



## EXTRA SPACE SELF STORAGE JSP22-48

### **JSP22-48 EXTRA SPACE SELF STORAGE**

Public Hearing at the request of GHK, Inc. for approval of the Preliminary Site Plan, Special Land Use Permit, Wetland Permit, Woodland Permit, and Stormwater Management Plan. The subject property is approximately 4.3 acres and is located south of Nine Mile Road on the east side of Novi Road in the I-1, Light Industrial District. The applicant is proposing to renovate the existing building and build a new 3-story building to repurpose the site for an indoor climate-controlled self-storage facility.

### **Required Action**

Approve/Deny the Special Land Use Permit, Preliminary Site Plan, Wetland Permit, Woodland Permit and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	5-22-23	<ul style="list-style-type: none"> <li>• <b>Special Land Use considerations</b></li> <li>• <b>Zoning Board of Appeals Variance from Section 4.19.2.F. for dumpster location in the interior side yard.</b> <i>(Supported as it is screened and placed to avoid impacts to natural features)</i></li> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Engineering	Approval recommended	5-16-23	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Landscaping	Approval recommended (contingent on corrections)	4-17-23	<ul style="list-style-type: none"> <li>• <b>Waiver for lack of 10 accessway perimeter trees along north edge property line</b> <i>(Supported as area is too narrow for tree planting).</i></li> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Woodland	Approval recommended	4-24-23	<ul style="list-style-type: none"> <li>• <b>Woodland permit for removal or impact to 4 trees, requiring 8 replacement credits</b></li> <li>• <b>Conservation easement to protect woodland credits planted on-site</b></li> </ul>
Wetland	Approval recommended	4-26-23	<ul style="list-style-type: none"> <li>• <b>Wetland Permit required</b></li> <li>• Positive impact as existing pavement within wetland to be removed</li> </ul>
Traffic	Approval recommended	5-2-23	<ul style="list-style-type: none"> <li>• Items to be addressed by the applicant prior to Final Site Plan approval</li> </ul>
Façade	Approval recommended	1-23-23	<ul style="list-style-type: none"> <li>• <b>Section 9 Façade Waiver for overage of EIFS on the west and south façade, overage of CMU on the north and east facades.</b> <i>(Supported, as not highly visible</i></li> </ul>

			<i>from public ROW)</i> <ul style="list-style-type: none"><li>• Items to be addressed by the applicant prior to Final Site Plan approval</li></ul>
Fire	Approval recommended	4-17-23	<ul style="list-style-type: none"><li>• Items to be addressed by the applicant prior to Final Site Plan approval</li></ul>

## **MOTION SHEET**

### **Approval – Special Land Use Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **approve** the Special Land Use Permit based on the following findings:

- a. Relative to other feasible uses of the site:
  - i. The proposed use will not cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service *because the proposed use is compatible with the surrounding area, no new driveways are proposed on Novi Road except an emergency access, and the number of peak-hour trips is relatively low;*
  - ii. The proposed use will not cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area *because the use of the site is expected to have lower water and sanitary use compared to the previous use;*
  - iii. The proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses, and wildlife habitats *because the proposed use removes pavement from the wetland area and proposes to replant with a wetland seed mix, and impacts to trees are minimized by redeveloping a previously occupied site;*
  - iv. The proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood *because the proposed use is similar to the storage use to the south, and additional building height is located so as to minimize its impact;*
  - v. The proposed use is consistent with the goals, objectives, and recommendations of the City's Master Plan for Land Use *because the proposed use is a compatible commercial development that provides economic value to the community;*
  - vi. The proposed use will promote the use of land in a socially and economically desirable manner *because it is a proposed adaptive reuse of a vacant site and will add a storage service option to the surrounding area;*
  - vii. The proposed use is listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this ordinance, and is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located.
- b. *(additional comments here if any)*

*(This motion is made because the plan is otherwise in compliance with Article 3, Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**- AND -**

**Approval – Preliminary Site Plan**

In the matter of Extra Space Self Storage, JSP22-48, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. The Zoning Board of Appeals granting a variance from Section 4.19.2.F of the Zoning Ordinance for the location of the dumpster in the interior side yard;
- b. Landscape waiver (Section 5.5.3.C) for a deficiency of 10 accessway perimeter trees along the northern property lines, because there isn't enough area to support tree planting, *which is hereby granted*;
- c. Section 9 Façade Waiver for an overage of EIFS on the west and south façade (35% proposed, maximum of 25% permitted), and an overage of painted CMU on the north and east facades (84% and 100% proposed, respectively, 0% permitted). The EIFS material is set back approximately 300 feet from the main façade. The CMU represents a continuation of existing materials *and will not be highly visible from public ROW. As the overall design is found to be consistent with the intent and purpose of the Façade Ordinance, the waiver is hereby granted*;
- d. The findings of compliance with Ordinance standards in the staff and consultant review letters and the conditions and the items listed in those letters being addressed on the Final Site Plan; and
- e. *(additional conditions here if any)*

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

**-AND-**

**Approval – Wetland Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **approve** the Wetland Permit based on and subject to the following:

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

*(This motion is made because the plan is otherwise in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

**Approval – Woodland Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **approve** the Woodland Permit based on and subject to the following:

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

*(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*



**- AND -**

**Approval – Stormwater Management Plan**

In the matter of Extra Space Self Storage, JSP22-48, 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 – Special Land Use Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **deny** the Special Land Use Permit...*(because the plan is not in compliance with Article 4, Article 5, and Article 6 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**- AND -**

**Denial – Preliminary Site Plan**

In the matter of Extra Space Self Storage, JSP22-48, motion to **deny** the Preliminary Site Plan...*(because the plan is not in compliance with Article 3, Article 4, and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Wetland Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **deny** the Wetland Permit... *(because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**-AND-**

**Denial- Woodland Permit**

In the matter of Extra Space Self Storage, JSP22-48, motion to **deny** the Woodland Permit... *(because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

**- AND -**

**Denial – Stormwater Management Plan**

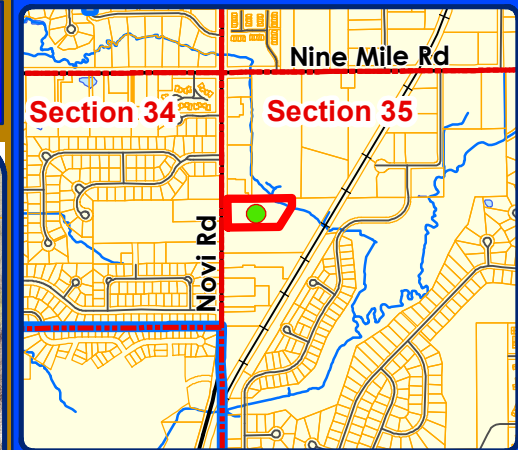
In the matter of Extra Space Self Storage, JSP22-48, motion to **deny** the Stormwater Management Plan...*(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)*

MAPS  
Location  
Zoning  
Future Land Use  
Natural Features


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# EXTRA SPACE SELF STORAGE LOCATION



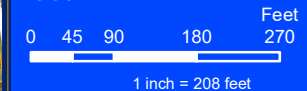
### LEGEND

 Subject Property



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

Map Author: Lindsay Bell  
Date: 5/31/23  
Project: EXTRA SPACE STORAGE  
Version #: 1

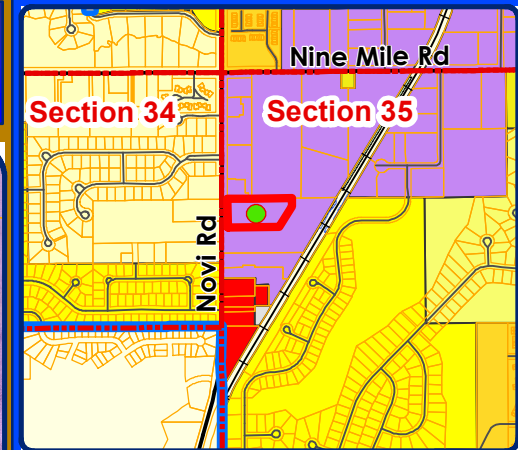
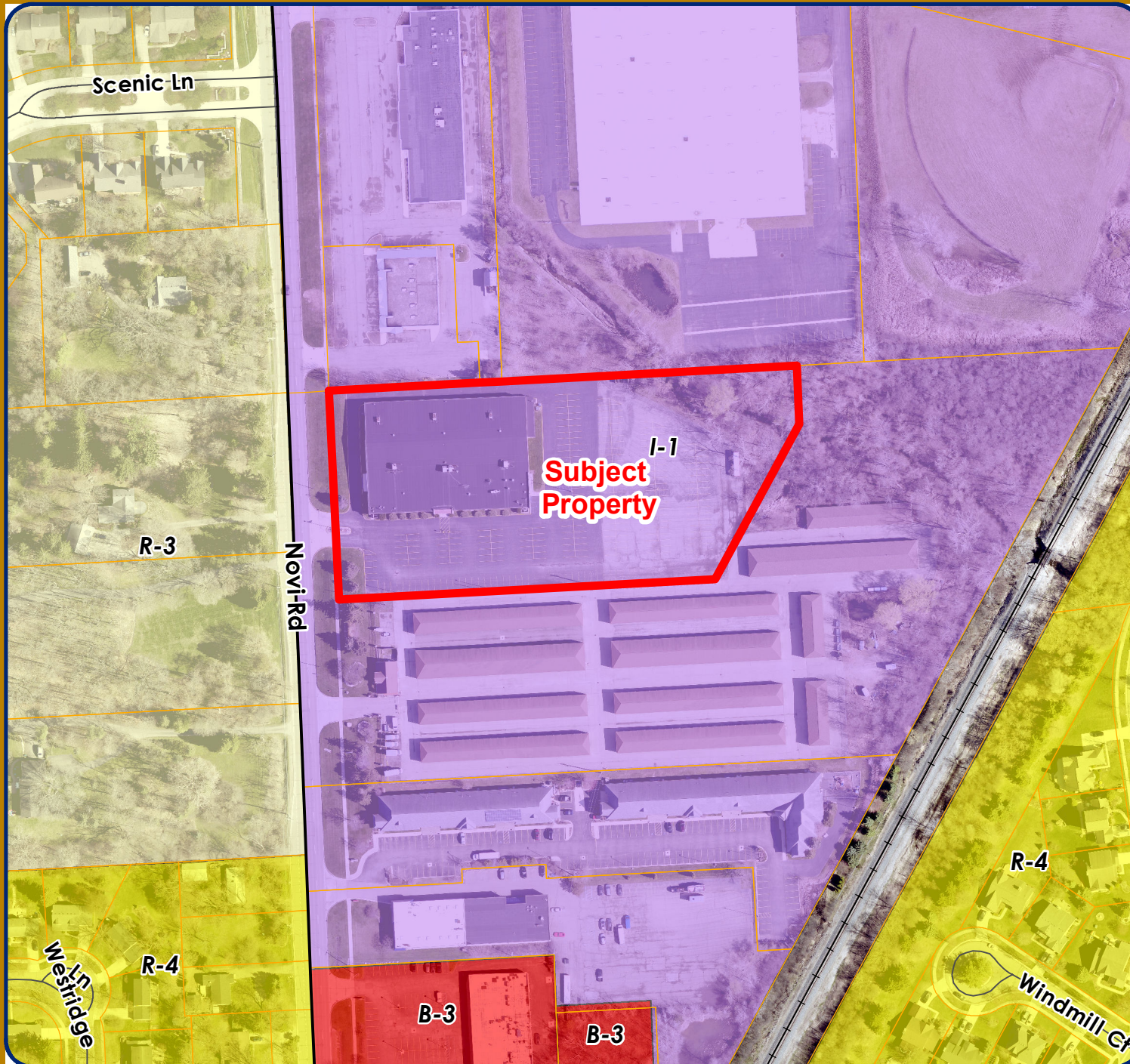


### MAP INTERPRETATION NOTICE

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



# EXTRA SPACE SELF STORAGE ZONING



**LEGEND**

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

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0 45 90 180 270 Feet  
 1 inch = 208 feet

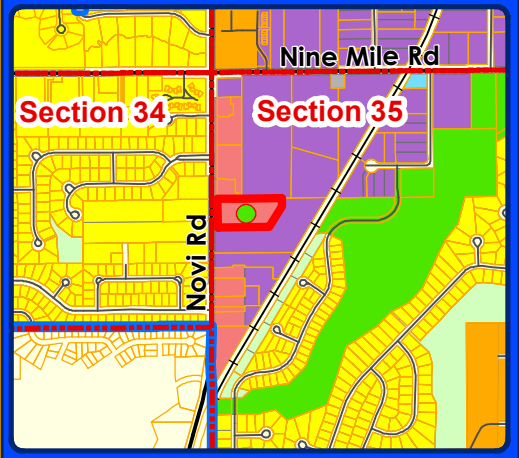
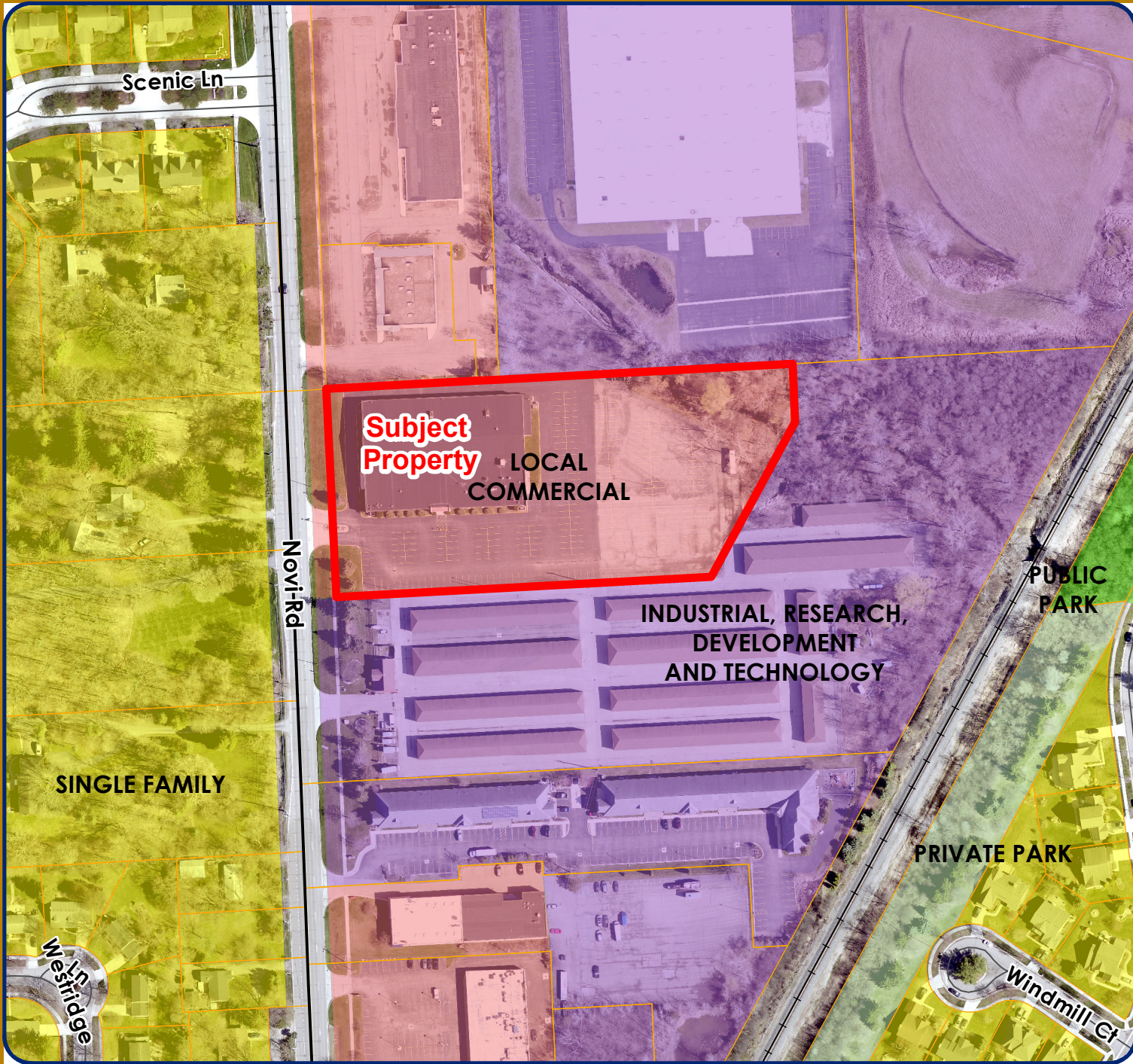
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# EXTRA SPACE SELF STORAGE

## FUTURE LAND USE



**LEGEND**

- Single Family
- Multiple-Family Residential
- Industrial, Research, Development and Technology
- Local Commercial
- Public
- Public Park
- Private Park
- Cemetery
- Subject Property

**City of Novi**  
 Dept. of Community Development  
 City Hall / Civic Center  
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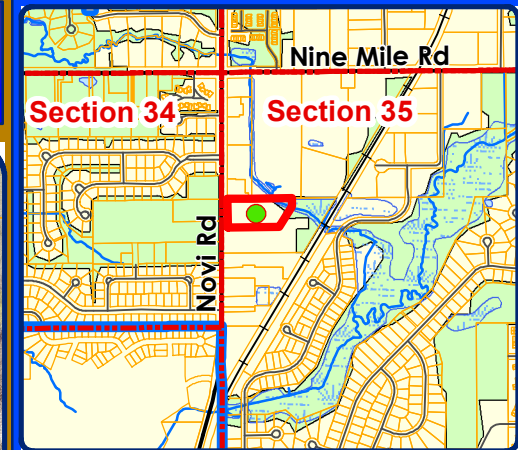
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# EXTRA SPACE SELF STORAGE

## NATURAL FEATURES



- LEGEND**
- WETLANDS
  - WOODLANDS
  - Subject Property



**City of Novi**  
Dept. of Community Development  
City Hall / Civic Center  
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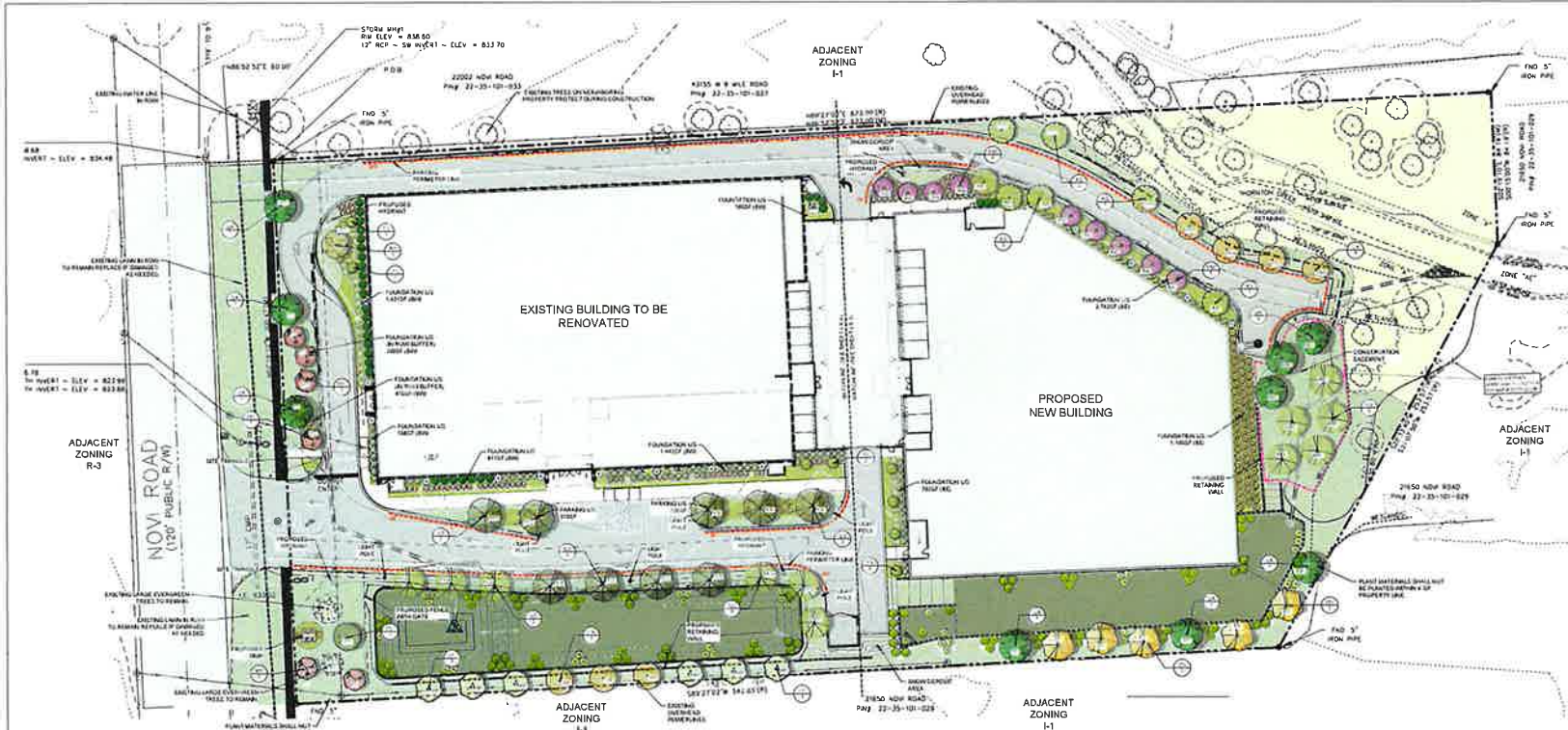
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**SITE PLAN & BUILDING ELEVATIONS**

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**OVERALL LANDSCAPE PLAN (TREES)**



LANDSCAPE CALCULATIONS	PROPERTY ZONED: I-1 (NOT ADJACENT TO PARKING)	PROVIDED
<b>PARKING LANDSCAPE</b>	<b>PARKING ABUTTS ACCESS DRIVE</b>	<b>PKS</b>
47 LF SOUTH ACCESS DRIVE	1 PERIMETER TREE 35LF (47805+13 66 TREES REQUIRED)	14 DECIDUOUS CANOPY TREES PROVIDED
388 LF NORTH ACCESS DRIVE	1 PERIMETER TREE 35LF (38805+14 64 TREES REQUIRED)	PKN
		7 DECIDUOUS CANOPY TREES PROVIDED
		13 DECIDUOUS CANOPY TREES PROVIDED
<b>NOVI ROAD - PUBLIC ROW BUFFER</b>	<b>REQUIRED</b>	<b>PROVIDED</b>
200 LF PUBLIC DRIVEWAYS	20' BUFFER BUFFER	BT
264 LF	1 DECIDUOUS CANOPY OR LARGE EVERGREEN PER 20' (26405+4 TREE REQUIRED)	3 DECIDUOUS CANOPY TREES PROVIDED
	1 DECIDUOUS SUB CANOPY 40LF (26405+6 TREES REQUIRED)	1 LARGE EVERGREEN TREES PROVIDED
		6 DECIDUOUS SUB CANOPY TREES PROVIDED
<b>STREET TREES (NOVI)</b>	<b>PARKING ABUTTS ACCESS DRIVE</b>	<b>PROVIDED</b>
300 LF PUBLIC DRIVEWAYS	1 DECIDUOUS CANOPY PER 20LF	ST
264 LF	264 LF / 35 = 7.5 TREES REQUIRED	0 DECIDUOUS CANOPY TREES PROVIDED
		EXISTING UTILITIES CONFLICTS
<b>BUILDING FOUNDATION LANDSCAPE</b>	<b>LABEL</b>	<b>PROVIDED</b>
EXISTING BUILDING (WEST)	BUILDING PERIMETER 644LF-25-25-5+640X8 = 4 5485F	BW
PROPOSED BUILDING (EAST)	BUILDING PERIMETER 565LF-7-12-14+60X8 = 4 5796F	RE
		4 5485F
		4 5796F
<b>DETENTION/RETENTION BASIN WEST POND PERIMETER</b>	<b>LABEL</b>	<b>PROVIDED</b>
		WVP
	1 DECIDUOUS CANOPY PER 25LF	1 DECIDUOUS CANOPY TREES PROVIDED
	255 LF / 35 = 13 14 TREES REQUIRED	3 DECIDUOUS SUB CANOPY TREES PROVIDED
		EXISTING OVERHEAD POWER LINES
<b>DETENTION/RETENTION BASIN EAST POND PERIMETER</b>	<b>LABEL</b>	<b>PROVIDED</b>
		EP
	1 DECIDUOUS CANOPY PER 35LF	0 DECIDUOUS CANOPY TREES PROVIDED
	273 LF / 35 = 7.7 TREES REQUIRED	
<b>MITIGATED WOODLAND TREES (W)</b>	<b>LABEL</b>	<b>PROVIDED</b>
TREES TO BE REMOVED		MW
	(5) MITIGATED TREES REQUIRED	3 WOODLAND TREES PROVIDED

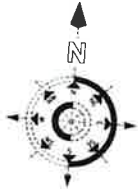
**PLANT SCHEDULE**

DECIDUOUS CANOPY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE
	BN	5	Betula nigra / River Birch Multi-Trunk	Gallon or BAR	1 Inch per Trunk, 2 Branch Min	8-10 HL
	NS	11	Nyssa sylvatica / Black Gum	Gallon or BAR	3 Cal	10 - 12 HL
	QA	9	Quercus alba / White Oak	Gallon or BAR	2.50" Cal Single Trunk	10 - 12 HL
	QS	9	Quercus shumardii / Shumard Oak	Gallon or BAR	3 Cal	10 - 12 HL
	QR			Gallon	CAL	SIZE
<b>DECIDUOUS SUB-CANOPY TREES</b>	<b>CODE</b>	<b>QTY</b>	<b>BOTANICAL / COMMON NAME</b>	<b>CONT.</b>	<b>CAL.</b>	<b>SIZE</b>
	AH	1	Asclepias speciosa / European Milkweed	Gallon or BAR	2-Cal	8-10 HL
	AG	7	Amelanchier x grandiflora Autumn Brilliance / Autumn Brilliance Apple Serviceberry	Gallon or BAR	2-Cal	8-10 HL
	CA	7	Carpinus caroliniana / American Hornbeam	Gallon or BAR	2-Cal	8-10 HL
	CF	6	Cornus florida / Flowering Dogwood	Gallon or BAR	2-Cal	8-10 HL
	MM	9	Magnolia x hybridissima / Saucer Magnolia Multi-Trunk	Gallon or BAR	1 Inset per Trunk, 2 Inset Min	8-8 HL
	MP	8	Mulberry / Purple Prune / Purple Prune Crataegle	Gallon or BAR	1 Inset per Trunk, Min. 3 Inset	8-8 HL
<b>LARGE EVERGREEN TREES</b>	<b>CODE</b>	<b>QTY</b>	<b>BOTANICAL / COMMON NAME</b>	<b>CONT.</b>	<b>CAL.</b>	<b>SIZE</b>
	PD	1	Podocarpus neriifolius / Oviplex Fr	Gallon or BAR	Full to the Ground	8-8 HL
<b>SMALL EVERGREEN TREES</b>	<b>CODE</b>	<b>QTY</b>	<b>BOTANICAL / COMMON NAME</b>	<b>CONT.</b>	<b>CAL.</b>	<b>SIZE</b>
	TS	8	Thuja occidentalis / Emerald Green Arborvitae	Gallon or BAR	Full to the Ground	8-8 HL

LAYOUT IS PRELIMINARY ONLY AND IS SUBJECT TO REVIEW & APPROVAL BY GOVERNING AGENCIES. CONTRACTORS AND LANDSCAPERS SHALL OBTAIN ALL NECESSARY PERMITS AND INFORMATION AND ARE NOT TO BE CONSIDERED.

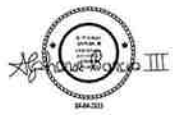


**SITE INFO:**  
 SELF STORAGE FACILITY  
 36,571 SF EXISTING  
 100,200 SF PROPOSED (13-10-11)  
 ADDRESS:  
 21700 NOVI RD  
 NOVI, MI 48235  
 TMS: 22-25-10-10-16  
 ZONING: I-1  
 USE: SELF STORAGE FACILITY  
 EXISTING LAND AREA: 4.32 ACRES  
 DISTURBED AREA: 3.90 ACRES  
 BUILDING SETBACKS REQ'D: 20' FRONT, 20' SIDE, 20' REAR  
 PROPOSED PARKING: 16 SPACES (2 ADA)



**PROJECT:**  
 PROPOSED SELF STORAGE  
 21700 NOVI ROAD  
 CITY OF NOVI, MI

**DRAWING:**  
 OVERALL LANDSCAPE  
 PLAN (TREES)



**ALPHONSE BARCIA III**  
 LANDSCAPE ARCHITECT LLC.  
 561 CLAYTON COURT  
 SUITE 101, LOUISIANA 70461  
 BARCIADESIGNS@GMAIL.COM  
 (985) 860-0429

**GHK DEVELOPMENTS, INC.**  
 NEW ORLEANS  
 GHK DEVELOPMENT, INC.  
 3920 MAGAZINE STREET  
 NEW ORLEANS, LA. 70115  
 GORDEN H. KOLB JR.  
 (504) 866-7300

DATE: 04/04/2023 SHEET: LS-1





# SITE DEVELOPMENT PLANS FOR: Self Storage Facility

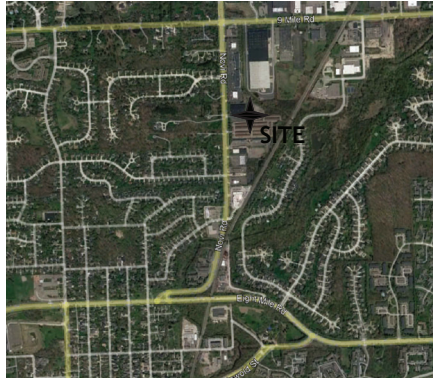
21700 Novi Rd.  
Novi, MI 48375  
City of Novi



**LEGAL DESCRIPTION:**

T1N, R9E, SEC 35 PART OF NW 1/4 BEG AT PT DIST S 00-15-00 W 1319.85 FT & N 89-27-02 E  
60.00 FT FROM NW SEC COR, TH N 89-27-02 E 673.00 FT, TH S 00-15-00 W 84.19 FT, TH S  
31-07-50 W 253.57 FT, TH S 89-27-02 W 542.85 FT, TH N 00-15-00 E 300.00 FT TO BEG 4.31 A

## LOCATION MAP



## SITE CONTACTS

<b>PLANNING/ PERMIT COORDINATOR</b>		<b>WATER</b>	
AGENCY: City of Novi	ADDRESS: 45175 Ten Mile Road Novi, MI 48375	AGENCY: City of Novi Public Works	ADDRESS: 26300 Lee BeCole Novi, MI 48375
PHONE: 248-735-5607	CONTACT: Christian Carroll	PHONE: 248-735-5640	CONTACT: Christian Carroll
EMAIL: cccarroll@cityofnovi.org		EMAIL: cccarroll@cityofnovi.org	
<b>LANDSCAPING</b>		<b>SEWER</b>	
AGENCY: City of Novi	ADDRESS: 45175 Ten Mile Road Novi, MI 48375	AGENCY: City of Novi Public Works	ADDRESS: 26300 Lee BeCole Novi, MI 48375
PHONE: 248-735-5621	CONTACT: Rick Meader	PHONE: 248-735-5640	CONTACT: Rick Meader
EMAIL: rmeader@cityofnovi.org		EMAIL: rmeader@cityofnovi.org	
<b>FIRE DISTRICT</b>		<b>STORMWATER</b>	
AGENCY: Novi Public Safety Administration	ADDRESS: 45125 Ten Mile Rd Novi, MI 48375	AGENCY: City of Novi	ADDRESS: 45175 Ten Mile Road Novi, MI 48375
PHONE: 248-348-7100	CONTACT: Matt Mariken	PHONE: 248-735-5632	CONTACT: Humma Anjum
EMAIL: mmariken@novi.org		EMAIL: hanjum@cityofnovi.org	

## SHEET INDEX

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\*BOUNDARY & TOPOGRAPHIC SURVEY (BY CRANE LAND SURVEYING)

### DEVELOPER

COMPANY: GHK Developments, Inc.  
ADDRESS: 3920 Magazine St.  
New Orleans, LA 70115  
PHONE: 504-866-7300  
CONTACT: Gordo Kolb  
EMAIL: gordo@ghkinc.com

### CIVIL ENGINEER

COMPANY: Bluewater Civil Design, PLLC  
ADDRESS: 718 Lowndes Hill Rd  
Greenville, SC 29607  
PHONE: 864-326-4204  
CONTACT: Jason S. Henderson, P.E.  
EMAIL: jason@bluewatercivil.com

### SURVEYOR

COMPANY: Global Land Solutions  
ADDRESS: 9730 N. Greenville Rd.  
Lakeview, MI 48850  
PHONE: 989-352-4000  
CONTACT: [Redacted]  
EMAIL: [Redacted]

I hereby certify that these plans (except for Architectural, Landscape) were prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Michigan and that I am competent to prepare this document.

*Jason S. Henderson*  
JASON HENDERSON - MI PE# 6201310227 03/31/2023 DATE



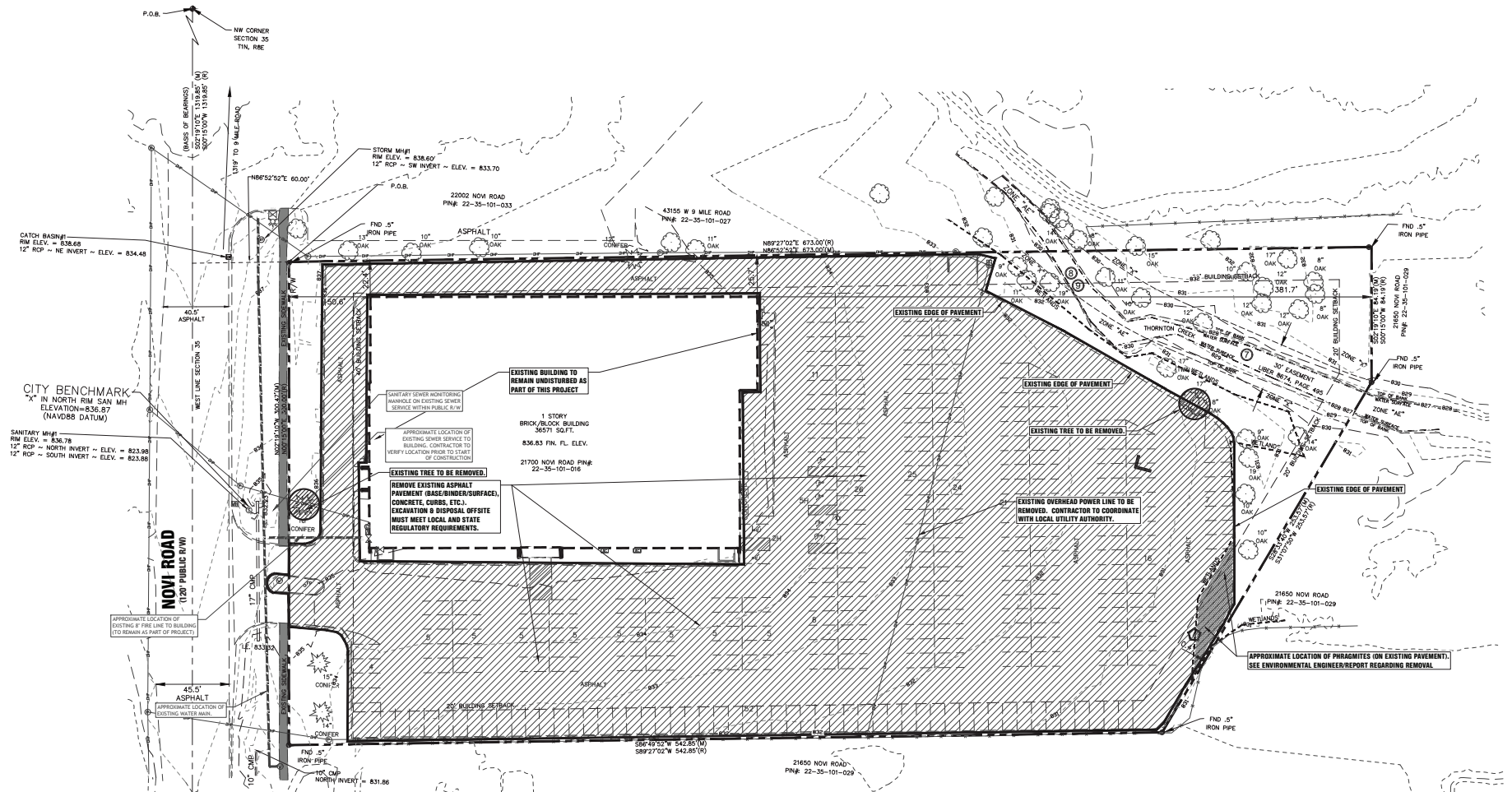
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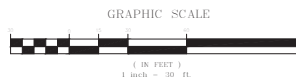
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D	1-10-2022	REVISION FOR OWNER REVIEW
E	1-10-2022	REVISION FOR CITY OF NOVI COMMENTS

EXISTING CONDITIONS & DEMOLITION PLAN

**C002**



- DEMOLITION NOTES:**
- The Contractor shall insure that all required permits are approved prior to beginning any demolition work.
  - THE CONTRACTOR SHALL REVIEW AND ADHERE TO THE ENVIRONMENTAL & GEOTECHNICAL REPORT AS PART OF THIS PROJECT.
  - Prior to beginning demolition the Contractor shall insure that all necessary safety measures are installed to protect the Owner's property, people, vehicles, and the public in general.
  - All hazardous materials shall be hauled off-site legally, on an Owner approved route, and disposed of legally at a landfill permitted to accept the specific hazardous material.
  - Demolition work shall be performed during hours of operation as approved by the Owner's Representative.
  - The Contractor shall coordinate with the Owner's Representative the type and quantity of all salvageable materials. The Contractor shall only haul-off the salvageable material as approved in writing by the Owner's Representative.
  - All demolition work shall meet the minimum requirements of OSHA, Federal Laws, State Laws, and Local Laws. The stricter shall govern.
  - Prior to beginning demolition, the contractor shall ensure Phase I Sediment and Erosion Control measures are installed (construction entrance, perimeter site fence, etc).
  - The Contractor shall coordinate with all utility companies (power, tele, cable, gas, water, etc.) to locate existing underground/above ground lines and identify any potential impacts due to the proposed construction. Contractor to coordinate with utility providers regarding any required relocations: PRIOR TO BEGINNING CONSTRUCTION.

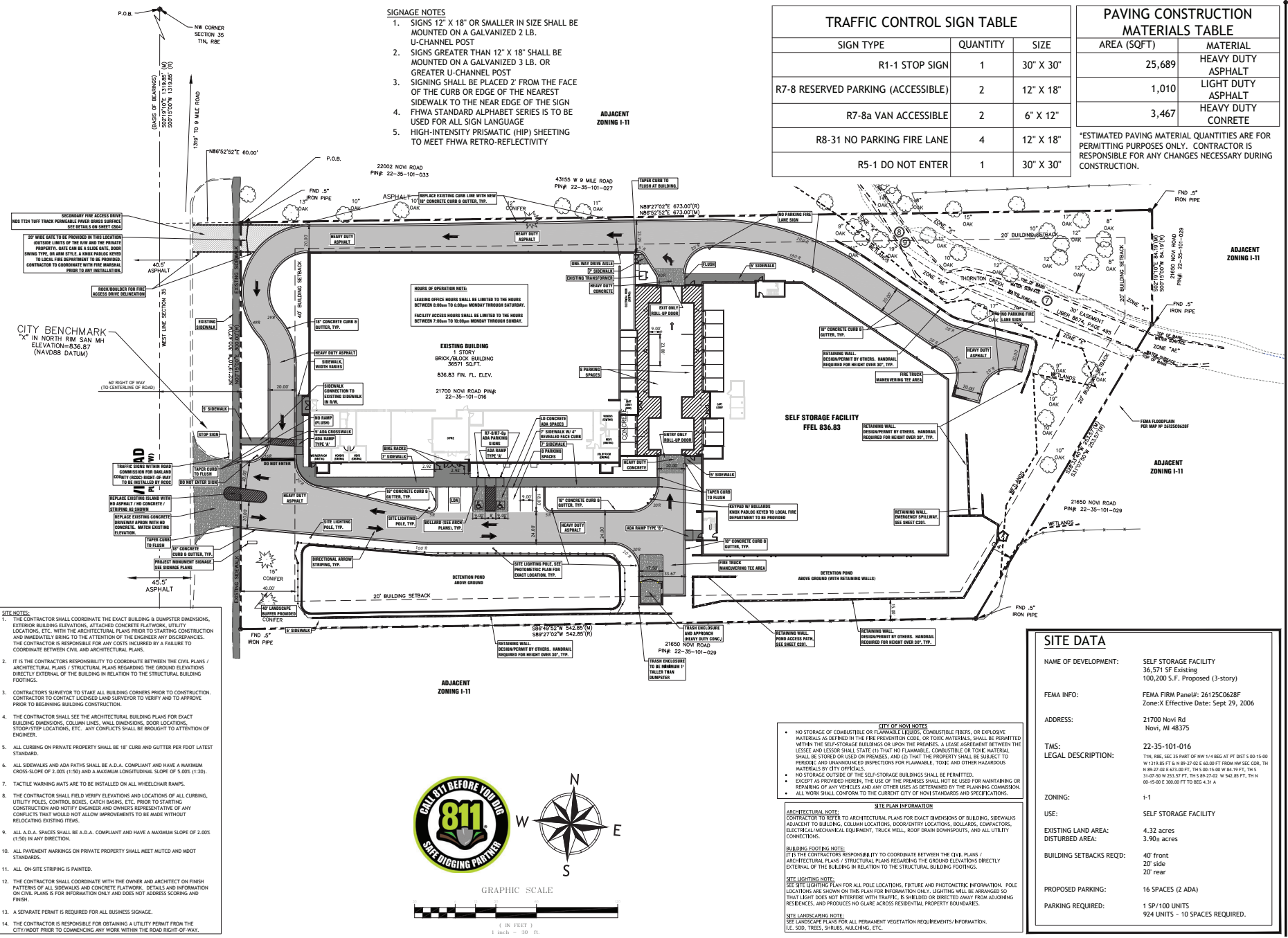




TRAFFIC CONTROL SIGN TABLE			
SIGN TYPE	QUANTITY	SIZE	
R1-1 STOP SIGN	1	30" X 30"	
R7-8 RESERVED PARKING (ACCESSIBLE)	2	12" X 18"	
R7-8a VAN ACCESSIBLE	2	6" X 12"	
R8-31 NO PARKING FIRE LANE	4	12" X 18"	
R5-1 DO NOT ENTER	1	30" X 30"	

PAVING CONSTRUCTION MATERIALS TABLE		
AREA (SQFT)	MATERIAL	
25,689	HEAVY DUTY ASPHALT	
1,010	LIGHT DUTY ASPHALT	
3,467	HEAVY DUTY CONCRETE	

\*ESTIMATED PAVING MATERIAL QUANTITIES ARE FOR PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES NECESSARY DURING CONSTRUCTION.



