



JMU2021-0005
PSP2023-0007
Revision #4
Received 6/27/2024

City of Rochester Hills
Hills Planning &
Economic
Development

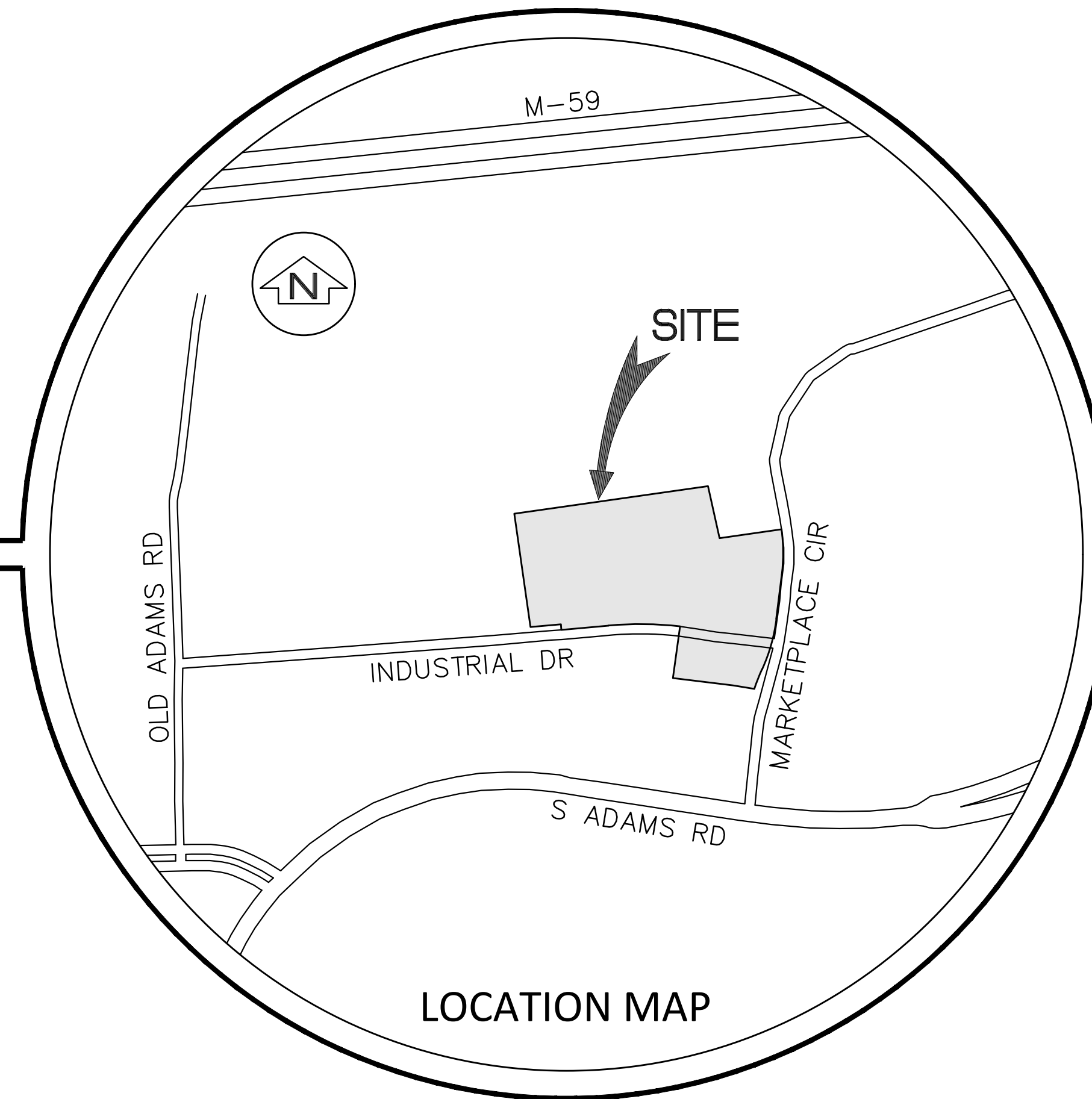
Site Plan Review

Reviewed for compliance with City Ordinance, Building and Fire Codes
Conditions and mark-ups noted throughout plan set must be addressed prior to final approval

Department	Reviewer	Approved
Assessing	Assessing	Yes
Building	Mark Artinian 248-841-2446 ArtinianM@RochesterHills.org	Yes
Engineering Utilities	Jason Boughton 248-841-2490 BoughtonJ@RochesterHills.org	Yes
Engineering Legal	Jenny McGuckin 248-841-2494 mcguckinj@rochesterhills.org	YES Date: 07/01/2024
Fire	Capt. Ann Echols 248-841-2701 EcholsA@RochesterHills.org	Yes
Natural Resources	Matt Einheuser 248-841-2551 EinheuserM@RochesterHills.org	Yes
Planning	Chris McLeod 248-841-2572 mcleodc@RochesterHills.org	Yes
Traffic	Keith Depp 248-841-2503 DeppK@RochesterHills.org	Yes

City of Rochester Hills, Oakland County, Michigan SITE PLAN DOCUMENTS

PART OF THE SOUTHWEST $\frac{1}{4}$
OF SECTION 30,
TOWN 3 NORTH, RANGE 11 EAST



LOCATION MAP

Project Name

Marketplace of Rochester Hills

SHEET INDEX

- SP0 Cover Sheet
- SP1 Boundary - Topographic - Tree Survey
- SP2 Stringer Dimension Plan
- SP3 Fire Truck Turning
- SP4 Engineering Site Plan
- SP5 Site Notes and Details
- SP6 Storm Water Management Plan
- SP7 Storm Sewer Calculations

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

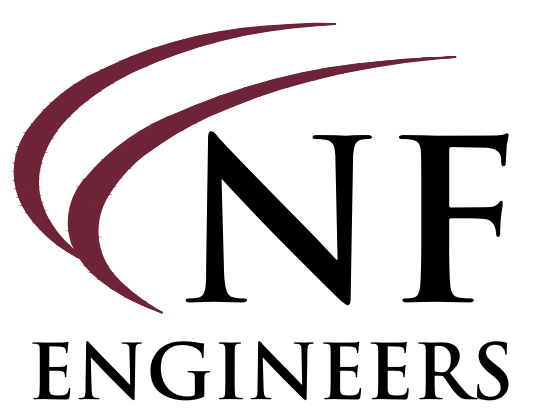
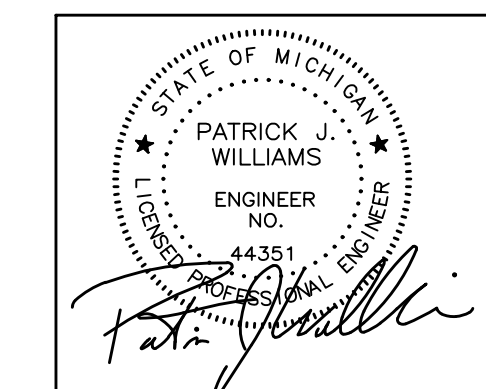
Photometric Plan

- A-1.1 Building 'A' Floor Plan - Athletic Facility
- A-1.2 Building 'A' Elevations - Athletic Facility
- A-2.1 Building 'B' Floor Plan - Light Industrial/Office
- A-2.2 Building 'B' Elevations - Light Industrial/Office
- A-3.1 Building 'C' Floor Plan - Restaurant/Drive-Thru
- A-3.2 Building 'C' Elevations - Restaurant/Drive-Thru
- A-4.1 Building 'D' Floor Plan - Retail
- A-4.2 Building 'D' Elevations - Retail

REVISIONS:	
02-27-2024	ISSUED FOR SP REVIEW
04-08-2024	REVISED PER CITY
05-16-2024	REVISED PER CITY
06-19-2024	REVISED PER CITY



City File #22-042 Section #30
N & F JOB #L762-01



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NFE-ENGR.COM

Next Steps: Plans to be forwarded to City Council for consideration.

Civil Engineer: NOWAK & FRAUS ENGINEERS
46777 Woodward Ave.
Pontiac, MI 48342-5032
Contact: Patrick Williams, P.E.
Tel. (248) 332-7931
Fax. (248) 332-8257

Architect: MICHAEL A. BOGGIO ASSOCIATES
30150 Telegraph Rd.
Suite 150
Bingham Farms, MI 48025
Phone: (248) 258-5155

LEGAL DESCRIPTION

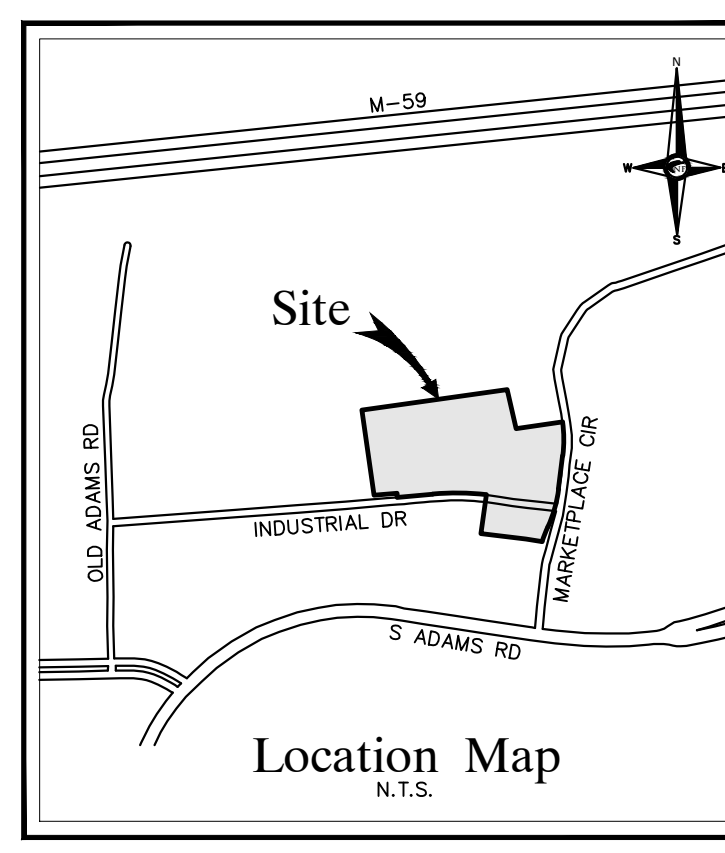
LAND SITUATED IN THE CITY OF ROCHESTER HILLS IN THE COUNTY OF OAKLAND IN THE STATE OF MI

THE LAND IS DESCRIBED AS FOLLOWS: A PARCEL OF LAND LOCATED IN THE SOUTHWEST 1/4 OF SECTION 30, TOWN 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE WEST 1/4 CORNER (AS REMONUMENTED) OF SAID SECTION 30 AND PROCEEDING ALONG THE EAST AND WEST 1/4 LINE NORTH 85 DEGREES 49 MINUTES 02 SECONDS EAST 823.73 FEET; THENCE SOUTH 07 DEGREES 21 MINUTES 28 SECONDS EAST 66.85 FEET TO THE POINT OF BEGINNING; THENCE NORTH 82 DEGREES 38 MINUTES 29 SECONDS EAST 531.04 FEET; THENCE SOUTH 11 DEGREES 53 MINUTES 53 SECONDS EAST 144.77 FEET; THENCE NORTH 82 DEGREES 38 MINUTES 32 SECONDS EAST 169.46 FEET; THENCE ALONG THE WEST RIGHT-OF-WAY LINE OF MARKETPLACE CIRCLE (60 FEET WIDE) THE FOLLOWING FOUR (4) COURSES: 1) 122.60 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, RADIUS 470.00 FEET, CENTRAL ANGLE 14 DEGREES 56 MINUTES 46 SECONDS, AND A CHORD THAT BEARS SOUTH 00 DEGREE 19 MINUTES 32 SECONDS WEST 122.26 FEET, 2) SOUTH 07 DEGREES 47 MINUTES 53 SECONDS WEST 121.81 FEET, 3) 143.15 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, RADIUS 470.00 FEET, CENTRAL ANGLE 17 DEGREES 27 MINUTES 04 SECONDS, AND A CHORD THAT BEARS SOUTH 16 DEGREES 31 MINUTES 26 SECONDS WEST 142.60 FEET AND 4) 57.02 FEET ALONG THE ARC OF A CURVE TO THE LEFT, RADIUS 530.00 FEET, CENTRAL ANGLE 06 DEGREES 09 MINUTES 50 SECONDS, AND A CHORD THAT BEARS SOUTH 22 DEGREES 10 MINUTES 03 SECONDS WEST 56.99 FEET; THENCE NORTH 79 DEGREES 54 MINUTES 04 SECONDS WEST 58.24 FEET; THENCE NORTH 82 DEGREES 12 MINUTES 07 SECONDS WEST 164.66 FEET; THENCE NORTH 08 DEGREES 30 MINUTES 03 SECONDS EAST 141.36 FEET; THENCE 194.39 FEET ALONG THE ARC OF A CURVE TO THE LEFT, RADIUS 970.00 FEET, CENTRAL ANGLE 11 DEGREES 28 MINUTES 55 SECONDS AND A CHORD THAT BEARS NORTH 88 DEGREES 36 MINUTES 41 SECONDS WEST 194.06 FEET; THENCE SOUTH 85 DEGREES 38 MINUTES 52 SECONDS WEST 128.81 FEET; THENCE NORTH 02 DEGREES 02 MINUTES 36 SECONDS WEST 15.01 FEET; THENCE SOUTH 85 DEGREES 38 MINUTES 52 SECONDS WEST 83.16 FEET ALONG THE CENTERLINE OF A 60 FOOT WIDE INGRESS AND EGRESS EASEMENT FOR A PRIVATE ROAD KNOWN AS INDUSTRIAL DRIVE; THENCE NORTH 07 DEGREES 21 MINUTES 28 SECONDS WEST 310.95 FEET TO THE POINT OF BEGINNING.

CONTAINING 262,812 SQUARE FEET OR 6.033 ACRES.

VACANT
TAX ID: 15-30-301-042
TAX ID: NEW PARCEL FOR 2020: 15-30-301-043



LEGAL DESCRIPTION
 LAND SITUATED IN THE CITY OF ROCHESTER HILLS IN THE COUNTY OF OAKLAND IN THE STATE OF MI:
 THE LAND IS DESCRIBED AS FOLLOWS: A PARCEL OF LAND LOCATED IN THE SOUTHWEST 1/4 OF SECTION 30, T.3N., R.11E., RANGE 11 EAST CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS:
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CONTAINING 262,812 SQUARE FEET OR 6.033 ACRES.

PROJECT
 Marketplace of Rochester Hills
 Rochester Hills, MI 48309

CLIENT
 Grenadier Adams MP, LLC
 Contact: Josh Grenadier
 Ph-248-752-1748

PROJECT LOCATION
 Part of the SW 1/4 of Section 30, T.3N., R.11E., City of Rochester Hills, Oakland County, MI

BASIS OF BEARING
 THE BASIS OF BEARING FOR THIS SURVEY WAS ESTABLISHED BY THE RECORD DESCRIPTION AS SHOWN IN THE TITLE COMMITMENT REFERENCED HEREON.

FLOOD HAZARD NOTE
 THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY; THE PROPERTY LIES WITHIN ZONE X OF THE CURRENT AVAILABLE FLOOD INSURANCE RATE MAP IDENTIFIED AS MAP NO. 26125C0389F WITH AN EFFECTIVE DATE OF 09-29-2006.

COVID-19 PANDEMIC CONDITION
 DUE TO THE UNPRECEDENTED COVID-19 PANDEMIC CONDITION AND RESTRICTIONS THE STANDARD DATA WHICH IS OBTAINED FROM MISS DIG / CALL 811 HAS BEEN RESTRICTED TO CRITICAL OR INCOMPLETE INFRASTRUCTURE ONLY. NFE WILL MAKE EVERY EFFORT TO OBTAIN CURRENT REFERENCE DATA FROM THE GOVERNING AGENCIES; HOWEVER, THIS DATA MAY BE PARTIAL OR INCOMPLETE. NFE WILL ISSUE THIS SURVEY WITH THE BEST AVAILABLE INFORMATION FROM OUR FIELD SURVEY AND OTHER AVAILABLE REFERENCE DATA. NFE WILL NOT BE RESPONSIBLE FOR INCOMPLETE OR PARTIAL DATA PROVIDED BY THIRD PARTY FACILITY OWNERS.

MISS DIG / UTILITY DISCLAIMER NOTE
 A MISS DIG TICKET NUMBER A13210129, PURSUANT TO MICHIGAN PUBLIC ACT 174 WAS ENTERED FOR THE SURVEYED PROPERTY, DUE TO THE EXTENDED REPORTING PERIOD FOR UNDERGROUND FACILITY OWNERS TO PROVIDE THEIR RECORDS, THE SURVEY MAY NOT REFLECT ALL THE UTILITIES AT THE TIME THE SURVEY WAS ISSUED ON 12-17-2024. THE SURVEY ONLY REFLECTS THOSE UTILITIES WHICH COULD BE OBSERVED BY THE SURVEYOR IN THE FIELD OR AS DETECTED BY THE UTILITY COMPANY RECORDS FURNISH PRIOR TO THE DATE THIS SURVEY WAS ISSUED. THE CLIENT AND/OR THEIR AUTHORIZED AGENT SHALL VERIFY WITH THE FACILITY OWNERS AND/OR THEIR AUTHORIZED AGENTS, THE COMPLETENESS AND EXACTNESS OF THE UTILITIES LOCATION.

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.

DRAWN BY:
 D. McConkey

DESIGNED BY:

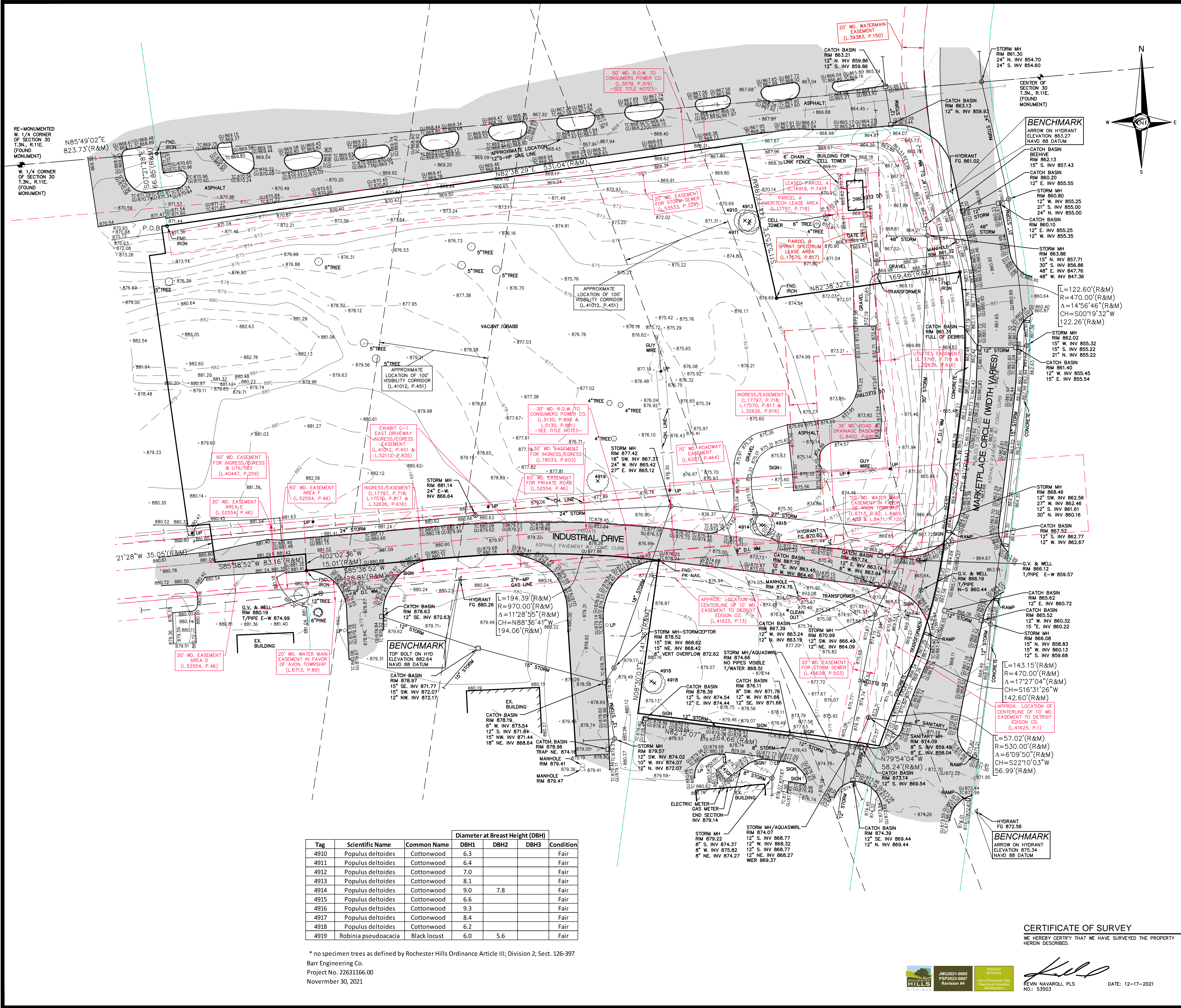
APPROVED BY:
 K. Navaroli

DATE:
 June 5, 2024

SCALE: 1" = 40'

40 20 0 20 40 60

City File #22-042
 Section #30
 NFE JOB NO. SHEET NO.
L762-01 SP1



Tag	Scientific Name	Common Name	Diameter at Breast Height (DBH)			Condition
			DBH1	DBH2	DBH3	
4910	Populus deltoides	Cottonwood	6.3			Fair
4911	Populus deltoides	Cottonwood	6.4			Fair
4912	Populus deltoides	Cottonwood	7.0			Fair
4913	Populus deltoides	Cottonwood	8.1			Fair
4914	Populus deltoides	Cottonwood	9.0	7.8		Fair
4915	Populus deltoides	Cottonwood	6.6			Fair
4916	Populus deltoides	Cottonwood	9.3			Fair
4917	Populus deltoides	Cottonwood	8.4			Fair
4918	Populus deltoides	Cottonwood	6.2			Fair
4919	Robinia pseudoacacia	Black locust	6.0	5.6		Fair

* no specimen trees as defined by Rochester Hills Ordinance Article III; Division 2; Sect. 126-397
 Barr Engineering Co.
 Project No. 22631166.00
 November 30, 2021

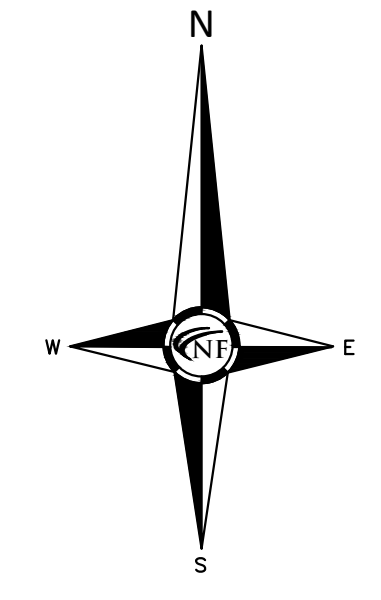
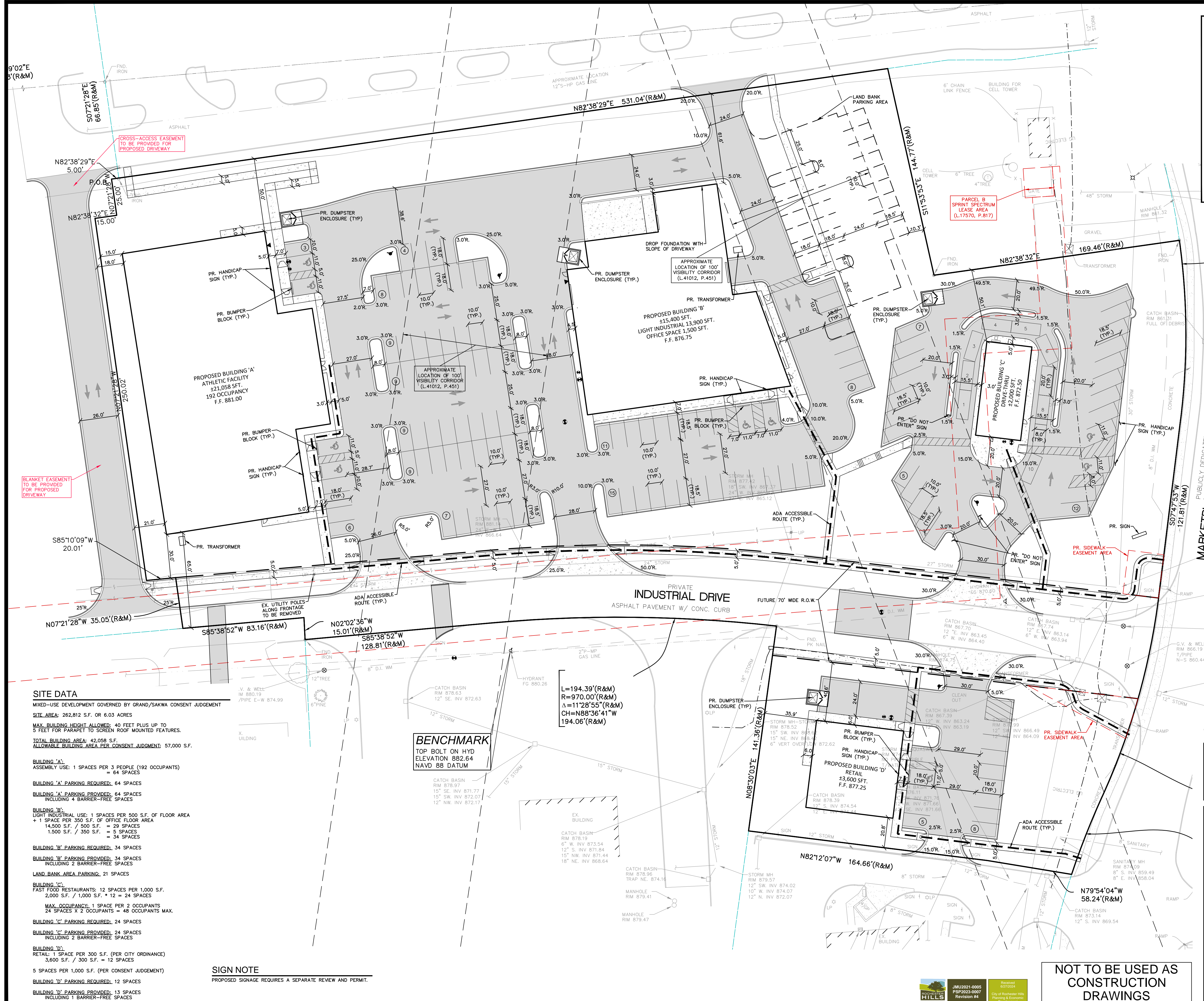
CERTIFICATE OF SURVEY
 WE HEREBY CERTIFY THAT WE HAVE SURVEYED THE PROPERTY HEREIN DESCRIBED.

