIGNATION NUMBER - COORDINATE WITH PLAN NOTES	D.O.	DOOR OPENING
	WINDOW DESIGNATION LETTER - COORDINATE WITH PLAN NOTES	DR.	DOOR
	ADDENDUM DESIGNATION NUMBER	DWG.	DRAWING
	BULLETIN DESIGNATION NUMBER	EA.	EACH
	MATCH LINE	ELEV.	ELEVATION
	SHEET REFERENCE FOR DRAWING CONTINUATION	E.W.	EACH WAY
		EXG.	EXISTING
		EXIST.	EXISTING
		EXP.	EXPANSION, EXPOSED
		EXT.	EXTERIOR
		F.O.D.	FLOOR DRAIN
		FDN.	FOUNDATION
		F.R.P.	FIBER REINFORCED PANELS
		FIN.	FINISH
		FLR.	FLOOR
		F.O.	FACE OF
		F.O.S.	FACE OF STUD
		FR.	FRAME
		FTG.	FOOTING
		FV.	FIELD VERIFY
		GA.	GAUGE
		GALV.	GALVANIZED
		GYP.	GYPSUM
		HDW.	HARDWARE
		H.M.	HOLLOW METAL
		HORIZ.	HORIZONTAL
		HT.	HEIGHT
		I.D.	INSIDE DIAMETER
		INSUL.	INSULATION
		INT.	INTERIOR
		JOINT.	JOINT
		LAV.	LAVATORY
		LG.	LONG
		L.L.O.	LONG LEG OUTSTANDING
		L.L.V.	LONG LEG VERTICAL
		MAX.	MAXIMUM
		MECH.	MECHANICAL
		MET.	METAL
		MEZZ.	MEZZANINE
		M.I.	MISCELLANEOUS IRON
		MIN.	MINIMUM
		MISC.	MISCELLANEOUS
		M.O.	MASONRY OPENING
		N.I.C.	NOT IN CONTRACT
		N.T.S.	NOT TO SCALE
		O.C.	ON CENTER
		O.D.	OUTSIDE DIAMETER
		OPNG.	OPENING
		OPP.	OPPOSITE
		PL.G.	PLATE GLASS
		PL.S.	PLATE STEEL
		P.LAM.	PLASTIC LAMINATE
		PLAS.	PLASTER
		PREFAB.	PREFABRICATED
		PROJ.	PROJECT, PROJECTION
		P.S.F.	POUNDS PER SQUARE FOOT
		PT.	PAINT, POINT
		R.	RISER
		R.A.	RETURN AIR
		R.B.	RUBBER BASE
		R.C.	ROOF CONDUCTOR
		R.C.P.	REFLECTED CEILING PLAN
		R.D.	ROOF DRAIN
		R.F.	RUBBER FLOORING
		REINF.	REINFORCED, REINFORCING
		REQD.	REQUIRED
		RFG.	ROOFING
		RM.	ROOM
		R.S.	ROOF SUMP
		R.T.	RUBBER TILE
		SAN.	SANITARY
		SCHED.	SCHEDULE
		SHT.	SHEET
		SIM.	SIMILAR
		SPEC.	SPECIFICATION
		S.S.	SERVICE SINK
		STL.	STEEL
		STD.	STANDARD
		STOR.	STORAGE
		STRUCT.	STRUCTURAL
		SUSP.	SUSPENDED
		SW.	SWITCH
		SYM.	SYMMETRICAL
		T.	TREAD
		TAB.	TOP AND BOTTOM
		TEL.	TELEPHONE
		TERR.	TERRAZZO
		T&G.	TONGUE AND GROOVE
		THK.	THICK, THICKNESS
		THRES.	THRESHOLD
		T.O.S.	TOP OF STEEL
		TYP.	TYPICAL
		UNDERCUT.	UNDERCUT
		UNLESS NOTED OTHERWISE.	UNLESS NOTED OTHERWISE
		V.B.	VINYL BASE
		V.C.T.	VINYL COMPOSITION TILE
		V.I.F.	VERIFY IN FIELD
		W.	WIDE
		VERT.	VERTICAL
		WAINSCOT.	WAINSCOT
		W.C.	WATER CLOSET
		WD WIN.	WOOD WINDOW
		WT.	WEIGHT
		W.W.F.	WELDED WIRE FABRIC

MATERIAL LEGEND	
	ACOUSTICAL CEILING
	BATT/LOOSE INSULATION
	BLOCKING/ROUGH LUMBER - CONTINUOUS
	BLOCKING/ROUGH LUMBER
	CONCRETE
	FINISHED WOOD
	GLASS
	GYPSON WALLBOARD
	MASONRY
	PARTICLE BOARD
	PLYWOOD



VICINITY MAP  
SCALE: N.T.S.



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Consultants:

Project:  
PET RESORT | NOVI  
NOVI RD. & GEN MAR DR.  
NOVI, MI 48375

Issued for:  
SITE PLAN APPROVAL  
07.21.23

Drawn by:  
SVA  
Checked by:  
JAV, MJB, AJD

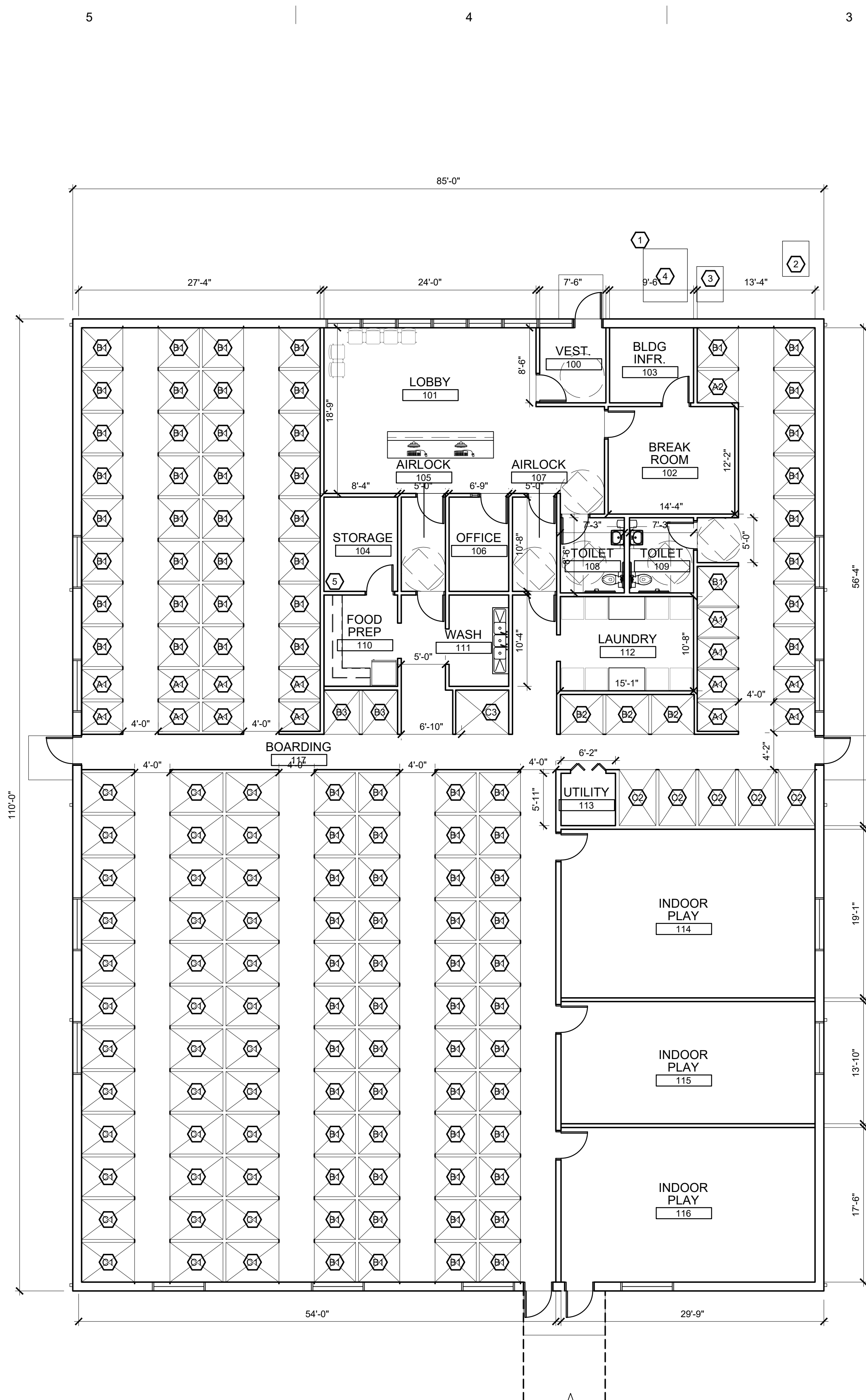
Sheet Title:  
TITLE SHEET,  
SHEET INDEX, +  
LOCATOR PLAN

Project No. :  
2023.030

Sheet No. :  
TS1.1

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

GENERAL FLOOR PLAN NOTES:

- THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
- ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
- WALL THICKNESS' ARE NOMINAL NOT ACTUAL DIMENSIONS. SEE WALL SCHEDULE FOR ACTUAL DIMENSIONS.
- ALL WOOD, INCLUDING BLOCKING, USED ON THE PROJECT SHALL BE FIRE RETARDANT TREATED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION.
- PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE CONDITION.
- PROVIDE TRANSITION STRIPS AT EACH CHANGE IN FLOOR FINISH MATERIALS.
- PAINT, PATCH AND REPAIR THE FOLLOWING TO MATCH EXISTING MATERIALS: FLOOR, WALL, AND CEILING SURFACES AS REQUIRED ADJACENT TO AREAS BEING DEMOLISHED. REFER TO DEMOLITION DRAWINGS FOR MORE INFORMATION.
- REINFORCE WALL AND PROVIDE BLOCKING AS REQUIRED TO SUPPORT WALL CABINETS AND COUNTERTOPS.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL WALL REINFORCING FOR INSTALLATION OF ACCESSORIES, COAT RACKS, CHART RACKS, CASEWORK, AND OTHER WALL MOUNTED ITEMS.
- CLEAN AND REPAIR ALL EXISTING FLOOR FINISHES AS NECESSARY.
- ALL EXPOSED PIPES, DUCTS, AND CONDUIT TO BE PAINTED TO MATCH EXISTING.
- PROVIDE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AT 30'-0" O.C. MAXIMUM AND AS INDICATED IN THE CONTRACT DOCUMENTS.
- COORDINATE WITH OWNER'S EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS / LOCATIONS OF FLOOR / WALL / CEILING MOUNTED ITEMS, IE. CAMERAS, TV'S, SPEAKERS, SENSORS, SECURITY WIRING, VAULTS, ATMS.
- CONTRACTOR SHALL CONDUCT A ROUGH ELECTRICAL INSPECTION WITH OWNER, PRIOR TO ENCLOSING WALLS, FOR THE PURPOSE OF CONFIRMING ALL J-BOX LOCATIONS FOR POWER, DATA, VOICE, SWITCH, THERMOSTAT, ETC.
- CONTRACTOR TO FILL ANY AND ALL EQUIPMENT PENETRATIONS OR DEPRESSIONS INTO OR THROUGH THE EXISTING SLAB THAT WILL NOT BE UTILIZED TO FEED NEW EQUIPMENT (I.E. ABANDONED FLOOR CORES, IMPRESSION FROM PREVIOUS EQUIPMENT FLOOR PLATE REMOVAL). PENETRATIONS SHALL BE FILLED WITH NON-SHRINK GROUT. THE SIDES OF ANY EXISTING OPENINGS SHALL BE MODIFIED/TAPERED SO THAT THEY ARE WIDER AT THE TOP THAN AT THE BOTTOM. FOR LARGE OPENINGS, PROVIDE ONE (1) #5 BAR 2" UP FROM BOTTOM OF HOLE.
- A TACTILE SIGN STATING 'EXIT' AND COMPLYING WITH ICC-A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN 'AREA OF REFUGE', AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY, AND THE EXIT DISCHARGE.
- PROVIDE PERMANENT MIN 3-INCH HIGH CONTRASTING COLOR MARKING AND IDENTIFICATION AT ALL FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS, SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS WITHIN 15 FEET AT THE END OF EACH WALL, AND NOT EXCEEDING 30 FEET MAXIMUM HORIZONTAL INTERVALS. MINIMUM 2 LOCATIONS EACH WALL, TYPICAL FOR ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING, OR ATTIC SPACES PER CODE (MBC 703.7)

FLOOR PLAN KEY LEGEND:

- 1 REFER TO LANDSCAPE PLAN FOR SCREENING
- 2 NEW BUILDING TRANSFORMER
- 3 MAKE UP AIR UNIT
- 4 GROUND MTD RTU
- 5 LADDER TO STORAGE MEZZANINE ABOVE

KENNEL MATRIX:

- A1 14 SMALL - 4'-8" X 3'-4"
- A2 1 SMALL - 4'-8" X 3'-8"
- B1 90 MEDIUM - 4'-8" X 4'-6"
- B2 3 MEDIUM - 4'-10" X 4'-6"
- B3 2 MEDIUM - 5'-0" X 4'-0"
- C1 36 LARGE - 6'-0" X 4'-6"
- C2 5 LARGE - 6'-4" X 4'-2"
- C3 1 LARGE - 6'-0" X 5'-0"
- 152 TOTAL



STUCKY VITALE ARCHITECTS  
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Consultants:

Project :  
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Issued for :  
SITE PLAN APPROVAL  
07.21.23

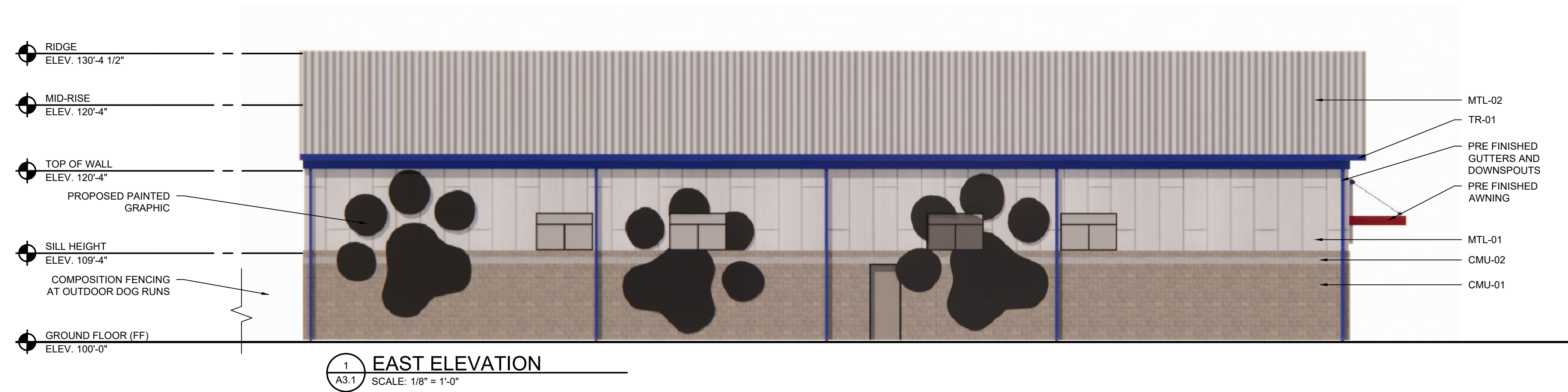
Drawn by :  
SVA  
Checked by :  
JAV, MJB, AJD  
Sheet Title :  
FLOOR PLAN

