



29580 HUDSON DRIVE JSP22-54

29580 HUDSON DRIVE JSP22-54

Consideration of 29580 Hudson Drive for Preliminary Site Plan approval. The subject property contains 1.09 acres and is located in Section 4 of the City (Unit 5 of Beck North). The applicant is proposing to construct an 8,400 square foot, two-story warehouse and showroom for kitchenware and restaurant equipment. The site contains a significant presence of easements along the frontage of Hudson Drive.

Required Action

Consideration of the Preliminary Site Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	2-23-23	<ul style="list-style-type: none"> • Zoning Board of Appeals Variance from Section 5.4.3 of the Zoning Ordinance for the placement of two truck docks in the exterior side yard. • Items to be addressed on the Final Site Plan
Engineering	Approval recommended	4-11-23	<ul style="list-style-type: none"> • Items to be addressed on the Final Site Plan
Landscape	Approval recommended	4-4-23	<ul style="list-style-type: none"> • Landscape waiver for deficiency of one perimeter tree provided along the south access drive (supported by staff due to utility conflicts) • Items to be addressed on the Final Site Plan
Traffic	Approval recommended	2-17-23	<ul style="list-style-type: none"> • Items to be addressed on the Final Site Plan
Façade	Approval recommended	2-23-23	<ul style="list-style-type: none"> • Items to be addressed on the Final Site Plan
Fire	Approval recommended	2-14-23	<ul style="list-style-type: none"> • Items to be addressed on the Final Site Plan

MOTION SHEET

Approval – Preliminary Site Plan

In the matter of 29580 Hudson Drive, JSP22-54, motion to **approve** the Preliminary Site Plan based on and subject to the following:

- a. The Planning Commission finds the following conditions of Section 3.14.3 are met:
 - i. 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;
 - ii. The intended truck delivery service can be effectively handled without long term truck parking on site;
 - iii. The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of Article 5 and the performance standards of Section 5.14;
 - iv. 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.
 - v. Compliance with the City's hazardous materials checklist is required;
- b. Zoning Board of Appeals Variance from Section 5.4.3 of the Zoning Ordinance for the placement of two truck docks in the exterior side yard as recommended by staff *because the proposed truck docks are proposed to be properly screened and minimize impact to on-site traffic flow to the extent possible*;
- c. Landscape waiver for deficiency of one perimeter tree provided along the south access drive as recommended by staff *due to utility conflicts*, which 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 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.)

– OR –

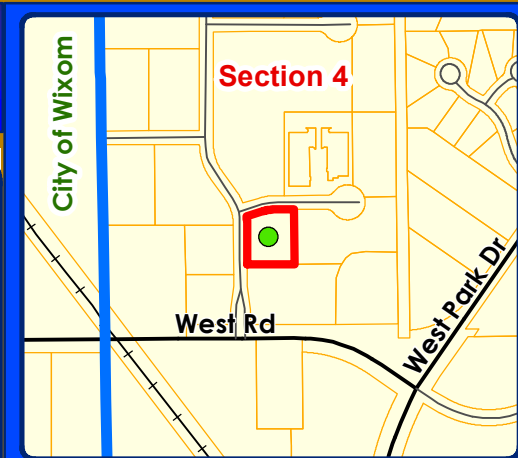
Denial – Preliminary Site Plan

In the matter of 29580 Hudson Drive, JSP22-54, 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.)*


MAPS
Location
Zoning
Future Land Use
Natural Features


JSP22-54 29580 HUDSON DRIVE

LOCATION



LEGEND


 Subject Property



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

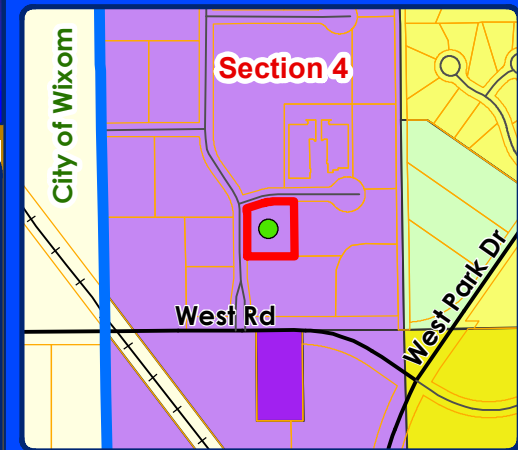
Map Author: Christian Carroll
Date: 4/11/23
Project: JSP22-54 29580 HUDSON DRIVE
Version #: 1

0 15 30 60 90 Feet
1 inch = 83 feet



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

JSP22-54 29580 HUDSON DRIVE ZONING



LEGEND

- R-A: Residential Acreage
- R-1: One-Family Residential District
- R-2: One-Family Residential
- I-1: Light Industrial District
- I-2: General Industrial District
- Subject Property

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

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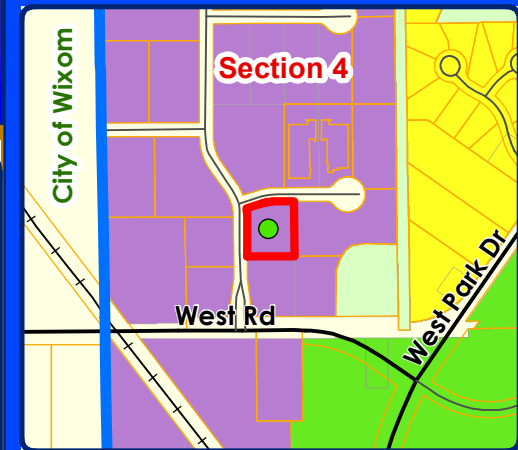
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JSP22-54 29580 HUDSON DRIVE

FUTURE LAND USE



LEGEND

- Single Family
- Industrial Research Development Technology
- Public Park
- Private Park
- Subject Property

City of Novi
Dept. of Community Development
City Hall / Civic Center
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Novi, MI 48375
cityofnovi.org

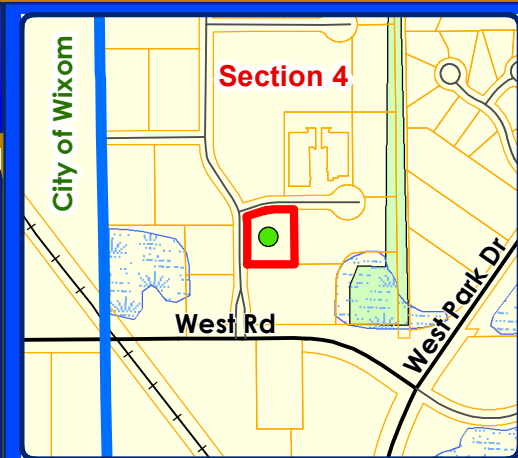
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JSP22-54 29580 HUDSON DRIVE

NATURAL FEATURES



LEGEND


- WETLANDS
- WOODLANDS
- Subject Property



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

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SITE PLAN

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

Owner / Developer

COPPERROCK CONSTRUCTION
601 Fifth Street NW
Suite 300
Grand Rapids, MI 49504

CONTACT:
Matthew Hall, Pre-construction Manager
Tel. (616) 570-2382

Architect

MAXAM ARCHITECTURE
557 Cresent NE
Grand Blanc, MI 49504
Tel. (616) 308-9729

Civil Engineer

NOWAK & FRAUS ENGINEERS
46777 Woodward Ave.
Pontiac, MI 48342-5032

CONTACT:
Brett J. Buchholz, P.E., Principal
Paul Tulkangas, P.E., Associate

Tel. (248) 332-7931
Fax. (248) 332-8257

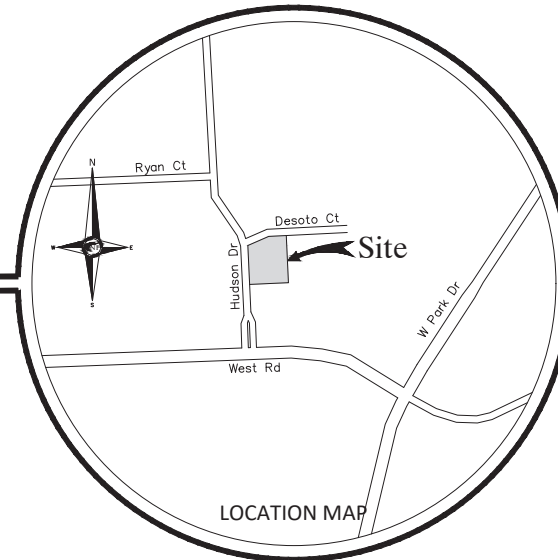
Landscape Architect

NOWAK & FRAUS ENGINEERS
46777 Woodward Ave.
Pontiac, MI 48342-5032

CONTACT:
George A. Ostrowski, PLA, LEED AP

Tel. (248) 332-7931
Fax. (248) 332-8257

City of Novi,
Oakland County, Michigan
SITE PLAN DOCUMENTS
Prepared For
CopperRock Construction
PART OF THE SW 1/4 OF SECTION 4, T.1N., R. 8E.,
CITY OF NOVI,
OAKLAND COUNTY, MICHIGAN



SHEET INDEX

- C0 - Cover Sheet
- C1 - Existing Easement Plan
- C2 - Demolition Plan
- C3 - Overall Site Plan
- C4 - Truck Maneuver Plan
- C5 - Paving-Grading Plan
- C6 - Utility Plan
- C7 - Storm Water Management Plan (1 of 3)
- C8 - Storm Water Management Plan (2 of 3)
- C9 - Storm Water Management Plan (3 of 3)
- C10 - Soil Erosion and Sedimentation Control Plan
- C11 - MDOT Sidewalk Ramp Details (R-28-J)

- L1 - Tree Preservation Plan
- L2 - Landscape Plan
- L3 - Landscape Notes and Details

Photometric Plan

LEGAL DESCRIPTION

PARCEL NUMBER 22-04-378-004, 29580
HUDSON DRIVE
T.1N., R.8E., SEC. 4, UNIT 5 OF BECK
NORTH CORPORATE PARK - NOVI
CONDOMINIUM, OAKLAND COUNTY
CONDOMINIUM SUBDIVISION PLAN NO.
1264, LIBER 21427, PAGE 238, OAKLAND
COUNTY RECORDS.

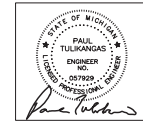
REVISIONS:
01-19-22 ISSUED FOR OWNER REVIEW
02-01-22 ISSUED FOR PRELIM. SITE PLAN REVIEW
03-22-2023 REVISED PER CITY REVIEW

Project Name

Beck North Unit 5 Industrial
Office Building - 29580
Hudson Drive (JSP 22-54)

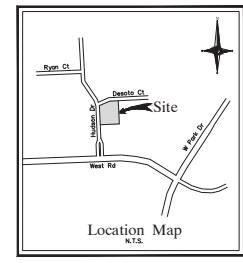
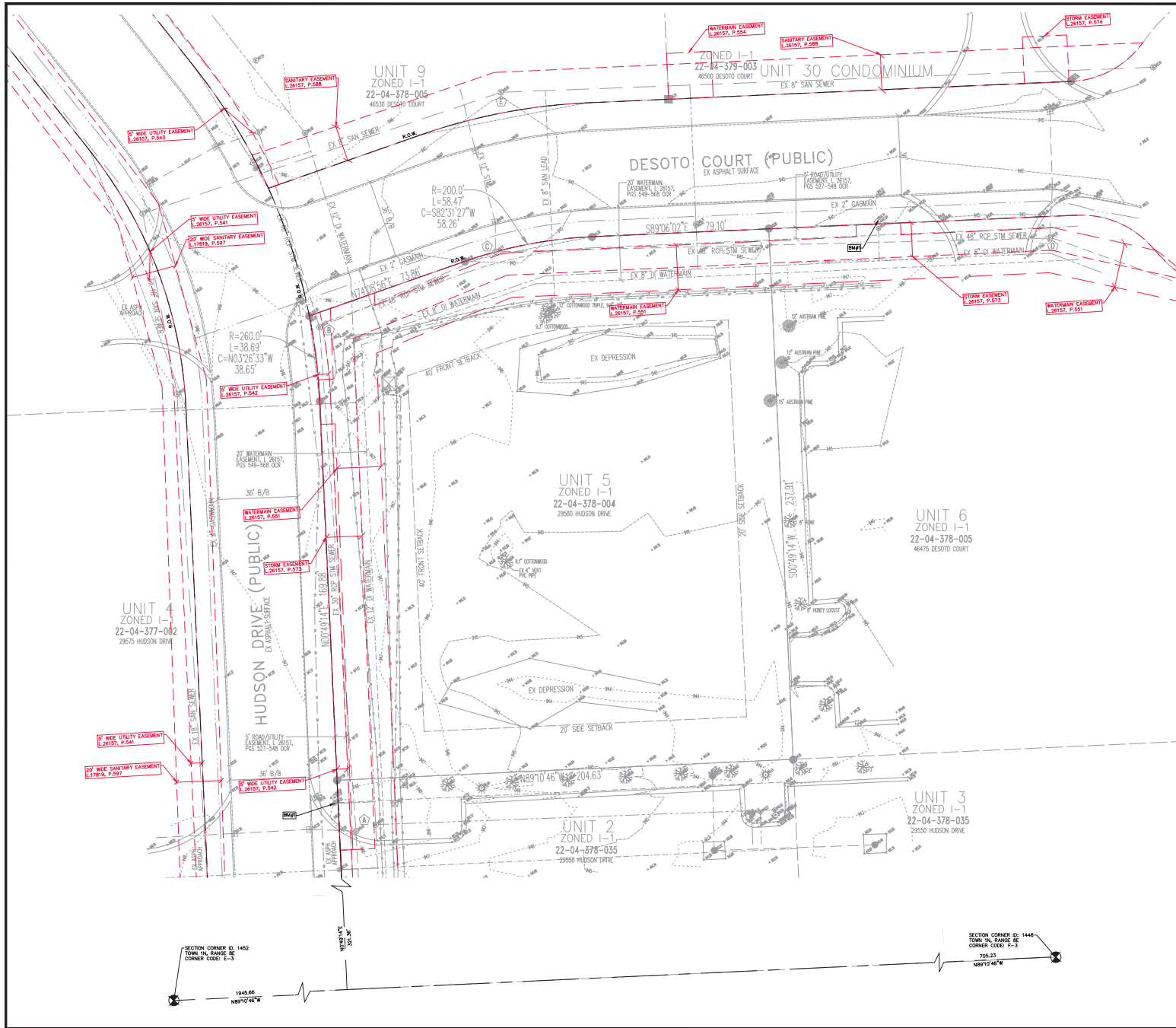


N & F JOB #N349



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
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WWW.NFE-ENGR.COM



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 WWW.NOWAKFRAUS.COM

SEAL

PROJECT
 Beck North Unit 5 Industrial
 Office Building - 29580
 Hudson Drive (JSP 22-54)

CLIENT
 CopperRock Construction
 6011 Fifth Street NW
 Suite 300
 Grand Rapids, MI 49504
 Tel: (616) 570-2382

Contact: Matthew Hall,
 Pre-construction Manager

PROJECT LOCATION
 Part of the SW 1/4
 of Section 4,
 T.1N., R.8E.,
 City of Novi,
 Oakland County, Michigan

BENCHMARK #1:
 PER SURVEY BY OTHERS, ARROW ON TOP OF EXISTING FIRE HYDRANT, LOCATED AT THE SOUTHWEST CORNER OF THE SITE, NORTH SIDE OF HUDSON DRIVE, APPROXIMATELY 20 FEET EAST OF INTERSECTION OF HUDSON DRIVE AND HUDSON ROAD. ELEVATION: 990.40(NVD 88)

BENCHMARK #2:
 PER SURVEY BY OTHERS, ARROW ON TOP OF EXISTING FIRE HYDRANT, LOCATED AT THE NORTHEAST CORNER OF THE SITE, WEST SIDE OF OSBORN APPROACH TO DESOTO, AS SHOWN. ELEVATION: 998.809

SURVEY NOTES:
 THIS SURVEY HAS BEEN PROVIDED BY THE PROJECT OWNER FOR THE PURPOSES OF DESIGN BY NOWAK & FRAUS, LLC. NO WARRANTIES OR GUARANTEES CAN BE MADE TO THE ACCURACY OF THE INFORMATION CONTAINED ON THIS SHEET. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT OWNER FOR CLARIFICATION BY THE ORIGINAL SURVEYOR.
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TOPOGRAPHIC SURVEY NOTES
 ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.
 UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.
 THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

LEGEND

MANHOLE	EXISTING SANITARY SEWER
HYDRANT	EXISTING SANITARY CLEAN OUT
MANHOLE	EXISTING WATER MAIN
MANHOLE	EXISTING STORM SEWER
MANHOLE	EX. R.V. CATCH BASIN
UTILITY POLE	EXISTING BURIED CABLES
UTILITY POLE	OVERHEAD LINES
UTILITY POLE	LIGHT POLE
SIGN	EXISTING GAS MAIN

SHEET
 Existing Easement Plan

811
 Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 01-21-22 ISSUED FOR OWNER REVIEW
 02-20-22 ISSUED FOR PERMITS, SITE PLAN REVIEW
 03-22-2022 REVISED PER CITY REVIEW

DRAWN BY:
 J. LAWREY

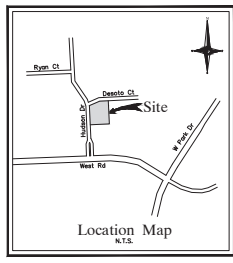
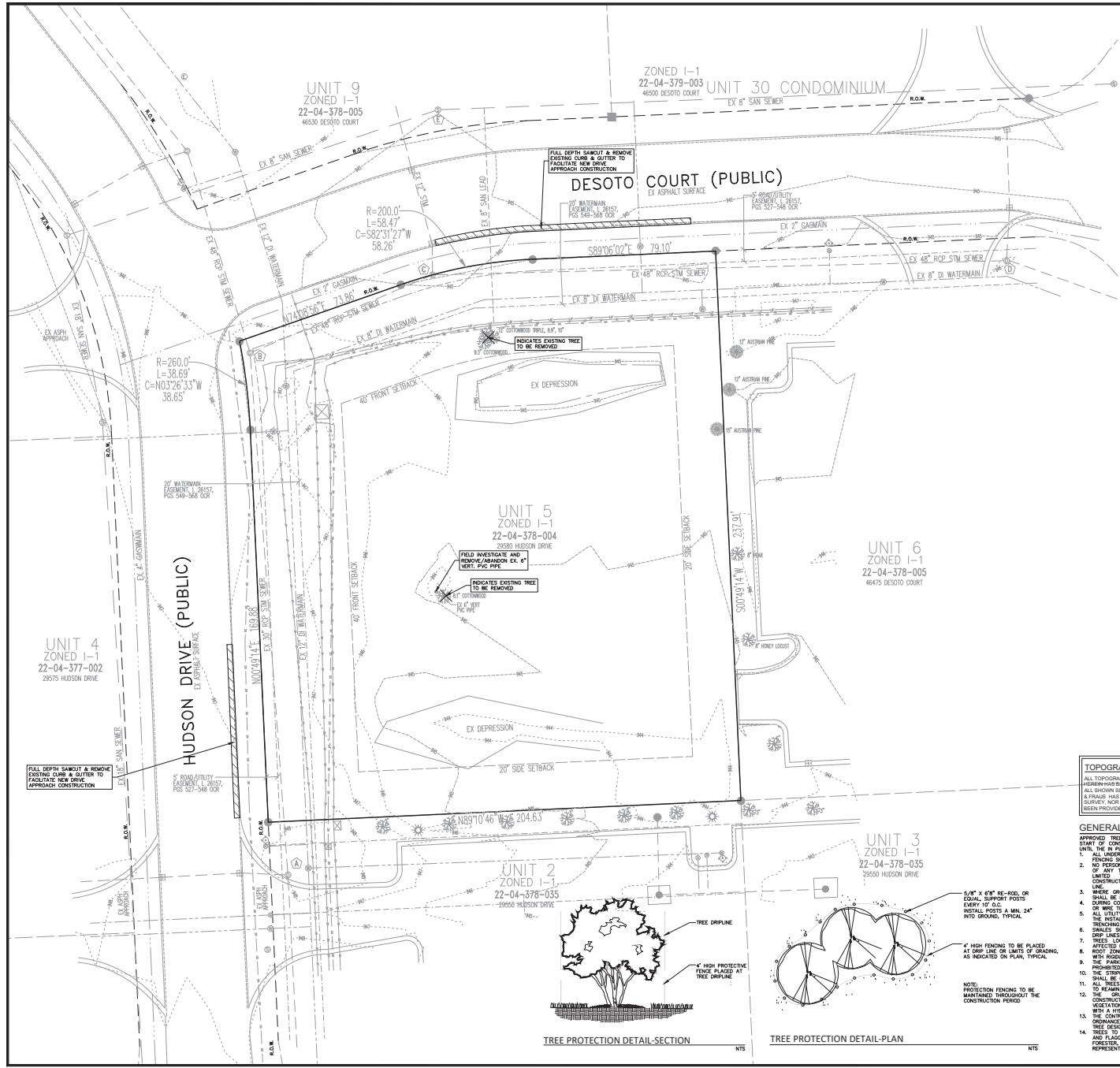
DESIGNED BY:
 G. YIU

