

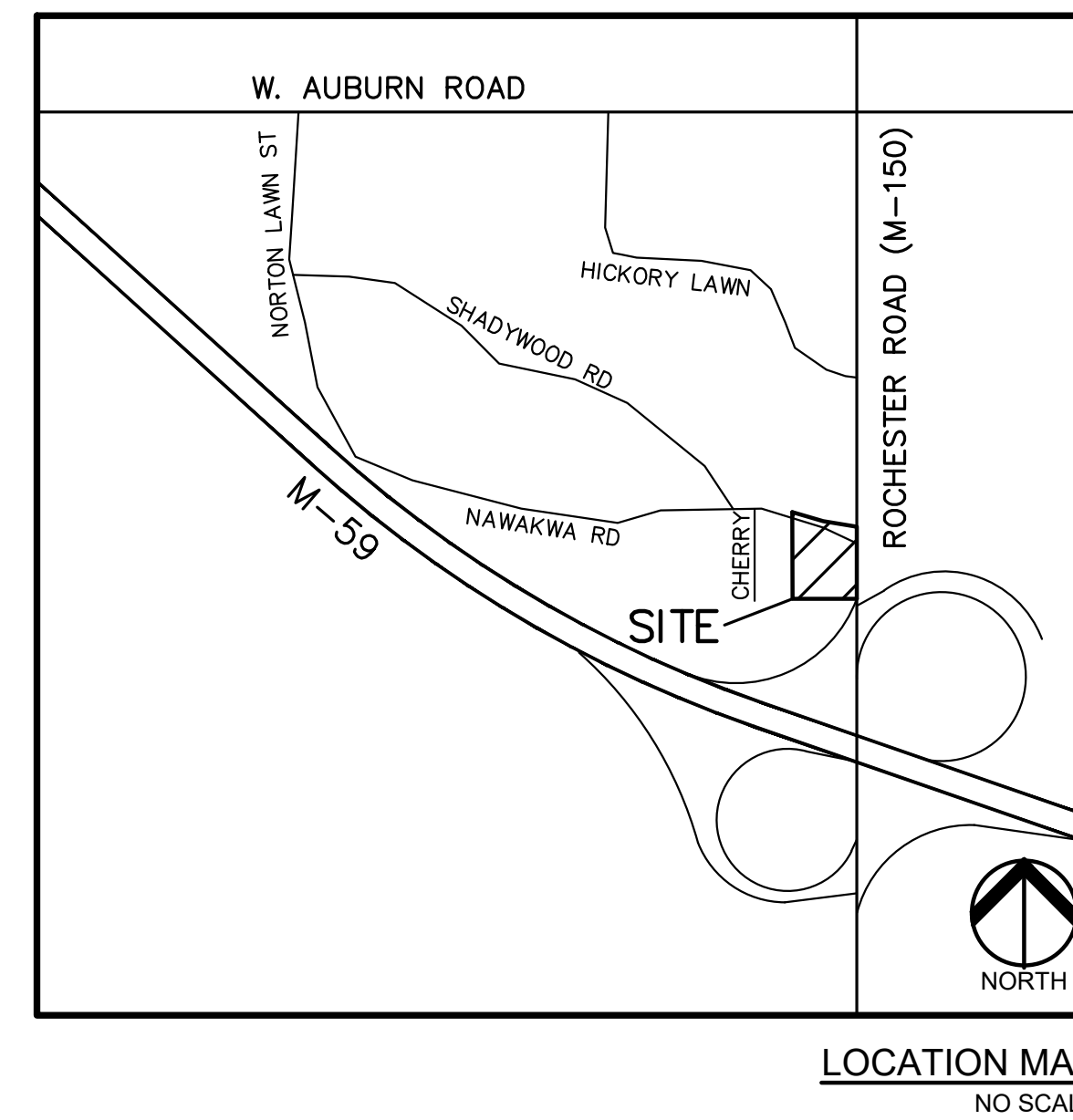
PRELIMINARY SITE PLANS

3420 ROCHESTER ROAD

3420 ROCHESTER ROAD
 ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL

INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-3.1	PRELIMINARY SITE PLAN
C-3.2	FIRE TRUCK TURNING PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-9.1	NOTES AND DETAILS
C-9.2	NOTES AND DETAILS
C-9.3	DETAILS
C-9.4	M.D.O.T. DETAILS
L-1.0	LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
T-1.0	TREE PLAN
A.101	FLOOR PLAN
A.102	MEZZ FLOOR PLAN
A.201	EXTERIOR ELEVATIONS
A.202	EXTERIOR RENDERINGS
SP.101	SITE LIGHTING PHOTOMETRIC PLAN
SP.102	SITE LIGHTING CUT SHEET