Project No. :  
2023.030

Sheet No. :  
A1.1

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LIST OF MATERIALS	
CMU-01	DESCRIPTION: INTEGRAL COLOR MASONRY TYPE: SPLIT FACE COLOR: FAWN
CMU-02	DESCRIPTION: INTEGRAL COLOR MASONRY TYPE: SPLIT FACE COLOR: CHARDONNAY
MTL-01	DESCRIPTION: PREFINISHED FLAT FACE METAL PANEL COLOR: ALABASTER
MTL-02	DESCRIPTION: STANDING SEAM METAL ROOFING COLOR: PURE WHITE
TR-01	DESCRIPTION: METAL TRIM COLOR: REGAL BLUE

FACADE MATERIAL PERCENTAGES	
CMU	32% TOTAL COVERAGE
MTL-01 FLAT METAL PANEL	38% TOTAL COVERAGE
MTL-02 STANDING SEAM METAL ROOF	24% TOTAL COVERAGE
TR-01 TRIM	6% TOTAL COVERAGE

**SVA**  
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NOVI, MI 48375

Issued for :  
SITE PLAN APPROVAL  
07.21.23

Drawn by :  
KSH  
Checked by :  
JAV, MJB  
Sheet Title :  
EXTERIOR  
ELEVATIONS

Project No. :  
2023.030

Sheet No. :  
**A3.1**

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## PLANNING REVIEW





# PLAN REVIEW CENTER REPORT

## Planning Review

### NOVI PET RESORT

JSP23-20

August 23, 2023

#### PETITIONER

Stucky Vitale Architects

#### REVIEW TYPE

Revised Preliminary Site Plan

#### PROPERTY CHARACTERISTICS

Section	22	
Site Location	50-22-22-276-017 (Gen Mar)	
Site School	Novi Community School District	
Site Zoning	I-1 Light Industrial	
Adjoining Zoning	North	I-1 Light Industrial
	East	I-2 General Industrial
	West	I-1 Light Industrial
	South	OS-1 Office Service; I-1 Light Industrial
Current Site Use	Vacant	
Adjoining Uses	North	
	East	Automotive Body Shop; Car Rental Establishment
	West	Warehouse
	South	Vacant
Site Size	2.31 acres	
Plan Date	March 24, 2023	

#### PROJECT SUMMARY

The applicant is proposing to construct a 9,350 square foot pet boarding facility at this vacant property on Gen Mar. The facility will be able to accommodate 152 dogs. Other proposed features include a parking lot with 20 parking spaces, a 2,509 square foot outdoor animal play area with artificial turf, and a dumpster pad & enclosure.

#### RECOMMENDATION

**Approval of the revised Preliminary Site Plan is recommended by Planning staff.** Currently, all reviewers are recommending approval of the revised Preliminary Site Plan, some with conditions to be addressed at Final Site Plan submittal.

#### ORDINANCE REQUIREMENTS

This project was reviewed for compliance with the City of Novi Zoning Ordinance and any other applicable provisions of the ordinance, as noted. The plans show general compliance with ordinance requirements. Please address any items in **bold** with the next review.

1. Project Narrative: *Project narrative provided and will be attached to this letter when it goes to the Planning Commission for review.*
  
2. Building and Parking Setbacks (Sec. 3.1.18.D & 3.6.2.C):
  - a. All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply. **The west yard building setback does not meet the requirement of 40 feet. Applicant will be seeking a variance from the ZBA**
  
3. Modification of Parking Setback Requirements (Sec. 3.6.2.Q): *The west yard parking setback does not meet the minimum requirement of 40 feet. **The Planning Commission can grant waivers for parking setback deficiencies where it determines that such modification may result in improved use of the site and/or in improved landscaping; provided, however, that such modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements of this Section.** The applicant has verified that the total area of parking setback required to be at least 39,963 square feet and proposed setback area is 39,996 square feet.*
  
4. Pickups and Drop-offs (Sec. 4.46.3): *Adequate traffic circulation shall be provided on the site to accommodate the frequent pickups and drop-offs of animals for the facility. Note added to sheet C-2: "animal pick-up and drop-off shall be accommodated in an efficient manner as to not disrupt traffic circulation."*
  
5. Outdoor Facilities (Sec. 4.46.4):
  - a. Any outdoor facilities shall be located in the interior side yard or rear yard. The proposed outdoor play area is located in the labeled side yard (southern yard), but all yards must comply with front yard standards since all yards have street frontage. **A ZBA variance will be required since this standard cannot be met without one.**
  - b. The outdoor facilities shall not encroach into any required building setback. Part of the proposed outdoor play area extends into the building setback. **A ZBA variance will be required if the play area cannot be relocated where it does not encroach into the setback.**
  - c. Pets shall not be permitted to remain outdoors overnight. *Applicant notes that pets will not remain outdoors overnight.*
  
6. Animal Waste (Sec. 4.46.5): *Animal wastes, biohazard materials or byproducts shall be disposed of as recommended by the Michigan Department of Public Health, and/or other duly appointed authority at the discretion of the City. All other wastes shall be contained in leak-proof and odor proof containers. No animal wastes, biohazard materials or byproducts shall be buried, composted, or incinerated on-site, or allowed to enter into groundwater. Applicant notes that this standard will be met.*
  
7. Noise Specifications (Sec. 4.46.6): *Noise shall be minimized through the combined use of screening, site isolation, and sound dampening materials in compliance with Sections 5.5, 5.11, and 5.14. The I-1 district decibel limits are: Nighttime Hours = 70 decibels maximum; Day Time Hours = 75 decibels maximum. Applicant notes that this standard will be met.*
  
8. Parking Lot Screening (Sec. 3.6.2.E): *Off-street parking is allowed in front yard if it is screened by a brick wall or landscaped berm. **Planning Commission waivers for parking lot screening from Novi***

**Road and Gen Mar (west frontage) are required for the current layout. Landscape supports both waivers.**

9. Bicycle Parking (Sec. 5.16): 2 bicycle parking spaces are proposed. **Please meet the locational & dimensional standards as noted in the Planning chart and the Traffic review letter.**
10. Dumpster (Sec. 4.19.2): Dumpsters should be in a rear yard. **A ZBA variance will be required for this deviation since all yards must comply with front yard standards.**
11. Dumpster Enclosure (Sec. 21-145(c)): **See the Engineering review for comments pertaining to the dumpster pad.**
12. Loading Spaces: A loading area is not indicated. *Narrative provided as to why a loading area is not needed.* **A ZBA variance will be required if the loading area cannot be provided.**
13. Rooftop Equipment (Sec. 4.19.2.E.ii): None appears to be proposed. If rooftop equipment is proposed, please include it in the next submittal with proper screening
14. Pedestrian Connectivity: Building exits must be connected to sidewalk system or parking lot. Exits are proposed on the east and west sides of the building, but the exits are not connected to a sidewalk or parking lot. *Exits are noted as emergency exits and now comply.*
15. Exterior Lighting & Photometric Plan (Sec. 5.7): *Photometric plan submitted.* Only necessary lighting for security purposes and limited operations shall be permitted after a site's hours of operation (5.7.3.G), and lighting for security purposes shall be directed only onto the area to be secured (5.7.3.H). **Please include a note on the plans that these lighting standards will be met.**
16. Signage: *A monument sign is proposed at the southern portion of the site. For sign permit information please contact Maureen Underhill at 248-347-0438 or [munderhill@cityofnovi.org](mailto:munderhill@cityofnovi.org) in the Code Compliance Division for more information.*
17. Planning Chart: Please refer to the attached Planning Chart for additional comments to address in the next submittal.

## **OTHER REVIEWS**

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- a. Landscape Review: Landscape is recommending **approval** of the revised Preliminary Site Plan, with some comments to be addressed in Final Site Plan (See Landscape Review Letter & Chart).
- b. Traffic Review: Traffic is recommending **approval** of the revised Preliminary Site Plan with some comments to be addressed in Final Site Plan. (See Traffic Review Letter).

## **NEXT STEP: PLANNING COMMISSION AND RESPONSE LETTER**

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The Preliminary Site Plan and Stormwater Management Plan will need approval from the Planning Commission. The project is scheduled to appear before the Planning Commission on August 30, 2023, at 7pm at the Novi Civic Center. Please provide the following via email the week prior to the meeting once this stage is reached:

1. Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**
2. A response letter addressing ALL the comments from ALL the review letters and a request for waivers/variances as you see fit.
3. A color rendering of the Site Plan (to be used for Planning Commission presentation).

## **ZONING BOARD OF APPEALS**

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If the Preliminary Site Plan, Stormwater Management Plan, and the requested waivers are approved by Planning Commission, staff will determine when the applicant can appear before the ZBA for the necessary variances.

## FINAL SITE PLAN SUBMITAL

---

After receiving Planning Commission's approval of the Preliminary Site Plan, please submit the following for review:

1. **Seven** copies of Final Site Plan sets (24" x 36", folded) addressing ALL comments from Preliminary Site Plan Review.
2. Response letter addressing ALL comments from ALL review letters and **refer to sheet numbers where the change is reflected.**
3. [Final Site Plan Application](#)
4. [Final Site Plan Checklist](#)
5. [No Revision Façade Affidavit](#) (only if no façade changes have been made)
6. An itemized engineering cost estimate including sanitary sewer, watermain, storm sewer, paving and grading costs, size 8.5" x 11" (The cost estimate should not include soil erosion or demolition costs.)
7. An itemized landscaping cost estimate including greenbelt and greenbelt ornamental trees, perennials, pond plantings, shrubs, edging, mulch, seed mix and seeded lawn, size 8.5" x 11" (The cost estimate should not include woodland trees, replacement trees or mitigation.)
8. [Other Agencies Checklist](#)
9. [Non-Domestic User Survey](#)
10. [Hazardous Chemical Survey](#)

## ELECTRONIC STAMPING SET SUBMITAL AND RESPONSE LETTER

---

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

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

## STAMPING SET APPROVAL

---

Stamping sets will be required for this project. After having received all the review letters from City staff the applicant should make the appropriate changes on the plans and submit **10 size 24" x 36" copies, folded, with signature and seal (may be electronic)** to the Community Development Department for final Stamping Set approval.

## PRE-CONSTRUCTION MEETING

---

**A Pre-Construction meeting is required for this project.** Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees and permits that must be issued before a Pre-Con can be scheduled, so it is suggested you contact Sarah Marchioni (248-347-0430 or [smarchioni@cityofnovi.org](mailto:smarchioni@cityofnovi.org)) once the Final Site Plan has been approved to begin the Pre-Con checklist. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah.

## CHAPTER 26.5

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

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248-347-0547 or [jhill@cityofnovi.org](mailto:jhill@cityofnovi.org).

A handwritten signature in black ink that reads "James Hill". The signature is written in a cursive style with a horizontal line underneath it.

James Hill, Planner





## PLANNING REVIEW CHART: I-1 Light Industrial

**Review Date:** August 9, 2023  
**Review Type:** Revised Preliminary Site Plan  
**Project Name:** JSP23-20 Novi Pet Resort  
**Location:** 50-22-22-276-017 (Gen Mar)  
**Plan Date:** July 19, 2023  
**Prepared by:** James Hill, Planner  
**E-mail:** jhill@cityofnovi.org; **Phone:** (248) 347-0547

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

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b>	Industrial Research Development and Technology	No Change	Yes	
<b>Area Study</b>	The site does not fall under any special category	N/A	N/A	
<b>Zoning</b> <i>(Effective 1/8/2015)</i>	I-1: Light Industrial District	No Change	Yes	
<b>Uses Permitted</b> <i>(Sec 3.1.18.B)</i>	Sec 3.1.18.B Principal Uses Permitted.	9,350 SF pet boarding facility	Yes	
<b>Height, Bulk, Density, and Area Limitations (Sec 3.1.18)</b>				
<b>Frontage on a Public Street</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required	Frontage on Gen Mar	Yes	
<b>Minimum Zoning Lot Size</b> <i>(Sec 3.6.2.D)</i>	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space	There are a number of landscaping waivers that would be required for this layout which would not be supported by staff.	<b>No</b>	<b>See the Landscape review for further details.</b>
<b>Maximum % of Lot Area Covered</b> <i>(By All Buildings)</i>	<i>(Sec 3.6.2.D)</i>	13.5% (9,350 SF) of lot coverage by all buildings	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Building Height</b> (Sec. 3.1.18.D)	40 ft.	20 ft., 4 in.	Yes	
<b>Building Setbacks</b> (Sec 3.1.18.D)				
Front (east)	40 ft.	68.3 ft.	Yes	<p><b>All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply</b></p> <p><b>A variance from the ZBA will be required since this standard cannot be met</b>  <b>Minimum 40 foot building setback required, 10 feet provided.</b></p>
Rear (west)	40 ft. (Sec 3.6.2.C)	10 ft.	<b>No</b>	
Side (north)	40 ft. (Sec 3.6.2.C)	226.1 ft.	Yes	
Side (south)	40 ft. (Sec 3.6.2.C)	52.2 ft. from the southwest corner of the building to the ROW	Yes	
<b>Parking Setback</b> (Sec 3.1.18.D & Refer to applicable notes in Sec 3.6.2)				
Front (east)	40 ft.	78.8 ft.	Yes	<p><b>All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply</b></p> <p><b>A waiver from the Planning Commission will be required since this standard cannot be met without one</b></p>
Rear (west)	40 ft. (Sec. 3.6.2.C)	25 ft.	<b>No</b>	
Side (north)	40 ft. (Sec. 3.6.2.C)	96.5 ft.	Yes	
Side (south)	40 ft. (Sec. 3.6.2.C)	97.1 ft.	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Pet Boarding Facilities in the I-1 and I-2 Districts (Sec. 4.46)</b>				
<b>Lot and Building Size</b> (Sec. 4.46.1)	The facilities are allowed in single tenant buildings on lots one acre or larger, or in buildings with multiple tenants on lots two acres or larger.	Meets standards	Yes	
<b>Retail Sales</b> (Sec. 4.46.2)	Up to ten (10) percent of the gross floor area may be used for accessory retail sales.	Retail indicated to take up less than 10% of the gross floor area	Yes	
<b>Pickups and Drop-offs</b> (Sec. 4.46.3)	Adequate traffic circulation shall be provided on the site to accommodate the frequent pickups and drop-offs of animals for the facility.	Note 16 on sheet C-2 indicates "animal pick-up and drop-off shall be accommodated in an efficient manner as to not disrupt traffic circulation"	Yes	
<b>Outdoor Facilities</b> (Sec. 4.46.4)	Any outdoor facilities shall not be closer than five hundred (500) feet from the boundary of the adjacent residential zoning.	Site is not adjacent to a residential zoning district	N/A	
	Any outdoor facilities shall be located in the interior side yard or rear yard.	Located in the labeled side yard (southern yard), but all yards must comply with front yard standards since all yards have street frontage	<b>No</b>	<b>A ZBA variance will be required since this standard cannot be met without one.</b>
	A six (6) foot tall, solid, obscuring fence or wall shall completely enclose all outdoor facilities.	7 ft. tall Trex Composite Fencing	Yes	
	The outdoor facilities shall not encroach into any required building setback.	Part of the proposed outdoor play area extends into the building setback	<b>No</b>	<b>A ZBA variance will be required</b>