- SIGNAGE NOTES**
- SIGNS 12" X 18" OR SMALLER IN SIZE SHALL BE MOUNTED ON A GALVANIZED 2 LB. U-CHANNEL POST
  - SIGNS GREATER THAN 12" X 18" SHALL BE MOUNTED ON A GALVANIZED 3 LB. OR GREATER U-CHANNEL POST
  - SIGNING SHALL BE PLACED 2' FROM THE FACE OF THE CURB OR EDGE OF THE NEAREST SIDEWALK TO THE NEAR EDGE OF THE SIGN
  - FHWA STANDARD ALPHABET SERIES IS TO BE USED FOR ALL SIGN LANGUAGE
  - HIGH-INTENSITY PRISMATIC (HIP) SHEETING TO MEET FHWA RETRO-REFLECTIVITY

- SITE NOTES:**
- THE CONTRACTOR SHALL COORDINATE THE EXACT BUILDING & DUMPSTER DIMENSIONS, EXTERIOR BUILDING ELEVATIONS, ATTACHED CONCRETE PATIOWAY, UTILITY LOCATIONS, ETC. WITH THE ARCHITECTURAL PLANS PRIOR TO STARTING CONSTRUCTION AND IMMEDIATELY BRING TO THE ATTENTION OF THE ENGINEER ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS INCURRED BY A FAILURE TO COORDINATE BETWEEN CIVIL AND ARCHITECTURAL PLANS.
  - IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BETWEEN THE CIVIL PLANS / ARCHITECTURAL PLANS / STRUCTURAL PLANS REGARDING THE GROUND ELEVATIONS DIRECTLY EXTERNAL OF THE BUILDING IN RELATION TO THE STRUCTURAL BUILDING FOOTINGS.
  - CONTRACTOR'S SUPERVISOR TO STAKE ALL BUILDING CORNERS PRIOR TO CONSTRUCTION. CONTRACTOR TO CONTACT LICENSED LAND SURVEYOR TO VERIFY AND TO APPROVE PRIOR TO BEGINNING BUILDING CONSTRUCTION.
  - THE CONTRACTOR SHALL SEE THE ARCHITECTURAL BUILDING PLANS FOR EXACT BUILDING DIMENSIONS, COLUMN LOCATIONS, WALL DIMENSIONS, DOOR LOCATIONS, STAIR/STEP LOCATIONS, ETC. ANY CONFLICTS SHALL BE BROUGHT TO ATTENTION OF ENGINEER.
  - ALL CURBING ON PRIVATE PROPERTY SHALL BE 14" CURB AND GUTTER PER FOOT LATEST STANDARD.
  - ALL SIDEWALKS AND ADA PATHS SHALL BE A.D.A. COMPLIANT AND HAVE A MAXIMUM CROSS-SLOPE OF 2.00% (1:50) AND A MAXIMUM LONGITUDINAL SLOPE OF 3.00% (1:20).
  - TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
  - THE CONTRACTOR SHALL FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CURBING, UTILITY POLES, CONTROL BOXES, CATCH BASINS, ETC. PRIOR TO STARTING CONSTRUCTION AND NOTIFY ENGINEER AND OWNER'S REPRESENTATIVE OF ANY CONFLICTS THAT WOULD NOT ALLOW IMPROVEMENTS TO BE MADE WITHOUT RELICENSING EXISTING ITEMS.
  - ALL A.D.A. SPACES SHALL BE A.D.A. COMPLIANT AND HAVE A MAXIMUM SLOPE OF 2.00% (1:50) IN ANY DIRECTION.
  - ALL PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL MEET MUTCD AND ADOT STANDARDS.
  - ALL ON-SITE STRIPING IS PAINTED.
  - THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ARCHITECT ON FINISH PATTERNS OF ALL SIDEWALKS AND CONCRETE PATIOWAY. DETAILS AND INFORMATION ON CIVIL PLANS IS FOR INFORMATION ONLY AND DOES NOT ADDRESS SCORING AND FINISH.
  - A SEPARATE PERMIT IS REQUIRED FOR ALL BUSINESS SIGNAGE.
  - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A UTILITY PERMIT FROM THE CITY/ADOT PRIOR TO COMMENCING ANY WORK WITHIN THE ROAD RIGHT-OF-WAY.



**CITY OF NOVI NOTES**

- NO STORAGE OF COMBUSTIBLE OR FLAMMABLE LIQUIDS, COMBUSTIBLE FIBERS, OR EXPLOSIVE MATERIALS AS DEFINED IN THE FIRE PREVENTION CODE, OR TOXIC MATERIALS, SHALL BE PERMITTED WITHIN THE SELF-STORAGE BUILDINGS OR UPON THE PREMISES. A LEASE AGREEMENT BETWEEN THE LESSEE AND LESSOR SHALL STATE (1) THAT NO FLAMMABLE, COMBUSTIBLE OR TOXIC MATERIAL SHALL BE STORED OR USED ON PREMISES, AND (2) THAT THE PROPERTY SHALL BE SUBJECT TO THE PERIODIC AND UNANNOUNCED INSPECTIONS FOR FLAMMABLE, TOXIC AND OTHER HAZARDOUS MATERIALS BY CITY OFFICIALS.
- NO STORAGE OUTSIDE OF THE SELF-STORAGE BUILDINGS SHALL BE PERMITTED.
- EXCEPT AS PROVIDED HEREIN, THE USE OF THE PREMISES SHALL NOT BE USED FOR REPAIRING OR REPAIRING OF ANY VEHICLES AND ANY OTHER USES AS DETERMINED BY THE PLANNING COMMISSION.
- ALL WORK SHALL CONFORM TO THE CURRENT CITY OF NOVI STANDARDS AND SPECIFICATIONS.

**SITE PLAN INFORMATION**

ARCHITECTURAL NOTE:  
 CONTRACTOR TO REFER TO ARCHITECTURAL PLANS FOR EXACT DIMENSIONS OF BUILDING, SIDEWALKS ADJACENT TO BUILDING, COLUMN LOCATIONS, DOOR ENTRY LOCATIONS, BOLLARDS, COMPARTMENTS, ELECTRICAL-MECHANICAL EQUIPMENT, TRUCK WELL, ROOF DRAIN DOWNSPOUTS, AND ALL UTILITY CONNECTIONS.

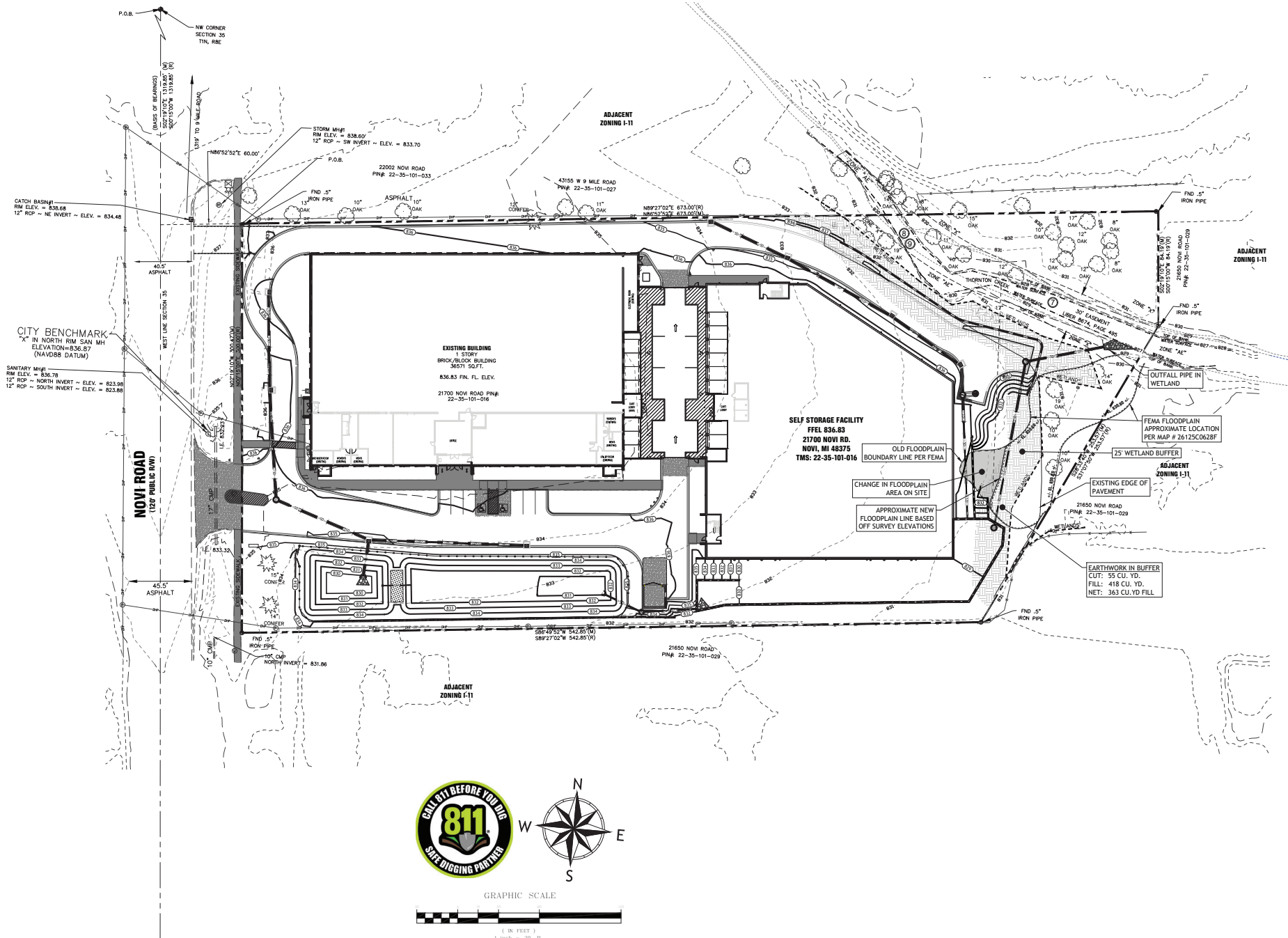
**BUILDING FOOTING NOTE:**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BETWEEN THE CIVIL PLANS / ARCHITECTURAL PLANS / STRUCTURAL PLANS REGARDING THE GROUND ELEVATIONS DIRECTLY EXTERNAL OF THE BUILDING IN RELATION TO THE STRUCTURAL BUILDING FOOTINGS.

**SITE LIGHTING NOTE:**  
 SEE SITE LIGHTING PLAN FOR ALL POLE LOCATIONS, FIXTURE AND PHOTOMETRIC INFORMATION. POLE LOCATIONS ARE SHOWN ON THIS PLAN FOR INFORMATION ONLY. LIGHTING WILL BE ARRANGED SO THAT LIGHT DOES NOT INTERFERE WITH TRAFFIC. IS SHIELDED OR DIRECTED AWAY FROM ADJACENT RESIDENCES, AND PRODUCES NO GLOARE ACROSS RESIDENTIAL PROPERTY BOUNDARIES.

**SITE LANDSCAPING NOTE:**  
 SEE LANDSCAPE PLANS FOR ALL PERMANENT VEGETATION REQUIREMENTS/INFORMATION. (I.E. SOIL, TREES, SHRUBS, MULCHING, ETC.)

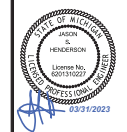
**SITE DATA**

NAME OF DEVELOPMENT:	SELF STORAGE FACILITY
FEMA INFO:	36,571 SF Existing 100,200 S.F. Proposed (3-story) FEMA FIRM Panel#: 26125C0628F Zone: X Effective Date: Sept 29, 2006
ADDRESS:	21700 Novi Rd Novi, MI 48375
TMS: LEGAL DESCRIPTION:	22-35-101-016 TIN, 886. SEC 15 PART OF NW 1/4 BEG AT PT DIST 5.00 15-60 W 1319.85 FT E N 89-27-02 E 60.00 FT FROM NW SEC COR, TH N 89-27-02 E 673.00 FT, TH S 89-15-00 W 66.19 FT, TH S 81-07-50 W 253.57 FT, TH S 89-27-02 W 56.88 FT, TH N 105-10-00 E 300.00 FT TO BEG 4.31 A.
ZONING:	I-1
USE:	SELF STORAGE FACILITY
EXISTING LAND AREA: DISTURBED AREA:	4.32 acres 3.90 acres
BUILDING SETBACKS REQ'D:	40' front 20' side 20' rear
PROPOSED PARKING:	16 SPACES (2 ADA)
PARKING REQUIRED:	1 SP/100 UNITS 924 UNITS - 10 SPACES REQUIRED.



Certification of Authorization:  
 SC 00412 - CA #1070248  
 NC 00848 - AL CA4055E

**SELF STORAGE FACILITY**  
**NOVI, MI**  
**21700 Novi Rd**  
**Novi, MI 48375**



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WETLANDS / FLOOD PLAIN PLAN





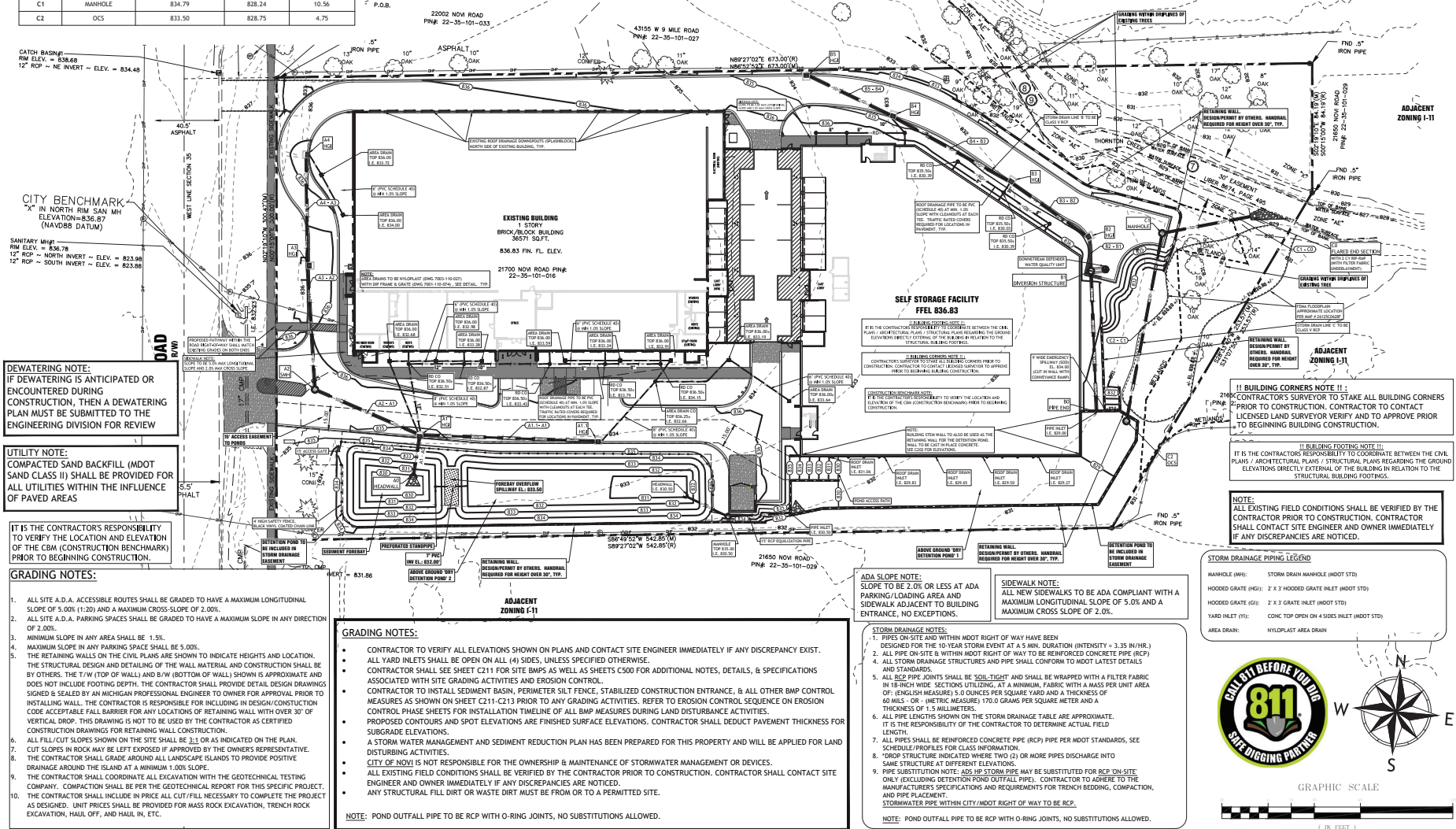
Structure Table				
Structure ID	Structure Type	Ground (Rim/Weir) Elev. (ft)	Invert Elevation (ft)	Structure Depth (ft)
A0	HEADWALL	832.21	???	???
A1	HGI	835.39	830.09	9.30
A1.1	HGI	835.08	830.36	4.72
A2	SMH	835.34	830.45	4.89
A3	HGI	835.43	830.83	4.59
A4	HGI	835.79	831.08	4.71
B0	PIPE END	830.80	???	???
B1	DIVERSION STRUCTURE	834.45	829.25	5.20
B2	HGI	834.19	829.42	8.77
B3	HGI	834.04	829.75	4.29
B4	HGI	834.02	830.08	3.94
B5	HGI	834.05	830.30	3.75
C0	FLARED END SECTION	829.52	???	???
C1	MANHOLE	834.79	828.24	10.56
C2	OC	833.50	828.75	4.75

Pipe Table							
Line ID	Length (ft)	Upstream I.E. (ft)	Downstream I.E. (ft)	Slope %	Pipe Dia. (in)	Pipe Material	
A1 - A0	27	830.09	830.00	0.35%	18	RCP/CPP	
A1.1 - A1	116	830.36	830.19	0.15%	18	RCP/CPP	
A2 - A1	74	830.45	830.19	0.35%	18	RCP/CPP	
A3 - A2	81	830.83	830.55	0.35%	18	RCP/CPP	
A4 - A3	72	831.08	830.83	0.34%	18	RCP/CPP	
B1 - B0	92	829.25	829.00	0.27%	18	RCP/CPP	
B2 - B1	23	829.42	829.34	0.36%	18	RCP/CPP	
B3 - B2	61	829.75	829.52	0.37%	18	RCP/CPP	
B4 - B3	90	830.08	829.75	0.37%	18	RCP/CPP	
B5 - B4	59	830.30	830.08	0.37%	18	RCP/CPP	
C1 - C0	59	828.24	828.00	0.40%	15	RCP/CPP	
C2 - C1	124	828.75	828.24	0.41%	15	RCP/CPP	

### STORM DRAINAGE CONSTRUCTION MATERIALS TABLE

LENGTH (LF)	SIZE (IN)	MATERIAL
934.0	18	RCP
295.7	6	PVC
375.4	8	PVC
139.3	10	PVC
83.8	12	PVC

\*ESTIMATED PIPE MATERIAL QUANTITIES ARE FOR PERMITTING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES NECESSARY DURING CONSTRUCTION.



**DEWATERING NOTE:**  
IF DEWATERING IS ANTICIPATED OR ENCOUNTERED DURING CONSTRUCTION, THEN A DEWATERING PLAN MUST BE SUBMITTED TO THE ENGINEERING DIVISION FOR REVIEW

**UTILITY NOTE:**  
COMPACTED SAND BACKFILL (MDOT SAND CLASS II) SHALL BE PROVIDED FOR ALL UTILITIES WITHIN THE INFLUENCE OF PAVED AREAS

**IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND ELEVATION OF THE CBM (CONSTRUCTION BENCHMARK) PRIOR TO BEGINNING CONSTRUCTION.**

**GRADING NOTES:**

- ALL SITE A.D.A. ACCESSIBLE ROUTES SHALL BE GRADED TO HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.00% (1:20) AND A MAXIMUM CROSS-SLOPE OF 2.00%.
- ALL SITE A.D.A. PARKING SPACES SHALL BE GRADED TO HAVE A MAXIMUM SLOPE IN ANY DIRECTION OF 2.00%.
- MINIMUM SLOPE IN ANY AREA SHALL BE 1.5%.
- MAXIMUM SLOPE IN ANY PARKING SPACE SHALL BE 5.00%.
- THE RETAINING WALLS ON THE CIVIL PLANS ARE SHOWN TO INDICATE HEIGHTS AND LOCATION. THE STRUCTURAL DESIGN AND DETAILING OF THE WALL MATERIAL AND CONSTRUCTION SHALL BE BY OTHERS. THE T/W (TOP OF WALL) AND B/W (BOTTOM OF WALL) SHOWN IS APPROXIMATE AND DOES NOT INCLUDE FOOTING DEPTH. THE CONTRACTOR SHALL PROVIDE DETAIL DESIGN DRAWINGS SIGNED & SEALED BY A MICHIGAN PROFESSIONAL ENGINEER TO OWNER FOR APPROVAL PRIOR TO INSTALLING WALL. THE CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN DESIGN/CONSTRUCTION CODE ACCEPTABLE FILL BARRIERS FOR ANY LOCATIONS OF RETAINING WALL WITH OVER 30" OF VERTICAL DROP. THIS DRAWING IS NOT TO BE USED BY THE CONTRACTOR AS CERTIFIED CONSTRUCTION DRAWINGS FOR RETAINING WALL CONSTRUCTION.
- ALL FILL/CUT SLOPES SHOWN ON THE SITE SHALL BE 3:1 OR AS INDICATED ON THE PLAN.
- CUT SLOPES IN ROCK MAY BE LEFT EXPOSED IF APPROVED BY THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL GRADE AROUND ALL LANDSCAPE ISLANDS TO PROVIDE POSITIVE DRAINAGE AROUND THE ISLAND AT A MINIMUM 1.00% SLOPE.
- THE CONTRACTOR SHALL COORDINATE ALL EXCAVATION WITH THE GEOTECHNICAL TESTING COMPANY. CONSTRUCTION SHALL BE PER THE GEOTECHNICAL REPORT FOR THIS SPECIFIC PROJECT.
- THE CONTRACTOR SHALL INCLUDE IN PRICE ALL CUT/FILL NECESSARY TO COMPLETE THE PROJECT AS DESIGNED. UNIT PRICES SHALL BE PROVIDED FOR MASS ROCK EXCAVATION, TRENCH ROCK EXCAVATION, HAUL OFF, AND HAUL IN, ETC.

**GRADING NOTES:**

- CONTRACTOR TO VERIFY ALL ELEVATIONS SHOWN ON PLANS AND CONTACT SITE ENGINEER IMMEDIATELY IF ANY DISCREPANCY EXIST.
- ALL YARD INLETS SHALL BE OPEN ON ALL (4) SIDES, UNLESS SPECIFIED OTHERWISE.
- CONTRACTOR SHALL SEE SHEET C211 FOR SITE BMPs AS WELL AS SHEETS C500 FOR ADDITIONAL NOTES, DETAILS, & SPECIFICATIONS ASSOCIATED WITH SITE GRADING ACTIVITIES AND EROSION CONTROL.
- CONTRACTOR TO INSTALL SEDIMENT BASIN, PERIMETER SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, & ALL OTHER BMP CONTROL MEASURES AS SHOWN ON SHEET C211-C213 PRIOR TO ANY GRADING ACTIVITIES. REFER TO EROSION CONTROL SEQUENCE ON EROSION CONTROL PHASE SHEETS FOR INSTALLATION TIMELINE OF ALL BMP MEASURES DURING LAND DISTURBANCE ACTIVITIES.
- PROPOSED CONTOURS AND SPOT ELEVATIONS ARE FINISHED SURFACE ELEVATIONS. CONTRACTOR SHALL DEDUCT PAVEMENT THICKNESS FOR SUBGRADE ELEVATIONS.
- A STORM WATER MANAGEMENT AND SEDIMENT REDUCTION PLAN HAS BEEN PREPARED FOR THIS PROPERTY AND WILL BE APPLIED FOR LAND DISTURBING ACTIVITIES.
- CITY OF NOVI IS NOT RESPONSIBLE FOR THE OWNERSHIP & MAINTENANCE OF STORMWATER MANAGEMENT OR DEVICES.
- ALL EXISTING FIELD CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT SITE ENGINEER AND OWNER IMMEDIATELY IF ANY DISCREPANCIES ARE NOTICED.
- ANY STRUCTURAL FILL DIRT OR WASTE DIRT MUST BE FROM OR TO A PERMITTED SITE.

NOTE: POND OUTFALL PIPE TO BE RCP WITH O-RING JOINTS, NO SUBSTITUTIONS ALLOWED.

**ADA SLOPE NOTES:**

SLOPE TO BE 2.0% OR LESS AT ADA PARKING/LOADING AREA AND SIDEWALK ADJACENT TO BUILDING ENTRANCE, NO EXCEPTIONS.

**SIDEWALK NOTE:**

ALL NEW SIDEWALKS TO BE ADA COMPLIANT WITH A MAXIMUM LONGITUDINAL SLOPE OF 5.0% AND A MAXIMUM CROSS SLOPE OF 2.0%.

**STORM DRAINAGE NOTES:**

- PIPES ON-SITE AND WITHIN MDOT RIGHT OF WAY HAVE BEEN DESIGNED FOR THE 10-YEAR STORM EVENT AT A 5 MIN. DURATION (INTENSITY = 3.35 IN./HR.)
- ALL PIPE ON-SITE & WITHIN MDOT RIGHT OF WAY TO BE REINFORCED CONCRETE PIPE (RCP)
- ALL STORM DRAINAGE STRUCTURES AND PIPE SHALL CONFORM TO MDOT LATEST DETAILS AND STANDARDS.
- ALL RCP PIPE JOINTS SHALL BE **SOUL-TIGHT** AND SHALL BE WRAPPED WITH A FILTER FABRIC BY FINCH WIDE SECTIONS UTILIZING AT A MINIMUM FABRIC WITH A MASS PER UNIT AREA OF (ENGLISH MEASURE) 5.0 OUNCES PER SQUARE YARD AND A THICKNESS OF 60 MILS - OR - (METRIC MEASURE) 170.0 GRAMS PER SQUARE METER AND A THICKNESS OF 1.5 MILLIMETERS.
- ALL PIPE LENGTHS SHOWN ON THE STORM DRAINAGE TABLE ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL FIELD LENGTH.
- ALL PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP) PIPE PER MDOT STANDARDS, SEE SCHEDULE PROFILES FOR CLASS INFORMATION.
- "DROP" STRUCTURE INDICATED WHERE TWO (2) OR MORE PIPES DISCHARGE INTO SAME STRUCTURE AT DIFFERENT ELEVATIONS.
- PIPE SUBSTITUTION NOTE: ADD-UP STORM PIPE MAY BE SUBSTITUTED FOR RCP ON-SITE ONLY (EXCLUDING DETENTION POND OUTFALL PIPE). CONTRACTOR TO ADHERE TO THE MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS FOR TRENCH BEDDING, COMPACTION, AND PIPE PLACEMENT.
- STORMWATER PIPE WITHIN CITY/MDOT RIGHT OF WAY TO BE RCP.

NOTE: POND OUTFALL PIPE TO BE RCP WITH O-RING JOINTS, NO SUBSTITUTIONS ALLOWED.

**!! BUILDING CORNERS NOTE !!**

CONTRACTOR'S SURVEYOR TO STAKE ALL BUILDING CORNERS PRIOR TO CONSTRUCTION. CONTRACTOR TO CONTACT LICENSED LAND SURVEYOR VERIFY AND TO APPROVE PRIOR TO BEGINNING BUILDING CONSTRUCTION.

**!! BUILDING FOOTING NOTE !!**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BETWEEN THE CIVIL PLANS / ARCHITECTURAL PLANS / STRUCTURAL PLANS REGARDING THE GROUND ELEVATIONS DIRECTLY EXTERNAL OF THE BUILDING IN RELATION TO THE STRUCTURAL BUILDING FOOTINGS.

**NOTE:**

ALL EXISTING FIELD CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT SITE ENGINEER AND OWNER IMMEDIATELY IF ANY DISCREPANCIES ARE NOTICED.

**STORM DRAINAGE PIPING LEGEND**

- MANHOLE (HPI): STORM DRAIN MANHOLE (HPI) STD
- HOODED GRATE (HG): 2' X 3' HOODED GRATE INLET (HPI) STD
- HOODED GRATE (G): 2' X 3' GRATE INLET (HPI) STD
- YARD INLET (YI): CONC TOP OPEN ON 4 SIDES INLET (HPI) STD
- AREA DRAIN: NYLOPLAST AREA DRAIN



Project Number: 2022-112  
 Date: 2023-10-01.dwg  
 Drawing Date: 08/2023  
 Date of Project: 1/2022  
 Designer of Record: Jason Henderson, P.E.  
**bluewater civil design**  
 bluewater\_civil\_design, LLC  
 718 Lovelock Hill Road • Greenville, SC 29607  
 www.bluewatercivil.com • info@bluewatercivil.com

Certification of Authorization:  
 SC C0012 - CA PROFESSIONAL  
 NC P088 - AL CA405E

**SELF STORAGE FACILITY**  
 NOVI, MI  
 21700 Novi Rd  
 Novi, MI 48375



GRADING & DRAINAGE PLAN

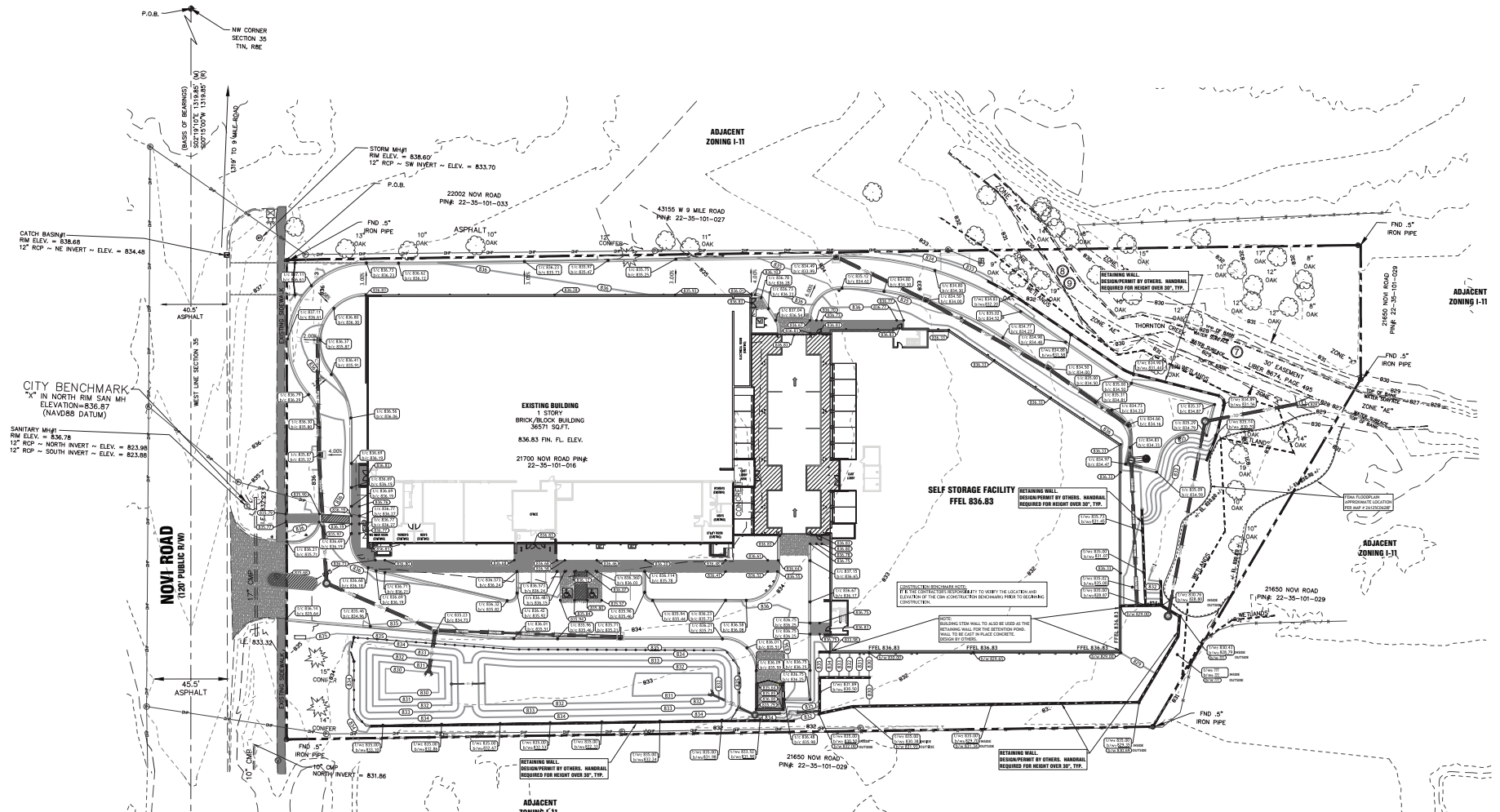
**C201**  
 ( IN FEET )  
 1" = 40'



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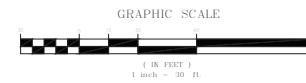
**SPOT ELEVATIONS PLAN**

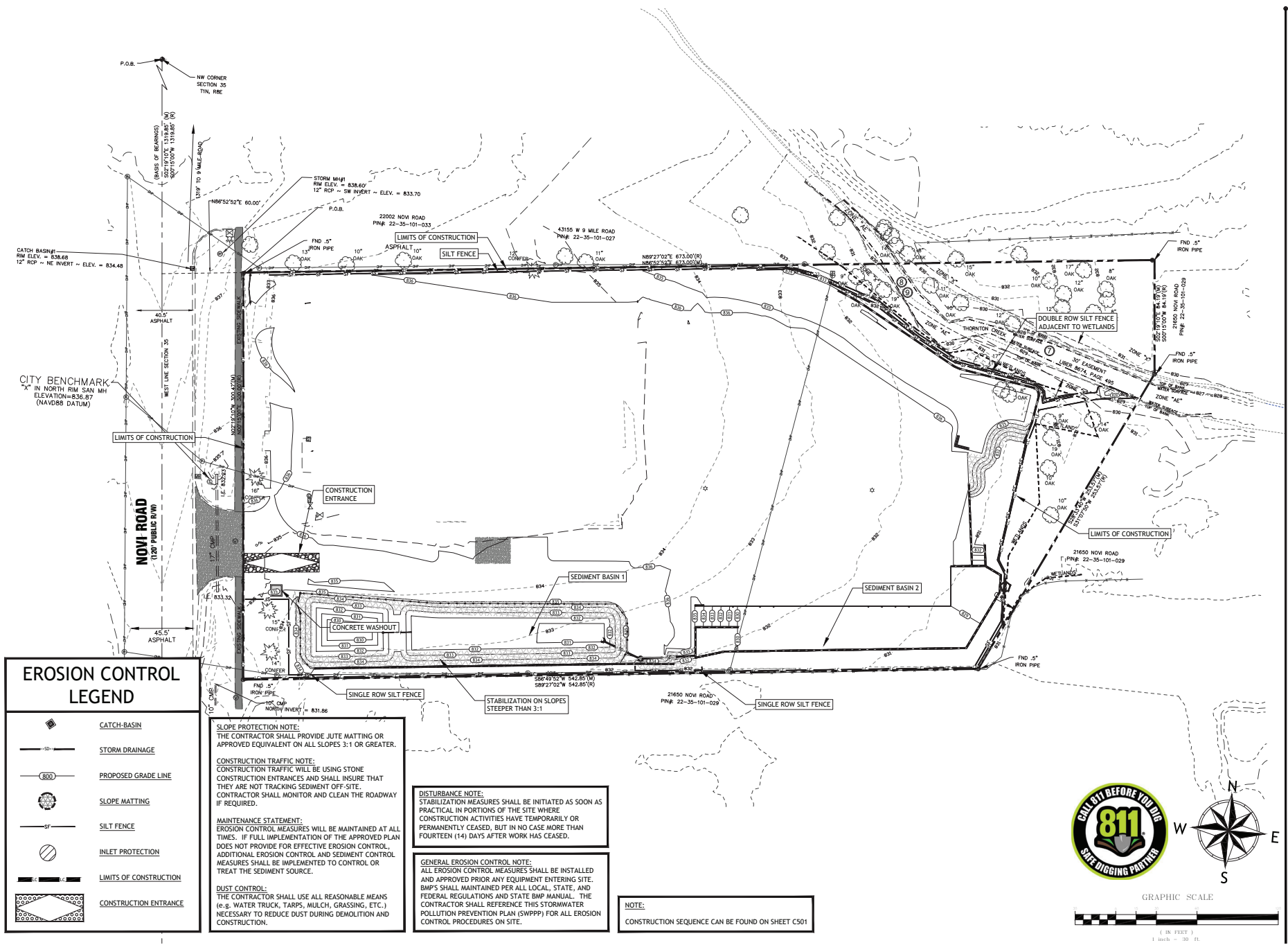
**C202**



- GRADING NOTES:**
1. ALL SITE A.D.A. ACCESSIBLE ROUTES SHALL BE GRADED TO HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.00% (1:20) AND A MAXIMUM CROSS-SLOPE OF 2.00%.
  2. ALL SITE A.D.A. PARKING SPACES SHALL BE GRADED TO HAVE A MAXIMUM SLOPE IN ANY DIRECTION OF 2.00%.
  3. MINIMUM SLOPE IN ANY AREA SHALL BE 1.5%.
  4. MAXIMUM SLOPE IN ANY PARKING SPACE SHALL BE 5.00%.
  5. THE RETAINING WALLS ON THE CIVIL PLANS ARE SHOWN TO INDICATE HEIGHTS AND LOCATION. THE STRUCTURAL DESIGN AND DETAILING OF THE WALL MATERIAL AND CONSTRUCTION SHALL BE BY OTHERS. THE T/W (TOP OF WALL) AND B/W (BOTTOM OF WALL) SHOWN IS APPROXIMATE AND DOES NOT INCLUDE FOOTING DEPTH. THE CONTRACTOR SHALL PROVIDE DETAIL DESIGN DRAWINGS SIGNED & SEALED BY A MICHIGAN PROFESSIONAL ENGINEER TO OWNER FOR APPROVAL PRIOR TO INSTALLING WALL. THE CONTRACTOR IS RESPONSIBLE FOR INCLUDING IN DESIGN/CONSTRUCTION CODE ACCEPTABLE FALL BARRIER FOR ANY LOCATIONS OF RETAINING WALL WITH OVER 30" OF VERTICAL DROP. THIS DRAWING IS NOT TO BE USED BY THE CONTRACTOR AS CERTIFIED CONSTRUCTION DRAWINGS FOR RETAINING WALL CONSTRUCTION.
  6. ALL FILL/CUT SLOPES SHOWN ON THE SITE SHALL BE 3:1 OR AS INDICATED ON THE PLAN.
  7. CUT SLOPES IN ROCK MAY BE LEFT EXPOSED IF APPROVED BY THE OWNER'S REPRESENTATIVE.
  8. THE CONTRACTOR SHALL GRADE AROUND ALL LANDSCAPE ISLANDS TO PROVIDE POSITIVE DRAINAGE AROUND THE ISLAND AT A MINIMUM 1.00% SLOPE.
  9. THE CONTRACTOR SHALL COORDINATE ALL EXCAVATION WITH THE GEOTECHNICAL TESTING COMPANY. COMPACTION SHALL BE PER THE GEOTECHNICAL REPORT FOR THIS SPECIFIC PROJECT.
  10. THE CONTRACTOR SHALL INCLUDE IN PRICE ALL CUT/FILL NECESSARY TO COMPLETE THE PROJECT AS DESIGNED. UNIT PRICES SHALL BE PROVIDED FOR MASS ROCK EXCAVATION, TRENCH ROCK EXCAVATION, HAUL OFF, AND HALL IN, ETC.

- PROPOSED SPOT GRADE NOTES:**
- UNLESS OTHERWISE PREFIXED, PROPOSED SPOT ELEVATIONS ARE GENERALLY REFERENCING THE GROUND ELEVATION AND/OR THE GUTTER ELEVATION AT A CURB. IF PREFIXED WITH A TOP AND BOTTOM ELEVATION AND THE ELEVATIONS ARE THE SAME THEN THE ADJOINING GRADES ARE FLUSH.
- GENERAL FORMAT:
- |  |       |          |          |          |
|--|-------|----------|----------|----------|
| TC - TOP OF CURB                         | 44.00 | 41-44.75 | 41-41.65 | 41-43.85 |
| B/C - BOTTOM OF CURB (GUTTER)            |       | 44-44.25 | 41-41.15 | 41-43.35 |
| T/W - TOP OF WALL                        |       |          |          |          |
| B/W - BOTTOM OF WALL (LOWER GROUND ELEV) |       |          |          |          |
| T/S - TOP OF SIDEWALK                    |       |          |          |          |
| B/S - BOTTOM OF SIDEWALK (PAVEMENT)      |       |          |          |          |
| LP - LOW POINT                           |       |          |          |          |
| HP - HIGH POINT                          |       |          |          |          |





### EROSION CONTROL LEGEND

	CATCH-BASIN
	STORM DRAINAGE
	PROPOSED GRADE LINE
	SLOPE MATTING
	SILT FENCE
	INLET PROTECTION
	LIMITS OF CONSTRUCTION
	CONSTRUCTION ENTRANCE

**SLOPE PROTECTION NOTE:**  
 THE CONTRACTOR SHALL PROVIDE JUTE MATTING OR APPROVED EQUIVALENT ON ALL SLOPES 3:1 OR GREATER.

**CONSTRUCTION TRAFFIC NOTE:**  
 CONSTRUCTION TRAFFIC WILL BE USING STONE CONSTRUCTION ENTRANCES AND SHALL INSURE THAT THEY ARE NOT TRACKING SEDIMENT OFF-SITE. CONTRACTOR SHALL MONITOR AND CLEAN THE ROADWAY IF REQUIRED.

**MAINTENANCE STATEMENT:**  
 EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

**DUST CONTROL:**  
 THE CONTRACTOR SHALL USE ALL REASONABLE MEANS (E.G. WATER TRUCK, TARPS, MULCH, GRASSING, ETC.) NECESSARY TO REDUCE DUST DURING DEMOLITION AND CONSTRUCTION.

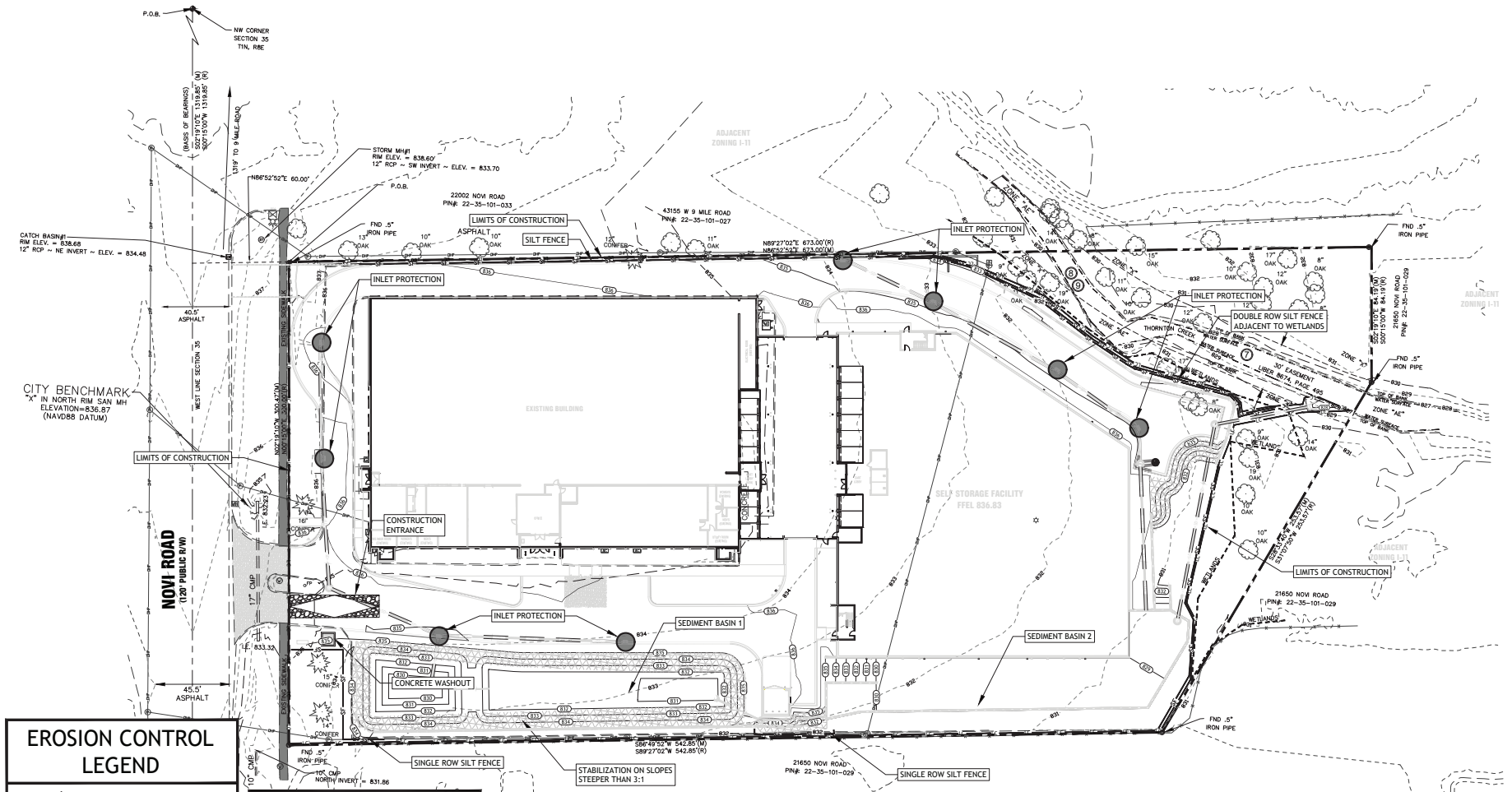
**DISTURBANCE NOTE:**  
 STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED.

**GENERAL EROSION CONTROL NOTE:**  
 ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND APPROVED PRIOR ANY EQUIPMENT ENTERING SITE. BMP'S SHALL MAINTAINED PER ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND STATE BMP MANUAL. THE CONTRACTOR SHALL REFERENCE THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR ALL EROSION CONTROL PROCEDURES ON SITE.

**NOTE:**  
 CONSTRUCTION SEQUENCE CAN BE FOUND ON SHEET C501

GRAPHIC SCALE  
 ( IN FEET )  
 1 inch = 30 ft.