APPROVED BY:
 B. Buchholz

DATE:
 January 19, 2022

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
 N349 C1



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SEAL

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Contact: Matthew Hall,
Pre-construction Manager

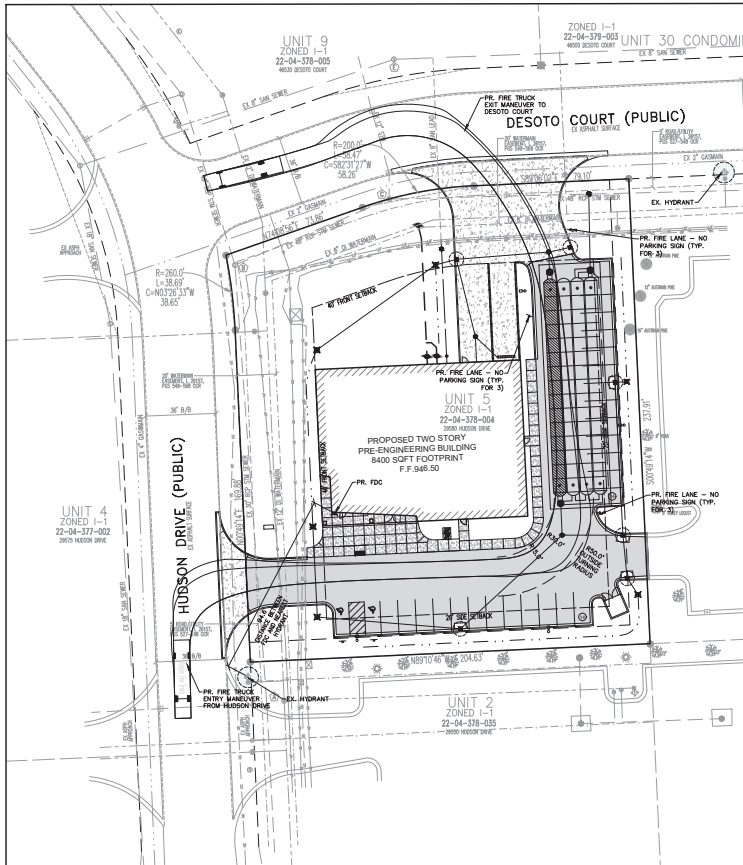
PROJECT LOCATION
Part of the SW ¼
of Section 4
T1N, R3E, S8E
City of Novi,
Oakland County, Michigan

SHEET
Demolition Plan

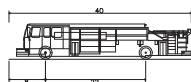
811
Know what's below
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DATE ISSUED/REVISED
01-29-22 ISSUED FOR OWNER REVIEW
02-29-22 ISSUED FOR FINAL SITE PLAN REVIEW
02-23-20 REVISED PER CITY REVIEW

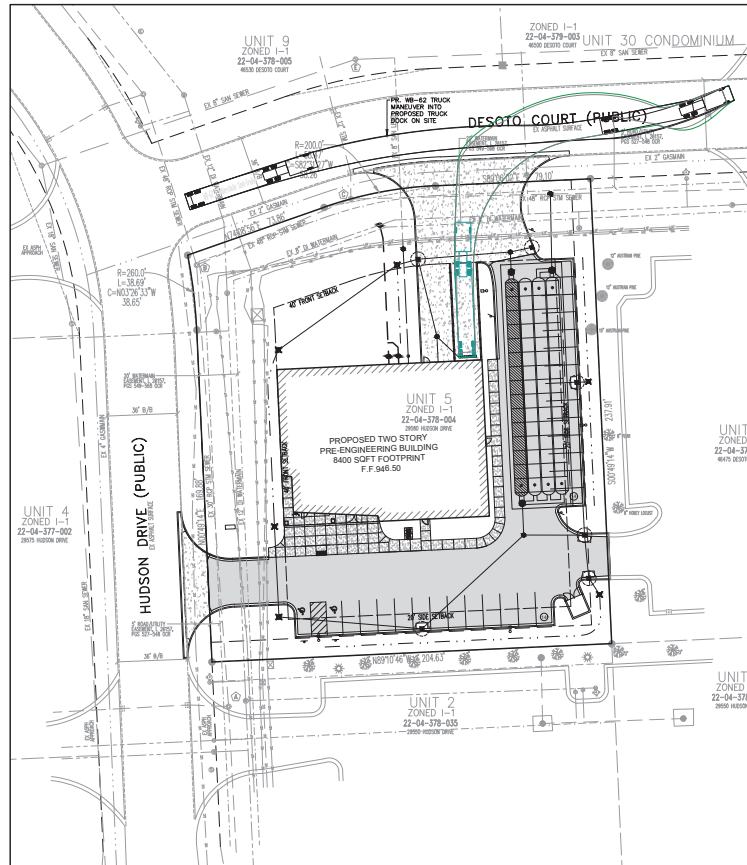
DRAWN BY: J. Lawrey
DESIGNED BY: G. Yiu
APPROVED BY: B. Buchholz
DATE: January 19, 2022
SCALE: 1" = 20'
NFE JOB NO. N349
SHEET NO. C2



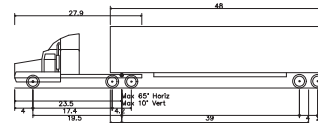
EMERGENCY VEHICLE MANEUVERING DIAGRAM
SCALE: 1" = 30'



Pumper Fire Truck
Overall Length 40.00ft
Overall Width 8.16ft
Overall Body Height 7.75ft
Min Body Ground Clearance 0.65ft
Track Width 8.16ft
Lock-to-lock time 5.00s
Max Wheel Angle 45.00°



WB-62 TRUCK MANEUVER
SCALE: 1" = 30'



WB-62 - Interstate Semi-Trailer
Overall Length 69.00ft
Overall Width 8.50ft
Overall Body Height 1.324ft
Min Body Ground Clearance 6.00ft
Max Track Width 8.50ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 28.40°



Location Map
N.T.S.



NF
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LAND SURVEYORS
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4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

SEAL



PROJECT
Beck North Unit 5 Industrial
Office Building - 29580
Hudson Drive (JSP 22-54)

CLIENT
CopperRock Construction
601 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION
Part of the SW 1/4
of Section 4
T.1N., R.8E.,
City of Novi,
Oakland County, Michigan

SHEET
Truck Maneuver Plan



Know what's below
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FIRE DEPARTMENT NOTES
ALL FIRE HYDRANTS MUST BE INSTALLED AND OPERATIONAL PRIOR TO ANY CONSTRUCTION MATERIAL BEING BROUGHT ON SITE.
ALL BUILDINGS MUST COMPLY WITH THE INTERNATIONAL FIRE CODE SECTION 810 FOR EMERGENCY ROAD COVERING TO BE IMPLEMENTED BY THE TIME OF THE FINAL INSPECTION OF THE FIRE ALARM AND FIRE SUPPRESSION.
FIRE APPARATUS ACCESS DRIVES TO AND FROM BUILDINGS THROUGH PARKING LOTS SHALL HAVE A MINIMUM 50 FEET OUTSIDE TURNING RADIUS AND BE DESIGNED TO SUPPORT A MINIMUM OF 35 TONS.

LEGEND	
MANHOLE	EXISTING SANITARY SEWER
HYDRANT	SAN. CLEAN OUT
MANHOLE CATCH BASIN	EXISTING WATERMAIN
UTILITY POLE GUY POLE	EXISTING STORM SEWER
FILET	EX. R. Y. CATCH BASIN
CR. MANHOLE	EXISTING BURIED CABLES
PR. FIRE TRUCK ENTRY MANEUVER FROM HUDSON DRIVE	OVERHEAD LINES
PR. WB-62 TRUCK MANEUVER FROM HUDSON DRIVE	LIGHT POLE
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	SON
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	EXISTING GAS MAIN
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PR. SANITARY SEWER
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PR. WATER MAIN
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PR. WATER MAIN
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PR. STORM SEWER
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PR. R. Y. CATCH BASIN
PR. FIRE LANE - NO PARKING SIGN (TYP. FOR 30' MIN)	PROPOSED LIGHT POLE

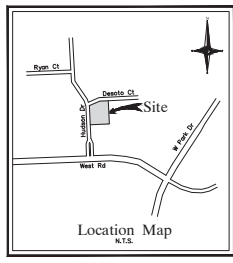
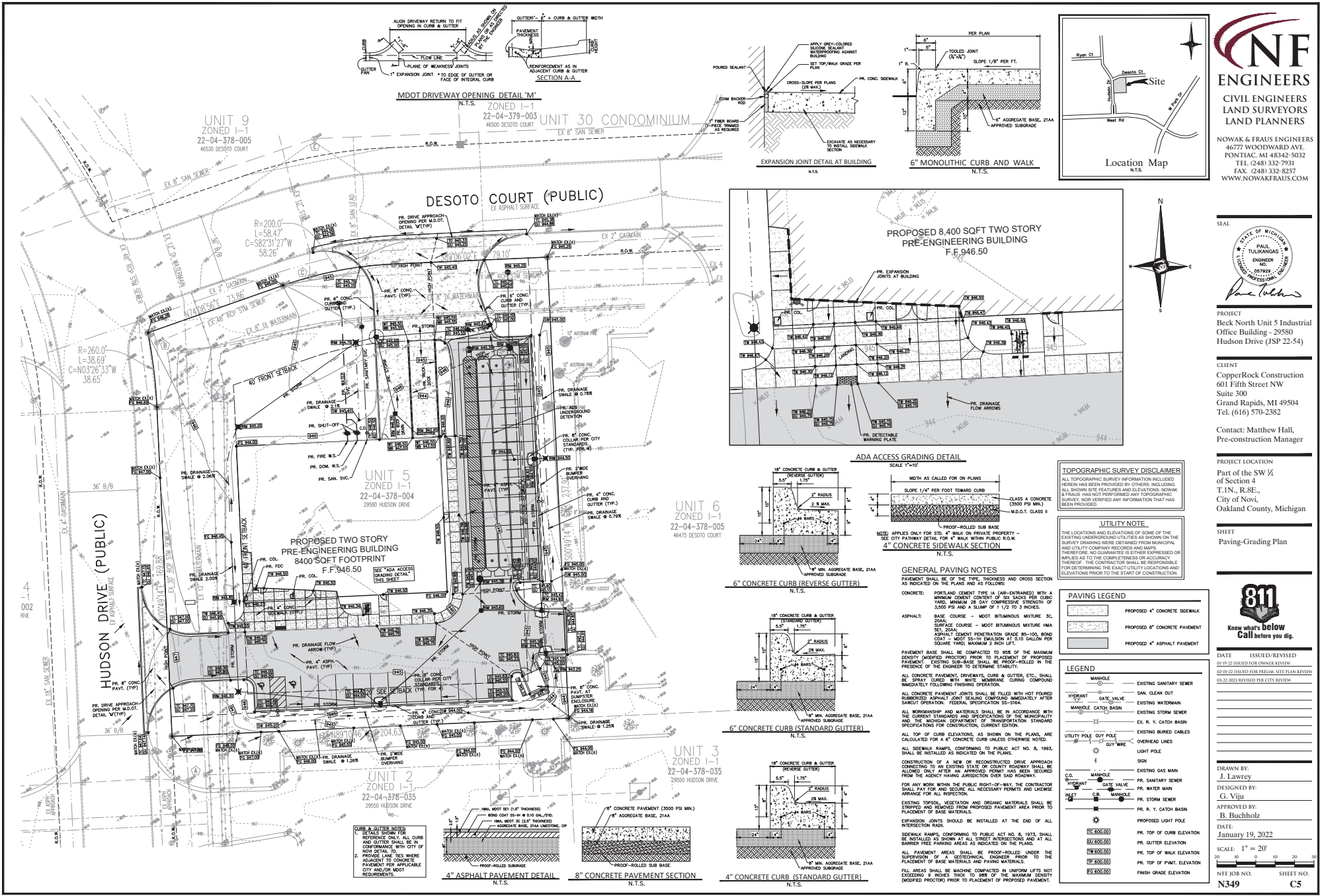
DATE ISSUED/REVISED
01-21-22 ISSUED FOR OWNER REVIEW
02-20-22 ISSUED FOR PERMITS WITH PLAN REVIEW
02-22-2022 REVISED PER CITY REVIEW

DRAWN BY:
J. LAWREY
DESIGNED BY:
G. YIU
APPROVED BY:
B. Buchholz

DATE:
January 19, 2022

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
N349 C4



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FAX. (248) 332-8257
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SEAL

PROJECT
Beck North Unit 5 Industrial
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CLIENT
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Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION
Part of the SW ¼ of
Section 4
T.1N., R.3E.,
City of Novi,
Oakland County, Michigan

SHEET
Paving-Grading Plan

811
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01-21-2023 ISSUED FOR PERMITS
02-20-2023 ISSUED FOR PERMITS WITH PLAN REVIEW
02-20-2023 REVISED PER CITY REVIEW

DRAWN BY:
J. LAWREY
DESIGNED BY:
G. YIU
APPROVED BY:
B. Buchholz

DATE:
January 19, 2023

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
N349 C5

TOPOGRAPHIC SURVEY DISCLAIMER
ALL TOPOGRAPHIC SURVEY INFORMATION INCLUDED HEREIN HAS BEEN PROVIDED BY OTHERS, INCLUDING ALL SHOWN SITE FEATURES AND ELEVATIONS. NOWAK & FRAUS HAS NOT PERFORMED ANY TOPOGRAPHIC SURVEY, NOR VERIFIED ANY INFORMATION THAT HAS BEEN PROVIDED.

UTILITY NOTE
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE SURVEY DRAWINGS WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

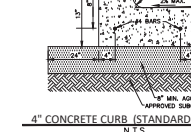
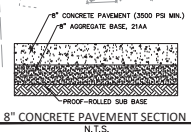
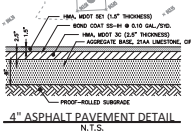
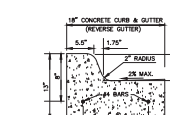
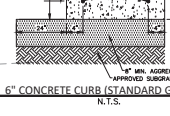
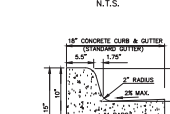
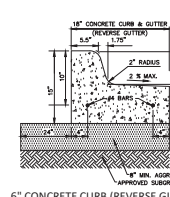
PAVING LEGEND

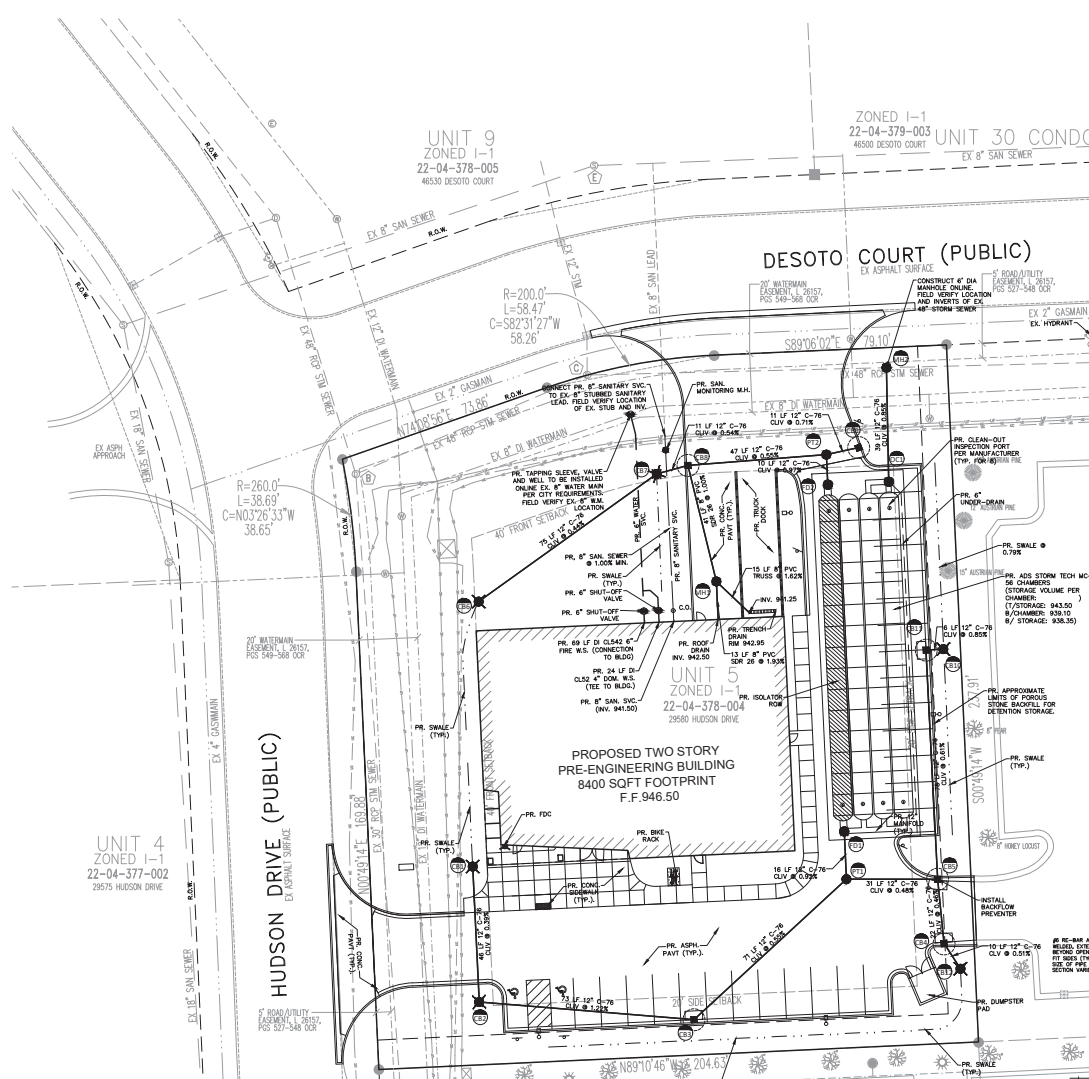
	PROPOSED 4" CONCRETE SIDEWALK
	PROPOSED 4" CONCRETE PAVEMENT
	PROPOSED 4" ASPHALT PAVEMENT

LEGEND

	EXISTING MANHOLE		EXISTING SANITARY SEWER
	EXISTING HYDRANT		EXISTING GATE VALVE
	EXISTING MANHOLE CATCH BASIN		EXISTING STORM SEWER
	EXISTING R.Y. CATCH BASIN		EXISTING R.Y. CATCH BASIN
	EXISTING UTILITY POLE		EXISTING BURRED CABLES
	EXISTING UTILITY POLE		OVERHEAD CABLES
	EXISTING UTILITY POLE		EXISTING LIGHT POLES
	EXISTING UTILITY POLE		EXISTING SIGN
	EXISTING UTILITY POLE		EXISTING GAS MAIN
	EXISTING UTILITY POLE		PR. SANITARY SEWER
	EXISTING UTILITY POLE		PR. WATER MAIN
	EXISTING UTILITY POLE		PR. STORM SEWER
	EXISTING UTILITY POLE		PR. R. Y. CATCH BASIN
	EXISTING UTILITY POLE		PROPOSED LIGHT POLE
	EXISTING UTILITY POLE		PR. TOP OF CURB ELEVATION
	EXISTING UTILITY POLE		PR. GUTTER ELEVATION
	EXISTING UTILITY POLE		PR. TOP OF WALK ELEVATION
	EXISTING UTILITY POLE		PR. TOP OF P.W.T. ELEVATION
	EXISTING UTILITY POLE		FINISH GRADE ELEVATION