Item	Required Code	Proposed	Meets Code	Comments
	All animal waste shall be removed from the outdoor area daily and disposed of in a sanitary manner.	Note 14 under General Notes on sheet C-2 indicates this standard will be met	Yes	
	Pets shall not be permitted to remain outdoors overnight.	Note 13 under General Notes on sheet C-2 indicates pets shall not stay outside overnight	Yes	
<b>Animal Waste</b> (Sec. 4.46.5)	Animal wastes, biohazard materials or byproducts shall be disposed of as recommended by the Michigan Department of Public Health, and/or other duly appointed authority at the discretion of the City. All other wastes shall be contained in leak-proof and odor proof containers. No animal wastes, biohazard materials or byproducts shall be buried, composted, or incinerated on-site, or allowed to enter into groundwater.	Note 14 under General Notes on sheet C-2 indicates this standard will be met	Yes	
<b>Noise</b> (Sec. 4.46.6)	Noise shall be minimized through the combined use of screening, site isolation, and sound dampening materials in compliance with Sections 5.5, 5.11, and 5.14  I-1 district decibel limits: - 70 decibels during night hours - 75 decibels during day hours	Note 15 under General Notes on sheet C-2 indicates this standard will be met	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>Note To District Standards</b> (Sec 3.6.2)				
<b>Exterior Side Yard Abutting a Street</b> (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	The building is only setback 10 ft from the west property line; the parking area is only setback 25 ft from the west property line	<b>No</b>	<p>The building setback in the western yard does not meet this standard. A Zoning Board of Appeals variance will be required for this deviation.</p> <p>The parking setback in the western yard does not meet this standard. A Planning Commission waiver will be required for this deviation.</p>
<b>Off-Street Parking in Front Yard</b> (Sec 3.6.2.E)	Off-street parking is allowed in front yard if <ul style="list-style-type: none"> <li>- the site is a minimum 2 acre site,</li> <li>- does not extend into the minimum required front yard setback of the district,</li> <li>- cannot occupy more than 50% of the area between min. front yard setback &amp; bldg. setback,</li> <li>- must be screened by brick wall or landscaped berm</li> <li>- lighting compatible with surrounding neighborhood</li> </ul>	Off-street parking is proposed in a front yard.  Screening is not provided.	<b>No</b>	<p>All exterior side yards abutting a street shall be provided with a setback equal to front yard. Therefore, the proposed parking area does extend into the minimum required setback of 40 ft.</p> <p>Planning Commission waivers for parking lot screening from Novi Road and Gen Mar (west frontage) are required for the current layout. Landscape supports both waivers.</p>
<b>Off-Street Parking in Side and Rear Yards</b> (Sec 3.6.2.F)	Off-street parking is allowed in the side and rear yards if the site does not abut residential. If it does, additional conditions apply.	Not adjacent to residential districts	N/A	
<b>Setback from Residential District</b> (Sec 3.6.2.H)	I-1 and I-2 districts, five (5) feet of horizontal setback for each foot of building height, or one hundred (100) feet, whichever is greater.	Not abutting a residential district	N/A	



Item	Required Code	Proposed	Meets Code	Comments
<b>Wetland &amp; Watercourse Setback</b> (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	No wetlands on site	N/A	
<b>Additional Height</b> (Sec 3.6.2.O)	Additional heights for selected building is allowed based on conditions listed in Sec 3.6.2.O	Applicant is not requesting	N/A	
<b>Parking Setback Screening</b> (Sec 3.6.2.P)	Required parking setback area shall be landscaped per sec 5.5.3.	No berm or wall proposed due to site constraints	No	<b>Several landscape deviations currently exist which would not be supported by staff. See the Landscape review for further details.</b>
<b>Modification of Parking Setback Requirements</b> (Sec 3.6.2.Q)	The Planning Commission may modify setback requirements in those instances where it determines that such modification may result in improved use of the site and/or in improved landscaping; provided, however, that such modifications of the setback requirements do not reduce the total area of setback on a site below the minimum setback area requirements of this Section.	The west yard parking setback does not meet the Ordinance standard of 40 feet  Required setback area of 39,963 SF and proposed setback area of 39,996 SF	Partially	<b>Planning Commission may grant waivers for parking setback deficiencies where it determines that such modification may result in improved use of the site and/or in improved landscaping; provided, however, that such modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements of this Section.</b>
<b>Parking, Loading and Dumpster Requirements</b>				
<b>Number of Parking Spaces:</b> Pet Boarding Facilities (Sec.5.2.12.C)	One (1) parking space for each seven hundred (700) square feet of usable floor area	Total SF = 9,350 SF Usable SF = 8,964 SF  Required Spaces: 8,964 / 700 = <b>13</b>  Total Proposed = <b>20</b> spaces	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>End Islands</b> (Sec. 5.3.12)	<p>End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles.</p> <p>The end islands shall generally be at least 10 feet wide, have an outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall</p>	<p>The 2 proposed end islands meet the dimensional standards.</p>	<p>Yes</p>	
<b>Parking Space Dimensions and Maneuvering Lanes</b> (Sec. 5.3.2)	<ul style="list-style-type: none"> <li>- 90° Parking: 9 ft. x 19 ft.</li> <li>- 24 ft. two way drives</li> <li>- 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping</li> </ul>	<p>9 ft. x 17 ft. spaces with 4 in. curbs</p> <p>24 ft. maneuvering lanes</p>	<p>Yes</p>	
<b>Parking Stalls Adjacent to a Parking Lot Entrance:</b> public or private (Sec. 5.3.13)	<p>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</p>	<p>Minimum distance is maintained</p>	<p>Yes</p>	
<b>Barrier Free Spaces</b> (Barrier Free Code)	<p>1 barrier free parking space required for a total of 1 to 25 spaces provided.</p> <p>At least one of every six spaces must be van accessible.</p>	<p>1 van accessible barrier free spaces is provided</p>	<p>Yes</p>	
<b>Barrier Free Space Dimensions</b> (Barrier Free Code)	<ul style="list-style-type: none"> <li>- 8' wide with an 8' wide access aisle for van accessible spaces</li> <li>- 5' wide with a 5' wide access aisle for regular accessible spaces</li> </ul>	<p>Complies</p>	<p>Yes</p>	



Item	Required Code	Proposed	Meets Code	Comments
<b>Barrier Free Signs</b> (Barrier Free Code)	One sign for each accessible parking space.	Location indicated	Yes	
<b>Minimum number of Bicycle Parking</b> (Sec. 5.16.1)	2 spaces minimum for pet boarding facilities	2 bicycle spaces are provided	Yes	
<b>Bicycle Parking General requirements</b> (Sec. 5.16)	<ul style="list-style-type: none"> <li>- No farther than 120 ft. from the entrance being served</li> <li>- When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations</li> <li>- Spaces to be paved and the bike rack shall be inverted "U" design</li> <li>- Shall be accessible via 6 ft. paved sidewalk</li> </ul>	2 bicycle spaces are provided, dimensional details not provided	Yes?	<b>Please provide bicycle parking dimensional details on the site plan</b>
<b>Bicycle Parking Lot layout</b> (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	2 bicycle spaces are provided, dimensional details not provided	Yes?	<b>Please provide bicycle parking dimensional details on the site plan</b>
<b>Dumpster</b> (Sec 4.19.2.F)	<ul style="list-style-type: none"> <li>- Located in rear yard</li> <li>- Attached to the building or no closer than 10 ft. from building if not attached</li> <li>- Not located in parking setback</li> <li>- If no setback, then it cannot be any closer than 10 ft. from property line.</li> <li>- Away from Barrier free Spaces</li> </ul>	Not located in a rear yard	No	<b>A ZBA variance will be required for this deviation since all yards must comply with front yard standards.</b>

Item	Required Code	Proposed	Meets Code	Comments
<b>Dumpster Enclosure</b> <i>(Sec. 21-145.(c))</i>	<ul style="list-style-type: none"> <li>- Screened from public view</li> <li>- A wall or fence 1 ft. higher than height of refuse bin</li> <li>- And no less than 5 ft. on three sides</li> <li>- Posts or bumpers to protect the screening</li> <li>- Hard surface pad.</li> <li>- Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>	Complies	Yes	<b>See the Engineering review for comments pertaining to the dumpster pad</b>
<b>Loading Spaces</b> <i>(Sec. 5.4.1)</i>	Must be located in the rear yard in the I-1 District  The loading area can be located in the interior side yard if it is adjacent to I-1, I-2, EXPO or EXO district	Loading area deemed not necessary – a ZBA variance will be pursued	<b>No</b>	<b>ZBA variance will be required</b>
<b>Roof Top Equipment</b>				
<b>Roof top equipment and wall mounted utility equipment</b> <i>(Sec. 4.19.2.E.ii)</i>	All roof top equipment must be screened, and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	Roof top equipment does not appear to be proposed	Yes	If rooftop equipment is proposed, please include it in the next submittal with proper screening
<b>Roof top appurtenances screening</b>	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road, or adjacent property.	Roof top equipment does not appear to be proposed	Yes	If rooftop equipment is proposed, please include it in the next submittal with proper screening



Item	Required Code	Proposed	Meets Code	Comments
<b>I-1 District Required Conditions (Sec 3.14)</b>				
<b>Outdoor Storage of above ground storage tanks</b> (Sec. 3.14.1.B.ii)	Outdoor placement of above-ground storage tanks of not more than 600 capacity per tank and accessory to an otherwise permitted use. Additional conditions apply	Not Proposed	N/A	
<b>Outdoor Storage of recreational equipment</b> (Sec. 3.14.1.B.iii)	See list of requirements in referenced ordinance section	Not Proposed	N/A	
<b>Other</b> (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.  Pet boarding facilities are allowed to use 10% of the gross floor area for accessory retail uses	Retail is included in narrative to not exceed 10% of the gross floor area	Yes	
<b>Adjacent to Freeway ROW</b> (Sec 3.14.4)	Where a permitted use abuts a freeway right-of way, special conditions listed in section 3.14.4 apply	Not adjacent to Freeway ROW	N/A	
<b>Adjacent to Residential district</b> (Sec 3.14.5)	Where a permitted use abuts a freeway right-of way, special conditions listed in section 3.14.5 apply	Not adjacent to a residential district	N/A	
<b>Planning Commission Findings for Permitted Uses (Sec 3.14.3)</b>				
<b>Long term truck parking</b> (Sec 3.14.3.B)	No long-term delivery truck parking on site	Not proposed	Yes	
<b>Performance standards</b> (Sec 3.14.3.C)	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of the article and performance standards of Section 5.14	Seems to comply	Yes	Further verification of the conformance may be required at the time of occupancy.

Item	Required Code	Proposed	Meets Code	Comments
<p><b>Storage and/use of material</b>                      (Sec 3.14.3.D)</p>	<p>The storage and/or use of any volatile, flammable or other materials shall be fully identified in application and shall comply with any city ordinances regarding toxic or hazardous materials.</p>	<p>Checklist provided</p>	<p>Yes</p>	
<p><b>Hazardous material checklist</b>                      (Sec 3.14.3.E)</p>	<p>Compliance of City's hazardous materials checklist</p>	<p>Checklist provided</p>	<p>Yes</p>	
<p><b>Sidewalks and Pathways</b></p>				
<p><b>ARTICLE XI. OFF-ROAD NON-MOTORIZED FACILITIES</b>                      (Sec. 11-256. Requirement (c) &amp; Sub. Ord. Sec. 4.05)</p>	<ul style="list-style-type: none"> <li>- In the case of new streets and roadways to be constructed as part of the project, a sidewalk shall be provided on both sides of the proposed street or roadway.</li> <li>- Sidewalks along arterials and collectors shall be 6 feet or 8 feet wide as designated by the "Bicycle and Pedestrian Plan," but not along industrial service streets per Subdivision Ordinance</li> <li>- Whereas sidewalks along local streets and private roadways shall be five (5) feet wide.</li> </ul>	<p>Sidewalks are not typically required in industrial complexes.</p>	<p>N/A</p>	



Item	Required Code	Proposed	Meets Code	Comments
<b>Pedestrian Connectivity</b>	<ul style="list-style-type: none"> <li>- Whether the traffic circulation features within the site and parking areas are designed to assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets</li> <li>- Building exits must be connected to sidewalk system or parking lot.</li> </ul>	Exits are proposed on the east and west sides of the building, and they are proposed to serve as emergency exits	Yes	
<b>Other Requirements</b>				
<b>Exterior lighting</b> (Sec. 5.7)	Photometric plan and exterior lighting details needed at time of Final Site Plan submittal  Only necessary lighting for security purposes and limited operations shall be permitted after a site's hours of operation (5.7.3.G) and lighting for security purposes shall be directed only onto the area to be secured (5.7.3.H)	Lighting plan provided	Yes	<b>Please include a note that the lighting standards will comply with the subsections regarding hours of operation and security lighting</b>
<b>Design and Construction Standards Manual</b>	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
<b>General layout and dimension of proposed physical improvements</b>	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).	Provided	Yes	
<b>Economic Impact Information</b>	<ul style="list-style-type: none"> <li>- Total cost of the proposed building &amp; site improvements</li> <li>- Number of anticipated jobs created (during construction &amp; after building is occupied, if known)</li> </ul>	Anticipated gross sales and maximum employees on site after building is occupied is provided	<b>No</b>	<b>If the total cost of the proposed building and site improvements is available, please include in the response letter</b>
<b>Development and Street Names</b>	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Not needed	N/A	
<b>Development/ Business Sign</b>	Signage if proposed requires a permit.	Monument sign proposed at the southern portion of the site		<u>For sign permit information contact Ordinance Enforcement at 248-735-5678.</u>

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



## ENGINEERING REVIEW



# PLAN REVIEW CENTER REPORT

6/23/2023

## Engineering Review

Novi Pet Resort  
JSP23-20

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### Applicant

Stucky Vitale Architects

### Review Type

Preliminary Site Plan

### Property Characteristics

- Site Location: South of Grand River Avenue West Side of Novi Road
- Site Size: 2.31 acres
- Plan Date: 5/23/2023
- Design Engineer: Stonefield Engineering

### Project Summary

- Construction of an approximately 9,350 square-foot Pet Boarding building and associated parking. Site access would be provided via Gen Mar Drive.
- Water service would be provided by a 2-inch extension from the existing 12-inch water main on the north side of Gen Mar at the southern limits of the property.
- Sanitary sewer service would be provided to serve the building by an extension from the existing 8-inch sanitary sewer along the South side of Gen Mar at the southern limits of the property.
- Storm Water would be collected by a single storm sewer collection system and discharged to an on-site detention basin before being released to an existing storm manhole north side of the property.