KEVIN NAVAROLI, PLS
 NO: 53503

DATE: 12-17-2021

LEGEND

	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
	EXISTING STORM SEWER
	EX. R.Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN



SITE DATA
 MIXED-USE DEVELOPMENT GOVERNED BY GRAND/SAKWA CONSENT JUDGEMENT
 SITE AREA: 262,812 S.F. OR 6.03 ACRES
 MAX. BUILDING HEIGHT ALLOWED: 40 FEET PLUS UP TO 5 FEET FOR PARAPET TO SCREEN ROOF MOUNTED FEATURES.
 TOTAL BUILDING AREA: 42,058 S.F.
 ALLOWABLE BUILDING AREA PER CONSENT JUDGMENT: 57,000 S.F.

BUILDING 'A':
 ASSEMBLY USE: 1 SPACE PER 3 PEOPLE (192 OCCUPANTS) = 64 SPACES
 BUILDING 'A' PARKING REQUIRED: 64 SPACES
 BUILDING 'A' PARKING PROVIDED: 64 SPACES INCLUDING 4 BARRIER-FREE SPACES

BUILDING 'B':
 LIGHT INDUSTRIAL USE: 1 SPACE PER 500 S.F. OF FLOOR AREA + 1 SPACE PER 350 S.F. OF OFFICE FLOOR AREA
 14,500 S.F. / 500 S.F. = 29 SPACES
 1,500 S.F. / 350 S.F. = 5 SPACES
 = 34 SPACES
 BUILDING 'B' PARKING REQUIRED: 34 SPACES
 BUILDING 'B' PARKING PROVIDED: 34 SPACES INCLUDING 2 BARRIER-FREE SPACES

LAND BANK AREA PARKING: 21 SPACES

BUILDING 'C':
 FAST FOOD RESTAURANTS: 12 SPACES PER 1,000 S.F. 2,000 S.F. / 1,000 S.F. * 12 = 24 SPACES
 MAX. OCCUPANCY: 1 SPACE PER 2 OCCUPANTS
 24 SPACES X 2 OCCUPANTS = 48 OCCUPANTS MAX.
 BUILDING 'C' PARKING REQUIRED: 24 SPACES
 BUILDING 'C' PARKING PROVIDED: 24 SPACES INCLUDING 2 BARRIER-FREE SPACES

BUILDING 'D':
 RETAIL: 1 SPACE PER 300 S.F. (PER CITY ORDINANCE) 3,600 S.F. / 300 S.F. = 12 SPACES
 5 SPACES PER 1,000 S.F. (PER CONSENT JUDGEMENT)
 BUILDING 'D' PARKING REQUIRED: 12 SPACES
 BUILDING 'D' PARKING PROVIDED: 13 SPACES INCLUDING 1 BARRIER-FREE SPACES

SIGN NOTE
 PROPOSED SIGNAGE REQUIRES A SEPARATE REVIEW AND PERMIT.

BENCHMARK
 TOP BOLT ON HYD ELEVATION 882.64
 NAVD 88 DATUM

L=194.39'(R&M)
 R=970.00'(R&M)
 A=112°55'(R&M)
 CH=N88°36'41"W
 194.06'(R&M)

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

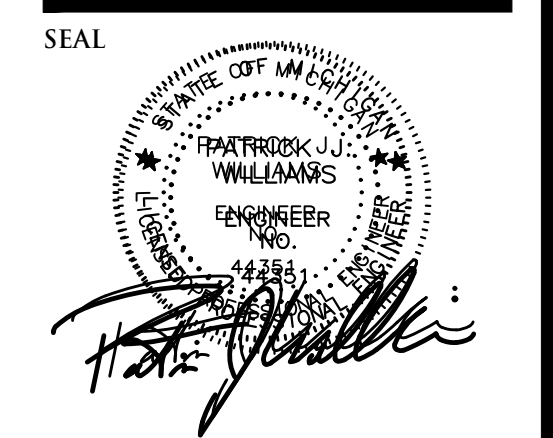
LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		GATE VALVE
	MANHOLE CATCH BASIN		EXISTING WATERMAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	GUY WIRE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN
	C.O. MANHOLE		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	C.B. MANHOLE		PR. R. Y. CATCH BASIN
	PROPOSED LIGHT POLE		

NOT TO BE USED AS CONSTRUCTION DRAWINGS

NF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257
 WWW.NOWAKFRAUS.COM



PROJECT
 Marketplace of Rochester Hills
 Rochester Hills, MI 48309

CLIENT
 Grenadier Adams MP, LLC
 Contact: Josh Grenadier
 Ph-248-752-1748

PROJECT LOCATION
 Part of the SW 1/4 of Section 30, T.3N., R.11E., City of Rochester Hills, Oakland County, MI

SHEET
 Stringer Dimension Plan



DATE	ISSUED/REVISED
02-27-2024	ISSUED FOR SP REVIEW
04-08-2024	REVISED PER CITY
05-16-2024	REVISED PER CITY
06-19-2024	REVISED PER CITY

DRAWN BY:
 J. Lawrey

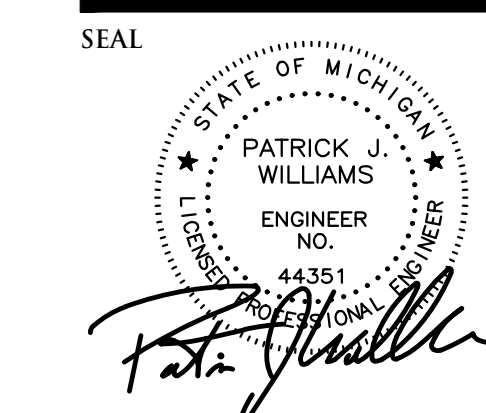
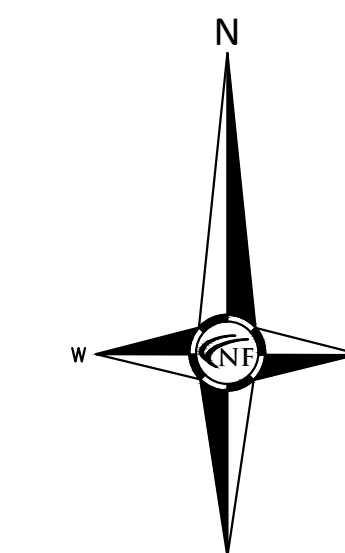
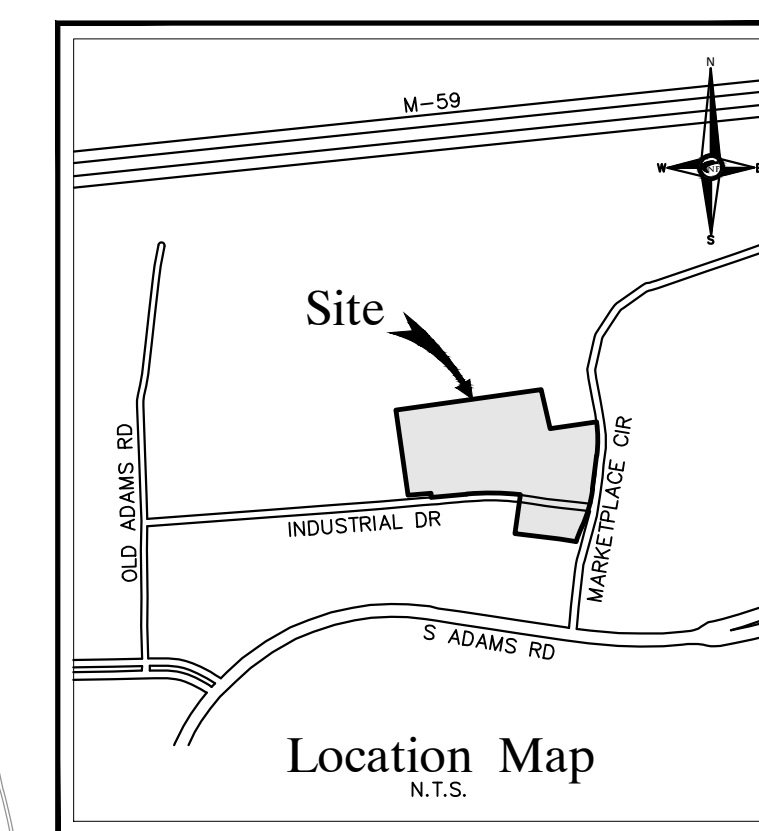
DESIGNED BY:
 A. Eizember

APPROVED BY:
 P. Williams

DATE:
 June 5, 2024

SCALE: 1" = 30'

City File #22-042
 Section #30
 NFE JOB NO. 1762-01
 SHEET NO. SP2



PROJECT
 Marketplace of Rochester Hills
 Rochester Hills, MI 48309

CLIENT
 Grenadier Adams MP, LLC
 Contact: Josh Grenadier
 Ph-248-752-1748

PROJECT LOCATION
 Part of the SW 1/4 of
 Section 30, T.3N., R.11E.,
 City of Rochester Hills,
 Oakland County, MI

SHEET
 Fire Truck Maneuvering
 Plan



DATE	ISSUED/REVISED
02-27-2024	ISSUED FOR SR REVIEW
04-08-2024	REVISED PER CITY
05-16-2024	REVISED PER CITY
06-19-2024	REVISED PER CITY

DRAWN BY:
J. Lawrey

DESIGNED BY:
A. Eizember

APPROVED BY:
P. Williams

DATE:
June 5, 2024

SCALE: 1" = 30'

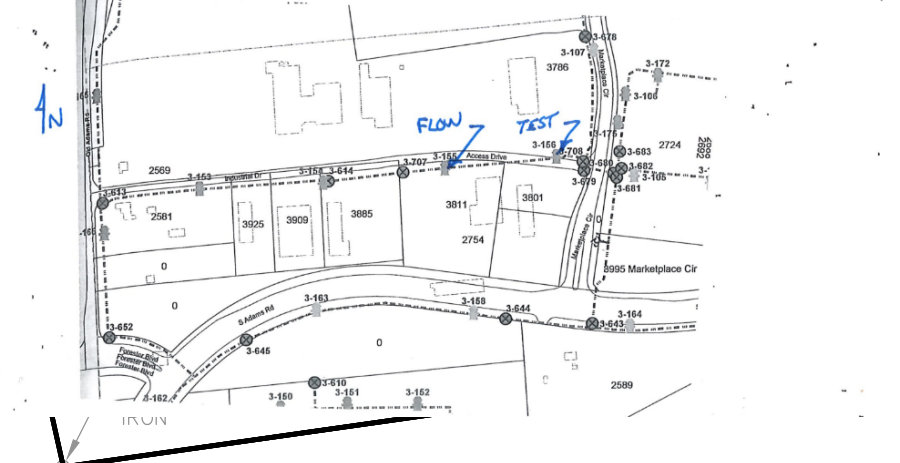
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City File #22-042
 Section #30
 NFE JOB NO. **L762-01** SHEET NO. **SP3**

CITY OF ROCHESTER HILLS
 HYDRANT FLOW TEST

Date: 06/05/24 Time: 13:24
 Test Performed by: J. Lawrey & G. Adams
 Location: Marketplace Circle / Industrial Drive, Rochester Hills, MI

Number of Hydrants Flowed	Number of Obsolete Hydrants	Flow of Obsolete Hydrants	Flow Rate (GPM)	Flow Pressure (PSI)	Flow Pressure (PSI) @ 100 GPM	Flow Pressure (PSI) @ 150 GPM	Flow Pressure (PSI) @ 200 GPM	Flow Pressure (PSI) @ 250 GPM	Flow Pressure (PSI) @ 300 GPM	Flow Pressure (PSI) @ 350 GPM	Flow Pressure (PSI) @ 400 GPM	Flow Pressure (PSI) @ 450 GPM	Flow Pressure (PSI) @ 500 GPM
1	3	3	330	42	40	38	36	34	32	30	28	26	24



L=194.39'(R&M)
 R=970.00'(R&M)
 A=11°28'55"(R&M)
 CH=N88°36'41"W
 194.06'(R&M)

FLOW TEST NOTE
 IN ORDER TO OBTAIN SITE PLAN APPROVAL, A FLOW TEST IS REQUIRED TO EVALUATE THE CAPABILITIES OF THE WATER SUPPLY. THIS CAN BE OBTAINED BY CONTACTING THE DPS ENGINEERING DEPARTMENT AT (248) 658-4640

- FIRE DEPARTMENT NOTES**
- 1) A "KNOX" KEY SYSTEM MAY BE REQUIRED IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE THROUGH THE KNOX COMPANY AT WWW.KNOXBOX.COM.
 - 2) FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE" AND SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - 3) CONSTRUCTION SITE SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2006 CHAPTER 14
 - 4) OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. CONTACT ROCHESTER HILLS FIRE DEPARTMENT FOR PERMIT INFORMATION.
 - 5) PROVIDE "NO PARKING FIRE DEPARTMENT CONNECTION" SIGN OVER THE FIRE DEPARTMENT CONNECTION.
 - 6) FDC'S SHALL NOT BE OBSTRUCTED BY LANDSCAPING, PARKING, OR ANY OTHER PERMANENT OR TEMPORARY MATERIALS OR DEVICES.
 - 7) IF THE FIRE DEPARTMENT CONNECTION IS NOT LOCATED ON THE STREET FRONT OF THE BUILDING, A WHITE/CLEAR STROBE LIGHT SHALL BE TIED INTO THE FIRE ALARM SYSTEM AND INSTALLED OVER THE FDC.

Pierce Turning Performance Analysis 03/30/2017

Bid Number: 581
 Department: City of Rochester Hills

Chassis: Arrow XT Chassis, PAM/Midmount
 Body: Aerial, Platform, 95', Mid-Mount, Alum Body

Parameters:	Value:
Inside Cramp Angle:	45°
Axis Track:	82.92 in.
Wheel Offset:	4.68 in.
Tread Width:	17.4 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	7 in.
Front Overhang:	75.99 in.
Wheelbase:	270 in.
Overall Length:	463"
Calculated Turning Radii:	
Inside Turn:	21 ft. 5 in.
Curb to curb:	38 ft. 2 in.
Wall to wall:	41 ft. 0 in.

Comments:
 95' PAP - City of Rochester Hills
 Rear Overhang - 16 feet

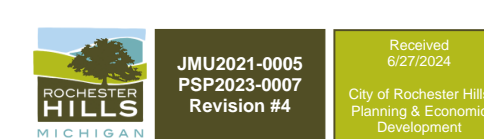
PAVING LEGEND

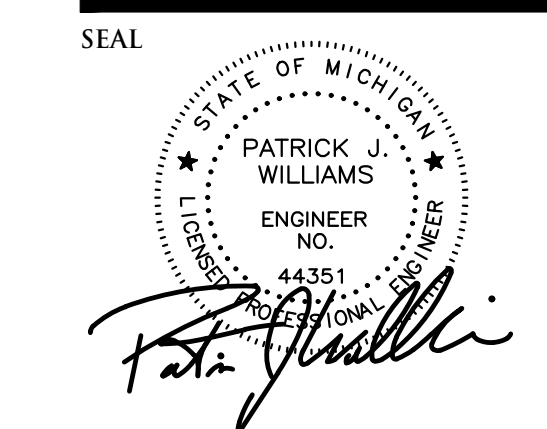
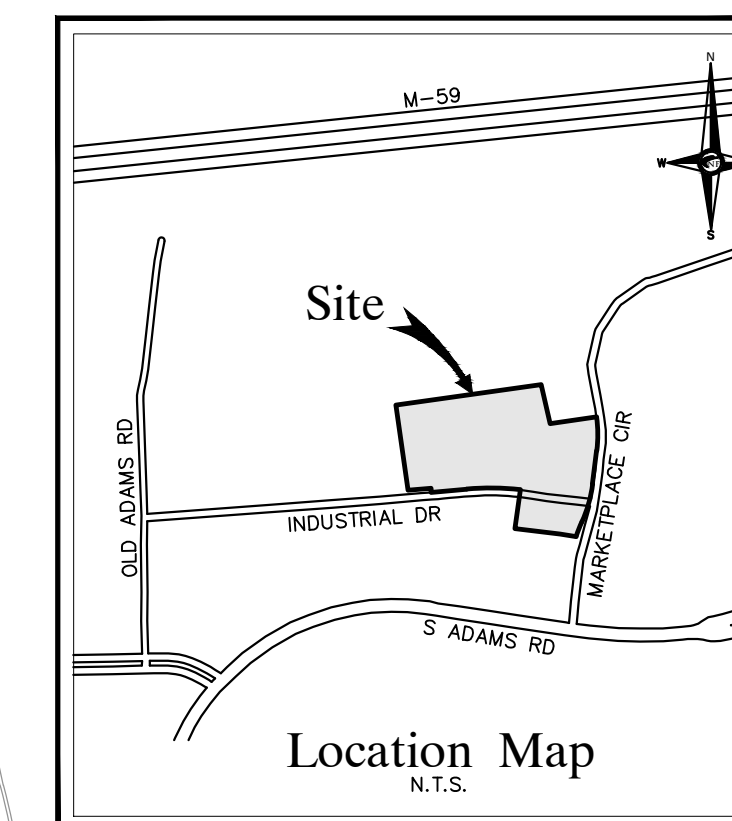
	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	MANHOLE CATCH BASIN		EXISTING WATERMAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	GUY WIRE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN
	C.O.		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	C.B.		PR. R. Y. CATCH BASIN
	MANHOLE		PROPOSED LIGHT POLE

NOT TO BE USED AS CONSTRUCTION DRAWINGS





PROJECT
Marketplace of Rochester Hills
Rochester Hills, MI 48309

CLIENT
Grenadier Adams MP, LLC
Contact: Josh Grenadier
Ph-248-752-1748

PROJECT LOCATION
Part of the SW 1/4 of Section 30, T.3N., R.11E., City of Rochester Hills, Oakland County, MI

SHEET
Semi-Truck Maneuvering Plan



Know what's below
Call before you dig.

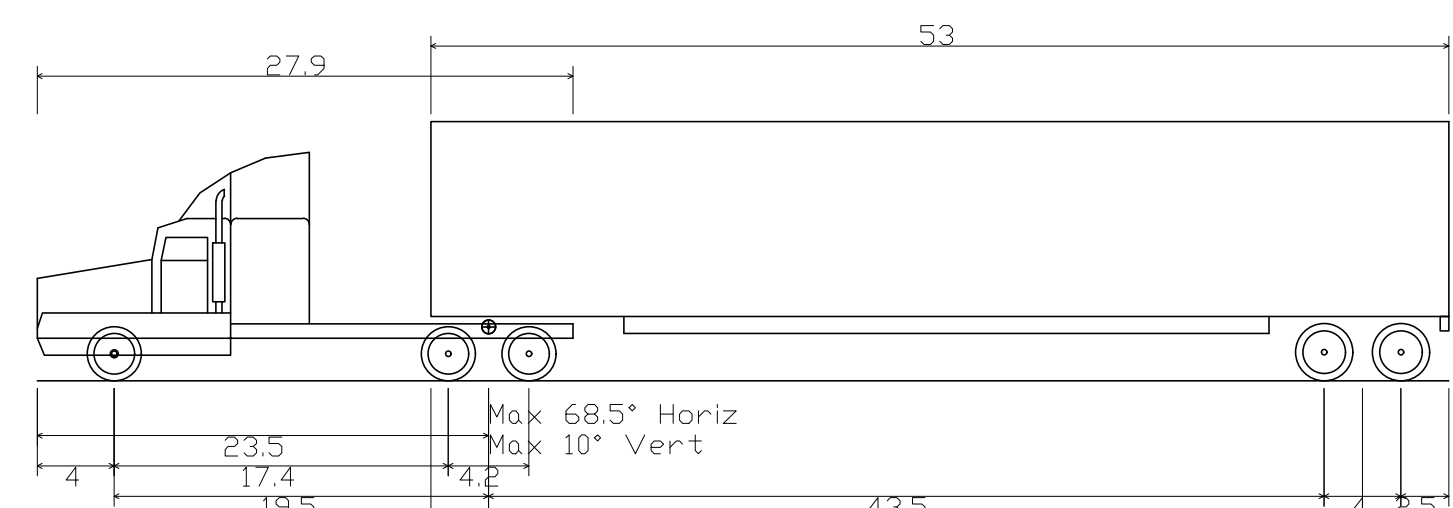
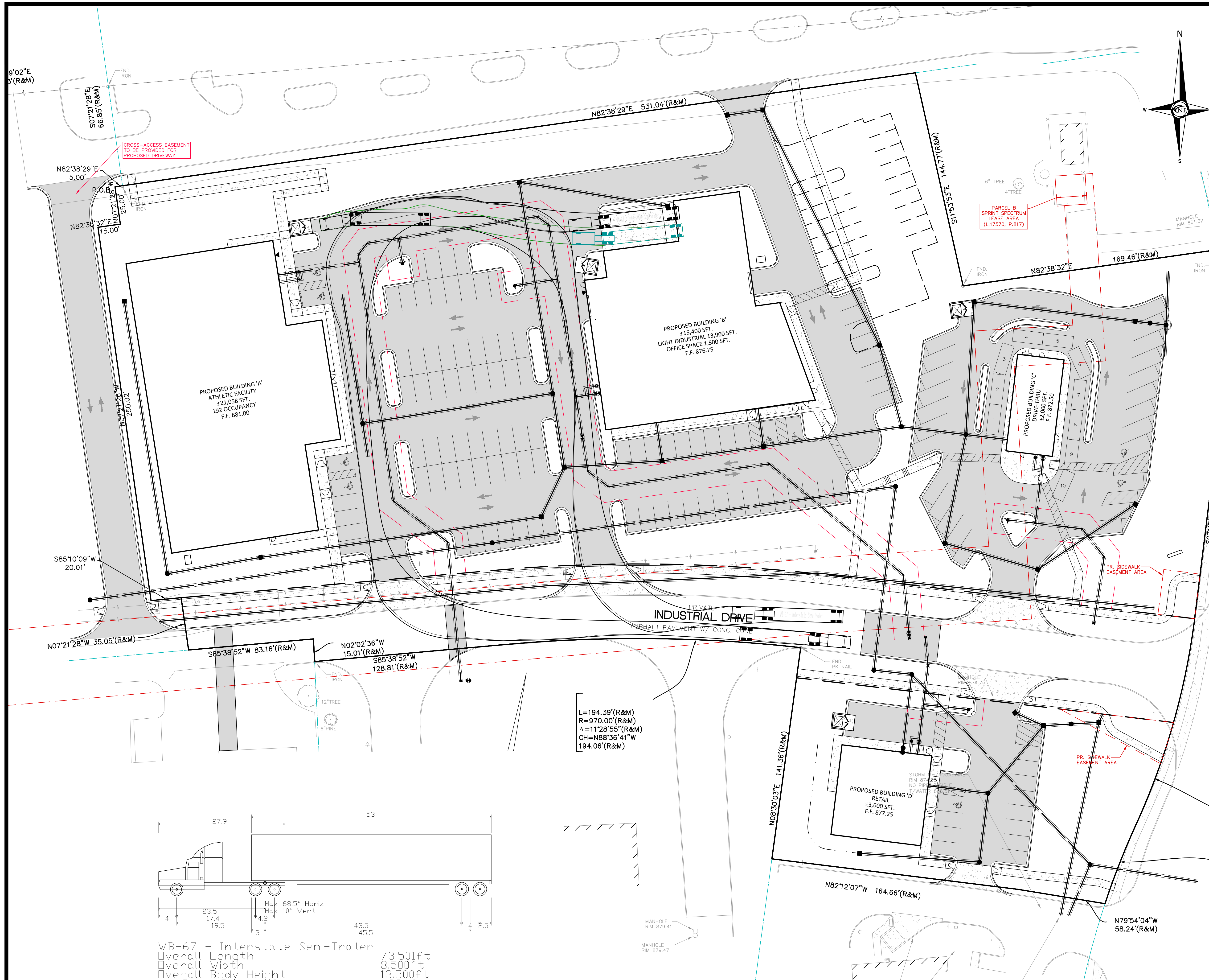
DATE	ISSUED/REVISED
02-27-2024	ISSUED FOR SP REVIEW
04-08-2024	REVISED PER CITY
05-16-2024	REVISED PER CITY
06-19-2024	REVISED PER CITY

DRAWN BY:
J. Lawrey
DESIGNED BY:
A. Eizember
APPROVED BY:
P. Williams

DATE:
June 5, 2024

SCALE: 1" = 30'

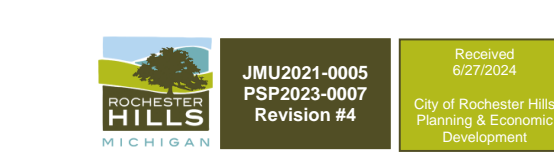
City File #22-042
Section #30
NFE JOB NO. 1762-01
SHEET NO. SP3.1



WB-67 - Interstate Semi-Trailer
Overall Length 73.501ft
Overall Width 8.500ft
Overall Body Height 13.500ft
Min Body Ground Clearance 1.334ft
Max Track Width 8.500ft
Lock-to-lock time 6.00s
Max Steering Angle (Virtual) 28.40°

L=194.39'(R&M)
R=970.00'(R&M)
A=11°28'55"(R&M)
CH=N88°36'41"W
194.06'(R&M)

NOT TO BE USED AS
CONSTRUCTION
DRAWINGS



PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		SAN. CLEAN OUT
	MANHOLE CATCH BASIN		EXISTING WATERMAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	GUY WIRE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN
	C.O.		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	C.B.		PR. R. Y. CATCH BASIN
	MANHOLE		PROPOSED LIGHT POLE

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 IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD; MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE - MDOT BITUMINOUS MIXTURE NO. 1100L, 20AA; SURFACE COURSE - MDOT BITUMINOUS MIXTURE NO. 1100T, 20AA; ASPHALT CEMENT PENETRATION GRADE 85-100, BOND COAT - MDOT SS-1H EMULSION AT 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, CURBS & GUTTERS, ETC. SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-5164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD 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 DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY 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 LIKEWISE ARRANGE FOR ALL INSPECTION.