### EROSION CONTROL LEGEND

- CATCH-BASIN
- STORM DRAINAGE
- PROPOSED GRADE LINE
- SLOPE MATTING
- SILT FENCE
- INLET PROTECTION
- LIMITS OF CONSTRUCTION
- CONSTRUCTION ENTRANCE

**SLOPE PROTECTION NOTE:**  
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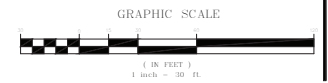
**MAINTENANCE STATEMENT:**  
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**NOTE:**  
 CONSTRUCTION SEQUENCE CAN BE FOUND ON SHEET C501





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SITE INFO:

PROJECT:  
**PROPOSED SELF STORAGE**  
 21700 NOVI ROAD  
 CITY OF NOVI, MI.

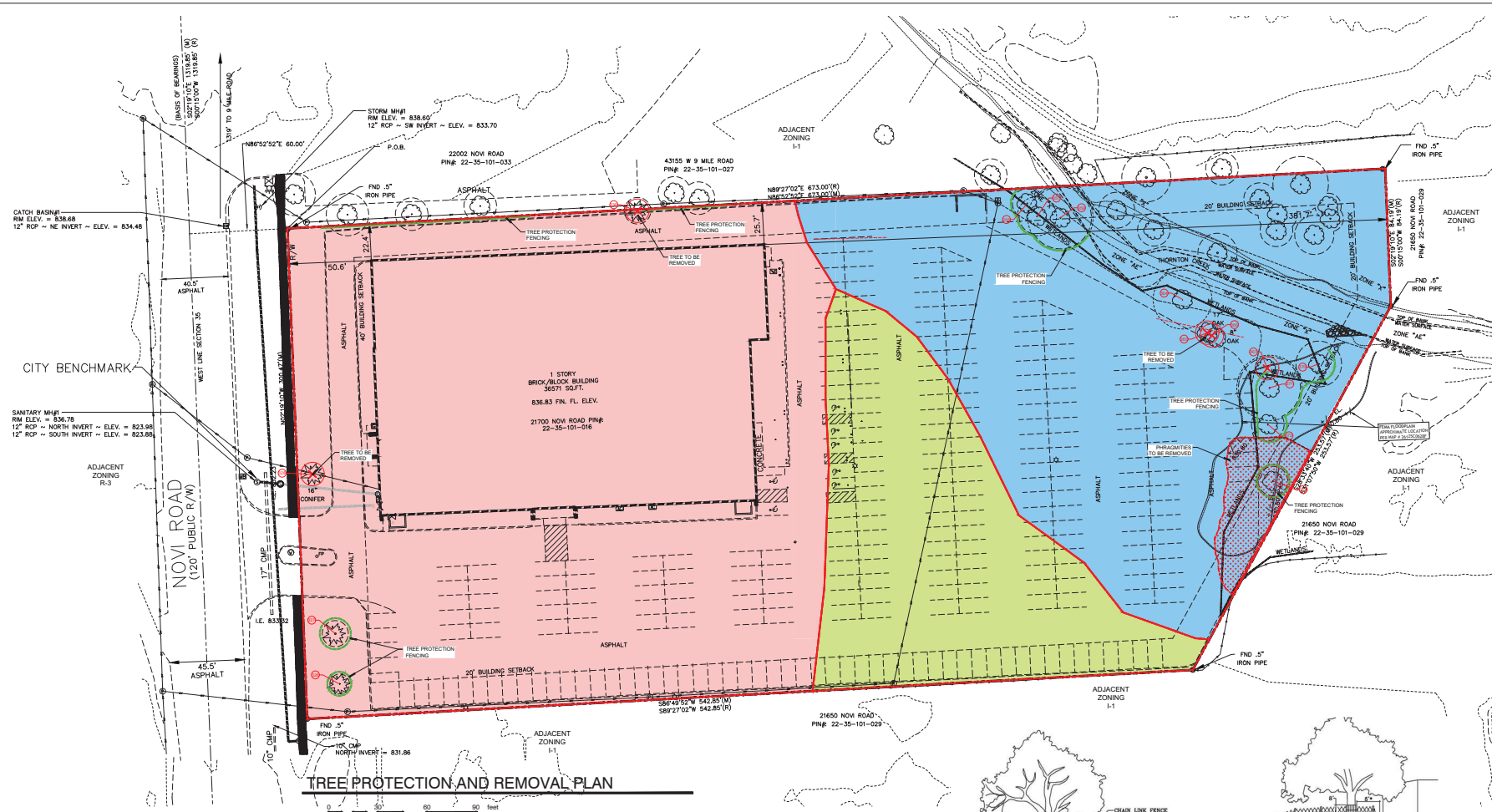
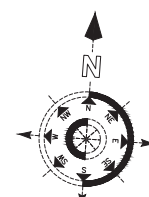
DRAWING:  
**TREE PROTECTION AND REMOVAL PLAN**



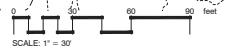
**ALPHONSE BARCIA III**  
 LANDSCAPE ARCHITECT LLC.  
 562 CLAYTON COURT  
 SLIDELL, LOUISIANA 70461  
 BARCIADESIGNS@GMAIL.COM  
 (985) 960-0429

**GHK DEVELOPMENTS, INC.**  
 NEW ORLEANS  
 GHK DEVELOPMENT, INC.  
 3920 MAGAZINE STREET  
 NEW ORLEANS, LA. 70115  
 GORDEN H. KOLB JR.  
 (504) 866-7300

DATE: 3/31/2023 SHEET: LS-0



**TREE PROTECTION AND REMOVAL PLAN**



TREE #	TYPE	DBH	REMARKS	CREDIT/MITIGATION
326	BLUE SPRUCE	12"	SAVE	NO TREE CREDIT
327	BLUE SPRUCE	17"	SAVE	NO TREE CREDIT
328	BLUE SPRUCE	17"	REMOVE	2 MITIGATION TREES REQUIRED
336	BLUE SPRUCE	12"	REMOVE	2 MITIGATION TREES REQUIRED
357	SLEPPERY ELM	10"	SAVE	2 TREE CREDIT
358	COTTONWOOD	8"	SAVE	2 TREE CREDIT
359	COTTONWOOD	23"	SAVE	4 TREE CREDIT
364	BLACK WALNUT	25"	SAVE	4 TREE CREDIT
365	BOX ELDER	12" TWIN	REMOVE	2 MITIGATION TREES REQUIRED
366	BLACK WALNUT	9"	REMOVE	1 MITIGATION TREES REQUIRED
367	BLACK WALNUT	15"	REMOVE	2 MITIGATION TREES REQUIRED
370	BOX ELDER	10"	SAVE	2 TREE CREDIT
371	BLACK WALNUT	21"	SAVE	4 TREE CREDIT
372	BOX ELDER	9"	SAVE	2 TREE CREDIT
373	BOX ELDER	14"	SAVE	3 TREE CREDIT

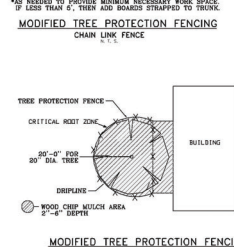
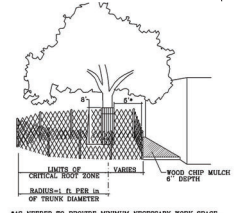
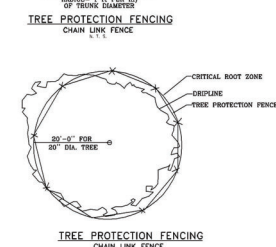
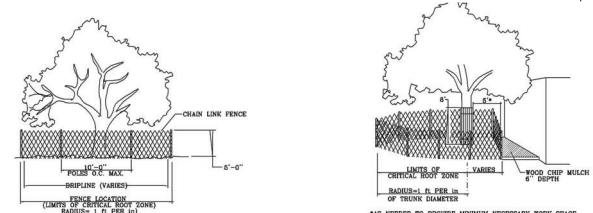
5 TOTAL TREES TO BE MITIGATED

**PLAN LEGEND**

- Existing parking hatch to be removed
- BntadB Soil Survey Data
- 36A Soil Survey Data
- 48 Soil Survey Data
- Approximate Location of Phragmites (To be Removed)
- Existing Tree to Remain
- Existing Tree Proposed to be Removed
- Tree Protection Fencing

USDA-NRCS County Soil Survey  
 NOTE: Boundaries are NOT from an official survey.

"All Phragmites found on the site must be treated in early fall (September) by a Michigan licensed ANC contractor. Subsequent treatments in following years are likely to be necessary to ensure eradication from the site. Proof of the treatment in the form of a contract with the contractor selected must be provided to the City Landscape Architect each year, at the time of treatment, so the site can be inspected by the City." If you find Japanese Knotweed on the site, a similar note for that should be added, but delete the timing as the contractor may have other information as to the best time for treatment.

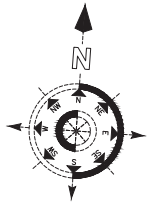


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**SITE INFO:**

SELF STORAGE FACILITY  
 35,371 S.F. EXISTING  
 100,200 S.F. PROPOSED (3-STORY)  
 ADDRESS:  
 21700 NOVI RD  
 NOVI, MI 48375  
 TMS: 22-35-101-016  
 ZONING: I-1  
 USE: SELF STORAGE FACILITY  
 EXISTING LAND AREA: 4.32 ACRES  
 DISTURBED AREA: 3.901 ACRES  
 BUILDING SETBACKS REQD: 40' FRONT  
 20' SIDE  
 20' REAR  
 PROPOSED PARKING: 16 SPACES (2 ADA)



**PROJECT:**

PROPOSED SELF STORAGE  
 21700 NOVI ROAD  
 CITY OF NOVI, MI.

**DRAWING:**

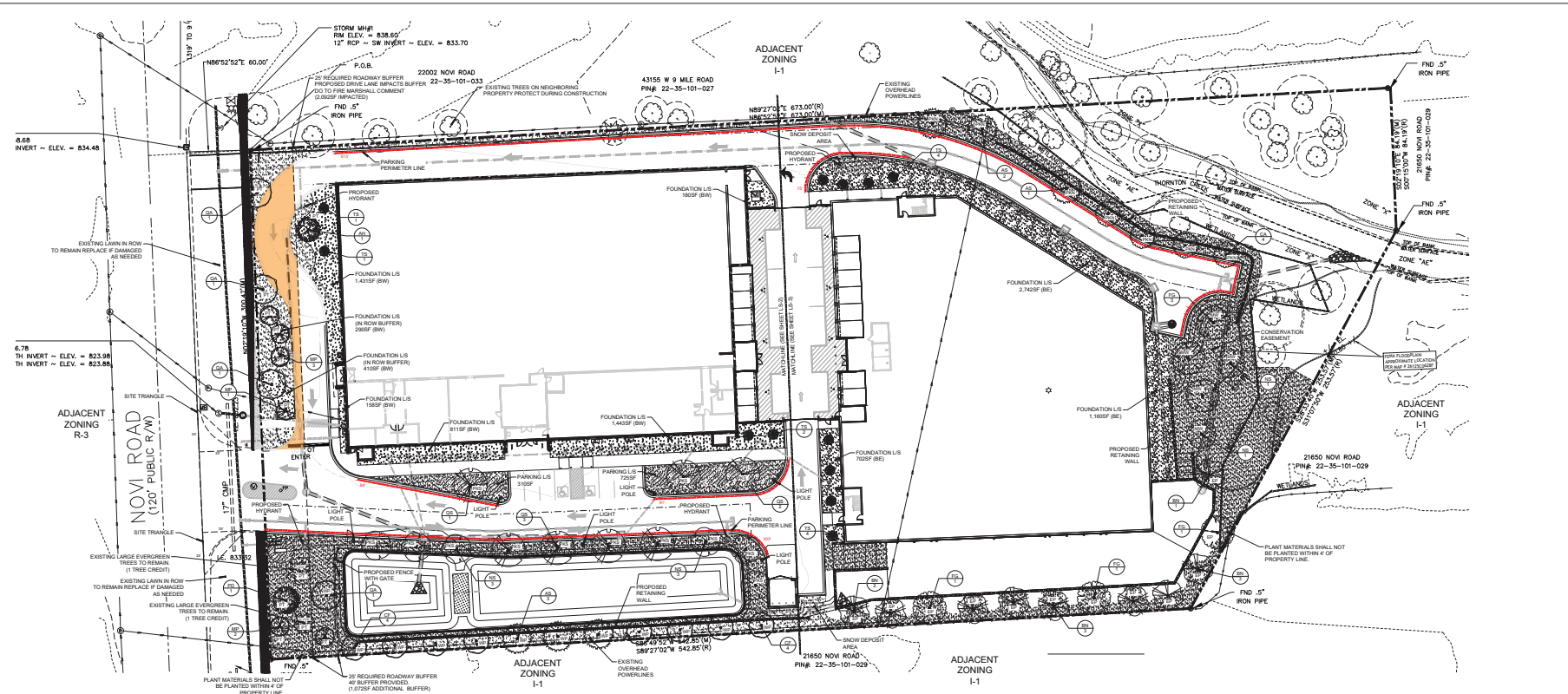
OVERALL LANDSCAPE PLAN (TREES)



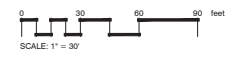
**ALPHONSE BARCIA III**  
 LANDSCAPE ARCHITECT LLC.  
 562 CLAYTON COURT  
 SLIBELL, LOUISIANA 70461  
 BARCADESIGNSGMAIL.COM  
 (985) 960-0429

**GHK DEVELOPMENTS, INC.**  
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 3920 MAGAZINE STREET  
 NEW ORLEANS, LA. 70115  
 GORDEN H. KOLB JR.  
 (504) 866-7300

DATE: 03/31/2023 SHEET: LS-1



**OVERALL LANDSCAPE PLAN (TREES)**



**LANDSCAPE CALCULATIONS**

PROPERTY ZONED: I-1 (NOT ADJACENT TO PARKING)	LANDSCAPE	REQUIREMENTS	PROVIDED
<b>PARKING LANDSCAPE</b>	<b>PARKING ABUTTS ACCESS DRIVE</b>	<b>LABEL</b> PROVIDED	<b>PKS</b> 13 DECIDUOUS CANOPY TREES PROVIDED
478LF SOUTH ACCESS DRIVE	1 PERIMETER TREE 35LF (478/35=13.66 TREES REQUIRED)		
688LF NORTH ACCESS DRIVE	1 PERIMETER TREE 35LF (688/35=19.66 TREES REQUIRED)	<b>LABEL</b> PROVIDED	<b>PKN</b> 7 DECIDUOUS CANOPY TREES PROVIDED LANDSCAPE WALKER REQUIRED
<b>NOVI ROAD, PUBLIC ROW BUFFER</b>	<b>REQUIRED</b>	<b>LABEL</b> PROVIDED	
300' LF-30LF DRIVEWAYS	25' WIDE BUFFER	<b>PT</b>	BUFFER WIDTH IMPACTED BY DRIVE LANE (SEE PLAN FOR DETAILS)
264 LF	1 DECIDUOUS CANOPY OR 1 LARGE EVERGREEN PER 60LF (264/60=4.4 TREES REQUIRED)		3 DECIDUOUS CANOPY TREES PROVIDED
	1 DECIDUOUS SUB CANOPY 40LF (264/40=6.6 TREES REQUIRED)		1 LARGE EVERGREEN TREES PROVIDED 2 EXISTING LARGE EVERGREEN TREE CREDIT 6 DECIDUOUS SUB CANOPY TREES PROVIDED
<b>STREET TREES (ROW)</b>	<b>PARKING ABUTTS ACCESS DRIVE</b>	<b>LABEL</b> PROVIDED	
300' LF-30LF DRIVEWAYS	1 DECIDUOUS CANOPY PER 35LF	<b>ST</b>	0 DECIDUOUS CANOPY TREES PROVIDED
264 LF	264 LF / 35 = 7.5 TREES REQUIRED		EXISTING UTILITIES CONFLICTS
<b>BUILDING FOUNDATION LANDSCAPE</b>	<b>LABEL</b> PROVIDED	<b>LABEL</b> PROVIDED	
EXISTING BUILDING (WEST)	BUILDING PERIMETER 644LF-25-28-5-640X8 = 4.6885F	<b>BW</b>	4.7235F
PROPOSED BUILDING (EAST)	BUILDING PERIMETER 585LF-7-3-640X8 = 4.5785F	<b>BE</b>	4.6045F
<b>DETENTION/RETENTION BASIN</b>	<b>LABEL</b> PROVIDED	<b>LABEL</b> PROVIDED	
WEST POND PERIMETER (547)	1 DECIDUOUS CANOPY PER 35LF	<b>WP</b>	1 DECIDUOUS CANOPY TREES PROVIDED
	547 LF / 35 = 15.62 TREES REQUIRED		11 DECIDUOUS SUB CANOPY TREES PROVIDED EXISTING OVERHEAD POWERLINES
<b>DETENTION/RETENTION BASIN</b>	<b>LABEL</b> PROVIDED	<b>LABEL</b> PROVIDED	
EAST POND PERIMETER (585)	1 DECIDUOUS CANOPY PER 35LF	<b>EP</b>	12 DECIDUOUS CANOPY TREES PROVIDED
	585 LF / 35 = 16.71 TREES REQUIRED		
<b>MITIGATED WOODLAND TREES</b>	<b>LABEL</b> PROVIDED	<b>LABEL</b> PROVIDED	
(8) TREES TO BE REMOVED	(5) MITIGATED TREES REQUIRED	<b>MW</b>	5 WOODLAND TREES PROVIDED

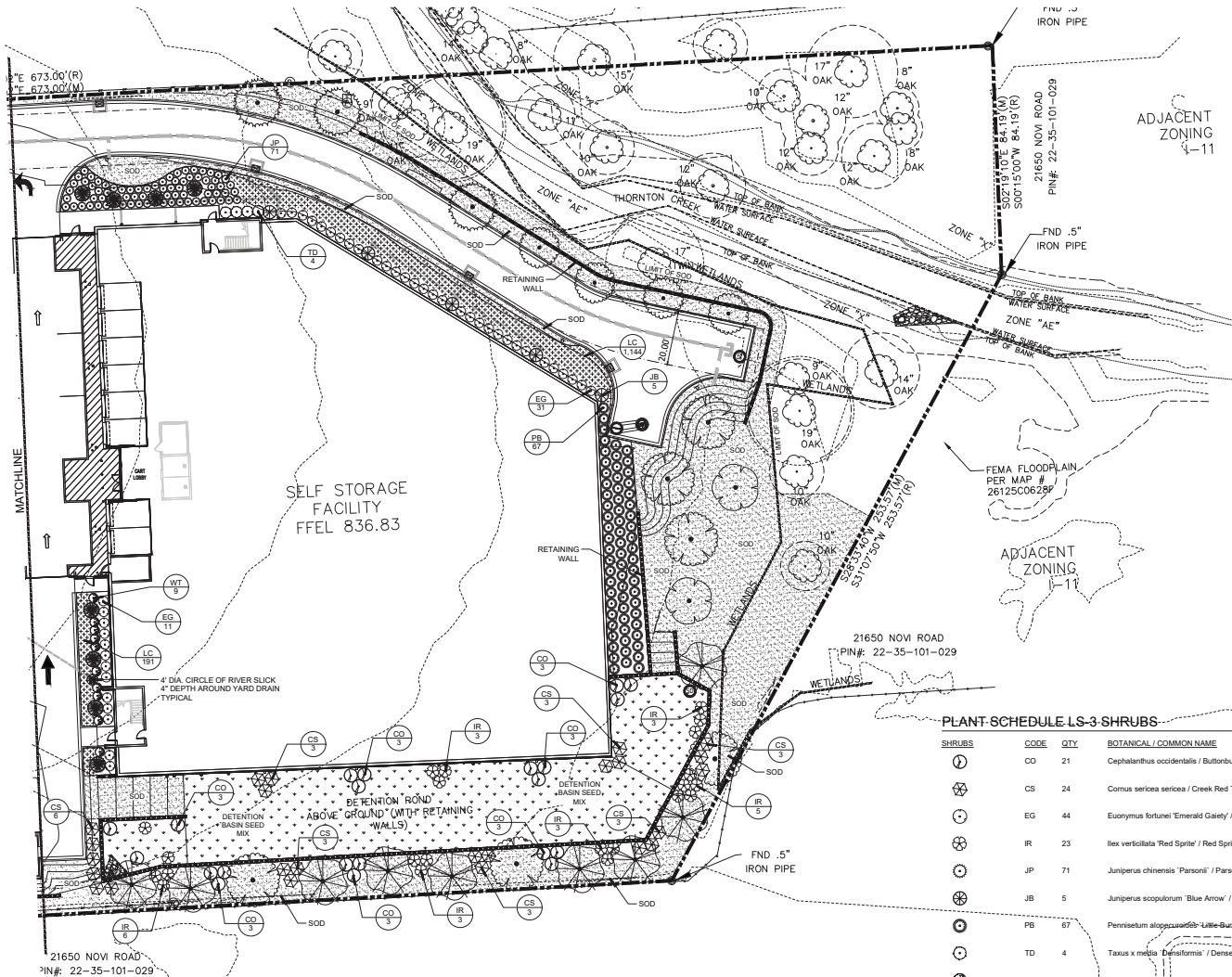
**PLANT SCHEDULE**

DECIDUOUS CANOPY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	BN	9	Betula nigra / River Birch Multi-Trunk	Gallon or B&B	1 Inch per Trunk, 3 trunks Min	8'-10" Ht.
	FG	6	Fagus grandifolia / American Beech	Gallon or B&B	3" Cal.	10' - 12" Ht.
	NS	8	Nyssa sylvatica / Black Gum	Gallon or B&B	3" Cal.	10' - 12" Ht.
	QA	4	Quercus alba / White Oak	Gallon or B&B	2.50" Cal. Single Trunk	10' - 12" Ht.
	QS	7	Quercus shumardii / Shumard Oak	Gallon or B&B	3" Cal.	10' - 12" Ht.
DECIDUOUS SUB-CANOPY TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	AS	6	Acer spicatum / Mountain Maple	Gallon or B&B	2"-Cal.	8'-10" Ht.
	AH	1	Aesculus hippocastanum / European Horsechestnut	Gallon or B&B	2"-Cal.	8'-10" Ht.
	CA	4	Carpinus caroliniana / American Hornbeam	Gallon or B&B	2"-Cal.	8'-10" Ht.
	CF	8	Cornus florida / Flowering Dogwood	Gallon or B&B	2"-Cal.	8'-10" Ht.
	MP	6	Malus x 'Purple Prince' / Purple Prince Crabapple	Gallon or B&B	1 Inch per trunk, Min. 3 trunks	6'-8" Ht.
LARGE EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	PD	1	Pseudotsuga menziesii / Douglas Fir	Gallon or B&B	Full to the Ground	6'-8" Ht.
UPRIGHT EVERGREEN TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	TS	12	Thuja occidentalis 'Smaragd' / Emerald Green Arborvitae	Gallon or B&B	Full to the Ground	6'-8" Ht.









PARTIAL LANDSCAPE PLAN



PLANT SCHEDULE LS-3 SHRUBS

SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	SIZE
	CO	21	Cephalanthus occidentalis / Buttonbush	Gallon or B&B	2' Min. Ht.
	CS	24	Cornus sericea sericea / Creek Red Twig Dogwood	Gallon or B&B	2' Min. Ht.
	EG	44	Euonymus fortunei 'Emerald Gaiety' / Emerald Gaiety Wintercreeper	Gallon or B&B	18" H, 18" Spd.
	IR	23	Ilex verticillata 'Red Sprite' / Red Sprite Winterberry	Gallon or B&B	2' Min. Ht.
	JP	71	Juniperus chinensis 'Parsoni' / Parsoni Juniper	3-Gal.	12" H, 12" Spd.
	JB	5	Juniperus scopulorum 'Blue Arrow' / Blue Arrow Juniper	Gallon or B&B	3' - 4' Ht.
	PB	67	Pennisetum alopecuroides 'Little Bunny' / Little Bunny Fountain Grass	3-Gal.	Full Pots
	TD	4	Taxus x media 'Transforma' / Dense Anglo-Japanese Yew	Gallon or B&B	2' Min. Ht.
	WT	10	Weigela florida 'Vendels' TM / My Monet Purple Effect Weigela	Gallon or B&B	18" H, 18" Spd.

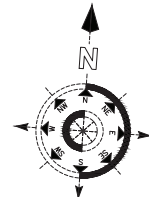
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	SPACING
	LC	1,371	Liriope spicata / Creeping Liriyurf	1-Gal	Full Pots	12" o.c.
	ROCK	13 sf	Mulch Area / Rock Mulch Locate in yard drains inside of landscape beds border rock with steel edging.	River Rock Slicks	4" Depth	
	SOD	13,667 sf	Poa pratensis / Kentucky Bluegrass	Squares or Mini Rolls	Class 'A'	

DETENTION POND	CODE	QTY	BOTANICAL / COMMON NAME	CONT	REMARKS	SPACING
	SEED	6,671 sf	Pond Planting / Detention Basin Seed Mix Prairie Moon Nursery Catalog # DET USDA Zone 3-7	SF	295 Seeds per SF	

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**SITE INFO:**  
 SELF STORAGE FACILITY  
 21,700 S.F. EXISTING  
 100,200 S.F. PROPOSED (3-STORY)  
 ADDRESS:  
 21700 Novi Rd  
 Novi, MI 48375  
 TMS: 22-35-101-016  
 ZONING: I-11  
 USE: SELF STORAGE FACILITY  
 EXISTING LAND AREA: 4.32 ACRES  
 DISTURBED AREA: 3.00 ACRES  
 BUILDING SETBACKS REQ'D: 40' FRONT  
 20' SIDE  
 20' REAR  
 PROPOSED PARKING: 16 SPACES (2 ADA)



**PROJECT:**  
 Proposed Self Storage  
 21700 Novi Road  
 City of Novi, MI.

**DRAWING:**  
 PARTIAL LANDSCAPE  
 PLAN (SHRUBS)



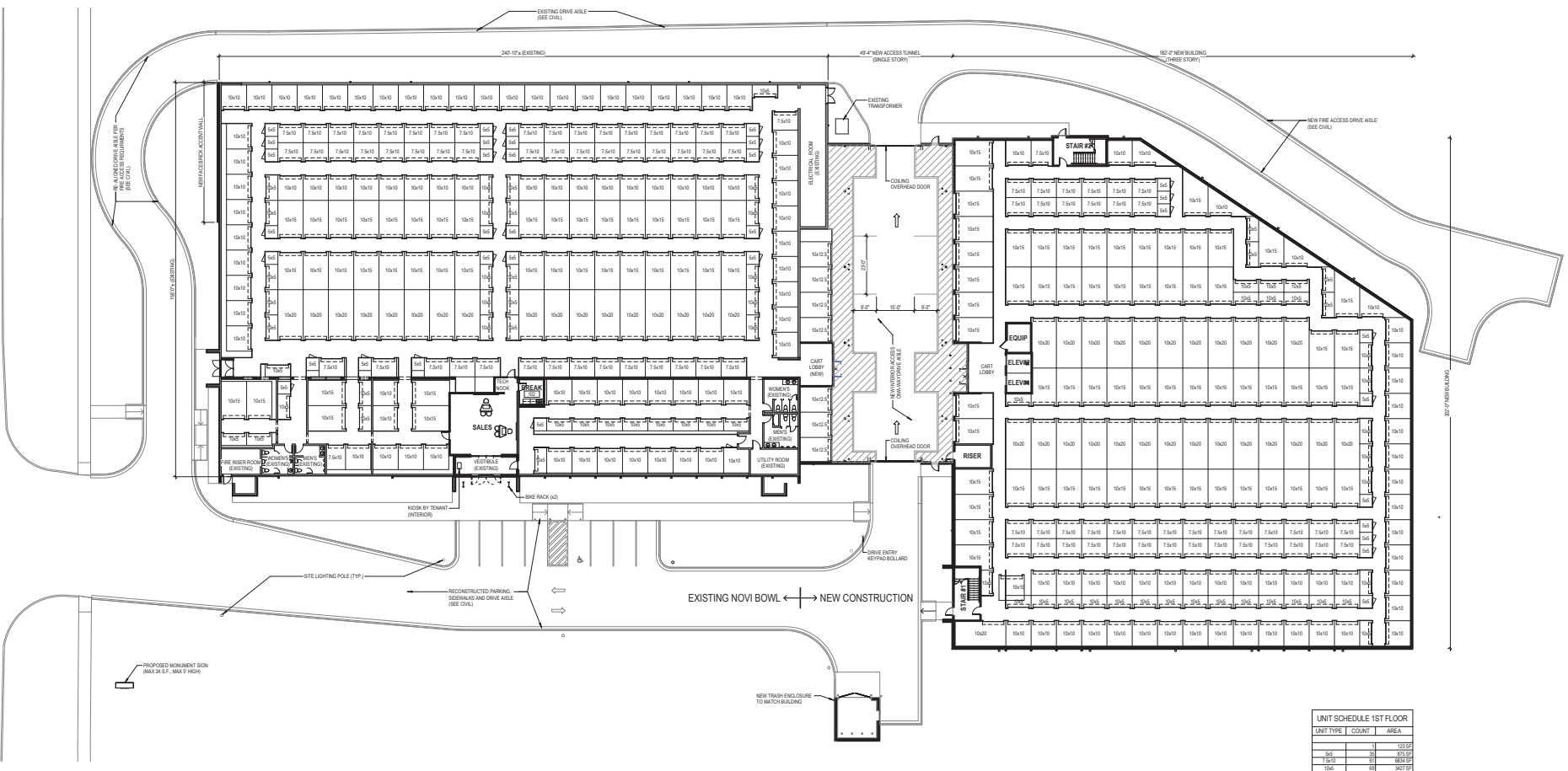
**ALPHONSE BARCIA III**  
 LANDSCAPE ARCHITECT LLC.  
 562 CLAYTON COURT  
 SLIDELL, LOUISIANA 70461  
 BARCIADESIGNS@GMAIL.COM  
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 3920 MAGAZINE STREET  
 NEW ORLEANS, LA. 70115  
 GORDEN H. KOLB JR.  
 (504) 866-7300

**DATE:** 03/31/2023 **SHEET:** LS-3

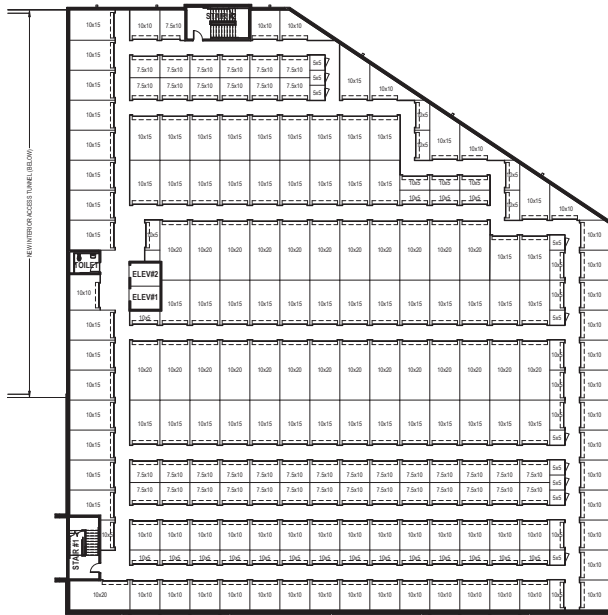


NOVI ROAD



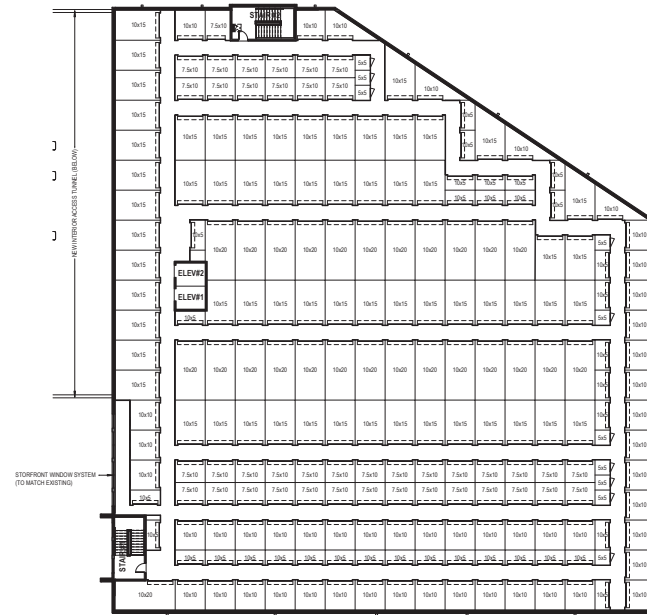
FIRST FLOOR PLAN EXHIBIT  
 1/16" = 1'-0"

UNIT SCHEDULE 1ST FLOOR		
UNIT TYPE	COUNT	AREA
10x10	1	100 SF
5x5	35	875 SF
7.5x7.5	91	843.75 SF
10x15	89	2475 SF
10x10	10	1000 SF
10x15	7	875 SF
10x10	50	1500 SF
10x15	41	862.5 SF
<b>TOTAL</b>	<b>425</b>	<b>4891.25 SF</b>



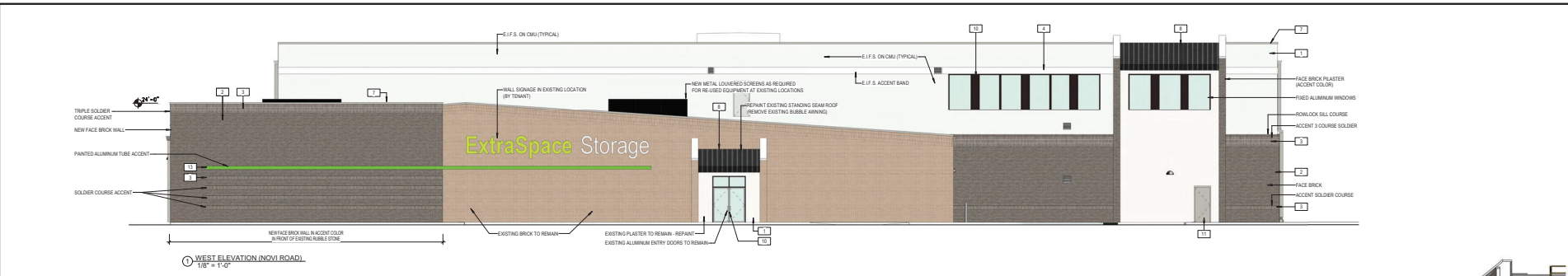
1 SECOND FLOOR PLAN EXHIBIT  
1/16" = 1'-0"

UNIT SCHEDULE 2ND FLOOR		
UNIT TYPE	COUNT	AREA
606	10	250 SF
7.5x10	41	2884 SF
10x5	39	1893 SF
10x15	48	4852 SF
10x15	52	3741 SF
10x20	20	3700 SF
<b>TOTAL</b>	<b>222</b>	<b>20020 SF</b>

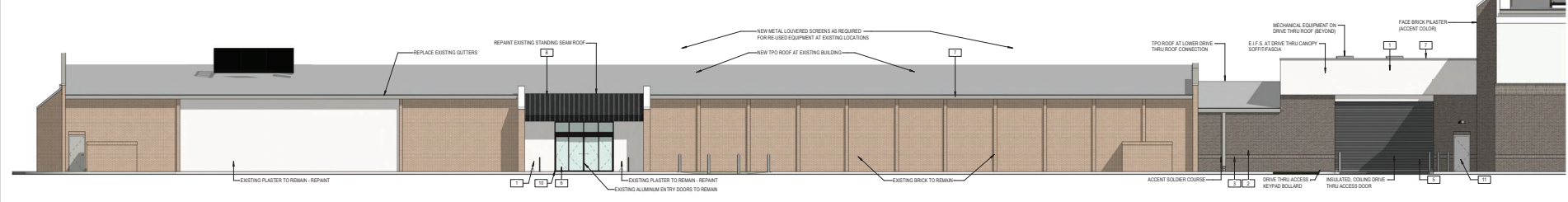


2 THIRD FLOOR PLAN EXHIBIT  
3/16" = 1'-0"

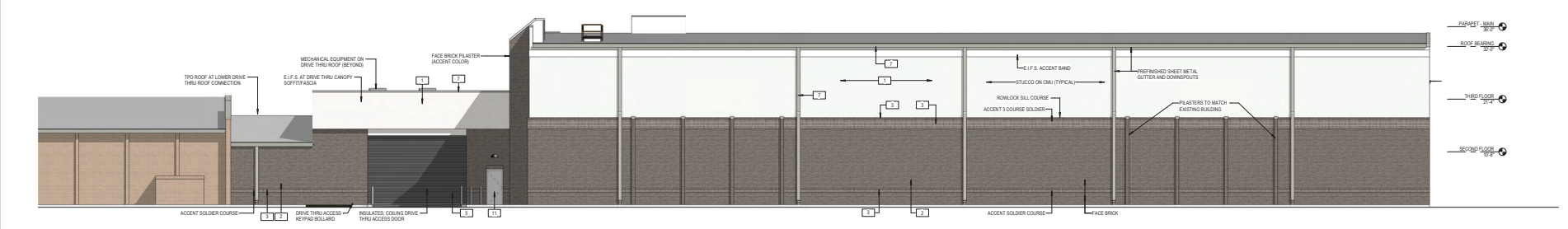
UNIT SCHEDULE 3RD FLOOR		
UNIT TYPE	COUNT	AREA
606	10	250 SF
7.5x10	41	2884 SF
10x5	39	1893 SF
10x15	53	5035 SF
10x15	41	3063 SF
10x20	20	3700 SF
<b>TOTAL</b>	<b>223</b>	<b>20525 SF</b>



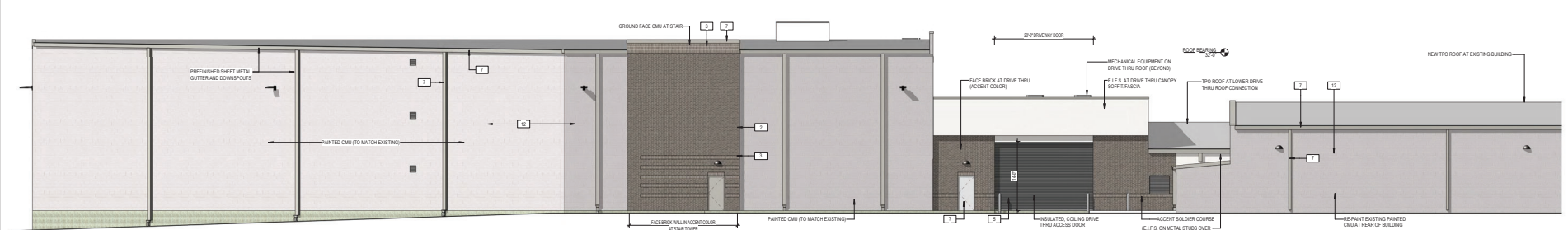
1 WEST ELEVATION (NOVI ROAD)  
 1/8" = 1'-0"



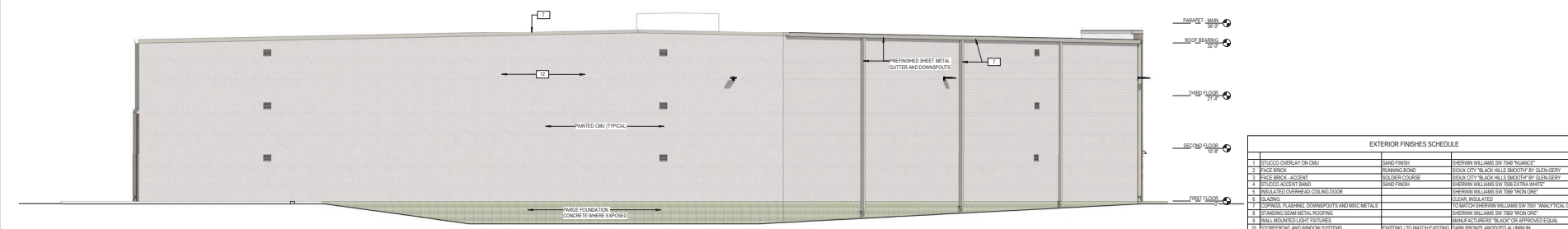
2 SOUTH ELEVATION (PARTIAL)  
 1/8" = 1'-0"



3 SOUTH ELEVATION (PARTIAL)  
 1/8" = 1'-0"



4 NORTH ELEVATION  
 1/8" = 1'-0"



5 EAST ELEVATION  
 1/8" = 1'-0"

EXTERIOR FINISHES SCHEDULE		
1	STUCCO OVERLAY ON CMU	SAND FRESH
2	FACE BRICK	ROMBERG/SCOTT
3	FACE BRICK (ACCENT)	SOLDIER COURSE
4	STUCCO ACCENT BAND	SAND FRESH
5	INSULATED OVERHEAD COILING DOOR	CLARK, WELLETED
6	DRAPING	CONCRETE/STAINLESS STEEL/ALUMINUM
7	TOPPING PLASTER, DOWNSPOUTS AND MECH DETAILS	CLARK, WELLETED
8	STANDING SEAM METAL ROOFING	SHERWIN WILLIAMS BY TONY MANCINI
9	TRIAL MOUNTED LIGHT FIXTURES	TRIAL MOUNTED LIGHT FIXTURES
10	EDGE PROFILE AND WINDOW SYSTEMS	EXISTING TO MATCH EXISTING
11	DRY ROOF DOORS & TRIM	EXISTING TO MATCH EXISTING
12	PAINTED CMU	SHERWIN WILLIAMS BY TONY MANCINI
13	PAINTED ALUMINUM TUBE ACCENT	SHERWIN WILLIAMS CUSTOM COLOR FOR WILLIAM









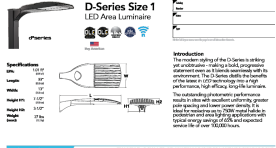
SELF STORAGE  
FACILITY  
21700 NOVI ROAD  
NOVI, MI





SELF STORAGE  
FACILITY  
21700 NOVI ROAD  
NOVI, MI

**D-Series Size 1 LED Area Luminaire**

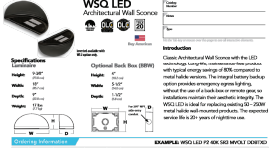


**Specifications:**  
 Model: D1  
 Height: 12"  
 Width: 12"  
 Depth: 12"  
 Weight: 1.5 lbs

**Introduction:**  
 The introduction of the D-Series is a key product in the area luminaire line. It is a high-performance, energy-efficient luminaire that provides uniform, glare-free illumination for a wide range of applications. The D-Series is designed to be a long-lasting, low-maintenance luminaire that provides excellent performance and value for the life of the luminaire.

**Features:**  
 - High-performance LED technology  
 - Energy-efficient design  
 - Uniform, glare-free illumination  
 - Long-lasting, low-maintenance design

**WSQ LED Architectural Wall Sconce**



**Specifications:**  
 Model: WSQ  
 Height: 6"  
 Width: 6"  
 Depth: 6"  
 Weight: 0.5 lbs

**Introduction:**  
 The WSQ LED Architectural Wall Sconce is a high-performance, energy-efficient luminaire that provides uniform, glare-free illumination for a wide range of applications. It is designed to be a long-lasting, low-maintenance luminaire that provides excellent performance and value for the life of the luminaire.