### Recommendation

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

### Comments:

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



**General**

1. Provide a minimum of two ties to established section or quarter section corners.
2. Show on the plan a City-established benchmark, which can be found on the City's website at this location: <https://novi.maps.arcgis.com/apps/webappviewer/index.html?id=5ce841f86197461c9f146e1330330bcf>
3. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for storm sewer (2 sheets), and paving (2 sheets). The most updated details can be found on the City's website at this location: <https://cityofnovi.org/services/public-works/engineering-division/engineering-standards-and-construction-details>
4. The Non-Domestic User Survey form for sanitary sewer flow shall be submitted to the City so it can be forwarded to Oakland County.
5. A right-of-way permit will be required from the City of Novi.
6. Provide a traffic control sign table listing the quantities of each **permanent** sign type proposed for the development.
7. The City of Novi plans to vacate the Gen Mar ROW along the northern limits of this parcel and combine it with the parcel to the north. This will resolve access issues with the two parcels to the north. Utility easements in the current ROW will be addressed as appropriate.
8. Provide a traffic control plan for the proposed road work activity on Gen Mar.
9. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas and illustrate and label on the profiles.
10. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
11. If applicable, provide a utility crossing table indicating that at least 18-inch vertical clearance will be provided, or that additional bedding measures will be utilized at points of conflict where adequate clearance cannot be maintained.
12. If applicable, Show the locations of all light poles on the utility plan and indicate the typical foundation depth for the pole to verify that no conflicts with utilities will occur. Light poles in a utility easement will require a License Agreement.
13. Specify whether irrigation will be proposed. If so, backflow prevention will be required.
14. Show and label the master planned 60-foot half width right-of-way for Novi Road. The dedication of the master-planned half right-of-way up to sixty (60) feet in width is requested for the project (on mile and ½-mile streets). Label the additional right-of-way width to be dedicated along Novi Road as "proposed" right-of-way.

**Water Main**

15. A tapping sleeve, valve and well is required at the connection to the existing water main.

**Sanitary Sewer**

16. Provide a sanitary sewer basis of design for the development on the utility plan sheet. (Calculations should use peaking factor of 4.0 and 3.2 People/REU).
17. Note on the construction materials table that 6-inch sanitary leads shall be a minimum SDR 23.5, and mains shall be SDR 26.
18. Provide a note on the Utility Plan stating the sanitary leads will be buried at least 5 feet deep where under the influence of pavement.

**Storm Sewer**

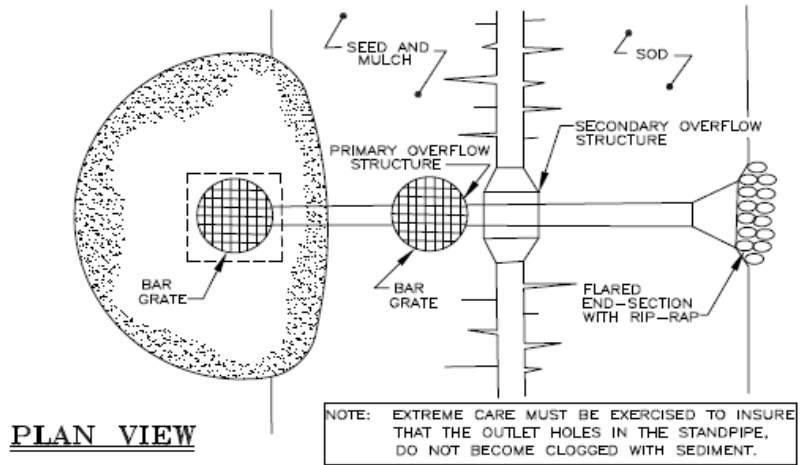
19. A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Grades shall be elevated, and minimum pipe slopes shall be used to maximize the cover depth. In situations where the minimum cover cannot be achieved, Class V pipe must be used with an absolute minimum cover depth of 2 feet. An explanation shall be provided where the cover depth cannot be provided.
20. Storm manholes with differences in invert elevations exceeding two feet shall contain a 2-foot-deep plunge pool.
21. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
22. Provide profiles for all storm sewer 12-inch and larger. All storm pipes accepting surface drainage shall be 12-inch or larger.
23. Plastic pipes are not allowed in the right-of-way, the maximum allowable size for plastic storm sewer is 12-inch. (Smaller diameters are allowed for roof drains)
24. Label all inlet storm structures on the profiles. Inlets are only permitted in paved areas and when followed by a catch basin within 50-feet.
25. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
26. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
27. Illustrate all pipes intersecting storm structures on the storm profiles.
28. An easement is required over the storm sewer accepting and conveying off-site drainage.
29. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.
30. Show and label all roof conductors and show where they tie into the storm sewer.



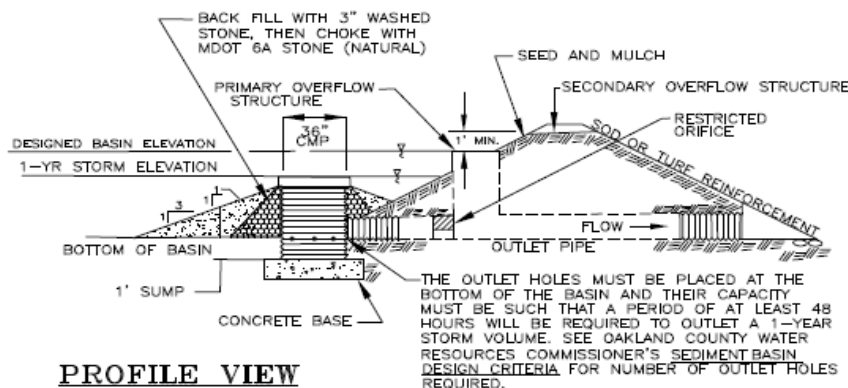
**Storm Water Management Plan**

31. The Storm Water Management Plan (SWMP) for this development shall be designed in accordance with the Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.
32. Rather than a sediment forebay, a permanent water surface and storage volume are preferred. Refer to section 5.6.1 A. of the Engineering Design Manual for depth and volume requirements for wet detention basins.
33. An adequate maintenance access route to the basin outlet structure and any other pretreatment structures shall be provided (15 feet wide, maximum running slope of 1V:5H, maximum cross slope of 3%, and able to withstand the passage of heavy equipment). Verify the access route does not conflict with proposed landscaping.
34. Provide a 5-foot-wide stone bridge/access route allowing direct access to the standpipe from the bank of the basin during high-water conditions (i.e. stone 6-inches above high water elevation). Provide a detail and/or note as necessary.
35. The primary overflow and spillway are required for each basin, consider connecting the two basins to have a single discharge point. See below example for standard outlet:

**TEMPORARY DETENTION BASIN OUTLET  
STONE FILTER (SO-2)**



**PLAN VIEW**



**PROFILE VIEW**

NOTE: NOT TO SCALE

THE OUTLET HOLES MUST BE PLACED AT THE BOTTOM OF THE BASIN AND THEIR CAPACITY MUST BE SUCH THAT A PERIOD OF AT LEAST 48 HOURS WILL BE REQUIRED TO OUTLET A 1-YEAR STORM VOLUME. SEE OAKLAND COUNTY WATER RESOURCES COMMISSIONER'S SEDIMENT BASIN DESIGN CRITERIA FOR NUMBER OF OUTLET HOLES REQUIRED.

36. The riprap berm in the detention basin is not one of the city's requirements. Provide purpose for berm or remove if not necessary.
37. As part of the Storm Drainage Facility Maintenance Easement Agreement, provide an access easement for maintenance over the storm water detention system and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.
38. Provide release rate calculations for the three design storm events (first flush, bank full, 100-year).
39. Due to maintenance concerns, each restricting orifice in the control structure shall be a minimum of 1 square-inch in size, even though this may result in a flow rate above that calculated.
40. The flow restriction shall be accomplished by methods other than a pipe restriction in an oversized pipe due to the potential for clogging and restrictor removal. A perforated standpipe, weir design, baffle wall, etc. should be utilized instead.
41. The primary outlet standpipe shall be designed with a secondary outer pipe with numerous holes. The stone filter would rest against this outer pipe and would help protect the outlet standpipe from clogging.
42. Provide a soil boring in the vicinity of the storm water basin to determine soil conditions and to establish the high-water elevation of the groundwater table. Note the bottom of the detention facility must be a minimum of three (3) feet above the groundwater elevation.
43. Provide supporting calculations for the runoff coefficient determination.
44. A runoff coefficient of 0.35 shall be used for all turf grass lawns (mowed lawns) and 0.95 shall be used for all impervious surfaces.
45. A 4-foot-wide safety shelf is required one foot below the permanent water surface elevation within the basin.
46. A 25-foot vegetated buffer shall be provided around the perimeter of each storm water basin where impervious area is directed to the basin via surface flow.

**Paving & Grading**

47. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
48. Revise Dumpster Pad details to meet city standards, 8" concrete on 8" 21 AA aggregate base. Note: Dumpster pad shall extend minimum 10' beyond dumpster enclosure.
49. Provide at least 3-foot of buffer distance between the sidewalk and any fixed objects, including hydrants and irrigation backflow devices. Include a note on the plan where the 3-foot separation cannot be provided.
50. Per MDOT Special Provision for Crushed Concrete; the use of crushed concrete is prohibited on the project within 100 feet of any water course (stream, river, county drain, etc.) and lake, regardless of the application of location of the water course or lake relative to the project limits. Add note to

- use 21AA crushed limestone base for any pavement within 100 feet of a water course.
51. Revise the on-site road cross-section to 1.5 inches of MDOT 5E1 on 2.5 inches of MDOT 3C on 8 inches of 21AA [limestone only if within 100 feet of a watercourse] aggregate base.
  52. Provide additional spot grades as necessary to demonstrate that a minimum 5-percent slope away from the building is provided for a minimum distance of ten feet around the perimeter of the building.
  53. The City standard straight-faced curb (MDOT F-4 curb detail) shall be provided. Remove detail and attach City standard paving details.
  54. Provide top of curb/walk and pavement/gutter grades to indicate height of curb adjacent to parking stalls or drive areas.
  55. Provide a line designation representing the effective 19-foot stall length for 17-foot perimeter stalls.
  56. 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). Additionally, 2-foot overhang should be provided adjacent to 17-foot parking stalls (show 2-foot overhang on paving sheets). Provide additional details as necessary. Sidewalk width should be adjusted to 7-feet wide in order to have the required 2-foot overhang, if overhang cannot be provided in this area 19-foot stalls with 6-inch curb should be proposed.

#### **Flood Plain**

57. A City of Novi floodplain use permit may be required for the proposed floodplain impact. This should be submitted as soon as possible. Contact the Building Department for submittal information. **A Joint Permit Application (JPA) through the Michigan Department of Environment, Great Lakes & Energy (EGLE) and U.S. Army Corps of Engineers (USACE) may also be required for the proposed floodplain impact prior to site plan approval.**
58. If applicable, show the limits of the 100-year flood plain and floodway per the current FIRM maps (2006).

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

59. A SESC permit is required. A full review has not been completed at this time. The review checklist detailing all SESC requirements is attached to this letter. Please address the comments below and submit a SESC permit application under separate cover. The application can be found on the City's website at <http://cityofnovi.org/Reference/Forms-and-Permits.aspx>.

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

60. 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.



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

61. A letter from either the applicant or the applicant's engineer must be submitted with the Stamping Set highlighting the changes made to the plans addressing each of the comments listed above and indicating the revised sheets involved. **Additionally, a statement must be provided stating that all changes to the plan have been discussed in the applicant's response letter.**
62. 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, should include number do detectable warning plates), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

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 Adam Yako at (248)735-5695 with any questions.



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Adam Yako,  
Project Engineer

cc: Ben Peacock, Community Development  
Humna Anjum, Engineering  
Ben Croy, City Engineer

## LANDSCAPE REVIEW



**PLAN REVIEW CENTER REPORT**  
**August 24, 2023**  
**Novi Pet Resort**  
**Second Revised Preliminary Site Plan - Landscaping**

**Review Type**

Second Revised Preliminary Site Plan Landscape Review

**Job #**

JSP23-0020

**Property Characteristics**

- Site Location: Novi Road & Gen Mar
- Site Acreage: 1.58 ac.
- Site Zoning: I-1
- Adjacent Zoning: North, West: I-1, East: I-2, South: OS-1
- Plan Date: 8/11/2023

**Ordinance Considerations**

This project was reviewed for conformance with Chapter 37: Woodland Protection, Zoning Article 5.5 Landscape Standards, the Landscape Design Manual and any other applicable provisions of the Zoning Ordinance. Items in **bold** below must be addressed and incorporated as part of the revised Preliminary Site Plan submittal. Underlined items must be addressed on the 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 **recommended for approval** for Revised Preliminary Site Plan. The remaining unresolved items can be addressed on the Final Site Plans.

**LANDSCAPE WAIVERS REQUIRED FOR THE PROPOSED LANDSCAPE PLAN:**

- Lack of berm along Novi Road frontage – *supported by staff*
- Deficiency of canopy and subcanopy trees along Novi Road – *supported by staff*
- Deficiency of street trees along Novi Road – *supported by staff*

**Please add the City Project Number, JSP23-0020, to the bottom right corner of the cover sheet.**

**Ordinance Considerations**

Existing Trees (Sec 37 Woodland Protection, Preliminary Site Plan checklist #17 and LDM 2.3 (2))  
4 evergreen trees are shown as being preserved.

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

The site is not adjacent to residential property, so this screening is not required.

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

**Novi Road:**

1. The required berm is not provided due to a significant change in grade. **This requires a landscape waiver**, which is supported by staff.
2. Not all of the required greenbelt landscaping is proposed. **This requires a landscape waiver** which is supported by staff as the only trees not provided are below the large



wall supporting the road.

3. Not all of the required Novi Road street trees are not provided. **This requires a landscape waiver** which is supported by staff as the only trees not provided are within the bridge area. If the RCOC declares that any or all of the proposed street trees should not be provided along Novi Road, they do not need to be but a copy of their decision must be provided to the City.