GENERAL PAVING NOTES
PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:
CONCRETE: PORTLAND CEMENT TYPE II (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT 58 LBS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.
ASPHALT: BASE COURSE - MOOT BITUMINOUS MIXTURE 3C, 20AAL.
SURFACE COURSE - MOOT BITUMINOUS MIXTURE 3A, 20AAL.
ASPHALT CEMENT PENETRATION GRADE 80-100, BOND COAT - MOOT 50-70 GALMASH ON 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.
PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.
ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC. SHALL BE SPRAWLED WITH WHITE MORTAR. CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
ALL DRIVEWAY PAVEMENT SHALL BE FILL WITH HOT FURNISHED ALKALI RESISTING SAND. CURING COMPOUND IMMEDIATELY AFTER SPRAWLING OPERATION. FRESHLY EXPOSED SURFACES SHALL BE PROTECTED FROM WEAR AND DAMAGE.
ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE INDIAN DEPARTMENT OF TRANSPORTATION. STANDING SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.
ALL TOP OF CURB ELEVATIONS AS SHOWN ON THE PLANS ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.
ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.
CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVEWAY APPROACH CONNECTING TO AN EXISTING DRIVEWAY OR SIDEWALK SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LICENSES ARRANGING FOR ALL RESTRICTIONS.
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.
EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION.
SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.
ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISOR OF THE PROJECT. ALL PAVEMENT SHALL BE PROOF-ROLLED TO THE FULL AREA. SHALL BE MACHINE COMPACTED IN 4 INCH LIFTS NOT EXCEEDING 8 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



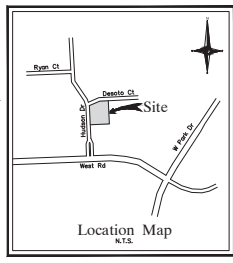


Storm Drainage Structure Schedule

Structure Name	Structure Details
#CB1	PR. 2' DIA REAR YARD CATCH BASIN
#CB2	PR. 4' DIA REAR YARD CATCH BASIN W/ 2' SUMP
#CB3	PR. 4' DIA CATCH BASIN W/ 2' SUMP
#CB4	PR. 4' DIA CATCH BASIN W/ 2' SUMP
#CB5	PR. 4' DIA CATCH BASIN W/ 2' SUMP
#CB6	PR. 2' DIA REAR YARD CATCH BASIN
#CB7	PR. 4' DIA REAR YARD CATCH BASIN W/ 2' SUMP
#CB8	PR. 4' DIA CATCH BASIN W/ 2' SUMP
#CB9	PR. 2' DIA INLET
#CB10	PR. 2' DIA REAR YARD CATCH BASIN

Storm Drainage Structure Schedule

Structure Name	Structure Details
#CB11	PR. 4' DIA CATCH BASIN W/ 2' SUMP
#CB12	PR. 2' DIA R.V.C.B.
#FD1	PR. 4' DIA FLOW DIVERSION MANHOLE W/ 4' SUMP
#FD2	PR. 4' DIA FLOW DIVERSION MANHOLE W/ 4' SUMP
#MH1	PR. 4' DIA MANHOLE
#MH2	PR. 6' DIA MANHOLE (CONSTRUCT ONLINE)
#OC3	PR. 6' DIA OUTLET CONTROL MANHOLE W/ WATER WALL RESTRICTION & 2' SUMP
#PF1	PR. 4' DIA MANHOLE
#PF2	PR. 4' DIA MANHOLE



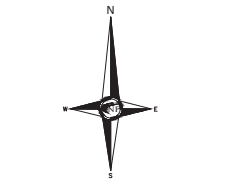
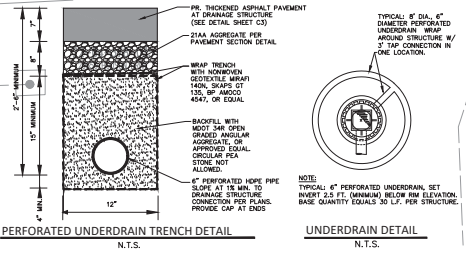
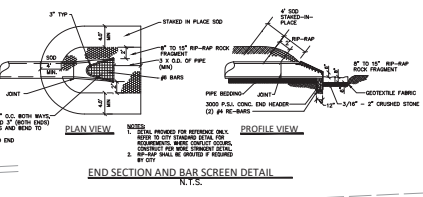
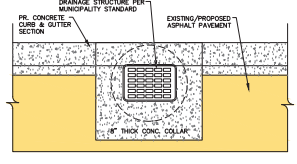
NF ENGINEERS

CIVIL ENGINEERS
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WWW.NOWAKFRANKS.COM

SANITARY SEWER BASIS OF DESIGN

Use	Qty.	Unit Factor	REU
Office	11,051 S.F.	@ 0.40	4,421 REU
Total REU			4,421 REU
Equivalent Population		@ 2.38 People Per REU	11 People
Total Population			11 People
Average Flow		$\frac{100 \text{ Gal/Person/Day} \times \text{Population}}{365 \text{ Days/Year}}$	7.48 gal/cf @ 85,400 sec/day
Average Flow		$\frac{1052.06 \text{ GPD}}{365 \text{ Days/Year}}$	0.0016 CFS
Peak Factor		$\frac{18 \times (\# \text{ of Persons}/1000) + 0.50}{4 \times (\# \text{ of Persons}/1000) + 0.50}$	2.12
Peak Flow		$\frac{\text{Peak Factor} \times \text{Average Flow}}{365 \text{ Days/Year}}$	0.0034 CFS
Proposed Sanitary Sewer:	8" In. Dia.	@ 1.00 %	1,208 CFS



- ### GENERAL NOTES:
- CONCRETE SAND BAGGILL (M.D.O.T. SAND CLASS II) SHALL BE PROVIDED FOR ALL UTILITIES WITHIN THE INFLUENCE OF PAVED AREAS.
 - ALL GATE VALVES 6" OR LARGER SHALL BE PLACED IN A WELL WITH THE BOTTOM OF A HINGED SHUT-OFF VALVE.
 - ALL SANITARY LEADS TO BE BURIED AT LEAST 5 FEET DEEP UNLESS THE INFLUENCE OF FLOODING.

DEWATERING OF TRENCH AND EXCAVATIONS

NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION UTILITY DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF DESIGN FOR DETERMINING THE DESIGN OR QUALITATIVE ANALYSIS OF DESIGN FOR DEWATERING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE BIDDING PRICE FOR THE CONSTRUCTION OF THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

TOPOGRAPHIC SURVEY DISCLAIMER

ALL TOPOGRAPHIC SURVEY INFORMATION INCLUDED HEREIN HAS BEEN PROVIDED BY OTHERS, INCLUDING ALL SHOWING SITE FEATURES AND ELEVATIONS. NOWAK & FRANKS HAS NOT PERFORMED ANY TOPOGRAPHIC SURVEY NOR VERIFIED ANY INFORMATION THAT HAS BEEN PROVIDED.

UTILITY NOTE

THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE EXISTING UTILITIES RECORDS AND MAPS, AND THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN ON THE EXISTING UTILITIES RECORDS AND MAPS, MAY BE DIFFERENT FROM THE ACTUAL LOCATIONS AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND

MANHOLE	EXISTING SANITARY SEWER
HYDRANT	SAN. CLEAN OUT
MANHOLE CATCH BASIN	EXISTING WATER MAIN
EXISTING WATER MAIN	EXISTING STORM SEWER
EXISTING STORM SEWER	EX. R. Y. CATCH BASIN
EXISTING BURIED CABLES	EXISTING BURIED CABLES
OVERHEAD LINES	OVERHEAD LINES
LIGHT POLE	LIGHT POLE
SON	SON
EXISTING GAS MAIN	EXISTING GAS MAIN
PR. SANITARY SEWER	PR. SANITARY SEWER
PR. WATER MAIN	PR. WATER MAIN
PR. STORM SEWER	PR. STORM SEWER
PR. R. Y. CATCH BASIN	PR. R. Y. CATCH BASIN
SAND BAGGILL (6" x 6" DISTRICT)	SAND BAGGILL (6" x 6" DISTRICT)
PROPOSED LIGHT POLE	PROPOSED LIGHT POLE

STATE OF MICHIGAN
PAUL TULKANGAS
ENGINEER
NO. 00792
EXPIRES 12/31/2025

Project North Unit 5 Industrial Office Building - 29580 Hudson Drive (JSP 22-54)

CLIENT
CopperRock Construction
6011 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel: (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION
Part of the SW 1/4 of Section 4
T1N, R3E,
City of Novi,
Oakland County, Michigan

SHEET
Utility Plan

811
Know what's below
Call before you dig.

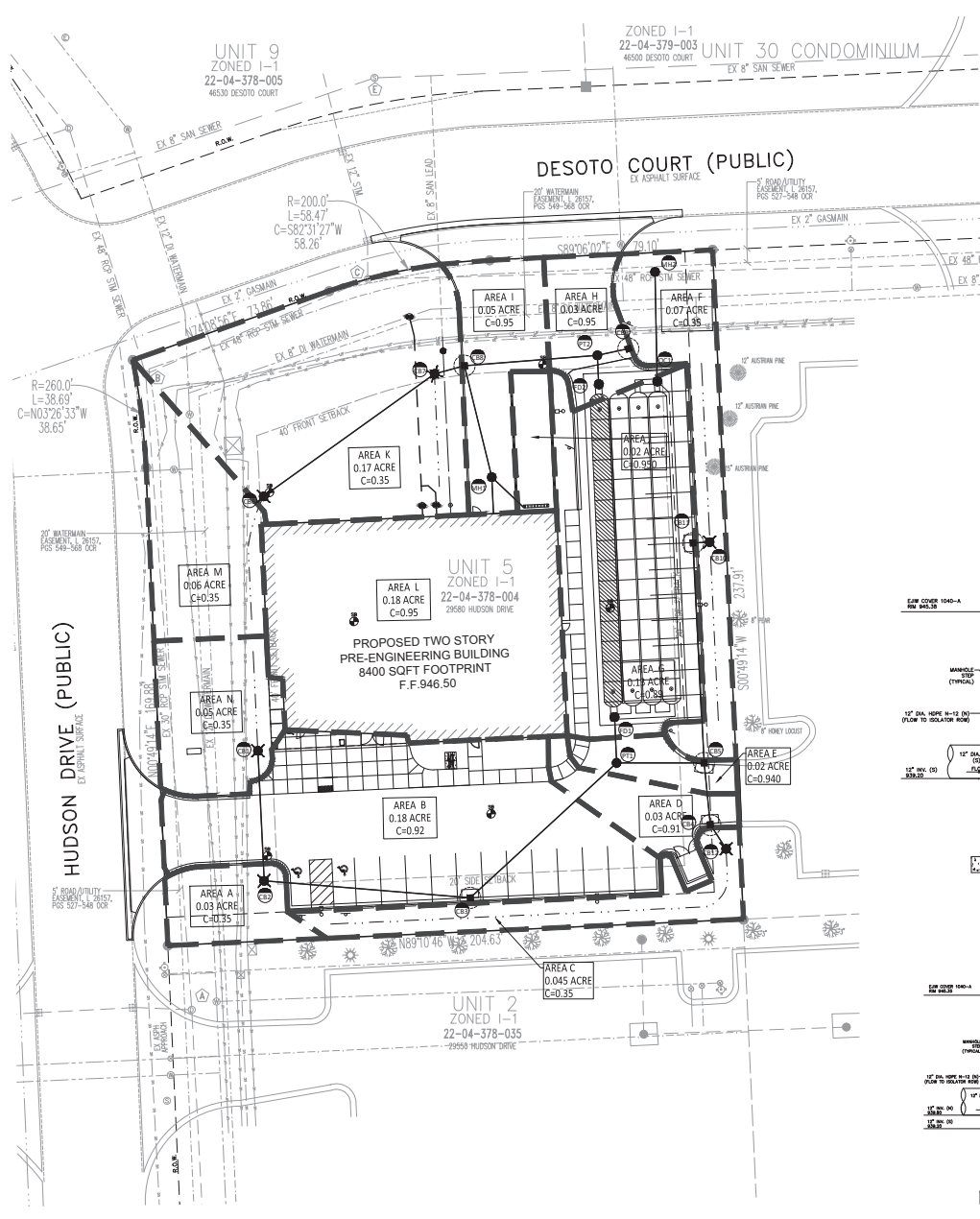
DATE ISSUED/REVISED
02/21/22 ISSUED FOR OWNER REVIEW
02/22/22 ISSUED FOR PERMITS AND PLAN REVIEW
02/23/22 REVISED PER CITY REVIEW

DRAWN BY:
J. Lawrey
DESIGNED BY:
G. Yiu
APPROVED BY:
B. Buchholz

DATE:
January 19, 2022

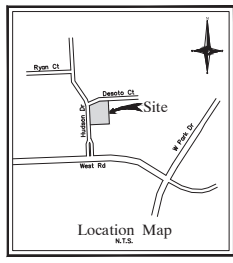
SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
N349 C6



PROJECT NO: 2088
PROJECT NAME: Office Building - 29560
DATE: 1/19/2023
BY: J. Lawrey

Drainage Area	Total Area	Impervious Area	Retention Area	Runoff Coefficient
A	0.03	0.01	0.00	0.35
B	0.18	0.17	0.00	0.92
C	0.045	0.04	0.00	0.35
D	0.03	0.03	0.00	0.91
E	0.02	0.02	0.00	0.94
F	0.07	0.07	0.00	0.36
G	0.02	0.02	0.00	0.35
H	0.03	0.03	0.00	0.95
I	0.05	0.05	0.00	0.95
J	0.03	0.03	0.00	0.35
K	0.17	0.17	0.00	0.35
L	0.18	0.18	0.00	0.95
M	0.06	0.06	0.00	0.35
N	0.05	0.05	0.00	0.35
O	0.03	0.03	0.00	0.35
P	0.03	0.03	0.00	0.35
Q	0.03	0.03	0.00	0.35
R	0.03	0.03	0.00	0.35
S	0.03	0.03	0.00	0.35
TOTALS	1.085	0.868	0.000	0.627

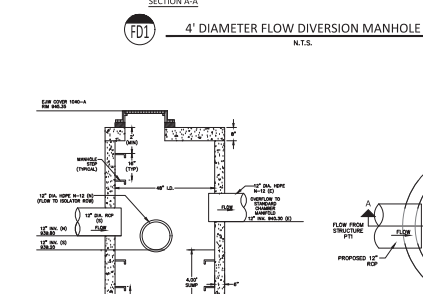
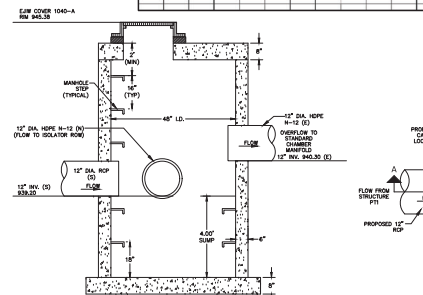


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CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL (248) 332-7931
FAX (248) 332-8257
WWW.NOWAKFRAUS.COM

DRAINAGE AREA & STORM SEWER CALCULATIONS

Area	Area (Ac)	Impervious Area (Ac)	Retention Area (Ac)	Runoff Coefficient	Peak Flow (cfs)	Peak Flow (MGD)	Time of Concentration (min)	Time of Travel (min)	Time of Arrival (min)	Peak Flow (cfs)	Peak Flow (MGD)
Area A	0.03	0.01	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area B	0.18	0.17	0.00	0.92	0.00	0.00	10	10	10	0.00	0.00
Area C	0.045	0.04	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area D	0.03	0.03	0.00	0.91	0.00	0.00	10	10	10	0.00	0.00
Area E	0.02	0.02	0.00	0.94	0.00	0.00	10	10	10	0.00	0.00
Area F	0.07	0.07	0.00	0.36	0.00	0.00	10	10	10	0.00	0.00
Area G	0.02	0.02	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area H	0.03	0.03	0.00	0.95	0.00	0.00	10	10	10	0.00	0.00
Area I	0.05	0.05	0.00	0.95	0.00	0.00	10	10	10	0.00	0.00
Area J	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area K	0.17	0.17	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area L	0.18	0.18	0.00	0.95	0.00	0.00	10	10	10	0.00	0.00
Area M	0.06	0.06	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area N	0.05	0.05	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area O	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area P	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area Q	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area R	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
Area S	0.03	0.03	0.00	0.35	0.00	0.00	10	10	10	0.00	0.00
TOTALS	1.085	0.868	0.000	0.627	0.00	0.00	10	10	10	0.00	0.00



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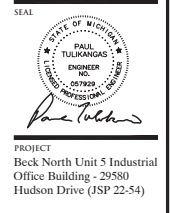
UTILITY NOTE
THE LOCATIONS AND ELEVATIONS OF SOME OF THE EXISTING UNDERGROUNDS AND UTILITIES AS SHOWN ON THE SURVEY DRAWINGS WERE OBTAINED FROM MUNICIPAL AND UTILITY COMPANY RECORDS AND MAPS. THEREFORE, NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

LEGEND

Symbol	INDICATES SOIL BORING LOCATIONS
Symbol	INDICATES STORM DRAINAGE AREAS
Symbol	INDICATES DRAINAGE AREAS AND RUNOFF COEFFICIENTS

LEGEND

Symbol	MANHOLE	EXISTING SANITARY SEWER
Symbol	HYDRANT	SAN. CLEAN OUT
Symbol	Symbol	EXISTING BURIED CABLES
Symbol	Symbol	EXISTING WATER MAIN
Symbol	Symbol	EXISTING STORM SEWER
Symbol	Symbol	EXISTING GAS MAIN
Symbol	Symbol	PR. SANITARY SEWER
Symbol	Symbol	PR. WATER MAIN
Symbol	Symbol	PR. STORM SEWER
Symbol	Symbol	PR. R. Y. CATCH BASIN
Symbol	Symbol	SAND BACKFILL (S & G ONLY)
Symbol	Symbol	PROPOSED LIGHT POLE



CLIENT
CopperRock Construction
6011 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

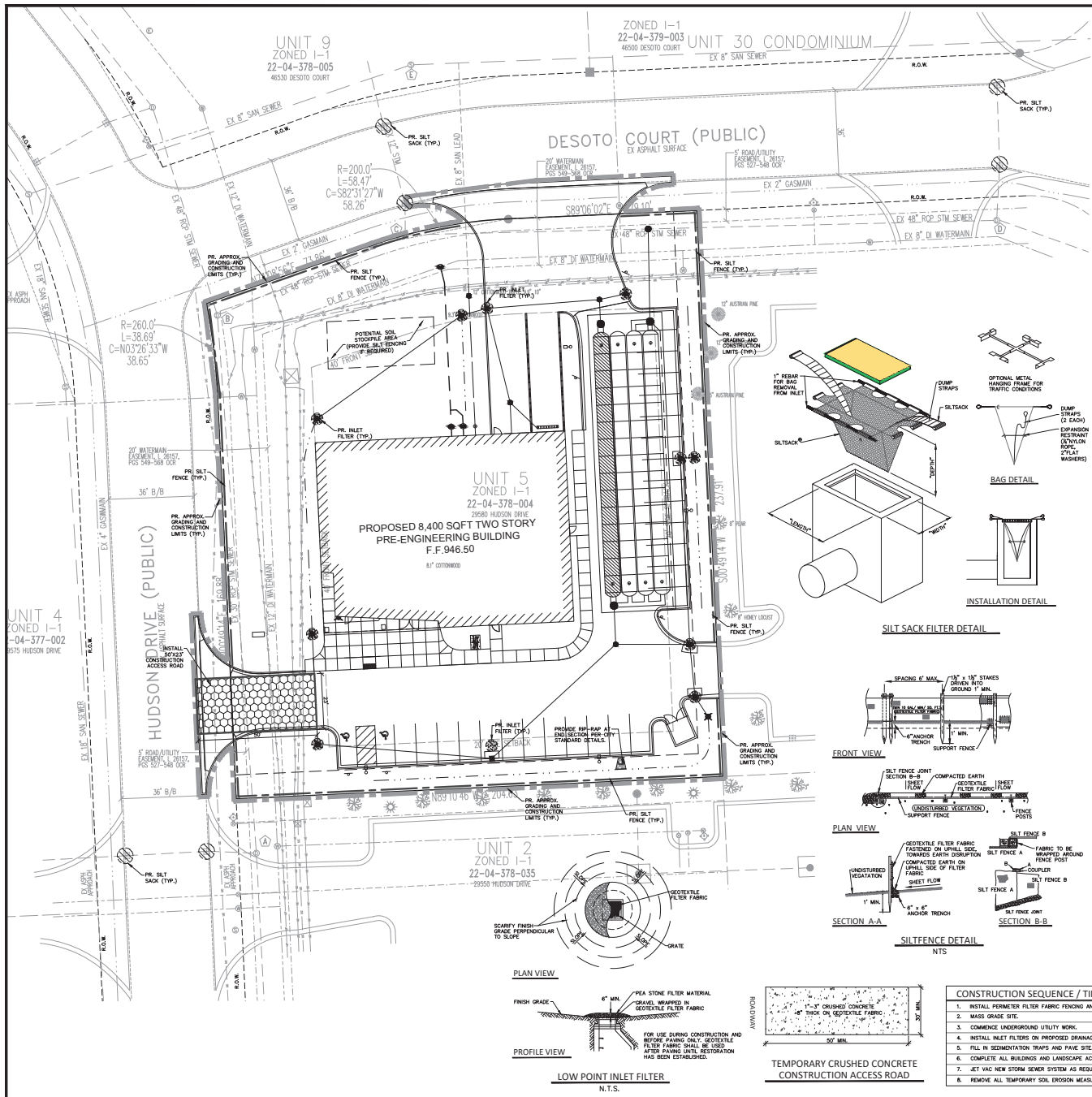
PROJECT LOCATION
Part of the SW 1/4 of Section 4
T.1N., R.8.E., City of Novi,
Oakland County, Michigan

SHEET
Storm Water Management
Plan (1 of 3)



DATE ISSUED/REVISED
01/23/23 ISSUED FOR OWNER REVIEW
02/20/23 ISSUED FOR PERMITS, SITE PLAN REVIEW
02/20/23 ISSUED FOR CITY REVIEW

DRAWN BY: J. Lawrey
DESIGNED BY: G. Yiu
APPROVED BY: B. Buchholz
DATE: January 19, 2023
SCALE: 1" = 20'
NFE JOB NO.: N349
SHEET NO.: C7



NF ENGINEERS
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LAND SURVEYORS
LAND PLANNERS

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WWW.NOWAKFRAUS.COM

STATE OF MICHIGAN
PAUL TULKANGAS
ENGINEER
NO. 007922
RESIDENTIAL

Paul Tulkangas

PROJECT
Beck North Unit 5 Industrial
Office Building - 29500
Hudson Drive (JSP 22-54)

CLIENT
CopperBeck Construction
601 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION
Part of the SW 1/4
of Section 4
T.1N., R.3E.,
City of Novi,
Oakland County, Michigan

SHEET
Soil Erosion and
Sedimentation Control
Plan

811
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DATE ISSUED/REVISED
01/20/23 ISSUED FOR OWNER REVIEW
01/20/23 REVISED FOR FINAL SITE PLAN REVIEW
01/20/23 REVISED PER CITY REVIEW

LEGAL DESCRIPTION
PARCEL NUMBER 22-04-378-004, 29500 HUDSON DRIVE
T.1N., R.3E., SEC. 4, 1/4 SW 1/4 OF SEC. 4 NORTH COOPERATIVE PLAN NO.
CONDOMINIUM, OAKLAND COUNTY CONDOMINIUM SUBDIVISION, PLAN NO. 1294, LIBER 21427, PAGE 238, OAKLAND COUNTY RECORDS.