**Features:**  
 - High-performance LED technology  
 - Energy-efficient design  
 - Uniform, glare-free illumination  
 - Long-lasting, low-maintenance design

**LITHONIA LIGHTING**

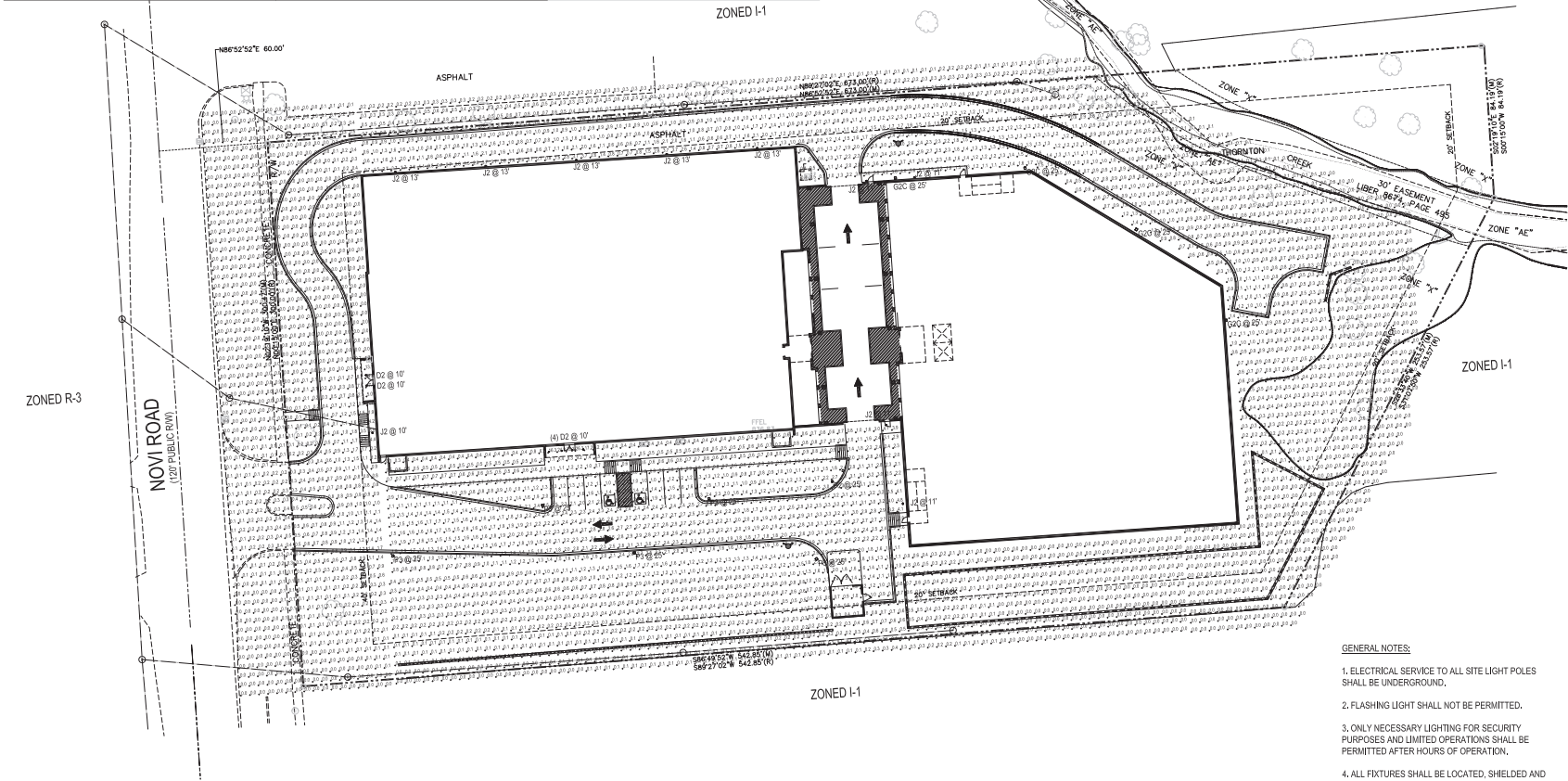
**FAST FACTS & SPECIFICATIONS:**  
 - Energy-efficient design  
 - Long-lasting, low-maintenance design  
 - Uniform, glare-free illumination

**LDNRV**  
 New Release 2018 (2018)

**Emergency Safety Operation**

Symbol	Tag	MANUFACTURER	LLF	Description	WATTAGE
J2	J2	LITHONIA LIGHTING	0.900	WSQ LED P2 SR4 40K MVOLT DBLXD	29 W
G2C	G2C	LITHONIA LIGHTING	0.900	DSX1 LED P1 40K T3M MVOLT HS DBLXD	54 W
D2	D2	LITHONIA LIGHTING	0.900	DSX1 LED P2 40K T3M MVOLT DBLXD - POLE MOUNT	70 W
P2	P2	LITHONIA LIGHTING	0.900	LDN6 4015 LOGAR LSS - SOFFIT REPLACEMENT	18 W
P3	P3	LITHONIA LIGHTING	0.900	DSX1 LED P2 40K T3M MVOLT DBLXD - POLE MOUNT	70 W

Calculation Summary				
Label	Avg	Max	Mh	Avg/Mh
PARKING ZONE	2.1	4.1	0.6	3.5 / 1
NORTH DRIVEWAY ZONE	1.2	3.8	0.5	2.8 / 1



- GENERAL NOTES:**
1. ELECTRICAL SERVICE TO ALL SITE LIGHT POLES SHALL BE UNDERGROUND.
  2. FLASHING LIGHT SHALL NOT BE PERMITTED.
  3. ONLY NECESSARY LIGHTING FOR SECURITY PURPOSES AND LIMITED OPERATIONS SHALL BE PERMITTED AFTER HOURS OF OPERATION.
  4. ALL FIXTURES SHALL BE LOCATED, SHIELDED AND AIMED AT THE GROUND AREA TO BE SECURED.
  5. ALL FIXTURES SHALL BE MOUNTED AS INDICATED BUT NOT TO EXCEED 25' ABOVE THE ADJACENT GRADE.

**SELF STORAGE FACILITY**  
 21700 NOVI ROAD  
 NOVI, MICHIGAN  
 PHOTOMETRIC SITE PLAN

## FAÇADE MATERIAL SAMPLES

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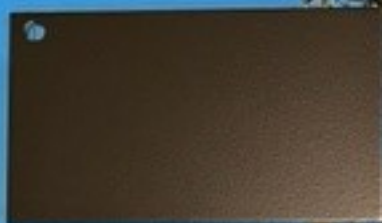


# EXTRASPACE STORAGE

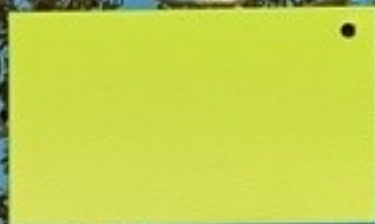
21708 NOVI ROAD | NOVI, MICHIGAN 48375



"SIOUX CITY BLACK HILLS SMOOTH"



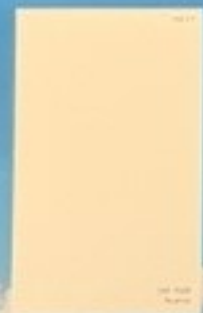
"SR 7165 MIDLAND"



"WASABI GREEN"



"EXISTING BRICK"



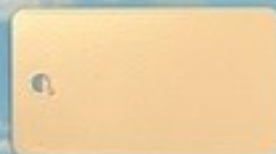
"SR7045 NUVANCE"



"SR7008 EXTRA WHITE"



"SR7001 ANALYTICAL GRAY"



"TR1 SANDSTONE"



## PLANNING REVIEW

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# PLAN REVIEW CENTER REPORT

## Planning Review EXTRA SPACE SELF STORAGE

JSP 22-48  
May 22, 2023

### PETITIONER

Novi Development Company

### REVIEW TYPE

Revised Preliminary Site Plan

### PROPERTY CHARACTERISTICS

Section	35	
Site Location	21700 Novi Road; 50-22-35-101-016	
Site School	Northville Public Schools	
Site Zoning	I-1 Light Industrial	
Adjoining Zoning	North	I-1 Light Industrial
	East	I-1 Light Industrial
	West	R-3 One-Family Residential
	South	I-1 Light Industrial
Current Site Use	Novi Bowl	
Adjoining Uses	North	Oakpointe Plaza
	East	Estate Storage
	West	One-Family Residential
	South	Estate Storage
Site Size	4.3 acres	
Plan Date	April 10, 2023	

### PROJECT SUMMARY

The applicant is proposing to renovate the former site of Novi Bowl. The proposed development includes the renovation of the existing 36,571 square foot building to accommodate indoor, climate-controlled, self-storage. The existing building height and layout will remain the same. The applicant is also proposing a 100,200 square foot addition consisting of 3 stories (40 feet tall) to the rear of the existing building. In total, 924 climate-controlled self-storage units are proposed on the site. In between the existing and proposed addition, there will be a one-way enclosed drive-lane with a roll-up overhead door and eight parking spaces to accommodate loading and unloading of storage items by customers. The anticipated hours of operation for the leasing office will be 8:00 am to 6:00 pm Monday through Saturday, and the access hours will be from 7:00 am to 10:00 pm Monday through Sunday. The site had been previously used as a bowling alley (Novi Bowl).

## RECOMMENDATION

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**Approval of the Preliminary Site Plan is recommended by Planning staff.** The plan mostly complies with the ordinance requirements. All reviewers recommend approval of the Preliminary Site Plan.

## SPECIAL LAND USE CONSIDERATIONS

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In the I-1 District, a self-storage facility falls under the Special Land Use requirements. In addition, new standards were recently added to the zoning ordinance to allow for this use. Section 6.2.C of the Zoning Ordinance outlines specific factors the Planning Commission shall consider in the review of the Special Land Use Permit request:

- i. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service. **The site has been adjusted to accommodate the flow of traffic to the extent possible.**
- ii. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area. **There is no additional impact on capabilities of public services.**
- iii. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats. **The impact to regulated woodlands and wetlands has been minimized to the extent possible.**
- iv. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. **The proposed use, which is adjacent to residential and commercial uses, appears to be compatible with the surrounding area as its location, size, and character do not appear to be detrimental to the surround area.**
- v. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use. **It complies with one of the goals that recommends attracting new businesses to the City.**
- vi. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner. **Compared to other uses permitted as a special land use in the I-1 district, a self-storage facility will not bring a considerable amount of noise or traffic to the area.**
- vii. Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located. **A self-storage facility is allowed as a Special Land Use under the I-1 Zoning District. Staff is of the opinion that the proposed use generally meets the special land use requirements and is in harmony with the design regulations of the zoning district.**

## ORDINANCE REQUIREMENTS

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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. Uses Permitted (Sec. 3.1.18.B/C): A climate-controlled self-storage facility is a special land use in the I-1 Zoning District. The Planning Commission will determine the compatibility of the use with the Special Land Use request.
2. Landscaped Greenbelt (Sec. 4.51.2.I): A landscaped greenbelt on the front of the property has been provided. However, the Planning Commission may require additional screening, as necessary, to buffer from residential uses.
3. Façade Materials (Sec. 4.51.2.N): The proposed design results in a significantly higher degree of compliance to the Façade Ordinance than previously shown. A Section 9 Façade Waiver for the overage of EIFS on the west façade and the overage of CMU on the north and east facades would be required. The waiver would be supported by the City's Façade Consultant. **Please indicate if you wish to seek this waiver in the response letter and provide a façade sample board prior to the Planning Commission public hearing.**
4. Planning Commission Findings (Sec. 3.14.3): As part of the Special Land Use request, the Planning Commission shall determine if the proposed development is compatible with the Zoning Ordinance, the site, and its surrounding area in regard to scale, size, lighting, noise, and other impacts.
5. Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2): The proposed perpendicular parking is 9 feet by 18 feet and the proposed parallel parking for loading and unloading is 9 feet by 23 feet. The proposed perpendicular spaces should either be 9 feet by 17 feet with 4 inch tall curb or 9 feet by 19 feet with 6 inch tall curb. **Please revise these dimensions, as necessary, and indicate the dimensions of the parallel spaces on the site plan.**
6. Bicycle Parking General Requirements & Lot Layout (Sec. 5.16): The proposed bicycle parking mostly complies with the ordinance requirements. Please see below for two items that should be addressed:
  - a. **Please indicate a minimum of 36" height for the U-Shaped bicycle racks.**
  - b. **Please widen the 5 foot path that connects to the public sidewalk to 6 feet to improve bicycle access to the site.**
7. Dumpster (Sec. 4.19.2.F): The proposed dumpster and dumpster enclosure is located in the interior side yard, which is not permitted. However, the proposed location minimizes impact to the existing wetlands, woodlands, and floodplain on the site. **Therefore, a variance request would be supported by staff. Please indicate if you wish to seek a variance from the Zoning Board of Appeals.**
8. Economic Impact Information: At this time, the total estimated cost of the proposed building and site improvements, as well as the number of anticipated jobs created (temporary and permanent) has not been provided. **Please provide this information prior to the Planning Commission meeting.**
9. Woodland Permit: A total of 4 regulated woodland trees and 2 non-regulated woodland trees are proposed for removal, which requires 7 woodland replacement credits. The applicant is proposing to preserve 2 non-regulated woodland trees, which brings the total woodland replacement credits required down to 3. A Woodland Permit is required to be reviewed and approved by the Planning Commission whenever more than 3 regulated woodland trees are proposed for removal. Therefore, this proposed development will require Woodland Permit approval from the Planning Commission. **Please review the Woodland review letter for more information.**

10. Wetland Permit: A minor wetland use permit may be required for the permanent impact to a portion of Wetland A. In addition, the impact to the wetland buffer area has not been quantified on the plans. **Please review the Wetland review letter for more information and revise the wetland plan in a revised submittal.**
11. Signage: 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.
12. 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. Engineering Review: Engineering is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- b. Landscape Review: Landscape is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- c. Woodland Review: Woodland is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- d. Wetland Review: Wetland is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- e. Traffic Review: Traffic is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- f. Façade Review: Façade is recommending approval of the Preliminary Site Plan contingent upon a Section 9 Façade Waiver being granted by the Planning Commission and a façade board being provided prior to the Planning Commission public hearing.
- g. Fire Review: Fire is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.

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

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The Special Land Use, Preliminary Site Plan, Woodland Use Permit, Wetland Use Permit, and Stormwater Management Plan will require a 15-day public hearing and approval from the Planning Commission due to the Special Land Use request. At that time, please provide the following by May 31 once this stage is reached:

1. Site Plan submittal in PDF format. **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, which is to be used for Planning Commission presentation.
4. A façade board with sample materials of the proposed façade.

## **NEXT STEP: ZONING BOARD OF APPEALS**

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After receiving Planning Commission's approval of the Preliminary Site Plan, one variance from the Zoning Board of Appeals will be necessary prior to the approval of the Final Site Plan. Please submit this application to Anita Wagner, Account Clerk ([awagner@cityofnovi.org](mailto:awagner@cityofnovi.org), 248-347-0459) to go before the Zoning Board of Appeals. The deadline for Zoning Board of Appeals applications is typically the **first** of the month.

## **FUTURE STEP: FINAL SITE PLAN SUBMITTAL**

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

1. **Seven** 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. An [Other Agencies Checklist](#)

#### **FUTURE STEP: ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER**

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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.*

#### **FUTURE STEP: STAMPING SET APPROVAL**

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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 **12 size 24" x 36" copies, folded, with signature and seal (may be electronic)** to the Community Development Department for final Stamping Set approval.

#### **FUTURE STEP: PRE-CONSTRUCTION MEETING**

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**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 248.735.5607 or [ccarroll@cityofnovi.org](mailto:ccarroll@cityofnovi.org).



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Christian Carroll, Planner



## PLANNING REVIEW CHART: I-1, Light Industrial Zoning District

**Review Date:** May 22, 2023  
**Review Type:** Revised Preliminary Site Plan Review  
**Project Name:** **JSP22-48 EXTRA SPACE SELF STORAGE DEVELOPMENT**  
**Location:** 21700 Novi Road; Parcel 50-22-35-101-016  
**Plan Date:** April 10, 2023  
**Prepared by:** Christian Carroll, Planner  
**E-mail:** [ccarroll@cityofnovi.org](mailto:ccarroll@cityofnovi.org) **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant with next submittal. *Italicized* items should be noted.

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted July 27, 2017)</i>	Local Commercial	Climate-Controlled Self-Storage Facility	<b>TBD</b>	<b>Planning Commission will determine the compatibility of the use with the Special Land Use Request.</b>
<b>Zoning</b> <i>(Effective January 8, 2015, as amended)</i>	I-1: Light Industrial	I-1, no change	Yes	
<b>Uses Permitted</b> <i>(Sec 3.1.18.B &amp; C)</i>	Permitted uses in Sec. 3.1.18.B, Special Land Uses in Sec. 3.1.18.C	Climate-Controlled Self-Storage Facility	Yes	<b>Special Land Use in the I-1 Zoning District.</b>
<b>Height, Bulk, Density, and Area Limitations (Sec. 3.1.18.D)</b>				
<b>Frontage on a Public Street</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required.	Frontage on Novi Road	Yes	
<b>Access to a Major Throughfare</b> (Sec. 5.13)	Vehicular access shall be provided only to an existing or planned major thoroughfare or freeway service drive OR access driveway on other street type is not across street from existing or planned single-family uses.	Access to Novi Road – island removed	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit in Ac <i>(Sec 3.6.2.D)</i>	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space	Complies	Yes	
<b>Maximum % of Lot Area Covered</b> <i>(By All Buildings)</i>	<i>(Sec 3.6.2.D)</i>	Complies	Yes	
<b>Building Height</b> <i>(Sec. 3.1.19.D)</i>	40 feet maximum, refer to TA18.299 standards	40 feet	Yes	
<b>Building Setbacks (Sec. 3.1.18.D)</b>				
Front (West)	40 feet	50 feet	Yes	
Interior Side (North)	20 feet	23 feet	Yes	
Interior Side (South)	20 feet	50 feet	Yes	



Rear (East)	20 feet	50 feet	Yes	
<b>Parking Setbacks</b> (Sec. 3.1.18.D) Refer to applicable notes in Sec. 3.6.2				
Front (West)	40 feet (See 3.6.2.E)	NA	NA	No parking abutting property lines.
Interior Side (North)	10 feet	NA	NA	
Interior Side (South)	10 feet	NA	NA	
Rear (East)	10 feet	NA	NA	
<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.	Complies	Yes	
<b>Off-Street Parking in Front Yard</b> (Sec 3.6.2.E)	The site is a minimum 2 acre site	4.3 acres	NA	Applicant is not proposing.
	Does not extend into the minimum required front yard	None shown	NA	
	Cannot occupy more than 50% of the area between min. front yard setback & bldg. setback.	None shown	NA	
	Must be screened by brick wall or landscaped berm 2.5 ft tall	None shown	NA	
	Lighting compatible with surrounding neighborhood	Complies	Yes	See Photometric review.
<b>Off-Street Parking in Side and Rear Yards</b> (Sec 3.6.2.F)	Off-street parking is allowed in side and rear yards if the site does not abut residential. If it does, additional conditions apply: shall not occupy more than 50% of side yard area abutting residential parking setback no less than 100 ft from residential district	Side and rear do not abut residential	NA	
<b>Setback from Residential District - Building</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. (unless separated by a thoroughfare or RR ROW)	50 foot setback – existing and separated by throughfare	Yes	
<b>Wetland/Watercourse Setback</b> (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	Wetland setback shown	Yes	May encroach on 25 foot wetland buffer, which would require administrative approval.
<b>Additional Height</b> (Sec 3.6.2.O)	Additional heights for selected buildings are allowed based on conditions listed in Sec 3.6.2.O	Does not apply	NA	
<b>Parking setback screening</b> (Sec 3.6.2.P)	Required parking setback area shall be landscaped per Sec. 5.5.3.	Does not apply	NA	
<b>Modification of</b>	The Planning Commission	Does not apply	NA	

<b>parking setback requirements</b> (Sec 3.6.2.Q)	may modify parking setback requirements based on conditions listed in Sec. 3.6.2.Q			
<b>Climate-Controlled Self-Storage Facilities</b> (Sec. 4.51.2, amended TA18.299 attached)				
<b>Minimum Site Size</b> (Sec. 4.51.2.A)	The minimum size of the site devoted entirely to such use shall be a minimum of two (2) acres unless the site abuts a residential zoning district in which case the site shall be a minimum of three (3) acres.	4.3 acres	Yes	
<b>Abutting Residential</b> (Sec. 4.51.2.B)	Notwithstanding the provisions of Section 3.1.18.C or Section 3.1.19.B, climate-controlled self-storage facilities may be allowed as a special land use when adjacent to residentially zoned property under the following criteria:			
	For any property separated by a major thoroughfare or railroad right-of-way from a residential zoning district.	Separated by a major thoroughfare	Yes	
	Any building or portion of building shall be setback a minimum of 40 feet from the property line abutting a residential district, and shall have a maximum height of 25 feet; provided, however, that for every additional 5 feet of building setback from the property line greater than 40 feet, the maximum building height may be increased 1 additional foot, up to 40 feet in height.	Building setback of 50 feet. The maximum building height of 40 feet is allowed at 115 foot setback	Yes	<i>The building height is ~17 feet from 50 feet to ~280 feet setback from the front property line. The building height is 40 feet after ~280 feet.</i>
	Leasing office hours shall be limited to the hours between 8:00 a.m. to 6:00 p.m. Monday through Saturday. Facility access hours shall be limited to the hours between 7:00 a.m. to 10:00 p.m. Monday through Sunday.	Leasing office are 8am to 6pm Monday through Saturday. Facility access hours are 7am to 10pm Monday through Sunday.	Yes	
<b>Ingress/Egress</b> (Sec. 4.51.2.C)	All ingress and egress from the site shall be directly onto a major thoroughfare as designated on the City's Master Plan.	Complies	Yes	
<b>Building Setbacks</b> (Sec. 4.51.2.D)	Building setbacks shall comply with the standards as set forth in the I-1, Light Industrial, or I-2, General Industrial district, as applicable.	Complies	Yes	



<p><b>Storage of Combustible Materials</b> (Sec. 4.51.2.E)</p>	<p>No storage of combustible or flammable liquids, combustible fibers, or explosive materials as defined in the fire prevention code, or toxic materials, shall be permitted within the self-storage buildings or upon the premises. A lease agreement between the lessee and lessor shall state (1) that no flammable, combustible or toxic material shall be stored or used on premises, and (2) that the property shall be subject to periodic and unannounced inspections for flammable, toxic and other hazardous materials by City officials.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Outdoor Storage</b> (Sec. 4.51.2.F)</p>	<p>No storage outside of the self-storage buildings shall be permitted.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Uses Not Permitted</b> (Sec. 4.51.2.G)</p>	<p>Except as provided herein, the use of the premises shall not be used for maintaining or repairing of any vehicles and any other uses as determined by the Planning Commission.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Mixed-Use Provision</b> (Sec. 4.51.2.H)</p>	<p>Any principal permitted use in the Light Industrial (I-1) district may be permitted in a mixed-use climate-controlled self-storage facility, subject to the following conditions:</p>	<p>Not proposed</p>	<p>NA</p>	
	<p>If the gross leasable area of such use(s) is less than 10% of the total gross leasable area of the overall building, and;</p>	<p>Not proposed</p>	<p>NA</p>	
	<p>If such uses are not associated with the self-storage use of the site, the Planning Commission may require additional amenities with such use(s), and taking into consideration the compatibility of the proposed use with the existing uses of the site and surrounding sites, whether there is adequate parking</p>	<p>Not proposed</p>	<p>NA</p>	

	for the combination of uses, and adequate pedestrian connectivity of the use to other uses on the site.			
	Limited retail sales to tenants of products and supplies incidental to the principal use, such as packing materials, packing labels, tape, rope, protective covers, and locks and chains shall be permitted within a building on the site devoted to this use.	Not proposed	NA	
<b>Landscaped Greenbelt</b> (Sec. 4.51.2.I)	At a minimum, a 25 foot wide landscaped greenbelt is required where the site abuts a residential zoning district or office zoning district. In addition, at least 2 of the required canopy or evergreen trees must be planted between the road right-of-way and building to soften the effects of the building on the abutting residential areas. The Planning Commission may require additional screening measures as necessary.	Provided on plans	Yes	<b>The Planning Commission may require additional screening, as necessary.</b>
<b>Site Access</b> (Sec. 4.51.2.J)	All access aisles, parking areas and walkways on the site shall be graded, drained, hard-surfaced and maintained in accordance with the standards and specifications of the City of Novi.	Complies	Yes	
<b>Minimum Driveway Widths</b> (Sec. 4.51.2.K)	Notwithstanding the required fire codes, the following minimum driveway widths shall apply: All one-way driveways shall be designed with one ten-foot-wide loading/unloading lane and one 15-foot travel lane, all two-way driveways shall be designed with one ten-foot-wide loading/unloading lane and two 12-foot travel lanes, the parking lanes may be eliminated if the driveway does not serve storage units,	One-Way: 20 feet, Two-Way: 24 feet	Yes	

	signs and painted lines shall be used to indicate parking and traffic direction throughout the site.			
<b>Fire Suppression</b> (Sec. 4.51.2.L)	Fire hydrants and fire suppression devices shall be provided, installed and maintained in compliance with the fire prevention code and any other applicable ordinances.	Appears to comply	Yes	Refer to Fire Review.
<b>Maximum Building Height</b> (Sec. 4.51.2.M)	The maximum building height shall be consistent with the zoning district that the site is located within.	Shall comply	Yes	
<b>Façade Materials</b> (Sec. 4.51.2.N)	Exterior building walls visible from a public right-of-way or nonindustrial district shall be finished with brick or other high-quality masonry materials as permitted in Section 5.15.	New addition is substantially compliant, old building is not.	TBD	<b>A Section 9 Façade Waiver for the overage of EIFS on the west façade and the overage of CMU on the north and east facades is supported by the City's Façade Consultant.</b>
<b>Security Provisions</b> (Sec. 4.51.2.O)	A demonstrated means of security and management shall be provided.	Provided in response	Yes	
<b>Site Lighting</b> (Sec. 4.51.2.P)	Any proposed site lighting shall comply with the requirements of Section 5.7. In particular, the standards of Section 5.7.3.L shall apply when a site abutting a residential district or use.	Complies	Yes	See Photometric Review.
<b>I-1 District Required Conditions</b> (Sec. 3.14, only applicable sections included)				
<b>Other</b> (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.	Limited Retail component, permitted	Yes	Refer to Self-Storage section for more information.
<b>Planning Commission Findings</b> (Sec 3.14.3)	The scale, size, building design, facade materials, landscaping and activity of the use is such that current and future adjacent residential uses will be protected from any adverse impacts.	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b>
	The intended truck delivery service can be effectively handled without long term truck parking on site.	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b>
	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b>



	<p>this article and performance standards of Section 5.14.</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>Haz chem survey submitted</p>	<p>Yes</p>	
	<p>There is compliance with the City's hazardous materials checklist for required submittal data.</p>	<p>Haz chem survey submitted</p>	<p>Yes</p>	
<p><b>Adjacent to Residential (Sec. 3.14.5)</b></p>	<p>-No truck well, loading dock or door, shall be permitted on or in the wall of the building which faces the abutting residential district and only pedestrian exits or emergency doors shall be allowed on such wall.                  -All loading/unloading docks and truck wells shall be placed on or in the wall of the building that is opposite the boundary of the residential district or on the wall that lies approximately at a ninety (90) degree angle to the residential district boundary.                  -If such dock, truck well and/or dock faces the front street, then such dock, truck well or door shall be recessed by not less than sixty (60) feet from the front wall of the building in order to provide that a semitrailer truck tractor and cab shall not, when in place for loading or unloading at the dock or well, project past the front wall of the building.                  -Driveways shall be designed in such a manner to discourage semi-trailer truck traffic access to that portion of the lot or site that is adjacent to a residential district.</p>	<p>No truck well or loading dock is proposed. Semi-Truck access appears to be limited in nature.</p>	<p>Yes</p>	
	<p>-No outside storage of any materials, equipment, trash or waste shall be permitted,</p>	<p>Complies</p>	<p>Yes</p>	

	<p>except dumpsters may be permitted outdoors where properly screened pursuant to the requirements of this Ordinance, as amended, or revised. Refuse pick-up shall be limited to the hours of 7:00 a.m. to 5:00 p.m., prevailing time.</p> <p>-All off-street parking and areas used for vehicular repair, delivery, loading/unloading and transport shall be not closer than one-hundred (100) feet from the boundary of a residential district and effectively screened from view from said residential district by landscaping, walls or berms pursuant to the requirements of Section 3.14.5.E.</p> <p>Notwithstanding the restriction of Section 3.6.2.E-F, the Planning Commission may permit front yard and side yard parking where necessary to maintain the separation required by this subsection.</p>			
	<p>The maximum heights of any building constructed on a lot or site adjacent to a residential district shall be twenty-five (25) feet, except where there is a street, road, highway or freeway between said lot or site and the abutting residential district.</p>	<p>Separated by street</p>	<p>Yes</p>	
	<p>Exterior site lighting as regulated by Section 5.7. In addition, where a building wall faces an abutting residential district there shall be no floodlighting of such facade. This shall not preclude the lighting of doorways on such facades.</p>	<p>Complies</p>	<p>Yes</p>	<p>See photometric review.</p>
	<p>An earth berm and plantings are required, except that no additional berm shall be required along a street, road, highway or freeway</p>	<p>Complies</p>	<p>Yes</p>	

	that lies between said use and an abutting residential district.			
	Windows and doors of non-office use areas of structures in an I-1 district may not be left open.	Complies	Yes	
<b>Parking and Loading Requirements</b>				
<b>Number of Parking Spaces</b> <i>(Sec. 5.2.12.E)</i>	Self-Storage: 1 space per 100 storage units, 5 space minimum   924 units – 10 spaces required	16 spaces proposed	Yes	
<b>Parking Space Dimensions and Maneuvering Lanes</b> <i>(Sec. 5.3.2)</i>	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping	9' x 18' perpendicular and 9' x 23' parallel loading/unloading spaces	Yes	<b>Perpendicular spaces are compliant, but are preferred to either be 9' x 17' with 4" curb or 9' x 19' with 6" curb.</b>
<b>End Islands</b> <i>(Sec. 5.3.12)</i>	End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. The end islands shall generally be at least 8 ft. wide, have an outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall	None shown (landscaped areas are adjacent with curbing)	Yes	
<b>Parking stall located adjacent to a parking lot entrance</b> <i>(public or private)</i> <i>(Sec. 5.3.13)</i>	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	Complies	Yes	
<b>Barrier Free Spaces</b> <i>(Barrier Free Code)</i>	Based on the requirement of 16 spaces, 1 van-accessible space is required	2 van accessible	Yes	
<b>Barrier Free Space Dimensions</b> <i>(Barrier Free Code)</i>	8' wide with an 8' wide access aisle for van accessible spaces - 8' wide with a 5' wide access aisle for regular accessible spaces	9' wide with 8' access aisle	Yes	<i>May be reduced to 8' with an 8' aisle for van accessible or 5' for non-van accessible.</i>
<b>Barrier Free Signs</b> <i>(Barrier Free Code)</i>	One sign for each accessible parking space.	Shown – detail provided	Yes	
<b>Minimum number of Bicycle Parking</b> <i>(Sec. 5.16.1)</i>	Industrial: Five (5) percent of required automobile spaces, minimum two (2) spaces	Four spaces provided	Yes	
<b>Bicycle Parking General requirements</b>	No farther than 120 ft. from the entrance being served	Complies	Yes	



(Sec. 5.16)	When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations	Complies	Yes	
	Spaces to be paved and the bike rack shall be inverted "U" design, 36" tall	Height not indicated	<b>No</b>	<b>Please provide the height, 36" minimum.</b>
	Shall be accessible via 6 ft. paved sidewalk	7 foot sidewalk adjacent to spaces, leaving 5 feet	<b>No</b>	<b>5 foot path to public sidewalk should be widened to 6 feet to improve bicycle access.</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	Complies	Yes	
<b>Loading Spaces</b> (Sec. 5.4.3)	All loading and unloading operations shall be conducted in the rear yard, except in those instances where: - The Industrial district abuts a residential district, in which case, the conditions of Section 3.14.5 shall apply, or, - An interior side yard is located adjacent to I district, EXPO district, or EXO Overlay district property, loading and unloading may be conducted in that interior side yard when located near the rear of the building. When loading and unloading is to be conducted within an interior side yard, the City may require aesthetic screening of the facility in accordance with the guidelines set forth in Section 5.5.	No loading and unloading outdoors shown	Yes	
<b>Dumpster, Accessory Structures, and Rooftop Equipment</b> (Sec. 4.19)				
<b>Dumpster</b> (Sec 4.19.2.F)	-Located in rear yard -Attached to the building or no closer than 10 ft. from building if not attached -Not located in parking setback -If no setback, then it cannot be any closer than 10 ft, from property line.	In the side yard, 15 foot setback	<b>No</b>	<b>Zoning Board of Appeals Variance would be needed for the current dumpster location. The variance would be supported by staff as the proposed location has minimal impact on site woodlands and wetlands.</b>

	-Away from Barrier free Spaces			
<b>Dumpster Enclosure</b> <i>(Sec. 21-145. (c) Chapter 21 of City Code of Ordinances)</i>	-Screened from public view -A wall or fence 1 ft. higher than height of refuse bin and no less than 5 ft. on three sides -Posts or bumpers to protect the screening -Hard surface pad -Screening Materials: Masonry, wood or evergreen shrubbery	Complies	Yes	
<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	Rooftop equipment is screened	Yes	
<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.	Rooftop equipment is screened	Yes	
<b>Sidewalks</b>				
<b>Non-Motorized Plan</b>	5 foot wide sidewalk required on Novi Road.	5 foot sidewalk existing	Yes	
<b>Public Sidewalks</b> <i>(Chapter 11, Sec.11-256(b))</i>	Connection from property to main sidewalk system is required.	Complies	Yes	
<b>Building Code and Other Requirements</b>				
<b>Woodlands</b> <i>(City Code Ch. 37)</i>	Replacement of removed trees	11 woodland replacement credits	Yes	<i>See Woodland Review.</i>
<b>Wetlands</b> <i>(City Code Ch. 12, Art. V)</i>	Mitigation of removed wetlands at ratio of 1.5:1 emergent wetland, 2:1 for forested wetlands over .25 acre	Plan provided – no mitigation necessary	Yes	<i>See Wetland Review.</i>
<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	
<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	Provided	Yes	

	footage of pavement area (indicate public or private).			
<b>Economic Impact Information</b>	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Not provided	TBD	<b>Provide prior to Planning Commission.</b>
<b>Building Exits</b>	Building exits must be connected to sidewalk system or parking lot.	Connected	Yes	
<b>Development/ Business Sign</b> <i>(City Code Sec 28.3)</i>	The leading edge of the sign structure shall be a minimum of 10 ft. behind the right-of-way. Entranceway shall be a maximum of 24 square feet, measured by completely enclosing all lettering within a geometric shape. Maximum height of the sign shall be 5 ft.	Not shown – to be reviewed by Code Compliance Division when ready.	NA	Contact Maureen Underhill at 248.735.5602 or <a href="mailto:munderhill@cityofnovi.org">munderhill@cityofnovi.org</a> for more information.
<b>Project &amp; Street Naming Committee</b>	Some projects may need approval from the Street & Project Naming Committee	<b>Submitted</b>	<b>TBD</b>	Contact Ben Peacock at 248.347.0475 or via email <a href="mailto:bpeacock@cityofnovi.org">bpeacock@cityofnovi.org</a>
<b>Lighting and Photometric Plan (Sec. 5.7)</b>				
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Provided	Yes	
<b>Lighting Plan (Sec. 5.7.A.i)</b>	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Provided	Yes	
<b>Building Lighting (Sec. 5.7.2.A.iii)</b>	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.	Complies	Yes	
<b>Lighting Plan (Sec.5.7.A.2.ii)</b>	Specifications for all proposed & existing lighting fixtures	Provided	Yes	
	Photometric data	Provided	Yes	
	Fixture height	25 feet	Yes	
	Mounting & design	Provided	Yes	
	Glare control devices (Also see Sec. 5.7.3.D)	Provided	Yes	
	Type & color rendition of lamps	Provided	Yes	



	Hours of operation	Hours provided	Yes	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties	Provided where possible	Yes	
<b>Maximum Height</b> (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses).	25 feet maximum	Yes	
<b>Standard Notes</b> (Sec. 5.7.3.B)	-Electrical service to light fixtures shall be placed underground -Flashing light shall not be permitted -Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation	Provided on plans	Yes	
<b>Security Lighting</b> (Sec. 5.7.3.H)	-All fixtures shall be located, shielded and aimed at the areas to be secured. -Fixtures mounted on the building and designed to illuminate the facade are preferred -Lighting for security purposes shall be directed only onto the area to be secured.	Complies	Yes	
<b>Average Foot Candles</b> (Sec.5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	3.5:1 fc	Yes	
<b>True Color</b> (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	Complies	Yes	
<b>Min. Illumination</b> (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.6 fc	Yes	
	Loading & unloading areas: 0.4 min	NA	NA	
	Walkways: 0.2 min	0.2 fc	Yes	
	Building entrances, frequent use: 1.0 min	2 fc	Yes	
	Building entrances, infrequent use: 0.2 min	0.2 fc	Yes	
<b>Max. Illumination adjacent to Non-Residential</b> (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	Complies	Yes	
<b>Cut off Angles</b> (Sec.	When adjacent to	Complies – note	Yes	

5.7.3.L)	residential districts: All cut off angles of fixtures must be 90° maximum illumination at the property line shall not exceed 0.5 foot candle No direct light source shall be visible at the property line (adjacent to residential) at ground level	provided		
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**NOTES:**

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

## ENGINEERING REVIEW

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# PLAN REVIEW CENTER REPORT

05/16/2023

## **Engineering Review**

Extra Space Self Storage  
JSP22-0048

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### **Applicant**

Novi Development Company

### **Review Type**

Revised Preliminary Site Plan

### **Property Characteristics**

- Site Location: 21700 Novi Road, Novi, MI. (S. of 9 Mile Rd. & E. of Novi Rd.)
- Site Size: 4.30 acres
- Plan Date: 5/12/2023
- Design Engineer: Bluewater Civil Design PLLC

### **Project Summary**

- Construction of an approximately 100,200 square-foot commercial storage building and associated parking. Site access would be provided via the existing driveway for the site roadways.
- Water service would be provided by an 8-inch extension from the existing 12-inch water main along the East side of Novi Road. There are no proposed changes to the existing 8-inch fire lead to the existing building. The proposed 8-inch water main will serve 2 additional hydrants.
- There are no proposed changes to the Sanitary sewer service.
- Storm water would be collected by a single storm sewer collection system and discharged to an on-site detention basin before being released to Thornton Creek.

### **Recommendation**

**Approval of the Revised Preliminary Site Plan and the Preliminary Storm Water Management Plan is recommended, with items to be addressed at the final site plan submittal.**

### **Comments:**

The Revised Preliminary Site Plan meets the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance, and the Engineering Design Manual with the following exceptions, which can be addressed at the final site plan submittal:

**General**

1. Provide a minimum of two ties to established section or quarter section corners.
2. Provide at least two reference benchmarks at intervals no greater than 1,200 feet. At least one referenced benchmark must be 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. A sheet index shall be provided on the cover sheet. The current sheet index does not include all sheets in the plan set.
4. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for water main (5 sheets), sanitary sewer (3 sheets), storm sewer (2 sheets), paving (2 sheets) and Boardwalks/Pathways (1 sheet). 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>
5. A right-of-way permit will be required from the City of Novi and Oakland County.
6. Show and label the master planned 60-foot half width right-of-way for Novi Road. Label the additional right-of-way width to be dedicated along Novi Road as "proposed" right-of-way.
7. The compacted sand backfill (MDOT sand Class II) should be placed above all utilities within the influence of paved areas and illustrate on the profiles.
8. 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. Label all utility crossings in the plan view.
9. All light poles in a utility easement will require a License Agreement.

**Water Main**

10. The proposed water main easement shall include all proposed hydrants. Revise the proposed easement accordingly.
11. The water main shall be placed so that no utility is placed within 10-feet of the water main (outside of pipe to outside of pipe).
12. Label the pipe lengths of the proposed water main in plan view.
13. The proposed water main shall be a minimum of 6-feet buried depth.
14. Show and label the proposed compacted sand backfill above the proposed water main under the influence of the pavement.
15. The proposed water main shall terminate at a hydrant, remove proposed blow-off valves.
16. Provide water main modeling calculations demonstrating that the required water supply of 4,000 GPM will be available.
17. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger.

18. The shut-off valves for the hydrant assemblies are not to be in wells. Refer to the City's standards and details for further information.
19. In the water main profiles add the following note: "Per the Ten States Standards Article 8.8.3, one full 20-foot pipe length of water main shall be used whenever storm sewer or sanitary sewer is crossed, and the pipe shall be centered on the crossing, in order to ensure 10-foot separation between water main and sewers." Additionally, show the 20-foot pipe lengths on the profile.

### **Sanitary Sewer**

20. The proposed and/or existing sanitary sewer was not reviewed as part of this submittal.

### **Storm Sewer**

21. **As discussed**, A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. 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.
22. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin.
23. Label the 10-year HGL elevation on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
24. Provide the casting type in the structure table. Round castings shall be provided on all catch basins except curb inlet structures.
25. Show and label the proposed compacted sand backfill above the proposed storm sewer under the influence of the pavement.
26. The minimum slope for 18-inch pipe shall be 0.18%. Currently the pipe between A1.1 and A1 does not meet this standard.
27. Two profiles are cut-off on sheet C203.

### **Storm Water Management Plan**

28. Provide the calculations on the plans for the Storm Water Management Plan as a part of the plan set including:
  - a. Detention and forebay sizing calculations (per City standards).
  - b. Release rate calculations for the three design storm events (first flush, bank full, 100-year).
29. The outlet standpipes 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.
30. 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.

### **Paving & Grading**

31. Show the sidewalk being removed/replaced to complete the water main construction.
32. Provide the City detail for the emergency access gate. Provide a note on the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the building permit.
33. Provide the MDOT sidewalk ramp details in the plan set. Remove any detail that does not reflect these details.
34. Detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the latest version of the MDOT standard detail for detectable surfaces.
35. Label specific ramp locations on the plans where the detectable warning surface is to be installed.
36. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable.
37. Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls. All barrier-free stalls shall comply with Michigan Barrier-Free regulations.
38. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms.
39. Provide a line designation representing the effective 19-foot stall length for 18-foot perimeter stalls.
40. Curbing and walks adjacent to the end of 18-foot stalls shall be reduced to 4-inches high (rather than the standard 6-inch height to be provided adjacent to 19-foot stalls). Provide additional details as necessary.
41. The proposed retaining wall design shall be signed and sealed by the design engineer responsible for the design and all associated calculations.

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

42. The SESC package has been received and will be reviewed separately from this review.

### **Agreements**

43. A license Agreement will be required for the light poles proposed within the water main easement. The agreement shall state that the wall and all site facilities within the influence of the wall that may be removed or damaged in the event the utility requires maintenance will be **the responsibility of the property owner** to repair or replace. Additionally, a cross-section shall be included with the agreement showing the distance between the wall foundation and the utility. A template agreement is available from the Engineering Division.



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

44. 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.**
45. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving (square yardage), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration).

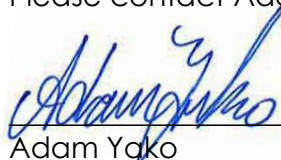
**The following must be submitted with the Stamping Set:**

*(Please note that all documents must be submitted together as a package with the Stamping Set submittal with a legal review transmittal form that can be found on the City's website. Partial submittals will not be accepted.)*

46. A draft copy of the Storm Drainage Facility Maintenance Easement Agreement (SDFMEA), as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the agreement is approved by the City's Legal Counsel, this agreement will then be sent to City Council for approval/acceptance. The SDFMEA will then be recorded at the office of the Oakland County Register of Deeds. This document is available on our website.
47. A draft copy of the 20-foot-wide easement for the water main to be constructed onsite must be submitted to the Community Development Department. This document is available on our website.
48. A draft copy of the warranty deed for the additional proposed 60-foot wide right-of-way along Novi Road must be submitted for review and acceptance by the City.

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

**Engineering Review of Revised Preliminary Site Plan**

*Extra Space Self Storage*  
*JSP22-0048*

05/16/2023

Page 6 of 6

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

## LANDSCAPE REVIEW

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**PLAN REVIEW CENTER REPORT**  
**April 17, 2023**  
**Extra Space Self Storage**  
**Revised Preliminary Site Plan - Landscaping**

**Review Type**

Revised Preliminary Site Plan Landscape Review

**Job #**

JSP22-0048

**Property Characteristics**

- Site Location: 21700 Novi Road
- Site Acreage: 4.30 ac.
- Site Zoning: I-1
- Adjacent Zoning: North, East, South: I-1, West: R-3
- Plan Date: 3/31/2023

**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 and 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.

**Recommendations:**

This project is **recommended for approval for Preliminary Site Plan, contingent on the shortages that require landscape waivers being corrected.** If they are not, then the project is not recommended for approval.

**LANDSCAPE WAIVERS REQUIRED FOR PROPOSED LAYOUT:**

- Lack of shrubs around the west pond and deficiency in shrub coverage on the east pond – *not supported by staff*
- Lack of accessway perimeter trees along the north edge property line north of the buildings (10 trees) – *supported by staff*
- Deficiency in accessway perimeter trees provided elsewhere on the site – *not supported by staff.*

**Please add the City Project Number (JSP22-48) to the Cover Sheet's bottom right corner.**

**Ordinance Considerations**

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

1. Provided
2. **Please correct the table as described on the landscape chart.**
3. Please show the proposed conservation easement boundary on the landscape plan.



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

1. The project is not adjacent to residentially-zoned property a screening berm is not required.
2. The special landscaping requirement for Self-storage facilities facing residential property across Novi Road has been met.

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

1. The required greenbelt width is not provided between the building and the right-of-way, but as this is an existing condition that is not being increased, it is accepted.
2. All required greenbelt landscaping is provided.
3. The proposed street trees may not be able to be planted due to existing utilities. If they aren't, a landscape waiver is not required. **Please show the existing underground utility lines on the landscape plan to confirm that the trees can't be planted.**

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

1. All required parking lot landscaping is provided.
2. The site's accessway perimeter plantings are deficient, **which requires a landscape waiver.** Staff would support a landscape waiver for the missing trees along the north side of the drive north of the buildings as there isn't room for them, but not for the rest of the site.
3. **Please request a waiver for the trees along the north side of the north drive and add (or reclassify) all remaining perimeter trees to the plan as described on the landscape chart.**

Building foundation Landscaping (Zoning Sec 5.5.3.D)

All required foundation landscaping is provided.

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

1. No shrubs are provided around the west pond.
2. The coverage of the east pond is not sufficient – larger masses providing a total of at least 70% coverage of the ponds (except along the building in the east pond) is required.
3. **These deficiencies require a landscape waiver.** It would not be supported by staff.