JNRNB2022-0009
PSP2022-0020
Revision #2
 Received 4/22/24

City of Rochester 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	No
Engineering - Utilities	Jason Boughton 248-841-2490 BoughtonJ@RochesterHills.org	Yes
Engineering Legal	Jenny McGuckin 248-841-2494 mcguckinj@rochesterhills.org	NO Date: 05/02/2024
Fire	Lt. Jon Mills 248-841-2708 MillsJ@RochesterHills.org	No
Natural Resources	Matt Einheuser 248-841-2551 EinheuserM@RochesterHills.org	Yes
Planning	Chris McLeod 248-841-2572 mcleodc@RochesterHills.org	No
Traffic	Keith Depp 248-841-2503 DeppK@RochesterHills.org	No

- SP
- CU
- LIP
- BP
- TRP

For all conditional uses, a "Conditional Use Proposed Sign" shall be placed onsite no less than fifteen (15) days prior to the public hearing date. Such sign shall be compliant with Section 138-1.203 of City Ordinances.

Next Steps: Submit revised site plans addressing reviewers comments. **ADM**

DESIGN TEAM

<p>OWNER/APPLICANT/DEVELOPER</p> <p>3420 ROCHESTER ROAD, LLC 29200 NORTHWESTERN HWY, SUITE 450 FARMINGTON HILLS, MI 48334 CONTACT: KENNY KOZA PHONE: 248.770.0204 EMAIL: KENNY@AZOKGROUP.COM</p>	<p>CIVIL ENGINEER</p> <p>PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: JAMES P. BUTLER, PE PHONE: 844.813.2949 EMAIL: JBUTLER@PEAGROUP.COM</p>
<p>ARCHITECT</p> <p>GAV & ASSOCIATES INC. 24001 ORCHARD LAKE RD #180a FARMINGTON, MI 48336 CONTACT: MEL BEBA PHONE: 248.985.9101 EMAIL: MEL@GAVASSOCIATES.COM</p>	<p>LANDSCAPE ARCHITECT</p> <p>PEA GROUP 7927 MEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM</p>



REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	8/15/2022
SITE/UTILITY LAYOUT	12/20/2023
SITE/UTILITY LAYOUT	4/17/2024



The applicant needs to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process.

NOT FOR CONSTRUCTION

City File #22-029 Section #34 in the lower right hand corner of each sheet

BENCHMARKS
(GPS DERIVED - NAVD88 DATUM)

BM #300
ARROW ON HYDRANT AT THE NORTHWEST CORNER OF ROCHESTER ROAD AND NAWAKWA ROAD.
ELEV. - 740.28

BM #301
SET BENCHMARK IN SOUTH FACE OF UTILITY POLE AT THE NORTHWEST CORNER OF NAWAKWA ROAD AND CHERRY ROAD.
ELEV. - 749.41

BM #302
ARROW ON HYDRANT EAST OF HOUSE #3466 CHERRY ROAD.
ELEV. - 748.12

BM #303
DIMPLE ON NORTHWEST BOLT OF STRAIN POLE JUST NORTH OF THE M-59 WEST RAMP.
ELEV. - 738.60

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER NON-PRINTED PANEL FLOOD INSURANCE RATE MAP NUMBER 26125C-0394F, DATED JANUARY 16, 2009.

LEGAL DESCRIPTION:
(TAX PARCEL 15-34-277-006)
(PER FIRST AMERICAN TITLE INSURANCE COMPANY, POLICY No. OP 405833, DATED JAN. 19, 2010)

Real property in the City of Rochester Hills, County of Oakland, State of Michigan, described as follows:

Part of Lots 64 and 65 of Avoncroft Subdivision, as recorded in Liber 17 of Plats, Page 15, Oakland County Records, being more particularly described as follows: Beginning at a point on the South line of Lot 64 of said Avoncroft Subdivision, said line being also the East and West 1/4 line of Section 34, Township 3 North, Range 11 East, Avon Township, Oakland County, Michigan, said point being S88°41'39"W as measured along said 1/4 Section line, a distance of 90.73 feet from the East 1/4 corner of said Section 34; proceeding thence from said point of beginning, S88°41'39"W along the East and West 1/4 line of said Section 34, said line being also the South line of said Lot 64, a distance of 231.96 feet to the Southwest corner of said Lot 64; thence N05°09'40"E along the West line of Lots 64 and 65 of said Subdivision, a distance of 292.00 feet to the Northwesterly corner of said Lot 65; thence along the Northerly line of Lot 65, said line being also the Southerly line of Nawakwa Road (50 feet wide), along the arc of a curve, concave to the North, Radius 494.00 feet, an arc distance of 266.05 feet (chord bears S68°19'17"E 262.85 feet) to the Southwest corner of Nawakwa Road and Rochester Road (M-150) as widened; thence S02°32'47"W along the Westerly line of said Rochester Road (width varies), thru the interior of Lot 65 and into Lot 64, a distance of 158.01 feet to a point; thence S45°50'30"W along a limited access right of way line of the proposed M-59 Freeway, a distance of 43.97 feet to the point of beginning.

- LEGEND:**
- OH-ELEC-W-O EX. OH. ELEC. POLE & GUY WIRE
 - UG-CATV EX. U.G. CABLE TV & PEDESTAL
 - UG-COMM EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
 - UG-ELEC-EX EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
 - EX. GAS LINE
 - EX. GAS VALVE & GAS LINE MARKER
 - EX. TRANSFORMER & IRRIGATION VALVE
 - EX. WATER MAIN
 - EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
 - EX. WATER VALVE BOX & SHUTOFF
 - EX. SANITARY SEWER
 - EX. SANITARY CLEANOUT & MANHOLE
 - EX. COMBINED SEWER MANHOLE
 - EX. STORM SEWER
 - EX. CLEANOUT & MANHOLE
 - EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
 - EX. YARD DRAIN & ROOF DRAIN
 - EX. UNIDENTIFIED STRUCTURE
 - EX. MAILBOX, SIGN & LIGHTPOLE
 - EX. FENCE
 - EX. GUARD RAIL
 - EX. SPOT ELEVATION
 - EX. CONTOUR
 - EX. WETLAND
 - IRON FOUND / SET
 - NAIL FOUND / NAIL & CAP SET
 - BRASS PLUG SET
 - MONUMENT FOUND / SET
 - SECTION CORNER FOUND
 - RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS

WATER MAIN "SKETCH OF UTILITIES" PER CITY OF ROCHESTER HILLS, RECEIVED 10-21-15

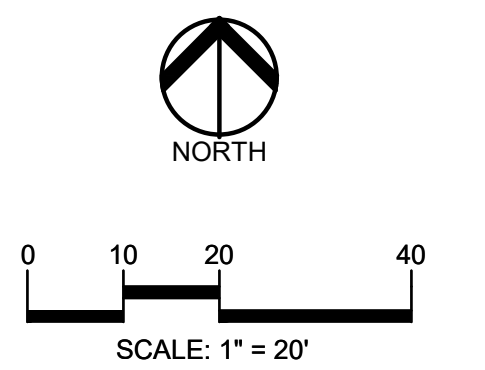
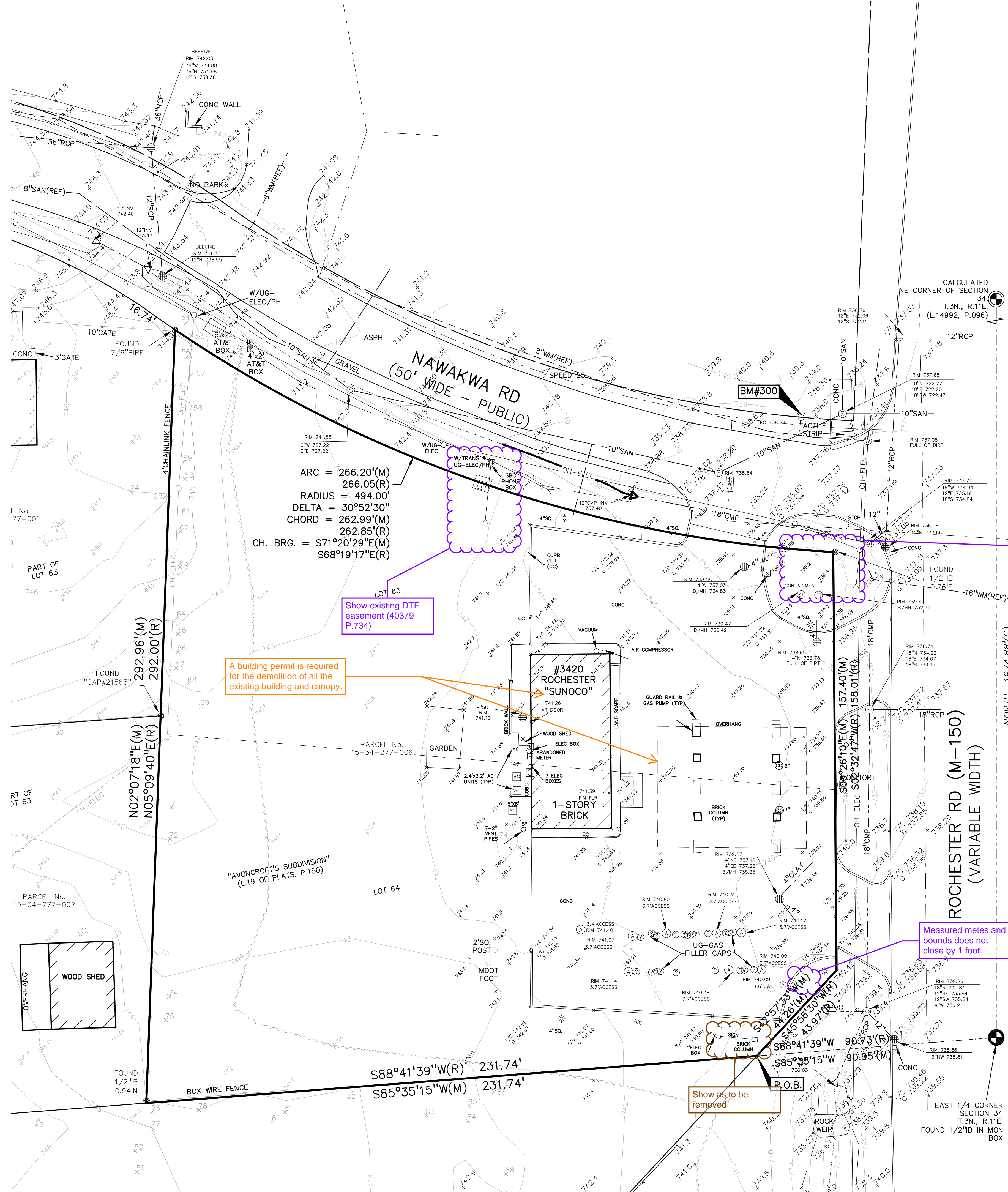
SANITARY SEWER "SKETCH OF UTILITIES" PER CITY OF ROCHESTER HILLS, RECEIVED 10-21-15

STORM SEWER "SKETCH OF UTILITIES" PER CITY OF ROCHESTER HILLS, RECEIVED 10-21-15

ELECTRIC TELEPHONE "CONSUMERS ENERGY" QUARTER SECTION MAP 03-61-34-1, DATED 04-68-15

GAS HAVE NOT RECEIVED AS OF 10-30-15

CATV HAVE NOT RECEIVED AS OF 10-30-15



CAUTION!
THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE AS TO ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
3420 ROCHESTER ROAD, LLC
29200 NORTHWESTERN HIGHWAY, SUITE 450
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

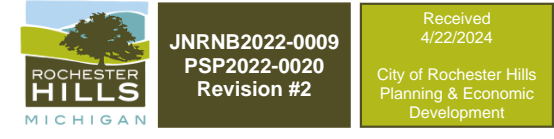
REVISIONS

SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
AUGUST 15, 2022

DRAWING TITLE
TOPOGRAPHIC SURVEY

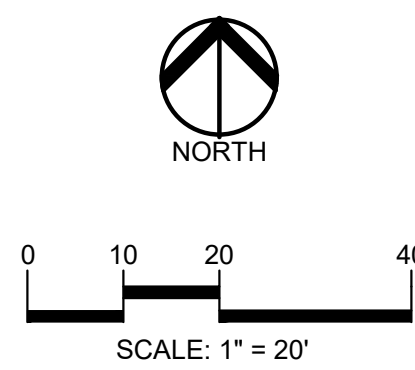
PEA JOB NO.	2021-0117
P.M.	LAA
DN.	MT
DES.	SWS
DRAWING NUMBER:	