NOTES
REFER TO THE WIC SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET FOR ALL ADDITIONAL NOTES & DETAILS (TYP.)
A DISTANCE OF 400 FEET TO THE NEAREST BODY OF WATER WALLED LAKE.
THE TOTAL AREA OF EARTH DISRUPTION IS 1.154 ACRES.
SOIL EROSION CONTROL PLAN SHALL BE MAINTAINED HEAVILY AND AFTER EVERY STORM EVENT BY CONTRACTOR.
A SOIL EROSION PERMIT IS REQUIRED FROM THE CITY OF NOVI.

SOIL DATA
THIS SITE CONSISTS OF 17A (KANSY SANDY CLAY, 0 TO 3 PERCENT SILT) BASED ON DATA PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.

DRAWN BY: J. Lanfey
DESIGNED BY: G. Yihu
APPROVED BY: B. Buchholz
DATE: January 19, 2023
SCALE: 1" = 20'
NFE JOB NO. N349
SHEET NO. C10

SESC INSTALLATION NOTE
INSTALLATION OF SILT FENCING AND THREE PROTECTION FENCING SHALL NOT OCCUR PRIOR TO THE INITIAL CITY PRE-CONSTRUCTION MEETING. WHEN NATURAL FEATURES EXIST, INSPECTION OF STAKING MAY BE REQUIRED PRIOR TO FENCE INSTALLATION.

PRE-TREATMENT MAINTENANCE NOTE
PRE-TREATMENT STRUCTURE SHALL BE INSPECTED, MEASURD FOR SEDIMENT ACCUMULATION UNTIL SITE IS STABILIZED AND SHALL BE CLEANED AS REQUIRED.

DEWATERING NOTE
IF DEWATERING IS ANTICIPATED OR ENCOUNTERED CONDITIONS REQUIRE DETERMINING GRADING CONSTRUCTION A Dewatering PLAN MUST BE SUBMITTED TO THE CITY OF NOVI ENGINEERING DIVISION FOR REVIEW.

UTILITY INSTALLATION NOTE
IT SHALL BE THE DEVELOPER'S RESPONSIBILITY TO GRADE AND STABILIZE DISTURBANCES DUE TO THE INSTALLATION OF PUBLIC UTILITIES.

EROSION CONTROL BLANKET NOTE
SLOPES STEEPER THAN 1:6 (48) SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS.

MAINTENANCE OF SESC MEASURES & DUST CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING WEEKLY AND POST RAINFALL INSPECTION & MAINTENANCE OF ALL SOIL EROSION & SEDIMENTATION CONTROL MEASURES.
2. REMOVE ACCUMULATION OF SEDIMENT & DEBRIS IN CONSTRUCTION ENTRANCE, SILT FENCE, LOW POINT INLET FILTERS, AND MANHOLE SUMPS. ACCUMULATED SEDIMENT AND DEBRIS ON ROADWAYS SHALL BE REMOVED.
3. SOIL EROSION & SEDIMENTATION CONTROL MEASURES FOUND IMPROPERLY INSTALLED SHALL BE RE-INSTALLED TO MEET THE DESIRED FUNCTION.
4. DUST SHALL BE CONTROLLED DAILY, OR AS NEEDED, TO A MINIMUM BY USE OF A WATER TRUCK AND/OR DUST CONTROL MATERIALS. SWEEP STREETS ADJACENT TO SITE AS REQUIRED.

SOIL EROSION CONTROL - SEQUENCE OF OPERATION (NEW CONSTRUCTION)
INSTALL ORANGE CONCRETE ACCESS DRIVE AND TEMPORARY CULVERTS AT THE SITE ENTRANCE AS INDICATED ON THE PLANS.

ERODIVE AND INSTALL UNDERGROUND UTILITIES. INSTALL PLASTIC INLET FILTERS AROUND ALL NEW STORM SEWER LINES AS INDICATED ON THE PLANS. EXISTING AND PROPOSED STORM SEWER FACILITIES SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION AT ALL TIMES.

COMBINE FINAL GRADING AND TRIMMING OPERATIONS. PREPARE SUBGRADE FOR INSTALLATION OF PROPOSED PAVEMENT.

SEED AND MULCH ALL DISTURBED SITE AREAS AND INSTALL SITE LANDSCAPING.

REMOVE CONSTRUCTION DEBRIS AND LET VAC NEWLY INSTALLED STORM SEWER SYSTEM AS REQUIRED BY THE MUNICIPALITY.

REMOVE ALL REMAINING TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED.

WHENEVER POSSIBLE, THE SITE SHALL BE GRADED TO WITHIN SIX INCHES (6") OF THE PROPOSED FINISH GRADE PRIOR TO INSTALLATION OF UNDERGROUND FACILITIES.

STAGING OF PROPOSED WORK SHALL BE COMPLETED BY THE CONTRACTOR AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED AREAS.

SOIL EROSION CONTROL
CONSTRUCTION FILING AND STAKING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT. EXCEPT WHERE SPECIFIC CONDITIONS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THE ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED THROUGHOUT THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, PONDS, OR OTHER WATERCOURSES.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONTINUED FLOW OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY OCCURS, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

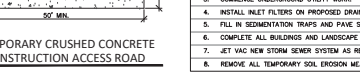
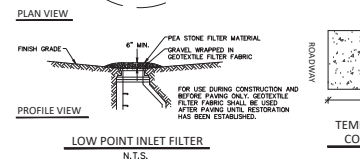
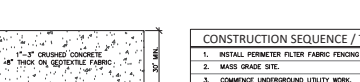
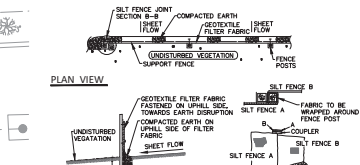
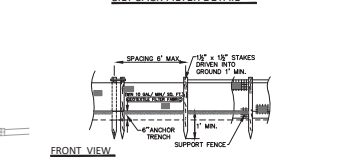
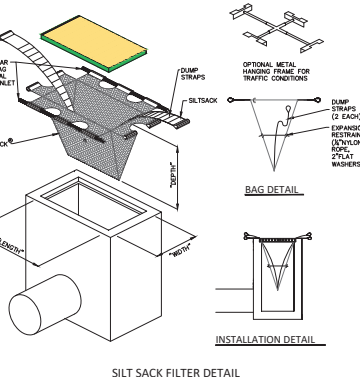
PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 180 (SIXTY) CALENDAR DAYS AFTER FINAL GRADING OF THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL, IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

INDICATES LIMITS OF SILT FABRIC FENCE
INDICATES LIMITS OF DRAINAGE DISTRICT AREA
INDICATES LIMITS OF SOIL DISRUPTION
INDICATES LOW POINT INLET FILTER OR PROPOSED DRAINAGE STRUCTURE
INDICATES SILT SACK OR EQUAL ON EXISTING DRAINAGE STRUCTURE



SEAL



PROJECT
Beck North Unit 5 Industrial
Office Building - 29580
Hudson Drive (JSP 22-54)

CLIENT
CopperRock Construction
601 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION
Part of the SW 1/4
of Section 4
T.1N., R.8E.
City of Novi,
Oakland County, Michigan

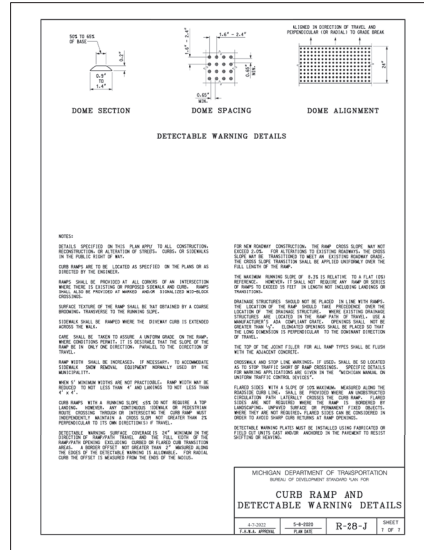
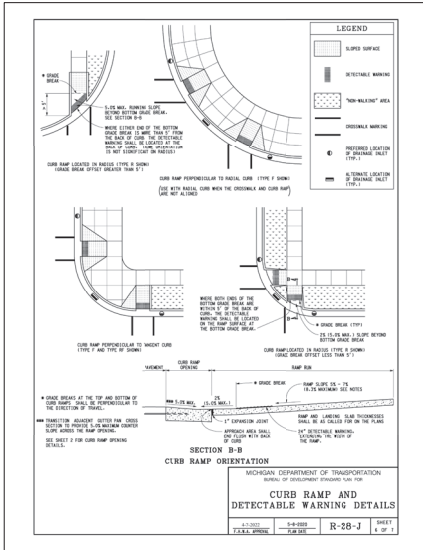
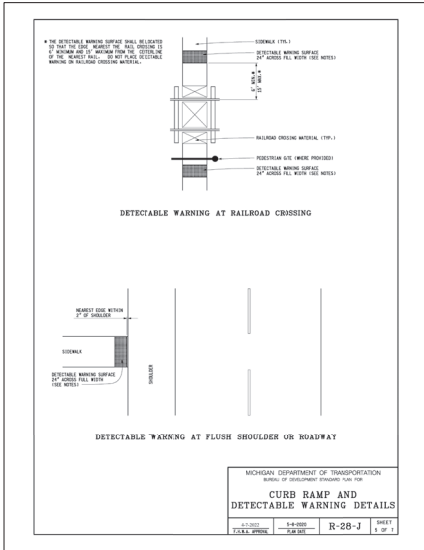
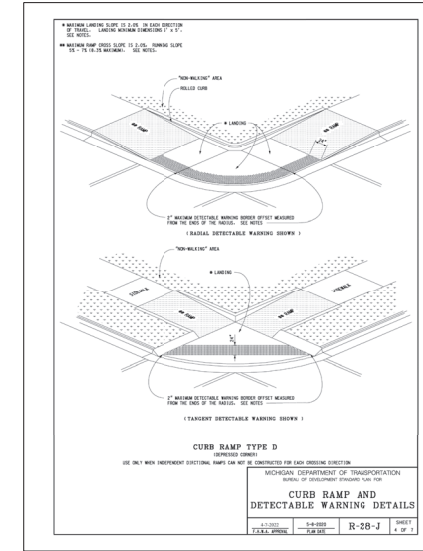
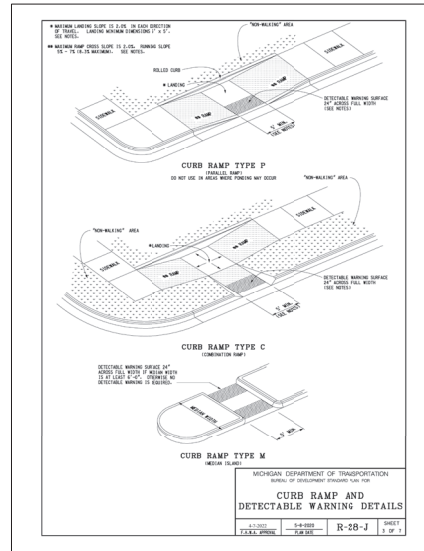
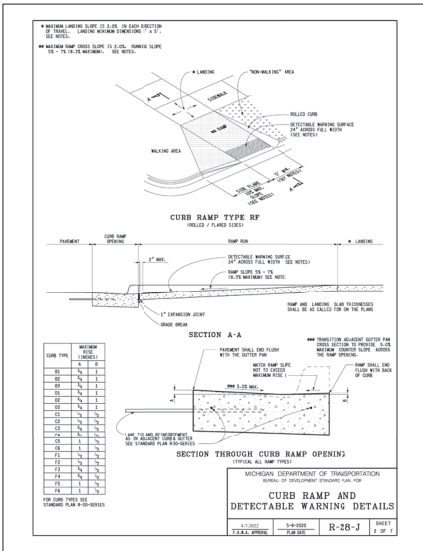
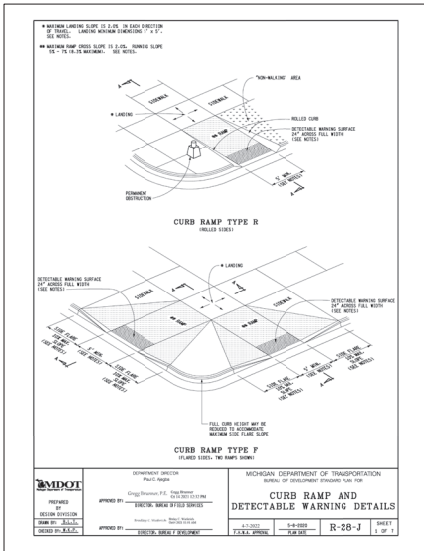
SHEET
MDOT Sidewalk Ramp
Details (R-28-J)

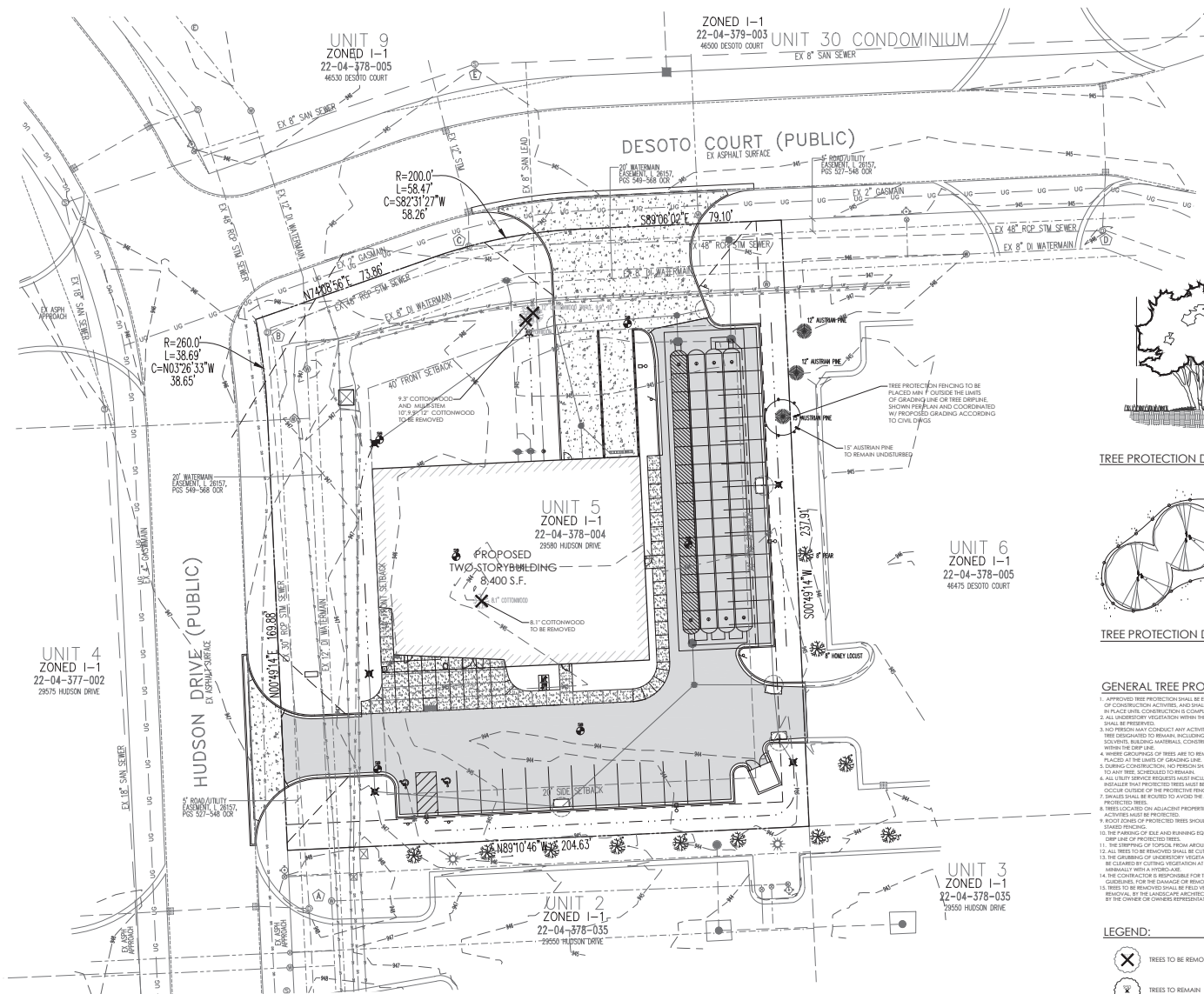


DATE ISSUED/REVISED
01-29-22 ISSUED FOR OWNER REVIEW
02-29-22 ISSUED FOR PERMITS WITH PLAN REVIEW
02-22-2025 REVISED PER CITY REVIEW

DRAWN BY:
J. Lawrey
DESIGNED BY:
G. Yiu
APPROVED BY:
B. Buchholz
DATE:
January 19, 2022
SCALE: N.T.S.