Plant List (LDM 4, 10)

1. Only 11 of 23 (47%) species used are native to Michigan. **Please replace some non-native species with native species to at least meet the 50% minimum required.**
2. The tree diversity requirement of LDM section 4 is met.

Planting Notations and Details (LDM 10)

Provided

Irrigation (LDM 10)

1. If an irrigation system will be used, a plan for that system must be provided in the Final Site Plans.
2. If other means (xeriscaping, hoses, etc.) will be used, information regarding that must be provided on the Final Site Plans.

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).



## LANDSCAPE REVIEW SUMMARY CHART – Revised Preliminary Site Plan

**Review Date:** April 17, 2023  
**Project Name:** JSP22 – 0048: Extra Space Self Storage  
**Plan Date:** March 31, 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 on the Final Site Plans.

### LANDSCAPE WAIVERS REQUIRED FOR PROPOSED LAYOUT:

- No shrubs around the west pond and deficiency of shrubs around the east pond – *not supported by staff*
- No accessway perimeter trees along the north property edge north of the building (10 trees) – *supported by staff*
- Deficiency in accessway perimeter trees provided elsewhere on the site – *not supported by staff*.

**Please add the City Project Number (JSP22-48) to the Cover Sheet's bottom right corner.**

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>	<ul style="list-style-type: none"> <li>• Overall scale: 1"=30'</li> <li>• Detail scale: 1"=20'</li> </ul>	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	Yes	Yes	
<b>Landscape Architect contact information</b> <i>(LDM 10)</i>	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Alphonse Barcia III	Yes	
<b>Sealed by LA.</b> <i>(LDM 10)</i>	Requires original signature	Copied seal and signature		<u>Live signature of the LA will be required on the</u>

Item	Required	Proposed	Meets Code	Comments
				<u>printed stamping sets.</u>
<b>Miss Dig Note</b> (800) 482-7171 (LDM 10)	Show on all plan sheets	Yes	Yes	
<b>Zoning</b> (LDM 10)	Include all adjacent zoning	<ul style="list-style-type: none"> <li>• Sheet LS-1</li> <li>• <u>Parcel</u>: I-1</li> <li>• <u>North, South</u>: I-1,</li> <li>• <u>East</u>: R-4 (across RR tracks),</li> <li>• <u>West</u>: R-3 (across Novi Rd)</li> </ul>	Yes	
<b>Survey information</b> (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Legal description or boundary line survey</u></li> <li>• <u>Existing topography</u></li> </ul>	<ul style="list-style-type: none"> <li>• Legal description on cover sheet</li> <li>• Topo is only shown on Demo plan (Sheet C002)</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Please add a topo sheet without any demolition comments
<b>Existing plant material</b> <b>Existing woodlands or wetlands</b> (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Show location type and size. Label to be saved or removed.</u></li> <li>• <u>Plan shall state if none exists.</u></li> </ul>	<ul style="list-style-type: none"> <li>• Trees and tree chart on Sheet LS-0</li> <li>• Removals shown on Sheet LS-0</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>	<ol style="list-style-type: none"> <li>1. Tree credits are only given for trees outside of a regulated woodland that are preserved – only credits for Trees 1 and 2 can be given. <b>Please correct the table on Sheet LS-0.</b></li> <li>2. No replacements are required for the removed evergreens as they are not in a regulated woodland and aren't 36" dbh.</li> <li>3. <u>Please draw a heavy line indicating the boundaries of the proposed woodland protection easement such as the pink line on the image at the bottom of this chart.</u></li> </ol>
<b>Soil types</b> (LDM10)	<ul style="list-style-type: none"> <li>• <u>As determined by Soils survey of Oakland County</u></li> <li>• <u>Show types, boundaries</u></li> </ul>	Sheet LS-0	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</b>	Overhead and	<ul style="list-style-type: none"> <li>• Overhead wires</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> </ul>	<b>Please show all utility</b>

Item	Required	Proposed	Meets Code	Comments
<b>proposed utilities</b> (LDM 10)	underground utilities, including hydrants	are indicated along south property line. <ul style="list-style-type: none"> <li>The water, sanitary and storm sewer lines along Novi Road are not shown</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>	<b>lines, including underground lines on the landscape plans – there are sanitary and water lines traveling along Novi Road.</b>
<b>Proposed grading. 2' contour minimum</b> (LDM 10)	Provide proposed contours at 2' interval	Sheet C201	Yes	
<b>Snow deposit</b> (LDM 10)	Show snow deposit areas on plan	Yes	Yes	
<b>LANDSCAPING REQUIREMENTS</b>				
<b>Parking Area Landscape Requirements</b> (Zoning Sec 5.5.3.C and LDM 5)				
<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>	<ul style="list-style-type: none"> <li>Provided</li> <li>No trees or shrubs are within it</li> </ul>	Yes	
<b>Name, type and number of ground cover</b> (LDM 5)	As proposed on planting islands	<ul style="list-style-type: none"> <li>Sod is shown for all areas except detention basin</li> <li>Detention seed mix is shown in basins</li> </ul>	Yes	1.
<b>General</b> (Zoning Sec 5.5.3.C)				
<b>Parking lot Islands</b>	<ul style="list-style-type: none"> <li>A minimum of 200 SF to qualify</li> <li>A minimum of 200sf unpaved area per tree planted in an island</li> <li>6" curbs</li> <li>Islands minimum width 10' BOC to BOC</li> </ul>	<ul style="list-style-type: none"> <li>The islands are actually perimeter islands.</li> <li>They appear to meet the minimum area required.</li> <li>Island areas are labeled – sufficient sized</li> </ul>	Yes	
<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.	The parking spaces are 17 feet long with a 7-foot wide sidewalk.	Yes	
<b>Contiguous space limit</b> (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	The only bay is 8 spaces.	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> </ul>	<ul style="list-style-type: none"> <li>Hydrants are shown</li> <li>No landscaping is blocking them.</li> </ul>	Yes Yes	<b>If either of the buildings has an FDC, please show that on the landscape plans and don't plant anything taller than 12" in front of it.</b>



Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>Plantings near hydrants or FDCs should be no taller than 12"</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>	No trees or shrubs appear to be within a clear zone but the sign may be.	TBD	<ol style="list-style-type: none"> <li>Please show the clear vision zone as shown below on the landscape plan.</li> <li>The sign and all shrubs and trees must be located outside of the zones.</li> </ol>
<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%	$A = x \text{ sf} * 7.5 \% = A \text{ sf}$	One bay with large islands and canopy trees on both ends	Yes	As the parking spaces are only on one side of the drive, only perimeter trees need to be provided, but should be placed to shade the spaces as much as possible.
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	$B = (\text{Total area} - 50000) * 1\% = xx \text{ sf}$	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 sf x 5%	$A = x \text{ sf} * 6\% = A \text{ sf}$ As the only parking is on one side of a drive, only perimeter parking lot trees are required.	One bay with large islands and canopy trees on both ends	Yes	Please place the tree in the western island closer to the parking spaces to shade the spaces as much as possible.
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 = 114 + 0 = 114 SF</li> </ul>	1035 SF	Yes	
D = C/200 Number of canopy trees required	Interior trees are not required since just one bay is provided –	Perimeter trees on each end of the bay are provided	Yes	

Item	Required	Proposed	Meets Code	Comments
	perimeter trees will meet the requirement			
<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>(250*2-81)/35 = 12</math> trees</li> <li>• Perimeter areas within 20 feet of a building can be excluded from the calculation.</li> </ul>	12 trees	Yes	<b>Label the PKS next to the dumpster as WP and count it as a pond tree</b>
<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>950lf/35 = 27</math> trees</li> <li>• Perimeter areas within 20 feet of a building can be excluded from the calculation.</li> </ul> <p>Waiver would be supported for 350 lf (10 trees) along north side of west building.</p>	<u>11 trees</u> <ul style="list-style-type: none"> <li>• 7 north of east building labeled PKN</li> <li>• 4 greenbelt trees that can be double-counted as accessway perimeter trees</li> </ul>	No	<ol style="list-style-type: none"> <li>1. A landscape waiver would be supported for the lack of trees provided along the 350lf along the drive north of the building as there is not room for the 10 trees required there.</li> <li>2. <b>Please request a waiver for those trees</b></li> <li>3. <b>Please provide all of the 17 remaining required trees along the drives, including 2 east of the snow deposit area north of the new building, 3 around the T turn and one east of the hydrant at the south side of the entrance (the replacements trees may need to be moved away from the pavement edge to accommodate them)</b></li> <li>4. <b>Label the accessway trees as AW, not PKN.</b></li> </ol>
<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)	As the railroad passes between the site and the residential property	None	Yes	

Item	Required	Proposed	Meets Code	Comments
	to the east, no screening berm is required.			
<b>Adjacent to Public Rights-of-Way (Sec 5.5.3.B and LDM 1.b)</b>				
<b>Berm requirements (Zoning Sec 5.5.3.A.(5))</b>	As the parking does not abut the greenbelt, no berm is required.	None	Yes	
<b>Cross-Section of Berms (LDM 10)</b>				
Slope, height and width	NA	No		
Type of Ground Cover	NA	Sod	Yes	
<b>Walls (Zoning Sec 5.5.3.A &amp; LDM 10)</b>				
<b>Material, height and type of construction footing</b>	Freestanding walls should have brick or stone exterior with masonry or concrete interior	<ul style="list-style-type: none"> <li>Only retaining walls along the detention ponds are proposed</li> <li>TW/BW are provided on grading plan</li> </ul>	TBD	<u>Please provide sample wall information for all walls indicating their appearance and construction.</u>
<b>Walls greater than 4 ft. should be designed and sealed by an Engineer</b>		No details provided	No	<u>Please provide details for walls taller than 4 feet along with the building plans</u>
<b>ROW Landscape Screening Requirements (Zoning Sec 5.5.3.B.ii)</b>				
Greenbelt width	Not adjacent to Pkg: 25 ft	0-18 ft	No	As the building is not being enlarged into the greenbelt, and the new drive across the front of the site is a requirement of the fire marshal, the deficiency is accepted without a waiver.
Min. berm crest width	None	No	Yes	
Minimum berm height	None	No	Yes	
3' wall	(2)(3)(4)	None		
<b>Canopy deciduous or large evergreen trees</b>	<ul style="list-style-type: none"> <li>Not adj to Pkg: 1 tree per 60 ft</li> <li><math>(300-50)/60 = 4</math> trees</li> </ul>	<ul style="list-style-type: none"> <li>5 new trees</li> <li>2 existing trees</li> </ul>	Yes	
<b>Sub-canopy deciduous trees</b>	<ul style="list-style-type: none"> <li>Not adj to Pkg: 1 tree per 40 ft</li> <li><math>(300-50)/40 = 6</math> trees</li> </ul>	6 trees	Yes	The two arborvitae do not count as subcanopy trees.
<b>Self-Storage Rules (14-271-Part II Section 2.1)</b>	At least 2 of the required canopy or evergreen greenbelt trees shall be planted between the road right-of-way and the building.	3 deciduous canopy trees	Yes	

Item	Required	Proposed	Meets Code	Comments
<p><b>Canopy deciduous trees in area between sidewalk and curb</b></p>	<ul style="list-style-type: none"> <li>• Parking &amp; No Parking: 1 tree per 35 lf</li> <li>• <math>(300-125)/45 = 4</math> trees</li> </ul>	<p>No trees</p>	<p>Yes</p>	<ol style="list-style-type: none"> <li>1. Please extend the clear vision zones out to the road edge and provide calculation, measuring the deduction per the illustration in Section 5.5.3.B.ii Footnote 10.</li> <li>2. If existing utility lines (not currently shown) do not allow the trees to be planted due to a lack of 5 foot spacing between the tree trunks and underground utility lines, the trees should not be planted and no waiver is required.</li> </ol>
<p><b>Non-Residential Projects (Zoning Sec 5.5.3.F.iii)</b>                  Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM</p>				
<p><b>Screening of outdoor storage, loading/unloading</b>                  (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)</p>	<p>Loading/unloading areas shall be screened from view from Novi Road or the residences.</p>	<p>All of the vehicle unloading areas appear to be inside the buildings, or blocked from view from Novi Road by the buildings and from the residences by the buildings and the railroad tracks.</p>	<p>Yes</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>The transformer for both buildings is blocked by the existing building but no shrubs</p>	<p>No</p>	<p><b>Please add screening shrubs along the north side of the transformer</b></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>• At least 75% of the building perimeter should be landscaped</li> <li>• West Bldg: <math>(644-25-28-5)lf \times 8 ft = 4688</math> sf</li> </ul>	<ul style="list-style-type: none"> <li>• West bldg: 4723 sf</li> <li>• East bldg: 4604 sf</li> <li>• Detailed foundation planting plans are provided</li> <li>• New plantings are proposed in place of the</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>	



Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>East Bldg: (585-7-3-3) If x 8 ft = 4576 sf</li> </ul>	existing shrubs around the existing building.		
<i>Building Frontage Landscaping (Zoning Sec 5.5.3.D)</i>	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	<ul style="list-style-type: none"> <li>Existing: 143/155 = 92%</li> <li>New: 100% of building visible from Novi Road is landscaped</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	
<b>Detention/Retention Basin Requirements (Zoning Sec. 5.5.3.E &amp; LDM 3)</b>				
<b>Planting requirements (Zoning Sec 5.5.3.E &amp; LDM 3)</b>	<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>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> <li>West pond: 335lf/35 = 10 trees</li> <li>East pond: 273lf/35 (only east, south and west sides) = 8 trees</li> </ul> <p>Woodland replacement trees can be used to meet the tree requirement</p>	<ul style="list-style-type: none"> <li>Shrubs are proposed around the ponds but 3 shrub "masses" are not large enough.</li> <li>Trees:                             <ul style="list-style-type: none"> <li>West pond: 12 trees</li> <li>East pond: 12 trees</li> </ul> </li> <li>A native seed mix is proposed for the bottoms of both ponds.</li> </ul>	<ul style="list-style-type: none"> <li>Yes/No</li> <li>Yes</li> <li>Yes</li> </ul>	<ol style="list-style-type: none"> <li><b>Please use larger masses of shrubs than just 3, and provide 70% coverage around the ponds.</b></li> <li><u>If berries are desired on the winterberries, one male per 8 females (intermixed) should be specified.</u></li> <li><u>Extra trees can be removed from the plan if desired.</u></li> <li><u>Please show seed mix species list on Final Site Plans.</u></li> <li><u>Please add a note near the seed mix list stating: "The landscape contractor shall send proof of the seed mix to be used (photo of seed bag or copy of invoice indicating the seed mix purchased) to <a href="mailto:rmeader@cityofnovi.org">rmeader@cityofnovi.org</a> for approval prior to placement."</u></li> </ol>
<b>Phragmites and Japanese Knotweed Control (Zoning Sec 5.5.6.B)</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</li> </ul>	<ul style="list-style-type: none"> <li>Populations of Phragmites are indicated on Sheet C002</li> <li>Plans for removal are included in Environmental Engineer Report</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>	<p><u>Please add steps for the Phragmites' removal to the Site Plans (referring to the environmental engineer's report is not sufficient)</u></p>

Item	Required	Proposed	Meets Code	Comments
	from the site.			
<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	
<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 plan is included		<ol style="list-style-type: none"> <li>1. <u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival.</u></li> <li>2. <u>If xeriscaping is used, please provide information about plantings included.</u></li> <li>3. <u>An irrigation system shall meet the requirements listed at the bottom of this chart.</u></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, not including woodland replacements or seed mix species, shall be native to Michigan</li> <li>• Tree diversity shall follow guidelines of</li> </ul>	On plant list	Yes	
Root type		Yes	Yes	
Botanical and common names (LDM 4 & 11)		<ul style="list-style-type: none"> <li>• 11 of 23 species used (48%) are native to Michigan</li> <li>• Tree diversity is</li> </ul>	<ul style="list-style-type: none"> <li>• No</li> <li>• Yes</li> </ul>	1. <b>Please increase the number of native species used so at least 50% of the species used are</b>

Item	Required	Proposed	Meets Code	Comments
	LDM Section 4	satisfactory ( <i>Thuja occidentalis</i> is a shrub, not a tree)		<p><b>native.</b> Check <a href="https://lsa-miflora-p.lsa.umich.edu/">https://lsa-miflora-p.lsa.umich.edu/</a> to see if a plant is considered native to Michigan or ask me via email.</p> <p><b>2.</b> Beeches are currently having some maladies in Michigan, so <b>I would recommend using Swamp White Oak (<i>Quercus bicolor</i>) – also a native - in place of them</b></p> <p><b>3.</b> <i>Acer spicatum</i> is a nice native tree, but is not readily available in nurseries here. <b>I'd recommend replacing them with <i>Amelanchier laevis</i> or <i>Amelanchier xgrandiflora</i> 'Autumn Brilliance, both of which are considered native.</b></p>
Type and amount of lawn		Sod	Yes	Please add areas of each in cost table.
Cost estimate (LDM 10)	For all new plantings, mulch and sod as listed on the plan	No		<p>Please add to final site plan. The standard costs to use are:</p> <ul style="list-style-type: none"> <li>• <u>Canopy trees: \$400 ea.</u></li> <li>• <u>Evergreen trees: \$375 ea.</u></li> <li>• <u>Subcanopy trees: \$375 ea.</u></li> <li>• <u>Shrubs: \$50 ea.</u></li> <li>• <u>Grasses/perennials: \$15 ea.</u></li> <li>• <u>Seed: \$3/syd</u></li> <li>• <u>Sod: \$6/syd</u></li> <li>• <u>Mulch: \$35/cyd</u></li> </ul>
<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	
Multi-stem Tree		Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
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)	Sheet LS-0	Yes	<b>Critical root zone can be shown as 1 foot outside of the dripline, but it's fine as you have it.</b>
<b>Other Plant Material Requirements (LDM 11)</b>				
<b>General Conditions</b>	Plant materials shall not be planted within 4 ft. of property line	Sheet LS-1	Yes	
<b>Plant Materials &amp; Existing Plant Material (LDM 11)</b>	Clearly show trees to be removed and trees to be saved.	Sheet LS-0	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>	23 credits noted on table	No	<b>1. No credits are allowed for the two evergreen trees saved as credits are only earned with preserved canopy trees</b> <b>2. No credits are allowed for the trees preserved within the wetland or woodland</b>
<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>	Included in plant list	Yes	
<b>Plant size credit (LDM 11)</b>	NA	No		
<b>Prohibited Plants (LDM 11.b)</b>	No plants on City Invasive Species List	No invasive plants are proposed	Yes	
<b>Recommended trees for planting under overhead utilities (LDM 11)</b>	Label the distance from the overhead utilities			
<b>Collected or Transplanted trees (LDM 11)</b>		None		
<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</li> </ul>	Yes	Yes	

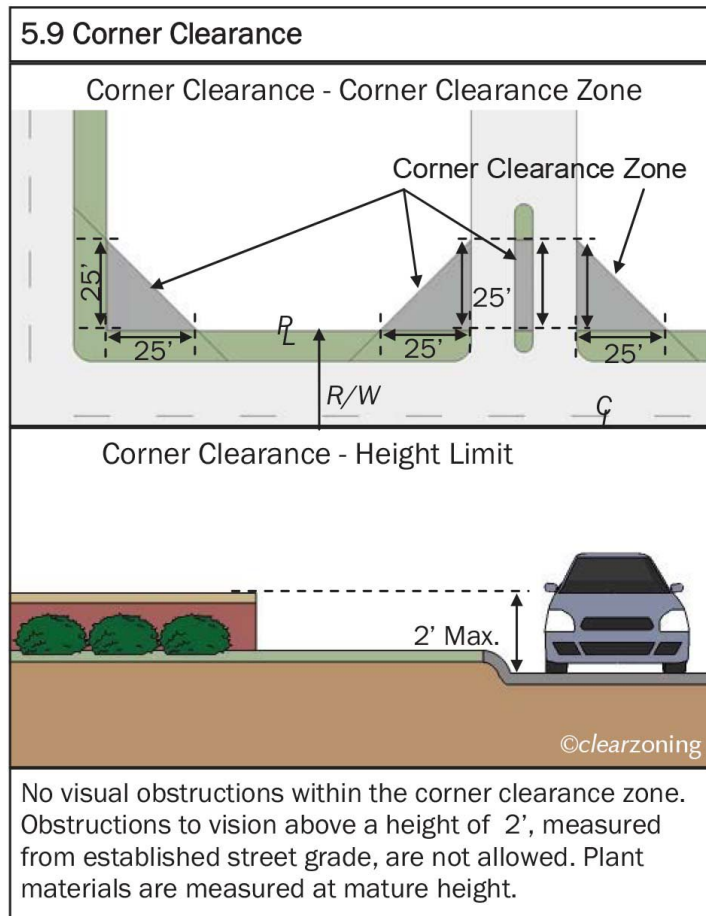
Item	Required	Proposed	Meets Code	Comments
	hardwood bark mulch. Include in cost estimate.			

**NOTES:**

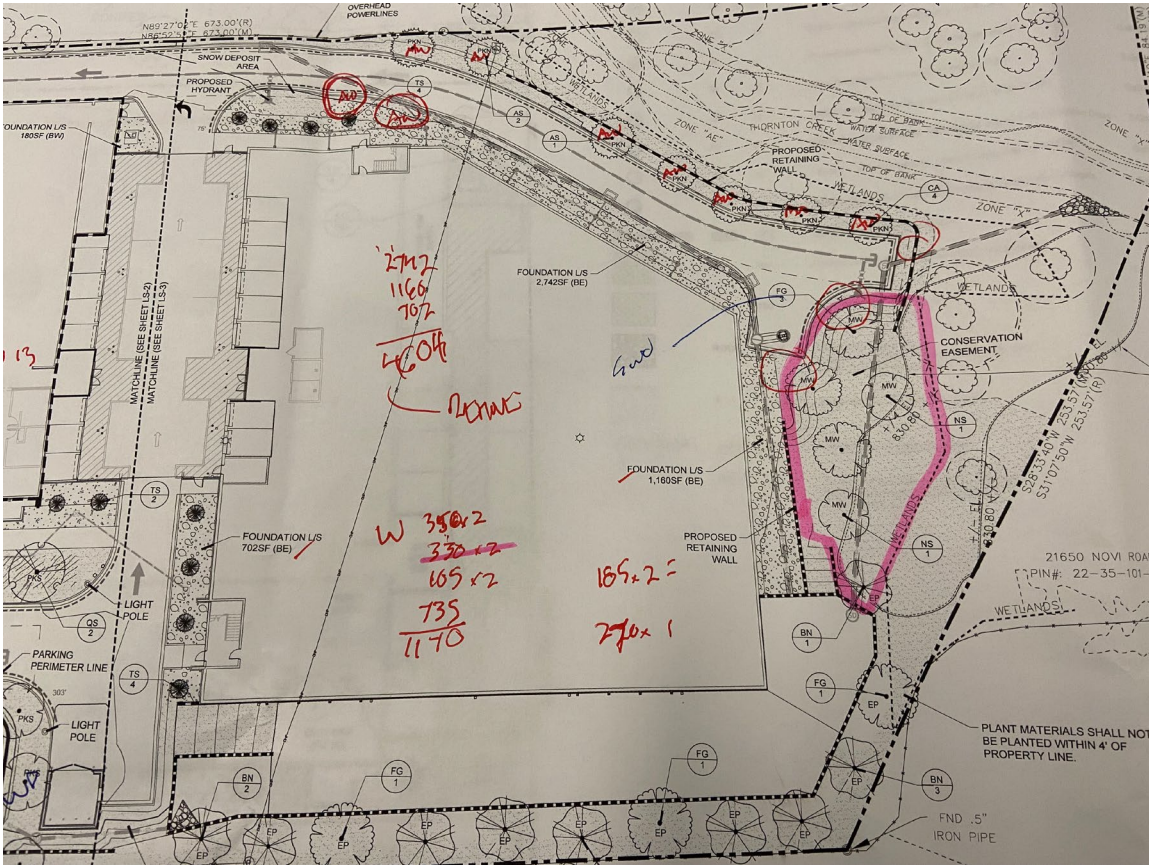
1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
2. The section of the applicable ordinance or standard is indicated in parenthesis. For the landscape requirements, please see the Zoning Ordinance landscape section 5.5 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.







**WOODLAND REVIEW**

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**Corporate Headquarters**  
295 South Water Street, Suite 300  
Kent, OH 44240  
800-828-8312

**Local Office**  
3381 Lapeer Rd. West  
Auburn Hills, MI 48326

**To:** Christian Carroll, City of Novi Planner  
Community Development Department, City of Novi

**From:** Kerry Gray, Principal Consultant  
Davey Resource Group

**CC:** Barb McBeth, City of Novi, City Planner  
Lindsay Bell, City of Novi Senior Planner  
Rick Meader, City of Novi Landscape Architect  
Ben Peacock, City of Novi Planner  
Diana Shanahan, City of Novi Planning Assistant  
Douglas Repen, Mannik and Smith Group

**Date:** April 24, 2023

**RE:** Extra Space Self Storage (FKA: GHK Self Storage)  
Woodland Review #2 – JSP22-38

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Davey Resource Group, Inc. (DRG) has conducted a review of the revised Preliminary Site Plan for the proposed **Extra Space Self Storage** facility (FKA GHK Self Storage) located at 21700 Novi Road (Parcel No. 22-35-101-016). The plan set, prepared by Blue Water Civil Design (plan revision: 03/31/2023), was reviewed for conformance with the City of Novi’s Woodland Protection Ordinance, Chapter 37, and comments from Woodland Review #1.

**Recommendation:** DRG **recommends contingent approval** of the Extra Space Self Storage Facility (FKA GHK Self Storage) Preliminary Plan – based upon addressing the woodland review comments.

The following **Woodland Regulations** apply to this site:

Woodland Regulation	Required
Woodland Permit (Chapter 37, Section 37-26)	YES
Tree Replacement (Chapter 37, Section 37-8) & Financial Guarantee (Chapter 26.5-5)	YES
Tree Protection (Fence) (Chapter 37, Section 37-9) & Financial Guarantee (Chapter 26.5-5)	YES
Woodland Conservation Easement (Chapter 37-30 (e))	YES

**Woodland Review Comments**

1. **A Woodland Use Permit is required** to perform construction on any site containing regulated woodlands. The Woodland Use Permit for this project requires Planning Commission approval.

To determine woodland fence inspection fees - the applicant shall **provide the cost (labor and supplies) for installation (including the initial location staking) and removal of tree protection fencing.**

2. **Woodland Replacement Credits (Sheet LS-0).** The City of Novi Landscape Design Manual **allows non-regulated canopy trees that will be preserved** to be used to fulfill woodland replacement credits if they are on the site and not prohibited and/or invasive species.

The “Tree Removal/Protection Chart” on Sheet LS-0 **incorrectly shows regulated woodland trees** being saved and counted as woodland replacement credits. The following preserved regulated woodland trees **cannot be used towards meeting woodland replacement requirements:**

- Tree #357 10” slippery elm
- Tree #358 8” cottonwood
- Tree #359 23” cottonwood
- Tree #364 25” black walnuts
- Tree #370 10” boxelder
- Tree #371 21” black walnut
- Tree #372 9” boxelder
- Tree #373 14” boxelder

In addition, the following preserved non-Michigan native evergreen trees cannot be used towards meeting woodland replacement requirements because they are not deciduous canopy trees.

- Tree #326 12” blue spruce
- Tree #327 17” blue spruce

3. **Tree Removals and Replacements (Sheets LS-0/LS-1).** The plan proposes the removal of three (3) regulated woodland trees and impacts to the critical root zone one (1) regulated woodland tree which requires 8 woodland replacement credits (see chart below).

- Tree #364 25” black walnut – *critical root zone impacts*
- Tree #365 12” boxelder – *removal*
- Tree #366 9” black walnut – *removal*
- Tree #367 15” black walnut – *removal*

**Revise plans to fix the chart on sheet LS-0 to reflect the information in Comments 2 and 3.**

Tree Size (DBH)	Number of Trees	Ratio Replacement/ Removed Tree	Total Replacements Required
8-11”	1	1	1
>11-20”	2	2	4
>20-29”	1	3	3
>29+”	0	4	0
Multi-Stem		Add Stems/8	
Woodland Replacement Credits (Non-Regulated Trees to be Preserved)	0	0	0
<b>Total Replacement Credits Required</b>			<b>8</b>



4. **Woodland Replacements (Sheet LS-1).** The site is required to mitigate the removal/disturbance of the 4 regulated woodland trees through the preservation of two non-regulated trees and with **eight (8) woodland replacement credits**. Woodland replacement credits can be provided by:
  - a. Planting the woodland tree replacement credits on-site.
  - b. Payment to the City of Novi Tree Fund at a rate of \$400/woodland replacement credit.
  - c. Combination of on-site tree planting and payment into the City of Novi Tree Fund (\$400/woodland replacement credit).

**Revise plans based on Comments #2 and 3 and the required woodland replacement credits.**

5. **Critical Root Zone (Sheet LS-0).** The tree protection fence diagrams on sheet LS-0 state the wrong information regarding measurement of the critical root zone. **Revise drawings to use the definition from Chapter 37.**

***Critical root zone (CRZ) means a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot.***

6. **Financial Guarantees (Repeated comments from Woodland Review #1)**
  - a. **A woodland fence guarantee of \$6,000 (\$5,000 x 120%) is required** per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.
  - b. **Woodland Replacement Financial Guarantee of \$3,200 (8 required woodland replacement credits x \$400 per woodland replacement credit)** is required as part of the Woodland Use Permit fees to ensure planting of the on-site Woodland Replacement tree credits.

Based on inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement Financial Guarantee shall be returned to the Applicant. The Applicant is responsible for requesting this inspection. Following acceptance of the planted woodland replacement trees, a 2-year performance bond must be paid to ensure the continued health and survival of the replacement trees (comment 6).

- c. The applicant will be required to pay into the City of Novi Tree fund at a rate of \$400/credit for any Woodland Replacement tree credits that cannot be planted on site or if any protected woodland or non-regulated trees providing a woodland replacement credit are removed or damaged.
- d. **The applicant shall guarantee trees for two (2) growing seasons after installation and the City's acceptance**, per The City's Performance Guarantees Ordinance. **A two-year maintenance bond in the amount of \$1,000**, twenty-five (25) percent of the value of the trees but in no case less than one thousand dollars (\$1,000.00), shall be required to ensure the continued health of the trees following acceptance (Chapter 26.5, Section 26.5-37).

Based on a successful inspection 2 years after installation of the on-site Woodland Replacement trees, the Woodland Replacement Performance Guarantee shall be returned to the Applicant. The Applicant is responsible for requesting this inspection.

7. **Woodland Guarantee Inspection.** If the woodland replacements, street trees or landscaping guarantee period is scheduled to end during the period of time when inspections are not conducted

(November 15th – April 15th) the Applicant is responsible for contacting the Bond Coordinator and Woodland/Landscape Inspector in late summer/early fall prior to the 2 year expiration to schedule an inspection. **The Applicant is responsible for walking the entire site to confirm that all of the material has survived and is healthy. If any material is missing, dead or dying, replacements should be made prior to requesting the inspection.** Once this occurs the Applicant should contact the Bond Coordinator to schedule the inspection (Angie Sosnowski at [asosnowski@cityofnovi.org](mailto:asosnowski@cityofnovi.org) / 248-347-0441) and complete the inspection request form. If additional inspections are needed, then additional inspection fees will be required to be paid by the applicant. Based upon a successful inspection for the 2 year warranty the Landscape/Woodland/Street trees financial guarantee will be returned to the Applicant

8. **Conservation Easement.** The Applicant may be required to provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees. The applicant shall demonstrate that all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. Any associated easement boundaries shall be indicated on the Plan.

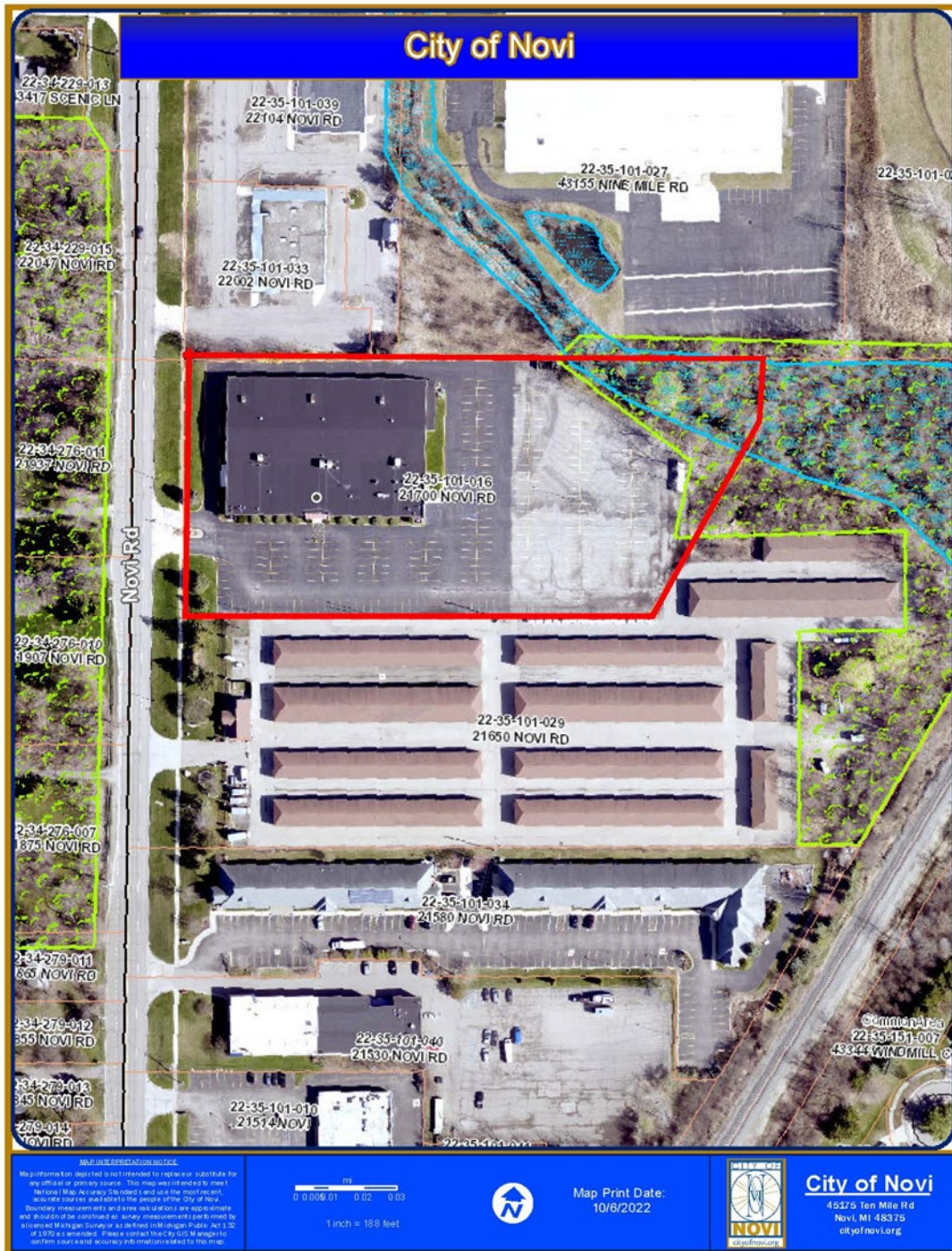


Figure 1. Proposed site for Extra Space Self Storage (FKA: GHK Self Storage)  
(outlined in red)

City of Novi Regulated Woodland Map  
(Green hatched areas = City-regulated woodlands;  
Blue hatched areas= City regulated wetlands)

## WETLAND REVIEW

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April 26, 2023

Christian Carroll  
 City Planner  
 Department of Community Development  
 City of Novi  
 45175 W. Ten Mile Road  
 Novi, Michigan 48375

RE: GHK Self-Storage; JSP22-48  
 Wetland Review of Revised Preliminary Site Plan  
 MSG Project No. N1030138

Dear Mr. Carroll:

The Mannik & Smith Group, Inc. (MSG) reviewed the plan set titled *Site Development Plans for: Self Storage Facility* prepared by Bluewater Civil Design, LLC dated March 31, 2023 (rPSP). The project site is located at 21700 Novi Road, east of Novi Road and south of Nine Mile Road, parcel 50-22-35-101-016, in Section 35 (Site). MSG also reviewed the *Wetland Assessment* report prepared by SME dated November 29, 2022, provided with the rPSP (Wetland Report). The rPSP depicts repurposing of the existing Site building and construction of a new self-storage building and two detention ponds in the currently paved parking areas of the Site.

**Published Data**

Upon review of published resources, the portion of the Site included in the Project appears to contain:

- City-regulated wetlands, as identified on the City of Novi Wetlands interactive map website (Figure 1).
- Wetlands that are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Refer to the Permits and Regulatory Status section below.
- Wetlands as identified on National Wetland Inventory (NWI) and Michigan Resource Inventory System (MIRIS) maps, as identified on the EGLE Wetlands Viewer interactive map website (Figure 2). NWI and MIRIS wetlands are identified through interpretation of topographic data and aerial photographs by the associated governmental bodies.
- Hydric (wetland) soil as mapped by the U.S. Department of Agriculture, Natural Resource Conservation Service, as identified on the EGLE Wetlands Viewer interactive map website (Figure 2).

**MSG Wetland Boundary Verification**

The rPSP and the Wetland Report depict the location of two wetlands at the Site as summarized below.

Wetland	On-site Wetland Area (Acre)	Wetland Impact Area (Acre)	Wetland Impact Fill Volume (Cubic Yards)	Wetland Buffer Area (Acre)	Wetland Buffer Impact Area (Acre)	Wetland Buffer Impact Fill Volume (Cubic Yards)
A	0.092	Not specified*,**	Not specified*	Not specified*	Not specified*	363 net fill
B	0.369	Not specified*,**	Not specified*	Not specified*	Not specified*	Not specified*
<b>Total</b>	<b>0.461</b>	<b>Not specified*,**</b>	<b>Not specified*</b>	<b>Not specified*</b>	<b>Not specified*</b>	<b>Not specified*</b>

\* This information required for final site plan approval

\*\* See Comment 1 below



**Permits and Regulatory Status**

The City of Novi Code of Ordinances, Chapter 12, Article V defines an essential wetland as meeting one or more of the criteria listed in subsections 12-174(b)(1) through (10). It is MSG's opinion Wetlands A and B provide the functional characteristics of storm water storage capacity and wildlife habitat, and accordingly Wetlands A and B meet the criteria for an essential, City-regulated wetland. It appears pavement is to be permanently removed from a portion of Wetland A; see the Comments section below for applicable requirements.

In addition to wetlands, the City of Novi regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states: "There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses". The established wetland and watercourse buffers/setback limit is 25 feet horizontal feet, regardless of grade change. Encroachment on the wetland buffer will require authorization from the City of Novi.

Mitigation is required per Section 12-176 of the Novi Code of Ordinances when an activity results in 0.25-acre or greater of impairment or destruction of wetland areas that are determined to be essential wetland area, two acres in size or greater, or contiguous to a lake, pond, river, or stream. The Novi Code of Ordinances, Section 12-176 – Mitigation, states "Where an activity results in the impairment or destruction of wetland areas of less than one-quarter (¼) acre that are determined to be essential under subsection 12-174(b), are two (2) acres in size or greater or are contiguous to a lake, pond, river or stream, additional planting or other environmental enhancement shall be required onsite within the wetlands or wetland and watercourse setback where the same can be done within the wetland and without disturbing further areas of the site." The rPSP does not depict encroachment into the Site wetlands, so neither mitigation nor an environmental enhancement plan appears to be required.

EGLE typically regulates wetlands that are located within 500 feet of an inland lake, pond, stream, or river, and/or isolated wetlands of an area of 5 acres or more. Wetlands A and B are likely regulated by EGLE based on their size and/or proximity to Thornton Creek. However, EGLE is the final authority of the location and regulatory status of wetlands in Michigan. MSG recommends the client request a pre-application meeting with EGLE to determine the State jurisdictional status and mitigation requirements if work affecting the potentially State-regulated wetlands is proposed.

Based on the available information, the following wetland related items appear to be required for this project:

<b>Item</b>	<b>Required/Not Required/Not Applicable</b>
Wetland Permit (specify Non-Minor or Minor)	Required, likely Minor Use; see Comment 1 below
Wetland Buffer Authorization	Required; see Comment 2 below
Wetland Mitigation	Not required
Environmental Enhancement Plan	Not required
EGLE Wetland Permit	Not required
Wetland Conservation Easement	Not applicable

**Comments**

- 1. The rPSP appears to depict permanent removal of pavement from a portion of Wetland A (Photo 4). The size of this area must be quantified on the Site plans and the vegetative cover to be used to replace the pavement must be identified in Site plans. In addition, a storm water culvert is proposed to be installed through the wetlands with a discharge into Thornton Creek. The temporary and/or permanent impact area(s) affected by the installation of the proposed storm water outfall into Thornton Creek must be similarly quantified.** Because the ground cover will be affected, areas where silt fence is to be installed are to be included in wetland impact area calculations.

- a. If affected wetland areas are revegetated with native wetland plants and/or native wetland seed mix, a City permit for temporary impact will be required.
  - b. If affected wetland areas are to be revegetated with turf grass and maintained as lawn, and/or if fill material is to be added to wetland areas, a City permit for permanent impact will be required, and an EGLE permit may be required. **Planting turf grass or placement of sod in a wetland or buffer area is considered permanent impact.**
2. The wetland buffer cut/fill volumes are noted on Sheet C102 of the rPSP. The **areas** of permanent and/or temporary buffer impact also must be depicted and quantified on Site plans. Because the ground cover will be affected, areas where silt fence is to be installed are to be included in wetland buffer impact area calculations. This information is required for issuance of a Wetland Buffer Authorization letter.
    - a. Wetland buffer areas where existing pavement is to be permanently removed and the replacement cover will consist of native plants and/or native seed mix are to be considered temporarily impacted.
    - b. Wetland buffer areas that are to include structures (e.g. pavement, retaining walls), landscaped, or maintained as lawn are to be considered permanently impacted.
  3. City of Novi requires the boundary lines of any watercourses or wetlands on the Site to be clearly flagged or staked and such flagging/staking shall remain in place throughout the conduct of permit activity.
  4. As detailed in SME's Wetland Report, Wetlands A and B include non-native plant species (e.g. reed canary grass, Phragmites, buckthorn). MSG recommends the applicant incorporate wetland replacement native plantings, including trees and shrubs, in the project plans as well as removal of non-native invasive species to enhance the aesthetics and natural habitat benefits of the wetland areas. **The proposed *Poa pratensis* (Kentucky Bluegrass) sod is not considered a native wetland plant.**

**MSG conditionally approves the rPSP for Wetlands, contingent on the applicant satisfactorily addressing the comments above.**

Please contact the undersigned if you have any questions regarding the matters addressed in this letter.