**Gen Mar:**

1. **The deficiency in subcanopy trees is due to the lack of space in front of the building. This requires a waiver that is supported by staff if the variance for the decreased setback is approved by the ZBA.**
2. Please add the one missing canopy tree along the Gen Mar frontage, as described on the landscape chart.

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

1. The required parking lot landscaping is provided, but there are some changes that should be made as described on the landscape chart.
2. Please add one more perimeter tree east of the parking lot and 1 accessway perimeter tree south of the detention basin as described on the landscape chart.

Building foundation Landscaping (Zoning Sec 5.5.3.D)

The required foundation landscaping is provided.

Plant List (LDM 4, 10)

1. 16 of 25 species used (64%) are native to Michigan.
2. The tree diversity meets the requirements of LDM Section 4.

Planting Notations and Details (LDM 10)

Provided.

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

1. The required shrubs are provided.
2. Please follow the instructions on the landscape chart regarding placement of trees on the south side of both basins.

Irrigation (LDM 10)

Please provide plans for either an irrigation system or an alternative means of providing water for the plants establishment and long-term survival.

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 meader [meader@cityofnovi.org](mailto:meader@cityofnovi.org).



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Rick Meader – Landscape Architect

## LANDSCAPE REVIEW SUMMARY CHART – Second Revised Preliminary Site Plan

**Review Date:** August 24, 2023  
**Project Name:** JSP23 – 0020: NOVI PET RESORT  
**Plan Date:** August 11, 2023  
**Prepared by:** Rick Meader, Landscape Architect E-mail: [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org);  
 Phone: (248) 735-5621

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

### LANDSCAPE WAIVERS REQUIRED FOR THE PROPOSED LANDSCAPE PLAN:

- Lack of berm along Novi Road frontage – *supported by staff*
- Deficiency of canopy and subcanopy greenbelt trees along Novi Road – *supported by staff*
- Deficiency of street trees along Novi Road – *supported by staff*

Please add the City Project Number, JSP23-0020, to the bottom right corner of the cover sheet.

Item	Required	Proposed	Meets Code	Comments
<b>Landscape Plan Requirements (Landscape Design Manual (LDM) and Zoning Ordinance (Zoning Sec))</b>				
<b>Landscape Plan</b> <i>(Zoning Sec 5.5.2, LDM 2, 10)</i>	<ul style="list-style-type: none"> <li>• New commercial or residential developments</li> <li>• Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less.</li> <li>• 1"=20' minimum with proper North. Variations from this scale can be approved by LA</li> <li>• Consistent with plans throughout set</li> </ul>	Scale: 1" = 30 ft	Yes	
<b>Project Information</b> <i>(LDM 10)</i>	Name and Address	Yes	Yes	
<b>Owner/Developer Contact Information</b> <i>(LDM 10)</i>	Name, address and telephone number of the owner and developer or association	Only on cover sheet	No	<b>Please add the information to the landscape plans title block or elsewhere.</b>
<b>Landscape Architect contact information</b> <i>(LDM 10)</i>	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Paul Devitto, LLA	Yes	
<b>Sealed by LA.</b> <i>(LDM 10)</i>	Requires original signature on stamping sets	Yes	Yes	
<b>Miss Dig Note</b> <i>(800) 482-7171 (LDM 10)</i>	Show on all plan sheets	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
<b>Zoning</b> (LDM 10)	Include all adjacent zoning	<b>Shown on C-1</b> <ul style="list-style-type: none"> <li>Parcel: I-1</li> <li>North, South, West: I-1</li> <li>East: I-2</li> </ul>	Yes	
<b>Survey information</b> (LDM 10)	<ul style="list-style-type: none"> <li>Legal description or boundary line survey</li> <li>Existing topography</li> </ul>	Sheet C-15	Yes	
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 10)	<ul style="list-style-type: none"> <li>Show location type and size. Label to be saved or removed.</li> <li>Plan shall state if none exists.</li> </ul>	Four evergreen trees are shown on the topographic survey and are preserved on the landscape plan	Yes	
<b>Soil types</b> (LDM10)	<ul style="list-style-type: none"> <li>As determined by Soils survey of Oakland county</li> <li>Show types, boundaries</li> </ul>	Soils chart and boundaries on C-7	Yes	
<b>Existing and proposed improvements</b> (LDM 10)	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
<b>Existing and proposed utilities</b> (LDM 10)	<ul style="list-style-type: none"> <li>Overhead and underground utilities, including hydrants</li> <li>Show all light posts</li> </ul>	<ul style="list-style-type: none"> <li>Existing and proposed utility lines and structures are shown</li> <li>There are no overhead lines on the site</li> <li>Light posts are shown</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>	<u>If there is an FDC on the building, please show it on the landscape plan. If there won't be, please note that in the response letter.</u>
<b>Proposed grading. 2' contour minimum</b> (LDM 10)	Provide proposed contours at 2' interval	<ul style="list-style-type: none"> <li>Sheet C-3</li> <li>No berms are indicated</li> </ul>	Yes	
<b>Snow deposit</b> (LDM 10)	Show snow deposit areas on plan	Yes	Yes	
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Parking Area Landscape Requirements (Zoning Sec 5.5.3.C and LDM 5)</b>				
<b>General requirements</b> (LDM 5)	<ul style="list-style-type: none"> <li>Clear sight distance within parking islands</li> <li>No evergreen trees</li> </ul>	No proposed plantings hinder visibility within the parking lot.	Yes	
<b>Name, type and number of ground cover</b> (LDM 5)	As proposed on planting islands	Seed is indicated for all disturbed areas	Yes	
<b>General (Zoning Sec 5.5.3.C)</b>				
<b>Parking lot Islands</b>	<ul style="list-style-type: none"> <li>A minimum of 200 SF</li> </ul>	All parking lot	Yes	



Item	Required	Proposed	Meets Code	Comments
	to qualify <ul style="list-style-type: none"> <li>• A minimum of 200sf unpaved area per tree planted in an island</li> <li>• 6" curbs</li> <li>• Islands minimum width 10' BOC to BOC</li> </ul>	islands are sized correctly.		
<b>Curbs and Parking stall reduction</b> (Zoning Sec 5.3.12)	Parking stall can be reduced to 17' and the curb to 4" adjacent to a sidewalk of minimum 7 ft.	All parking spaces are 17 feet long	Yes	
<b>Contiguous space limit</b> (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	11 is maximum bay length	Yes	
<b>Plantings around Fire Hydrant</b> (Zoning sec 5.5.3.C)	<ul style="list-style-type: none"> <li>• No plantings with matured height greater than 12' within 10 ft. of fire hydrants</li> <li>• Plant trees at least 5 ft from underground utility lines</li> <li>• Plantings near hydrants or FDCs should be no taller than 12"</li> </ul>	<ul style="list-style-type: none"> <li>• Correct spacing is provided.</li> <li>• A note regarding tree spacing is provided</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>	
<b>Landscaped area</b> (Zoning sec 5.5.3.C)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
<b>Clear Zones</b> (Zoning sec 5.5.3.B.ii Footnote 10)	<ul style="list-style-type: none"> <li>• 25 ft corner clearance required.</li> <li>• Refer to Zoning Section 5.5.9</li> </ul>	Yes	Yes	
<b>Category 1: For OS-1, OS-2, OSC, OST, B-1, B-2, B-3, NCC, EXPO, FS, TC, TC-1, RC, Special Land Use or non-residential use in any R district (Zoning Sec 5.5.3.C)</b>				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	<ul style="list-style-type: none"> <li>• <math>A = x \text{ sf} * 7.5\% = A \text{ sf}</math></li> <li>• <math>50,000 * 7.5\% = 3750 \text{ sf}</math></li> </ul>	NA		
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> <li>• <math>B = x \text{ sf} * 1\% = B \text{ sf}</math></li> <li>• <math>(xxx - 50000) * 1\% = xx \text{ sf}</math></li> </ul>	NA		
<b>Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C)</b>				
A. = Total square footage of vehicular use area up to 50,000	$A = x \text{ sf} * 6\%$ $A = 8363\text{sf} * 6\% = 502\text{sf}$		TBD	<b>1. Please revise the calculations as shown here.</b>

Item	Required	Proposed	Meets Code	Comments
sf x 5%				<p>2. Vehicular use areas up to 50,000sf should be multiplied by 6.0% - the entire parking lot, including the aisle between spaces, should be included in the VUA.</p> <p>3. Only the aisles not adjacent to parking spaces should be included in the accessway perimeter calculation.</p>
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	$B = 0.5\% \times 0 \text{ sf} = B \text{ SF}$	NA		
<b>All Categories</b>				
C = A+B Total square footage of landscaped islands	<ul style="list-style-type: none"> <li>• C = A + B</li> <li>• C = 502 + 0 = 502 SF</li> </ul>	812 SF	Yes	Please correct calculation as noted above
D = C/200 Number of canopy trees required	<ul style="list-style-type: none"> <li>• D = C/200 trees</li> <li>• D = 502/200 = 3 Trees</li> </ul>	3 - The tree labeling is very confusing and conflicting.	Yes	Only 3 trees required to meet the interior requirement should be labeled as such (in the 3 islands closest to the street)
<b>Parking Lot Perimeter Trees</b> (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> <li>• 1 Canopy tree per 35 lf</li> <li>• <math>xx / 35 = xx \text{ trees}</math></li> <li>• <math>243/35 = 7 \text{ trees}</math></li> </ul>	6 provided including 2 greenbelt canopy trees	No	<p>1. Please label all of the remaining canopy trees around the edge of the parking lot as perimeter trees</p> <p>2. Please add a tree on the east side of the parking lot.</p>
<b>Accessway perimeter</b> (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> <li>• 1 canopy tree per 35 lf on each side of road, less widths of access drives.</li> <li>• <math>(149-100)lf/35 = 1 \text{ tree}</math></li> </ul>	0 trees	No	<p>1. One of the perimeter trees along the north drive should be labeled as an accessway perimeter tree.</p> <p>2. A waiver for 4 trees not provided because they would hinder site vision is required. <i>It would be supported by staff.</i></p> <p>3. Please add 1 tree on along the north</p>



Item	Required	Proposed	Meets Code	Comments
				access drive, south of the detention pond.
<b>Parking land banked</b> (Zoning Sec 5.2.14.D)	NA	None		
<b>Berms, Walls and ROW Planting Requirements</b>				
<b>Berms</b> (Zoning Sec 5.5.3.A & LDM 1)				
<ul style="list-style-type: none"> <li>All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours</li> <li>Berm should be located on lot line except in conflict with utilities.</li> <li>Berms should be constructed with 6" of topsoil.</li> </ul>				
<b>Residential Adjacent to Non-residential</b> (Sec 5.5.3.A & LDM 1.a)				
<b>Berm requirements</b> (Zoning Sec 5.5.A)	The site does not abut residential property so this berm is not required	None	Yes	
<b>Planting requirements</b> (LDM 1.a.)	LDM Novi Street Tree List	NA		
<b>Adjacent to Public Rights-of-Way</b> (Sec 5.5.3.B and LDM 1.b)				
<b>Berm requirements</b> (Zoning Sec 5.5.3.A.(5))	An undulating berm a minimum of 3 feet high with a 3 foot wide crest is required This applies to the Novi Road and western Gen Mar frontage	No berm is provided due to the steep grade up to Novi Road	No	<ol style="list-style-type: none"> <li><b>Landscape waivers are required for the lack of required greenbelt berms.</b></li> <li><i>They are supported by staff due to the existing grades.</i></li> </ol>
<b>Cross-Section of Berms</b> (LDM 10)				
Slope, height and width	<ul style="list-style-type: none"> <li>Label contour lines</li> <li>Maximum 33%</li> <li>Min. 3 feet flat horizontal area</li> <li>Minimum 3 feet high</li> <li>Constructed of loam with 6' top layer of topsoil.</li> </ul>	None		No berm cross section is required as no berm is proposed.
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	A note indicates that there are no overhead utilities on the site.		
<b>Walls</b> (Zoning Sec 5.5.3.A & LDM 10)				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No walls are proposed		
<b>Walls greater than 4 ft. should be designed and sealed</b>		NA		

Item	Required	Proposed	Meets Code	Comments
by an Engineer				
<b>ROW Landscape Screening Requirements (Zoning Sec 5.5.3.B.ii) – ONLY FOR NOVI ROAD FRONTAGE</b>				
Greenbelt width	25 ft	67 ft	Yes	
Min. berm crest width	<ul style="list-style-type: none"> <li>Adj to pkg: 3 ft</li> <li>Not adj to pkg: 0 ft</li> </ul>	None	No	<ol style="list-style-type: none"> <li><b>A landscape waiver is required.</b></li> <li><i>It is supported by staff because it the existing grades make providing the required berm impossible.</i></li> </ol>
Minimum berm height	<ul style="list-style-type: none"> <li>Adj to pkg: 3 ft</li> <li>Not adj to pkg: 0 ft</li> </ul>	None	No	<b>See above</b>
3' wall	(2)(3)(4)	None		
<b>Canopy deciduous or large evergreen trees</b>	<ul style="list-style-type: none"> <li>Adj to Pkg: 1 tree per 40 lf – not applicable</li> <li>Not adj to Pkg: 1 tree per 60 ft</li> <li>420/60 = 7 trees</li> </ul>	<ul style="list-style-type: none"> <li>1 proposed trees</li> <li>4 existing trees</li> </ul> Warranty requested for frontage below wall (2 trees)	No	<ol style="list-style-type: none"> <li><b>A landscape waiver is required to not provide two trees beneath the wall.</b></li> <li><i>It is supported by staff.</i></li> </ol>
<b>Sub-canopy deciduous trees)</b>	<ul style="list-style-type: none"> <li>Adj to Pkg: 1 tree per 35 lf – not applicable</li> <li>Not adj to Pkg: 1 tree per 40 ft</li> <li>420/40 = 11 trees</li> </ul>	8 trees  Warranty requested for frontage below wall (3 trees)	No	<ol style="list-style-type: none"> <li><b>A landscape waiver is required to not provide two trees beneath the wall.</b></li> <li><i>It is supported by staff.</i></li> </ol>
<b>Canopy deciduous trees in area between sidewalk and curb</b>	<ul style="list-style-type: none"> <li>Parking &amp; No Parking: 1 tree per 35 lf</li> <li>420/45 = 9 trees</li> </ul>	7 trees  Warranty requested for frontage with wall	No	<ol style="list-style-type: none"> <li><b>A landscape waiver is required to not provide two trees beneath the wall.</b></li> <li><i>It is supported by staff.</i></li> <li><b>If the Road Commission does not allow the street trees, they do not need to be provided, but documentation of their decision must be provided to staff.</b></li> </ol>
<b>Non-Residential Projects (Zoning Sec 5.5.3.F.6) – FOR ALL GEN MAR FRONTAGES</b>				
<b>Interior Street to Industrial subdivision (Zoning Sec 5.5.3.F.6)</b>	<ul style="list-style-type: none"> <li>1 canopy deciduous or 1 large evergreen per 35 l.f. along ROW (of those 1 canopy tree per 50 feet must be located along street as street trees)</li> <li>1 sub canopy tree per</li> </ul>	<b>W-S frontage</b> <ul style="list-style-type: none"> <li>13 greenbelt trees</li> <li>10 street trees</li> <li>10 subcanopy trees</li> <li>25 shrubs</li> <li>71 lf massing</li> </ul>	<b>N-S frontage</b> <ul style="list-style-type: none"> <li>No</li> <li>Yes</li> <li>No</li> <li>Yes</li> <li>Yes</li> </ul>	<ol style="list-style-type: none"> <li><b>Please add 1 more canopy tree in the greenbelt to meet the requirement.</b></li> <li><i>A landscape waiver for the deficiency in subcanopy trees along the</i></li> </ol>