NFE JOB NO. SHEET NO.
N349 C11





NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257

SEAL



PROJECT
 Gabriel Group

CLIENT
 CopperRock Construction
 601 Fifth Street NW
 Suite 300
 Grand Rapids, MI 49504
 Tel. (616) 570-2382

Contact: Matthew Hall,
 Pre-construction Manager

PROJECT LOCATION
 Part of the SW 1/4
 of Section 4
 T11N, R. 8E,
 City of Novi,
 Oakland County, Michigan

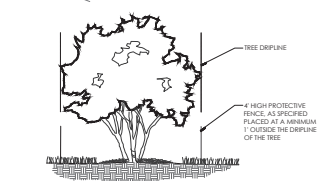
SHEET
 Tree Preservation Plan



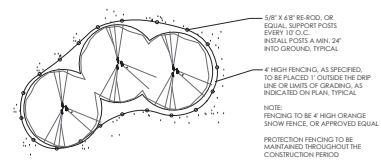
REVIEWS
 01/19/2022 ISSUED FOR OWNER REVIEW
 02/01/2022 ISSUED FOR PDP REVIEW
 03/22/2023 REVISED PER CITY REVIEW

DRAWN BY:
 G. Ostrowski
 DESIGNED BY:
 G. Ostrowski
 APPROVED BY:
 G. Ostrowski
 DATE:
 12-15-2022

SCALE: 1" = 20'
 CITY JOB NO. JSP22-0054 SHEET NO. N349 L1



TREE PROTECTION DETAIL-SECTION



TREE PROTECTION DETAIL-PLAN

GENERAL TREE PROTECTION NOTES

1. APPROVED TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL THE SURFACE LEVEL CONSTRUCTION IS COMPLETE.
2. ALL UNDESIRABLE VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE REMOVED.
3. NO PERSON SHALL CONDUCT ANY ACTIVITY WITHIN THE Drip Line OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOIL, MULCH, BRUSH, OR OTHER CONSTRUCTION EQUIPMENT, OR JOB DEPOSITS WITHIN THE Drip Line.
4. WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
5. SQUARE CORNERS OF PROTECTIVE FENCING SHALL BE ATTACHED AND SECURED TO ANY TREE SCHEDULED TO REMAIN.
6. ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE SURVEYOR THAT PROTECTED TREES MAY BE AFFECTED. ALL FENCING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
7. GRADING SHALL BE AVOIDED TO AVOID THE AREA WITHIN THE Drip Lines OF PROTECTED TREES.
8. TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
9. ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH REGULARLY MAINTAINED FENCING.
10. SOIL PAVING, STAKE AND BURNING EQUIPMENT SHALL BE PROHIBITED UNDER THE Drip Line OF PROTECTED TREES.
11. THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
12. ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
13. THE GRUBBING OF UNDESIRABLE VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE COMPLETED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MANUALLY WITH A HEDDLE.
14. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT FOR CONFORMANCE GUIDELINES FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
15. TREES TO BE REMOVED SHALL BE FIELD VERIFIED, EVALUATED AND FLAGGED FOR REMOVAL BY THE LANDSCAPE ARCHITECT OR FORESTER, ONLY AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.

LEGEND:

- (X) TREES TO BE REMOVED
- (O) TREES TO REMAIN
- (---) TREE PROTECTION FENCING

INVASIVE SPECIES NOTE:
 A SITE VISIT REVEALED NO INVASIVE KNOWN OR PHOTOGRAINED SPECIES PRESENT ON SITE.

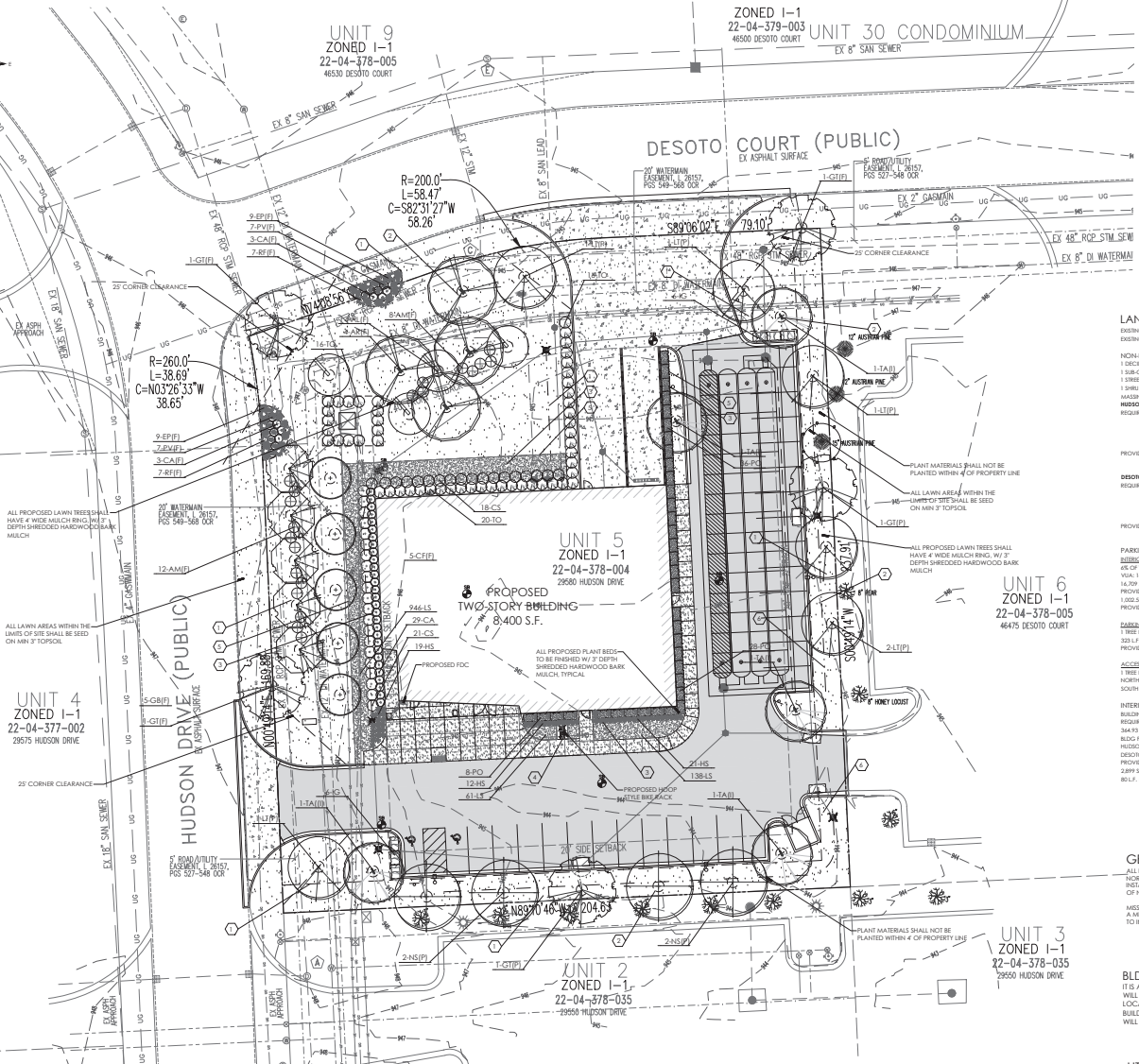


NOWAK & FRUAS ENGINEERS
4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL: (248) 332-7931
FAX: (248) 332-8257

UNIT 9
ZONED I-1
22-04-379-005
4650 DESOTO COURT

ZONED I-1
22-04-379-003
4650 DESOTO COURT
UNIT 30 CONDOMINIUM
EX 8" SAN SEWER

DESOTO COURT (PUBLIC)
EX ASPHALT SURFACE



GENERAL LANDSCAPE NOTES

- 1. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVED PLANS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVED PLANS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVED PLANS...

LANDSCAPE REQUIREMENTS

EXISTING SITE COORDINATE: 41 INDUSTRIAL DISTRICT
EXISTING SITE AREA: 47,314 S.F. OR 1.09 ACRES
NON-RESIDENTIAL SUBDIVISION LANDSCAPING
1. DECIDUOUS OR EVERGREEN TREE PER 30 L.F. OF FRONTAGE
2. 3 SUB-CANOPY TREE PER 30 L.F. OF FRONTAGE
3. STREET TREE BETWEEN CURB AND WALK PER 30 L.F. OF FRONTAGE
4. 1 WALK PER 30 L.F. OF FRONTAGE

CITY NOTES:

- 1. ALL PLANT SUBSTITUTIONS AND/OR DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED BY WRITING BY THE CITY OF NOVI PRIOR TO INSTALLATION.

LANDSCAPE WAIVERS REQUESTED:

- 1. DEFICIENCY OF 3 GREENBELT TREES ALONG HUDSON DRIVE DUE TO LACK OF SPACE FROM UNDERGROUND UTILITIES.

GENERAL NOTES:

ALL PROPOSED PLANT MATERIAL SHALL BE NORTHERN GROWN, NO. 1 GRADE STOCK, INSTALLED IN ACCORDANCE WITH IAN AND CITY OF NOVI STANDARDS.
MSS D-2 (1-800-487-7171) SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO INSTALLATION OF ALL MATERIALS.

UTILITY/TREE NOTE:

ALL PROPOSED TREES SHALL BE LOCATED 5' FROM AND UNDERGROUND UTILITY LOCATION, AND 10' FROM ALL HYDRAINS AND UTILITY STRUCTURES.

IRRIGATION NOTE:

ALL LANDSCAPE AREAS INCLUDING THOSE WITHIN THE R.O.W. SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. THE SYSTEM SHALL OPERATE IN COMPLIANCE WITH LOCAL STANDARDS AND SEASONAL RESTRICTIONS. SEPARATE ZONES SHALL BE PROVIDED FOR LAWN AREAS AND PLANTING BEDS. IRRIGATION SHALL BE DESIGNED IN THE MOST EFFICIENT MANNER NECESSARY TO FULLY IRRIGATE ALL PLANTING AREAS.

TYPICAL SEEDED LAWN MIX:

ALL LAWN AREAS DESIGNATED TO BE SEEDING SHALL BE HYDRO-SEEDED WITH TYPICAL DROUGHT TOLERANT DURABLE BLENDED SEED MIX AT A RATE OF 20 LBS PER ACRE.
MIX IS COMPOSED OF:
20% KENTUCKY BLUEGRASS
20% CREEPING BENTGRASS
10% HEAVY CROWN BUEGRASS
10% NEWPORT KENTUCKY BUEGRASS

GENERAL SEED NOTE:

ALL LAWN AREAS DESIGNATED TO BE SEEDING SHALL BE HYDRO-SEEDED WITH SPECIFIED BLENDS AND STABILIZED WITH WOOD CELLULOSE FIBER MULCH (200 LBS PER ACRE). IN AREAS SUBJECT TO EROSION, REDWOOD LAWN SHALL BE FURTHER STABILIZED WHERE NECESSARY WITH BROADCASTABLE BIOEROSION BARREST AND STABILIZED WITH STABILIZER. ALL SEED SHALL BE APPLIED OVER A MINIMUM 3" PREPARED TOPSOIL AND SHALL BE KEPT MOIST AND WATERED DAILY UNTIL ESTABLISHED.
SEEDING INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL 1 TO JUNE 1
FALL: AUGUST 1 TO OCTOBER 15

SCALE



PROJECT
Gabriel Group

CLIENT
CopperRock Construction
601 Fifth Street NW
Suite 300
Grand Rapids, MI 49504
Tel. (616) 570-2382

Contact: Matthew Hall,
Pre-construction Manager

PROJECT LOCATION

Part of the SW 1/4
of Section 4
T.1N., R.3E.,
City of Novi,
Oakland County, Michigan

SHEET
Landscape Plan



REVIEWS
01/19/2024 ISSUED FOR OWNER REVIEW
02/01/2024 ISSUED FOR PER REVIEW
03/22/2024 REVISED PER CITY REVIEW

GROUND COVER KEY

- 1 TYPICAL SEED LAWN AREAS, SOWN ON 3" TOPSOIL
- 2 4" DIA SPACED CURB EDGE W/ 3" SHREDED BARK MULCH
- 3 3" DEPTH DOUBLE SHREDED HARDWOOD BARK MULCH
- 4 HOOP STYLE BIKE RACK
- 5 3/16" x 4" METAL EDGING STAKED PER MANUFACTURER
- 6 AREAS OF SNOW DEPOSIT TO BE COORDINATED W/ SNOW REMOVAL COMPANY

DRAWN BY:
G. Ostrowski

DESIGNED BY:
G. Ostrowski

APPROVED BY:
G. Ostrowski

DATE:
12-15-2022

SCALE: 1" = 20'

NEE JOB NO. SHEET NO.

N349 L2

CITY FILE NO. JSP22-0054

D-Series Size 1 LED Area Luminaire

Specifications

Efficiency:	120 lm/w
Beam Angle:	22.7°
Length:	14.25"
Height:	7.88"
Mounting Height:	21.75"
Weight:	28.56 lbs

Introduction
The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology along with high performance, high efficiency, long life luminaires.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSK1 LED P7 40K 70CM 73M MVOLT 5PA NLRAR2 PRRH DBXBD

Code	Label	Color Temperature	Label Voltage	Description	Height	Mounting
DSK1 LED	DSK1	40K	70CM	73M MVOLT 5PA NLRAR2 PRRH DBXBD	73.00'	DBXBD

Color Options

Color	Label	Color Temperature	Label Voltage	Description	Height	Mounting
White	DSK1	40K	70CM	73M MVOLT 5PA NLRAR2 PRRH DBXBD	73.00'	DBXBD

LITHONIA LIGHTING COMMERCIAL OUTDOOR
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LITHONIA LIGHTING

FEATURES & SPECIFICATIONS
• 100% LED
• 120 lm/w
• 22.7° beam angle
• 14.25" length
• 7.88" height
• 21.75" mounting height
• 28.56 lbs weight

LDN6



6" Open and Walk-Rate LED New Construction Downlight

Ordering Information

Example: LDN6 120V 50W 12" 50W 12"

Label	Color Temperature	Label Voltage	Description	Height	Mounting
LDN6	50W	120V	50W 12"	12.00'	50W 12"

Schedule

Symbol	Label	QTY	Manufacturer	Description	Lamp	CRI	Mounting Height
A	3	Lithonia Lighting	D-Series Size 1 Area Luminaire 4000K	LED	80	20'-0"	
B	1	Lithonia Lighting	D-Series Size 1 Area Luminaire 4000K	LED	80	20'-0"	
C	3	Lithonia Lighting	6.5" LED Downlight 4000K	LED	80	9'-0"	

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
PARKING LOT	+	1.6 f.c.	3.8 f.c.	0.5 f.c.	7.6:1	3.2:1	0.4:1
PROPERTY LINE	+	0.1 f.c.	0.5 f.c.	0.0 f.c.	N/A	N/A	0.2:1
SHIPPING/RECEIVING	+	1.0 f.c.	1.4 f.c.	0.7 f.c.	2.0:1	1.4:1	0.7:1

- General Note**
- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 - SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 - CALCULATIONS ARE SHOWN IN FOOT CANDLES AT: 0' - 0"
 - HOURS OF OPERATION: 24 HOURS PER DAY & 7 DAYS A WEEK.
 - 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.
 - ALL FIXTURES SHALL BE LOCATED, SHIELDED AND AIMED AT THE AREAS TO BE SECURED.
 - FIXTURES MOUNTED ON THE BUILDING AND DESIGNED TO ILLUMINATE THE FACADES ARE PREFERRED.
 - LIGHTING FOR SECURITY PURPOSES SHALL BE DIRECTED ONLY ONTO THE AREAS TO BE SECURED.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

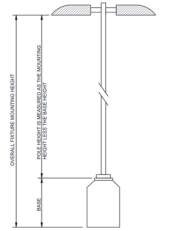
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASO@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE SUBMITTED TO THE CITY FOR APPROVAL.

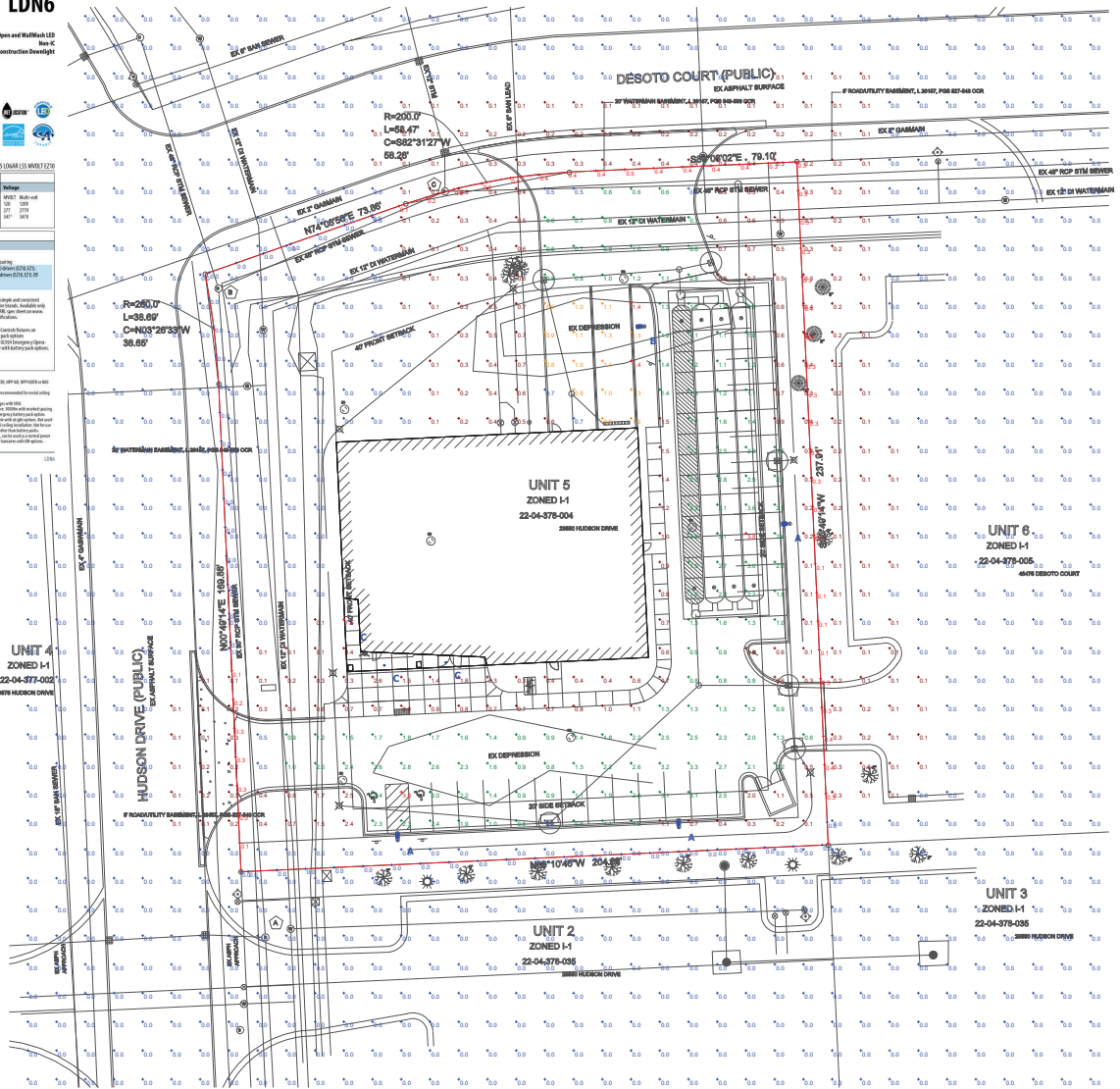
Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Mounting Height Note
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.



EV Smart Commercial Pole Base Housing
Consider including one or more reconfigurable Pole Bases (PB) on your site to allow for EV Charging stations.
Contact Gasser Bush Associates for more information on PBs and EV Charging Stations at www.gasserbush.com



Plan View
Scale - 1" = 20ft



29580 HUDSON DRIVE
PHOTOMETRIC SITE PLAN
PREPARED FOR: NOWAK & RAUS ENGINEERS
WWW.GASSERBUSH.COM

Designer: GBA
Date: 01/24/2023
Rev: 3/21/2023
Scale: Not to Scale
Drawing No.: #23-10919-V2



PLAN REVIEW CENTER REPORT

Planning Review 29580 HUDSON DRIVE

JSP 22-54
April 13, 2023

PETITIONER

CopperRock Construction

REVIEW TYPE

Preliminary Site Plan

PROPERTY CHARACTERISTICS

Section	4	
Site Location	29580 Hudson Drive; 22-04-378-004; East of Hudson Dr, South of DeSoto Ct	
Site School	Walled Lake Consolidated School District	
Site Zoning	I-1 Light Industrial	
Adjoining Zoning	North	I-1 Light Industrial
	East	I-1 Light Industrial
	West	I-1 Light Industrial
	South	I-1 Light Industrial
Current Site Use	Vacant	
Adjoining Uses	North	Vacant (North) / DeSoto Investments (Northeast)
	East	Design Research Engineering
	West	Metalsa
	South	American Interiors
Site Size	1.09 acres	
Plan Date	February 2, 2023	

PROJECT SUMMARY

The applicant is proposing to construct an 8,400 square foot, two-story warehouse and showroom for kitchenware and restaurant equipment. In addition, 2 truck docks and 22 parking spaces are proposed. The site is located at 29580 Hudson Drive and is Unit 5 of Beck North Corporate Park. The site contains a significant presence of easements along the frontage of Hudson Drive. The site does not contain any regulated wetlands or woodlands.