Sincerely,

**The Mannik & Smith Group, Inc.**

  
Keegan Mackin  
Environmental Scientist

  
Douglas Repen, CDT  
Project Manager  
Certified Storm Water Management Operator

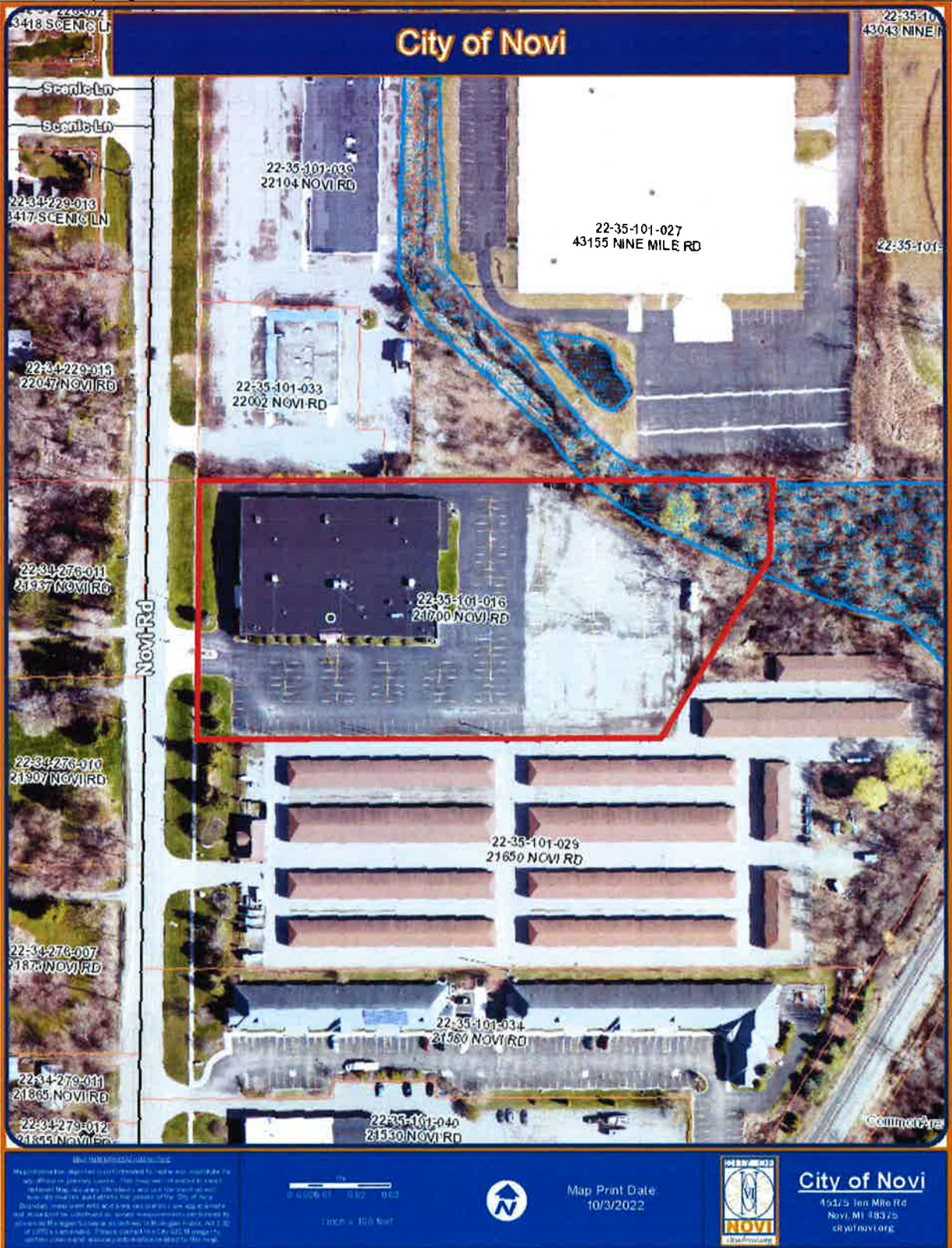
CC: Barbara McBeth, City of Novi Planner  
Lindsay Bell, City of Novi Planner  
Ben Peacock, City of Novi Planner  
Diana Shanahan, City of Novi Planning Assistant  
Sarah Marchioni, City of Novi Project Coordinator  
Rick Meader, City of Novi Landscape Architect

## FIGURES



Figure 1

City of Novi Natural Resources Map. Approximate Site boundary is shown in red. Regulated Wetland areas are shown in blue.



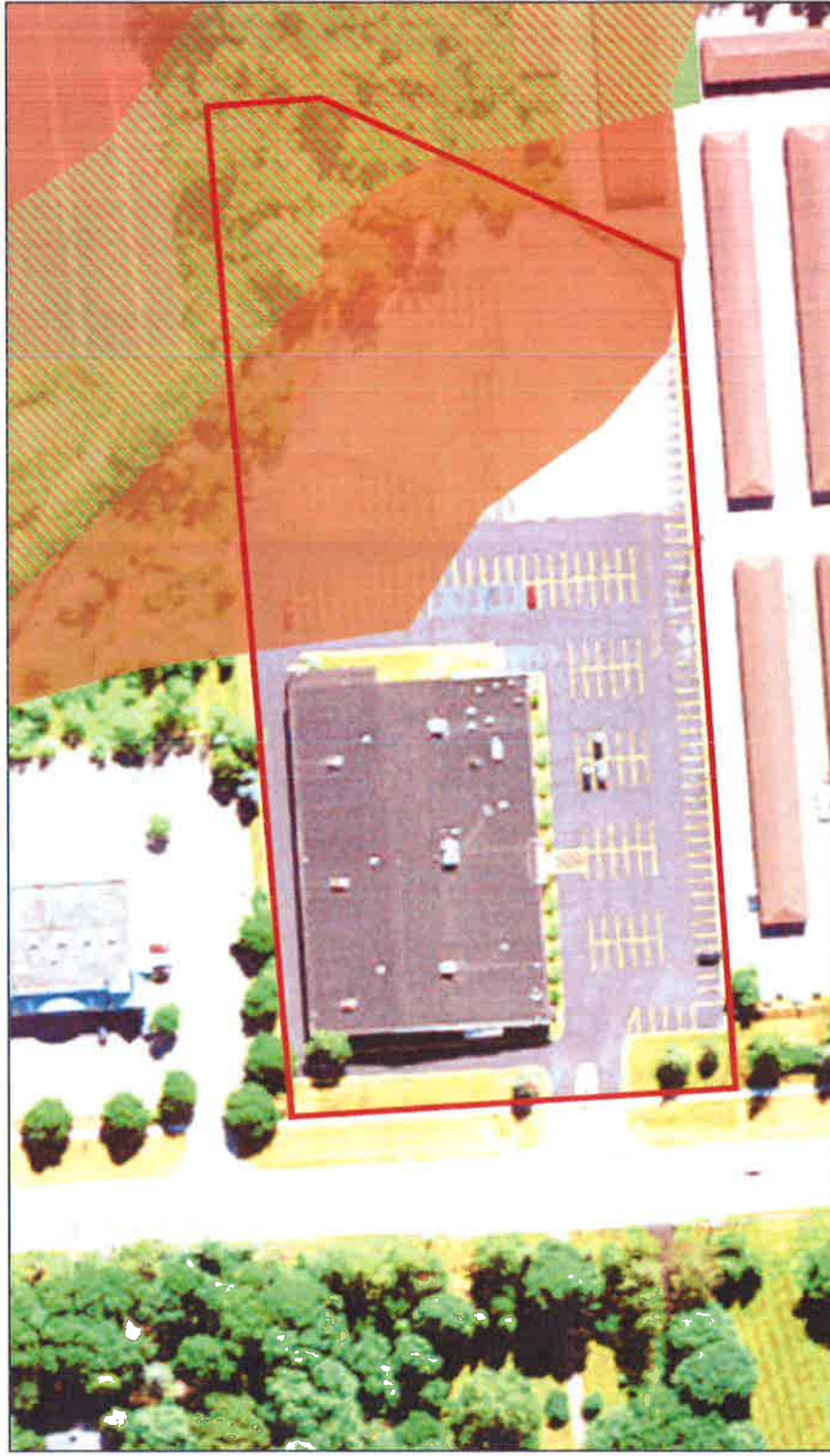
2365 Haggerty Road South, Canton, Michigan 48188  
Tel: 734.397.3100 Fax: 734.397.3131

**GHK Self-Storage; JSP22-48**  
**Wetland Review of Revised Preliminary Site Plan**  
MSG Project No. N1030138



**Figure 2** EGLE Wetlands Viewer Map. Approximate Site boundary is shown in red.

Wetlands Map Viewer



2365 Haggerty Road South, Canton, Michigan 48188  
Tel: 734.397.3100 Fax: 734.397.3131

GHK Self-Storage; JSP22-48  
Wetland Review of Revised Preliminary Site Plan  
MSG Project No. N1030138



## SITE PHOTOGRAPHS





Photo 1: View of the site, facing southwest. January 4, 2023



Photo 2: View of paved area adjoining wetlands, facing southeast. January 4, 2023



Photo 3: Typical view of wetland delineation flagging at the Site. January 4, 2023



Photo 4: View of portion of Wetland A extending onto paved area, facing north. January 4, 2023





Photo 5: View of emergent wetland vegetation in Wetland A, facing east. January 4, 2023



Photo 6: View of scrub-shrub wetland vegetation in Wetland A, facing east. January 4, 2023





Photo 7: View of riverine wetland (Thornton Creek) and forested wetland vegetation in Wetland B area, facing northwest. January 4, 2023



Photo 8: View of Thornton Creek adjacent to paved area, facing northwest. January 4, 2023

## TRAFFIC REVIEW

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**Project name:**

JSP22-48 – Extra Space Self Storage (fka GHK Self Storage) Revised Preliminary Site Plan Traffic Review

**To:**

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

**From:**

AECOM

**Date:**

May 2, 2023

**CC:**

Lindsay Bell, Christian Carroll, Humna Anjum, Ben Peacock, Diana Shanahan

# Memo

**Subject:** JSP22-48 – Extra Space Self Storage (fka GHK Self Storage) Revised Preliminary Site Plan Traffic Review

The revised preliminary site plan was reviewed to the level of detail provided and AECOM recommends **approval with conditions** for the applicant to move forward as long as the comments/potential variances below are addressed to the satisfaction of the City.

## GENERAL COMMENTS

1. The applicant, GHK Development, Inc., is proposing the addition of a 100,200 SF 3 story self storage building to the existing 36,571 SF building to be remodeled into self storage.
2. The development is located on the east side of Novi Road, south of 9 Mile Road. Novi Road is under the jurisdiction of Oakland County.
3. The site is zoned I-1 (Light Industrial).
4. The following traffic related waivers or variances will be required:
  - a. Location of trash enclosure.
5. Conditions for approval include the following:
  - a. Applicant requests and is granted a variance for location of trash enclosure.
  - b. Dimensions of garage door provided to show 20' access way.
  - c. 6' clear path required from bike parking to ramp.
  - d. The height of the Bike Rack is 36".

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation based on the ITE Trip Generation Manual, 11<sup>th</sup> Edition, as follows.

ITE Code: 151 – Mini-Warehouse  
Development-specific Quantity: 136,771 SF  
Zoning Change: I-1

Trip Generation Summary	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
<b>AM Peak-Hour Trips</b>	12	7	100	No
<b>PM Peak-Hour Trips</b>	21	11	100	No
<b>Daily (One-Directional) Trips</b>	198	N/A	750	No

- 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
-	N/A

## 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.3</a>	Not indicated	Met	No changes proposed to existing access.
2	Driveway Width   O <a href="#">Figure IX.3</a>	Not indicated	Met	No changes proposed to existing access.
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	A second access point was added for emergency access.
5	Driveway sight distance   O <a href="#">Figure VIII-E</a>	Not indicated	Met	No changes proposed to existing access.
6	Driveway spacing			
6a	Same-side   O <a href="#">11.216.d.1.d</a>	Not indicated	Met	No changes proposed to existing access.
6b	Opposite side   O <a href="#">11.216.d.1.e</a>	Not indicated	Met	No changes proposed to existing access.
7	External coordination (Road agency)	Not indicated	Met	No changes proposed to existing access.
8	External Sidewalk   <a href="#">Master Plan &amp; EDM</a>	Not indicated	Met	No changes proposed to existing access.
9	Sidewalk Ramps   <a href="#">EDM 7.4 &amp; R-28-J</a>	Not indicated	Met	No changes proposed to existing access.
10	Any Other Comments:			



INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone   <a href="#">ZO 5.4</a>	None indicated	Met	None required for I districts. Consider for land use.
12	Trash receptacle   <a href="#">ZO 5.4.4</a>	Located in side yard	<b>Not Met</b>	Trash receptacle is to be located in the rear yard. <b>A waiver would be required for current proposed location.</b>
13	Emergency Vehicle Access	No turning movements provided	Inconclusive	Provide emergency vehicle turning movements in future submittals.
14	Maneuvering Lane   <a href="#">ZO 5.3.2</a>	24' and 20' lanes dimensioned. Garage doors not dimensioned.	<b>Partially Met</b>	<b>Indicate dimensions of garage doors.</b>
15	End islands   <a href="#">ZO 5.3.12</a>			
15a	Adjacent to a travel way	None	-	-
15b	Internal to parking bays	None	-	-
16	Parking spaces   <a href="#">ZO 5.2.12</a>			
17	Adjacent parking spaces   <a href="#">ZO 5.5.3.C.ii.i</a>	<15 spaces with no island	Met	
18	Parking space length   <a href="#">ZO 5.3.2</a>	18' for perpendicular spaces, 23' for parallel spaces	Met	Perpendicular spaces with 6" curb require 19' spaces.
19	Parking space Width   <a href="#">ZO 5.3.2</a>	9' for parallel and perpendicular	Met	Parallel spaces could be reduced to 8' wide.
20	Parking space front curb height   <a href="#">ZO 5.3.2</a>	4"	Inconclusive	Spaces are 18' with a 4" curb. Applicant could shorten spaces to 17'.
21	Accessible parking – number   <a href="#">ADA</a>	2	Met	Only 1 ADA space is required for 16 total spaces.
22	Accessible parking – size   <a href="#">ADA</a>	9' space with 8' aisle	Met	Spaces currently 9' wide, may be reduced to 8' with an 8' aisle for van accessible to increase green area.
23	Number of Van-accessible space   <a href="#">ADA</a>	2	Met	Indicated
24	Bicycle parking			
24a	Requirement   <a href="#">ZO 5.16.1</a>	4 spaces/2 racks indicated	Met	2 spaces required
24b	Location   <a href="#">ZO 5.16.1</a>	Adjacent to door	Met	

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
24c	Clear path from Street   <a href="#">ZO 5.16.1</a>	7' sidewalk with 2' overhang	<b>Not Met</b>	6' clear path required. 7' sidewalk with 4" curb is assumed to have 2' clear overhang, resulting in 5' clear path. Applicant could widen the sidewalk to 8' from bike parking to ramp.
24d	Height of rack   <a href="#">ZO 5.16.5.B</a>	None indicated	<b>Not Met</b>	<b>36" in height required. Indicate height in future submittals.</b>
24e	Other (Covered / Layout)   <a href="#">ZO 5.16.1</a>	Layout included	Met	
25	Sidewalk – min 5' wide   <a href="#">Master Plan</a>	5' and 7'	Met	
26	Sidewalk ramps   <a href="#">EDM 7.4 &amp; R-28-J</a>	Indicated	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>	20' radius	<b>Inconclusive</b>	Indicate lengths of stubs in future submittals. Radius meets the parameters. <b>Provide dimensions as per Figure 5.10.1.B.II in the Zoning Ordinance.</b>
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes   <a href="#">MMUTCD</a>	Included	Met	
33	Signing table: quantities and sizes	Included	Met	
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post   <a href="#">MMUTCD</a>	Included	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>	Included	Met	
36	Sign bottom height of 7' from final grade   <a href="#">MMUTCD</a>	Included	Met	
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>	Included	Met	
38	FHWA Standard Alphabet series used for all sign language   <a href="#">MMUTCD</a>	Included	Met	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity   <a href="#">MMUTCD</a>	Included	Met	

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
40	Parking space striping notes	Not included	<b>Not Met</b>	<b>Include in future submittals. Include note about abutting blue and white striping where a normal space abuts an ADA space.</b>
41	The international symbol for accessibility pavement markings   ADA	Included	Met	
42	Crosswalk pavement marking detail	Included	Partially Met	Include color of marking and angle of hatching in detail in future submittals.
43	Any Other Comments:	<b>Applicant is indicating RCOC will install Stop sign at driveway, verify responsibility for installation. Update pavement markings detail to specify "White" paint, as per MMUTCD Section 3B.20. Add details for pavement marking island at entrance.</b>		

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**



Patricia Thompson, PE  
Traffic Engineer



Paula K. Johnson, PE  
Senior Transportation Engineer



Saumil Shah, PMP  
Project Manager

## FAÇADE REVIEW

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January 23, 2023

*Façade Review Status Summary:* **Approved, Section 9 Waiver Recommended.**

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

Re: **FACADE ORDINANCE – GHK Self Storage, JSP22-48**  
 Façade Region: 1, Zoning District: I-1

Dear Ms. McBeth;

The following is the Façade Review for Preliminary Site Plan Approval of the above referenced project based on the drawings prepared by Jared Ducote Architect, dated 10/31/22. The drawings have been revised based on our prior review comments. The percentages of materials for each façade are shown on the table below. The maximum and minimum percentages required by the Ordinance Section 5.15 are shown in the right-hand column. A sample board as required by Section 5.15.4.D of the Ordinance was not provided. This project consists of the adaptive reuse of a 1-story bowling alley with a 3-story addition. The structure is treated as a single building with respect to the Façade Ordinance. The building is located within 500 feet of a major thoroughfare (Novi Rd.) and is therefore considered Façade Region 1. The requirements for Façade Region 3 are also provided below, for comparison purposes.

<b>Revised Drawings Dated 10/31/22</b>	<b>West (Front)</b>	<b>South</b>	<b>East</b>	<b>North</b>	<b>Ordinance Maximum Region 1</b>	<b>Ordinance Maximum Region 3</b>
Brick	61%	62%	0%	12%	100% (30% MIN)	100%
EIFS	<b>35%</b>	<b>35%</b>	0%	4%	25%	75%
Standing Seam Roof	2%	2%	0%	0%	25%	75%
Flat Metal (Aluminum Accent)	1%	0%	0%	0%	50%	75%
Painted CMU (Existing or New)	0%	0%	<b>100%</b>	<b>84%</b>	0%	0%
RTU Screen	1%	1%	0%	<b>0%</b>	50%	50%

<b>Original Drawings Dated 9/28/22 (For Reference)</b>	<b>West (Front)</b>	<b>South</b>	<b>East</b>	<b>North</b>	<b>Ordinance Maximum Region 1</b>	<b>Ordinance Maximum Region 3</b>
Brick	30%	25%	0%	0%	100% (30% MIN)	100%
EIFS	<b>44%</b>	<b>40%</b>	<b>62%</b>	<b>32%</b>	25%	75%
Split Faced CMU	<b>20%</b>	<b>22%</b>	<b>26%</b>	<b>19%</b>	10%	75%
Ground Faced CMU	3%	4%	4%	7%	10%	25%
Standing Seam Roof	2%	3%	0%	0%	25%	75%
Flat Metal (Aluminum Accent)	1%	6%	4%	3%	50%	75%
Painted CMU (Existing)	0%	0%	0%	<b>37%</b>	0%	0%
Exposed Concrete Foundation	0%	0%	<b>4%</b>	<b>2%</b>	0%	0%

As shown above the revised design results in a significantly higher degree of compliance to the Façade Ordinance with respect to the percentages of materials. Additionally, the combination of materials and colors provides improved integration of the proposed addition and the existing structure. The overage of EIFS on the west (front) façade is set back approximately 300' from the main façade and will not be significantly visible from Novi Road. The overage of CMU on the north and east facades represents a continuation of existing materials and will not be significantly visible from Novi Road.

**Recommendation** - For the reasons stated above we recommend that the design is consistent with the intent and purpose of the Façade Ordinance and that a Section 9 Waiver be granted for the overage EIFS on the west façade and the overage of CMU on the north and east facades. The applicant should provide a sample board prior to the Planning Commission meeting.

**Notes to the Applicant:**

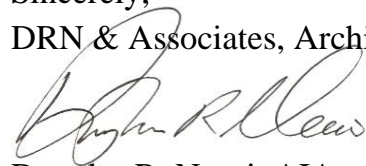
1. It should be noted that all roof top equipment (RTU's) and ground mounted HVAC units must be screened from view from all vantage points both on-site and off-site using materials in compliance with the Façade Ordinance.

2. Inspections – The Façade Ordinance requires inspection(s) for all projects. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

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

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

Sincerely,  
DRN & Associates, Architects PC



Douglas R. Necci, AIA

## FIRE REVIEW

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April 17, 2023

TO: Barbara McBeth - City Planner  
Lindsay Bell - Plan Review Center  
Christian Carroll - 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

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

cityofnovi.org

RE: GHK Self-Storage

**PSP# 22-0137**

PSP#22-137

JSP22-48

**Project Description:**

Build 1 new multi-story Storage Building and remodel 1 existing building (old Novi Bowl bldg.) on site.

**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.
- A hazardous chemical survey is required to be submitted to the Planning & Community Development Department for distribution to the Fire Department at the time any Preliminary Site Plan is submitted for review and approval. Definitions of chemical types can be obtained from the Fire Department at (248) 735-5674. (See Attachment B)
- **Corrected 4-17-23 KSP**-Sheet C101 – Front access drive indicates entrance(s) of 19.79' & 18.45'. This will need to be corrected to a minimum of 20' wide for Fire lane access.
- **Corrected 4-17-23 KSP**-No Parking Fire Lane signs will need to be added on rear access drive.
- **Corrected 4-17-23 KSP**-Sheet A210 - Entry gate in between buildings will need fire department "Knox-Key" access and/or electronic "Knox-Gate" access.
- **Corrected 4-17-23 KSP**-Sheet C103 – Water Main detail. More fire hydrants will need to be added on site and rear access drive.
- **Corrected 4-17-23 KSP**-Sheet LSO13 – Landscaping page. Landscaping cannot block any fire hydrant or fire Department connections to sprinkler valves. Provide locations for all FDC valve locations.



- **Corrected 4-17-23 KSP**-All fire apparatus access roads (public and private) with a dead-end drive in excess of one hundred fifty (150) feet shall be designed with a turn-around designed in accordance with Figure VIII-I or a cul-de-sac designed in accordance with Figure VIII-F. (D.C.S. Sec 11-194 (a)(20))
- **Corrected 4-17-23 KSP**-Additional Secondary Access road will need to be added from Novi Rd to rear driveway. Access thru building interior gate is NOT a/an acceptable fire lane route.

**Recommendation:**

Approved

Sincerely,

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

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

cc: file

**APPLICANT RESPONSE LETTER**

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# PLAN REVIEW CENTER REPORT

## Planning Review EXTRA SPACE SELF STORAGE

JSP 22-48  
May 22, 2023

### PETITIONER

Novi Development Company

### REVIEW TYPE

Revised Preliminary Site Plan

### PROPERTY CHARACTERISTICS

Section	35	
Site Location	21700 Novi Road; 50-22-35-101-016	
Site School	Northville Public Schools	
Site Zoning	I-1 Light Industrial	
Adjoining Zoning	North	I-1 Light Industrial
	East	I-1 Light Industrial
	West	R-3 One-Family Residential
	South	I-1 Light Industrial
Current Site Use	Novi Bowl	
Adjoining Uses	North	Oakpointe Plaza
	East	Estate Storage
	West	One-Family Residential
	South	Estate Storage
Site Size	4.3 acres	
Plan Date	April 10, 2023	

### PROJECT SUMMARY

The applicant is proposing to renovate the former site of Novi Bowl. The proposed development includes the renovation of the existing 36,571 square foot building to accommodate indoor, climate-controlled, self-storage. The existing building height and layout will remain the same. The applicant is also proposing a 100,200 square foot addition consisting of 3 stories (40 feet tall) to the rear of the existing building. In total, 924 climate-controlled self-storage units are proposed on the site. In between the existing and proposed addition, there will be a one-way enclosed drive-lane with a roll-up overhead door and eight parking spaces to accommodate loading and unloading of storage items by customers. The anticipated hours of operation for the leasing office will be 8:00 am to 6:00 pm Monday through Saturday, and the access hours will be from 7:00 am to 10:00 pm Monday through Sunday. The site had been previously used as a bowling alley (Novi Bowl).

## RECOMMENDATION

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**Approval of the Preliminary Site Plan is recommended by Planning staff.** The plan mostly complies with the ordinance requirements. All reviewers recommend approval of the Preliminary Site Plan.

## SPECIAL LAND USE CONSIDERATIONS

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In the I-1 District, a self-storage facility falls under the Special Land Use requirements. In addition, new standards were recently added to the zoning ordinance to allow for this use. Section 6.2.C of the Zoning Ordinance outlines specific factors the Planning Commission shall consider in the review of the Special Land Use Permit request:

- i. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on existing thoroughfares in terms of overall volumes, capacity, safety, vehicular turning patterns, intersections, view obstructions, line of sight, ingress and egress, acceleration/deceleration lanes, off-street parking, off-street loading/unloading, travel times and thoroughfare level of service. **The site has been adjusted to accommodate the flow of traffic to the extent possible.** NOTED
- ii. Whether, relative to other feasible uses of the site, the proposed use will cause any detrimental impact on the capabilities of public services and facilities, including water service, sanitary sewer service, storm water disposal and police and fire protection to service existing and planned uses in the area. **There is no additional impact on capabilities of public services.** NOTED
- iii. Whether, relative to other feasible uses of the site, the proposed use is compatible with the natural features and characteristics of the land, including existing woodlands, wetlands, watercourses and wildlife habitats. **The impact to regulated woodlands and wetlands has been minimized to the extent possible.** NOTED
- iv. Whether, relative to other feasible uses of the site, the proposed use is compatible with adjacent uses of land in terms of location, size, character, and impact on adjacent property or the surrounding neighborhood. **The proposed use, which is adjacent to residential and commercial uses, appears to be compatible with the surrounding area as its location, size, and character do not appear to be detrimental to the surround area.** NOTED
- v. Whether, relative to other feasible uses of the site, the proposed use is consistent with the goals, objectives and recommendations of the City's Master Plan for Land Use. **It complies with one of the goals that recommends attracting new businesses to the City.** NOTED
- vi. Whether, relative to other feasible uses of the site, the proposed use will promote the use of land in a socially and economically desirable manner. **Compared to other uses permitted as a special land use in the I-1 district, a self-storage facility will not bring a considerable amount of noise or traffic to the area.** NOTED
- vii. Whether, relative to other feasible uses of the site, the proposed use is (1) listed among the provision of uses requiring special land use review as set forth in the various zoning districts of this Ordinance, and (2) is in harmony with the purposes and conforms to the applicable site design regulations of the zoning district in which it is located. **A self-storage facility is allowed as a Special Land Use under the I-1 Zoning District. Staff is of the opinion that the proposed use generally meets the special land use requirements and is in harmony with the design regulations of the zoning district.** NOTED

## ORDINANCE REQUIREMENTS

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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. Uses Permitted (Sec. 3.1.18.B/C): A climate-controlled self-storage facility is a special land use in the I-1 Zoning District. The Planning Commission will determine the compatibility of the use with the Special Land Use request.
2. Landscaped Greenbelt (Sec. 4.51.2.I): A landscaped greenbelt on the front of the property has been provided. However, the Planning Commission may require additional screening, as necessary, to buffer from residential uses.
3. Façade Materials (Sec. 4.51.2.N): The proposed design results in a significantly higher degree of compliance to the Façade Ordinance that previously shown. A Section 9 Façade Waiver for the overage of EIFS on the west façade and the overage of CMU on the north and east facades would be required. The waiver would be supported by the City's Façade Consultant. **Please indicate if you wish to seek this waiver in the response letter and provide a façade sample board prior to the Planning Commission public hearing.** YES, WE ARE SEEKING A SECTION 9 WAIVER
4. Planning Commission Findings (Sec. 3.14.3): As part of the Special Land Use request, the Planning Commission shall determine if the proposed development is compatible with the Zoning Ordinance, the site, and its surrounding area in regard to scale, size, lighting, noise, and other impacts.
5. Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2): The proposed perpendicular parking is 9 feet by 18 feet and the proposed parallel parking for loading and unloading is 9 feet by 23 feet. The proposed perpendicular spaces should either be 9 feet by 17 feet with 4 inch tall curb or 9 feet by 19 feet with 6 inch tall curb. **Please revise these dimensions, as necessary, and indicate the dimensions of the parallel spaces on the site plan.** PARKING SPACES TO BE REVISED TO 9' x 17' W/ 4" CURB
6. Bicycle Parking General Requirements & Lot Layout (Sec. 5.16): The proposed bicycle parking mostly complies with the ordinance requirements. Please see below for two items that should be addressed:
  - a. **Please indicate a minimum of 36" height for the U-Shaped bicycle racks.** PLANS TO BE REVISED, HEIGHT ADDED TO DETAIL
  - b. **Please widen the 5 foot path that connects to the public sidewalk to 6 feet to improve bicycle access to the site.** PATH TO BE WIDENED TO 6'
7. Dumpster (Sec. 4.19.2.F): The proposed dumpster and dumpster enclosure is located in the interior side yard, which is not permitted. However, the proposed location minimizes impact to the existing wetlands, woodlands, and floodplain on the site. **Therefore, a variance request would be supported by staff. Please indicate if you wish to seek a variance from the Zoning Board of Appeals.** YES, WE WILL SEEK A VARIANCE FROM THE ZONING BOARD OF APPEALS.
8. Economic Impact Information: At this time, the total estimated cost of the proposed building and site improvements, as well as the number of anticipated jobs created (temporary and permanent) has not been provided. **Please provide this information prior to the Planning Commission meeting.**
9. Woodland Permit: A total of 4 regulated woodland trees and 2 non-regulated woodland trees are proposed for removal, which requires 7 woodland replacement credits. The applicant is proposing to preserve 2 non-regulated woodland trees, which brings the total woodland replacement credits required down to 3. A Woodland Permit is required to be reviewed and approved by the Planning Commission whenever more than 3 regulated woodland trees are proposed for removal. Therefore, this proposed development will require Woodland Permit approval from the Planning Commission. **Please review the Woodland review letter for more information.** NOTED

The project entails a total investment by the developer of \$20,883,000, inclusive of the land cost. The development cost is \$17,100,000 which includes the construction, site and landscaping costs, as well as the financing costs and operating reserves. Construction costs and Site hard costs are \$12,862,000. The construction of the project will generate approximately 150 temporary jobs over a 14 month period, and 2-3 permanent jobs once the business has opened.

10. Wetland Permit: A minor wetland use permit may be required for the permanent impact to a portion of Wetland A. In addition, the impact to the wetland buffer area has not been quantified on the plans. **Please review the Wetland review letter for more information and revise the wetland plan in a revised submittal.** **NOTED**
11. Signage: 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.
12. 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. Engineering Review: Engineering is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- b. Landscape Review: Landscape is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- c. Woodland Review: Woodland is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- d. Wetland Review: Wetland is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- e. Traffic Review: Traffic is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.
- f. Façade Review: Façade is recommending approval of the Preliminary Site Plan contingent upon a Section 9 Façade Waiver being granted by the Planning Commission and a façade board being provided prior to the Planning Commission public hearing.
- g. Fire Review: Fire is recommending approval of the Preliminary Site Plan with comments to be addressed in the Final Site Plan submittal.

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

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The Special Land Use, Preliminary Site Plan, Woodland Use Permit, Wetland Use Permit, and Stormwater Management Plan will require a 15-day public hearing and approval from the Planning Commission due to the Special Land Use request. At that time, please provide the following by May 31 once this stage is reached:

1. Site Plan submittal in PDF format. **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, which is to be used for Planning Commission presentation.
4. A façade board with sample materials of the proposed façade.

## **NEXT STEP: ZONING BOARD OF APPEALS**

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After receiving Planning Commission's approval of the Preliminary Site Plan, one variance from the Zoning Board of Appeals will be necessary prior to the approval of the Final Site Plan. Please submit this application to Anita Wagner, Account Clerk ([awagner@cityofnovi.org](mailto:awagner@cityofnovi.org), 248-347-0459) to go before the Zoning Board of Appeals. The deadline for Zoning Board of Appeals applications is typically the **first** of the month.

## **FUTURE STEP: FINAL SITE PLAN SUBMITTAL**

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

1. **Seven** 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. An [Other Agencies Checklist](#)

#### **FUTURE STEP: ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER**

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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.*

#### **FUTURE STEP: STAMPING SET APPROVAL**

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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 **12 size 24" x 36" copies, folded, with signature and seal (may be electronic)** to the Community Development Department for final Stamping Set approval.

#### **FUTURE STEP: PRE-CONSTRUCTION MEETING**

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**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 248.735.5607 or [ccarroll@cityofnovi.org](mailto:ccarroll@cityofnovi.org).



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Christian Carroll, Planner



## PLANNING REVIEW CHART: I-1, Light Industrial Zoning District

**Review Date:** May 22, 2023  
**Review Type:** Revised Preliminary Site Plan Review  
**Project Name:** **JSP22-48 EXTRA SPACE SELF STORAGE DEVELOPMENT**  
**Location:** 21700 Novi Road; Parcel 50-22-35-101-016  
**Plan Date:** April 10, 2023  
**Prepared by:** Christian Carroll, Planner  
**E-mail:** [ccarroll@cityofnovi.org](mailto:ccarroll@cityofnovi.org) **Phone:** (248) 735-5607

Items in **Bold** need to be addressed by the applicant with next submittal. *Italicized* items should be noted.

Item	Required Code	Proposed	Meets Code	Comments
<b>Zoning and Use Requirements</b>				
<b>Master Plan</b> <i>(adopted July 27, 2017)</i>	Local Commercial	Climate-Controlled Self-Storage Facility	TBD	<b>Planning Commission will determine the compatibility of the use with the Special Land Use Request.</b> <b>NOTED</b>
<b>Zoning</b> <i>(Effective January 8, 2015, as amended)</i>	I-1: Light Industrial	I-1, no change	Yes	
<b>Uses Permitted</b> <i>(Sec 3.1.18.B &amp; C)</i>	Permitted uses in Sec. 3.1.18.B, Special Land Uses in Sec. 3.1.18.C	Climate-Controlled Self-Storage Facility	Yes	<b>Special Land Use in the I-1 Zoning District.</b>
<b>Height, Bulk, Density, and Area Limitations (Sec. 3.1.18.D)</b>				
<b>Frontage on a Public Street</b> <i>(Sec. 5.12)</i>	Frontage on a Public Street is required.	Frontage on Novi Road	Yes	
<b>Access to a Major Throughfare (Sec. 5.13)</b>	Vehicular access shall be provided only to an existing or planned major thoroughfare or freeway service drive OR access driveway on other street type is not across street from existing or planned single-family uses.	Access to Novi Road – island removed	Yes	
<b>Minimum Zoning Lot Size</b> for each Unit in Ac <i>(Sec 3.6.2.D)</i>	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open space	Complies	Yes	
<b>Maximum % of Lot Area Covered</b> <i>(By All Buildings)</i>	<i>(Sec 3.6.2.D)</i>	Complies	Yes	
<b>Building Height</b> <i>(Sec. 3.1.19.D)</i>	40 feet maximum, refer to TA18.299 standards	40 feet	Yes	
<b>Building Setbacks (Sec. 3.1.18.D)</b>				
Front (West)	40 feet	50 feet	Yes	
Interior Side (North)	20 feet	23 feet	Yes	
Interior Side (South)	20 feet	50 feet	Yes	

Rear (East)	20 feet	50 feet	Yes	
<b>Parking Setbacks</b> (Sec. 3.1.18.D) Refer to applicable notes in Sec. 3.6.2				
Front (West)	40 feet (See 3.6.2.E)	NA	NA	No parking abutting property lines.
Interior Side (North)	10 feet	NA	NA	
Interior Side (South)	10 feet	NA	NA	
Rear (East)	10 feet	NA	NA	
<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.	Complies	Yes	
<b>Off-Street Parking in Front Yard</b> (Sec 3.6.2.E)	The site is a minimum 2 acre site	4.3 acres	NA	Applicant is not proposing.
	Does not extend into the minimum required front yard	None shown	NA	
	Cannot occupy more than 50% of the area between min. front yard setback & bldg. setback.	None shown	NA	
	Must be screened by brick wall or landscaped berm 2.5 ft tall	None shown	NA	
	Lighting compatible with surrounding neighborhood	Complies	Yes	See Photometric review.
<b>Off-Street Parking in Side and Rear Yards</b> (Sec 3.6.2.F)	Off-street parking is allowed in side and rear yards if the site does not abut residential. If it does, additional conditions apply: shall not occupy more than 50% of side yard area abutting residential parking setback no less than 100 ft from residential district	Side and rear do not abut residential	NA	
<b>Setback from Residential District - Building</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. (unless separated by a thoroughfare or RR ROW)	50 foot setback – existing and separated by throughfare	Yes	
<b>Wetland/Watercourse Setback</b> (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	Wetland setback shown	Yes	May encroach on 25 foot wetland buffer, which would require administrative approval.
<b>Additional Height</b> (Sec 3.6.2.O)	Additional heights for selected buildings are allowed based on conditions listed in Sec 3.6.2.O	Does not apply	NA	
<b>Parking setback screening</b> (Sec 3.6.2.P)	Required parking setback area shall be landscaped per Sec. 5.5.3.	Does not apply	NA	
<b>Modification of</b>	The Planning Commission	Does not apply	NA	



<b>parking setback requirements</b> (Sec 3.6.2.Q)	may modify parking setback requirements based on conditions listed in Sec. 3.6.2.Q			
<b>Climate-Controlled Self-Storage Facilities</b> (Sec. 4.51.2, amended TA18.299 attached)				
<b>Minimum Site Size</b> (Sec. 4.51.2.A)	The minimum size of the site devoted entirely to such use shall be a minimum of two (2) acres unless the site abuts a residential zoning district in which case the site shall be a minimum of three (3) acres.	4.3 acres	Yes	
<b>Abutting Residential</b> (Sec. 4.51.2.B)	Notwithstanding the provisions of Section 3.1.18.C or Section 3.1.19.B, climate-controlled self-storage facilities may be allowed as a special land use when adjacent to residentially zoned property under the following criteria:			
	For any property separated by a major thoroughfare or railroad right-of-way from a residential zoning district.	Separated by a major thoroughfare	Yes	
	Any building or portion of building shall be setback a minimum of 40 feet from the property line abutting a residential district, and shall have a maximum height of 25 feet; provided, however, that for every additional 5 feet of building setback from the property line greater than 40 feet, the maximum building height may be increased 1 additional foot, up to 40 feet in height.	Building setback of 50 feet. The maximum building height of 40 feet is allowed at 115 foot setback	Yes	<i>The building height is ~17 feet from 50 feet to ~280 feet setback from the front property line. The building height is 40 feet after ~280 feet.</i>
	Leasing office hours shall be limited to the hours between 8:00 a.m. to 6:00 p.m. Monday through Saturday. Facility access hours shall be limited to the hours between 7:00 a.m. to 10:00 p.m. Monday through Sunday.	Leasing office are 8am to 6pm Monday through Saturday. Facility access hours are 7am to 10pm Monday through Sunday.	Yes	
<b>Ingress/Egress</b> (Sec. 4.51.2.C)	All ingress and egress from the site shall be directly onto a major thoroughfare as designated on the City's Master Plan.	Complies	Yes	
<b>Building Setbacks</b> (Sec. 4.51.2.D)	Building setbacks shall comply with the standards as set forth in the I-1, Light Industrial, or I-2, General Industrial district, as applicable.	Complies	Yes	

<p><b>Storage of Combustible Materials</b> (Sec. 4.51.2.E)</p>	<p>No storage of combustible or flammable liquids, combustible fibers, or explosive materials as defined in the fire prevention code, or toxic materials, shall be permitted within the self-storage buildings or upon the premises. A lease agreement between the lessee and lessor shall state (1) that no flammable, combustible or toxic material shall be stored or used on premises, and (2) that the property shall be subject to periodic and unannounced inspections for flammable, toxic and other hazardous materials by City officials.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Outdoor Storage</b> (Sec. 4.51.2.F)</p>	<p>No storage outside of the self-storage buildings shall be permitted.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Uses Not Permitted</b> (Sec. 4.51.2.G)</p>	<p>Except as provided herein, the use of the premises shall not be used for maintaining or repairing of any vehicles and any other uses as determined by the Planning Commission.</p>	<p>Note provided</p>	<p>Yes</p>	
<p><b>Mixed-Use Provision</b> (Sec. 4.51.2.H)</p>	<p>Any principal permitted use in the Light Industrial (I-1) district may be permitted in a mixed-use climate-controlled self-storage facility, subject to the following conditions:</p>	<p>Not proposed</p>	<p>NA</p>	
	<p>If the gross leasable area of such use(s) is less than 10% of the total gross leasable area of the overall building, and;</p>	<p>Not proposed</p>	<p>NA</p>	
	<p>If such uses are not associated with the self-storage use of the site, the Planning Commission may require additional amenities with such use(s), and taking into consideration the compatibility of the proposed use with the existing uses of the site and surrounding sites, whether there is adequate parking</p>	<p>Not proposed</p>	<p>NA</p>	

	for the combination of uses, and adequate pedestrian connectivity of the use to other uses on the site.			
	Limited retail sales to tenants of products and supplies incidental to the principal use, such as packing materials, packing labels, tape, rope, protective covers, and locks and chains shall be permitted within a building on the site devoted to this use.	Not proposed	NA	
<b>Landscaped Greenbelt</b> (Sec. 4.51.2.I)	At a minimum, a 25 foot wide landscaped greenbelt is required where the site abuts a residential zoning district or office zoning district. In addition, at least 2 of the required canopy or evergreen trees must be planted between the road right-of-way and building to soften the effects of the building on the abutting residential areas. The Planning Commission may require additional screening measures as necessary.	Provided on plans	Yes	<b>The Planning Commission may require additional screening, as necessary.</b> <b>NOTED</b>
<b>Site Access</b> (Sec. 4.51.2.J)	All access aisles, parking areas and walkways on the site shall be graded, drained, hard-surfaced and maintained in accordance with the standards and specifications of the City of Novi.	Complies	Yes	
<b>Minimum Driveway Widths</b> (Sec. 4.51.2.K)	Notwithstanding the required fire codes, the following minimum driveway widths shall apply: All one-way driveways shall be designed with one ten-foot-wide loading/unloading lane and one 15-foot travel lane, all two-way driveways shall be designed with one ten-foot-wide loading/unloading lane and two 12-foot travel lanes, the parking lanes may be eliminated if the driveway does not serve storage units,	One-Way: 20 feet, Two-Way: 24 feet	Yes	

	signs and painted lines shall be used to indicate parking and traffic direction throughout the site.			
<b>Fire Suppression</b> (Sec. 4.51.2.L)	Fire hydrants and fire suppression devices shall be provided, installed and maintained in compliance with the fire prevention code and any other applicable ordinances.	Appears to comply	Yes	Refer to Fire Review.
<b>Maximum Building Height</b> (Sec. 4.51.2.M)	The maximum building height shall be consistent with the zoning district that the site is located within.	Shall comply	Yes	
<b>Façade Materials</b> (Sec. 4.51.2.N)	Exterior building walls visible from a public right-of-way or nonindustrial district shall be finished with brick or other high-quality masonry materials as permitted in Section 5.15.	New addition is substantially compliant, old building is not.	TBD	<b>A Section 9 Façade Waiver for the overage of EIFS on the west façade and the overage of CMU on the north and east facades is supported by the City's Façade Consultant.</b> NOTED
<b>Security Provisions</b> (Sec. 4.51.2.O)	A demonstrated means of security and management shall be provided.	Provided in response	Yes	
<b>Site Lighting</b> (Sec. 4.51.2.P)	Any proposed site lighting shall comply with the requirements of Section 5.7. In particular, the standards of Section 5.7.3.L shall apply when a site abutting a residential district or use.	Complies	Yes	See Photometric Review.
<b>I-1 District Required Conditions</b> (Sec. 3.14, only applicable sections included)				
<b>Other</b> (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.	Limited Retail component, permitted	Yes	Refer to Self-Storage section for more information.
<b>Planning Commission Findings</b> (Sec 3.14.3)	The scale, size, building design, facade materials, landscaping and activity of the use is such that current and future adjacent residential uses will be protected from any adverse impacts.	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b> NOTED
	The intended truck delivery service can be effectively handled without long term truck parking on site.	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b> NOTED
	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of	Shall comply	TBD	<b>Planning Commission will decide as part of the Special Land Use Request.</b> NOTED

	<p>this article and performance standards of Section 5.14.</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>Haz chem survey submitted</p>	<p>Yes</p>	
	<p>There is compliance with the City's hazardous materials checklist for required submittal data.</p>	<p>Haz chem survey submitted</p>	<p>Yes</p>	
<p><b>Adjacent to Residential (Sec. 3.14.5)</b></p>	<p>-No truck well, loading dock or door, shall be permitted on or in the wall of the building which faces the abutting residential district and only pedestrian exits or emergency doors shall be allowed on such wall.                      -All loading/unloading docks and truck wells shall be placed on or in the wall of the building that is opposite the boundary of the residential district or on the wall that lies approximately at a ninety (90) degree angle to the residential district boundary.                      -If such dock, truck well and/or dock faces the front street, then such dock, truck well or door shall be recessed by not less than sixty (60) feet from the front wall of the building in order to provide that a semitrailer truck tractor and cab shall not, when in place for loading or unloading at the dock or well, project past the front wall of the building.                      -Driveways shall be designed in such a manner to discourage semi-trailer truck traffic access to that portion of the lot or site that is adjacent to a residential district.</p>	<p>No truck well or loading dock is proposed. Semi-Truck access appears to be limited in nature.</p>	<p>Yes</p>	
	<p>-No outside storage of any materials, equipment, trash or waste shall be permitted,</p>	<p>Complies</p>	<p>Yes</p>	



	<p>except dumpsters may be permitted outdoors where properly screened pursuant to the requirements of this Ordinance, as amended, or revised. Refuse pick-up shall be limited to the hours of 7:00 a.m. to 5:00 p.m., prevailing time.</p> <p>-All off-street parking and areas used for vehicular repair, delivery, loading/unloading and transport shall be not closer than one-hundred (100) feet from the boundary of a residential district and effectively screened from view from said residential district by landscaping, walls or berms pursuant to the requirements of Section 3.14.5.E.</p> <p>Notwithstanding the restriction of Section 3.6.2.E-F, the Planning Commission may permit front yard and side yard parking where necessary to maintain the separation required by this subsection.</p>			
	<p>The maximum heights of any building constructed on a lot or site adjacent to a residential district shall be twenty-five (25) feet, except where there is a street, road, highway or freeway between said lot or site and the abutting residential district.</p>	<p>Separated by street</p>	<p>Yes</p>	
	<p>Exterior site lighting as regulated by Section 5.7. In addition, where a building wall faces an abutting residential district there shall be no floodlighting of such facade. This shall not preclude the lighting of doorways on such facades.</p>	<p>Complies</p>	<p>Yes</p>	<p>See photometric review.</p>
	<p>An earth berm and plantings are required, except that no additional berm shall be required along a street, road, highway or freeway</p>	<p>Complies</p>	<p>Yes</p>	

	that lies between said use and an abutting residential district.			
	Windows and doors of non-office use areas of structures in an I-1 district may not be left open.	Complies	Yes	
<b>Parking and Loading Requirements</b>				
<b>Number of Parking Spaces</b> <i>(Sec. 5.2.12.E)</i>	Self-Storage: 1 space per 100 storage units, 5 space minimum   924 units – 10 spaces required	16 spaces proposed	Yes	
<b>Parking Space Dimensions and Maneuvering Lanes</b> <i>(Sec. 5.3.2)</i>	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping	9' x 18' perpendicular and 9' x 23' parallel loading/unloading spaces	Yes	<b>Perpendicular spaces are compliant, but are preferred to either be 9' x 17' with 4" curb or 9' x 19' with 6" curb.</b> <b>PARKING SPACES TO BE REVISED TO 9' x 17' W/ 4" CURB</b>
<b>End Islands</b> <i>(Sec. 5.3.12)</i>	End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles. The end islands shall generally be at least 8 ft. wide, have an outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall	None shown (landscaped areas are adjacent with curbing)	Yes	
<b>Parking stall located adjacent to a parking lot entrance</b> <i>(public or private)</i> <i>(Sec. 5.3.13)</i>	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	Complies	Yes	
<b>Barrier Free Spaces</b> <i>(Barrier Free Code)</i>	Based on the requirement of 16 spaces, 1 van-accessible space is required	2 van accessible	Yes	
<b>Barrier Free Space Dimensions</b> <i>(Barrier Free Code)</i>	8' wide with an 8' wide access aisle for van accessible spaces - 8' wide with a 5' wide access aisle for regular accessible spaces	9' wide with 8' access aisle	Yes	<i>May be reduced to 8' with an 8' aisle for van accessible or 5' for non-van accessible.</i>
<b>Barrier Free Signs</b> <i>(Barrier Free Code)</i>	One sign for each accessible parking space.	Shown – detail provided	Yes	
<b>Minimum number of Bicycle Parking</b> <i>(Sec. 5.16.1)</i>	Industrial: Five (5) percent of required automobile spaces, minimum two (2) spaces	Four spaces provided	Yes	
<b>Bicycle Parking General requirements</b>	No farther than 120 ft. from the entrance being served	Complies	Yes	

(Sec. 5.16)	When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations	Complies	Yes	
	Spaces to be paved and the bike rack shall be inverted "U" design, 36" tall	Height not indicated	<b>No</b>	<b>Please provide the height, 36" minimum.</b> BIKE RACK HEIGHT ADDED TO DETAIL
	Shall be accessible via 6 ft. paved sidewalk	7 foot sidewalk adjacent to spaces, leaving 5 feet	<b>No</b>	<b>5 foot path to public sidewalk should be widened to 6 feet to improve bicycle access.</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	Complies	Yes	PATH TO PUBLIC SIDEWALK HAS BEEN WIDENED TO 6'
<b>Loading Spaces</b> (Sec. 5.4.3)	All loading and unloading operations shall be conducted in the rear yard, except in those instances where: - The Industrial district abuts a residential district, in which case, the conditions of Section 3.14.5 shall apply, or, - An interior side yard is located adjacent to I district, EXPO district, or EXO Overlay district property, loading and unloading may be conducted in that interior side yard when located near the rear of the building. When loading and unloading is to be conducted within an interior side yard, the City may require aesthetic screening of the facility in accordance with the guidelines set forth in Section 5.5.	No loading and unloading outdoors shown	Yes	
<b>Dumpster, Accessory Structures, and Rooftop Equipment</b> (Sec. 4.19)				
<b>Dumpster</b> (Sec 4.19.2.F)	-Located in rear yard -Attached to the building or no closer than 10 ft. from building if not attached -Not located in parking setback -If no setback, then it cannot be any closer than 10 ft. from property line.	In the side yard, 15 foot setback	<b>No</b>	<b>Zoning Board of Appeals Variance would be needed for the current dumpster location. The variance would be supported by staff as the proposed location has minimal impact on site woodlands and wetlands.</b>

WE WILL SEEK A VARIANCE FROM THE ZONING BOARD OF APPEALS.