Item	Required	Proposed	Meets Code	Comments
	<p>40 l.f. frontage</p> <ul style="list-style-type: none"> <li>• 1 shrub per 20 lf frontage</li> <li>• Plant massing for 10% of ROW</li> <li>• Screening hedge or berm for parking lot</li> </ul> <p><b>West and South Frontage</b></p> <ul style="list-style-type: none"> <li>• (541-48)/35 = 14 trees</li> <li>• (541-48)/50 = 10 street trees (part of 14 tree requirement)</li> <li>• (541-48)/40 = 12 subcanopy trees</li> <li>• (541-48)/20 = 25 shrubs</li> <li>• 49 lf massing</li> </ul> <p><b>North Frontage:</b></p> <ul style="list-style-type: none"> <li>• 162/35 = 5 trees</li> <li>• 162/50 = 3 street trees (part of 5 tree requirement)</li> <li>• 162/40 = 4 subcanopy trees</li> <li>• 162/20 = 8 shrubs</li> <li>• 16 lf massing</li> </ul>	<p><b>North frontage</b></p> <ul style="list-style-type: none"> <li>• 5 canopy trees</li> <li>• 3 street trees</li> <li>• 4 subcanopy trees</li> <li>• 8 shrubs (detention pond)</li> <li>• 36 lf massing (detention pond)</li> </ul>	<p><b>E-W frontage</b></p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> </ul>	<p>West/South frontage would be supported for the 110lf of building frontage (3 subcanopy trees) if the variance for the building setback is supported by the ZBA.</p> <p><b>3. Please move the three planetrees to locations south of the east detention pond to shade the pond and avoid their removal if the road segment is vacated.</b></p> <p><b>4. Please spread the street trees along Gen Mar more.</b></p>
<p><b>Screening of outdoor storage, loading/unloading</b> (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)</p>		<p>No loading zone is indicated</p>	<p>TBD</p>	<p><u>If a loading zone is provided, please screen it from view of the roads.</u></p>
<p><b>Transformers/Utility boxes</b> (LDM 6)</p>	<ul style="list-style-type: none"> <li>• A minimum of 2ft. separation between box and the plants</li> <li>• Ground cover below 4" is allowed up to pad.</li> <li>• No plant materials within 8 ft. from the doors</li> </ul>	<p>A transformer is located on the north edge of the building and is screened satisfactorily.</p>	<p>No</p>	<p><u>Please add a note stating the screening shrubs shall be maintained at a height at least as tall as the transformer.</u></p>
<p><b>Building Foundation Landscape Requirements (Zoning Sec 5.5.3.D)</b></p>				
<p><b>Interior site landscaping SF</b> (Zoning Sec 5.5.3.D)</p>	<ul style="list-style-type: none"> <li>• Equals to entire perimeter of the building x 8 with a minimum width of 4 ft.</li> <li>• A = x lf x 8ft</li> <li>• A = (368-23)lf * 8 = 2760sf</li> </ul>	<p>A: 2990 sf</p>	<p>Yes</p>	
<p><i>Building Frontage Landscaping (Zoning</i></p>	<p>If visible from public street a minimum of 60%</p>	<p>More than 60% of the building</p>	<p>Yes</p>	

Item	Required	Proposed	Meets Code	Comments
Sec 5.5.3.D)	of the exterior building perimeter should be covered in green space	frontages are landscaped.		
<b>Detention/Retention Basin Requirements (Zoning Sec. 5.5.3.E &amp; LDM 3)</b>				
<b>Planting requirements</b> (Zoning Sec 5.5.3.E & LDM 3)	<ul style="list-style-type: none"> <li>Clusters of large native shrubs shall cover 70-75% of the basin rim area at 10 lf from permanent water level</li> <li>Deciduous canopy trees shall be provided around the east, south and west sides of the basin at 1 per 35lf of the rim to shade the pond.</li> <li>10" to 14" tall grass along sides of basin</li> <li>Refer to wetland for basin mix</li> <li>Deciduous canopy tree 1/35 of east, south and west sides of pond at 10 feet from permanent water level</li> </ul>	<ul style="list-style-type: none"> <li>Required shrubs are proposed</li> <li>More canopy trees are needed south of the basins</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>	<ol style="list-style-type: none"> <li>As noted above, please move the planetrees along the north frontage to south and east of the east detention pond.</li> <li>Also as noted previously, please add an accessway perimeter tree south of the west detention pond that will also shade the pond.</li> </ol>
<b>Phragmites and Japanese Knotweed Control</b> (Zoning Sec 5.5.6.B)	<ul style="list-style-type: none"> <li>Any and all populations of Phragmites australis and/or Japanese Knotweed on site shall be included on tree survey.</li> <li>Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site.</li> </ul>	None indicated	TBD	<ol style="list-style-type: none"> <li>Please survey the site for any populations of Phragmites australis and Japanese Knotweed</li> <li>If any is found, show it on the topo survey and add plans for its removal.</li> <li>If none is found, please indicate that on the survey.</li> </ol>
<b>LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS</b>				
<b>Landscape Notes – Utilize City of Novi Standard Notes</b>				
<b>Installation date</b> (LDM 10)	Provide intended date	Between Mar 15 and Nov 15.	Yes	
<b>Maintenance &amp; Statement of intent</b> (Zoning Sec 5.5.6 & LDM 10)	<ul style="list-style-type: none"> <li>Include statement of intent to install and guarantee all materials for 2 years.</li> <li>Include a minimum one cultivation in June, July and August for the 2-year warranty period.</li> </ul>	Yes	Yes	



Item	Required	Proposed	Meets Code	Comments
<b>Plant source</b> (LDM 10 & 11)	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
<b>Irrigation plan</b> (LDM 10)	<ul style="list-style-type: none"> <li>A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans.</li> <li>If irrigation won't be used, note how trees will get sufficient water for establishment and long-term survival</li> </ul>	No		<ol style="list-style-type: none"> <li>Please add an irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival in the Final Site Plans.</li> <li>If an irrigation system will be proposed, it should meet the requirements listed at the end of this chart.</li> <li>If xeriscaping is used, please provide information about plantings included.</li> </ol>
<b>Other information</b> (LDM 10)	Required by Planning Commission	NA		
<b>Establishment period</b> (Zoning Sec 5.5.6 & LDM 10)	<b>2 yr. Guarantee</b>	Yes	Yes	
<b>Approval of substitutions.</b> (Zoning Sec 5.5.5 & LDM 10)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
<b>Plant List (LDM 10 &amp; 11) – Include all cost estimates</b>				
Quantities and sizes	<ul style="list-style-type: none"> <li>At least 50% of species used shall be native to Michigan</li> <li>Tree diversity shall follow guidelines of LDM Section 4</li> </ul>	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names (LDM 4 & 11)		<ul style="list-style-type: none"> <li>16 of 25 species used (64%) are native to Michigan.</li> <li>Tree diversity is satisfactory</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	
Type and amount of lawn		<ul style="list-style-type: none"> <li>Seed is indicated.</li> <li>The amount is on the plant schedule</li> </ul>	Yes	
Cost estimate (LDM 10)		For all new plantings, mulch and sod as listed on the plan	Yes	Yes
<b>Planting Details/Info (LDM Part III) – Utilize City of Novi Standard Details</b>				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		Yes	Yes	

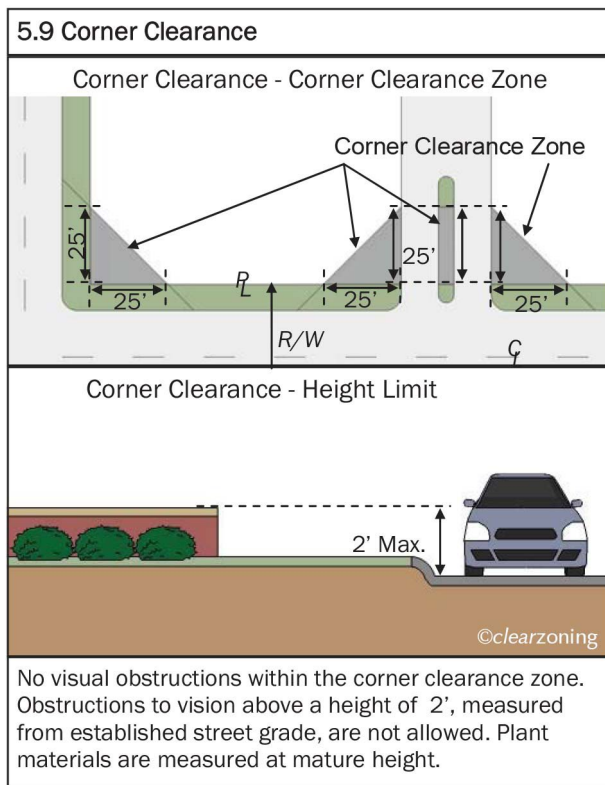
Item	Required	Proposed	Meets Code	Comments
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	
<b>Other Plant Material Requirements (LDM 11)</b>				
<b>General Conditions</b>	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
<b>Plant Materials &amp; Existing Plant Material (LDM 11)</b>	Clearly show trees to be removed and trees to be saved.	Yes	Yes	
<b>Landscape tree credit (LDM 11)</b>	<ul style="list-style-type: none"> <li>Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA.</li> <li>Refer to Landscape tree Credit Chart in LDM</li> </ul>	None taken		
<b>Plant Sizes for ROW, Woodland replacement and others (LDM 11)</b>	<ul style="list-style-type: none"> <li>Size determined by use detailed in LDM Table 11.b.(2)a.i</li> <li>Indicate on plant list</li> </ul>	Sizes shown on plant list are acceptable	Yes	
<b>Plant size credit (LDM 11)</b>	NA	None taken		
<b>Prohibited Plants (LDM 11.b)</b>	No plants on City Invasive Species List	No invasive species are proposed.	Yes	
<b>Recommended trees for planting under overhead utilities (LDM 11)</b>	Label the distance from the overhead utilities	There are no overhead lines on the site.		
<b>Collected or Transplanted trees (LDM 11)</b>		None used		
<b>Nonliving Durable Material: Mulch (LDM 12)</b>	<ul style="list-style-type: none"> <li>Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth</li> <li>Specify natural color, finely shredded hardwood bark mulch. Include in cost</li> </ul>	Yes	Yes	



Item	Required	Proposed	Meets Code	Comments
	estimate. • Refer to section for additional information			

**NOTES:**

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



**Irrigation System Requirements**

1. Any booster pump installed to connect the project's irrigation system to an existing irrigation system must be downstream of the RPZ.
2. The RPZ must be installed in accordance with the 2015 Michigan Plumbing Code.
3. The RPZ must be installed in accordance with the manufacture installation instructions for winterization that includes drain ports and blowout ports.
4. The RPZ must be installed a minimum of 12-inches above FINISHED grade.
5. Attached is a handout that addresses winterization installation requirements to assist with this.
6. A plumbing permit is required.
7. The assembly must be tested after installation with results recorded on the City of Novi test report form.

**TRAFFIC REVIEW**





AECOM  
 39575 Lewis Dr  
 Novi  
 MI, 48377  
 USA  
 aecom.com

**Project name:**  
 JSP23-24 – Novi Pet Resort Revised Preliminary  
 Plan Traffic Review

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

**From:**  
 AECOM

**Date:**  
 August 8, 2023

**CC:**  
 Lindsay Bell, Humna Anjum, Ben Peacock, Diana  
 Shanahan, James Hill

# Memo

**Subject:** JSP23-24 – Novi Pet Resort Revised Preliminary Plan Traffic Review

The revised preliminary site plan was reviewed to the level of detail provided and AECOM recommends **approval** for the applicant to move forward until the comments are addressed to the satisfaction of the City.

## GENERAL COMMENTS

1. The applicant, Stucky Vitale Architects, Inc., is proposing 9,350 SF pet boarding facility.
2. The development is located on the west side of Novi Road and the east side of Gen Mar Road. Novi Road is under the jurisdiction of the Road Commission for Oakland County (RCOC) and Gen Mar Road is under the jurisdiction of the City.
3. The site is zoned I-1, Light Industrial, and no zoning changes are proposed.
4. The following traffic related deviations may required if changes are not made.
  - a. Lack of loading zone.

## TRAFFIC IMPACTS

1. AECOM was unable to perform an initial trip generation based on the ITE Trip Generation Manual, 11<sup>th</sup> Edition, as there is insufficient data for the land use.

ITE Code: 640 – Animal Hospital/Veterinary Clinic  
 Development-specific Quantity: 9,350 SF  
 Zoning Change: N/A

Trip Generation Summary	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
<b>AM Peak-Hour Trips</b>	36	24	100	No
<b>PM Peak-Hour Trips</b>	37	22	100	No
<b>Daily (One-Directional) Trips</b>	201	N/A	750	No

2. The City of Novi generally requires a traffic impact study/statement if the number of trips generated by the proposed development exceeds the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour, or if the project meets other specified criteria.

Trip Impact Study Recommendation	
Type of Study:	Justification
None	Trips do not exceed City thresholds.

## TRAFFIC REVIEW

The following table identifies the aspects of the plan that were reviewed. Items marked O are listed in the City’s Code of Ordinances. Items marked with ZO are listed in the City’s Zoning Ordinance. Items marked with ADA are listed in the Americans with Disabilities Act. Items marked with MMUTCD are listed in the Michigan Manual on Uniform Traffic Control Devices.

The values in the ‘Compliance’ column read as ‘met’ for plan provision meeting the standard it refers to, ‘not met’ stands for provision not meeting the standard and ‘inconclusive’ indicates applicant to provide data or information for review and ‘NA’ stands for not applicable for subject Project. The ‘remarks’ column covers any comments reviewer has and/or ‘requested/required variance’ and ‘potential variance’. A potential variance indicates a variance that will be required if modifications are not made or further information provided to show compliance with the standards and ordinances. The applicant should put effort into complying with the standards; the variances should be the last resort after all avenues for complying have been exhausted. Indication of a potential variance does not imply support unless explicitly stated.