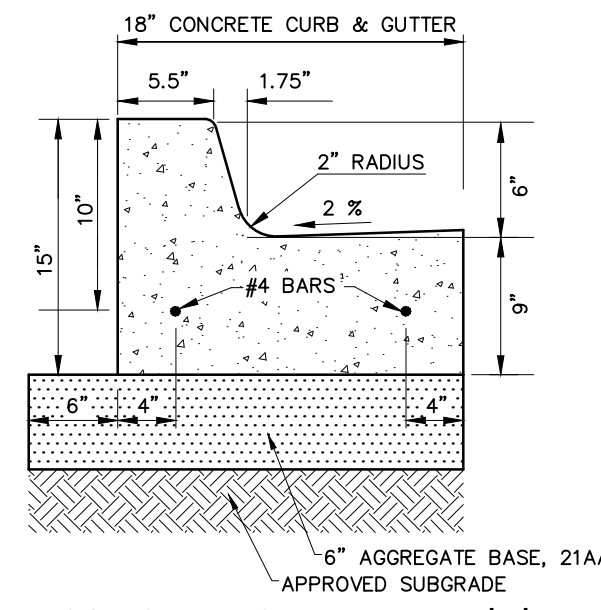
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

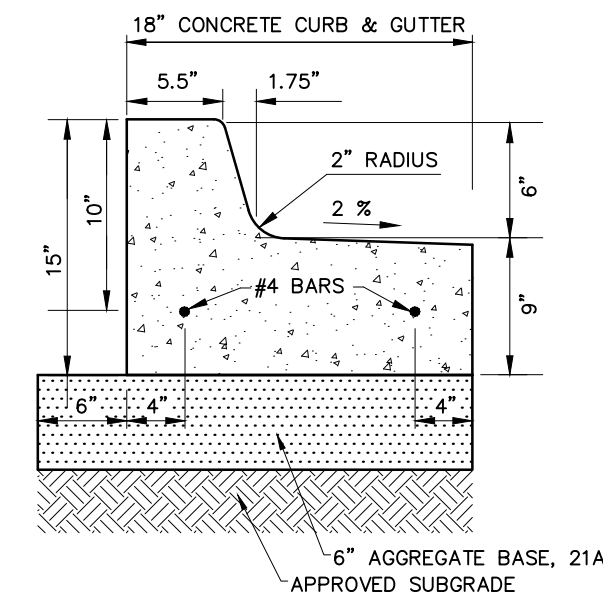
SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

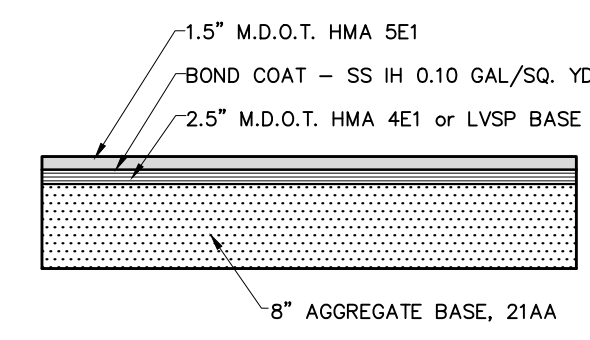
FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.



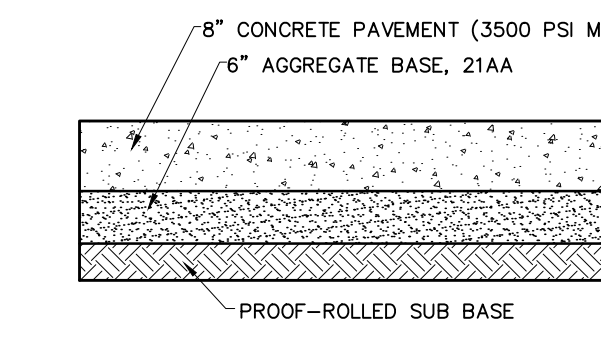
CONCRETE CURB DETAIL 'A'
N.T.S.



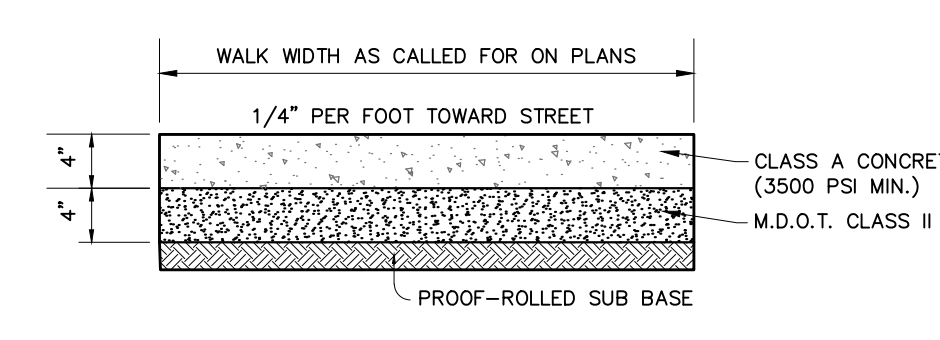
CONCRETE CURB DETAIL 'B'
N.T.S.



ASPHALT PAVEMENT SECTION
(DRIVE AND PARKING)
N.T.S.



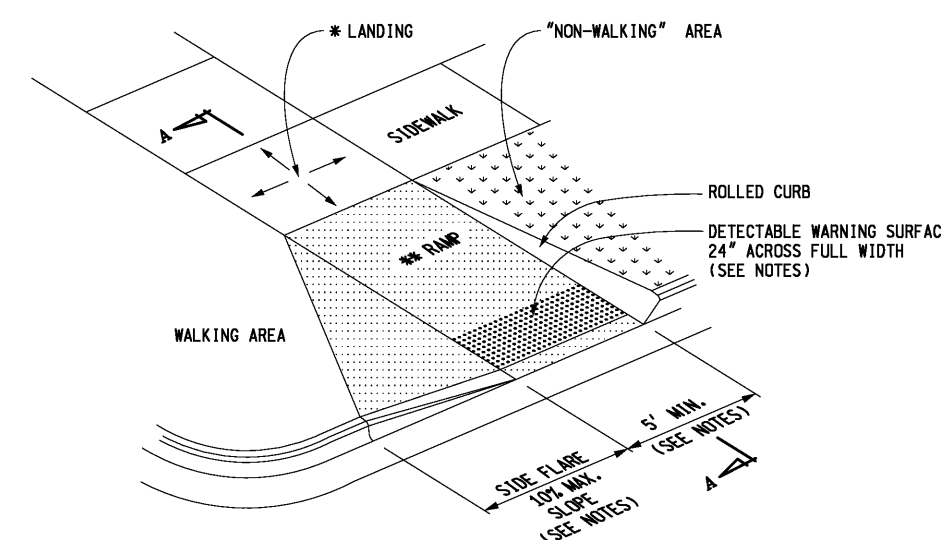
CONCRETE PAVEMENT SECTION
N.T.S.



CONCRETE SIDEWALK SECTION
N.T.S.

• MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL - MINIMUM DIMENSIONS 5' x 5' - SEE NOTES.

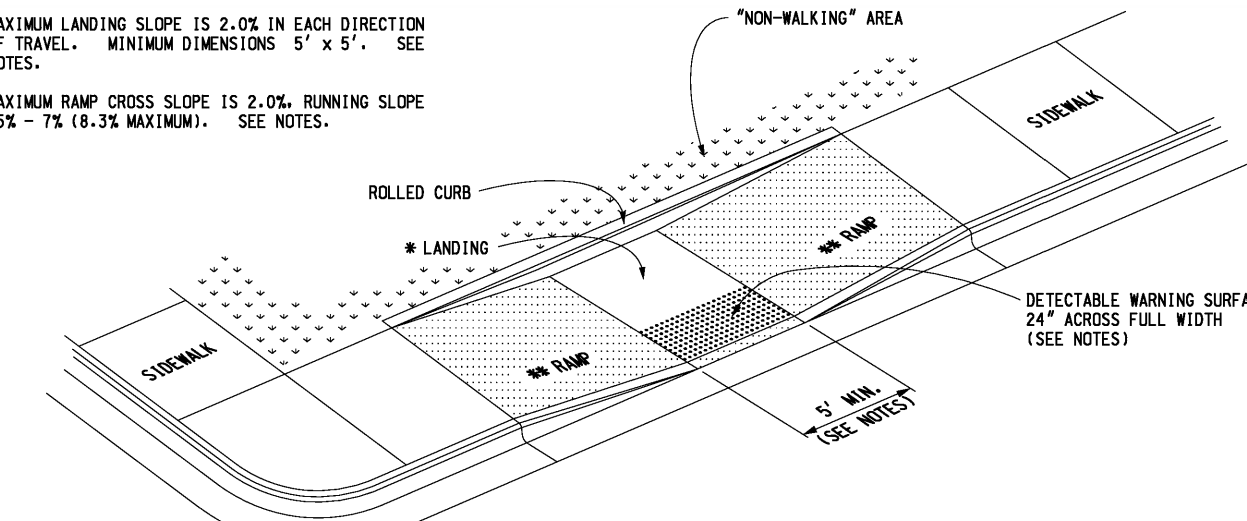
• MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.2% MAXIMUM) - SEE NOTES.



SIDEWALK RAMP TYPE RF
(ROLLED / FLARED SIDES)

• MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL - MINIMUM DIMENSIONS 5' x 5' - SEE NOTES.

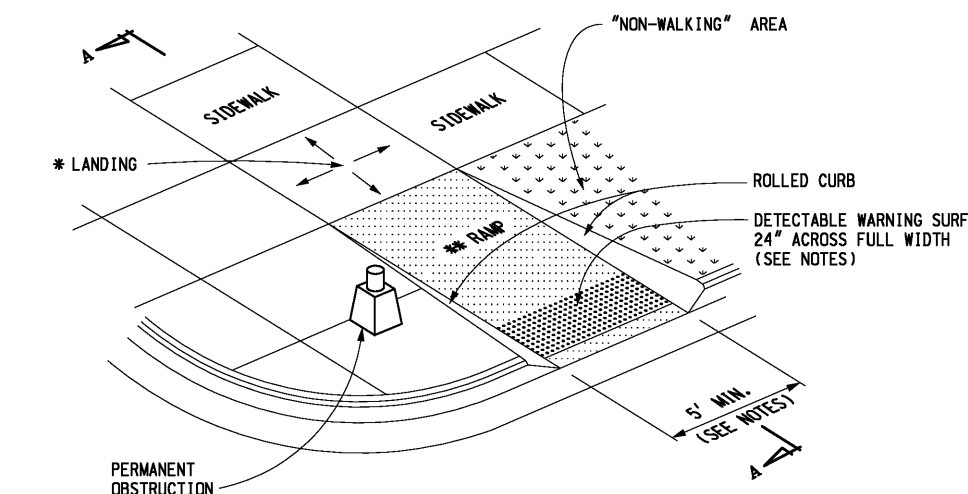
• MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.2% MAXIMUM) - SEE NOTES.



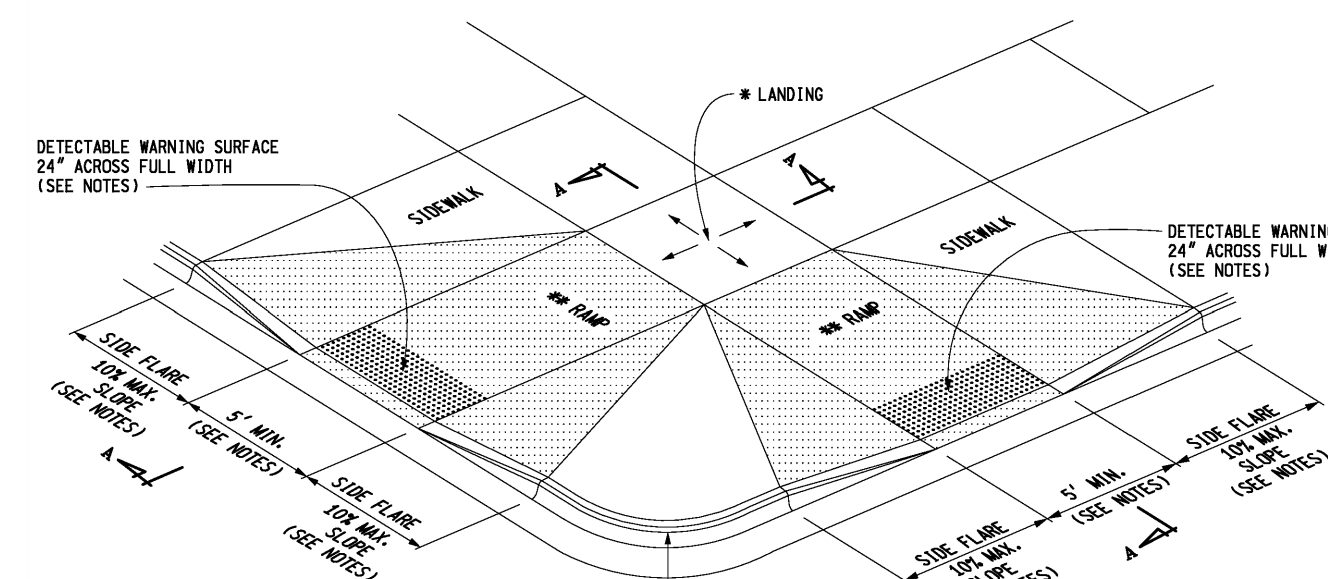
SIDEWALK RAMP TYPE P
(PARALLEL RAMP)

• MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL - MINIMUM DIMENSIONS 5' x 5' - SEE NOTES.

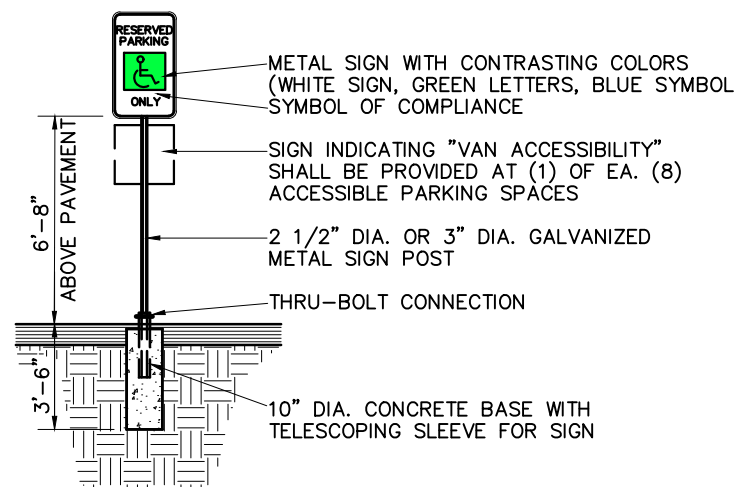
• MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.2% MAXIMUM) - SEE NOTES.



SIDEWALK RAMP TYPE R
(ROLLED SIDES)

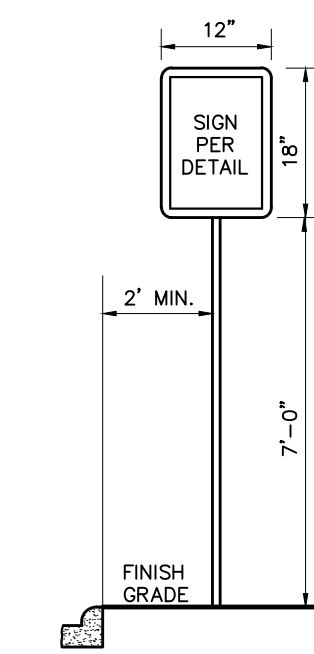


SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)

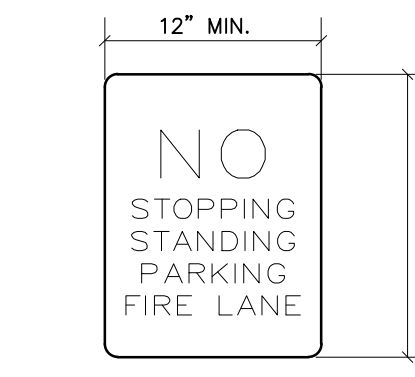


BARRIER FREE PARKING SIGN DETAIL
N.T.S.

Provide (1) for each accessible parking space



NO PARKING SIGN DETAIL
N.T.S.



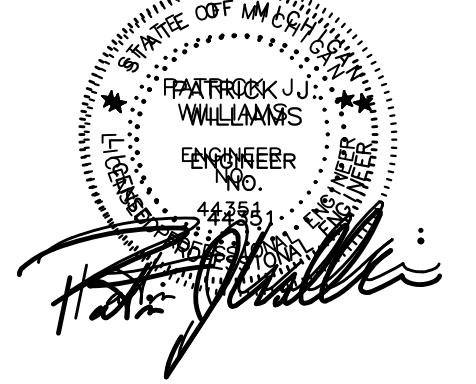
FIRE LANE SIGN DETAIL
N.T.S.

SPECIFICATIONS
 METAL PANELS 0.081 INCH THICK NO. 6061-T6 ALUMINUM
 SIGN SHEET REFLECTORIZED FWHA 6.306
 POST GALVANIZED SQUARE TUBING WITH CONTINUOUS 7/16 ROUND HOLES ON 1 CENTERS, ALL 4 SIDES ENTIRE LENGTH - UNISTRUT OR APPROVED EQUAL - 1-3/4 SQUARE
 SIGN SPACING 100 FEET (MAX.)

SANITARY SEWER BASIS OF DESIGN						
Use	Qty.	Unit	Factor			
Fitness Center (Building A)	19,500	Sq. Ft.	@ 0.29	Per 1,000	Sq. Ft.	= 5.66 REUs
Offices - General (Building A)	1,920	Sq. Ft.	@ 0.40	Per 1,000	Sq. Ft.	= 0.77 REUs
Warehouses & Storage (Building B)	8	Fixtures	@ 0.12	Per 1	Fixtures	= 0.96 REUs
Offices - General (Building B)	1,604	Sq. Ft.	@ 0.40	Per 1,000	Sq. Ft.	= 0.64 REUs
Quick Service Restaurants (w/ Dining) (Building C)	20	Fixtures	@ 0.49	Per 1	Fixtures	= 9.80 REUs
Stores (Building D)	3,600	Sq. Ft.	@ 0.04	Per 1,000	Sq. Ft.	= 0.14 REUs
Total REUs		= 17.97 REUs				
Equivalent Population		= 2.44 People Per REU				
Total Population		= 44 People				
Average Flow						
= 100 Gal/Per/Day * Population						
= 7.48 gal/cd * 86,400 sec/day						
= 4384.34 GPD = 0.0068 CFS						
Peak Factor						
= 18 + (# of Persons/1000) ^ 0.50						
= 4 + (# of Persons/1000) ^ 0.50						
= 4.33						
Peak Flow						
= Peak Factor * Average Flow						
= 18966.21 GPD = 0.0293 CFS						
Proposed Sanitary Sewer						
= 8 in. @ 0.40 % = 0.764 CFS						

NOT TO BE USED AS CONSTRUCTION DRAWINGS

SEAL



PROJECT

Marketplace of Rochester Hills
 Rochester Hills, MI 48309

CLIENT

Grenadier Adams MP, LLC
 Contact: Josh Grenadier
 Ph-248-752-1748

PROJECT LOCATION

Part of the SW 1/4 of Section 30, T.3N., R.11E., City of Rochester Hills, Oakland County, MI

SHEET

Site Notes and Details



Know what's below
 Call before you dig.

DATE ISSUED/REVISED

02-27-2024 ISSUED FOR SP REVIEW
 04-08-2024 REVISED PER CITY
 05-16-2024 REVISED PER CITY
 06-19-2024 REVISED PER CITY

DRAWN BY:

A. Eizember

DESIGNED BY:

A. Eizember

APPROVED BY:

P. Williams

DATE:

June 5, 2024

SCALE: N.T.S.

City File #22-042

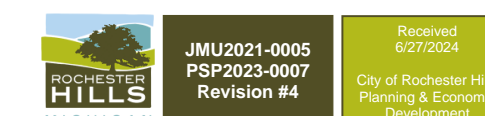
Section #30

NFE JOB NO.

L762-01

SHEET NO.