RECOMMENDATION

Approval of the Preliminary Site Plan is recommended by Planning staff if a variance for the truck docks located in the exterior side yard is granted by the Zoning Board of Appeals. The plan mostly complies with the ordinance requirements. All reviewers recommend approval of the Preliminary Site Plan.

ORDINANCE REQUIREMENTS

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

1. Uses Permitted (Sec. 3.1.19.B/C): An industrial office is a principal permitted use in the I-1, Light Industrial, Zoning District. **Planning Commission approval of the Preliminary Site Plan and Stormwater Management Plan is required.**
2. Parking Setback (Sec. 3.1.18.D): The proposed parking setback of 8.7 feet along the east property line (interior side yard) does not meet the minimum requirement of 10 feet. **Please revise this setback, or seek a modification from the Planning Commission.**
3. Modification of Parking Setback Requirements (Sec. 3.6.2.Q): The Planning Commission may modify setback requirements in those instances where it determines that such modification may result in improved use of the site and/or in improved landscaping provided that such modification of the setback requirements does not reduce the total area of setback on a site below the minimum setback area requirements. *The site appears to meet this condition.* **However, if a modification is sought, a calculation indicating compliance with this requirement shall be provided prior to the Planning Commission meeting.**
4. Planning Commission Findings (Sec. 3.14.3): As part of the Planning Commission review of the Preliminary Site Plan, they shall consider the scale, size, building design, façade materials, landscaping, lighting, noise, vibration, odor, truck delivery, and activity of the site. **This shall be a condition of Planning Commission approval.**
5. Loading Spaces (Sec. 5.4.3): Two proposed truck docks are located in the exterior side yard of the site, which is not permitted. **Please revise the location of the truck docks, or seek a variance from the Zoning Board of Appeals.**
6. Dumpster Enclosure (Sec. 21-145 (c), Code of Ordinances): The proposed dumpster enclosure appears to comply with ordinance standards. However, a detail has not been provided. **Please provide a detail of the dumpster enclosure. Include the surface type, provide bumpers/posts, and indicate the height of the enclosure.**
7. Economic Impact Information: Requested economic impact information has not been provided at this time. **Please provide the total estimated cost of the proposed building & site improvements and number of anticipated jobs created (temporary construction and permanent) prior to the Planning Commission meeting.**
8. Security Lighting (Sec. 5.7.3.H): Standard noted related to any proposed security lighting have not been provided on the photometric plan. **Please provide these standard notes on the photometric plan with the next submittal.**
9. Minimum Illumination (Sec. 5.7.3.K): The minimum illumination requirements appear to be met for most of the site, except for the main entrance, which is shown as 0.3 foot candles. **Please revise the minimum illumination near the main entrance to a minimum of 1 foot candle.**
10. Signage: For sign permit information please contact Maureen Underhill at 248-347-0438 or munderhill@cityofnovi.org in the Code Compliance Division for more information.
11. Planning Chart: Please refer to the attached Planning Chart for additional comments to address in the next submittal.

OTHER REVIEWS

- a. Engineering Review: Engineering is recommending approval of the Preliminary Site Plan with comments to be addressed on the Final Site Plan submittal.
- b. Landscape Review: Landscape is recommending approval of the Preliminary Site Plan with comments to be addressed on the Final Site Plan submittal.
- c. Traffic Review: Traffic is recommending approval of the Preliminary Site Plan with comments to be addressed on the Final Site Plan submittal.
- d. Façade Review: Façade is recommending approval of the Preliminary Site Plan with comments to be addressed on the Final Site Plan submittal.
- e. Fire Review: Fire is recommending approval the Preliminary Site Plan with comments to be addressed on the Final Site Plan submittal.

NEXT STEP: PLANNING COMMISSION AND RESPONSE LETTER

The Preliminary Site Plan is required to go before the Planning Commission and Stormwater Management Plan as a Matter for Consideration. This item is scheduled to go before the **Planning Commission on April 19, 2023 at 7:00 P.M. in the Novi Civic Center**. The applicant, or someone familiar with the project, is requested to be in attendance. In addition, please provide the following prior to the meeting:

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

NEXT STEP: ZONING BOARD OF APPEALS

After receiving Planning Commission's approval of the Preliminary Site Plan, at least one variance from the Zoning Board of Appeals will be necessary prior to the approval of the Final Site Plan. This variance request is tentatively scheduled to go before the **Zoning Board of Appeals on May 9, 2023 at 7:00 P.M. in the Novi Civic Center**. The applicant, or someone familiar with the project, is requested to be in attendance.

FUTURE STEP: FINAL SITE PLAN SUBMITTAL

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

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

FUTURE STEP: ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER

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

If required, drafts for all legal documents with a legal transmittal are to be submitted along with stamping sets. Please note that any off-site easements will need to be approved prior to Stamping Set approval.

FUTURE STEP: STAMPING SET APPROVAL

Stamping sets will be required for this project. After having received all the review letters from City staff the applicant should make the appropriate changes on the plans and submit **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

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) 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

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.



Christian Carroll, Planner

PLANNING REVIEW



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

Review Date: February 23, 2023
Review Type: Preliminary Site Plan Review
Project Name: **JSP22-54 29580 HUDSON DRIVE**
 50-22-04-378-004; North of West Rd, East of Hudson Dr
Plan Date: February 2, 2023
Prepared by: Christian Carroll, Planner
E-mail: 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
Zoning and Use Requirements				
Master Plan <i>(adopted July 27, 2017)</i>	Industrial Research Development and Technology	Industrial Office	Yes	
Zoning <i>(Effective January 8, 2015, as amended)</i>	I-1: Light Industrial District and I-2: General Industrial District	No Change	Yes	
Uses Permitted <i>(Sec 3.1.18.B & C)</i>	Sec. 3.1.18.B Permitted Uses Sec. 3.1.18.C Special Land Uses	Industrial Office	Yes	Planning Commission approval of the Preliminary Site Plan is required.
Non-Residential Open Storage <i>(Sec 3.14.1.B.iv)</i>	Permitted as Special Land Use when conducted in conjunction with and accessory to otherwise permitted use in I-1	Does not comply	NA	
Height, Bulk, Density, and Area Limitations (Sec. 3.1.18.D)				
Frontage on a Public Street <i>(Sec. 5.12)</i>	Frontage on a Public Street is required.	Frontage on DeSoto Ct & Hudson Dr	Yes	
Access to a Major Thoroughfare <i>(Sec. 5.13)</i>	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.	Complies	Yes	
Minimum Zoning Lot Size 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	
Minimum Zoning Lot Size for each Unit: Width in Feet		Complies	Yes	
Maximum % of Lot Area Covered <i>(By All Buildings)</i>	<i>(Sec 3.6.2.D)</i>	8,400 sf / 47,320 sf = 17.7%	Yes	
Building Height <i>(Sec. 3.1.18.D)</i>	40 ft	24 ft	Yes	
Building Setbacks (Sec. 3.1.18.D)				
Front (West)	40 ft	40 ft	Yes	
Ext. Side (North)	40 ft	70.3 ft	Yes	
Int. Side (South)	20 ft	68 ft	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Rear (East)	20 ft	59.6 ft	Yes	
Parking Setbacks (Sec. 3.1.18.D) Refer to applicable notes in Sec. 3.6.2				
Front (West)	40 ft (Sec. 3.6.2.E)	NA	NA	Revise, or seek modification from Planning Commission and provide requested information from Section 3.6.2.Q.
Ext. Side (North)	40 ft (Sec. 3.6.2.E)	NA	NA	
Int. Side (South)	10 ft	10 ft	Yes	
Rear (East)	10 ft	8.7 ft	No	
Note to District Standards (Sec. 3.6.2)				
Exterior Side Yard Abutting a Street (Sec 3.6.2.C)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.	Complies – north side	Yes	
Off-Street Parking in Front Yard (Sec 3.6.2.E)	Off-street parking is allowed in front yard if:			<i>No parking proposed in the front yard.</i>
	The site is a minimum 2 acre site	1.086 acres	NA	
	Does not extend into the minimum required front yard	Complies	NA	
	Cannot occupy more than 50% of the area between min. front yard setback & bldg. setback,	Percentage not shown	NA	
	Must be screened by brick wall or landscaped berm 2.5 ft tall	Not screened	NA	
	Lighting compatible with surrounding neighborhood	No lighting shown	NA	
Off-Street Parking in Side and Rear Yards (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: i. shall not occupy more than 50% of side yard area abutting residential ii. parking setback no less than 100 ft from res district	Site does not abut residential	Yes	
Setback from Residential District - Building (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)	Does not apply	NA	
Wetland/Watercourse Setback (Sec 3.6.2.M)	A setback of 25ft from wetlands and from high watermark course shall be maintained	Does not apply	NA	
Additional Height (Sec 3.6.2.O)	Additional heights for selected buildings is allowed based on conditions listed in Sec 3.6.2.O	Does not apply	NA	
Parking setback screening (Sec 3.6.2.P)	Required parking setback area shall be landscaped per Sec. 5.5.3.	Shown	Yes	<i>See Landscape review.</i>
Modification of parking setback requirements (Sec 3.6.2.Q)	The Planning Commission may modify parking setback requirements based on conditions listed in Sec. 3.6.2.Q	Not proposed	TBD	Please indicate if a modification is being sought.
I-1 District Required Conditions (Sec. 3.14)				

Item	Required Code	Proposed	Meets Code	Comments
Other (Sec 3.14.2)	Unless otherwise provided, dealing directly with consumer at retail, is prohibited.	Narrative provided	Yes	
Planning Commission Findings (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.	Appears to comply	TBD	Planning Commission will decide as part of the Site Plan.
	The intended truck delivery service can be effectively handled without long term truck parking on site.	Appears to comply	TBD	Planning Commission will decide as part of the Site Plan.
	The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of this article and performance standards of Section 5.14.	Appears to comply	TBD	Planning Commission will decide as part of the Site Plan.
	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.	Provided	Yes	
	There is compliance with the City's hazardous materials checklist for required submittal data.	Provided	Yes	
Parking and Loading Requirements				
Number of Parking Spaces (Sec. 5.2.12.E, as amended December 26, 2019)	Industrial Establishments & Related Offices: 1 space per 700 sf usable floor area OR 5 spaces + 1 space for each 1.5 employees in the largest working shift, whichever is greater. 8,400 sf/700 sf = 12 spaces required	22 spaces proposed (2 barrier free)	Yes	
Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)	- 90° Parking: 9 ft. x 19 ft. - 24 ft. two way drives - 9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping	9' x 17' parking spaces with 4" curb	Yes	
End Islands (Sec. 5.3.12)	- End Islands with landscaping and raised curbs are required at the end of all parking bays that about traffic circulation aisles. - The end islands shall generally be at least 8 ft. wide, have an	End islands provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
	outside radius of 15 ft., and be constructed 3 ft. shorter than the adjacent parking stall			
Parking stall located adjacent to a parking lot entrance (<i>public or private</i>) (Sec. 5.3.13)	Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer	Complies	Yes	
Barrier Free Spaces (<i>Barrier Free Code</i>)	Based on the requirement of 12 spaces, 0 standard and 1 van-accessible spaces are required	2 van accessible	Yes	
Barrier Free Space Dimensions (<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	8' wide with 8' access aisle	Yes	
Barrier Free Signs (<i>Barrier Free Code</i>)	One sign for each accessible parking space.	Complies	Yes	
Minimum number of Bicycle Parking (Sec. 5.16.1)	Industrial: Five (5) percent of required automobile spaces, minimum two (2) spaces	2 spaces	Yes	
Bicycle Parking General requirements (Sec. 5.16)	No farther than 120 ft. from the entrance being served	~20 ft	Yes	
	When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations	Only 2 spaces required	NA	
	Spaces to be paved and the bike rack shall be inverted "U" design Shall be accessible via 6 ft. paved sidewalk	U design, 36" in tall, 6 ft walk	Yes	
Bicycle Parking Lot layout (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double	Complies	Yes	
Loading Spaces (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 area in interior side yard, truck dock in exterior side yard	No	Revise the location of the truck dock, or seek a variance from the Zoning Board of Appeals.

Item	Required Code	Proposed	Meets Code	Comments
	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.			
Dumpster, Accessory Structures, and Rooftop Equipment (Sec. 4.19)				
Dumpster (Sec 4.19.2.F)	<ul style="list-style-type: none"> - Located in rear yard - Attached to the building or - No closer than 10 ft. from building if not attached - Not located in parking setback - If no setback, then it cannot be any closer than 10 ft. from property line. Away from Barrier free Spaces	Complies	Yes	
Dumpster Enclosure (Sec. 21-145. (c) Chapter 21 of City Code of Ordinances)	<ul style="list-style-type: none"> - 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	Appears to comply	Yes?	Provide detail sheet on dumpster enclosure.
Roof top equipment and wall mounted utility equipment (Sec. 4.19.2.E.ii)	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	No rooftop equipment proposed	Yes	
Roof top appurtenances screening	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.	No rooftop equipment proposed	Yes	
Building Code and Other Requirements				
Woodlands (City Code Ch. 37)	Replacement of removed trees	None	NA	
Wetlands (City Code Ch. 12, Art. V)	Mitigation of removed wetlands at ratio of 1.5:1 emergent wetland, 2:1 for forested wetlands	None	NA	
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Complies	Yes	
General layout	Location of all existing and	Complies	Yes	<i>Additional sheets will be</i>

Item	Required Code	Proposed	Meets Code	Comments
and dimension of proposed physical improvements	proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).			<i>requested, as necessary by each reviewer.</i>
Economic Impact Information	- Total cost of the proposed building & site improvements - Number of anticipated jobs created (during construction & after building is occupied, if known)	Not provided	TBD	Provide prior to Planning Commission Meeting.
Building Exits	Building exits must be connected to sidewalk system or parking lot.	Shown	Yes	
Phasing	All projects must be completed within two years of the issuance of any starting permit or phasing plan should be provided	Not proposed	NA	
Other Permits and Approvals				
Development/ Business Sign (City Code Sec 28.3)	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.	Does not apply at this time	NA	Contact Maureen Underhill at 248.735.5602 munderhill@cityofnovi.org for more information.
Project & Street Naming Committee	Some projects may need approval from the Street & Project Naming Committee	Project name not provided	No	Please submit a project name. Contact Diana Shanahan at 248.347.0475 dshanahan@cityofnovi.org
Lighting and Photometric Plan (Sec. 5.7)				
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Provided	Yes	
Lighting Plan (Sec. 5.7.2.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures	Provided	Yes	
Building Lighting (Sec. 5.7.2.A.iii)	Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming points of any remote fixtures.	Provided	Yes	

Item	Required Code	Proposed	Meets Code	Comments
Lighting Standards (Sec. 5.7.A.2.ii)	Specifications for all proposed & existing lighting fixtures	Provided	Yes	
	Photometric data	Provided	Yes	
	Fixture height	20 ft	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	24/7	Yes	
	Photometric plan illustrating all light sources that impact the subject site, including spill-over information from neighboring properties	Provided	Yes	
Max Height (Sec. 5.7.3.A)	Height not to exceed maximum height of zoning district (or 25 ft. where adjacent to residential districts or uses	20 ft	Yes	
Standard Notes (Sec. 5.7.3.B)	<ul style="list-style-type: none"> - Electrical service to light fixtures shall be placed underground - Flashing light shall not be permitted - Only necessary lighting for security purposes & limited operations shall be permitted after a site's hours of operation 	Provided	Yes	
Security Lighting (Sec. 5.7.3.H)	<ul style="list-style-type: none"> - All fixtures shall be located, shielded and aimed at the areas to be secured. - Fixtures mounted on the building and designed to illuminate the facade are preferred - Lighting for security purposes shall be directed only onto the area to be secured. 	Not provided	No	Please provide these standard notes on the plan for any proposed security lighting.
Average Lumen (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	3.2 fc: 1 fc	Yes	
True Color Rendering (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	
Min. Illumination (Sec. 5.7.3.K)	Parking areas: 0.2 min	0.5 fc	Yes	The main entrance illumination should be increased to a minimum of 1 foot candle.
	Loading & unloading areas: 0.4 min	0.7 fc	Yes	
	Walkways: 0.2 min	0.6 fc	Yes	
	Building entrances, frequent use:	0.3 fc	No	

Item	Required Code	Proposed	Meets Code	Comments
	1.0 min			
	Building entrances, infrequent use: 0.2 min	1.0 fc	Yes	
Max. Illumination adjacent to Non-Residential (Sec. 5.7.3.K)	When site abuts a non-residential district, maximum illumination at the property line shall not exceed 1 foot candle	0.5 fc	Yes	
Cut off Angles (Sec. 5.7.3.L)	When adjacent to residential districts: - All cut off angles of fixtures must be 90° - maximum illumination at the property line shall not exceed 0.5 foot candle - No direct light source shall be visible at the property line (adjacent to residential) at ground level	Complies	Yes	

NOTES:

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

ENGINEERING REVIEW



PLAN REVIEW CENTER REPORT

04/12/2023

Engineering Review

29580 Hudson Drive
JSP22-54

Applicant

CopperRock Construction

Review Type

Preliminary Site Plan

Property Characteristics

- Site Location: East of Hudson Drive and North of West Road
- Site Size: +/- 1.09 acres
- Plan Date: 02/01/2022
- Design Engineer: Nowak & Fraus Engineers

Project Summary

- Construction of an approximately 8,400 square-foot building and associated parking. Site access would be provided via Hudson Drive and DeSoto Court.
- Water service would be provided by a 4-inch domestic lead and a 6-inch fire lead would be to serve the building.
- Sanitary sewer service would be provided by an existing 8-inch extension from the existing 8-inch sanitary sewer along the north side of DeSoto Court. An 8-inch lead would be provided to serve the building.
- Storm water would be collected by a single storm sewer collection system and discharged to a regional detention basin.

Recommendation

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

Comments:

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

General

1. This property was accounted for in the Beck North Corporate Park Condominium documents for storm water management, therefore the underground detention can be removed from the project. The property should be treated instead for the Water Quality Volume on-site before being discharged to the existing 48-inch storm sewer along the south side of DeSoto Court.
2. Provide a note on the plans that all work shall conform to the current City of Novi standards and specifications.
3. **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>
4. A right-of-way permit will be required from the City of Novi.
5. Provide a note that compacted sand backfill (MDOT sand Class II) shall be provided for all utilities within the influence of paved areas, and illustrate and label on the profiles.
6. Provide a construction materials table on the utility plan listing the quantity and material type for each utility (water, sanitary and storm) being proposed.
7. 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.
8. Proposed trees shall maintain a minimum 5-foot horizontal separation distance from any existing or proposed utility. Current landscape plans shows conflicts between the proposed storm sewer/drainage swales and proposed landscaping, adjust as necessary.
9. Indicate the typical foundation depth for the proposed light poles to verify that no conflicts with utilities will occur.
10. For common area irrigation systems connected to public water supplies: Install a backflow prevention Reduced Pressure Zone Assembly (RPZ) with an ASSE 1013 listing approval at each tap to the public water supply. A minimum clearance of 12-inches measured from the bottom of pressure relief valve to the finished landscaped grade shall be required. Provide a detail showing the RPZ installation setup and height above grade. If backflow preventer is to be enclosed, provide a detail of the enclosure with required drainage outlets.

Show all locations on a site plan. A plumbing permit is required for the installation of the backflow preventer. Installation of the backflow preventer shall be in such a manner as to not require blowing out the system through the backflow preventer. Drain ports and blow out ports shall be included. Any deviations from these requirements must be approved through the Novi Water & Sewer Division Cross Connection Control Specialist (248-735-5661).

11. A Cross Access Easement will be required for connection to the existing parking lot to the east.

Water Main

12. A tapping sleeve, valve and well is required at the connection to the existing water main.
13. All gate valves 6" or larger shall be placed in a well with the exception of a hydrant shut off valve. A valve shall be placed in a box for water main smaller than 6".

Sanitary Sewer

14. Provide a sanitary sewer monitoring manhole, unique to this site, within a dedicated access easement or within the road right-of-way. If not in the right-of-way, provide a 20-foot-wide access easement to the monitoring manhole from the right-of-way (rather than a public sanitary sewer easement).
15. Provide a sanitary sewer basis of design for the development on the utility plan sheet. (Calculations should use peaking factor of 4.0 and 3.2 REU).
16. Provide a note on the Utility Plan stating the sanitary leads will be buried at least 5 feet deep where under the influence of pavement.