NOT FOR CONSTRUCTION
CITY FILE #22-029 SECTION #34

C-1.0

S:\PROJECTS\2021-0117 ROCHESTER HILLS FILED METAL\DWG\SITE PLANS\CG-1\070PC-21-0117.dwg PLOT
DATE: 4/17/2024 10:50 AM 10:50:00 AM



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

LEGEND:

[Symbol]	CONCRETE PAVEMENT
[Symbol]	ASPHALT PAVEMENT
[Symbol]	GRAVEL
[Symbol]	CONCRETE CURB AND GUTTER
[Symbol]	REVERSE GUTTER PAN
[Symbol]	SETBACK LINE
[Symbol]	SIGN
[Symbol]	LIGHTPOLE
[Symbol]	FENCE

SIGN LEGEND:

NO PARKING FIRE LANE SIGN	1
STOP SIGN	2
VAN ACCESSIBLE SIGN	4
DO NOT ENTER SIGN	5
SIDEWALK ENDS SIGN	6
DRIVE THRU SIGN	7
RIGHT LANE MUST TURN RIGHT SIGN	8
ELECTRIC VEHICLE SIGN	9

REFER TO DETAIL SHEET FOR SIGN DETAILS

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP TYPE R	R
SIDEWALK RAMP TYPE P	P

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SITE DATA TABLE:

SITE AREA: 1.33 ACRES (57,985 SF.) NET AND GROSS
ZONING: NB - NEIGHBORHOOD BUSINESS
PROPOSED USE: RETAIL (7,154 SF.) / DRIVE THRU (1,194 SF.) / CANOPY (2,392 SF.)

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 30 FT. (2 STORIES)
PROPOSED BUILDING HEIGHT = 1 STORY
TOTAL BUILDING FOOTPRINT AREA = 10,740 SF.

BUILDING LOT COVERAGE = 18.52%

SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
FRONT (EAST)	50'	50' (CANOPY)
SIDE (NORTH)	25'	50.04'
SIDE (SOUTH)	25'	50.97'
REAR (WEST)	50'	53.35'

PARKING CALCULATIONS:
RETAIL = 1 SPACE PER 300 SF. OF FLOOR AREA
TOTAL RETAIL PARKING (REQUIRED) = 8,348/300 = 28 SPACES
TOTAL PARKING PROVIDED = 31 SPACES

DRIVE-THRU STACKING PROVIDED = 10 STACKING SPACES PER SERVICE WINDOW
TOTAL STACKING PROVIDED = 13 STACKING SPACES

LOADING CALCULATIONS:
LOADING REQUIRED = 1' - 10'x4' LOADING SPACE
LOADING PROVIDED = 500 SF. (10'x50' SPACE) AT SOUTH SIDE OF PARCEL

SITE SOILS INFORMATION:
ACCORDING TO THE USDA WEB SOIL SURVEY OF OAKLAND COUNTY, THE SITE GENERALLY CONSISTS OF THE FOLLOWING SOIL TYPES:
40A - UDORTHENTS, LOAMY, NEARLY LEVEL
Shubau - SHEBEON-URBAN LAND COMPLEX, 0 TO 4 PERCENT SLOPES

- GENERAL NOTES:**
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
 - NO PARKING-FIRE LANE SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
 - REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
 - REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS.

- ROAD COMMISSION FOR OAKLAND COUNTY (R.C.O.C.) NOTES:**
- PROPER SIGNING IS REQUIRED PRIOR TO ANY WORK STARTING WITHIN THE ROAD RIGHT-OF-WAY.
 - LANE CLOSURES WILL BE RESTRICTED TO 9AM - 3PM MONDAY THROUGH FRIDAY
 - MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES
 - PROPOSED CURBS SHOULD MATCH EXISTING CURBS AND WILL BE TIED TO EXISTING CURBS USING EPOXY-COATED #4 BAR.
 - A FULL-DEPTH SAWCUT AND/OR MILLED BUTT-JOINT WILL BE REQUIRED AT THE AVON ROAD DRIVE APPROACH PER THE R.C.O.C. FIELD INSPECTOR.
 - ALL FIXED OBJECTS WITHIN 5 FEET OF BACK OF CURB WILL BE REMOVED OR RELOCATED PRIOR TO EXCAVATION.
 - ROADWAYS SHALL BE KEPT CLEAN OF DIRT AND DEBRIS.
 - ALL EXCAVATIONS WITHIN A 1:1 INFLUENCE OF THE ROADWAY WILL REQUIRE M.D.O.T. CLASS II BACKFILL COMPACTED TO 95% MAXIMUM DENSITY.