SP5



JMU/2021-0005
 PEP2023-0007
 Revision #4

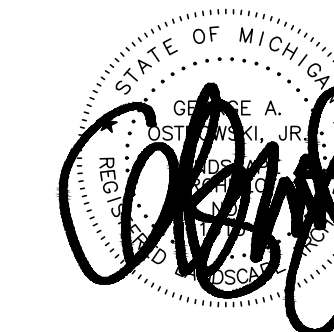
Received 02/27/2024
 City of Pontiac Planning & Economic Development

Weighted Run-off Coefficient Calculation "C"					
Total Site:	180,141	S.F.	or	4.14	Acres
1. Pavement and Roofs:	151,399	S.F.	or	3.48	Acres
2. Lawn, Landscape & Buffers:	28,742	S.F.	or	0.66	Acres
Sum of Individual Areas:	180,141	S.F.	or	4.14	Acres
Area No. 1 - Coefficient:	0.95				
Area No. 2 - Coefficient:	0.35				
"C" (Average) =	Area 1 * C1 + Area 2 * C2 Area 1 + Area 2				
"C" (Average) =	0.85				
"C" by Areas					
Area A:	Pavement:	9569 S.F.		0.22	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	9569 S.F.		0.22	Acres
				C=	0.95
Area B:	Pavement:	11490 S.F.		0.26	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	11490 S.F.		0.26	Acres
				C=	0.95
Area C:	Pavement:	362 S.F.		0.01	Acres
	Grass:	3645 S.F.		0.08	Acres
	Total:	4007 S.F.		0.09	Acres
				C=	0.40
Area D:	Pavement:	18788 S.F.		0.43	Acres
	Grass:	1896 S.F.		0.04	Acres
	Total:	20684 S.F.		0.47	Acres
				C=	0.90
Area E:	Pavement:	24758 S.F.		0.57	Acres
	Grass:	3852 S.F.		0.09	Acres
	Total:	28610 S.F.		0.66	Acres
				C=	0.87
Area F:	Pavement:	1338 S.F.		0.03	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	1338 S.F.		0.03	Acres
				C=	0.95
Area G:	Pavement:	7429 S.F.		0.17	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	7429 S.F.		0.17	Acres
				C=	0.95
Area H:	Pavement:	7963 S.F.		0.18	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	7963 S.F.		0.18	Acres
				C=	0.95
Area I:	Pavement:	5185 S.F.		0.12	Acres
	Grass:	1900 S.F.		0.04	Acres
	Total:	7085 S.F.		0.16	Acres
				C=	0.79
Area J:	Pavement:	5289 S.F.		0.12	Acres
	Grass:	3114 S.F.		0.07	Acres
	Total:	8403 S.F.		0.19	Acres
				C=	0.73
Area K:	Pavement:	10540 S.F.		0.24	Acres
	Grass:	1018 S.F.		0.02	Acres
	Total:	11558 S.F.		0.27	Acres
				C=	0.90
Area L:	Pavement:	9824 S.F.		0.23	Acres
	Grass:	419 S.F.		0.01	Acres
	Total:	10243 S.F.		0.24	Acres
				C=	0.93
Area M:	Pavement:	4388 S.F.		0.10	Acres
	Grass:	2007 S.F.		0.05	Acres
	Total:	6395 S.F.		0.15	Acres
				C=	0.76
Area N:	Pavement:	6430 S.F.		0.15	Acres
	Grass:	5199 S.F.		0.12	Acres
	Total:	11629 S.F.		0.27	Acres
				C=	0.68
Area O:	Pavement:	2000 S.F.		0.05	Acres
	Grass:	0 S.F.		0.00	Acres
	Total:	2000 S.F.		0.05	Acres
				C=	0.95
Area P:	Pavement:	5577 S.F.		0.13	Acres
	Grass:	201 S.F.		0.00	Acres
	Total:	5778 S.F.		0.13	Acres
				C=	0.93
Area Q:	Pavement:	5161 S.F.		0.12	Acres
	Grass:	53 S.F.		0.00	Acres
	Total:	5214 S.F.		0.12	Acres
				C=	0.94

City of Rochester Hills, Oakland County, Michigan															Project No: L762										
Storm Sewer Calculations															Project Name: Marketplace of Rochester Hills										
															Location: Marketplace Circle										
															Dated: September 28, 2022										
															Revised: 06/19/24										
Drainage Area	From Struc. No.	To Struc. No.	Drainage Area (Acres)	Runoff Coefficient (C)	Equivalent Area (C * A)	Total Area (Sum C * A)	Time of Concentration (Minutes)	Rainfall Intensity (Inches/Hr.)	Actual Discharge (CFS)	Pipe Size (Inches)	Pipe Slope (% Slope)	Pipe Length (Feet)	Flow Velocity (Ft / Sec)	Time of Flow (Minutes)	Full Pipe Capacity (CFS)	H. G. Elev. Upper End (Feet)	H. G. Elev. Lower End (Feet)	H. G. Slope (% Slope)	Theoretical Velocity (Ft / Sec)	Ground Elevation (Upper) (Feet)	Change in Elevation (Feet)	Invert Elev. Upper End (Feet)	Invert Elev. Lower End (Feet)	Upper Rim to HGL (Feet)	
A	ROOF	22	0.22	0.95	0.209	0.209	15.00	3.798	0.794	8	1.00	37	3.462	0.18	1.208	874.32	874.16	0.431	2.27	881.00	0.37	874.00	873.63	6.68	
B	ROOF	18	0.26	0.95	0.247	0.247	15.00	3.798	0.938	8	1.00	86	3.462	0.41	1.208	874.19	873.67	0.603	2.69	881.00	0.86	874.00	873.14	6.81	
-		18	8	0.00	0.95	0.000	0.247	15.41	3.746	0.925	12	0.32	128	2.566	0.83	2.015	873.52	873.43	0.067	1.18	880.10	0.41	873.04	872.63	6.58
F	TD2	9	0.03	0.95	0.029	0.029	15.00	3.798	0.108	8	1.00	100	3.462	0.48	1.208	869.38	869.37	0.008	0.31	872.75	1.00	869.75	868.75	3.37	
D		9	8	0.47	0.90	0.423	0.452	15.48	3.738	1.688	12	0.32	142	2.566	0.92	2.015	869.37	869.05	0.224	2.15	874.75	0.45	868.65	868.20	5.38
-		8	7	0.00	0.95	0.000	0.699	16.40	3.628	2.534	15	0.24	50	2.579	0.32	3.165	869.05	868.98	0.154	2.07	875.75	0.12	868.10	867.98	6.70
-		22	21	0.00	0.95	0.000	0.209	15.18	3.775	0.789	12	0.32	63	2.566	0.41	2.015	874.16	874.13	0.049	1.00	880.50	0.20	873.53	873.33	6.34
C		21	7a	0.09	0.40	0.036	0.245	15.59	3.725	0.913	12	0.32	188	2.566	1.22	2.015	873.55	873.43	0.066	1.16	880.00	0.60	873.23	872.63	6.45
-		7a	7	0.00	0.95	0.000	0.245	16.81	3.582	0.878	12	0.32	36	2.566	0.23	2.015	873.23	873.21	0.061	1.12	876.95	0.12	872.53	872.41	3.72
E		7	6	0.66	0.87	0.574	1.518	17.04	3.556	5.398	18	0.28	65	3.145	0.34	5.558	869.07	868.89	0.264	3.05	875.25	0.18	867.88	867.69	6.18
G		6A	6	0.17	0.95	0.162	0.162	15.00	3.798	0.613	8	1.00	26	3.462	0.13	1.208	872.17	872.10	0.258	1.76	876.75	0.26	871.75	871.49	4.58
I		6	5	0.16	0.79	0.126	1.806	17.39	3.519	6.354	18	0.38	68	3.664	0.31	6.475	872.35	872.10	0.366	3.60	875.40	0.26	867.59	867.34	3.05
H		5A	5	0.18	0.95	0.171	0.171	15.00	3.798	0.649	8	1.00	26	3.462	0.13	1.208	872.10	872.02	0.289	1.86	876.75	0.26	871.75	871.49	4.65
J		5	4	0.19	0.73	0.139	2.115	17.70	3.486	7.374	18	0.50	92	4.203	0.36	7.428	868.43	867.98	0.493	4.17	875.40	0.46	867.24	866.78	6.97
K/2		12	11	0.14	0.90	0.126	0.126	15.00	3.798	0.479	12	0.32	24	2.566	0.16	2.015	866.23	866.22	0.018	0.61	869.50	0.08	865.50	865.42	3.27
K/2		11	10	0.14	0.90	0.126	0.252	15.16	3.778	0.952	12	0.32	174	2.566	1.13	2.015	865.69	865.57	0.071	1.21	869.25	0.56	865.32	864.77	3.56
L		10	4	0.24	0.93	0.223	0.475	16.29	3.642	1.731	12	0.32	56	2.566	0.36	2.015	866.12	865.99	0.236	2.20	875.00	0.18	864.67	864.49	8.88
-		4	3	0.00	0.95	0.000	2.591	18.06	3.448	8.933	24	0.16	43	2.880	0.25	9.049	865.99	865.92	0.156	2.84	874.50	0.07	864.39	864.32	8.51
Q		15	14	0.12	0.94	0.113	0.113	15.00	3.798	0.428	12	0.32	78	2.566	0.51	2.015	867.06	867.05	0.014	0.55	870.50	0.20	866.50	866.25	3.44
R		14	13	0.06	0.79	0.047	0.160	15.51	3.735	0.598	12	0.32	64	2.566	0.42	2.015	867.67	867.65	0.028	0.76	870.25	0.25	866.15	865.95	2.58
N		13	3	0.27	0.68	0.184	0.344	15.92	3.685	1.267	12	0.32	73	2.566	0.47	2.015	867.74	867.65	0.126	1.61	870.75	0.23	865.85	865.61	3.01
O		3A	3	0.05	0.95	0.048	0.048	15.00	3.798	0.180	6	1.00	28	2.858	0.16	0.561	867.65	867.62	0.103	0.92	872.50	0.28	867.50	867.22	4.85
-		3	2	0.00	0.95	0.000	2.982	18.31	3.423	10.207	24	0.22	88	3.378	0.43	10.611	865.80	865.62	0.204	3.25	871.50	0.19	864.22	864.02	5.70
M		2	1a	0.15	0.76	0.114	3.096	18.74	3.380	10.463	24	0.24	108	3.528	0.51	11.083	865.50	865.27	0.214	3.33	871.00	0.26	863.92	863.67	5.50
P		1a	PT1	0.13	0.93	0.121	3.217	19.25	3.331	10.714	24	0.24	10	3.528	0.05	11.083	865.16	865.14	0.224	3.41	870.60	0.02	863.57	863.54	5.44
-		PT1	1	0.00	0.95	0.000	3.217	19.30	3.326	10.699	24	0.24	11	3.528	0.05	11.083	865.04	865.02	0.224	3.41	870.70	0.03	863.44	863.42	5.66

City of Rochester Hills, Oakland County, Michigan															Project No: L762										
Storm Sewer Calculations															Project Name: Marketplace of Rochester Hills										
															Location: Marketplace Circle										
															Dated: September 28, 2022										
															Revised: 06/19/24										
Drainage Area	From Struc. No.	To Struc. No.	Drainage Area (Acres)	Runoff Coefficient (C)	Equivalent Area (C * A)	Total Area (Sum C * A)	Time of Concentration (Minutes)	Rainfall Intensity (Inches/Hr.)	Actual Discharge (CFS)	Pipe Size (Inches)	Pipe Slope (% Slope)	Pipe Length (Feet)	Flow Velocity (Ft / Sec)	Time of Flow (Minutes)	Full Pipe Capacity (CFS)	H. G. Elev. Upper End (Feet)	H. G. Elev. Lower End (Feet)	H. G. Slope (% Slope)	Theoretical Velocity (Ft / Sec)	Ground Elevation (Upper) (Feet)	Change in Elevation (Feet)	Invert Elev. Upper End (Feet)	Invert Elev. Lower End (Feet)	Upper Rim to HGL (Feet)	
S		20	19	0.11	0.38	0.042	0.042	15.00	3.798	0.159	12	0.32	80	2.566	0.52	2.015	872.55	872.54	0.002	0.20	876.00	0.26	872.00	871.74	3.45
-		19	17	0.00	0.95	0.000	0.042	15.52	3.733	0.156	12	0.32	46	2.566	0.30	2.015	870.40	870.40	0.002	0.20	876.00	0.15	869.74	869.60	5.60
T		17A	17	0.08	0.95	0.076	0.076	15.00	3.798	0.289	6	1.00	40	2.858	0.23	0.561	871.36	871.25	0.265	1.47	877.25	0.40	871.25	870.85	5.89
-		17	16	0.00	0.95	0.000	0.118	15.82	3.697	0.435	12	0.32	58	2.566	0.38	2.015	867.72	867.71	0.015	0.55	874.30	0.19	867.1		

SEAL



PROJECT
Marketplace of Rochester Hills

CLIENT
Grenadier Adams MP, LLC
24255 West 13 Mile
Suite 220
Bingham Farms, MI 48025

Contact: Josh Grenadier
Ph: (248) 752-1748

PROJECT LOCATION
Part of the Southwest 1/4
of Section 30
T. 3 North, R. 11 East
City of Rochester Hills,
Oakland County, Michigan

SHEET
Tree Preservation Plan



Know what's below
Call before you dig.

REVISIONS

02/22/24	ISSUED FOR SITE PLAN REVIEW
04/08/24	REVISED PER CITY REVIEW
05/16/24	REVISED PER CITY REVIEW
06/19/24	REVISED PER CITY REVIEW

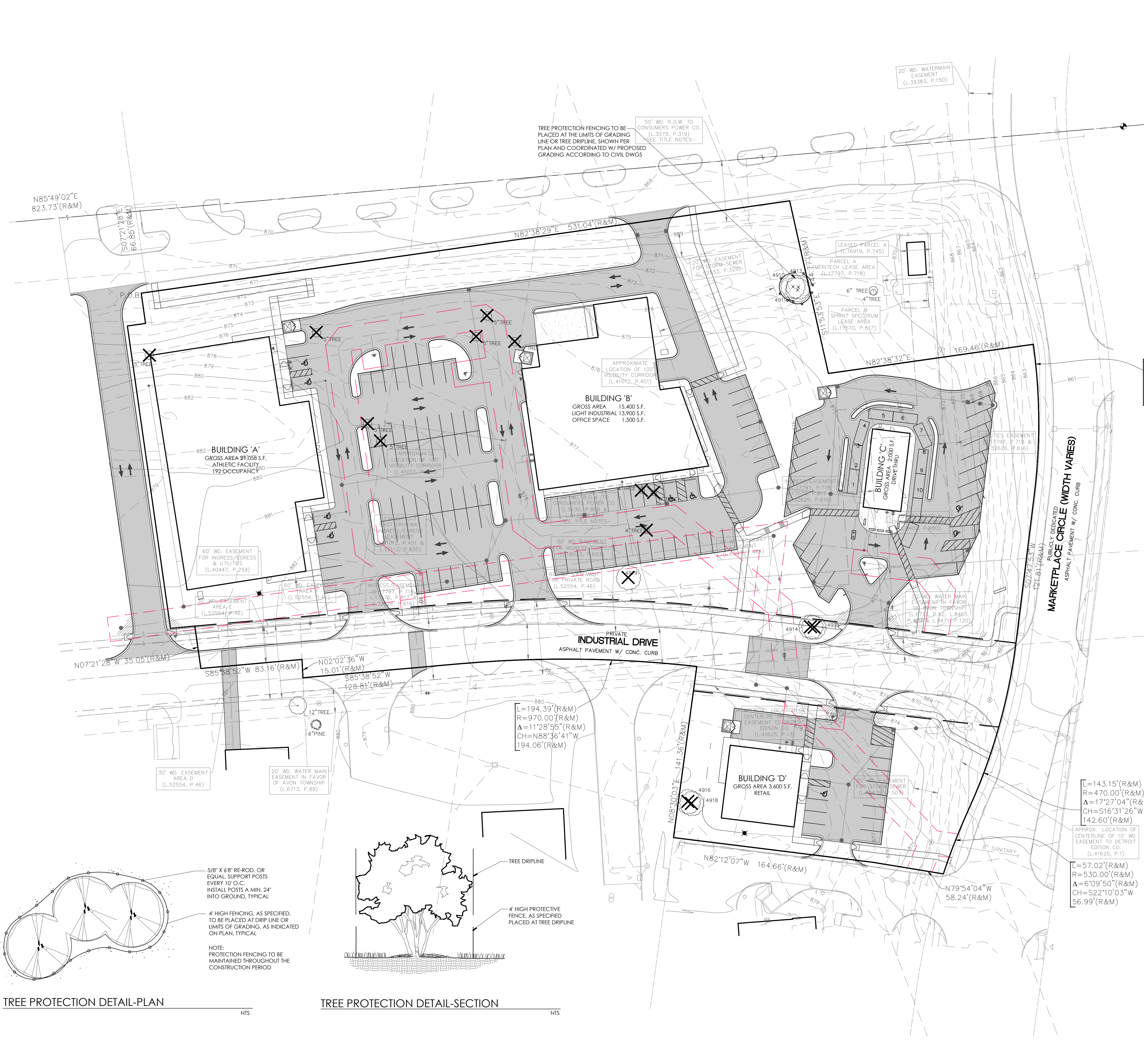
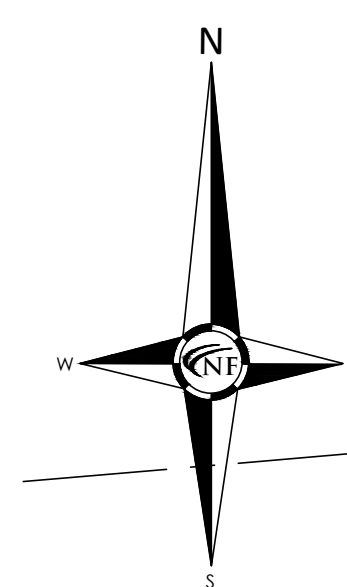
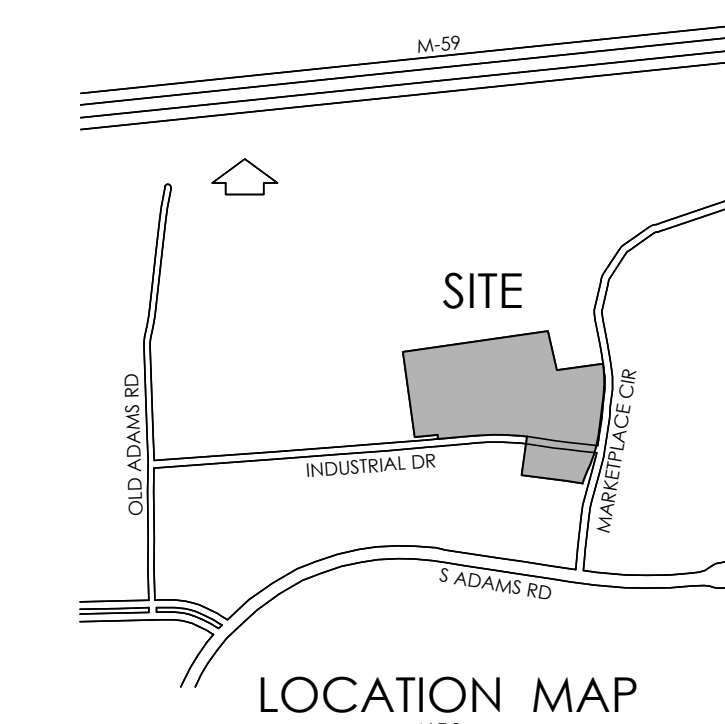
DRAWN BY:
G. Ostrowski
DESIGNED BY:
G. Ostrowski

APPROVED BY:
G. Ostrowski
DATE:
01-19-2024

SCALE: 1" = 40'

40 20 0 20 40 60

NFE JOB NO. SHEET NO.
L762 L1



LEGEND:

- X TREES TO BE REMOVED
- 950 TREES TO REMAIN
- TREE PROTECTION FENCING

L=122.60'(R&M)
R=470.00'(R&M)
A=14°56'46"(R&M)
CH=500°19'32"W
122.26'(R&M)

GENERAL TREE PROTECTION NOTES

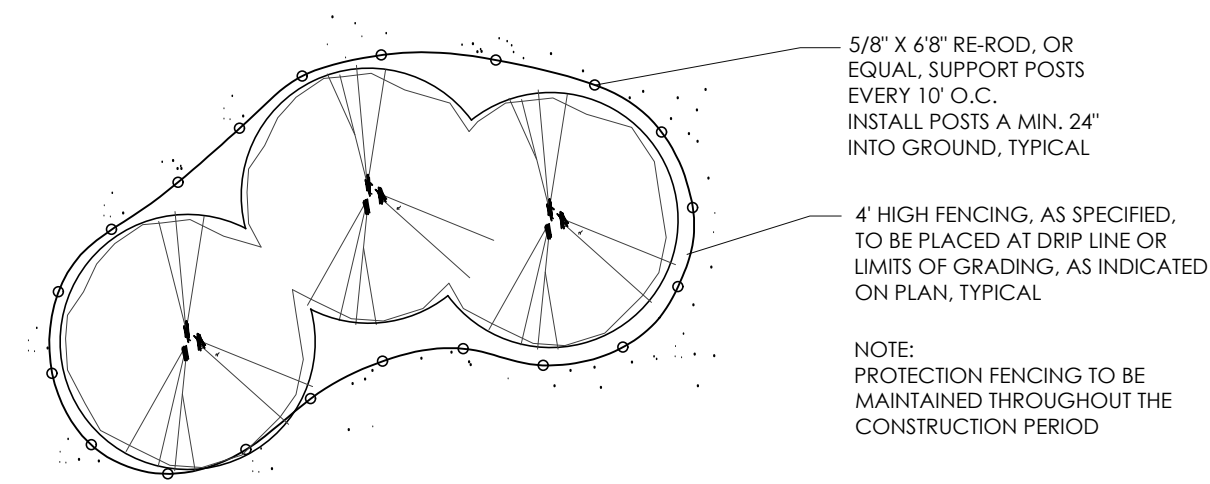
- APPROVED TREE PROTECTION SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL THE IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
- ALL UNDERSTORY VEGETATION WITHIN THE LIMITS OF PROTECTIVE FENCING SHALL BE PRESERVED.
- NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN, INCLUDING BUT NOT LIMITED TO, PLACING SOLVENTS, BUILDING MATERIALS, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN THE DRIP LINE.
- WHERE GROUPINGS OF TREES ARE TO REMAIN, TREE FENCING SHALL BE PLACED AT THE LIMITS OF GRADING LINE.
- DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY TREE, SCHEDULED TO REMAIN.
- ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.
- SWALES SHALL BE ROUTED TO AVOID THE AREA WITHIN THE DRIP LINES OF PROTECTED TREES.
- TREES LOCATED ON ADJACENT PROPERTIES THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED.
- ROOT ZONES OF PROTECTED TREES SHOULD BE SURROUNDED WITH RIGIDLY STAKED FENCING.
- THE PARKING OF IDLE AND RUNNING EQUIPMENT SHALL BE PROHIBITED UNDER THE DRIP LINE OF PROTECTED TREES.
- THE STRIPPING OF TOPSOIL FROM AROUND PROTECTED TREES SHALL BE PROHIBITED.
- ALL TREES TO BE REMOVED SHALL BE CUT AWAY FROM TREES TO REMAIN.
- THE GRUBBING OF UNDERSTORY VEGETATION WITHIN CONSTRUCTION AREAS SHOULD BE CLEARED BY CUTTING VEGETATION AT THE GROUND WITH A CHAIN SAW OR MINIMALLY WITH A HYDRO-AXE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT PER ORDINANCE GUIDELINES, FOR THE DAMAGE OR REMOVAL OF ANY TREE DESIGNATED TO REMAIN.
- 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 OWNERS REPRESENTATIVE.

PROTECTIVE FENCING NOTE:

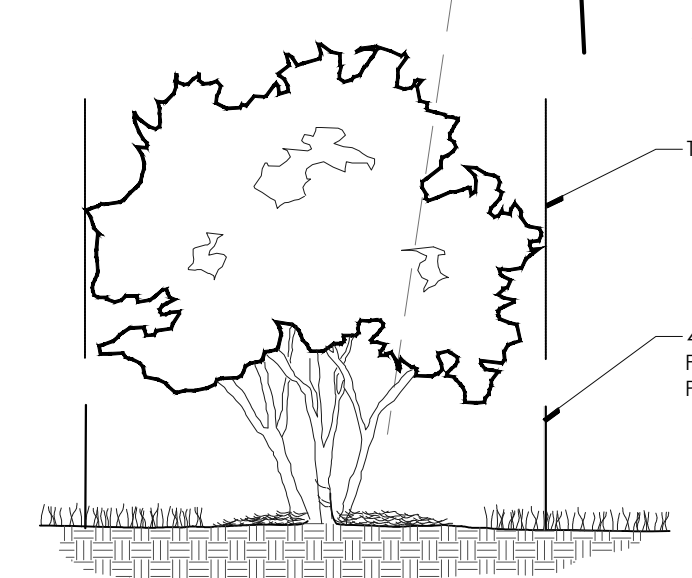
TREE PROTECTION AND STAKE FENCING, AS REVIEWED AND APPROVED BY CITY STAFF, SHALL BE INSTALLED PRIOR TO THE ISSUANCE OF THE LAND IMPROVEMENT PERMIT.