Storm Sewer

17. 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.
18. Provide a 0.1-foot drop in the downstream invert of all storm structures where a change in direction of 30 degrees or greater occurs.
19. Provide a four-foot-deep sump and an oil/gas separator in the last storm structure prior to discharge to the underground storm water storage.
20. Provide profiles for all storm sewer 12-inch and larger.
21. Label the 10-year HGL on the storm sewer profiles and ensure the HGL remains at least 1-foot below the rim of each structure.
22. Illustrate all pipes intersecting storm structures on the storm profiles.
23. Provide a schedule listing the casting type, rim elevation, diameter, and invert sizes/elevations for each proposed, adjusted, or modified storm structure on the utility plan. Round castings shall be provided on all catch basins except curb inlet structures.

24. The storm sewer pipe between MH2 and CB8 is shown to be under capacity. We recommend revising the storm sewer design, so the Q provided is greater than or equal to the Q calculated to maximize the life of the pipe and structures. Resize proposed storm sewer accordingly.
25. Provide explanation behind the use of a check valve/blow preventer between structures CB4 and CB12.

Storm Water Management Plan

26. As part of the Storm Drainage Facility Maintenance Easement Agreement, provide an access easement for maintenance over the storm water detention system, outlet control structure, and the pretreatment structure. Also, include an access easement to the detention area from the public road right-of-way.

Paving & Grading

27. Provide a construction materials table on the Paving Plan listing the quantity and material type for each pavement cross-section being proposed.
28. 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.
29. 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.
30. Provide the standard MDOT detail 'M' approach for the two proposed driveways.
31. Add the maximum 2-percent cross-slope to the sidewalk detail.
32. Minimum slopes for drainage swales shall be 2.0%

Flood Plain

33. If applicable, show the limits of the 100-year flood plain and floodway per the current FIRM maps (2006).

Soil Erosion and Sediment Control

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

The following must be submitted with the revised Preliminary Site Plan:

35. 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.**

The following must be submitted with the Final Site Plan:

36. 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.)

37. 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.
38. A draft copy of the 20-foot-wide easement for the sanitary sewer monitoring manhole access to be constructed onsite must be submitted to the Community Development Department. This document is available on our website.
39. A draft copy of the cross access easement for the connection to the existing parking lot to the east must be submitted to the Community Development Department. This document is available on our website.

The following must be addressed prior to construction:

40. A pre-construction meeting shall be required prior to any site work being started. Please contact Sarah Marchioni in the Community Development Department to setup a meeting (248-347-0430). **Be advised that scheduling the pre-construction meeting can take 2-4 weeks.**
41. A City of Novi Grading Permit will be required prior to any grading on the site. This permit will be issued at the pre-construction meeting (no application required). No fee is required for this permit.

42. Material certifications must be submitted to Spalding DeDecker for review prior to the construction of any onsite utilities. Contact Heather Gendron at 248-844-5400 for more information.
43. Construction inspection fees in the amount of **\$TBD** must be paid to the Community Development Department.
44. Legal escrow fees in the amount of **\$TBD** must be deposited with the Community Development Department. **All unused escrow will be returned to the payee at the end of the project** (except for escrows that are \$50 or less). This amount includes engineering legal fees only. There may be additional legal fees for planning legal documents.
45. A storm water performance guarantee in the amount of **\$TBD** (Equal to 120% of the cost required to complete the storm water management facilities) as specified in the Storm Water Management Ordinance must be posted at the Community Development Department.
46. Water and Sanitary Sewer Fees must be paid prior to the pre-construction meeting. Contact the Treasury Department at 248-347-0498 to determine the amount of these fees.
47. A street sign financial guarantee in the amount of **\$TBD** (\$400 per traffic control sign proposed) must be posted at the Community Development Department. Signs must be installed in accordance with MMUTCD standards.
48. A Soil Erosion Control Permit must be obtained from the City of Novi. Contact Sarah Marchioni in the Community Development Department, Building Division (248-347-0430) for forms and information. The financial guarantee and inspection fees will be determined during the SESC review.
49. A permit for all proposed work activities within the road right-of-way must be obtained from the City of Novi. This application is available from the City Engineering Division or on the city website and can be filed once the Final Site Plan has been submitted. Please contact the Engineering Division at 248-347-0454 for further information. Please submit the cover sheet, standard details, and plan sheets applicable to the permit only.

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

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

Engineering Review of Preliminary Site Plan

29580 Hudson Drive
JSP22-54

04/12/2023

Page 7 of 7

Please contact Adam Chludzinski at (248)735-5643 with any questions.



Adam Chludzinski,
Project Engineer

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

LANDSCAPE REVIEW



PLAN REVIEW CENTER REPORT
April 4, 2023
29580 Hudson Drive
Revised Preliminary Site Plan – Landscaping Review

Review Type

Revised Preliminary Site Plan Landscape Review

Job #

JSP22-0054

Property Characteristics

- Site Location: 29580 Hudson Drive
- Site Acreage: 1.09 ac.
- Site Zoning: I-1
- Adjacent Zoning: North, South, East, West: I-1
- Plan Date: 3/22/2023

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 Final Site Plan submittal. Please follow guidelines of the Zoning Ordinance and Landscape Design Guidelines. This review and the accompanying Landscape Chart are summaries and are not intended to substitute for any Ordinance.

RECOMMENDATION:

This project is **recommended for approval**. The other changes noted below can be addressed on the Final Site Plans.

PLEASE ADD THE CITY PROJECT NUMBER, JSP22-0054, TO THE BOTTOM RIGHT CORNER OF THE OVERALL PLAN SET COVER SHEET.

LANDSCAPE DEVIATION THAT IS REQUIRED FOR PROPOSED LAYOUT:

- Deficiency of one perimeter trees provided along the south access drive –*supported by staff*

Please work to remove the conditions that require the unsupported waivers.

Ordinance Considerations

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

1. All existing trees are shown on the topographic plan and Tree Protection Plan, but their identity and size are not all provided.
2. **Please add the identity and size of all the trees on the site and consistently show all trees as saved or removed throughout the set.**

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

The project is not adjacent to any residential property so none of this buffering is required.

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

The site does not front any public roads that aren't considered an interior street to the

industrial park so these requirements do not need to be met.

Non-Residential Subdivision Requirements (Zoning Sec. 5.5.3.F.iv)

1. All required canopy trees, subcanopy trees, shrubs and accent landscaping are provided.
2. **Please look closely at the existing utility lines.** *If 5 feet spacing cannot be provided in any areas along Hudson Drive, a waiver to not provide trees in those areas would be supported by staff.*

Parking Lot Landscaping (Zoning Sec. 5.5.3.C., 5.5.3.F.iv)

1. All 5 of the required interior trees and required interior area are proposed.
2. All required parking lot perimeter trees are provided.
3. **Please add 2 canopy trees along the west side of the loading area to help shade that large expanse of paving.**

Building Foundation Landscaping (Zoning Sec. 5.5.3.D)

All required building foundation landscaping and frontage coverage is proposed.

Loading Area Screening (Zoning Sec. 3.15.1.B)

Provided by an evergreen hedge.

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

No detention basin landscaping is required because underground detention is proposed.

Transformer Screening (LDM 6)

The transformer is sufficiently screened.

Plant List (LDM 4, 10)

1. 14 of 19 species (74%) used are native to Michigan.
2. The tree diversity is acceptable.

Planting Notations and Details (LDM 10)

Provided

Irrigation (LDM 10)

A plan for an automatic irrigation system or information as to how the plants will be provided with sufficient water for establishment and long-term survival must be provided no later than the Final Site Plan.

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@cityofnovi.org.



Rick Meader – Landscape Architect

LANDSCAPE REVIEW SUMMARY CHART – Revised Preliminary Site Plan

Review Date: April 4, 2023
Project Name: JSP22 – 0054: 29580 Hudson Drive
Plan Date: March 22, 2023
Prepared by: Rick Meader, Landscape Architect E-mail: rmeader@cityofnovi.org;
 Phone: (248) 735-5621

Items in **Bold** need to be addressed by the applicant on the Final Site Plans. Items that need an unsupported waiver need to be addressed for recommendation of approval of the Preliminary Site Plan.

LANDSCAPE WAIVER REQUIRED:

- 1 perimeter tree shortage along south access drive – supported by staff

NOTE: If there is not sufficient spacing room for some or all of the required greenbelt trees along Hudson Road, a waiver for any trees that can't be planted would be supported by staff. Currently all trees are shown, but the space available between all of the underground utility lines is questionable in some areas.

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"> • New commercial or residential developments • Addition to existing building greater than 25% increase in overall footage or 400 SF whichever is less. • 1"=20' minimum with proper North. Variations from this scale can be approved by LA • Consistent with plans throughout set 	1" = 20'	Yes	
Project Information (LDM 10)	Name and Address	<ul style="list-style-type: none"> • Name in title block • Location map provided 	Yes	
Owner/Developer Contact Information (LDM 10)	Name, address and telephone number of the owner and developer or association	On title block	Yes	
Landscape Architect contact information (LDM 10)	Name, Address and telephone number of RLA/PLA/LLA who created the plan	George Ostrowski, Nowak & Fraus	Yes	
Sealed by LA. (LDM 10)	Requires original signature	Yes	Yes	<u>Live signatures will be required on the stamping sets.</u>

Item	Required	Proposed	Meets Code	Comments
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"> Parcel: I-1 North, South, East & West: I-1 	Yes	
Survey information (LDM 10)	<ul style="list-style-type: none"> Legal description or boundary line survey Existing topography 	<ul style="list-style-type: none"> Description: Cover sheet Topo: Sheet C1 	Yes	
Existing plant material Existing woodlands or wetlands (LDM 10)	<ul style="list-style-type: none"> Show location type and size. Label to be saved or removed. Plan shall state if none exists. 	<ul style="list-style-type: none"> Existing trees are shown but are not identified with species or size (dbh) One tree is shown as being removed, but a protected tree near the loading area is not shown on the landscape plan (L-2) 	<ul style="list-style-type: none"> No No 	<ol style="list-style-type: none"> Since there are only a few trees, an entire chart is not required, but the sizes of all trees on the site should be shown on L-1. Please revise the tree protection fence detail shown on the demolition plan to show the fence placed at 1 foot outside the dripline. Show the tree fence at the trees' actual canopy width, not just the outside of the tree symbol. If the tree near the loading area will be saved, please show it on L-2.
Soil types (LDM10)	<ul style="list-style-type: none"> As determined by Soils survey of Oakland county Show types, boundaries 	Sheet C9	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 proposed utilities (LDM 10)	Overhead and underground utilities, including hydrants	<ul style="list-style-type: none"> All existing and proposed utilities are shown on the landscape plans There are no overhead lines on the site. 	<ul style="list-style-type: none"> Yes Yes No 	The water and sanitary line need to be moved westward to provide room for the required accessway perimeter trees to be planted 4 feet behind the loading area curb.
Proposed grading. 2' contour minimum	Provide proposed contours at 2' interval	Sheet C5	Yes	

Item	Required	Proposed	Meets Code	Comments
(LDM 10)				
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"> • Clear sight distance within parking islands • No evergreen trees 	No blockages within the parking lot are noted.	Yes	
Name, type and number of ground cover (LDM 5)	As proposed on planting islands	Seed is indicated on all areas not planted with other groundcovers at foundation.	Yes	
General (Zoning Sec 5.5.3.C)				
Parking lot Islands	<ul style="list-style-type: none"> • A minimum of 200 SF to qualify • A minimum of 200sf unpaved area per tree planted in an island • 6" curbs • Islands minimum width 10' BOC to BOC 	Yes	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.	Parking spaces are 17 ft long	Yes	
Contiguous space limit (Zoning sec 5.5.3.C)	Maximum of 15 contiguous spaces	14 spaces is maximum bay length	Yes	
Plantings around Fire Hydrant (Zoning sec 5.5.3.C)	<ul style="list-style-type: none"> • No plantings with matured height greater than 12' within 10 ft. of fire hydrants • Plant trees at least 5 ft from underground utility lines • Plantings near hydrants or FDCs should be no taller than 12" 	<ul style="list-style-type: none"> • Only existing offsite hydrants are shown. • An FDC is shown and the area around it is paved. 	Yes	If any new hydrants are added, please make sure proper plant spacing is provided.
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"> • 25 ft corner clearance required. • Refer to Zoning Section 5.5.9 	Yes	Yes	

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> Road Commission for Oakland County zone for RCOC jurisdiction roads 			
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%	<ul style="list-style-type: none"> $A = x \text{ sf} * 7.5\% = A \text{ sf}$ $50,000 * 7.5\% = 3750 \text{ sf}$ 	NA		
B = Total square footage of additional paved vehicular use areas (not including A or B) over 50,000 SF) x 1 %	<ul style="list-style-type: none"> $B = x \text{ sf} * 1\% = B \text{ sf}$ $(xxx - 50000) * 1\% = xx \text{ sf}$ 	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%	<ul style="list-style-type: none"> $A = x \text{ sf} * 6\% = A \text{ sf}$ $A = 16,709\text{sf} * 6\% = 1003 \text{ sf}$ 			
B = Total square footage of additional paved vehicular use areas over 50,000 SF x 0.5%	$B = 0.5\% * 0 \text{ sf} = B \text{ SF}$	NA		
All Categories				
C = A+B Total square footage of landscaped islands	<ul style="list-style-type: none"> $C = A + B$ $C = 1003 + 0 = 1003 \text{ SF}$ 	1427 sf	Yes	
D = C/200 Number of canopy trees required	<ul style="list-style-type: none"> $D = C/200 \text{ trees}$ $D = 1003/200 = 5 \text{ Trees}$ 	5 trees	Yes	
Parking lot Perimeter Trees (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> 1 Canopy tree per 35 lf $323/35 = 9 \text{ trees}$ 	9 provided	Yes	
Accessway perimeter (Zoning Sec 5.5.3.C)	<ul style="list-style-type: none"> 1 canopy tree per 35 lf on each side of road, less widths of access drives. North: $87/35 = 2 \text{ trees}$ South: $80/35 = 2 \text{ trees}$ 	<ul style="list-style-type: none"> North: 2 trees South: 1 tree 	<ul style="list-style-type: none"> Yes No 	A landscape waiver is required for the lack of trees. It is supported by staff due to the numerous utility conflicts at the south entrance.
Parking land banked (Zoning Sec 5.2.14.D)	<ul style="list-style-type: none"> NA 	No		
Berms, Walls and ROW Planting Requirements				
Berms (Zoning Sec 5.5.3.A & LDM 1)				
<ul style="list-style-type: none"> All berms shall have a maximum slope of 33%. Gradual slopes are encouraged. Show 1ft. contours Berm should be located on lot line except in conflict with utilities. Berms should be constructed with 6" of topsoil. 				

Item	Required	Proposed	Meets Code	Comments
Residential Adjacent to Non-residential (Sec 5.5.3.A & LDM 1.a)				
Berm requirements (Zoning Sec 5.5.A)	The site is not adjacent to any residential property so this screening berm is not required	None	Yes	
Planting requirements (LDM 1.a.)	LDM Novi Street Tree List	NA		
Adjacent to Public Rights-of-Way (Sec 5.5.3.B and LDM 1.b)				
Berm requirements (Zoning Sec 5.5.3.A.(5))	This site does not abut any public right-of-way (West Road is the closest) so this berm is not required.	No	Yes	
Cross-Section of Berms (LDM 10)				
Slope, height and width	<ul style="list-style-type: none"> • Label contour lines • Maximum 33% • Min. 3 feet flat horizontal area • Minimum 3 feet high • Constructed of loam with 6' top layer of topsoil. 	No berms are required or proposed so no cross section is provided	Yes	
Type of Ground Cover		NA		
Setbacks from Utilities	Overhead utility lines and 15 ft. setback from edge of utility or 20 ft. setback from closest pole	NA		
Walls (Zoning Sec 5.5.3.A & LDM 10)				
Material, height and type of construction footing	Freestanding walls should have brick or stone exterior with masonry or concrete interior	No walls are required or proposed		
Walls greater than 4 ft. should be designed and sealed by an Engineer		NA		
Non-Residential Subdivision Landscaping (Zoning Sec. 5.5.3.F.iv)				
Greenbelt width	Per zoning: 40 ft	Hudson Dr: 43 ft Desoto Ct: 40 ft	Yes Yes	
Min. berm crest width	None	None	Yes	
Minimum berm height	None	None	Yes	
3' wall	(2)(3)(4)	None	Yes	
Canopy deciduous or large evergreen trees	<ul style="list-style-type: none"> • 1 per 35 lf frontage 	<ul style="list-style-type: none"> • Hudson Dr: 6 trees • Desoto Dr: 6 trees 	<ul style="list-style-type: none"> • Yes • Yes 	1. Extra trees may be removed from the

Item	Required	Proposed	Meets Code	Comments
	<ul style="list-style-type: none"> Hudson Dr: (207-25)/35 = 5 trees Desoto Ct: (153-55)/35 = 3 trees 			<p>plan if desired</p> <p>2. Especially along Hudson Drive, please be sure that there is sufficient room (5 feet) from all underground utility lines to place the proposed tree(s). <i>Staff would support a waiver for any of the trees that can't be planted along that frontage due to utility conflicts.</i></p>
Sub-canopy deciduous trees)	<ul style="list-style-type: none"> 1 per 35 lf frontage Hudson Dr: (207-25)/40 = 5 trees Desoto Ct: (153-55)/40 = 2 trees 	<ul style="list-style-type: none"> Hudson Dr: 6 trees Desoto Dr: 3 trees 	<ul style="list-style-type: none"> Yes Yes 	<p>1. Please correct the calculations per the requirements (1 tree per 40 lf not 35 lf).</p> <p>2. Extra trees may be removed from the plan if desired</p>
Canopy deciduous trees in area between sidewalk and curb	<p>Of the required canopy trees noted above, 1 tree per 50lf of frontage shall be placed as a street tree, within 15 feet of the curb.</p> <ul style="list-style-type: none"> Hudson Dr: (207-25)/50 = 4 trees Desoto Ct: (153-55)/50 = 2 trees 	<ul style="list-style-type: none"> Hudson Dr: 1 tree Desoto Dr: 2 trees 	<ul style="list-style-type: none"> No Yes 	<p>1. The calculation for the street trees does not require additional trees – it just shows how many of the greenbelt trees should be near the road</p> <p>2. <i>Along Hudson, if there is not room along the road or in the rest of the greenbelt, the waiver would be supported by staff.</i></p>
Shrubs in greenbelt	<p>1 shrub per 20 feet of frontage</p> <ul style="list-style-type: none"> Hudson Dr: (207-25)/20 = 9 shrubs Desoto Ct: (153-55)/20 = 5 shrubs 	<ul style="list-style-type: none"> Hudson Dr: 12 shrubs Desoto Dr: 8 shrubs 	<ul style="list-style-type: none"> Yes Yes 	
Screening hedge for parking (3 ft high min) (in addition to shrubs required above)	<p>Evergreen hedges along sides of parking facing Hudson and Desoto</p>	<p>Yes</p>	<p>Yes</p>	<p>Please add two canopy trees along the west edge of the loading area (replacing a few of the arborvitaes) to shade it.</p>
Massing of ornamental grasses,	<p>10% of linear frontage</p>	<p>Masses of perennials and</p>	<p>Yes</p>	

Item	Required	Proposed	Meets Code	Comments
perennials and/or annuals and bulbs adjacent to the street	<ul style="list-style-type: none"> Hudson Dr.: (207-25)*10% = 18 lf Desoto Ct: (153-55)*10% = 10 lf 	ornamental grasses are proposed along both streets		
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 area must be screened from the public road	Evergreen hedge is provided	Yes	
Transformers/Utility boxes (LDM 6)	<ul style="list-style-type: none"> A minimum of 2ft. separation between box and the plants Ground cover below 4" is allowed up to pad. No plant materials within 8 ft. from the doors 	The transformer is screened satisfactorily	Yes	
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"> Equals to entire perimeter of the building x 8 with a minimum width of 4 ft. A=(365-42) x 8ft = 2584 SF 	2899 SF	Yes	
Building Frontage Landscaping (Zoning Sec 5.5.3.D)	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"> Hudson Dr: 100% Desoto Ct: 72% 	Yes	
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"> Clusters of large native shrubs shall cover 70-75% of the basin rim area at 10 lf from permanent water level 10" to 14" tall grass along sides of basin Refer to wetland for basin mix Deciduous canopy tree 1/35 of east, south and west sides of pond at 10 feet from permanent water level 	Only underground detention is proposed so no detention landscaping is required and none is provided	Yes	
Phragmites and Japanese Knotweed Control (Zoning Sec	<ul style="list-style-type: none"> Any and all populations of Phragmites australis 	None indicated	TBD	1. Please survey the site for any populations of Phragmites