- MICHIGAN DEPARTMENT OF TRANSPORTATION (M.D.O.T.) NOTES:**
- MDOT WILL REQUIRE A PERMIT APPLICATION BEFORE WE PARTICIPATE IN ANY TRAFFIC IMPACT STUDY (TIS) DISCUSSION. WE WILL STILL PERFORM CONCEPTUAL REVIEWS FOR SMALLER PROJECTS WITH A WELL DEFINED SITE PLAN. NON-BINDING, EMAIL RESPONSE LISTING POTENTIAL TROPIC CONCERNS BEYOND THAT ALL REVIEWS WILL BE OFFICIAL PERMIT REVIEWS. PLEASE NOTE THAT THE PERMIT APPLICANT SHALL BE THE PROPERTY OWNER.

Restaurant use will likely impact parking calculations.

Revise based on revised stacking space length required by Ordinance

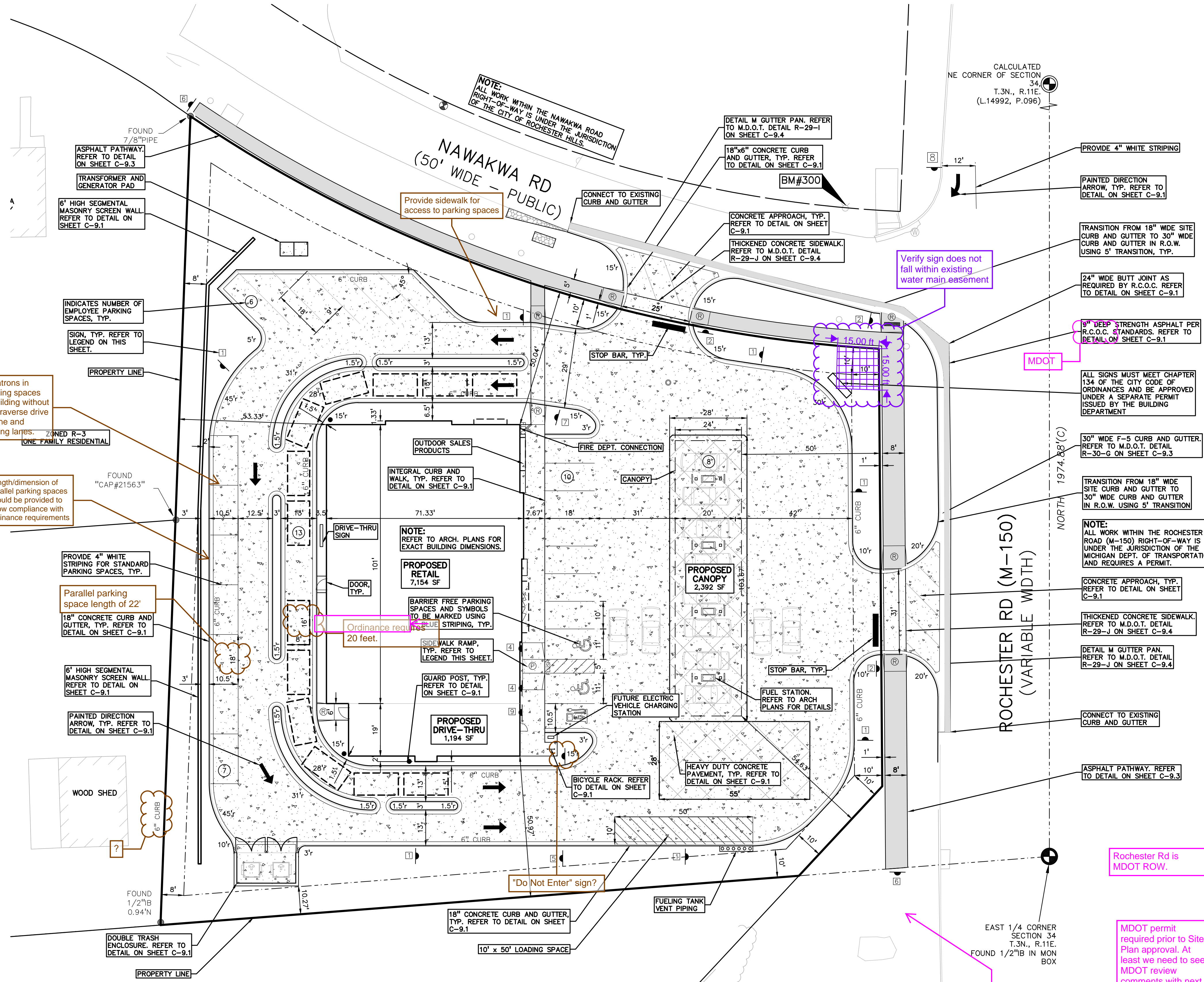
Within 125% of total parking required.