TREE PRESERVATION SUMMARY:

TOTAL NUMBER OF TREES SURVEYED:	18
LESS NUMBER OF DEAD TREES:	0
LESS NUMBER OF R.O.W. TREES:	0
LESS UNREGULATED SIZE:	10
NET TREES ON-SITE:	8
TOTAL TREES TO BE REMOVED:	5
TOTAL TREES TO REMAIN:	3
MINIMUM PRESERVATION REQUIREMENT 8 TREES - 0 TREES IN BUILDING ENVELOPE = 8 X 40% =	3 TREES REQUIRED TO BE PRESERVED 3 TREES PROPOSED TO BE SAVED
TREE REPLACEMENT	
TOTAL REMOVALS:	5 TREES
TOTAL NUISANCE REMOVALS:	0 TREES
TOTAL SPECIMEN TREE REMOVALS:	0 TREES
TOTAL REPLACEMENT TREES REQUIRED:	5 TREES
TOTAL REPLACEMENT TREES PROVIDED:	5 TREES



TREE PROTECTION DETAIL-PLAN



TREE PROTECTION DETAIL-SECTION

W:\GIS\2024\20240119_0001\RES\01\20240119_0001\20240119_0001\20240119_0001.dwg, 4/17/2024 9:33:34 AM

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power
P1			15	Lithonia Lighting	DSX1 LED P1 30K 80CRI BLC3	D-Series Size 1 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 3 Extreme Backlight Control	4911	0.9	50.9
P2			2	Lithonia Lighting	DSX1 LED P1 30K 80CRI TSM	D-Series Size 1 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 5 Medium	6907	0.9	101.8
P3			6	Lithonia Lighting	DSX0 LED P1 30K 80CRI T1S	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 1 Short	4454	0.9	33.21
P4			2	Lithonia Lighting	DSX0 LED P1 30K 80CRI RCCD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Right Corner Cutoff Extreme Backlight Control	3063	0.9	33.21
W1			21	Lithonia Lighting	WDGE1 LED P1 30K 80CRI VW	WDGE1 LED WITH P1 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1163	0.9	10.0002
W2			12	Lithonia Lighting	WDGE1 LED P2 30K 80CRI VW	WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1876	0.9	15.0178
W3			5	Lithonia Lighting	WDGE2 LED P3 30K 80CRI VW	WDGE2 LED WITH P3 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	3092	0.9	22.55
P5			4	Lithonia Lighting	DSX0 LED P1 30K 80CRI BLC3	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 3 Extreme Backlight Control	3036	0.9	33.21
P6			1	Lithonia Lighting	DSX0 LED P1 30K 80CRI TSM	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 5 Medium	4358	0.9	33.21

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Building A & B ROW	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Building A Parking & Drive Lanes	X	1.1 fc	1.9 fc	0.4 fc	4.8:1	2.8:1
Building C Parking & Drive Lanes	X	1.2 fc	2.0 fc	0.3 fc	6.7:1	4.0:1
Building C ROW	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A
Building D Parking & Drive Lanes	X	1.0 fc	1.9 fc	0.4 fc	4.8:1	2.5:1
Building D ROW	+	0.0 fc	0.0 fc	0.0 fc	N/A	N/A
Overall	+	0.6 fc	4.0 fc	0.0 fc	N/A	N/A
Property Line	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
Within 25' Building A	X	1.9 fc	4.0 fc	0.5 fc	8.0:1	3.8:1
Within 25' Building B	X	2.2 fc	4.0 fc	1.0 fc	4.0:1	2.2:1
Within 25' Building C	X	1.7 fc	2.8 fc	0.9 fc	3.1:1	1.9:1
Within 25' Building D	X	1.5 fc	3.2 fc	0.5 fc	6.4:1	3.0:1
Build B Parking & Drive Lanes	X	1.3 fc	2.0 fc	0.5 fc	4.0:1	2.6:1

General Note
 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0" & AT R.O.W 5'-0"

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.

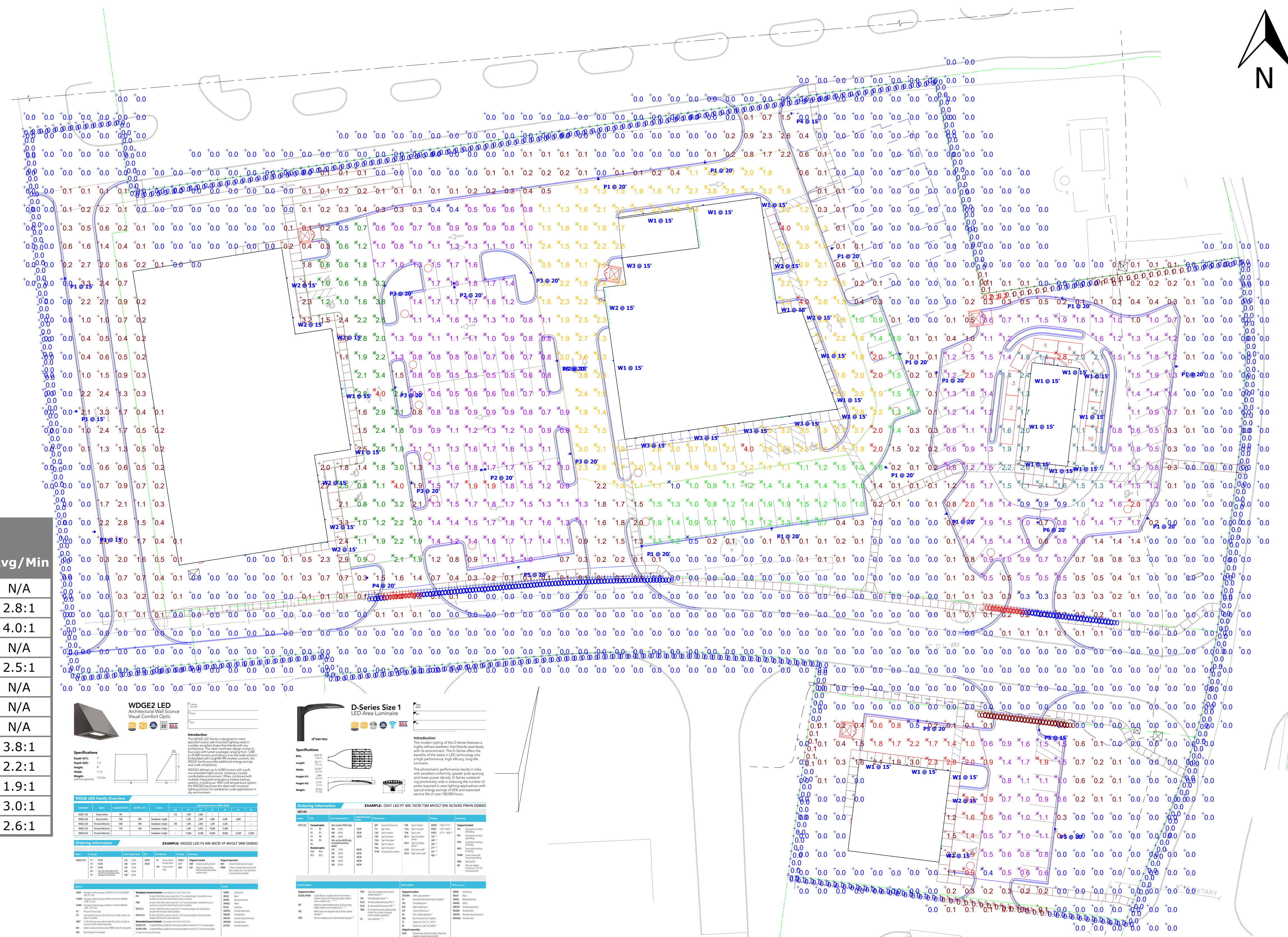
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
 THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED 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.



WDGE2 LED Architectural Wall Scape Visual Comfort Optic

Specifications:
 Depth: 6.5"
 Height: 15.5"
 Width: 15.5"
 Mounting: 15.5"
 Weight: 15.5 lbs

Introduction:
 The WDGE2 LED family is designed to meet the needs of architectural lighting applications with a wide range of beam spreads and mounting heights. The WDGE2 LED family offers the highest performance, high quality, long life luminaire.

Ordering Information:
 EXAMPLE: WDGE2 LED P1 30K 80CRI VW MOUNT SIM DEND

Order Code	Quantity	Manufacturer	Part Number	Notes
W1 @ 15'	21	Lithonia	WDGE1 LED P1 30K 80CRI VW	
W2 @ 15'	12	Lithonia	WDGE1 LED P2 30K 80CRI VW	
W3 @ 15'	5	Lithonia	WDGE2 LED P3 30K 80CRI VW	

D-Series Size 1 LED Area Luminaire

Specifications:
 Depth: 6.5"
 Height: 15.5"
 Width: 15.5"
 Mounting: 15.5"
 Weight: 15.5 lbs

Introduction:
 The modern styling of the D-Series features a high performance, high quality, long life luminaire with a wide range of beam spreads and mounting heights. The D-Series offers the highest performance, high quality, long life luminaire.

Ordering Information:
 EXAMPLE: DSX1 LED P1 30K 80CRI BLC3

Order Code	Quantity	Manufacturer	Part Number	Notes
P1 @ 20'	15	Lithonia	DSX1 LED P1 30K 80CRI BLC3	
P2 @ 20'	2	Lithonia	DSX1 LED P1 30K 80CRI TSM	
P3 @ 20'	6	Lithonia	DSX0 LED P1 30K 80CRI T1S	
P4 @ 20'	2	Lithonia	DSX0 LED P1 30K 80CRI RCCD	

D-Series Size 0 LED Area Luminaire

Specifications:
 Depth: 6.5"
 Height: 15.5"
 Width: 15.5"
 Mounting: 15.5"
 Weight: 15.5 lbs

Introduction:
 The modern styling of the D-Series features a high performance, high quality, long life luminaire with a wide range of beam spreads and mounting heights. The D-Series offers the highest performance, high quality, long life luminaire.

Ordering Information:
 EXAMPLE: DSX0 LED P1 30K 80CRI BLC3

Order Code	Quantity	Manufacturer	Part Number	Notes
P5 @ 20'	4	Lithonia	DSX0 LED P1 30K 80CRI BLC3	
P6 @ 20'	1	Lithonia	DSX0 LED P1 30K 80CRI TSM	

WDGE1 LED Architectural Wall Scape

Specifications:
 Depth: 6.5"
 Height: 15.5"
 Width: 15.5"
 Mounting: 15.5"
 Weight: 15.5 lbs

Introduction:
 The WDGE1 LED family is designed to meet the needs of architectural lighting applications with a wide range of beam spreads and mounting heights. The WDGE1 LED family offers the highest performance, high quality, long life luminaire.

Ordering Information:
 EXAMPLE: WDGE1 LED P2 30K 80CRI VW MOUNT SIM PE DEND

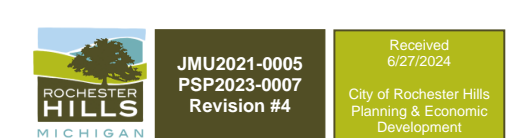
Order Code	Quantity	Manufacturer	Part Number	Notes
W1 @ 15'	21	Lithonia	WDGE1 LED P1 30K 80CRI VW	
W2 @ 15'	12	Lithonia	WDGE1 LED P2 30K 80CRI VW	

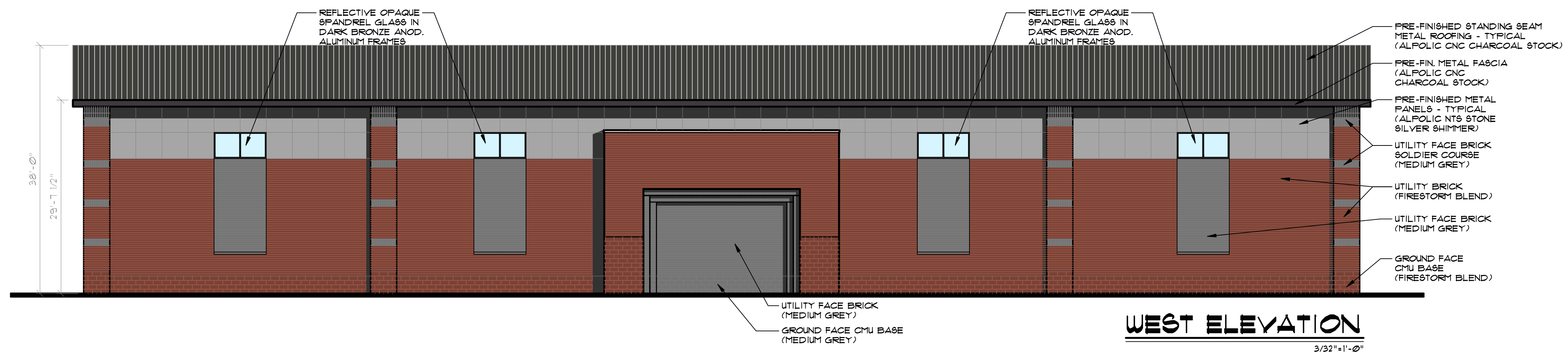
Plan View
 Scale: 1" = 35R



MARKETPLACE OF ROCHESTER HILLS
 PHOTOMETRIC PLAN
 GASSER BUSH ASSOCIATES
 WWW.GASSERBUSH.COM

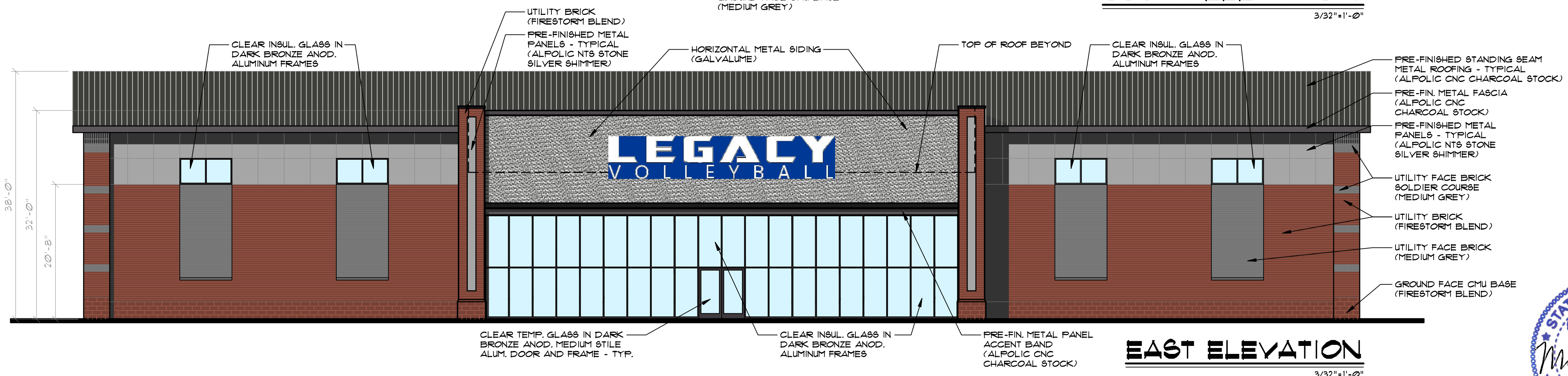
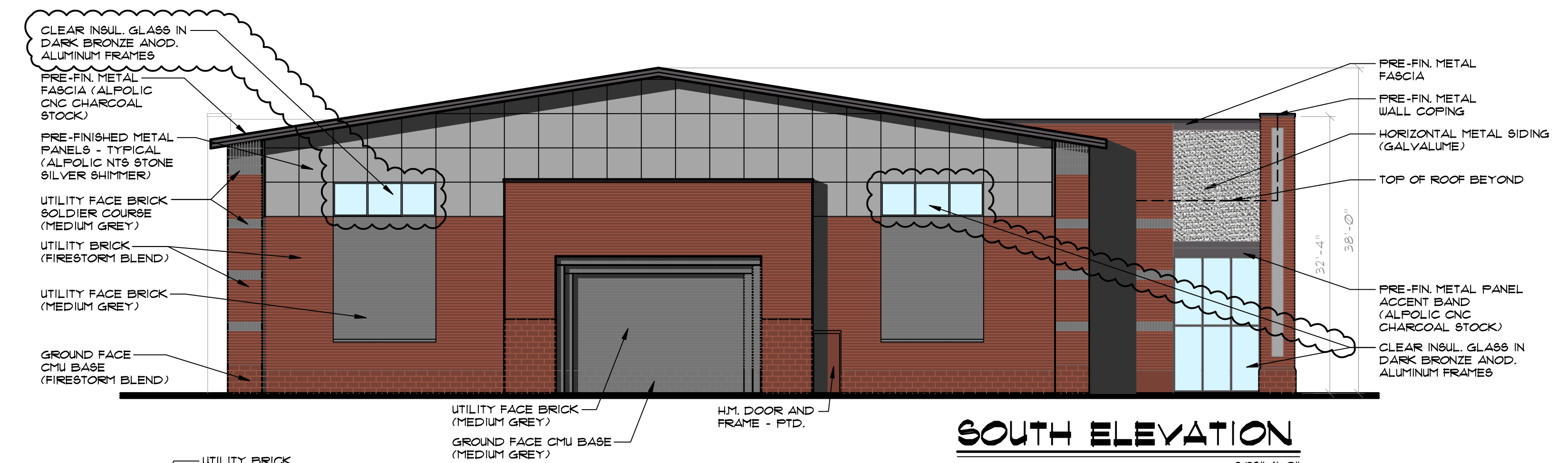
Designer
 BK
 Date
 12/19/2023
 Rev. 01/12/2024
 Scale
 Not to Scale
 Drawing No.
 #23-10108 V4

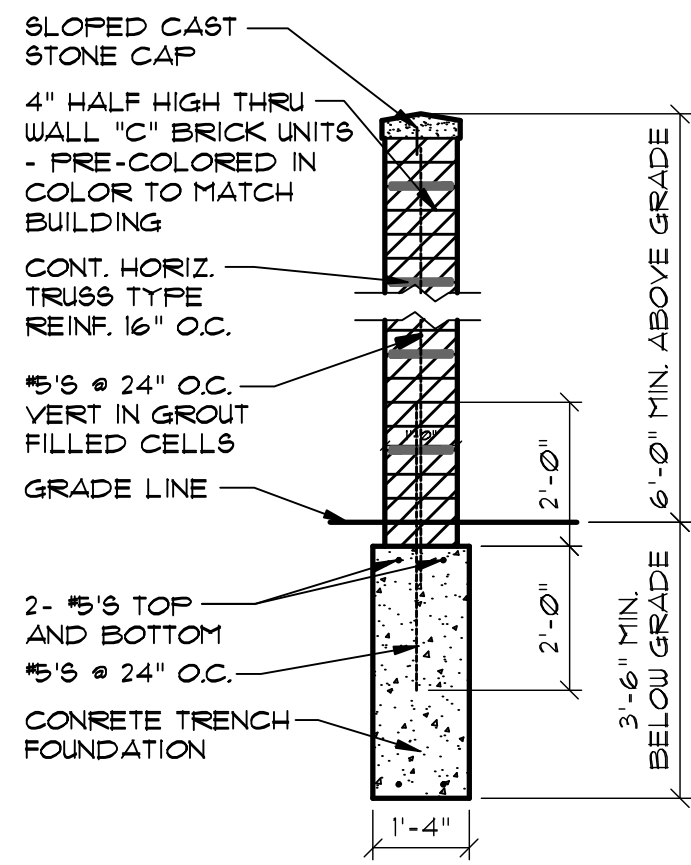




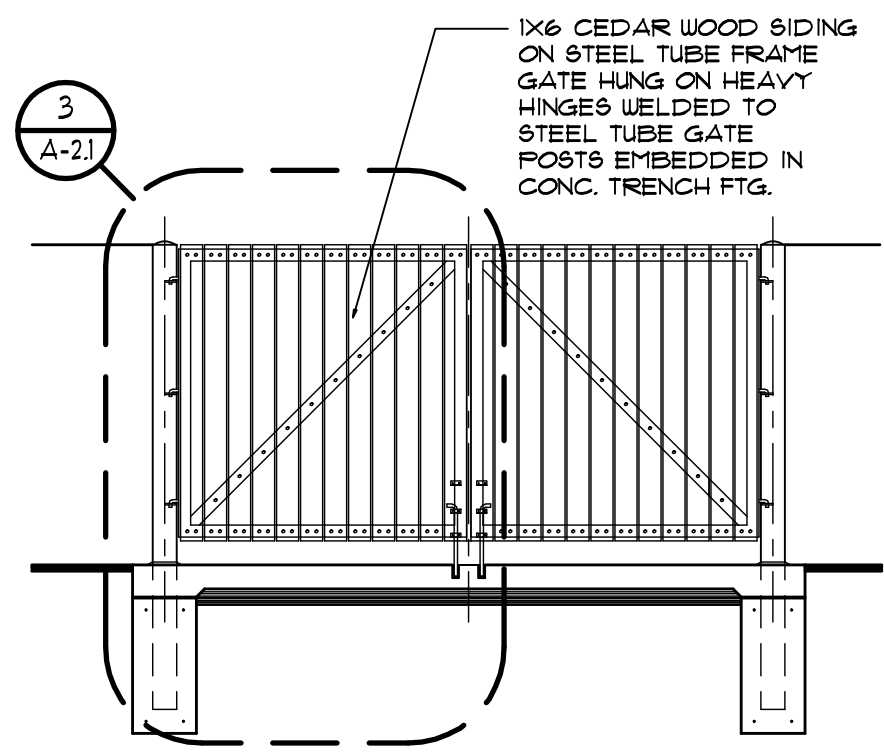
NOTE
ALL ROOFTOP HVAC EQUIPMENT INCLUDING H.V.A.C. UNITS, EXHAUST FANS ETC. SHALL BE LOCATED AS REQUIRED BY TENANT FINISH DRAWINGS AND ALL EQUIPMENT SHALL BE SCREENED BY PARAPET WALLS.

NOTE-A:
ALL SIGNAGE SHALL BE SUBMITTED UNDER SEPARATE APPLICATION FOR REVIEW AND PERMIT. ALL SIGNS SHALL MEET ORDINANCE AND CONSENT JUDGEMENT REQUIREMENTS.