EXTERNAL SITE ACCESS AND OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
1	Driveway Radii   O <a href="#">Figure IX.1</a>	15’	Met	Within range for drive, could increase to standard of 20’.
2	Driveway Width   O <a href="#">Figure IX.1</a>	24’	Met	Width is within range, standard is 30’.
3	Driveway Taper   O <a href="#">Figure IX.11</a>	-	N/A	
3a	Taper length	-	N/A	
3b	Tangent	-	N/A	
4	Emergency Access   O <a href="#">11-194.a.19</a>	2 access points	Met	
5	Driveway sight distance   O <a href="#">Figure VIII-E</a>	Not dimensioned	N/A	For Major through roads.
6	Driveway spacing	-	N/A	No other existing driveways along Gen Mar Road at site location.
6a	Same-side   O <a href="#">11.216.d.1.d</a>	-	N/A	
6b	Opposite side   O <a href="#">11.216.d.1.e</a>	-	N/A	
7	External coordination (Road agency)	-	N/A	No changes proposed to Novi Road.
8	External Sidewalk   <a href="#">Master Plan &amp; EDM</a>	-	N/A	None proposed in Master Plan.
9	Sidewalk Ramps   <a href="#">EDM 7.4 &amp; R-28-J</a>	-	N/A	
10	Any Other Comments:			



INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone   <a href="#">ZO 5.4</a>	Not indicated	<b>Not Met</b>	<b>Indicate loading zone in future submittal.</b>
12	Trash receptacle   <a href="#">ZO 5.4.4</a>	Located in NE of site	Met	
13	Emergency Vehicle Access	Included	Met	
14	Maneuvering Lane   <a href="#">ZO 5.3.2</a>	24'	Met	
15	End islands   <a href="#">ZO 5.3.12</a>			
15a	Adjacent to a travel way	Not dimensioned	<b>Inconclusive</b>	End islands appear to be 3' shorter than adjacent space but <b>a dimension should be added to the site plan.</b>
15b	Internal to parking bays	-	N/A	
16	Parking spaces   <a href="#">ZO 5.2.12</a>	20 provided		
17	Adjacent parking spaces   <a href="#">ZO 5.3.C.ii.i</a>	<15 spaces in all parking bays	Met	
18	Parking space length   <a href="#">ZO 5.3.2</a>	17'	Met	
19	Parking space Width   <a href="#">ZO 5.3.2</a>	9'	Met	
20	Parking space front curb height   <a href="#">ZO 5.3.2</a>	4" in front of parking, 6"	Met	
21	Accessible parking – number   <a href="#">ADA</a>	1	Met	
22	Accessible parking – size   <a href="#">ADA</a>	8' with 8' aisle	Met	
23	Number of Van-accessible space   <a href="#">ADA</a>	1	Met	
24	Bicycle parking			
24a	Requirement   <a href="#">ZO 5.16.1</a>	2 spaces required	Met	
24b	Location   <a href="#">ZO 5.16.1</a>	Indicated	Met	
24c	Clear path from Street   <a href="#">ZO 5.16.1</a>	6' required, 5' proposed	<b>Not Met</b>	<b>Provide a 6' clear path with ramps from bike parking location to adjacent roadway. With a 2' overhang at the 17' parking spaces, only 5' of the 7' walk is considered a clear path.</b>
24d	Height of rack   <a href="#">ZO 5.16.5.B</a>	3'	Met	
24e	Other (Covered / Layout)   <a href="#">ZO 5.16.1</a>	-	N/A	
25	Sidewalk – min 5' wide   <a href="#">Master Plan</a>	7' (5' with 2' overhang in front of 17' parking space) and 5'	Met	
26	Sidewalk ramps   <a href="#">EDM 7.4</a> & <a href="#">R-28-J</a>	Indicated and detail included	Met	
27	Sidewalk – distance back of curb   <a href="#">EDM 7.4</a>	-	N/A	
28	Cul-De-Sac   O <a href="#">Figure VIII-F</a>	-	N/A	
29	EyeBrow   O <a href="#">Figure VIII-G</a>	-	N/A	
30	Turnaround   <a href="#">ZO 5.10</a>	-	N/A	

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes   <a href="#">MMUTCD</a>	Included	Partially Met	Include size of R7-8p Van Accessible sign.
33	Signing table: quantities and sizes	Included	Partially Met	List all proposed signs in the "Sign Data Table" and not only the stop signs.
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post   <a href="#">MMUTCD</a>	Not included	Partially Met	
35	Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post   <a href="#">MMUTCD</a>	Not included	Partially Met	
36	Sign bottom height of 7' from final grade   <a href="#">MMUTCD</a>	6' shown on detail	Not Met	7' required.
37	Signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign   <a href="#">MMUTCD</a>	Not included	Not Met	
38	FHWA Standard Alphabet series used for all sign language   <a href="#">MMUTCD</a>	Not included	Not Met	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity   <a href="#">MMUTCD</a>	Not included	Not Met	
40	Parking space striping notes	Included	Met	
41	The international symbol for accessibility pavement markings   ADA	Included	Met	
42	Crosswalk pavement marking detail	-	N/A	
43	Any Other Comments:			

Note: Hyperlinks to the standards and Ordinances are for reference purposes only, the applicant and City of Novi to ensure referring to the latest standards and Ordinances in its entirety.

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

Sincerely,

**AECOM**



Paula K. Johnson, PE  
Senior Transportation Engineer



Saumil Shah, PMP  
Project Manager



## FAÇADE REVIEW



June 20, 2023

City of Novi Planning Department  
45175 W. 10 Mile Rd.

*Façade Review Status Summary:*  
**Approved - Full Compliance**

Re: **FACADE ORDINANCE – Novi Pet Resort, PSP23-024**  
Façade Region: 3, Zoning District: I-1

Dear Ms. McBeth;

This review is based on the drawings prepared by Stucky Vitale Architects, dated 5/24/23. The percentages of materials proposed are as shown in the table below. The maximum (and minimum) percentages allowed by the Schedule Regulating Façade Materials of Ordinance Section 5.15 are shown in the righthand column. Materials that are in non-compliance, if any, are highlighted in bold. The sample board required by Section 5.15.4.D of the Ordinance was not provided at the time of this review.

	North (front)	South	East	West	Ordinance Maximum (Minimum)
Split Faced CMU	32%	37%	46%	46%	75%
Flat Metal Panels	64%	59%	50%	50%	75%
Trim (Prefinished Metal)	4%	4%	4%	4%	15%

Recommendation – The precise type of metal panels (flat vs. ribbed) was not clearly indicated on the drawings. The applicant has indicated via phone inquiry that the panels will in fact be flat. All facades are therefore in full compliance with the Façade Ordinance. If you have any questions regarding this project, please do not hesitate to call.

Sincerely,  
DRN & Associates, Architects, PC

Douglas R. Necci, AIA



## FIRE REVIEW



June 14, 2023

TO: Barbara McBeth - City Planner  
Lindsay Bell - Plan Review Center  
Ben Peacock – Plan Review Center  
Diana Shanahan – Planning Assistant

**CITY COUNCIL**

**Mayor**  
Bob Gatt

**Mayor Pro Tem**  
Dave Staudt

Laura Marie Casey

Hugh Crawford

Justin Fischer

Brian Smith

Ericka Thomas

**Interim City Manager**  
Victor Cardenas

**Director of Public Safety  
Chief of Police**  
Erick W. Zinser

**Fire Chief**  
Jeffery R. Johnson

**Assistant Chief of Police**  
Scott R. Baetens

**Assistant Fire Chief**  
John B. Martin

RE: Novi Pet Resort

PSP#23-024

JSP#23-24

**Project Description:**

New 9,350 sq FT building for animal resort/kennel at location.

**Comments:**

- **All** fire hydrants **MUST** be installed and operational prior to any combustible material is brought on site. **IFC 2015 3312.1**
- For new buildings and existing buildings, you **MUST** comply with the International Fire Code **Section 510** for Emergency Radio Coverage. This shall be completed by the time the final inspection of the fire alarm and fire suppression permits.

**Recommendation:**

Approved

Sincerely,

Andrew Copeland – Acting Fire Marshal  
City of Novi Fire Department

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

cc: file

cityofnovi.org



**APPLICANT'S RESPONSE LETTER AND NARRATIVE**

# STONEFIELD

August 25, 2023

James Hill  
Planner  
City of Novi Community Development | Planning Division  
45175 Ten Mile Rd  
Novi, MI 48375

**RE: Pet Resort Novi  
Proposed Pet Boarding Facility  
PID: 22-22-276-017  
Northwest Corner of Novi Road and Gen  
City of Novi, Oakland County, Michigan**

James:

Our office is submitting documents on behalf of the Applicant to address the outstanding comments contained within the latest Preliminary Site Plan review letters. Please find the following items enclosed:

<b>ITEM DESCRIPTION</b>	<b>DATED</b>	<b>COPIES</b>	<b>PREPARED BY</b>
Site Development Plans	08-11-2023	1	Stonefield Engineering & Design
Architectural Plans	07-21-2023	1	Stucky Vitale Architects
Colorized Site Rendering	08-25-2023	1	Stucky Vitale Architects

---

**The following is an itemized response to the comments contained within the City of Novi Planning Review Letter dated August 23, 2023. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:**

---



## Request for Waivers / Variances:

Due to the uncommon dimensions, frontages, & existing features of the site, the applicant team is requesting relief from the City Planning Commission & Zoning Board of Appeals for the following waivers & variances:

### Variances:

1. Minimum Building Setbacks – Sec. 3.1.18.D, Sec. 3.6.2.C & Sec. 3.6.2.Q
  - a. Variance required due to the unorthodox 4-frontage configuration of the lot.
  - b. Please note the applicant team was under the impression that Sec. 3.6.2.Q states the Planning Commission may have the ability to modify these requirements. If we are understanding correctly, the applicant requests to Planning Commission to modify building setbacks to result in better use of the lot area. If not, the applicant has no objection to requesting a variance for this item. Proposed modifications are as follows:
    - i. Front Yard Setback (East): increase to 68.3' proposed, 40' is required.
    - ii. Side Street Yard Setback (North): increase to 50.0' is proposed, 40' is required.
    - iii. Side Street Yard Setback (West): Decrease to 10.0' is proposed, 40' is required.
    - iv. Side Street Yard Setback – No modification requested.
2. Right-of-way Landscape Buffers
  - a. Proposed 10.0' where 25' is required. (Western Gen Mar Frontage) Request stems from modifying setbacks to avoid the existing 20' grade change and utility easements along the eastern portion of the parcel.
3. Outdoor Facilities – Sec. 4.46.4
  - a. Requesting to place the outdoor play area within the southern Side Street Yard (No rear yard is available on site due to four frontages)
  - b. Two variances requested – 1) location within side street yard, 2) Encroachment into required building setbacks.
4. Dumpster – Sec. 4.19.2.F
  - a. Requesting to place a trash enclosure within the northern side street yard (No rear yard is available on site due to four frontages)
5. Loading Spaces – Sec. 5.4.1
  - a. Requesting to omit the requirement for a designated loading space as it is not necessary for the proposed use. Loading will be limited to small deliveries carried out by employees or typical delivery sprinter vans (Amazon, etc.) for food and pet supplies. The loading drop offs can be handled utilizing the standard parking stalls and will be scheduled for non-peak hours.

### Waivers:

1. Parking Setback – Sec. 3.1.18.D & Sec. 3.6.2
  - a. Variance required due to the unorthodox 4-frontage configuration of the lot, existing grading challenges on west side of site & existing utility easements. 25.0' proposed where 40' is required.
2. Parking Lot Screening – Sec. 3.6.2.E
  - a. No berm is proposed within eastern setback due to existing grade changes between parking lot and Novi Road.
  - b. Decrease in required accessway trees requested to avoid sight vision conflicts. 4 trees proposed, 7 required.
3. Landscaping Adjacent to Public Rights of Way – Berm/Wall, Buffer & Street Trees (Novi Road)
  - a. Berm omitted due to significant grade change
  - b. Proposed street trees limited due to existing retaining wall
  - c. RCOC to declare whether street trees are required within Novi Road right-of-way
4. Landscaping Adjacent to Public Rights of Way – Berm/Wall, Buffer & Street Trees (Gen Mar)
  - a. Deficiency in subcanopy trees due to limited width between building & parcel lot line.

## Ordinance Requirements:

### 3. Building and Parking Setbacks:

- a. *All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply. The west yard building setback does not meet the requirement of 40 feet. Applicant will be seeking a variance from the ZBA*
- b. *The west yard parking setback does not meet the requirement of 40 feet. Applicant will be seeking a waiver from the Planning Commission.*

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

### 6. Outdoor Facilities:

- a. *Any outdoor facilities shall be located in the interior side yard or rear yard. The proposed outdoor play area is located in the labeled side yard (southern yard), but all yards must comply with front yard standards since all yards have street frontage. A ZBA variance will be required since this standard cannot be met without one.*
- b. *The outdoor facilities shall not encroach into any required building setback. Part of the proposed outdoor play area extends into the building setback. A ZBA variance will be required if the play area cannot be relocated where it does not encroach into the setback.*
- c. *Pets shall not be permitted to remain outdoors overnight. Applicant notes that pets will not remain outdoors overnight.*

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

9. Parking Lot Screening (Sec. 3.6.2.E): *Off-street parking is allowed in front yard if it is screened by a brick wall or landscaped berm. Planning Commission waivers for parking lot screening from Novi Road and Gen Mar (west frontage) are required for the current layout. Landscape supports both waivers.*

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

10. Bicycle Parking (Sec. 5.16): *2 bicycle parking spaces are proposed. Please meet the locational & dimensional standards as noted in the Planning chart and the Traffic review letter.*

**No objection to this request. The bicycle parking will be updated per the provided reviews and standards.**

11. Dumpster (Sec. 4.19.2): *Dumpsters should be in a rear yard. A ZBA variance will be required for this deviation since all yards must comply with front yard standards.*

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

12. Dumpster Enclosure (Sec. 21-145(c)): *See the Engineering review for comments pertaining to the dumpster pad*

**No objection – The plans will be updated to add detailed language and specifications as required by the engineering review during the next submittal set.**

16. Exterior Lighting & Photometric Plan (Sec. 5.7): *Photometric plan submitted. Only necessary lighting for security purposes and limited operations shall be permitted after a site's hours of operation (5.7.3.G), and lighting for security purposes shall be directed only onto the area to be secured (5.7.3.H).*

**No Objection – This note will be added to the proposed Lighting Plan on C-10.**



## Planning Review Chart Comments:

1. Minimum Zoning Lot Size- See the Landscape review for further details.

**Refer to the revised Site Plan sheet, as well as responses to landscaping review comments.**

2. Maximum % of Lot Area Covered - Due to site constraints, not all yard setbacks can be met. Those that do not comply will need a variance from the Zoning Board of Appeals

**Understood & agreed – A variance and/or waiver by the Planning Commission is requested.**

3. Building Setbacks - All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply. A variance from the ZBA will be required since this standard cannot be met without one.