Rochester Rd is MDOT ROW.

MDOT permit required prior to Site Plan approval. At least we need to see MDOT review comments with next review.

City's TIS review will be done concurrently with MDOT's review.

Install Pathway across property frontage. Coordination with MDOT & City as in 2021 MDOT/City plans to install pathway across the M-59 bridge.



PROJECT TITLE
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS

SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
AUGUST 15, 2022

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO.	2021-0117
P.M.	LAA
DN.	MT
DES.	SWS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION
CITY NOTE #22-029 SECTION #34

C-3.1

S:\PROJECTS\2021\2021-0117 ROCH HILLS RETAIL\DWG\SITE PLANS\C-3.1 PRELIM SITE PLAN.dwg PLOT DATE: 4/16/2024 9:52 AM 10/16/2024

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 Rochester Hills Engineering Department at 248-656-4640.

Fire Apparatus Access Roadways should be designed to support the load of the fire apparatus (75,000 pounds) and be surfaced to provide all weather driving capabilities.

Use this Information to the Auto Turn

Provide Auto Turn from Nawakwa Rd to Rochester Rd

Reposition Proposed Fire Hydrant in this Location

It appears the pavement edge can be moved west to try to limit excessive paving.

Pierce Turning Performance Analysis

03/30/2017

Bid Number: 581
Department: City of Rochester Hills

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

Parameters:

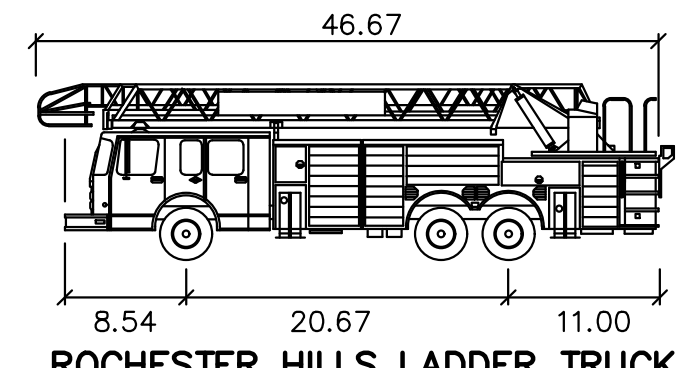
Inside Cramp Angle:	45°
Axle Track:	82.92 in.
Wheel Offset:	4.88 in.
Tread Width:	17.4 in.
Chassis Overhang:	68.99 in.
Additional Bumper Depth:	7 in.
Front Overhang:	75.99 in.
Wheelbase:	270 in.
Overall Length:	46'3"
Calculated Turning Radii:	
Inside Turn:	21 ft. 5 in.
Curb to curb:	38 ft. 2 in.
Wall to wall:	41 ft. 0 in.