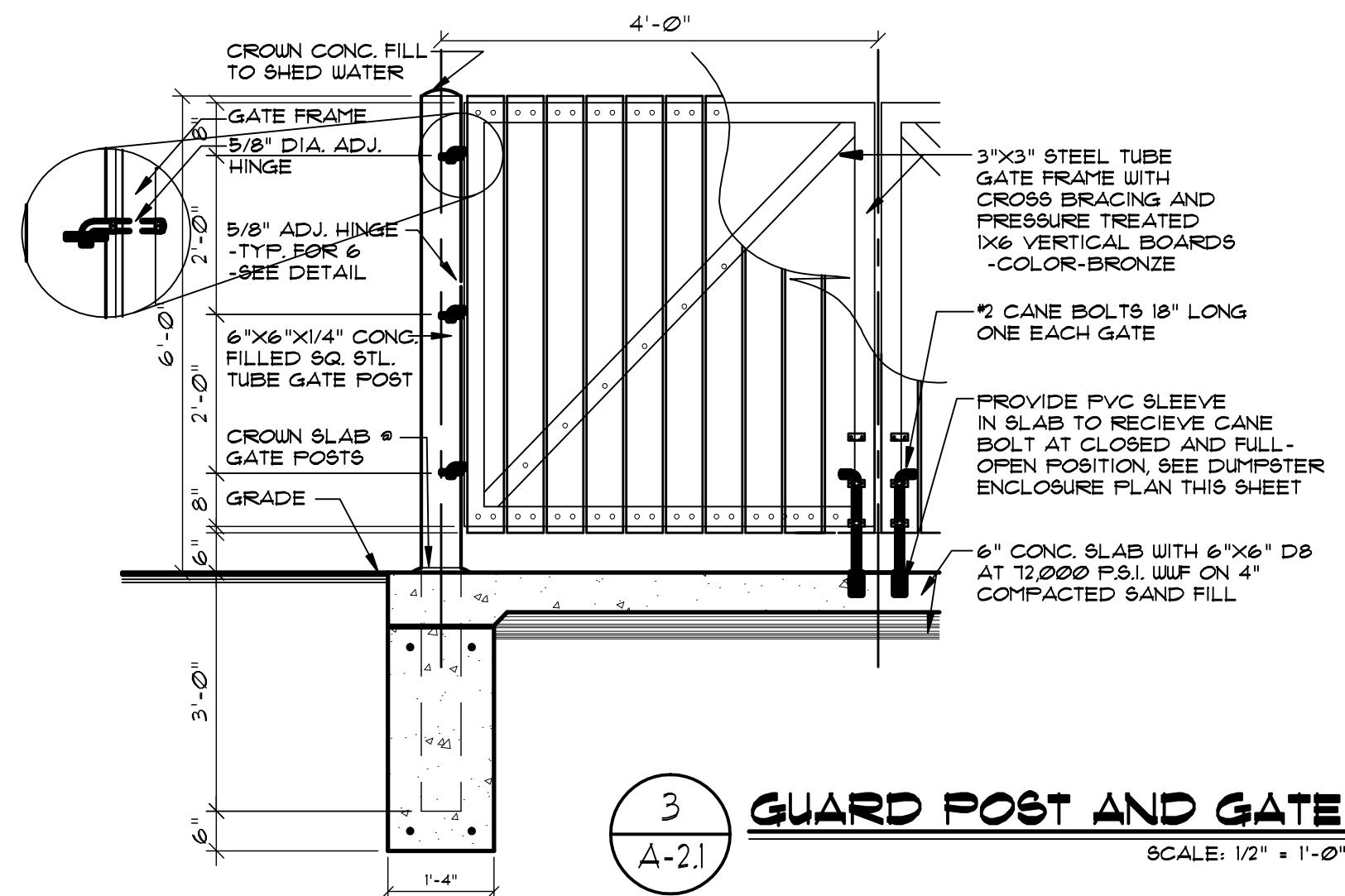




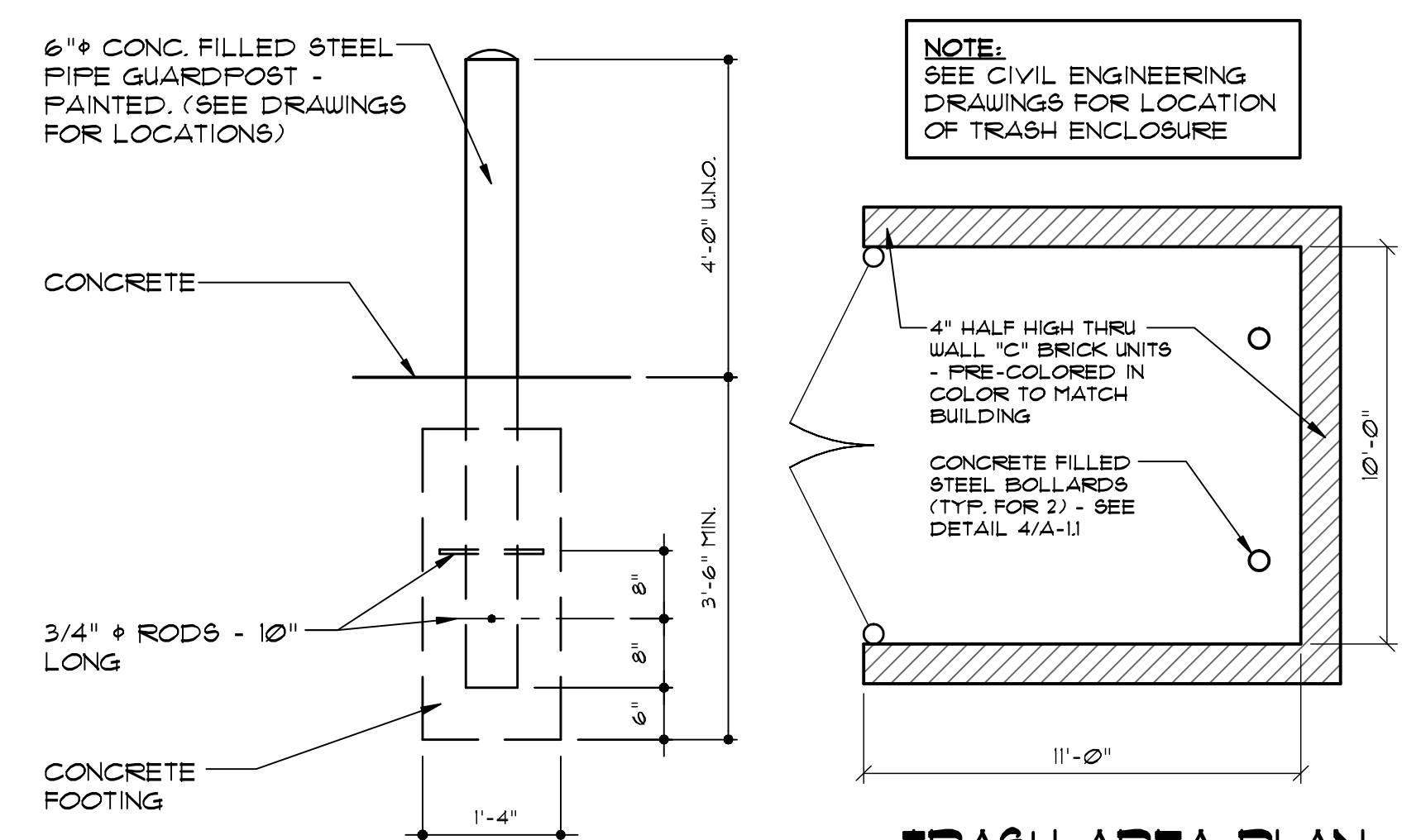
1 TRASH & SCREEN WALL DETAIL
SCALE: 3/8" = 1'-0"



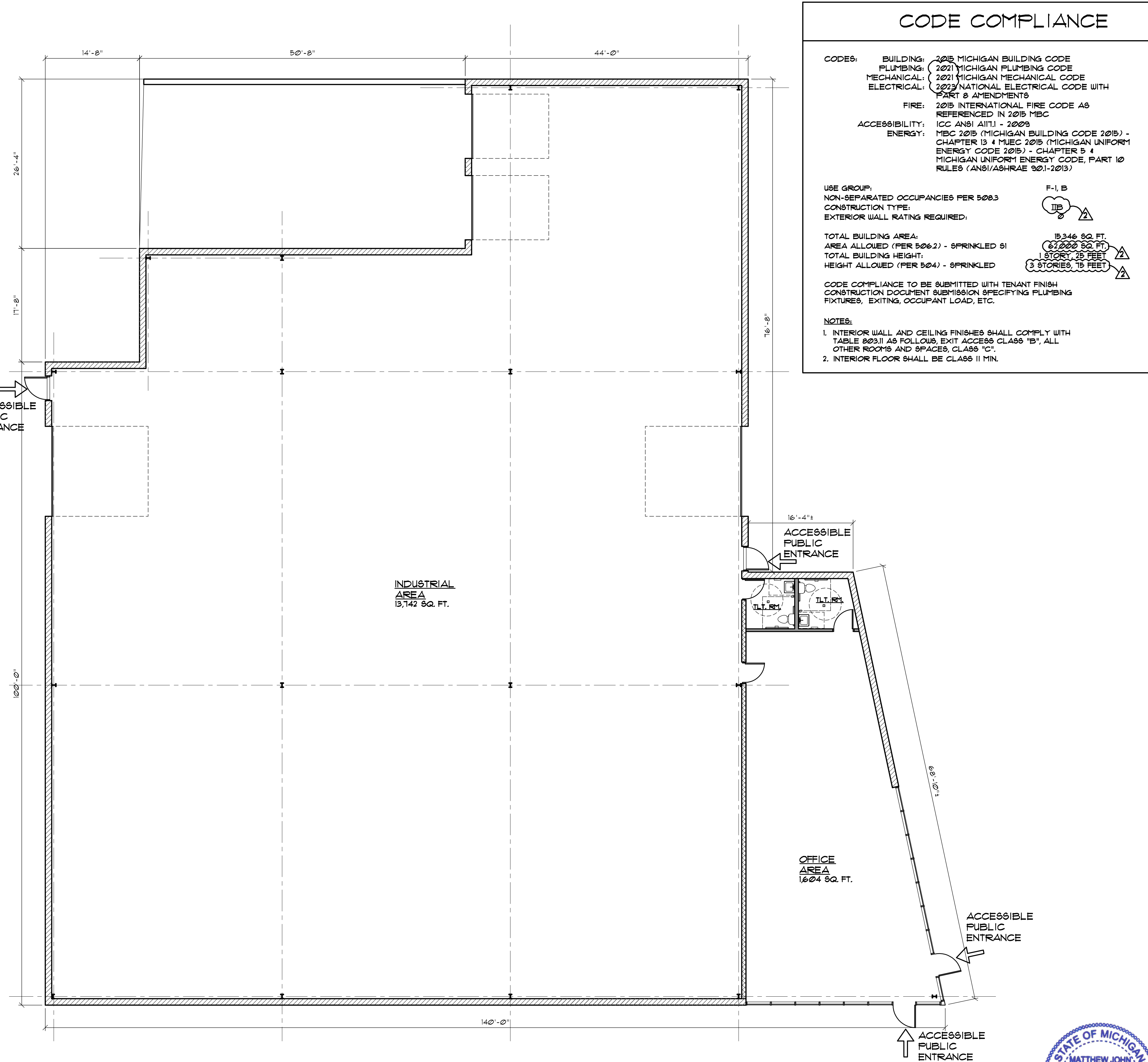
2 GUARD POST AND GATE
SCALE: 1/4" = 1'-0"



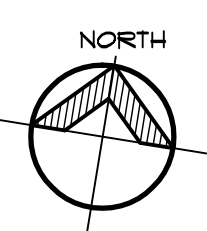
3 GUARD POST AND GATE
SCALE: 1/2" = 1'-0"



4 STEEL GUARDPOST DETAIL
SCALE: 1/2" = 1'-0"



FIRST FLOOR PLAN
15,346 S.F. TOTAL



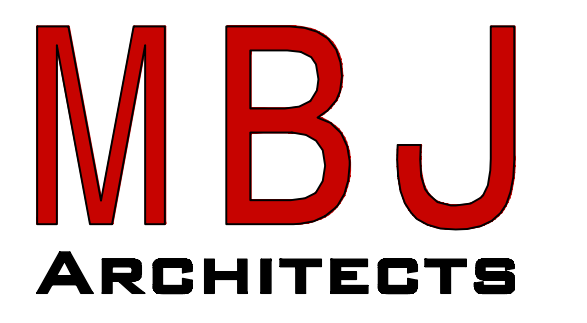
CODE COMPLIANCE

CODES:
 BUILDING: 2015 MICHIGAN BUILDING CODE
 PLUMBING: 2021 MICHIGAN PLUMBING CODE
 MECHANICAL: 2021 MICHIGAN MECHANICAL CODE
 ELECTRICAL: 2023 NATIONAL ELECTRICAL CODE WITH PART 8 AMENDMENTS
 FIRE: 2015 INTERNATIONAL FIRE CODE AS REFERENCED IN 2015 MBC
 ACCESSIBILITY: ICC ANSI A117.1 - 2009
 ENERGY: MBC 2015 (MICHIGAN BUILDING CODE 2015) - CHAPTER 13 & MUEC 2015 (MICHIGAN UNIFORM ENERGY CODE 2015) - CHAPTER 5 & MICHIGAN UNIFORM ENERGY CODE, PART 10 RULES (ANSI/ASHRAE 90.1-2013)

USE GROUP: F-1, B
 NON-SEPARATED OCCUPANCIES PER 500.3
CONSTRUCTION TYPE: II-B
EXTERIOR WALL RATING REQUIRED: 2
TOTAL BUILDING AREA: 15,346 SQ. FT.
AREA ALLOWED (PER 506.2) - SPRINKLED 01: 67,000 SQ. FT.
TOTAL BUILDING HEIGHT: 1 STORY, 25 FEET
HEIGHT ALLOWED (PER 504) - SPRINKLED: 3 STORIES, 75 FEET

CODE COMPLIANCE TO BE SUBMITTED WITH TENANT FINISH CONSTRUCTION DOCUMENT SUBMISSION SPECIFYING PLUMBING FIXTURES, EXITING, OCCUPANT LOAD, ETC.

NOTES:
 1. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH TABLE 003.11 AS FOLLOWS, EXIT ACCESS CLASS "B", ALL OTHER ROOMS AND SPACES, CLASS "C".
 2. INTERIOR FLOOR SHALL BE CLASS II MIN.



30150 Telegraph Rd.
 Suite 150
 Bingham Farms, MI 48025
 248.258.5155



PROPOSED:
INDUSTRIAL BUILDING AT MARKETPLACE OF ROCHESTER HILLS

3900 INDUSTRIAL DR.
 ROCHESTER HILLS,
 MICHIGAN 48309

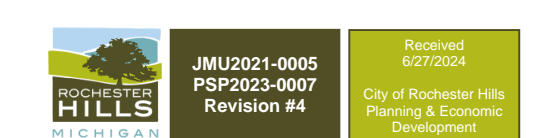
Sheet Title:
FLOOR PLAN - PROPOSED BUILDING "B" LIGHT INDUSTRIAL/ OFFICE

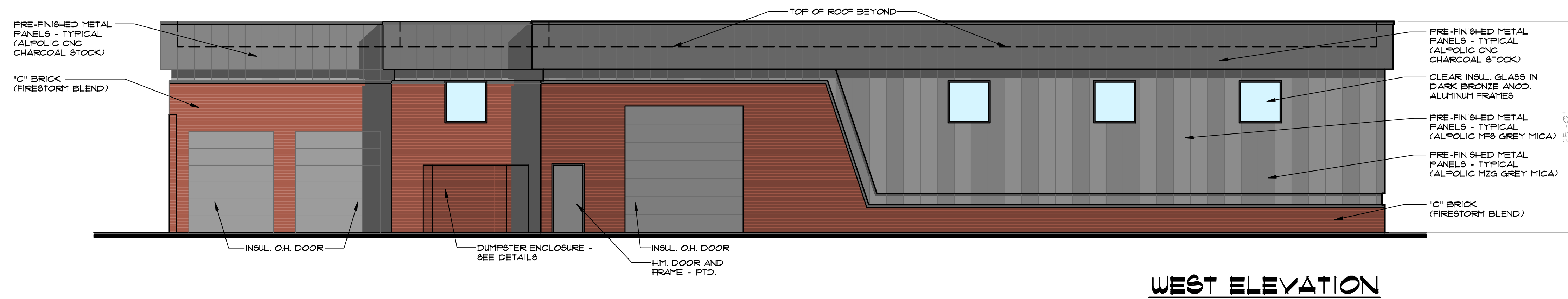
Issued For:
 02-28-24 S.P.A.
 04-05-24 REV. 1
 06-25-24 REV. 2

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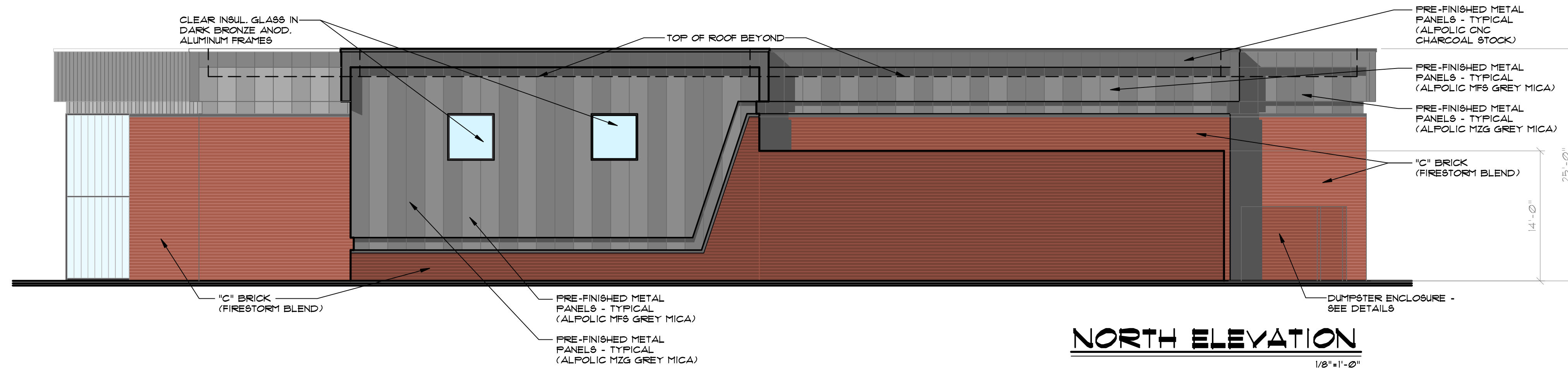
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A = 2.1

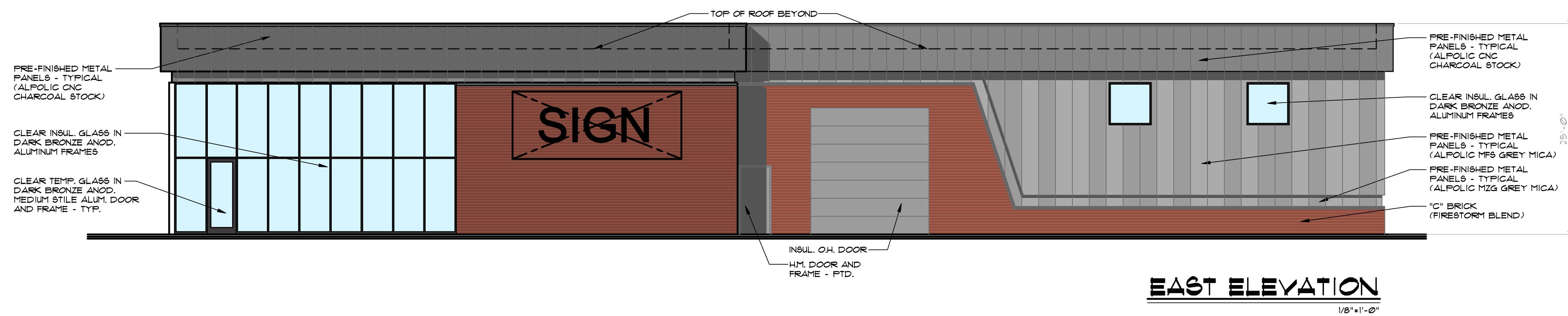




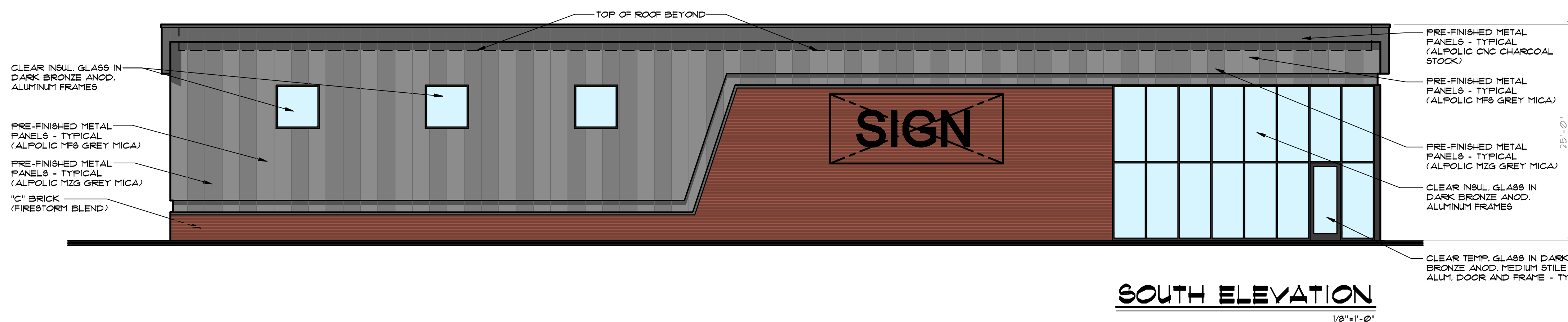
WEST ELEVATION
1/8"=1'-0"



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



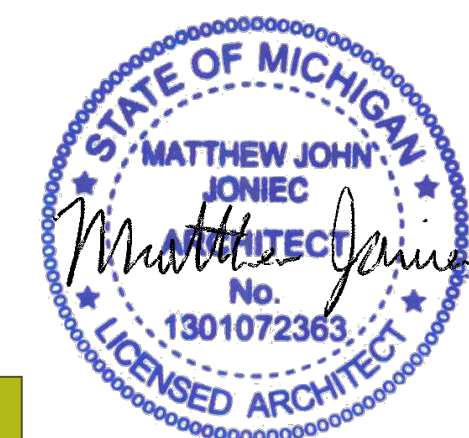
EAST ELEVATION
1/8"=1'-0"



SOUTH ELEVATION
1/8"=1'-0"

NOTE
ALL ROOFTOP HVAC EQUIPMENT INCLUDING H.V.A.C. UNITS, EXHAUST FANS ETC., SHALL BE LOCATED AS REQUIRED BY TENANT FINISH DRAWINGS AND ALL EQUIPMENT SHALL BE SCREENED BY PARAPET WALLS.

NOTE-A:
ALL SIGNAGE SHALL BE SUBMITTED UNDER SEPARATE APPLICATION FOR REVIEW AND PERMIT. ALL SIGNS SHALL MEET ORDINANCE AND CONSENT JUDGEMENT REQUIREMENTS.



CODE COMPLIANCE

CODES: BUILDING: 2015 MICHIGAN BUILDING CODE
 PLUMBING: 2021 MICHIGAN PLUMBING CODE
 MECHANICAL: 2021 MICHIGAN MECHANICAL CODE
 ELECTRICAL: 2023 NATIONAL ELECTRICAL CODE WITH PART 8 AMENDMENTS
 FIRE: 2015 INTERNATIONAL FIRE CODE AS REFERENCED IN 2015 MBC
 ACCESSIBILITY: ICC ANS1 A117.1 - 2009
 ENERGY: MBC 2015 (MICHIGAN BUILDING CODE 2015) - CHAPTER 13 & MUEC 2015 (MICHIGAN UNIFORM ENERGY CODE 2015) - CHAPTER 5 & 4 MICHIGAN UNIFORM ENERGY CODE, PART 10 RULES (ANSI/ASHRAE 90.1-2013)

USE GROUP: A-2
 NON-SEPARATED OCCUPANCIES PER 500.3
 CONSTRUCTION TYPE: VB
 EXTERIOR WALL RATING REQUIRED: 0

TOTAL BUILDING AREA: 2,014 SQ. FT.
 AREA ALLOWED (PER 506.2) - NON-SPRINKLED: 6,000 SQ. FT.
 TOTAL BUILDING HEIGHT: 1 STORY, 21 FEET
 HEIGHT ALLOWED (PER 504) - NON-SPRINKLED: 1 STORY, 40 FEET

CODE COMPLIANCE TO BE SUBMITTED WITH TENANT FINISH CONSTRUCTION DOCUMENT SUBMISSION SPECIFYING PLUMBING FIXTURES, EXITING, OCCUPANT LOAD, ETC.

- NOTES:**
- INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH TABLE 803.11 AS FOLLOWS, EXIT ACCESS CLASS "B", ALL OTHER ROOMS AND SPACES, CLASS "C".
 - INTERIOR FLOOR SHALL BE CLASS II MIN.

MBJ

ARCHITECTS

30150 Telegraph Rd.
 Suite 150
 Bingham Farms, MI 48025
 248.258.5155

Formerly:

MBA MICHAEL A. BOSSIO ASSOCIATES ARCHITECTS

PROPOSED:
DRIVE-THRU AT MARKETPLACE OF ROCHESTER HILLS

3900 INDUSTRIAL DR.
 ROCHESTER HILLS,
 MICHIGAN 48309

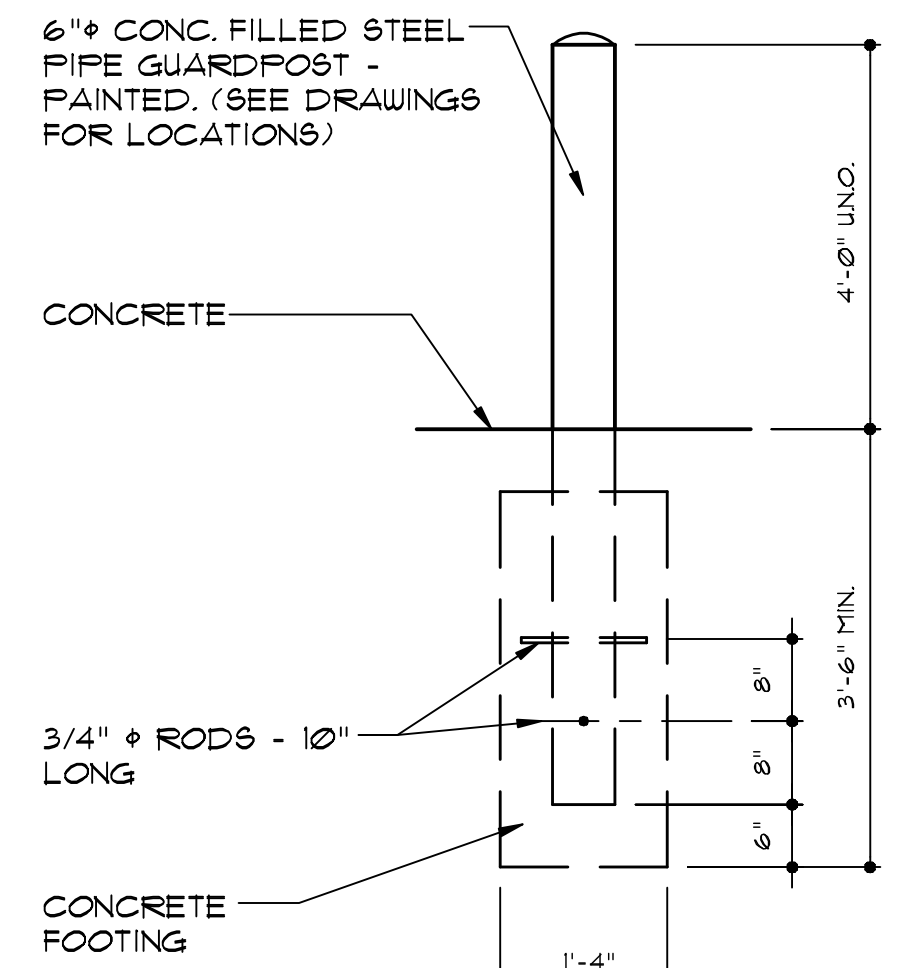
Sheet Title:
FLOOR PLAN - PROPOSED BUILDING "C" RESTAURANT/ DRIVE-THRU

Issued For:
 02-28-24 S.P.A.
 04-05-24 REV.