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

4. Parking Setback - All exterior side yards abutting a street shall be provided with a setback equal to the front yard setback requirement of the district in which located and all regulations applicable to a front yard shall apply. A waiver from the Planning Commission will be required since this standard cannot be met without one.

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

5. Outdoor Facilities - A ZBA variance will be required since this standard cannot be met without one. The outdoor facilities shall not encroach into any required building setback. A ZBA variance will be required.

**Acknowledged. Please refer to the above Request for Waivers / Variances.**

6. Exterior Side Yard Abutting a Street - The building setback in the western yard does not meet this standard. A Zoning Board of Appeals variance would be required for this deviation. The parking setback in the western yard does not meet this standard. A Planning Commission waiver would be required for this deviation.

**Acknowledged. Please refer to the above Request for Waivers / Variances. Modification stems from the existing topography of the site as well as challenges brought on by the 4-frontage lot.**

7. Off-Street Parking in Front Yard - All exterior side yards abutting a street shall be provided with a setback equal to front yard. Therefore, the proposed parking area does extend into the minimum required setback of 40 ft. Planning Commission waivers for parking lot screening from Novi Road and Gen Mar (west frontage) are required for the current layout. Landscape supports both waivers.

**Acknowledged. Please refer to the above Request for Waivers / Variances. A greenbelt of 25 FT was maintained in the western exterior side yard. Shifting the parking east would encroach into an existing 20 FT wide drain easement running through the site as well as a severe (20 FT) grade change within the eastern portion of the site. Refer to sheet C-2 of the Site Improvement Plans for the proposed parking setbacks.**

8. Parking Setback Screening - Several landscape deviations currently exist which would not be supported by staff. See the Landscape review for further details.

**No longer required per conversation with Rick Meader.**

9. Modification of Parking Setback Requirements - Planning Commission can grant waivers for parking setback deficiencies.

**Please refer to the above Request for Waivers / Variances. The applicant is requesting a modification to the setback requirements to maintain an equal / greater setback area. The required setback area is 39,963 SF and the proposed setback area is 39,996 SF. Refer to the first footnote of the 'Land Use and Zoning' table on Sheet C-2 of the Site Improvement Plan.**

10. Bicycle Parking General requirements - Please provide bicycle parking dimensional details on the site plan.

**Parking details & dimensions per the City of Novi ordinance will be added to Sheet C-2. Two bicycle parking spaces are proposed adjacent to the main building entrance on the northern façade and the layout will be updated per the provided engineering comments & zoning dimensional requirements.**

11. Bicycle Parking Lot layout - Please provide bicycle parking dimensional details on the site plan

**Please refer to the above response #10.**

12. Dumpster - A ZBA variance will be required for this deviation since all yards must comply with front yard standards.

**A variance will be pursued through the ZBA. Please refer to the above Request for Waivers / Variances.**

13. Dumpster Enclosure - See the Engineering review for comments pertaining to the dumpster pad.

**Acknowledged. Refer to the response provided in the below engineering comments.**

14. Loading Spaces – ZBA variance will be required

**Refer to the Project Narrative. Please refer to the above Request for Waivers / Variances.**

15. Rooftop equipment - If rooftop equipment is proposed, please include it in the next submittal with proper screening

**Acknowledged. Rooftop equipment is not proposed at this time and is not anticipated. In the case of its addition in later design development, proper screening will be provided during the next submittals.**

16. Roof top appurtenances screening - Provide the required hazardous materials checklist

**Hazardous materials checklist has been included within this resubmission package.**

17. Performance Standards - Further verification of the conformance may be required at the time of occupancy.

**Understood.**

18. Exterior lighting - Please include a note that the lighting standards will comply with the subsections regarding hours of operation and security lighting.

**No objection. The Lighting Plan on Sheet C-10 will be updated with the above note.**



19. Economic Impact Information - If the total cost of the proposed building and site improvements is available, please include in the response letter.

**The total cost of the proposed building & improvements is not available at time of submission. However, a cost estimate will be prepared during the engineering review & the applicant will try to estimate costs for discussion during the planned Planning Commission Hearing. Economic Impact Information has been included within the project narrative.**

20. Development/ Business Sign - For sign permit information contact Ordinance Enforcement at 248-735-5678

**A sign permit will be obtained prior to the start of construction**

## **Landscape Review:**

- I. Adjacent to Public Rights of Way

### **Novi Road:**

- a. The required berm is not provided due to a significant change in grade. This requires a landscape waiver, which is supported by staff.

**Understood. This has been outlined in the above Request for Waivers / Variances.**

- b. Not all of the required greenbelt landscaping is proposed. This requires a landscape waiver which is supported by staff as the only trees not provided are below the large wall supporting the road.

**Understood. This has been outlined in the above Request for Waivers / Variances.**

- c. Not all of the required Novi Road street trees are not provided. This requires a landscape waiver which is supported by staff as the only trees not provided are within the bridge area. If the RCOC declares that any or all of the proposed street trees should not be provided along Novi Road, they do not need to be but a copy of their decision must be provided to the City.

**Understood. This has been outlined in the above Request for Waivers / Variances. The applicant has reached out to RCOC for comment on multiple occasions without avail and will continue to request an answer for right-of-way trees.**

### **Gen Mar:**

- a. The deficiency in subcanopy trees is due to the lack of space in front of the building. This requires a waiver that is supported by staff if the variance for the decreased setback is approved by the ZBA.

**Understood. Refer to the above Request for Waivers / Variances.**

- b. Please add the one missing canopy tree along the Gen Mar frontage, as described on the landscape chart.

**No objection – the missing canopy tree will be added as required.**

2. Parking Lot Landscaping –
  - a. The required parking lot landscaping is provided, but there are some changes that should be made as described on the landscape chart.

Understood. All changes as recommended will be incorporated in the next plan set submission as required.

- b. Please add one more perimeter tree east of the parking lot and 1 accessway perimeter tree south of the detention basin as described on the landscape chart.

**No objection – the missing parking perimeter tree and accessway perimeter tree will be added as required.**

3. Storm Basin Landscape:
  - a. Please follow the instructions on the landscape chart regarding placement of trees on the south side of both basins.

**Noted. The landscaping plan and chart will be updated per the instructions / comments / markups provided.**

4. Irrigation - Please provide plans for either an irrigation system or an alternative means of providing water for the plants establishment and long-term survival.

**An irrigation plan will be provided as part of the final site plan application.**

### Landscape Review Summary Chart:

1. Owner/Developer Contact Information - Please add the information to the landscape plans title block or elsewhere.

**Owner/developer contact information will be added to the landscape plan (Sheet C-7) as well as the cover sheet (Sheet C-1).**

2. Existing and proposed utilities:
  - a. If there is an FDC on the building, please show it on the landscape plan. If there wont be, please note that in the response letter.

**No FDC connection on the building is anticipated per applicable codes, and will be confirmed during final site plan review. If an FDC is added, landscaping will be updated per all ordinance requirements and noted on the landscaping plans.**

3. Total square footage of vehicular use area up to 50,000 sf x 5%
  - a. Please revise the calculations as shown here.
  - b. Vehicular use areas up to 50,000sf should be multiplied by 6.0%the entire parking lot, including the aisle between spaces, should be included in the VUA.
  - c. Only the aisles not adjacent to parking spaces should be included in the accessway perimeter calculation.

**Noted. The vehicular use area calculations will be revised as advised on the next submittal set.**



4. All Categories:

- a.  $C = A + B$  - Please correct calculation as noted above

**No objection, this will be revised on the next submittal set.**

- b.  $D = C/200$  - Only 3 trees required to meet the interior requirement should be labeled as such (in the 3 islands closest to the street)

**No objection, this will be revised on the next submittal set.**

5. Parking Lot Perimeter Trees:

- a. Please label all of the remaining canopy trees around the edge of the parking lot as perimeter trees  
b. Please add a tree on the east side of the parking lot.

**No objection, this will be revised on the next submittal set.**

6. Accessway perimeter:

- a. One of the perimeter trees along the north drive should be labeled as an accessway perimeter tree.  
b. A waiver for 4 trees not provided because they would hinder site vision is required. It would be supported by staff.  
c. Please add 1 tree on along the north access drive, south of the detention pond.

**No objection, this will be revised on the next submittal set.**

7. Berm requirements - Landscape waivers are required for the lack of required greenbelt berms. They are supported by staff due to the existing grades.

**A waiver as suggested by staff is requested. Please refer to the Landscape Plan (Sheet C-7) for updated zoning table. Refer to the above Requests for Waivers / Variances.**

8. Min. berm crest width - A landscape waiver is required. It is supported by staff because it the existing grades make providing the required berm impossible.

**A waiver as suggested by staff is requested. Please refer to the Landscape Plan (Sheet C-7) for updated zoning table.**

9. Canopy deciduous or large evergreen trees - A landscape waiver is required to not provide two trees beneath the wall. It is supported by staff.

**Refer to the above Requests for Waivers / Variances.**

10. Sub-canopy deciduous trees - A landscape waiver is required to not provide two trees beneath the wall. It is supported by staff.

**Refer to the above Requests for Waivers / Variances.**

11. Canopy deciduous trees in area between sidewalk and curb:
  - a. A landscape waiver is required to not provide two trees beneath the wall. It is supported by staff.
  - b. If the Road Commission does not allow the street trees, they do not need to be provided, but documentation of their decision must be provided to staff.

**Refer to the above Requests for Waivers / Variances. As noted above, we are still waiting for RCOC to declare whether street trees are required within Novi Road right-of-way and will update our plan set accordingly.**

12. Interior Street to Industrial subdivision:
  - a. Please add 1 more canopy tree in the greenbelt to meet the requirement.
  - b. A landscape waiver for the deficiency in subcanopy trees along the West/South frontage would be supported for the 110lf of building frontage (3 subcanopy trees) if the variance for the building setback is supported by the ZBA.
  - c. Please move the three planetrees to locations south of the east detention pond to shade the pond and avoid their removal if the road segment is vacated.
  - d. Please spread the street trees along Gen Mar more.

**No objection to the above plan changes. Refer to the above Requests for Waivers / Variances.**

13. Screening of outdoor storage, loading/unloading - If a loading zone is provided, please screen it from view of the roads.

**A note indicating no loading zone will exist was added to the landscape plan (Sheet C-7 & Sheet C-8).**

14. Transformers/Utility boxes:
  - a. Please add a note stating the screening shrubs shall be maintained at a height at least as tall as the transformer.

**Above note will be added during the next plan set submittal.**

15. Planting requirements:
  - a. As noted above, please move the planetrees along the north frontage to south and east of the east detention pond. Also as noted previously, please add an accessway perimeter tree south of the west detention pond that will also shade the pond.

**No objection to the requested plan changes. These will be made during the next plan submittal.**

16. Phragmites and Japanese Knotweed Control
  - a. Please survey the site for any populations of Phragmites australis and Japanese Knotweed
  - b. If any is found, show it on the topo survey and add plans for its removal.
  - c. If none is found, please indicate that on the survey.

**A note added to the Landscape Plan (Sheet C-7 & Sheet C-8) citing the removal of Japanese Knotweed and Phragmites shall be eradicated if present on site.**



17. Irrigation plan –

- a. Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long-term survival.
- b. If an irrigation system will be proposed, it should meet the requirements listed at the end of this chart.
- c. If xeriscaping is used, please provide information about plantings included.

**An irrigation plan will be provided as part of final site plan application and approval.**

**Traffic Review:**

1. Driveway Radii – Indicate dimension in future submittal

**Driveway radii have been indicated, refer to Sheet C-2 of the Site Improvement Plan.**

2. Loading Zone – Indicate loading zone in future submittal

**Refer to the Project Narrative. A variance will be pursued through the ZBA.**

3. Emergency Vehicle Access - Provide turning movements to show emergency vehicle access

**A standard Aerial Fire Truck circulation has been shown on site. Refer to Sheet C-3 of the Site Improvement Plans.**

4. Adjacent to a travel way - Indicate dimensions in future submittal. End islands should be 3' shorter than adjacent space.

**End islands have been updated to be 3 FT shorter than adjacent parking spaces. Refer to Sheet C-2 of the Site Improvement Plans.**

5. Parking space front curb height - 4" curb with 2' overhang required at 17' spaces, 6" everywhere else.

**Proposed concrete curb adjacent to 17 FT parking spaces has been updated to 4". Refer to Sheet C-4 of the Site Improvement Plan.**

6. Bicycle parking

- a. Confirm location
- b. Provide a 6' clear path with ramps from bike parking location to adjacent roadway.
- c. 3' height required.

**2 Bicycle parking spaces are proposed adjacent to the main building entrance on the northern façade. Refer to sheet C-2 of the Site Improvement Plan, and detail #11 on C-12. As requested, as separate dimensional detail will be added to Sheet C-2 and the layout will be revised per all applicable requirements set within the City zoning ordinance.**

7. Sidewalk – min 5' wide | Master Plan Indicate height of walk in front of 17' parking space, 4" required.

**Proposed concrete curb adjacent to 17 FT parking spaces has been updated to a height of 4". Refer to Sheet C-4 of the Site Improvement Plan.**

8. Sidewalk ramps - Include MDOT sidewalk ramp standard R-28 in future submittal.

**MDOT R-28 sidewalk ramp detail is shown. Refer to Sheet C-14 of the Site Improvement Plans.**

9. Signing & Striping:

- a. Signing: Sizes - Include size of R7-8p Van Accessible sign
- b. Signing table: quantities and sizes - List all proposed signs in the "Sign Data Table".
- c. Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post
- d. Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post
- e. Sign bottom height of 7' from final grade |
- f. Signing shall be placed 2' from the face of the curb or edge of the nearest sidewalk to the near edge of the sign
- g. FHWA Standard Alphabet series used for all sign language
- h. High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity

**All ADA signage is to meet all state requirements. Signage details will be further updated with weight capacities during final site plan review. Sizes are dictated by federal guidelines, per the MUTCD designations shown on the site development plans.**

10. Any Other Comments: - Remove "STOP" in the stop bar and arrow details if not proposed on the site plan. Remove arrow detail if not intended to be painted on the site or add label to the site plan. Hollow traffic arrows on site plan indicate traffic flow, solid traffic arrows indicate pavement marking.

**Stop bar and arrows remain shown on the site plan, and are to be painted on-site. Refer to Sheet C-2 for locations.**

## **Fire Department Review:**

1. All fire hydrants MUST be installed and operational prior to any combustible material is brought on site

**Noted. Refer to note 14 of the 'Drainage and Utility Notes' on sheet C-6 of the Site Improvement Plans.**

2. For new buildings and existing buildings, you MUST comply with the International Fire Code Section 510 for Emergency Radio Coverage. This shall be completed by the time the final inspection of the fire alarm and fire suppression permits.

**Noted. Refer to note 15 of the 'Drainage and Utility Notes' on sheet C-6 of the Site Improvement Plans.**



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Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,



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