	-Away from Barrier free Spaces			
<b>Dumpster Enclosure</b> <i>(Sec. 21-145. (c) Chapter 21 of City Code of Ordinances)</i>	-Screened from public view -A wall or fence 1 ft. higher than height of refuse bin and no less than 5 ft. on three sides -Posts or bumpers to protect the screening -Hard surface pad -Screening Materials: Masonry, wood or evergreen shrubbery	Complies	Yes	
<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	Rooftop equipment is screened	Yes	
<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.	Rooftop equipment is screened	Yes	
<b>Sidewalks</b>				
<b>Non-Motorized Plan</b>	5 foot wide sidewalk required on Novi Road.	5 foot sidewalk existing	Yes	
<b>Public Sidewalks</b> <i>(Chapter 11, Sec.11-256(b))</i>	Connection from property to main sidewalk system is required.	Complies	Yes	
<b>Building Code and Other Requirements</b>				
<b>Woodlands</b> <i>(City Code Ch. 37)</i>	Replacement of removed trees	11 woodland replacement credits	Yes	<i>See Woodland Review.</i>
<b>Wetlands</b> <i>(City Code Ch. 12, Art. V)</i>	Mitigation of removed wetlands at ratio of 1.5:1 emergent wetland, 2:1 for forested wetlands over .25 acre	Plan provided – no mitigation necessary	Yes	<i>See Wetland Review.</i>
<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	
<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	Provided	Yes	

	footage of pavement area (indicate public or private).				
<b>Economic Impact Information</b>	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Not provided	TBD	<b>Provide prior to Planning Commission.</b>	
<b>Building Exits</b>	Building exits must be connected to sidewalk system or parking lot.	Connected	Yes	The project entails a total investment by the developer of \$20,883,000, inclusive of the land cost. The development cost is \$17,100,000 which includes the construction, site and landscaping costs, as well as the financing costs and operating reserves. Construction costs and Site hard costs are \$12,862,000. The construction of the project will generate approximately 150 temporary jobs over a 14 month period, and 2-3 permanent jobs once the business has opened.	
<b>Development/ Business Sign</b> <i>(City Code Sec 28.3)</i>	The leading edge of the sign structure shall be a minimum of 10 ft. behind the right-of-way. Entranceway shall be a maximum of 24 square feet, measured by completely enclosing all lettering within a geometric shape. Maximum height of the sign shall be 5 ft.	Not shown – to be reviewed by Code Compliance Division when ready.	NA		Contact Maureen Underhill at 248.735.5602 or <a href="mailto:munderhill@cityofnovi.org">munderhill@cityofnovi.org</a> for more information.
<b>Project &amp; Street Naming Committee</b>	Some projects may need approval from the Street & Project Naming Committee	Submitted	TBD		Contact Ben Peacock at 248.347.0475 or via email <a href="mailto:bpeacock@cityofnovi.org">bpeacock@cityofnovi.org</a>
<b>Lighting and Photometric Plan (Sec. 5.7)</b>					
<b>Intent (Sec. 5.7.1)</b>	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Provided	Yes		
<b>Lighting Plan (Sec. 5.7.A.i)</b>	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Provided	Yes		
<b>Building Lighting (Sec. 5.7.2.A.iii)</b>	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.	Complies	Yes		
<b>Lighting Plan (Sec.5.7.A.2.ii)</b>	Specifications for all proposed & existing lighting fixtures	Provided	Yes		
	Photometric data	Provided	Yes		
	Fixture height	25 feet	Yes		
	Mounting & design	Provided	Yes		
	Glare control devices (Also see Sec. 5.7.3.D)	Provided	Yes		
	Type & color rendition of lamps	Provided	Yes		



	Hours of operation	Hours provided	Yes	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties	Provided where possible	Yes	
<b>Maximum Height</b> (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses).	25 feet maximum	Yes	
<b>Standard Notes</b> (Sec. 5.7.3.B)	-Electrical service to light fixtures shall be placed underground -Flashing light shall not be permitted -Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation	Provided on plans	Yes	
<b>Security Lighting</b> (Sec. 5.7.3.H)	-All fixtures shall be located, shielded and aimed at the areas to be secured. -Fixtures mounted on the building and designed to illuminate the facade are preferred -Lighting for security purposes shall be directed only onto the area to be secured.	Complies	Yes	
<b>Average Foot Candles</b> (Sec.5.7.3.E)	Average light level of the surface being lit to the lowest light of the surface being lit shall not exceed 4:1	3.5:1 fc	Yes	
<b>True Color</b> (Sec. 5.7.3.F)	Use of true color rendering lamps such as metal halide is preferred over high & low pressure sodium lamps	Complies	Yes	
<b>Min. Illumination</b> (Sec. 5.7.3.k)	Parking areas: 0.2 min	0.6 fc	Yes	
	Loading & unloading areas: 0.4 min	NA	NA	
	Walkways: 0.2 min	0.2 fc	Yes	
	Building entrances, frequent use: 1.0 min	2 fc	Yes	
	Building entrances, infrequent use: 0.2 min	0.2 fc	Yes	
<b>Max. Illumination adjacent to Non-Residential</b> (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	Complies	Yes	
<b>Cut off Angles</b> (Sec.	When adjacent to	Complies – note	Yes	

5.7.3.L)	residential districts: All cut off angles of fixtures must be 90° maximum illumination at the property line shall not exceed 0.5 foot candle No direct light source shall be visible at the property line (adjacent to residential) at ground level	provided		
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**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.



# PLAN REVIEW CENTER REPORT

05/16/2023

## **Engineering Review**

Extra Space Self Storage  
JSP22-0048

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### **Applicant**

Novi Development Company

### **Review Type**

Revised Preliminary Site Plan

### **Property Characteristics**

- Site Location: 21700 Novi Road, Novi, MI. (S. of 9 Mile Rd. & E. of Novi Rd.)
- Site Size: 4.30 acres
- Plan Date: 5/12/2023
- Design Engineer: Bluewater Civil Design PLLC

### **Project Summary**

- Construction of an approximately 100,200 square-foot commercial storage building and associated parking. Site access would be provided via the existing driveway for the site roadways.
- Water service would be provided by an 8-inch extension from the existing 12-inch water main along the East side of Novi Road. There are no proposed changes to the existing 8-inch fire lead to the existing building. The proposed 8-inch water main will serve 2 additional hydrants.
- There are no proposed changes to the Sanitary sewer service.
- Storm water would be collected by a single storm sewer collection system and discharged to an on-site detention basin before being released to Thornton Creek.

### **Recommendation**

**Approval of the Revised Preliminary Site Plan and the Preliminary Storm Water Management Plan is recommended, with items to be addressed at the final site plan submittal.**

### **Comments:**

The Revised Preliminary Site Plan meets the general requirements of Chapter 11 of the Code of Ordinances, the Storm Water Management Ordinance, and the Engineering Design Manual with the following exceptions, which can be addressed at the final site plan submittal:

**General**

TIES HAVE BEEN ADDED TO SURVEY

1. Provide a minimum of two ties to established section or quarter section corners.
2. Provide at least two reference benchmarks at intervals no greater than 1,200 feet. At least one referenced benchmark must be 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> BENCHMARKS ADDED TO SURVEY
3. A sheet index shall be provided on the cover sheet. The current sheet index does not include all sheets in the plan set. ADDITIONAL SHEETS HAVE BEEN ADDED TO COVER SHEETS
4. **Only at the time of the printed Stamping Set submittal**, provide the City's standard detail sheets for water main (5 sheets), sanitary sewer (3 sheets), storm sewer (2 sheets), paving (2 sheets) and Boardwalks/Pathways (1 sheet). 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> WILL BE INCLUDED WITH FINAL STAMPING SET SUBMITTAL
5. A right-of-way permit will be required from the City of Novi and Oakland County. THIS HAS BEEN APPLIED FOR
6. Show and label the master planned 60-foot half width right-of-way for Novi Road. Label the additional right-of-way width to be dedicated along Novi Road as "proposed" right-of-way. THIS HAS BEEN APPLIED FOR
7. The compacted sand backfill (MDOT sand Class II) should be placed above all utilities within the influence of paved areas and illustrate on the profiles. ADDED TO STORM DRAINAGE PROFILES
8. 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. Label all utility crossings in the plan view. ADDED TO C301
9. All light poles in a utility easement will require a License Agreement. NOTED

**Water Main**

10. The proposed water main easement shall include all proposed hydrants. Revise the proposed easement accordingly. EASEMENT LOCATION HAS BEEN REVISED TO INCLUDE HYDRANTS
11. The water main shall be placed so that no utility is placed within 10-feet of the water main (outside of pipe to outside of pipe). WATER MAIN LOCATION HAS BEEN REVISED
12. Label the pipe lengths of the proposed water main in plan view. LENGTHS HAVE BEEN ADDED TO PLAN VIEW
13. The proposed water main shall be a minimum of 6-feet buried depth. WATER MAIN PROFILE HAS BEEN REVISED
14. Show and label the proposed compacted sand backfill above the proposed water main under the influence of the pavement. BACKFILL ADDED TO WATER MAIN PROFILE
15. The proposed water main shall terminate at a hydrant, remove proposed blow-off valves. BLOW OFF VALVES HAVE BEEN REMOVED
16. Provide water main modeling calculations demonstrating that the required water supply of 4,000 GPM will be available. HYDRANT TEST TO BE ORDERED
17. Per current EGLE requirement, provide a profile for all proposed water main 8-inch and larger. PROFILES HAVE BEEN ADDED TO SITE PLANS

18. The shut-off valves for the hydrant assemblies are not to be in wells. Refer to the City's standards and details for further information. **SHUT OFF VALVES HAVE BEEN REVISED**
19. In the water main profiles add the following note: "Per the Ten States Standards Article 8.8.3, one full 20-foot pipe length of water main shall be used whenever storm sewer or sanitary sewer is crossed, and the pipe shall be centered on the crossing, in order to ensure 10-foot separation between water main and sewers." Additionally, show the 20-foot pipe lengths on the profile.

**NOTE ADDED TO PROFILES**

### Sanitary Sewer

20. The proposed and/or existing sanitary sewer was not reviewed as part of this submittal. **NOTED**

**DUE TO ELEVATION CONSTRAINTS ON SITE, FALL CAN NOT BE ACHIEVED ON STORM SEWER SYSTEM TO GET 3' OF COVER ON ALL PIPES. THESE PIPES WITH 2'-3' OF COVER HAVE BEEN CALLED OUT AS CLASS V RCP**

### Storm Sewer

21. **As discussed**, A minimum cover depth of 3 feet shall be maintained over all proposed storm sewer. Currently, a few pipe sections do not meet this standard. 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.
22. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the storm water basin. **SHOWN ON PROFILES**
23. Label the 10-year HGL elevation on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure. **SEE SWMR**
24. Provide the casting type in the structure table. Round castings shall be provided on all catch basins except curb inlet structures. **ADDED TO STRUCTURE TABLE**
25. Show and label the proposed compacted sand backfill above the proposed storm sewer under the influence of the pavement. **ADDED TO PROFILES**
26. The minimum slope for 18-inch pipe shall be 0.18%. Currently the pipe between A1.1 and A1 does not meet this standard. **PIPE SLOPE HAS BEEN REVISED**
27. Two profiles are cut-off on sheet C203. **PROFILES HAVE BEEN REVISED**

### Storm Water Management Plan

28. Provide the calculations on the plans for the Storm Water Management Plan as a part of the plan set including:
- Detention and forebay sizing calculations (per City standards). **CALCULATIONS HAVE BEEN INCLUDED IN STORMWATER MANAGEMENT REPORT**
  - Release rate calculations for the three design storm events (first flush, bank full, 100-year). **RELEASE RATE CALCULATIONS HAVE BEEN INCLUDED IN STORMWATER MANAGEMENT REPORT**
29. The outlet standpipes 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. **STANDPIPE WITH STONE FILTER ADDED TO PLANS**
30. 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.

**PER DISCUSSIONS WITH THE CITY AND DUE TO HIGH WATER TABLE ELEVATIONS, MAINTAINING A POND BOTTOM OF AT LEAST 3' WOULD MAKE DETENTION ON SITE UNFEASIBLE. FROM OTHER BORING LOCATIONS ON SITE, GW TABLE IS ~ 830. EXISTING FFEL IS 836.83**



### Paving & Grading

31. Show the sidewalk being removed/replaced to complete the water main construction. **SIDEWALK REMOVAL/REPLACEMENT ADDED TO PLANS**
32. Provide the City detail for the emergency access gate. Provide a note on the plan stating that the emergency access gate is to be installed and closed prior to the issuance of the building permit. **DETAIL ADDED TO PLANS**
33. Provide the MDOT sidewalk ramp details in the plan set. Remove any detail that does not reflect these details. **DETAIL ADDED TO PLANS**
34. Detectable warning plates are required at all barrier free ramps, hazardous vehicular crossings and other areas where the sidewalk is flush with the adjacent drive or parking pavement. The barrier-free ramps shall comply with current MDOT specifications for ADA Sidewalk Ramps. Provide the latest version of the MDOT standard detail for detectable surfaces. **DETECTABLE WARNING PLATES ADDED TO PLANS**
35. Label specific ramp locations on the plans where the detectable warning surface is to be installed. **CALL OUTS ADDED TO PLANS**
36. Specify the product proposed and provide a detail for the detectable warning surface for barrier free ramps. The product shall be the concrete-embedded detectable warning plates, or equal, and shall be approved by the Engineering Division. Stamped concrete will not be acceptable. **CALL OUTS ADDED TO PLANS**
37. Verify the slopes along the ingress/egress routing to the building from the barrier-free stalls. All barrier-free stalls shall comply with Michigan Barrier-Free regulations. **SLOPES ADDED TO PLANS**
38. Site grading shall be limited to 1V:4H (25-percent), excluding landscaping berms. **SLOPES REVISED**
39. Provide a line designation representing the effective 19-foot stall length for 18-foot perimeter stalls. **LINE DESIGNATION ADDED TO PLANS**
40. Curbing and walks adjacent to the end of 18-foot stalls shall be reduced to 4-inches high (rather than the standard 6-inch height to be provided adjacent to 19-foot stalls). Provide additional details as necessary. **CURB JUMP REVISED TO 4"**
41. The proposed retaining wall design shall be signed and sealed by the design engineer responsible for the design and all associated calculations.

**NOTED**

### Soil Erosion and Sediment Control

42. The SESC package has been received and will be reviewed separately from this review. **NOTED**

### Agreements

43. A license Agreement will be required for the light poles proposed within the water main easement. The agreement shall state that the wall and all site facilities within the influence of the wall that may be removed or damaged in the event the utility requires maintenance will be **the responsibility of the property owner** to repair or replace. Additionally, a cross-section shall be included with the agreement showing the distance between the wall foundation and the utility. A template agreement is available from the Engineering Division.

**NOTED**

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

44. 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.** NOTED
45. An itemized construction cost estimate must be submitted to the Community Development Department for the determination of plan review and construction inspection fees. This estimate should only include the civil site work and not any costs associated with construction of the building or any demolition work. **The estimate must be itemized** for each utility (water, sanitary, storm sewer), on-site paving (square yardage), right-of-way paving (including proposed right-of-way), grading, and the storm water basin (basin construction, control structure, pre-treatment structure and restoration). NOTED

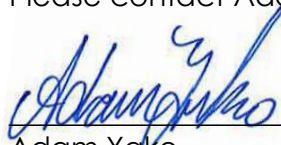
**The following must be submitted with the Stamping Set:**

*(Please note that all documents must be submitted together as a package with the Stamping Set submittal with a legal review transmittal form that can be found on the City's website. Partial submittals will not be accepted.)*

46. A draft copy of the Storm Drainage Facility Maintenance Easement Agreement (SDFMEA), as outlined in the Storm Water Management Ordinance, must be submitted to the Community Development Department. Once the agreement is approved by the City's Legal Counsel, this agreement will then be sent to City Council for approval/acceptance. The SDFMEA will then be recorded at the office of the Oakland County Register of Deeds. This document is available on our website. NOTED
47. A draft copy of the 20-foot-wide easement for the water main to be constructed onsite must be submitted to the Community Development Department. This document is available on our website. NOTED
48. A draft copy of the warranty deed for the additional proposed 60-foot wide right-of-way along Novi Road must be submitted for review and acceptance by the City. NOTED

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





PLAN REVIEW CENTER REPORT  
April 17, 2023  
Extra Space Self Storage  
Revised Preliminary Site Plan - Landscaping

Review Type  
Revised Preliminary Site Plan Landscape Review

Job #  
JSP22-0048

Property Characteristics

- Site Location: 21700 Novi Road
- Site Acreage: 4.30 ac.
- Site Zoning: I-1
- Adjacent Zoning: North, East, South: I-1, West: R-3
- Plan Date: 3/31/2023

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 and 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.

Recommendations:

This project is recommended for approval for Preliminary Site Plan, contingent on the shortages that require landscape waivers being corrected. If they are not, then the project is not recommended for approval.

LANDSCAPE WAIVERS REQUIRED FOR PROPOSED LAYOUT:

- Lack of shrubs around the west pond and deficiency in shrub coverage on the east pond – *not supported by staff*
- Lack of accessway perimeter trees along the north edge property line north of the buildings (10 trees) – *supported by staff*
- Deficiency in accessway perimeter trees provided elsewhere on the site – *not supported by staff*.

Please add the City Project Number (JSP22-48) to the Cover **Sheet's** bottom right corner.

Ordinance Considerations

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

1. Provided
2. Please correct the table as described on the landscape chart. **Chart will be revised.**
3. Please show the proposed conservation easement boundary on the landscape plan.

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

1. The project is not adjacent to residentially-zoned property a screening berm is not required.
2. The special landscaping requirement for Self-storage facilities facing residential property across Novi Road has been met.

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

1. The required greenbelt width is not provided between the building and the right-of-way, but as this is an existing condition that is not being increased, it is accepted.
2. All required greenbelt landscaping is provided.
3. The proposed street trees may not be able to be planted due to existing utilities. If they aren't, a landscape waiver is not required. Please show the existing underground utility lines on the landscape plan to **confirm that the trees can't be planted**. Will confirm with survey.

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

1. All required parking lot landscaping is provided.
2. The site's accessway perimeter plantings are deficient, which requires a landscape waiver. Staff would support a landscape waiver for the missing trees along the north side of the drive north of the buildings as there isn't room for them, but not for the rest of the site.
3. Please request a waiver for the trees along the north side of the north drive and add (or reclassify) all remaining perimeter trees to the plan as described on the landscape chart.

Building foundation Landscaping (Zoning Sec 5.5.3.D)

All required foundation landscaping is provided.

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

1. No shrubs are provided around the west pond.
2. The coverage of the east pond is not sufficient – larger masses providing a total of at least 70% coverage of the ponds (except along the building in the east pond) is required.
3. These deficiencies require a landscape waiver. It would not be supported by staff. Will add shrubs as needed to meet the 70% coverage.

Plant List (LDM 4, 10)

1. Only 11 of 23 (47%) species used are native to Michigan. Please replace some non-native species with native species to at least meet the 50% minimum required. Will change trees to meet 50% requirement.
2. The tree diversity requirement of LDM section 4 is met.

Planting Notations and Details (LDM 10)

Provided

Irrigation (LDM 10)

1. If an irrigation system will be used, a plan for that system must be provided in the Final Site Plans. Will draw a irrigation drawing once we have site plan approval.
2. If other means (xeriscaping, hoses, etc.) will be used, information regarding that must be provided on the Final Site Plans.

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).





# LANDSCAPE REVIEW SUMMARY CHART – Revised Preliminary Site Plan

Review Date: April 17, 2023  
 Project Name: JSP22 – 0048: Extra Space Self Storage  
 Plan Date: March 31, 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 on the Final Site Plans.

**LANDSCAPE WAIVERS REQUIRED FOR PROPOSED LAYOUT:**

- No shrubs around the west pond and deficiency of shrubs around the east pond – *not supported by staff*
- No accessway perimeter trees along the north property edge north of the building (10 trees) – *supported by staff*
- Deficiency in accessway perimeter trees provided elsewhere on the site – *not supported by staff.*

Please add the City Project Number (JSP22-48) to the Cover **Sheet's** bottom right corner.

Item	Required	Proposed	Meets Code	Comments
Landscape Plan Requirements (Landscape Design Manual (LDM) and Zoning Ordinance (Zoning Sec))				
Landscape Plan (Zoning Sec 5.5.2, LDM 2, 10)	<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>	<ul style="list-style-type: none"> <li>• Overall scale: 1"=30'</li> <li>• Detail scale: 1"=20'</li> </ul>	Yes	
Project Information (LDM 10)	Name and Address	Yes	Yes	
Owner/Developer Contact Information (LDM 10)	Name, address and telephone number of the owner and developer or association	Yes	Yes	
Landscape Architect contact information (LDM 10)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	Alphonse Barcia III	Yes	
Sealed by LA. (LDM 10)	Requires original signature	Copied seal and signature		<u>Live signature of the LA will be required on the</u>

Item	Required	Proposed	Meets Code	Comments
				<u>printed stamping sets.</u>
Miss Dig Note (800) 482-7171 (LDM 10)	Show on all plan sheets	Yes	Yes	
Zoning (LDM 10)	Include all adjacent zoning	<ul style="list-style-type: none"> <li>• Sheet LS-1</li> <li>• <u>Parcel</u>: I-1</li> <li>• <u>North, South</u>: I-1,</li> <li>• <u>East</u>: R-4 (across RR tracks),</li> <li>• <u>West</u>: R-3 (across Novi Rd)</li> </ul>	Yes	
Survey information (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Legal description or boundary line survey</u></li> <li>• <u>Existing topography</u></li> </ul>	<ul style="list-style-type: none"> <li>• Legal description on cover sheet</li> <li>• Topo is only shown on Demo plan (Sheet C002)</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• No</li> </ul>	Please add a topo sheet without any demolition comments
Existing plant material Existing woodlands or wetlands (LDM 10)	<ul style="list-style-type: none"> <li>• <u>Show location type and size. Label to be saved or removed.</u></li> <li>• <u>Plan shall state if none exists.</u></li> </ul>	<ul style="list-style-type: none"> <li>• Trees and tree chart on Sheet LS-0</li> <li>• Removals shown on Sheet LS-0</li> </ul>	<p>Will Revise</p> <ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>	<ol style="list-style-type: none"> <li>1. Tree credits are only given for trees outside of a regulated woodland that are preserved – only credits for Trees 1 and 2 can be given. Please correct the table on Sheet LS-0.</li> <li>2. No replacements are required for the removed evergreens as they are not in a regulated woodland and aren't 36" dbh.</li> <li>3. <u>Please draw a heavy line indicating the boundaries of the proposed woodland protection easement such as the pink line on the image at the bottom of this chart.</u></li> </ol>
Soil types (LDM10)	<ul style="list-style-type: none"> <li>• <u>As determined by Soils survey of Oakland County</u></li> <li>• <u>Show types, boundaries</u></li> </ul>	Sheet LS-0	Yes	
Existing and proposed improvements (LDM 10)	Existing and proposed buildings, easements, parking spaces, vehicular use areas, and R.O.W	Yes	Yes	
Existing and	Overhead and	<ul style="list-style-type: none"> <li>• Overhead wires</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> </ul>	Please show all utility

Item	Required	Proposed	Meets Code	Comments
proposed utilities (LDM 10)	underground utilities, including hydrants	are indicated along south property line. <ul style="list-style-type: none"> <li>The water, sanitary and storm sewer lines along Novi Road are not shown</li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>	lines, including underground lines on the landscape plans – there are sanitary and water lines traveling along Novi Road.  <span style="color: green;">Will add to Survey</span>
Proposed grading. 2' contour minimum (LDM 10)	Provide proposed contours at 2' interval	Sheet C201	Yes	
Snow deposit (LDM 10)	Show snow deposit areas on plan	Yes	Yes	
LANDSCAPING REQUIREMENTS				
Parking Area Landscape Requirements (Zoning Sec 5.5.3.C and LDM 5)				
General requirements (LDM 5)	<ul style="list-style-type: none"> <li>Clear sight distance within parking islands</li> <li>No evergreen trees</li> </ul>	<ul style="list-style-type: none"> <li>Provided</li> <li>No trees or shrubs are within it</li> </ul>	Yes	
Name, type and number of ground cover (LDM 5)	As proposed on planting islands	<ul style="list-style-type: none"> <li>Sod is shown for all areas except detention basin</li> <li>Detention seed mix is shown in basins</li> </ul>	Yes	1.
General (Zoning Sec 5.5.3.C)				
Parking lot Islands	<ul style="list-style-type: none"> <li>A minimum of 200 SF to qualify</li> <li>A minimum of 200sf unpaved area per tree planted in an island</li> <li>6" curbs</li> <li>Islands minimum width 10' BOC to BOC</li> </ul>	<ul style="list-style-type: none"> <li>The islands are actually perimeter islands.</li> <li>They appear to meet the minimum area required.</li> <li>Island areas are labeled – sufficient sized</li> </ul>	Yes	
Curbs and Parking stall reduction (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.	The parking spaces are 17 feet long with a 7-foot wide sidewalk.	Yes	
Contiguous space limit (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	The only bay is 8 spaces.	Yes	
Plantings around Fire Hydrant (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> </ul>	<ul style="list-style-type: none"> <li>Hydrants are shown</li> <li>No landscaping is blocking them.</li> </ul>	<span style="color: green;">Will show</span>  Yes Yes	If either of the buildings has an FDC, please show that on the landscape plans and <b>don't plant anything taller than 12"</b> in front of it.

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>Plantings near hydrants or FDCs should be no taller than 12"</li> </ul>			
Landscaped area (Zoning sec 5.5.3.C)	Areas not dedicated to parking use or driveways exceeding 100 sq. ft. shall be landscaped	Yes	Yes	
Clear Zones (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>	No trees or shrubs appear to be within a clear zone but the sign may be.	Will Revise  TBD	<ol style="list-style-type: none"> <li>Please show the clear vision zone as shown below on the landscape plan.</li> <li>The sign and all shrubs and trees must be located outside of the zones.</li> </ol>
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)				
A = Total square footage of vehicular use areas up to 50,000sf x 7.5%	$A = x \text{ sf} * 7.5 \% = A \text{ sf}$	One bay with large islands and canopy trees on both ends	Trees are Shown 4' from back of curb  Yes	As the parking spaces are only on one side of the drive, only perimeter trees need to be provided, but should be placed to shade the spaces as much as possible.
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	$B = (\text{Total area} - 50000) * 1\% = xx \text{ sf}$	NA		
Category 2: For: I-1 and I-2 (Zoning Sec 5.5.3.C)				
A. = Total square footage of vehicular use area up to 50,000 sf x 5%	$A = x \text{ sf} * 6\% = A \text{ sf}$  As the only parking is on one side of a drive, only perimeter parking lot trees are required.	One bay with large islands and canopy trees on both ends	Will Revise Note proposed light poles  Yes	Please place the tree in the western island closer to the parking spaces to shade the spaces as much as possible.
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	$B = 0.5\% \times 0 \text{ sf} = B \text{ SF}$	NA		
All Categories				
C = A+B Total square footage of landscaped islands	<ul style="list-style-type: none"> <li><math>C = A + B</math></li> <li><math>C = 114 + 0 = 114 \text{ SF}</math></li> </ul>	1035 SF	Yes	

D = C/200 Number of canopy trees required	Interior trees are not required since just one bay is provided –	Perimeter trees on each end of the bay are provided	Yes	
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Item	Required	Proposed	Meets Code	Comments
	perimeter trees will meet the requirement			
Parking Lot Perimeter Trees (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> <li>• 1 Canopy tree per 35 lf</li> <li>• <math>(250 \times 2 - 81) / 35 = 12</math> trees</li> <li>• Perimeter areas within 20 feet of a building can be excluded from the calculation.</li> </ul>	12 trees	Will revise  Yes	Label the PKS next to the dumpster as WP and count it as a pond tree
Accessway perimeter (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>950 \text{lf} / 35 = 27</math> trees</li> <li>• Perimeter areas within 20 feet of a building can be excluded from the calculation.</li> </ul> <p>Waiver would be supported for 350 lf (10 trees) along north side of west building.</p>	<p><u>11 trees</u></p> <ul style="list-style-type: none"> <li>• 7 north of east building labeled PKN</li> <li>• 4 greenbelt trees that can be double-counted as accessway perimeter trees</li> </ul>	Will adjust. Plan as requested  No	<ol style="list-style-type: none"> <li>1. A landscape waiver would be supported for the lack of trees provided along the 350lf along the drive north of the building as there is not room for the 10 trees required there.</li> <li>2. Please request a waiver for those trees</li> <li>3. Please provide all of the 17 remaining required trees along the drives, including 2 east of the snow deposit area north of the new building, 3 around the T turn and one east of the hydrant at the south side of the entrance (the replacements trees may need to be moved away from the pavement edge to accommodate them)</li> <li>4. Label the accessway trees as AW, not PKN.</li> </ol>
Parking land banked (Zoning Sec 5.2.14.D)	NA	None		
<b>Berms, Walls and ROW Planting Requirements</b>				
<i>Berms (Zoning Sec 5.5.3.A &amp; LDM 1)</i>				
<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>				
<i>Residential Adjacent to Non-residential (Sec 5.5.3.A &amp; LDM 1.a)</i>				
Berm requirements (Zoning Sec 5.5.A)	As the railroad passes between the site and the residential property	None	Yes	

Item	Required	Proposed	Meets Code	Comments
	to the east, no screening berm is required.			
<b>Adjacent to Public Rights-of-Way (Sec 5.5.3.B and LDM 1.b)</b>				
Berm requirements (Zoning Sec 5.5.3.A.(5))	As the parking does not abut the greenbelt, no berm is required.	None	Yes	
<b>Cross-Section of Berms (LDM 10)</b>				
Slope, height and width	NA	No		
Type of Ground Cover	NA	Sod	Yes	
<b>Walls (Zoning Sec 5.5.3.A &amp; LDM 10)</b>				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	<ul style="list-style-type: none"> <li>Only retaining walls along the detention ponds are proposed</li> <li>TW/BW are provided on grading plan</li> </ul>	TBD	<u>Please provide sample wall information for all walls indicating their appearance and construction.</u>
Walls greater than 4 ft. should be designed and sealed by an Engineer		No details provided	No	<u>Please provide details for walls taller than 4 feet along with the building plans</u>
<b>ROW Landscape Screening Requirements (Zoning Sec 5.5.3.B.ii)</b>				
Greenbelt width	Not adjacent to Pkg: 25 ft	0-18 ft	No	As the building is not being enlarged into the greenbelt, and the new drive across the front of the site is a requirement of the fire marshal, the deficiency is accepted without a waiver.
Min. berm crest width	None	No	Yes	
Minimum berm height	None	No	Yes	
3' wall	(2)(3)(4)	None		
Canopy deciduous or large evergreen trees	<ul style="list-style-type: none"> <li>Not adj to Pkg: 1 tree per 60 ft</li> <li>(300-50)/60 = 4 trees</li> </ul>	<ul style="list-style-type: none"> <li>5 new trees</li> <li>2 existing trees</li> </ul>	Yes	
Sub-canopy deciduous trees	<ul style="list-style-type: none"> <li>Not adj to Pkg: 1 tree per 40 ft</li> <li>(300-50)/40 = 6 trees</li> </ul>	6 trees	Yes	The two arborvitae do not count as subcanopy trees.
Self-Storage Rules (14-271-Part II Section 2.1)	At least 2 of the required canopy or evergreen greenbelt trees shall be planted between the road right-of-way and the building.	3 deciduous canopy trees	Yes	

Item	Required	Proposed	Meets Code	Comments
Canopy deciduous trees in area between sidewalk and curb	<ul style="list-style-type: none"> <li>• Parking &amp; No Parking: 1 tree per 35 lf</li> <li>• (300-125)/45 = 4 trees</li> </ul>	No trees	Will Revise plan  Note Sign will be moved  Will check for utility lines  Yes	1. Please extend the clear vision zones out to the road edge and provide calculation, measuring the deduction per the illustration in Section 5.5.3.B.ii Footnote 10. 2. If existing utility lines (not currently shown) do not allow the trees to be planted due to a lack of 5 foot spacing between the tree trunks and underground utility lines, the trees should not be planted and no waiver is required.
Non-Residential Projects (Zoning Sec 5.5.3.F.iii) Refer to Planting in ROW, building foundation landscape, parking lot landscaping and LDM				
Screening of outdoor storage, loading/unloading (Zoning Sec. 3.14, 3.15, 4.55, 4.56, 5.5)	Loading/unloading areas shall be screened from view from Novi Road or the residences.	All of the vehicle unloading areas appear to be inside the buildings, or blocked from view from Novi Road by the buildings and from the residences by the buildings and the railroad tracks.	Yes	
Transformers/Utility boxes (LDM 6)	<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>	The transformer for both buildings is blocked by the existing building but no shrubs	Will add Shrubs  No	Please add screening shrubs along the north side of the transformer
Building Foundation Landscape Requirements (Zoning Sec 5.5.3.D)				
Interior site landscaping SF (Zoning Sec 5.5.3.D)	<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>• At least 75% of the building perimeter should be landscaped</li> <li>• West Bldg: (644-25-28-5)lf x 8 ft = 4688 sf</li> </ul>	<ul style="list-style-type: none"> <li>• West bldg: 4723 sf</li> <li>• East bldg: 4604 sf</li> <li>• Detailed foundation planting plans are provided</li> <li>• New plantings are proposed in place of the</li> </ul>	<ul style="list-style-type: none"> <li>• Yes</li> <li>• Yes</li> </ul>	

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> <li>East Bldg: (585-7-3-3) 1f x 8 ft = 4576 sf</li> </ul>	existing shrubs around the existing building.		
<i>Building Frontage Landscaping (Zoning Sec 5.5.3.D)</i>	If visible from public street a minimum of 60% of the exterior building perimeter should be covered in green space	<ul style="list-style-type: none"> <li>Existing: 143/155 = 92%</li> <li>New: 100% of building visible from Novi Road is landscaped</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> </ul>	
Detention/Retention Basin Requirements (Zoning Sec. 5.5.3.E & LDM 3)				
Planting requirements (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>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> <li>West pond: 335lf/35 = 10 trees</li> <li>East pond: 273lf/35 (only east, south and west sides) = 8 trees</li> </ul> <p>Woodland replacement trees can be used to meet the tree requirement</p>	<ul style="list-style-type: none"> <li>Shrubs are proposed around the ponds but 3 shrub "masses" are not large enough.</li> <li>Trees:                             <ul style="list-style-type: none"> <li>West pond: 12 trees</li> <li>East pond: 12 trees</li> </ul> </li> <li>A native seed mix is proposed for the bottoms of both ponds.</li> </ul>	Will add shrubs  Add Note  Removed Trees  Will add note <ul style="list-style-type: none"> <li>Yes/No</li> <li>Yes</li> <li>Yes</li> </ul> Will add note	<ol style="list-style-type: none"> <li>Please use larger masses of shrubs than just 3, and provide 70% coverage around the ponds.</li> <li>If berries are desired on the winterberries, one male per 8 females (intermixed) should be specified.</li> <li>Extra trees can be removed from the plan if desired.</li> <li>Please show seed mix species list on Final Site Plans.</li> <li>Please add a note near the seed mix list stating: <u>"The landscape contractor shall send proof of the seed mix to be used (photo of seed bag or copy of invoice indicating the seed mix purchased) to <a href="mailto:rmeader@cityofnovi.org">rmeader@cityofnovi.org</a> for approval prior to placement."</u></li> </ol>
Phragmites and Japanese Knotweed Control (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</li> </ul>	<ul style="list-style-type: none"> <li>Populations of Phragmites are indicated on Sheet C002</li> <li>Plans for removal are included in Environmental Engineer Report</li> </ul>	Will Review  <ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>	Please add steps for the <u>Phragmites' removal to the Site Plans (referring to the environmental engineer's report is not sufficient)</u>

Item	Required	Proposed	Meets Code	Comments
	from the site.			
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 10)	Provide intended date	Between Mar 15 and Nov 15.	Yes	
Maintenance & Statement of intent (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	
Plant source (LDM 10 & 11)	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan (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 plan is included	<b>Will add Irrigation When we have site plan approval</b>	<ol style="list-style-type: none"> <li>1. <u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long- term survival.</u></li> <li>2. <u>If xeriscaping is used, please provide information about plantings included.</u></li> <li>3. <u>An irrigation system shall meet the requirements listed at the bottom of this chart.</u></li> </ol>
Other information (LDM 10)	Required by Planning Commission	NA		
Establishment period (Zoning Sec 5.5.6 & LDM 10)	2 yr. Guarantee	Yes	Yes	
Approval of substitutions. (Zoning Sec 5.5.5 & LDM 10)	City must approve any substitutions in writing prior to installation.	Yes	Yes	
Plant List (LDM 10 & 11) – Include all cost estimates				
Quantities and sizes	<ul style="list-style-type: none"> <li>• At least 50% of species used, not including woodland replacements or seed mix species, shall be native to Michigan</li> <li>• Tree diversity shall follow guidelines of</li> </ul>	On plant list	Yes	
Root type		Yes	Yes	
Botanical and common names (LDM 4 & 11)		<ul style="list-style-type: none"> <li>• 11 of 23 species used (48%) are native to Michigan</li> <li>• Tree diversity is</li> </ul>	<b>Will UpDate</b> <ul style="list-style-type: none"> <li>• No</li> <li>• Yes</li> </ul>	1. Please increase the number of native species used so at least 50% of the species used are



Item	Required	Proposed	Meets Code	Comments
	LDM Section 4	satisfactory ( <i>Thuja occidentalis</i> is a shrub, not a tree)		<p>native. Check <a href="https://lsa-miflora-p.lsa.umich.edu/">https://lsa-miflora-p.lsa.umich.edu/</a> to see if a plant is considered native to Michigan or ask me via email.</p> <p>2. Beeches are currently having some maladies in Michigan, so I would recommend using Swamp White Oak (<i>Quercus bicolor</i>) – also a native - in place of them</p> <p>3. <i>Acer spicatum</i> is a nice native tree, but is not readily available in nurseries here. <b>I'd</b> recommend replacing them with <i>Amelanchier laevis</i> or <i>Amelanchier xgrandiflora</i> '<b>Autumn Brilliance</b>', both of which are considered native.</p>
Type and amount of lawn		Sod	Yes	<u>Please add areas of each in cost table.</u>
Cost estimate (LDM 10)	For all new plantings, mulch and sod as listed on the plan	No		<p><u>Please add to final site plan. The standard costs to use are:</u></p> <ul style="list-style-type: none"> <li>• <u>Canopy trees: \$400 ea.</u></li> <li>• <u>Evergreen trees: \$375 ea.</u></li> <li>• <u>Subcanopy trees: \$375 ea.</u></li> <li>• <u>Shrubs: \$50 ea.</u></li> <li>• <u>Grasses/perennials: \$15 ea.</u></li> <li>• <u>Seed: \$3/syd</u></li> <li>• <u>Sod: \$6/syd</u></li> <li>• <u>Mulch: \$35/cyd</u></li> </ul>
<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	
Multi-stem Tree		Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
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)	Sheet LS-0	Yes	Critical root zone can be shown as 1 foot outside of the dripline, but <b>it's</b> fine as you have it.
<b>Other Plant Material Requirements (LDM 11)</b>				
General Conditions	Plant materials shall not be planted within 4 ft. of property line	Sheet LS-1	Yes	
Plant Materials & Existing Plant Material (LDM 11)	Clearly show trees to be removed and trees to be saved.	Sheet LS-0	Yes	
Landscape tree credit (LDM 11)	<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>	Revised LS-0 Tree Table  23 credits noted on table  Revised LS-0 Tree Table	No	1. No credits are allowed for the two evergreen trees saved as credits are only earned with preserved canopy trees 2. No credits are allowed for the trees preserved within the wetland or woodland
Plant Sizes for ROW, Woodland replacement and others (LDM 11)	<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>	Included in plant list	Yes	
Plant size credit (LDM 11)	NA	No		
Prohibited Plants (LDM 11.b)	No plants on City Invasive Species List	No invasive plants are proposed	Yes	
Recommended trees for planting under overhead utilities (LDM 11)	Label the distance from the overhead utilities			
Collected or Transplanted trees (LDM 11)		None		
Nonliving Durable Material: Mulch (LDM 12)	<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</li> </ul>	Yes	Yes	

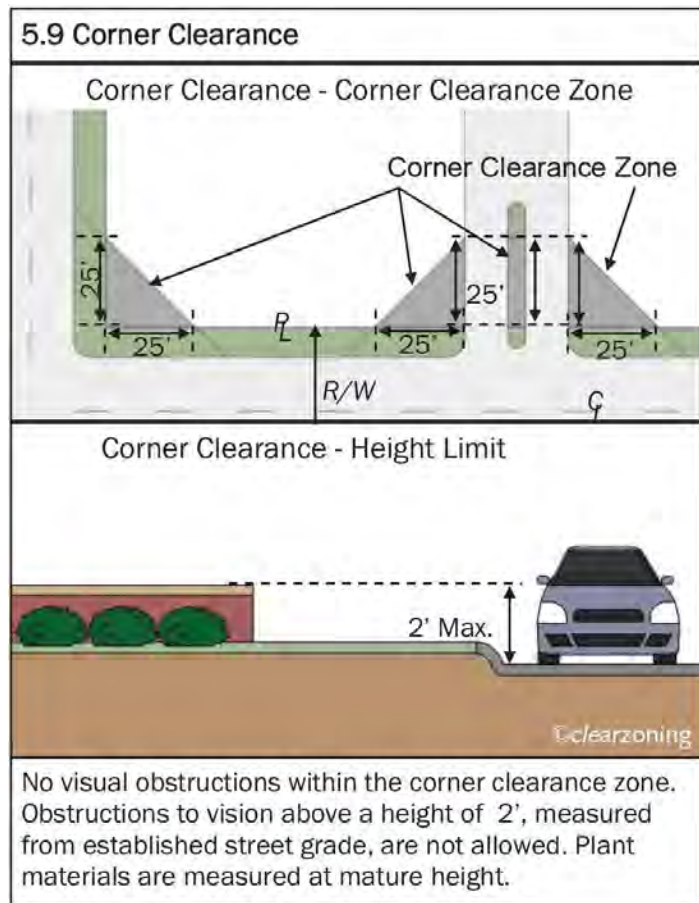
Item	Required	Proposed	Meets Code	Comments
	hardwood bark mulch. Include in cost estimate.			