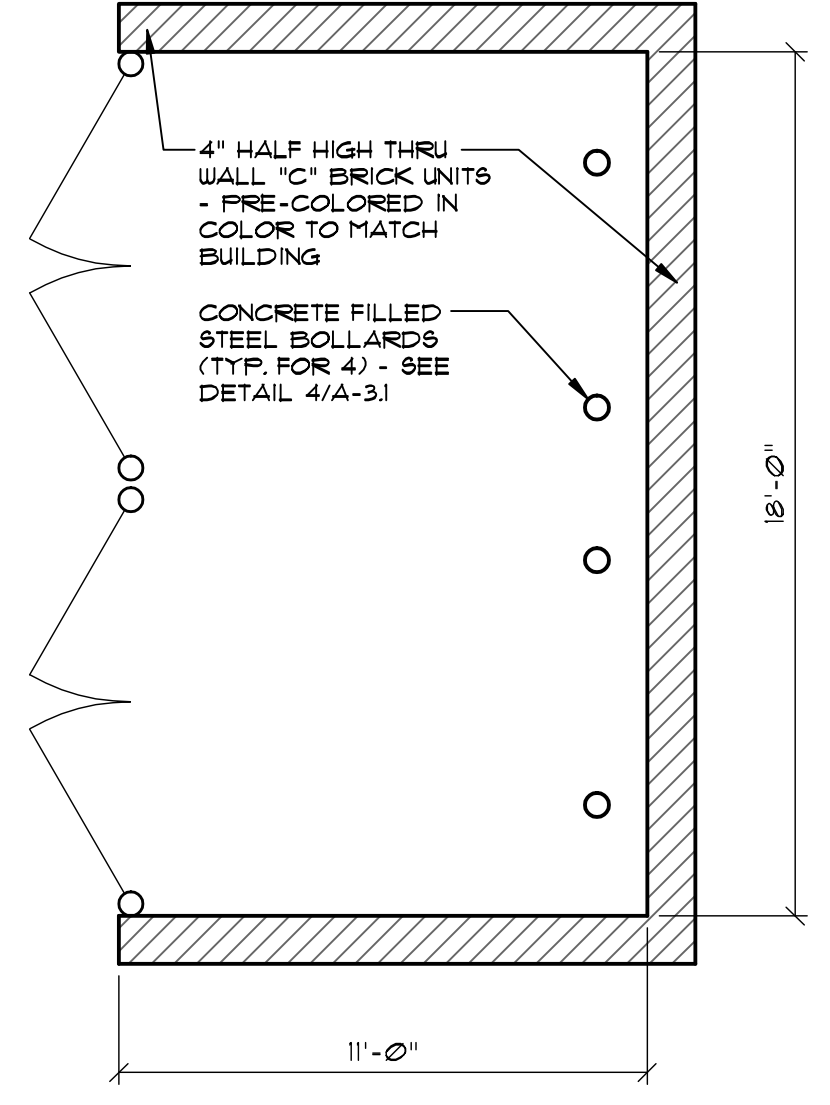
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Sheet No.

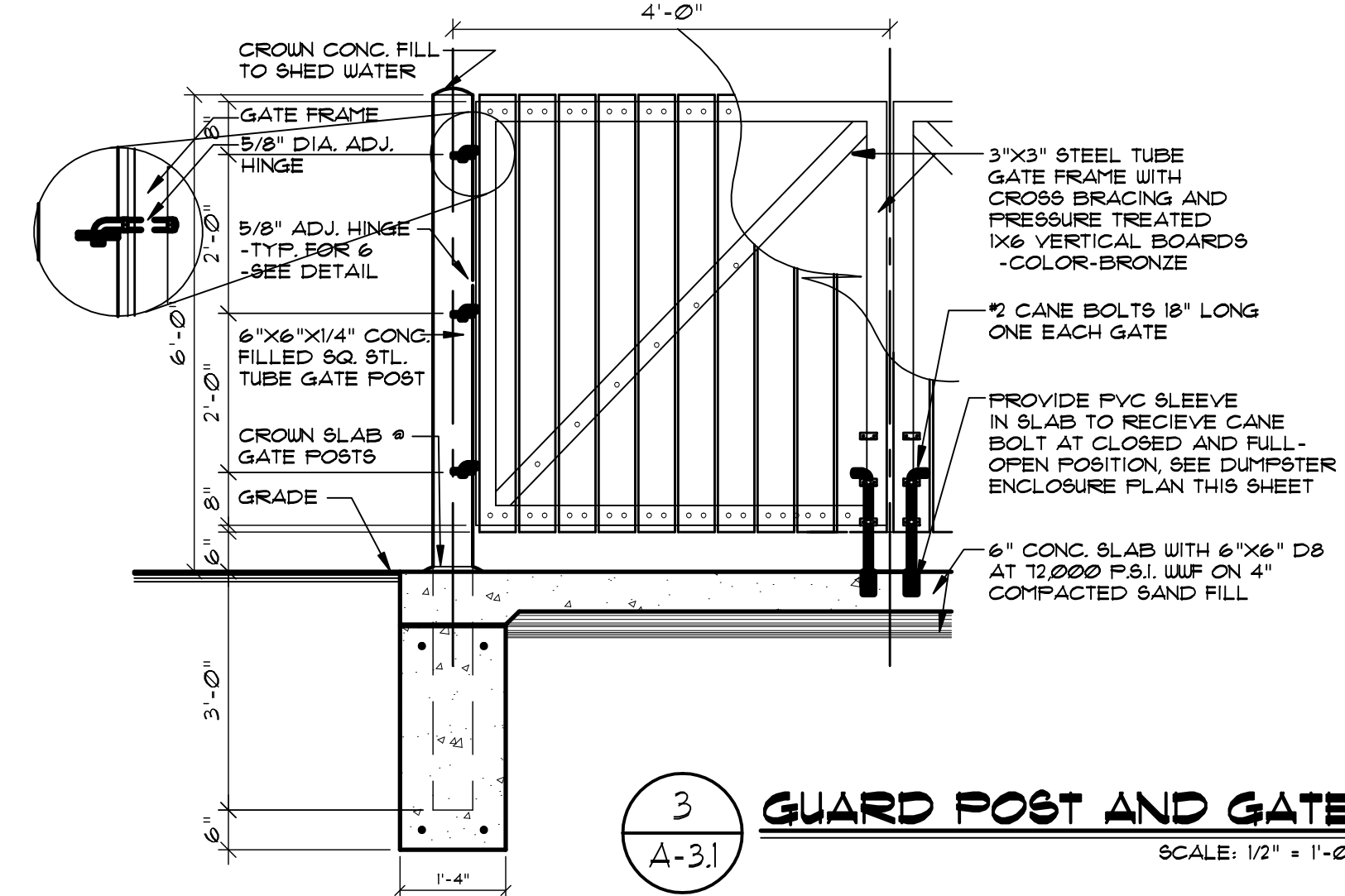
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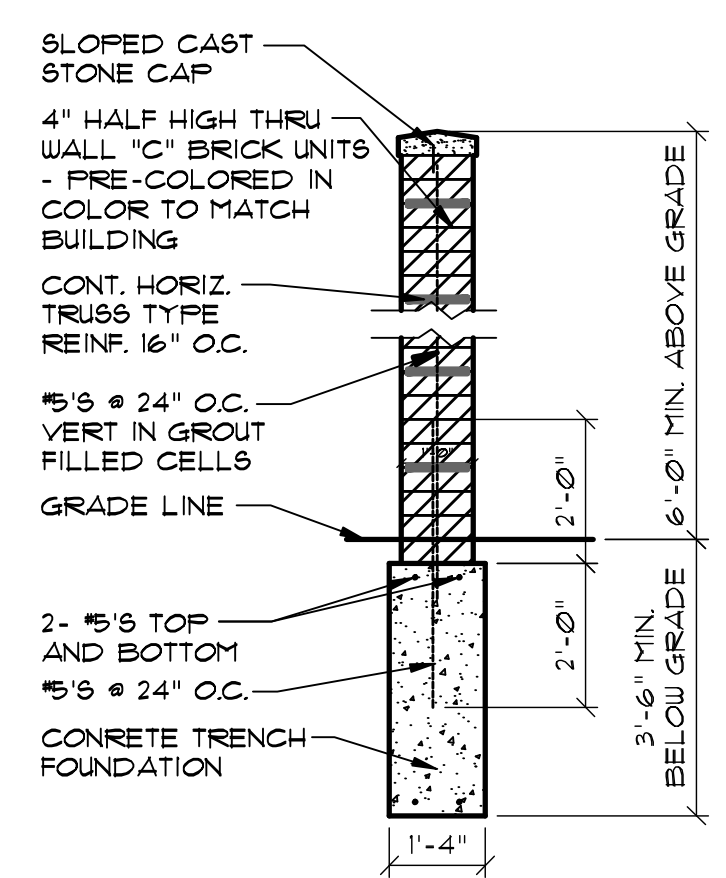
4 STEEL GUARDPOST DETAIL
A-3.1 SCALE: 1/2" = 1'-0"



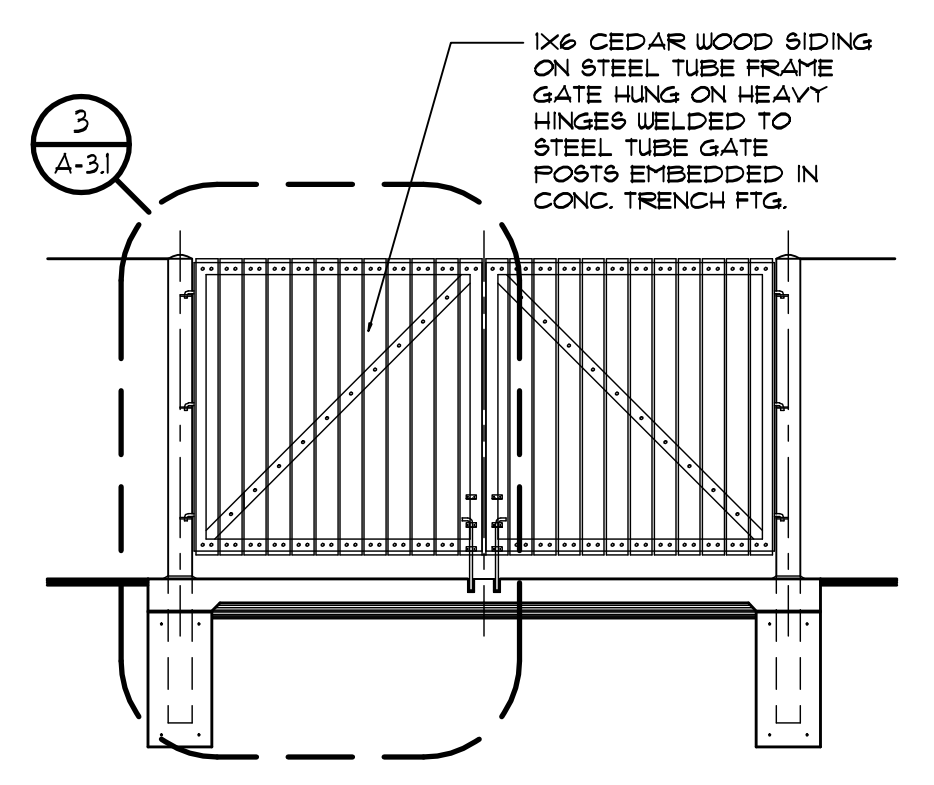
TRASH AREA PLAN
SCALE: 1/4" = 1'-0"



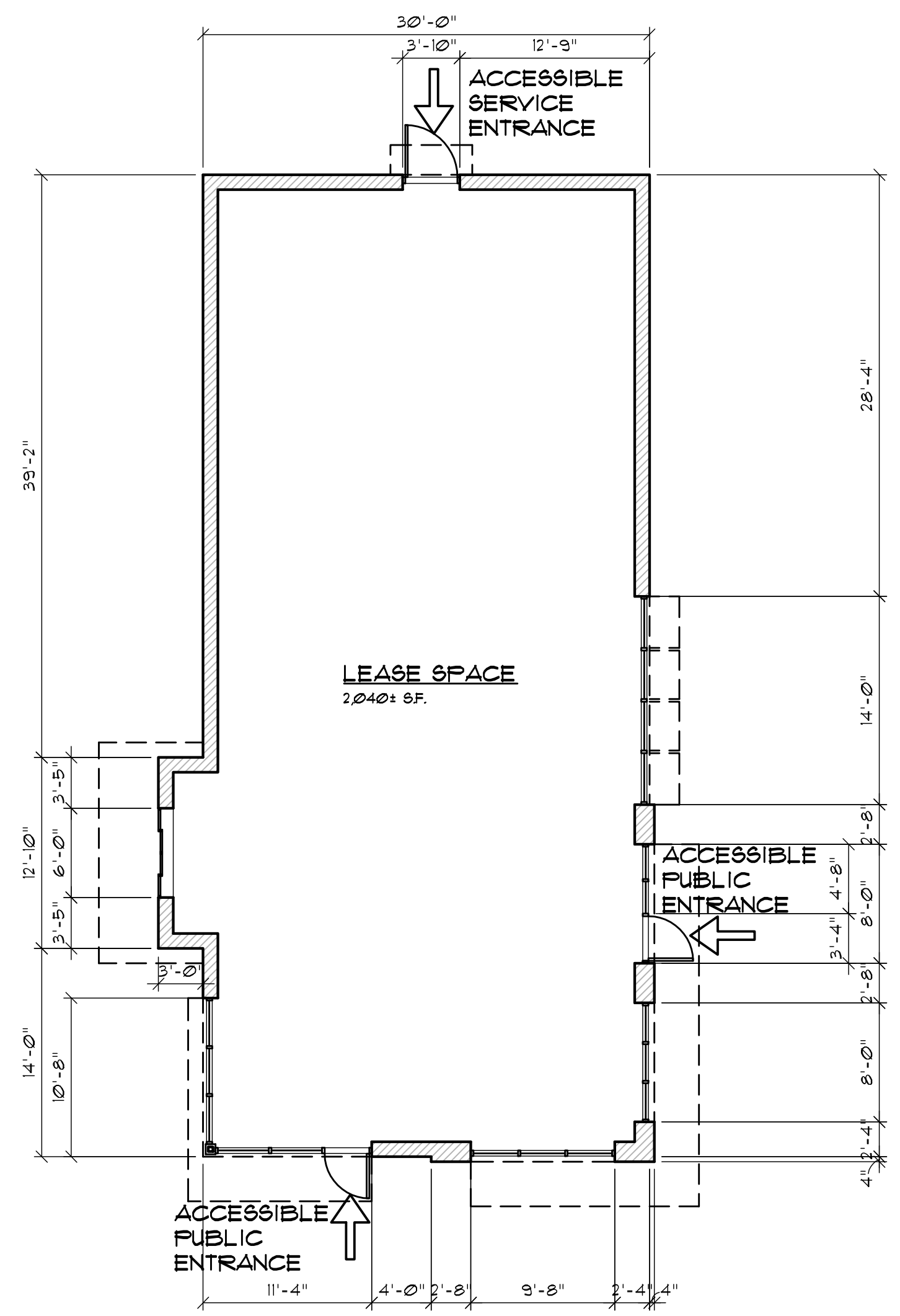
3 GUARD POST AND GATE
A-3.1 SCALE: 1/2" = 1'-0"



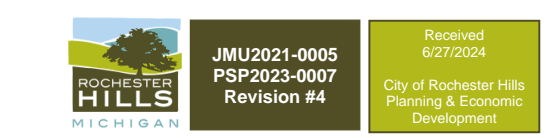
1 TRASH & SCREEN WALL DETAIL
A-3.1 SCALE: 3/8" = 1'-0"

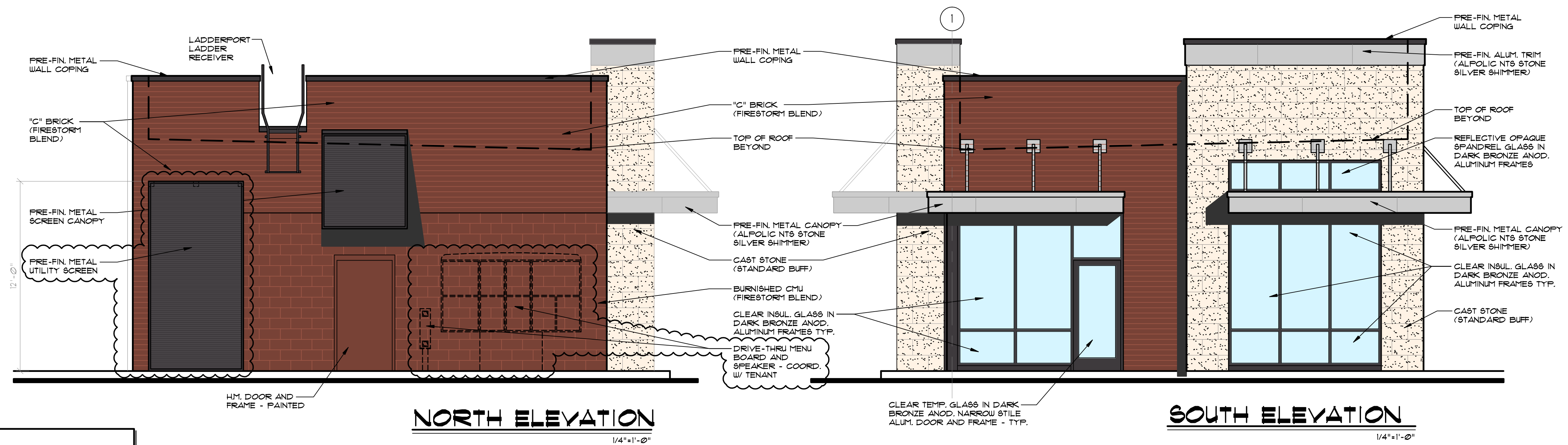


2 GUARD POST AND GATE
A-3.1 SCALE: 1/4" = 1'-0"



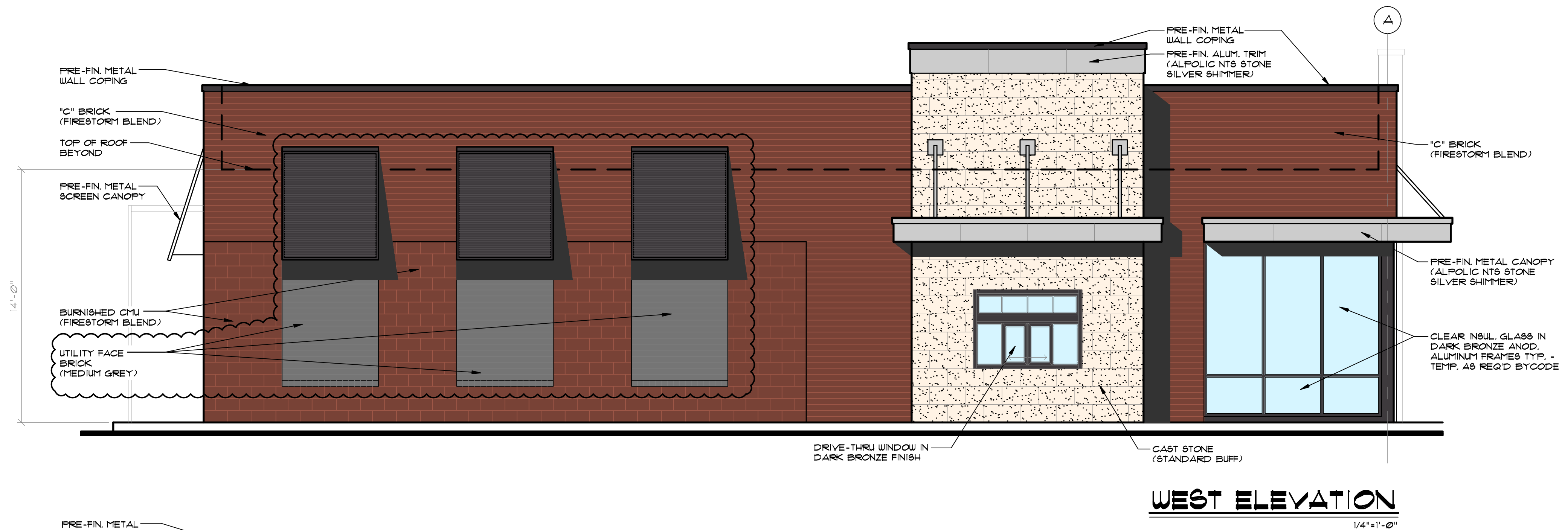
FIRST FLOOR PLAN
1/8" = 1'-0"

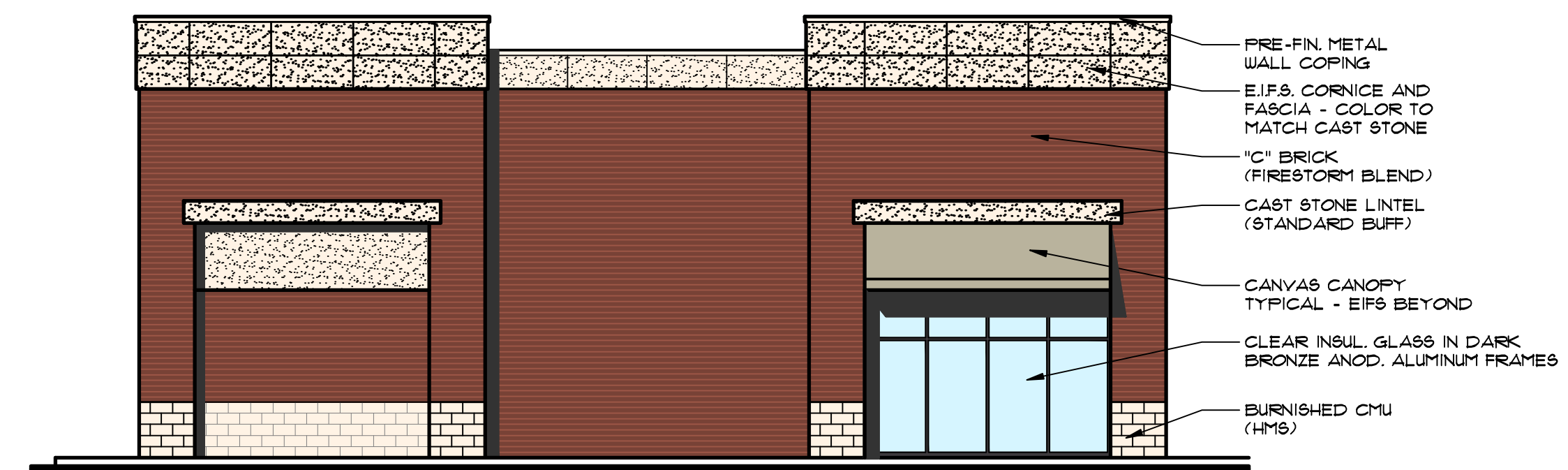




NOTE
ALL ROOFTOP HVAC EQUIPMENT INCLUDING HVAC UNITS, EXHAUST FANS ETC. SHALL BE LOCATED AS REQUIRED BY TENANT FINISH DRAWINGS AND ALL EQUIPMENT SHALL BE SCREENED BY PARAPET WALLS.