Item	Required	Proposed	Meets Code	Comments
5.5.6.B)	and/or Japanese Knotweed on site shall be included on tree survey. <ul style="list-style-type: none"> Treat populations per MDEQ guidelines and requirements to eradicate the weed from the site. 			australis and Japanese Knotweed 2. If any is found, show it on L1 and add plans for its removal. 3. If none is found, please indicate that on L1.
LANDSCAPING NOTES, DETAILS AND GENERAL REQUIREMENTS				
Landscape Notes – Utilize City of Novi Standard Notes				
Installation date (LDM 10)	Provide intended date	Fall 2023, before Nov 15.	Yes	
Maintenance & Statement of intent (Zoning Sec 5.5.6 & LDM 10)	<ul style="list-style-type: none"> Include statement of intent to install and guarantee all materials for 2 years. Include a minimum one cultivation in June, July and August for the 2-year warranty period. 	Yes	Yes	
Plant source (LDM 10 & 11)	Shall be northern nursery grown, No.1 grade.	Yes	Yes	
Irrigation plan (LDM 10)	<ul style="list-style-type: none"> A fully automatic irrigation system or a method of providing sufficient water for plant establishment and survival is required on Final Site Plans. If irrigation won't be used, note how trees will get sufficient water for establishment and long-term survival 	No		1. <u>Please add irrigation plan or information as to how plants will be watered sufficiently for establishment and long-term survival in the Final Site Plans.</u> 2. <u>If xeriscaping is used, please provide information about plantings included.</u>
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 4, 10 & 11) – Include all cost estimates				
Quantities and sizes	<ul style="list-style-type: none"> At least 50% of the species used shall be native to Michigan Tree diversity shall meet standards of LDM section 4. 	Yes	Yes	
Root type		Yes	Yes	
Botanical and common names (LDM 4 & 11)		<ul style="list-style-type: none"> 14 of 19 species used (74%) are native to Michigan 	<ul style="list-style-type: none"> Yes Yes 	

Item	Required	Proposed	Meets Code	Comments
		• Tree diversity is satisfactory		
Type and amount of lawn		Seed	Yes	<u>Please add area of seed in cost table on Final Site plan (\$3/syd)</u>
Cost estimate (LDM 10)	For all new plantings, mulch and sod as listed on the plan	No		<u>Please add to final site plan.</u>
Planting Details/Info (LDM Part III) – Utilize City of Novi Standard Details				
Canopy Deciduous Tree	Refer to LDM for detail drawings	Yes	Yes	
Evergreen Tree		No		Not required
Multi-stem Tree		Yes	Yes	
Shrub		Yes	Yes	
Perennial/ Ground Cover		Yes	Yes	
Tree stakes and guys. (Wood stakes, fabric guys)		Yes	Yes	
Tree protection fencing	Located at Critical Root Zone (1' outside of dripline)	Yes	Yes	See note regarding detail on the Demolition Plan.
Other Plant Material Requirements (LDM 11)				
General Conditions	Plant materials shall not be planted within 4 ft. of property line	Yes	Yes	
Plant Materials & Existing Plant Material (LDM 11)	Clearly show trees to be removed and trees to be saved.	Yes	Yes	Please describe size and type of all existing trees on L1
Landscape tree credit (LDM 11)	<ul style="list-style-type: none"> • Substitutions to landscape standards for preserved canopy trees outside woodlands/ wetlands should be approved by LA. • Refer to Landscape tree Credit Chart in LDM 	No		
Plant Sizes for ROW, Woodland replacement and others (LDM 11)	<ul style="list-style-type: none"> • Size determined by use detailed in LDM Table 11.b.(2)a.i • Indicate on plant list 	On plant list	Yes	
Plant size credit (LDM 11)	NA	No		
Prohibited Plants (LDM 11.b)	No plants on City Invasive Species List	None used	Yes	
Recommended trees for planting under	Label the distance from the overhead utilities	No overhead lines are on the property		

Item	Required	Proposed	Meets Code	Comments
overhead utilities (LDM 11)				
Collected or Transplanted trees (LDM 11)		None		
Nonliving Durable Material: Mulch (LDM 12)	<ul style="list-style-type: none"> Trees shall be mulched to 3" depth and shrubs, groundcovers to 2" depth Specify natural color, finely shredded hardwood bark mulch. 	Yes	Yes	
NOTES: <ol style="list-style-type: none"> This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards. 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. 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

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

TRAFFIC REVIEW



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

Project name:
JSP22-54 – 29580 Hudson Drive Preliminary Site
Plan Traffic Review

From:
AECOM

Date:
February 17, 2023

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

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

Memo

Subject: JSP22-54 – 29580 Hudson Drive Preliminary Site Plan Traffic Review

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

GENERAL COMMENTS

1. The applicant, Triumph Engineering, is proposing 8,400 SF building of unknown occupancy.
2. The development is located on the southeast corner of the intersection of Hudson Drive and Desoto Court. Both Hudson Drive and Desoto Court are under the jurisdiction of the City of Novi.
3. The site is I-1 (Light Industrial).
4. There are no traffic related deviations indicated at this time.

TRAFFIC IMPACTS

1. AECOM could not perform an initial trip generation based on the ITE Trip Generation Manual, 11th Edition, as land use provided by the applicant is not in the Manual.
2. The City of Novi generally requires a traffic impact study/statement if the number of trips generated by the proposed development exceeds the City's threshold of more than 750 trips per day or 100 trips per either the AM or PM peak hour, or if the project meets other specified criteria.

Trip Impact Study Recommendation	
Type of Study:	Justification
-	Trips unlikely to exceed City's threshold due to small building size and specialized use.

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 Figure IX.1	25'	Met	Within range.
2	Driveway Width O Figure IX.1	24' and 54'	Met	54' driveway exceeds the range in Figure IX.1
3	Driveway Taper O Figure IX.11	-	N/A	No changes proposed.
3a	Taper length	-	N/A	No changes proposed.
3b	Tangent	-	N/A	No changes proposed.
4	Emergency Access O 11-194.a.19	-	N/A	No changes proposed.
5	Driveway sight distance O Figure VIII-E	None indicated	Inconclusive	Include in future plans.
6	Driveway spacing			
6a	Same-side O 11.216.d.1.d	164' CL to CL	Met	Same-side should be measured near-curb to near-curb. However with the width of the approach that will increase spacing.
6b	Opposite side O 11.216.d.1.e	174'	Met	Not arterial roadway
7	External coordination (Road agency)	-	N/A	No changes proposed to non-city roads.
8	External Sidewalk Master Plan & EDM	None indicated	N/A	
9	Sidewalk Ramps EDM 7.4 & R-28-J	None indicated	N/A	
10	Any Other Comments:			

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
11	Loading zone ZO 5.4	820 SF	Not Met	Use of loading zone will block multiple parking spaces and access to drive aisle. Move loading zone to ensure vehicle access to site or indicate building use and that all deliveries will take place during off-hours. Truck turning movements indicate dock to be used instead of indicated loading zone.
12	Trash receptacle ZO 5.4.4	In side yard	Met	Allowable in double frontage lots.
13	Emergency Vehicle Access	2 access points, turning movements provided	Met	
14	Maneuvering Lane ZO 5.3.2	23.5'	Not Met	24' aisle required, east side is 23.5'
15	End islands ZO 5.3.12			
15a	Adjacent to a travel way	15' outer radius, no length indicated	Inconclusive	Must be 3' shorter than adjacent parking space.
15b	Internal to parking bays	-	N/A	None in plans, none required.
16	Parking spaces ZO 5.2.12			
17	Adjacent parking spaces ZO 5.5.3.C.ii.i	Max of 11 spaces adjacent	Met	
18	Parking space length ZO 5.3.2	17' with 2' overhang	Met	
19	Parking space Width ZO 5.3.2	9'	Met	
20	Parking space front curb height ZO 5.3.2	4"	Met	
21	Accessible parking – number ADA	2	Met	More than required for 22 spaces.
22	Accessible parking – size ADA	8' with 8' aisle	Met	
23	Number of Van-accessible space ADA	None indicated	Inconclusive	Indicate van accessible signage in future plans.
24	Bicycle parking			
24a	Requirement ZO 5.16.1	2 spaces	Inconclusive	Assumed to be met as final land use is not determined at this time.
24b	Location ZO 5.16.1	Near main entrance	Met	
24c	Clear path from Street ZO 5.16.1	5' path for short distance	Not Met	Widen path to the west of bike parking to 6'.
24d	Height of rack ZO 5.16.5.B	3'	Met	
24e	Other (Covered / Layout) ZO 5.16.1	Provided	Met	

INTERNAL SITE OPERATIONS				
No.	Item	Proposed	Compliance	Remarks
25	Sidewalk – min 5' wide Master Plan	5'	Met	
26	Sidewalk ramps EDM 7.4 & R-28-J	None indicated	Not Met	Detail is included but plans have no indication of locations, just detectable warning plate.
27	Sidewalk – distance back of curb EDM 7.4	0'	Met	City has indicated no offset is required along drive aisles on commercial property, however an offset could be provided where possible to improve pedestrian safety.
28	Cul-De-Sac O Figure VIII-F	N/A	-	-
29	EyeBrow O Figure VIII-G	N/A	-	-
30	Turnaround ZO 5.10	N/A	-	-
31	Any Other Comments:			

SIGNING AND STRIPING				
No.	Item	Proposed	Compliance	Remarks
32	Signing: Sizes MMUTCD	included in detail	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 MMUTCD	Included	Met	Conflicting notes are present between Note 6 and the text accompanying the overall ADA sign detail. Correct the detail to match Note 6.
35	Signs greater than 12" x 18" shall be mounted on a galvanized 3 lb. or greater U-channel post MMUTCD	Included	Met	
36	Sign bottom height of 7' from final grade MMUTCD	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 MMUTCD	Included	Met	
38	FHWA Standard Alphabet series used for all sign language MMUTCD	Included	Met	
39	High-Intensity Prismatic (HIP) sheeting to meet FHWA retro-reflectivity MMUTCD	Included	Met	
40	Parking space striping notes	Included	Met	
41	The international symbol for accessibility pavement markings ADA	Included	Met	
42	Crosswalk pavement marking detail	-	N/A	No crosswalks indicated.
43	Any Other Comments:			

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

Memo

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

FACADE REVIEW



February 23, 2023

**Façade Review Status:
 Approved, Full Compliance.**

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

Attn: Ms. Barb McBeth – Director of Community Development

Re: **FACADE ORDINANCE REVIEW**
29580 Hudson Drive, JSP22-54
 Façade Region: 3, Zoning District: **I-1**


Dear Ms. McBeth:

The following Façade Review is based on the drawings provided by Maxam Architects, dated 1/27/23. The percentages of materials proposed for each elevation are shown in the table below. The maximum percentages allowed by Ordinance Section 5.15 are shown in the righthand column. Materials that are in non-compliance, if any, are highlighted in bold. The Façade Material Sample Board required by Section 5.15.4.D of the Ordinance was not provided at the time of this review.

Façade Region 3	South	East	West (Front)	North	Ordinance Maximum (Minimum)
Burnished CMU	24%	40%	24%	25%	75%
Insulated Metal Panels	73%	60%	73%	75%	75%
Wood Look Panels	3%	0%	3%	0%	25%

As shown above all facades are in full compliance with the Façade Ordinance. The applicant should provide the Façade Material Sample Board required by Section 5.15.4.D of the Ordinance prior to the Planning Commission meeting.

Sincerely,
 DRN & Associates, Architects PC



Douglas R. Necci, AIA

FIRE REVIEW



February 14, 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: 29580 Hudson Dr

PSP# 23-0005

Pre-App# 22-0118

Project Description:

Build a new structure on the corner of Hudson Dr and Desoto Dr.

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.
- Hydrants shall be spaced approximately three hundred (300) feet apart online in commercial, industrial, and multiple-residential areas. In cases where the buildings within developments are fully fire suppressed, hydrants shall be no more than five hundred (500) feet apart. The spacing of hydrants around commercial and/or industrial developments shall be considered as individual cases where special circumstances exist upon consultation with the fire chief. **(D.C.S. Sec. 11-68 (f)(1)c)**
- Fire hydrant spacing shall be measured as "hose laying distance" from fire apparatus. Hose laying distance is the distance the fire apparatus travels along improved access routes between hydrants or from a hydrant to a structure.
- Fire lanes will be designated by the Fire Chief or his designee when it is deemed necessary and shall comply with the Fire Prevention Ordinances adopted by the City of Novi. The location of all "fire lane – no parking" signs are to be shown on the site plans. **(Fire Prevention Ord.)**
- The minimum width of a posted fire lane is 20 feet. The minimum height of a posted fire lane is 14 feet. **(D.C.S Sec. 158-99(a).)**
- **Corrected 2-14-23 KSP**-Fire apparatus access drives to and from buildings through parking lots shall have a minimum fifty (50) feet outside turning radius and designed to support a minimum of thirty-five (35) tons. **(D.C.S. Sec 11-239(b)(5))**

- **Corrected 2-14-23 KSP**-Approved fire apparatus access roads shall be provided for every facility, building or portion of a building constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet of all portions of the exterior wall of the first story of the building. **(International Fire Code 503.1.1)**
- **Corrected 2-14-23 KSP**-Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the code official. **(International Fire Code 912.2.1)**
- **Corrected 2-14-23 KSP**-Proximity to hydrant: In any building or structure required to be equipped with a fire department connection, the connection shall be located within one hundred (100) feet of a fire hydrant. **(Fire Prevention Ord. Sec. 15-17 912.2.3)**
- **Corrected 2-14-23 KSP**-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.

Recommendation:

Approved with Conditions

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



CIVIL ENGINEERS

LAND SURVEYORS

LAND PLANNERS

March 22, 2023

Mr. Christian Carroll
Planner
City of Novi
45175 Ten Mile Rd.
Novi, MI 48375
(248) 735-5607

Re: Beck North Unit 5 Industrial Office Building (29580 Hudson Drive) – JSP22-54
City of Novi – Preliminary Site Plan (PSP) Submittal – Responses to City PSP Reviews
NFE Job #N349

Mr. Carroll,

This letter provides responses and acknowledgment to the staff review comments received for the Preliminary Site Plan Review that was performed by the City of Novi for the above-noted project. Revised drawings dated 03/22/23 are provided to address comments from the Engineering Review. Other Items that will be provided during final site plan submittal, as well as specific variance requests, are outlined in the below responses. Please review the below responses and advise if anything further is required for this project to be placed on the April 2023 planning commission agenda to receive Preliminary Site Plan approval.

Planning Review Chart (Dated 02/23/23)

- The rear/east parking setback noted at 8.7 feet is not correct. This appears to be caused by confusion of the shown linear dimensions. The actual proposed eastern parking setback is 10.7 feet, which exceeds the minimum 10-foot parking setback requirements, and therefore no variance is required.
- The truck loading area remains proposed on the north side of the building, and a variance will be sought through the required ZBA process.
- A detail of the dumpster enclosure is provided on sheet C3.
- The project developer, Copperrock Construction, will provide economic impact information prior to the PC meeting.
- The project name has been revised as requested.
- The standard lighting notes have been added to the photometric plan as requested.
- The illumination at the main building entrance has been increased to meet minimum requirements. See details on photometric plan.

Engineering Review Letter (Dated 02/01/23)

PSP Review

1. Storm water conveyance and detention calculations have been revised to meet the current City of Novi Storm Water Ordinance and Chapter 5 of the Engineering Design Manual.
2. Soil boring locations are shown on sheet C7 and reference the SME report dated 04/06/22. A copy of this report is enclosed for your records.
3. Two pre-treatment structures have been incorporated into the storm water management design. Details and sizing calculations are provided on sheet C9.

NOWAK & FRAUS ENGINEERS

46777 WOODWARD AVENUE
PONTIAC, MI 48342-5032

WWW.NOWAKFRAUS.COM

VOICE: 248.332.7931
FAX: 248.332.8257

Mr. Christian Carroll

RE: Beck North Unit 5 Industrial Office Building (JSP22-54) –PSP Submittal – Responses to City PSP Reviews

03/22/23

Page - 2 - of 3

4. Outlet control calculations for the first flush, bankfull, and 100-year volumes are shown on sheet C9. The outlet control detail shown on sheet C9 has been updated to reflect calculated storage elevations and outlet orifice data.
5. Critical elevations relating to the proposed UG detention system and site pavement are reflected on the ADS cross-section detail on sheet C8. The top of detention storage is 942.85 (also the top of the ADS chambers). The bottom of the chambers is 939.10, and the bottom of detention storage is 938.35. The lowest top of pavement elevation above the system is 944.85, which provides the minimum 1-foot pf freeboard to the subgrade elevation for the proposed 12" total HMA and aggregate base cross-section.
6. The design porosity for the UG bedding and backfill stone is 40%. The calculated provided storage volume uses an "effective" porosity of 34%, which is 85% of the design porosity.
7. The two ties to the section corners are shown on sheet C1.
8. Two benchmarks are shown on the topographic survey background. BM #1 is a City of Novi benchmark. Both the City benchmark elevation data and the topographic survey benchmark elevation data are shown on sheet C1. Based on field measured information between the two benchmark locations on this hydrant, we have confirmed the survey matches City of Novi datum.

Note: Other comments received from the Engineering Review letter will be addressed during the Final Site Plan Submittal.

Landscape Review (Dated 02/08/23)

- The city file number has been added to the bottom right of all sheets.
- The topographic survey has been updated with the current tree information, sizes, and species. No woodland replacement trees are required.
- The Non-Residential Subdivision Landscape Requirements have been added to the landscape plan. The plan conforms to all the required landscape except for street trees (between the curb and walk). Where possible (1 tree on Hudson and 2 trees on DeSoto Ct), trees have been added. We would request a waiver for the deficiency. Both frontages have extensive utilities public and franchise, that limit the available space.
- Parking lot landscape calculations have revised to include accessway requirements. One of the trees could not be provided at the south entry, due to the location of the proposed sign and existing watermain and assorted underground utilities.
- Parking lot hedges adjacent to the parking stalls have been provided.
- Clear vision zones have been provided; no obstructions are indicated.
- Loading area screening has been provided to shield the loading are from Hudson Drive.
- The existing transformer has been screened in compliance with the city detail.
- A note indicating the site will have an underground irrigation system, designed, and submitted as a part of final site plan approval has been added to the plan.
- Snow deposit areas have been indicated on the plan.
- Seed and mulch costs have been added to the plant list.

Traffic Review (Dated 02/17/23)

External Site Access and Operations:

- Driveway sight distances meets requirements and are shown on the landscaping plan sheets.

Internal Site Operations:

- The maneuvering drive lane width on the east side of the building has been increased to meet the 24' requirement.

NOWAK & FRAUS ENGINEERS

46777 WOODWARD AVENUE
PONTIAC, MI 48342-5032

WWW.NOWAKFRAUS.COM

VOICE: 248.332.7931
FAX: 248.332.8257

Mr. Christian Carroll

RE: Beck North Unit 5 Industrial Office Building (JSP22-54) –PSP Submittal – Responses to City PSP Reviews

03/22/23

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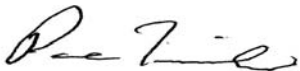
- Two ADA parking spaces are provided on the south side of the building, both of which meet requirements for van-accessible spaces.
- The sidewalk width between the main building entrance and the bike parking area has been increased to 6 feet as requested.
- Sidewalk ramp access is provided on the south side of the building at the main entrance and meets all applicable ADA guidelines for accessibility standards.

Fire Department Review (Dated 02/14/23)

- The site utilizes two existing fire hydrants within the road rights-of-way to meet coverage requirements.
- We believe the proposed plan meets all other applicable requirements as stated in this review.

Please review the above responses to the City of Novi Preliminary Site Plan Drawing Reviews, and feel free to contact myself or Brett Buchholz at our office if you have any questions, comments, or if any further documentation is required.

Sincerely,



Paul Tulikangas, P.E., Project Manager



Brett Buchholz, P.E., Principal

Cc: Mr. Matthew Hall, Preconstruction Manager, Copperrock Construction

Enclosures:

(3) Copies of Revised Civil/Landscape Drawings (Dated 3/22/23).

Geotechnical Report from SME dated 04/06/22.