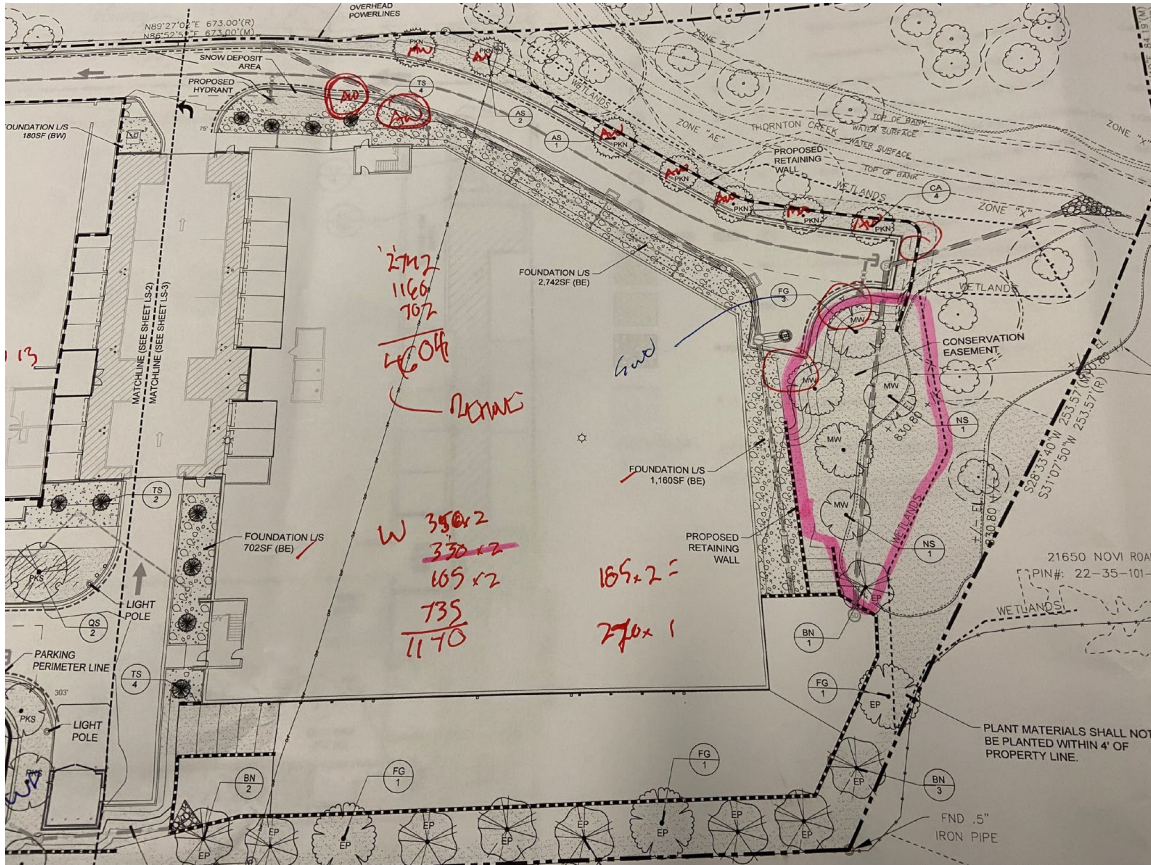
NOTES:

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.







Corporate Headquarters  
295 South Water Street, Suite 300  
Kent, OH 44240  
800-828-8312

Local Office  
3381 Lapeer Rd. West  
Auburn Hills, MI 48326

**To:** Christian Carroll, City of Novi Planner  
Community Development Department, City of Novi

**From:** Kerry Gray, Principal Consultant  
Davey Resource Group

**CC:** Barb McBeth, City of Novi, City Planner  
Lindsay Bell, City of Novi Senior Planner  
Rick Meader, City of Novi Landscape Architect  
Ben Peacock, City of Novi Planner  
Diana Shanahan, City of Novi Planning Assistant  
Douglas Repen, Mannik and Smith Group

**Date:** April 24, 2023

**RE:** Extra Space Self Storage (FKA: GHK Self Storage)  
Woodland Review #2 – JSP22-38

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Davey Resource Group, Inc. (DRG) has conducted a review of the revised Preliminary Site Plan for the proposed **Extra Space Self Storage** facility (FKA GHK Self Storage) located at 21700 Novi Road (Parcel No. 22-35-101-016). The plan set, prepared by Blue Water Civil Design (plan revision: 03/31/2023), was reviewed for conformance with the City of Novi’s Woodland Protection Ordinance, Chapter 37, and comments from Woodland Review #1.

**Recommendation:** DRG recommends contingent approval of the Extra Space Self Storage Facility (FKA GHK Self Storage) Preliminary Plan – based upon addressing the woodland review comments.

The following Woodland Regulations apply to this site:

Woodland Regulation	Required
Woodland Permit (Chapter 37, Section 37-26)	YES
Tree Replacement (Chapter 37, Section 37-8) & Financial Guarantee (Chapter 26.5-5)	YES
Tree Protection (Fence) (Chapter 37, Section 37-9) & Financial Guarantee (Chapter 26.5-5)	YES
Woodland Conservation Easement (Chapter 37-30 (e))	YES



**Woodland Review Comments**

1. **A Woodland Use Permit is required** to perform construction on any site containing regulated woodlands. The Woodland Use Permit for this project requires Planning Commission approval.

To determine woodland fence inspection fees - the applicant shall **provide the cost (labor and supplies) for installation (including the initial location staking) and removal of tree protection fencing.**

**COST OF INSTALLATION TO BE PROVIDED WITH RESUBMITTAL**

2. **Woodland Replacement Credits (Sheet LS-0).** The City of Novi Landscape Design Manual **allows non-regulated canopy trees that will be preserved** to be used to fulfill woodland replacement credits if they are on the site and not prohibited and/or invasive species.

The “Tree Removal/Protection Chart” on Sheet LS-0 **incorrectly shows regulated woodland trees** being saved and counted as woodland replacement credits. The following preserved regulated woodland trees **cannot be used towards meeting woodland replacement requirements:**

- Tree #357 10” slippery elm
- Tree #358 8” cottonwood
- Tree #359 23” cottonwood
- Tree #364 25” black walnuts
- Tree #370 10” boxelder
- Tree #371 21” black walnut
- Tree #372 9” boxelder
- Tree #373 14” boxelder

In addition, the following preserved non-Michigan native evergreen trees cannot be used towards meeting woodland replacement requirements because they are not deciduous canopy trees.

- Tree #326 12” blue spruce
- Tree #327 17” blue spruce

**LANDSCAPING PLAN TO BE REVISED TO CORRECTLY SHOW REGULATED WOODLAND TREES**

3. **Tree Removals and Replacements (Sheets LS-0/LS-1).** The plan proposes the removal of three (3) regulated woodland trees and impacts to the critical root zone one (1) regulated woodland tree which requires 8 woodland replacement credits (see chart below).
  - Tree #364 25” black walnut – *critical root zone impacts*
  - Tree #365 12” boxelder – *removal*
  - Tree #366 9” black walnut – *removal*
  - Tree #367 15” black walnut – *removal*

**Revise plans to fix the chart on sheet LS-0 to reflect the information in Comments 2 and 3.**

Tree Size (DBH)	Number of Trees	Ratio Replacement/ Removed Tree	Total Replacements Required
8-11”	1	1	1
>11-20”	2	2	4
>20-29”	1	3	3
>29+”	0	4	0
Multi-Stem		Add Stems/8	
Woodland Replacement Credits (Non-Regulated Trees to be Preserved)	0	0	0
<b>Total Replacement Credits Required</b>			<b>8</b>

**CHART REVISED ON LANDSCAPING PLANS**

4. **Woodland Replacements (Sheet LS-1).** The site is required to mitigate the removal/disturbance of the 4 regulated woodland trees through the preservation of two non-regulated trees and with **eight (8) woodland replacement credits**. Woodland replacement credits can be provided by:
- Planting the woodland tree replacement credits on-site.
  - Payment to the City of Novi Tree Fund at a rate of \$400/woodland replacement credit.
  - Combination of on-site tree planting and payment into the City of Novi Tree Fund (\$400/woodland replacement credit).

**Revise plans based on Comments #2 and 3 and the required woodland replacement credits.**

LANDSCAPING PLANS TO BE REVISED

5. **Critical Root Zone (Sheet LS-0).** The tree protection fence diagrams on sheet LS-0 state the wrong information regarding measurement of the critical root zone. **Revise drawings to use the definition from Chapter 37.**

***Critical root zone (CRZ) means a circular area around a tree with a radius measured to the tree's longest dripline radius plus one (1) foot.***

LANDSCAPING PLANS TO BE REVISED TO CORRECTLY SHOW CRZ

6. **Financial Guarantees (Repeated comments from Woodland Review #1)**
- A woodland fence guarantee of \$6,000 (\$5,000 x 120%) is required** per Chapter 26.5-37. The financial guarantee shall be paid prior to issuance of the City of Novi Woodland Use Permit.  
NOTED
  - Woodland Replacement Financial Guarantee of \$3,200 (8 required woodland replacement credits x \$400 per woodland replacement credit)** is required as part of the Woodland Use Permit fees to ensure planting of the on-site Woodland Replacement tree credits.

Based on inspection of the installed on-site Woodland Replacement trees, the Woodland Replacement Financial Guarantee shall be returned to the Applicant. The Applicant is responsible for requesting this inspection. Following acceptance of the planted woodland replacement trees, a 2-year performance bond must be paid to ensure the continued health and survival of the replacement trees (comment 6).

NOTED

- The applicant will be required to pay into the City of Novi Tree fund at a rate of \$400/credit for any Woodland Replacement tree credits that cannot be planted on site or if any protected woodland or non-regulated trees providing a woodland replacement credit are removed or damaged. NOTED
- The applicant shall guarantee trees for two (2) growing seasons after installation and the City's acceptance,** per The City's Performance Guarantees Ordinance. **A two-year maintenance bond in the amount of \$1,000,** twenty-five (25) percent of the value of the trees but in no case less than one thousand dollars (\$1,000.00), shall be required to ensure the continued health of the trees following acceptance (Chapter 26.5, Section 26.5-37).

Based on a successful inspection 2 years after installation of the on-site Woodland Replacement trees, the Woodland Replacement Performance Guarantee shall be returned to the Applicant. The Applicant is responsible for requesting this inspection. NOTED

7. **Woodland Guarantee Inspection.** If the woodland replacements, street trees or landscaping guarantee period is scheduled to end during the period of time when inspections are not conducted

(November 15th – April 15th) the Applicant is responsible for contacting the Bond Coordinator and Woodland/Landscape Inspector in late summer/early fall prior to the 2 year expiration to schedule an inspection. **The Applicant is responsible for walking the entire site to confirm that all of the material has survived and is healthy. If any material is missing, dead or dying, replacements should be made prior to requesting the inspection.** Once this occurs the Applicant should contact the Bond Coordinator to schedule the inspection (Angie Sosnowski at [asosnowski@cityofnovi.org](mailto:asosnowski@cityofnovi.org) / 248-347-0441) and complete the inspection request form. If additional inspections are needed, then additional inspection fees will be required to be paid by the applicant. Based upon a successful inspection for the 2 year warranty the Landscape/Woodland/Street trees financial guarantee will be returned to the Applicant **NOTED**

8. **Conservation Easement.** The Applicant may be required to provide preservation/conservation easements as directed by the City of Novi Community Development Department for any areas of woodland replacement trees. The applicant shall demonstrate that all proposed woodland replacement trees and existing regulated woodland trees to remain will be guaranteed to be preserved as planted with a conservation easement or landscape easement to be granted to the city. This language shall be submitted to the City Attorney for review. The executed easement must be returned to the City Attorney within 60 days of the issuance of the City of Novi Woodland permit. Any associated easement boundaries shall be indicated on the Plan.

**NOTED**

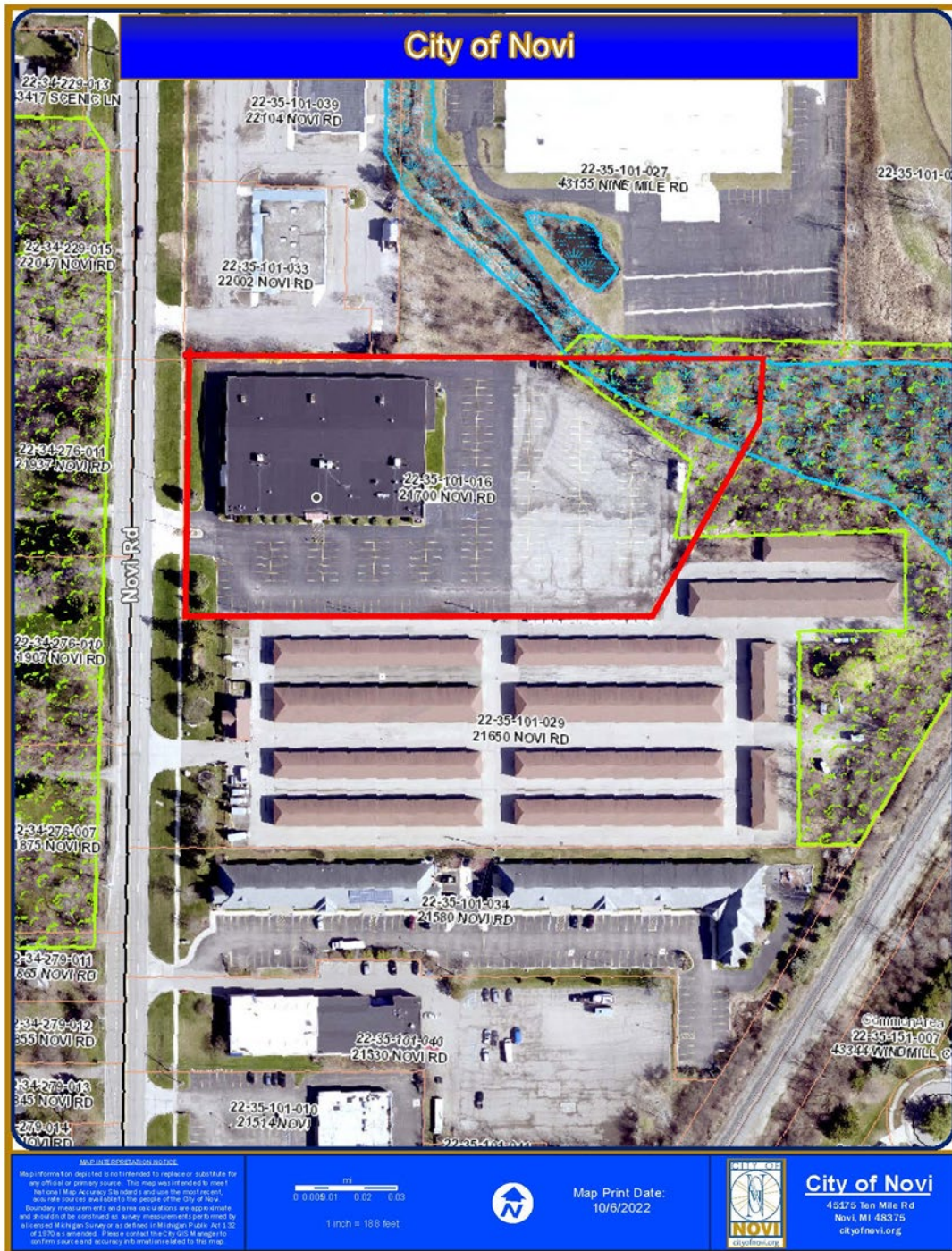


Figure 1. Proposed site for Extra Space Self Storage (FKA: GHK Self Storage)  
(outlined in red)

City of Novi Regulated Woodland Map  
(Green hatched areas = City-regulated woodlands;  
Blue hatched areas= City regulated wetlands)





April 26, 2023

Christian Carroll  
 City Planner  
 Department of Community Development  
 City of Novi  
 45175 W. Ten Mile Road  
 Novi, Michigan 48375

RE: GHK Self-Storage; JSP22-48  
 Wetland Review of Revised Preliminary Site Plan  
 MSG Project No. N1030138

Dear Mr. Carroll:

The Mannik & Smith Group, Inc. (MSG) reviewed the plan set titled *Site Development Plans for: Self Storage Facility* prepared by Bluewater Civil Design, LLC dated March 31, 2023 (rPSP). The project site is located at 21700 Novi Road, east of Novi Road and south of Nine Mile Road, parcel 50-22-35-101-016, in Section 35 (Site). MSG also reviewed the *Wetland Assessment* report prepared by SME dated November 29, 2022, provided with the rPSP (Wetland Report). The rPSP depicts repurposing of the existing Site building and construction of a new self-storage building and two detention ponds in the currently paved parking areas of the Site.

**Published Data**

Upon review of published resources, the portion of the Site included in the Project appears to contain:

- City-regulated wetlands, as identified on the City of Novi Wetlands interactive map website (Figure 1).
- Wetlands that are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Refer to the Permits and Regulatory Status section below.
- Wetlands as identified on National Wetland Inventory (NWI) and Michigan Resource Inventory System (MIRIS) maps, as identified on the EGLE Wetlands Viewer interactive map website (Figure 2). NWI and MIRIS wetlands are identified through interpretation of topographic data and aerial photographs by the associated governmental bodies.
- Hydric (wetland) soil as mapped by the U.S. Department of Agriculture, Natural Resource Conservation Service, as identified on the EGLE Wetlands Viewer interactive map website (Figure 2).

**MSG Wetland Boundary Verification**

The rPSP and the Wetland Report depict the location of two wetlands at the Site as summarized below.

Wetland	On-site Wetland Area (Acre)	Wetland Impact Area (Acre)	Wetland Impact Fill Volume (Cubic Yards)	Wetland Buffer Area (Acre)	Wetland Buffer Impact Area (Acre)	Wetland Buffer Impact Fill Volume (Cubic Yards)
A	0.092	Not specified*,**	Not specified*	Not specified*	Not specified*	363 net fill
B	0.369	Not specified*,**	Not specified*	Not specified*	Not specified*	Not specified*
<b>Total</b>	<b>0.461</b>	<b>Not specified*,**</b>	<b>Not specified*</b>	<b>Not specified*</b>	<b>Not specified*</b>	<b>Not specified*</b>

\* This information required for final site plan approval

\*\* See Comment 1 below



**Permits and Regulatory Status**

The City of Novi Code of Ordinances, Chapter 12, Article V defines an essential wetland as meeting one or more of the criteria listed in subsections 12-174(b)(1) through (10). It is MSG's opinion Wetlands A and B provide the functional characteristics of storm water storage capacity and wildlife habitat, and accordingly Wetlands A and B meet the criteria for an essential, City-regulated wetland. It appears pavement is to be permanently removed from a portion of Wetland A; see the Comments section below for applicable requirements.

In addition to wetlands, the City of Novi regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states: "There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses". The established wetland and watercourse buffers/setback limit is 25 feet horizontal feet, regardless of grade change. Encroachment on the wetland buffer will require authorization from the City of Novi.

Mitigation is required per Section 12-176 of the Novi Code of Ordinances when an activity results in 0.25-acre or greater of impairment or destruction of wetland areas that are determined to be essential wetland area, two acres in size or greater, or contiguous to a lake, pond, river, or stream. The Novi Code of Ordinances, Section 12-176 – Mitigation, states "Where an activity results in the impairment or destruction of wetland areas of less than one-quarter (¼) acre that are determined to be essential under subsection 12-174(b), are two (2) acres in size or greater or are contiguous to a lake, pond, river or stream, additional planting or other environmental enhancement shall be required onsite within the wetlands or wetland and watercourse setback where the same can be done within the wetland and without disturbing further areas of the site." The rPSP does not depict encroachment into the Site wetlands, so neither mitigation nor an environmental enhancement plan appears to be required.

EGLE typically regulates wetlands that are located within 500 feet of an inland lake, pond, stream, or river, and/or isolated wetlands of an area of 5 acres or more. Wetlands A and B are likely regulated by EGLE based on their size and/or proximity to Thornton Creek. However, EGLE is the final authority of the location and regulatory status of wetlands in Michigan. MSG recommends the client request a pre-application meeting with EGLE to determine the State jurisdictional status and mitigation requirements if work affecting the potentially State-regulated wetlands is proposed.

Based on the available information, the following wetland related items appear to be required for this project:

Item	Required/Not Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required, likely Minor Use; see Comment 1 below
Wetland Buffer Authorization	Required; see Comment 2 below
Wetland Mitigation	Not required
Environmental Enhancement Plan	Not required
EGLE Wetland Permit	Not required
Wetland Conservation Easement	Not applicable

**Comments**

1. **The rPSP appears to depict permanent removal of pavement from a portion of Wetland A (Photo 4). The size of this area must be quantified on the Site plans and the vegetative cover to be used to replace the pavement must be identified in Site plans. In addition, a storm water culvert is proposed to be installed through the wetlands with a discharge into Thornton Creek. The temporary and/or permanent impact area(s) affected by the installation of the proposed storm water outfall into Thornton Creek must be similarly quantified.** Because the ground cover will be affected, areas where silt fence is to be installed are to be included in wetland impact area calculations.

SIZES AND VEGETATIVE COVER ADDED TO SITE PLANS.  
IMPACT AREAS ADDED TO SITE PLANS

- a. If affected wetland areas are revegetated with native wetland plants and/or native wetland seed mix, a City permit for temporary impact will be required. **NOTED**
  - b. If affected wetland areas are to be revegetated with turf grass and maintained as lawn, and/or if fill material is to be added to wetland areas, a City permit for permanent impact will be required, and an EGLE permit may be required. **Planting turf grass or placement of sod in a wetland or buffer area is considered permanent impact.** **NOTED**
2. The wetland buffer cut/fill volumes are noted on Sheet C102 of the rPSP. The **areas** of permanent and/or temporary buffer impact also must be depicted and quantified on Site plans. Because the ground cover will be affected, areas where silt fence is to be installed are to be included in wetland buffer impact area calculations. This information is required for issuance of a Wetland Buffer Authorization letter. **AREAS ADDED TO SITE PLANS**
    - a. Wetland buffer areas where existing pavement is to be permanently removed and the replacement cover will consist of native plants and/or native seed mix are to be considered temporarily impacted. **NOTED**
    - b. Wetland buffer areas that are to include structures (e.g. pavement, retaining walls), landscaped, or maintained as lawn are to be considered permanently impacted. **NOTED**
  3. City of Novi requires the boundary lines of any watercourses or wetlands on the Site to be clearly flagged or staked and such flagging/staking shall remain in place throughout the conduct of permit activity. **NOTED**
  4. As detailed in SME's Wetland Report, Wetlands A and B include non-native plant species (e.g. reed canary grass, Phragmites, buckthorn). MSG recommends the applicant incorporate wetland replacement native plantings, including trees and shrubs, in the project plans as well as removal of non-native invasive species to enhance the aesthetics and natural habitat benefits of the wetland areas. **The proposed *Poa pratensis* (Kentucky Bluegrass) sod is not considered a native wetland plant.** **NOTED. WETLAND PLANT HAS BEEN REVISED**

**MSG conditionally approves the rPSP for Wetlands, contingent on the applicant satisfactorily addressing the comments above.**

Please contact the undersigned if you have any questions regarding the matters addressed in this letter.

Sincerely,

**The Mannik & Smith Group, Inc.**

  
Keegan Mackin  
Environmental Scientist

  
Douglas Repen, CDT  
Project Manager  
Certified Storm Water Management Operator

CC: Barbara McBeth, City of Novi Planner  
Lindsay Bell, City of Novi Planner  
Ben Peacock, City of Novi Planner  
Diana Shanahan, City of Novi Planning Assistant  
Sarah Marchioni, City of Novi Project Coordinator  
Rick Meader, City of Novi Landscape Architect

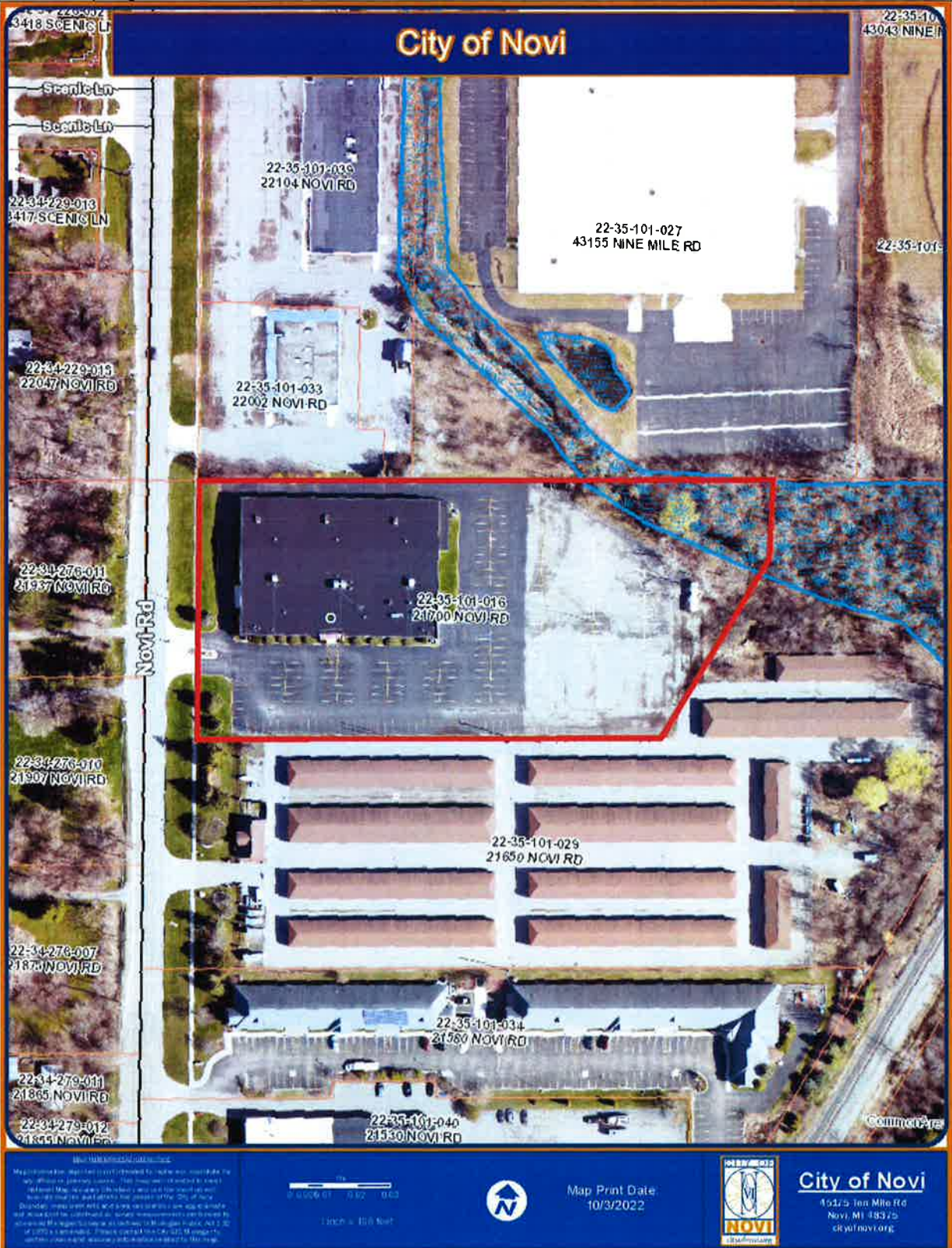
## FIGURES





Figure 1

City of Novi Natural Resources Map. Approximate Site boundary is shown in red. Regulated Wetland areas are shown in blue.



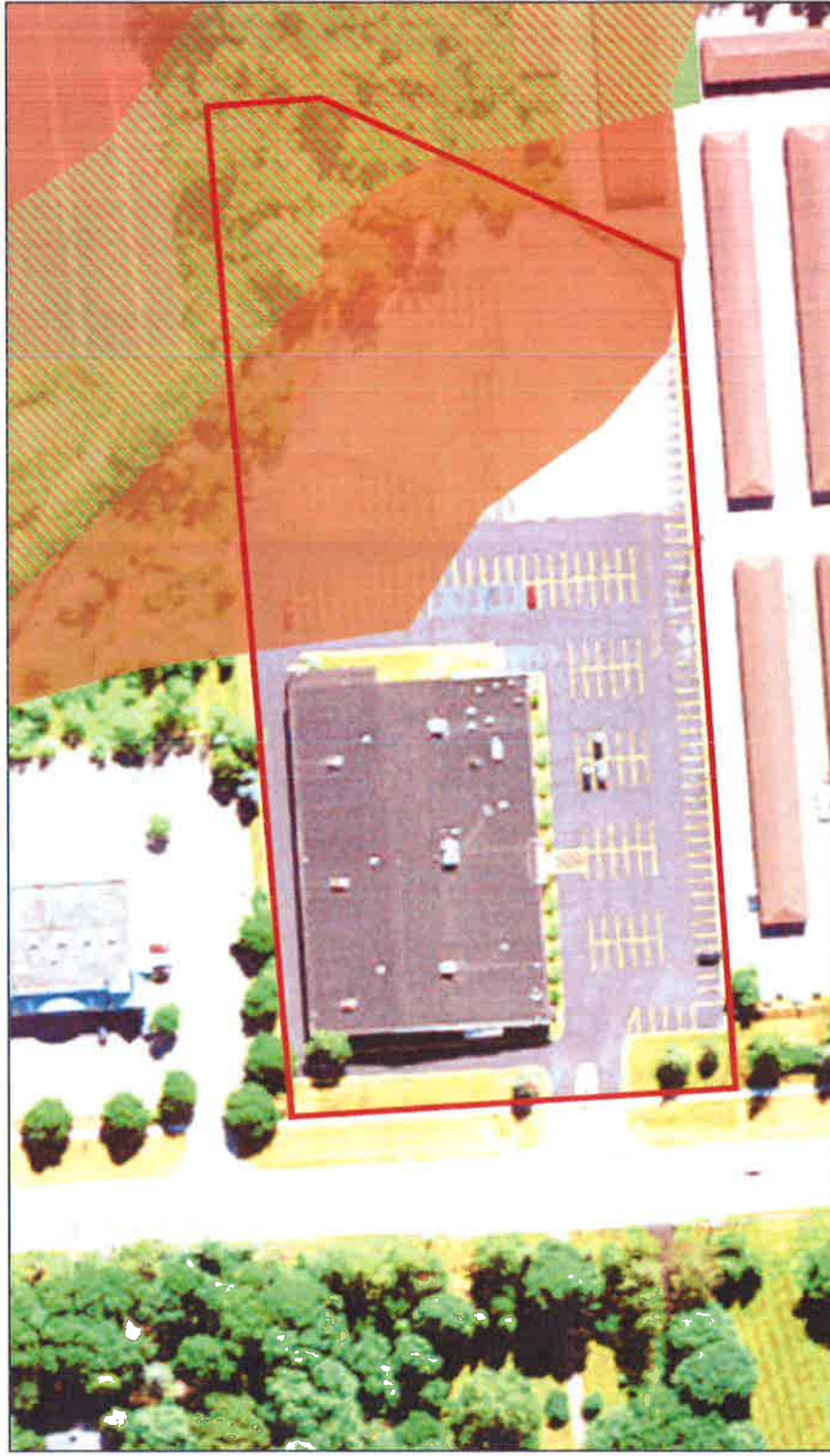
2365 Haggerty Road South, Canton, Michigan 48188  
Tel: 734.397.3100 Fax: 734.397.3131

**GHK Self-Storage; JSP22-48**  
**Wetland Review of Revised Preliminary Site Plan**  
MSG Project No. N1030138



**Figure 2** EGLE Wetlands Viewer Map. Approximate Site boundary is shown in red.

Wetlands Map Viewer



January 4, 2023

Part 303 Final Wetlands Inventory

Wetlands as identified on NWI and MIRIS maps

Soil areas which include wetland soils

Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils

1:1,047  
0 0.01 0.03 0.05 mi  
0 0.01 0.03 0.05 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Disclaimer: This map is not intended to be used to determine the specific.



2365 Haggerty Road South, Canton, Michigan 48188  
Tel: 734.397.3100 Fax: 734.397.3131

**GHK Self-Storage; JSP22-48**  
**Wetland Review of Revised Preliminary Site Plan**  
MSG Project No. N1030138



## SITE PHOTOGRAPHS





Photo 1: View of the site, facing southwest. January 4, 2023



Photo 2: View of paved area adjoining wetlands, facing southeast. January 4, 2023



Photo 3: Typical view of wetland delineation flagging at the Site. January 4, 2023



Photo 4: View of portion of Wetland A extending onto paved area, facing north. January 4, 2023





Photo 5: View of emergent wetland vegetation in Wetland A, facing east. January 4, 2023



Photo 6: View of scrub-shrub wetland vegetation in Wetland A, facing east. January 4, 2023





Photo 7: View of riverine wetland (Thornton Creek) and forested wetland vegetation in Wetland B area, facing northwest. January 4, 2023



Photo 8: View of Thornton Creek adjacent to paved area, facing northwest. January 4, 2023





**Project name:**

JSP22-48 – Extra Space Self Storage (fka GHK Self Storage) Revised Preliminary Site Plan Traffic Review

**To:**

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

**From:**

AECOM

**Date:**

May 2, 2023

**CC:**

Lindsay Bell, Christian Carroll, Humna Anjum, Ben Peacock, Diana Shanahan

# Memo

**Subject:** JSP22-48 – Extra Space Self Storage (fka GHK Self Storage) Revised Preliminary Site Plan Traffic Review

The revised preliminary site plan was reviewed to the level of detail provided and AECOM recommends **approval with conditions** for the applicant to move forward as long as the comments/potential variances below are addressed to the satisfaction of the City.

## GENERAL COMMENTS

1. The applicant, GHK Development, Inc., is proposing the addition of a 100,200 SF 3 story self storage building to the existing 36,571 SF building to be remodeled into self storage.
2. The development is located on the east side of Novi Road, south of 9 Mile Road. Novi Road is under the jurisdiction of Oakland County.
3. The site is zoned I-1 (Light Industrial).
4. The following traffic related waivers or variances will be required:
  - a. Location of trash enclosure.
5. Conditions for approval include the following:
  - a. Applicant requests and is granted a variance for location of trash enclosure.
  - b. Dimensions of garage door provided to show 20' access way.
  - c. 6' clear path required from bike parking to ramp.
  - d. The height of the Bike Rack is 36".

## TRAFFIC IMPACTS

1. AECOM performed an initial trip generation based on the ITE Trip Generation Manual, 11<sup>th</sup> Edition, as follows.

ITE Code: 151 – Mini-Warehouse  
Development-specific Quantity: 136,771 SF  
Zoning Change: I-1

Trip Generation Summary	Estimated Trips	Estimated Peak-Direction Trips	City of Novi Threshold	Above Threshold?
<b>AM Peak-Hour Trips</b>	12	7	100	No
<b>PM Peak-Hour Trips</b>	21	11	100	No
<b>Daily (One-Directional) Trips</b>	198	N/A	750	No

- 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
-	N/A

## 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.3</a>	Not indicated	Met	No changes proposed to existing access.
2	Driveway Width   O <a href="#">Figure IX.3</a>	Not indicated	Met	No changes proposed to existing access.
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	A second access point was added for emergency access.
5	Driveway sight distance   O <a href="#">Figure VIII-E</a>	Not indicated	Met	No changes proposed to existing access.
6	Driveway spacing			
6a	Same-side   O <a href="#">11.216.d.1.d</a>	Not indicated	Met	No changes proposed to existing access.
6b	Opposite side   O <a href="#">11.216.d.1.e</a>	Not indicated	Met	No changes proposed to existing access.
7	External coordination (Road agency)	Not indicated	Met	No changes proposed to existing access.
8	External Sidewalk   <a href="#">Master Plan &amp; EDM</a>	Not indicated	Met	No changes proposed to existing access.
9	Sidewalk Ramps   <a href="#">EDM 7.4 &amp; R-28-J</a>	Not indicated	Met	No changes proposed to existing access.
10	Any Other Comments:			

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone   <a href="#">ZO 5.4</a>	None indicated	Met	None required for I districts. Consider for land use.
12	Trash receptacle   <a href="#">ZO 5.4.4</a>	Located in side yard	<b>Not Met</b> WAIVER TO BE APPLIED FOR	Trash receptacle is to be located in the rear yard. <b>A waiver would be required for current proposed location.</b>
13	Emergency Vehicle Access	No turning movements provided	Inconclusive	Provide emergency vehicle turning movements in future submittals.
14	Maneuvering Lane   <a href="#">ZO 5.3.2</a>	24' and 20' lanes dimensioned. Garage doors not dimensioned.	<b>Partially Met</b> SEE ARCHITECTURAL ELEVATIONS FOR DIMENSIONS	<b>Indicate dimensions of garage doors.</b>
15	End islands   <a href="#">ZO 5.3.12</a>			
15a	Adjacent to a travel way	None	-	-
15b	Internal to parking bays	None	-	-
16	Parking spaces   <a href="#">ZO 5.2.12</a>			
17	Adjacent parking spaces   <a href="#">ZO 5.5.3.C.ii.i</a>	<15 spaces with no island	Met	
18	Parking space length   <a href="#">ZO 5.3.2</a>	18' for perpendicular spaces, 23' for parallel spaces	Met	Perpendicular spaces with 6" curb require 19' spaces.
19	Parking space Width   <a href="#">ZO 5.3.2</a>	9' for parallel and perpendicular	Met	Parallel spaces could be reduced to 8' wide.
20	Parking space front curb height   <a href="#">ZO 5.3.2</a>	4"	Inconclusive	Spaces are 18' with a 4" curb. Applicant could shorten spaces to 17'.
21	Accessible parking – number   <a href="#">ADA</a>	2	Met	Only 1 ADA space is required for 16 total spaces.
22	Accessible parking – size   <a href="#">ADA</a>	9' space with 8' aisle	Met	Spaces currently 9' wide, may be reduced to 8' with an 8' aisle for van accessible to increase green area.
23	Number of Van-accessible space   <a href="#">ADA</a>	2	Met	Indicated
24	Bicycle parking			
24a	Requirement   <a href="#">ZO 5.16.1</a>	4 spaces/2 racks indicated	Met	2 spaces required
24b	Location   <a href="#">ZO 5.16.1</a>	Adjacent to door	Met	

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
24c	Clear path from Street   <a href="#">ZO 5.16.1</a>	7' sidewalk with 2' overhang	<b>Not Met</b> <b>SIDEWALK REVISED</b>	6' clear path required. 7' sidewalk with 4" curb is assumed to have 2' clear overhang, resulting in 5' clear path. Applicant could widen the sidewalk to 8' from bike parking to ramp.
24d	Height of rack   <a href="#">ZO 5.16.5.B</a>	None indicated	<b>Not Met</b> <b>HEIGHT ADDED TO PLANS</b>	<b>36" in height required. Indicate height in future submittals.</b>
24e	Other (Covered / Layout)   <a href="#">ZO 5.16.1</a>	Layout included	Met	
25	Sidewalk – min 5' wide   <a href="#">Master Plan</a>	5' and 7'	Met	
26	Sidewalk ramps   <a href="#">EDM 7.4 &amp; R-28-J</a>	Indicated	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>	20' radius	<b>Inconclusive</b> <b>DIMENSIONS ADDED TO PLANS</b>	Indicate lengths of stubs in future submittals. Radius meets the parameters. <b>Provide dimensions as per Figure 5.10.1.B.II in the Zoning Ordinance.</b>
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes   <a href="#">MMUTCD</a>	Included	Met	
33	Signing table: quantities and sizes	Included	Met	
34	Signs 12" x 18" or smaller in size shall be mounted on a galvanized 2 lb. U-channel post   <a href="#">MMUTCD</a>	Included	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>	Included	Met	
36	Sign bottom height of 7' from final grade   <a href="#">MMUTCD</a>	Included	Met	
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>	Included	Met	
38	FHWA Standard Alphabet series used for all sign language   <a href="#">MMUTCD</a>	Included	Met	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity   <a href="#">MMUTCD</a>	Included	Met	



SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
40	Parking space striping notes	Not included	<b>Not Met</b> NOTE ADDED TO PLANS	<b>Include in future submittals. Include note about abutting blue and white striping where a normal space abuts an ADA space.</b>
41	The international symbol for accessibility pavement markings   ADA	Included	Met	
42	Crosswalk pavement marking detail	Included	Partially Met	Include color of marking and angle of hatching in detail in future submittals.
43	Any Other Comments: NOTE AND MARKINGS REVISED ON PLAN	<b>Applicant is indicating RCOC will install Stop sign at driveway, verify responsibility for installation. Update pavement markings detail to specify "White" paint, as per MMUTCD Section 3B.20. Add details for pavement marking island at entrance.</b>		

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,

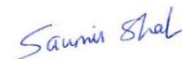
**AECOM**



Patricia Thompson, PE  
Traffic Engineer



Paula K. Johnson, PE  
Senior Transportation Engineer



Saumil Shah, PMP  
Project Manager



April 17, 2023

TO: Barbara McBeth - City Planner  
Lindsay Bell - Plan Review Center  
Christian Carroll - 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

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

cityofnovi.org

RE: GHK Self-Storage

**PSP# 22-0137**

PSP#22-137

JSP22-48

**Project Description:**

Build 1 new multi-story Storage Building and remodel 1 existing building (old Novi Bowl bldg.) on site.

**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

NOTED

NOTED

- A hazardous chemical survey is required to be submitted to the Planning & Community Development Department for distribution to the Fire Department at the time any Preliminary Site Plan is submitted for review and approval. Definitions of chemical types can be obtained from the Fire Department at (248) 735-5674. (See Attachment B)

NOTED

ENTRANCE LANES REVISED

- **Corrected 4-17-23 KSP**-Sheet C101 – Front access drive indicates entrance(s) of 19.79' & 18.45'. This will need to corrected to a minimum of 20' wide for Fire lane access.
- **Corrected 4-17-23 KSP**-No Parking Fire Lane signs will need to be added on rear access drive.

SIGNS ADDED TO PLANS

ENTRY GATE WITH KNOX BOX CALLED OUT ON PLANS

- **Corrected 4-17-23 KSP**-Sheet A210 - Entry gate in between buildings will need fire department "Knox-Key" access and/or electronic "Knox-Gate" access.

FIRE HYDRANTS ADDED TO PLANS

- **Corrected 4-17-23 KSP**-Sheet C103 – Water Main detail. More fire hydrants will need to be added on site and rear access drive.

FDC VALVE LOCATIONS ADDED TO PLANS

- **Corrected 4-17-23 KSP**-Sheet LSO13 – Landscaping page. Landscaping cannot block any fire hydrant or fire Department connections to sprinkler valves. Provide locations for all FDC valve locations.

TURN AROUND  
ADDED TO PLANS

- **Corrected 4-17-23 KSP**-All fire apparatus access roads (public and private) with a dead-end drive in excess of one hundred fifty (150) feet shall be designed with a turn-around designed in accordance with Figure VIII-I or a cul-de-sac designed in accordance with Figure VIII-F. (D.C.S. Sec 11-194 (a)(20))

ADDITIONAL FIRE  
ACCESS ROAD  
ADDED TO PLANS

- **Corrected 4-17-23 KSP**-Additional Secondary Access road will need to be added from Novi Rd to rear driveway. Access thru building interior gate is NOT a/an acceptable fire lane route.

**Recommendation:**

Approved

Sincerely,



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

cc: file