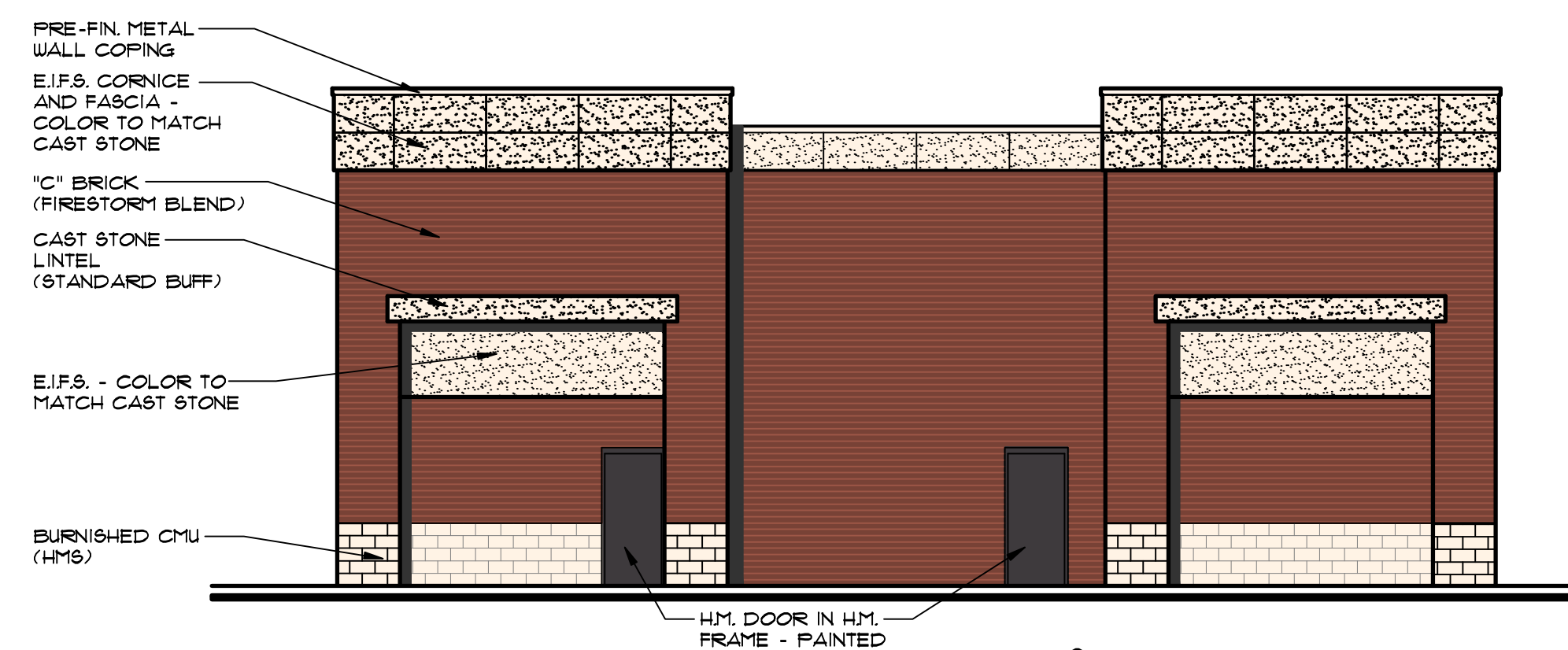
NOTE-A:
ALL SIGNAGE SHALL BE SUBMITTED UNDER SEPARATE APPLICATION FOR REVIEW AND PERMIT. ALL SIGNS SHALL MEET ORDINANCE AND CONSENT JUDGEMENT REQUIREMENTS.





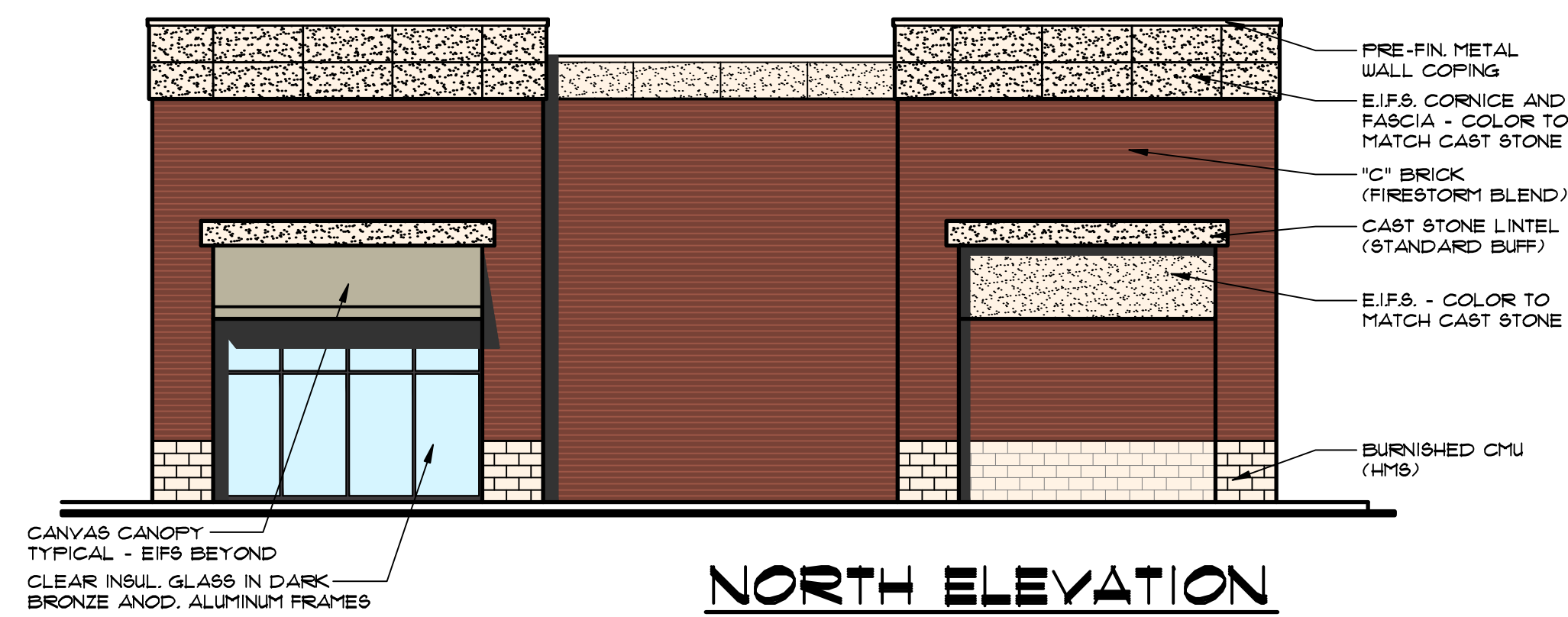
SOUTH ELEVATION

1/8"=1'-0"



WEST ELEVATION

1/8"=1'-0"



NORTH ELEVATION

1/8"=1'-0"

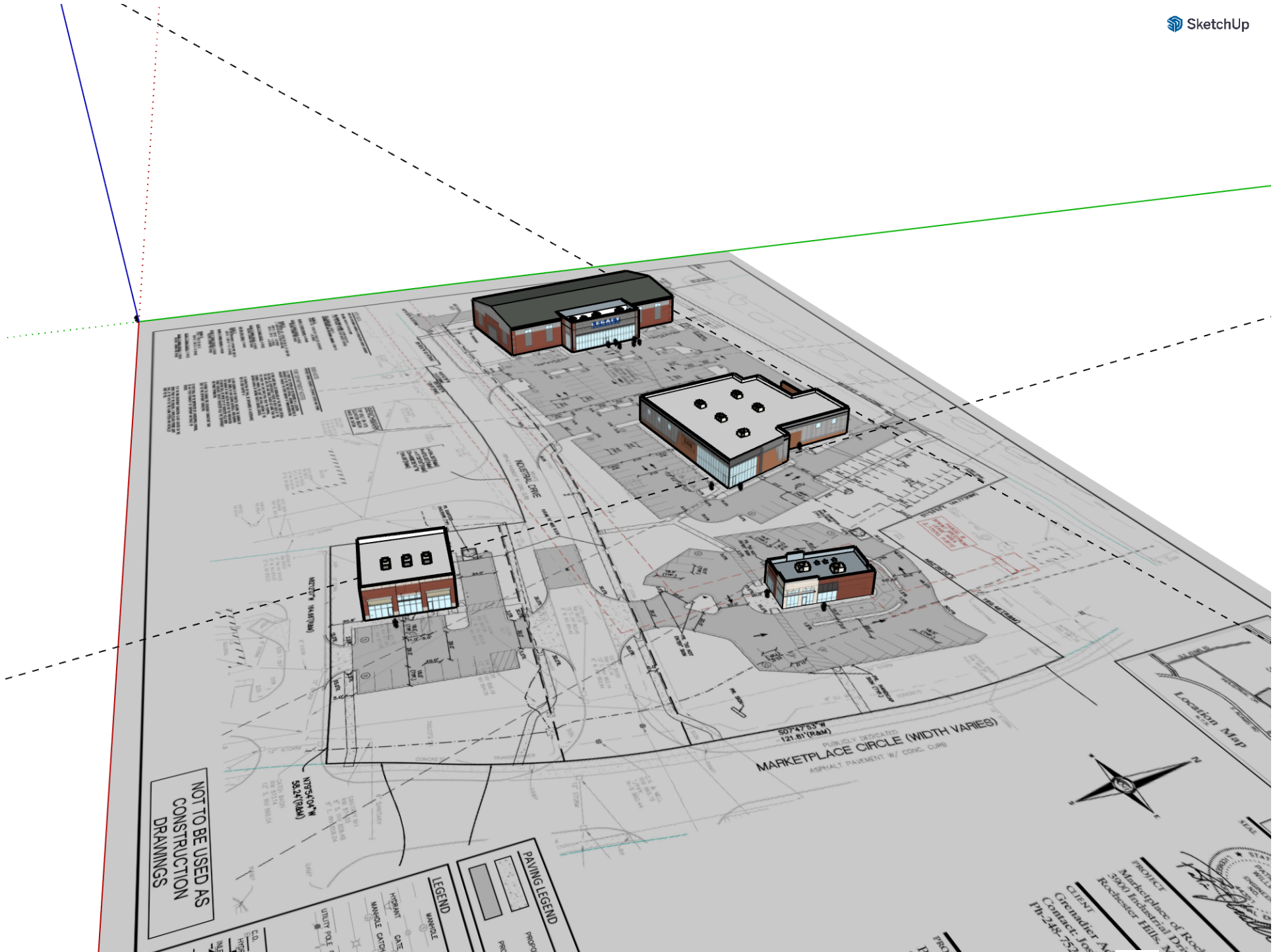


EAST ELEVATION

1/8"=1'-0"

NOTE
ALL ROOFTOP HVAC EQUIPMENT INCLUDING HVAC UNITS, EXHAUST FANS ETC, SHALL BE LOCATED AS REQUIRED BY TENANT FINISH DRAWINGS AND ALL EQUIPMENT SHALL BE SCREENED BY PARAPET WALLS.

NOTE-A:
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NOT TO BE USED AS
CONSTRUCTION
DRAWINGS

LEGEND

[Symbol]	UNPAVED
[Symbol]	HYDRANT
[Symbol]	DATE
[Symbol]	MANHOLE COVER
[Symbol]	UTILITY POLE

PAVING LEGEND

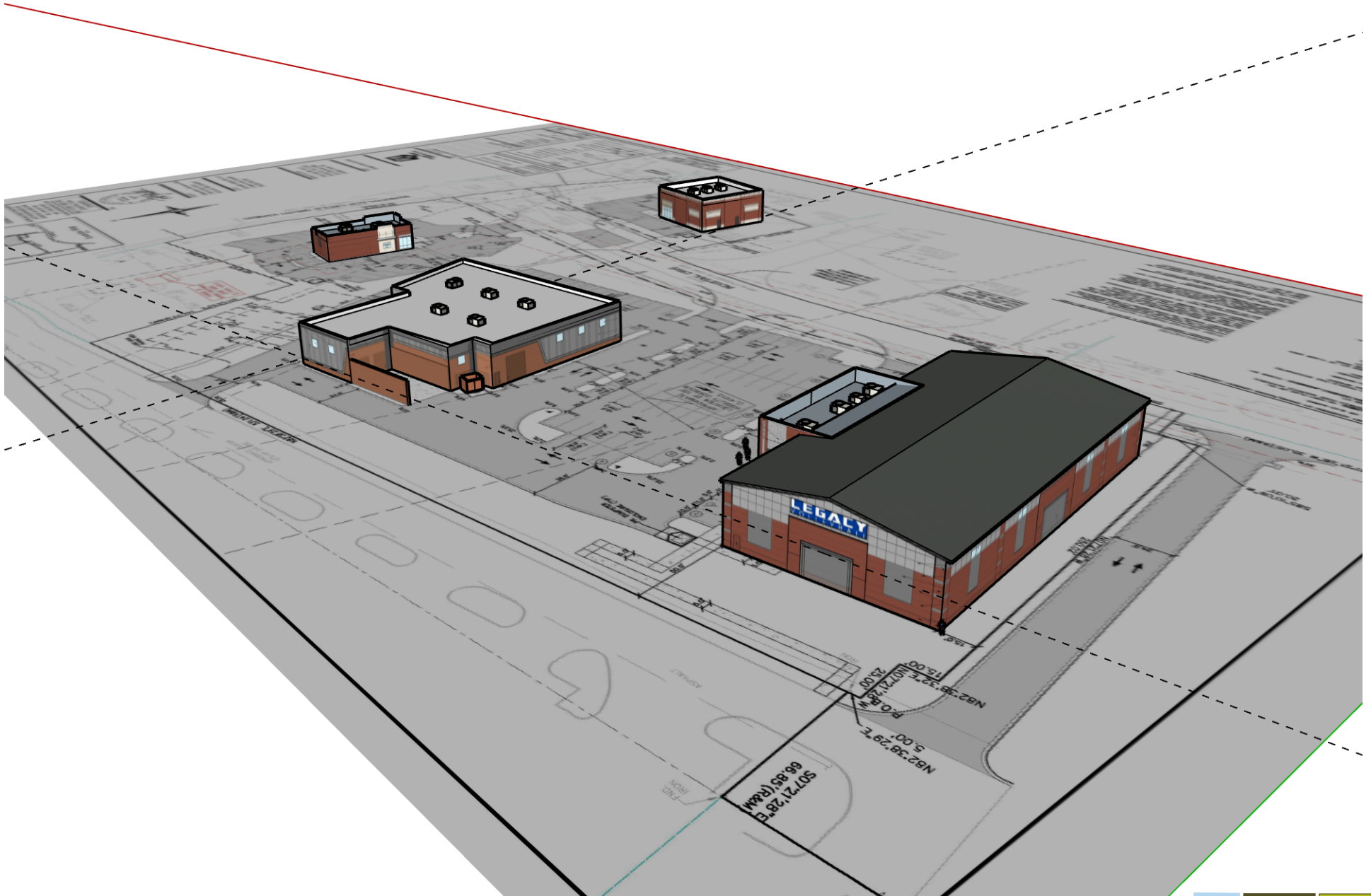
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[Symbol]	ASPH

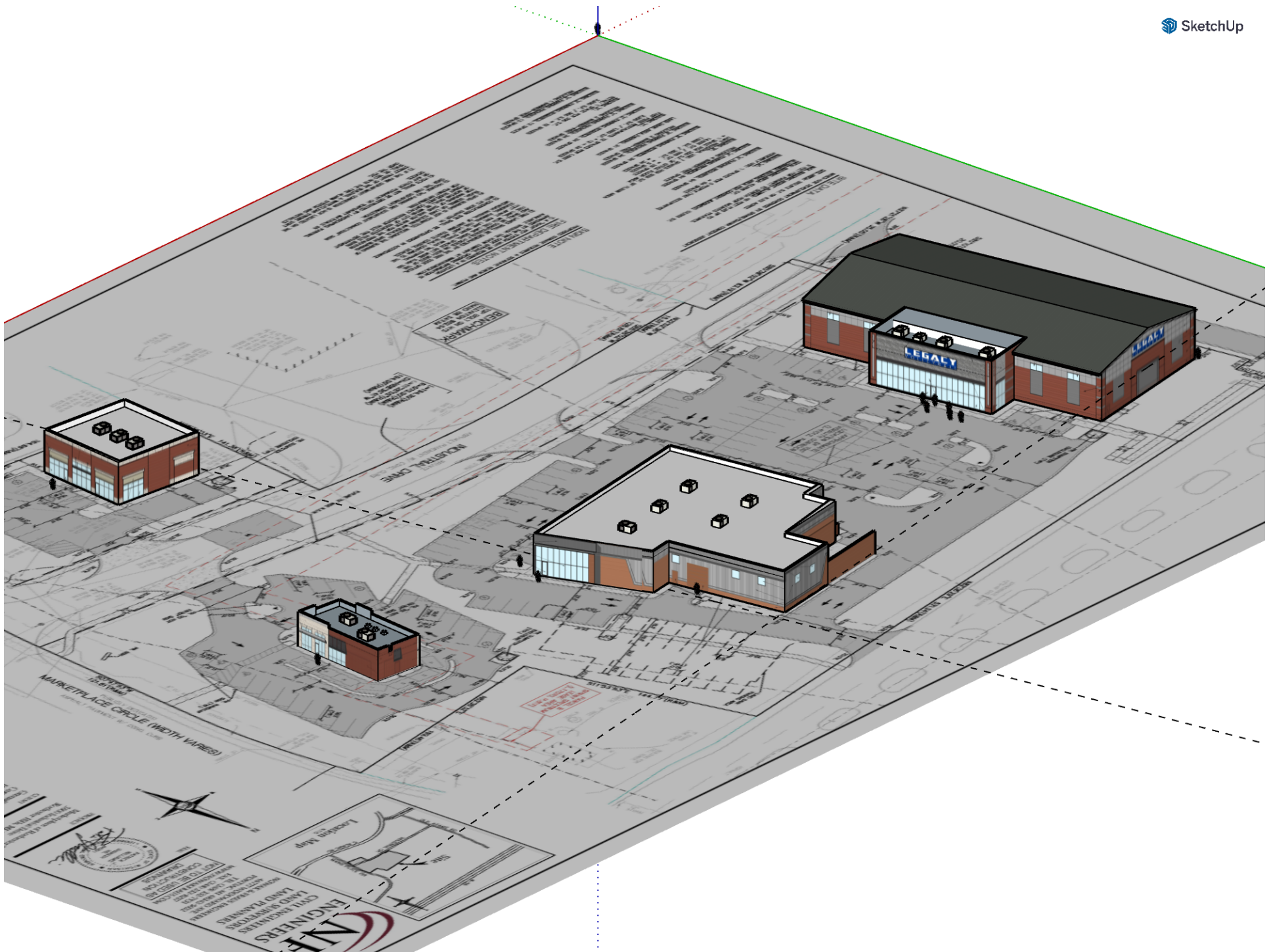
PROJECT
Marketplace of Rochester Hills
500 Industrial Drive
Rochester Hills, MI 48063

CLIENT
Grenadier Associates
Contact: Joe
PH-248-752

SCALE

Location Map





Site Plan w Aerials.pdf Markup Summary

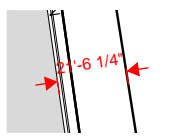
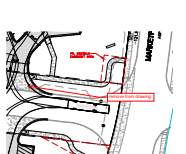
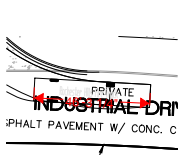
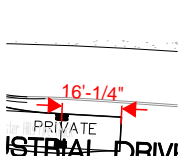

Building Department (2)

	<p>Subject: Building Department Author: Mark Artinian Date: 7/8/2024 4:39:51 PM Status:</p>	<p>Mark Artinian 248-841-2446 ArtinianM@RochesterHills.org</p>
<p>Yes</p>	<p>Subject: Building Department Author: Mark Artinian Date: 7/8/2024 4:40:47 PM Status:</p>	<p>Yes</p>

Engineering Department (1)

	<p>Subject: Engineering Department Author: Jason Boughton Date: 7/1/2024 9:26:25 AM Status:</p>	
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Fire Department (5)

	<p>Subject: Fire Department Author: Ann Echols Date: 7/1/2024 7:14:08 AM Status:</p>	<p>21'-6 1/4"</p>
	<p>Subject: Fire Department Author: Ann Echols Date: 7/1/2024 7:52:54 AM Status:</p>	<p>remove from drawing</p>
	<p>Subject: Fire Department Author: Ann Echols Date: 7/1/2024 7:56:25 AM Status:</p>	<p>46'-3 1/4"</p>
	<p>Subject: Fire Department Author: Ann Echols Date: 7/1/2024 7:56:31 AM Status:</p>	<p>16'-1/4"</p>
	<p>Subject: Fire Department Author: Ann Echols Date: 7/1/2024 8:03:17 AM Status:</p>	

Group (22)

	<p>Subject: Group Author: macdonaldj Date: 6/28/2024 2:16:00 PM Status:</p>	<p>City of Rochester Hills Planning & Economic Development</p>
---	--	--



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:36:07 PM
Status:



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:38:16 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:38:22 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



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Author: C.McLeod
Date: 7/15/2024 3:38:25 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:38:30 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:38:42 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 7/15/2024 3:38:46 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



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Date: 7/15/2024 3:38:51 PM
Status:

Received
6/27/2024

City of Rochester Hills Planning & Economic
Development



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Date: 7/15/2024 3:38:56 PM
Status:

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6/27/2024

City of Rochester Hills Planning & Economic
Development



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Date: 7/15/2024 3:39:02 PM
Status:

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6/27/2024

City of Rochester Hills Planning & Economic
Development



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6/27/2024

City of Rochester Hills Planning & Economic
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6/27/2024

City of Rochester Hills Planning & Economic
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6/27/2024

City of Rochester Hills Planning & Economic
Development



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6/27/2024

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Development



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Status:

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6/27/2024

City of Rochester Hills Planning & Economic
Development



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Status:

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6/27/2024

City of Rochester Hills Planning & Economic
Development



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Date: 7/15/2024 3:39:44 PM
Status:

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6/27/2024

City of Rochester Hills Planning & Economic
Development



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6/27/2024

City of Rochester Hills Planning & Economic
Development



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6/27/2024

City of Rochester Hills Planning & Economic
Development



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City of Rochester Hills Planning & Economic
Development



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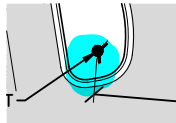
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City of Rochester Hills Planning & Economic
 Development

Highlight (16)



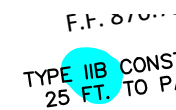
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Author: Ann Echols
Date: 7/1/2024 7:13:24 AM
Status:



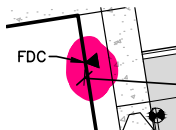
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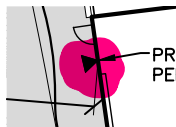
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Status:



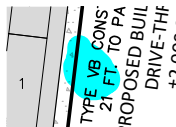
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Author: Ann Echols
Date: 7/1/2024 7:13:42 AM
Status:



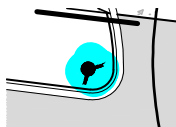
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Date: 7/1/2024 7:13:46 AM
Status:



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Date: 7/1/2024 7:51:24 AM
Status:



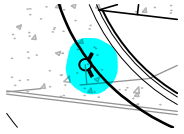
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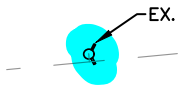
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Author: Ann Echols
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Status:

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F.F. 877.2
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26 FT. TO PAR

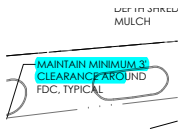
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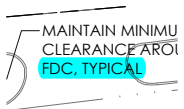


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Author: Ann Echols
Date: 7/1/2024 7:55:53 AM
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Subject: Highlight
Author: Ann Echols
Date: 7/1/2024 7:57:24 AM
Status:

MAINTAIN MINIMUM 3'
CLEARANCE ARO

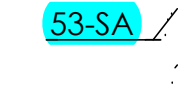


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Author: Ann Echols
Date: 7/1/2024 7:57:26 AM
Status:

FDC, TYPICAL

Subject: Highlight
Author: Ann Echols
Date: 7/1/2024 8:00:32 AM
Status:

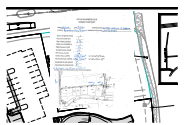
SA 53 Dwarf Arctic Willow
Salix purpurea 'Nana' 30" HT CONT
42" OC



Subject: Highlight
Author: Ann Echols
Date: 7/1/2024 8:00:46 AM
Status:

53-SA

Image (1)



Subject: Image
Author: Ann Echols
Date: 7/1/2024 8:02:30 AM
Status:

Jenny McGuckin - YES (1)



Subject: Jenny McGuckin - YES
Author: Jenny McGuckin
Date: 7/1/2024 7:27:57 AM
Status:

Natural Resouces (1)

Subject: Natural Resouces
Author: Matt Einheuser
Date: 7/12/2024 9:47:54 AM
Status:

Planning Department (2)

Assessing	Yes	Subject: Planning Department Author: C.McLeod Date: 7/15/2024 3:24:42 PM Status:	Assessing	Yes
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Chris McLeod 248-641-0272 mcleodc@richland.edu	Yes	Subject: Planning Department Author: C.McLeod Date: 7/18/2024 8:45:46 AM Status:		
<u>Civil Engineer</u>				

Traffic (1)

Keith Fraus 248-641-0232 keithf@richland.edu	Yes	Subject: Traffic Author: Keith Date: 7/17/2024 2:35:07 PM Status:		
<u>Civil Engineer</u> NOWAK & FRAUS ENGINEERS 4677 Woodward Ave. Pontiac, MI 48342-5232				