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

Category	Option	Description
Axle, Front, Custom	0644046	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Qtm/AXT/DCF (425 Tires)
Wheels, Front	0019611	Wheels, Front, Alcoa, 22.5" x 12.25", Aluminum, Hub Pilot
Tires, Front	0677592	Tires, Front, Goodyear, G296 MSA, 425/65R22.50, 20 ply, Fire Service Load Rating
Bumpers	0686710	Bumper, Non-Extended, Steel, Painted, Arrow XT
Aerial Devices	0592911	Aerial, 95' Pierce PAP, Mid Mount

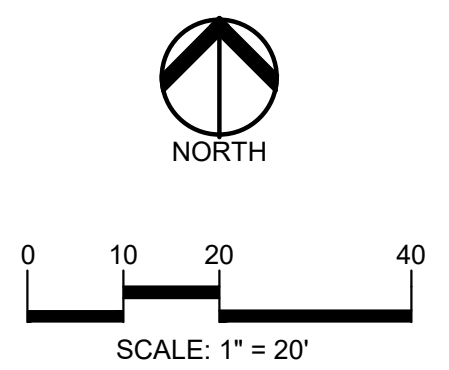
Notes:
Actual inside cramp angle may be less due to highly specialized options.
Curb to Curb turning radius calculated for 9.00 inch curb.

- #### ROCHESTER HILLS FIRE DEPARTMENT NOTES:
- A KNOX KEY SYSTEM SHALL BE INSTALLED, IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT www.knoxbox.com (3200 SERIES BOX).
 - 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.
 - CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE (IFC) 2006 CHAPTER 14.
 - 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 THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES.
 - A UNDERGROUND DETENTION SYSTEM IS SHOWN ON-SITE.



ROCHESTER HILLS LADDER TRUCK

Width	8.50 feet
Track	8.00 feet
Lock to Lock Time	5.0
Steering Angle	30.0



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

CLIENT
3420 ROCHESTER ROAD, LLC
2920 NORTHWESTERN HIGHWAY,
SUITE 450
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

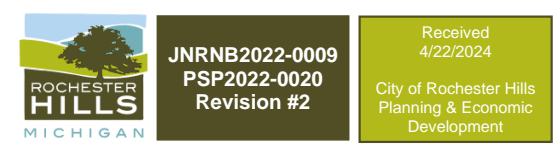
REVISIONS

SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
AUGUST 15, 2022

DRAWING TITLE
FIRE TRUCK TURNING PLAN

PEA JOB NO.	2021-0117
P.M.	LAA
DN	MT
DES.	SWS
DRAWING NUMBER:	



NOT FOR CONSTRUCTION
CITY FILE #22-029 SECTION #34

C-3.2

S:\PROJECTS\2022\2022-0117 ROCHESTER HILLS FUEL RETAIL\DWG\SITE PLANS\G-3.2\FIRE-21-0117.dwg PLOT DATE: 4/15/2024 2:25 PM 01/20/2024



SCALE: 1" = 20'



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

CLIENT
3420 ROCHESTER ROAD, LLC
29200 NORTHWESTERN HIGHWAY,
SUITE 450
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS	
SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
AUGUST 15, 2022

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO.	2021-0117
P.M.	LAA
DN.	MT
DES.	SWS
DRAWING NUMBER:	

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB	G = GUTTER GRADE
T/P = TOP OF PAVEMENT	F.G. = FINISHED GRADE
T/S = TOP OF SIDEWALK	F.F. = FINISHED FLOOR
T/W = TOP OF WALL	B/W = BOTTOM OF WALL

RETAINING WALL NOTE:
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

BENCHMARKS
(GPS DERIVED - NAVD88 DATUM)

- BM #300
ARROW ON HYDRANT AT THE NORTHWEST CORNER OF ROCHESTER ROAD AND NAWAKWA ROAD.
ELEV. - 740.28
- BM #301
SET BENCHMARK IN SOUTH FACE OF UTILITY POLE AT THE NORTHWEST CORNER OF NAWAKWA ROAD AND CHERRY ROAD.
ELEV. - 749.41
- BM #302
ARROW ON HYDRANT EAST OF HOUSE #3466 CHERRY ROAD.
ELEV. - 748.12
- BM #303
DIMPLE ON NORTHWEST BOLT OF STRAIN POLE JUST NORTH OF THE M-59 WEST RAMP.
ELEV. - 739.80

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP TYPE P
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS



NOT FOR CONSTRUCTION
CITY FILE #22-029 SECTION #34

C-4.0

S:\PROJECTS\2024\0117 ROCHESTER HILLS FILE\RETAIL\DWG\SITE PLANS\G-4-030RAE-24-0117.dwg PLOT
DATE: 4/17/24 9:50 AM BY: SWS/MT



0 10 20 40
 SCALE: 1" = 20'



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

CLIENT
3420 ROCHESTER ROAD, LLC
 29200 NORTHWESTERN HIGHWAY,
 SUITE 450
 FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
 3420 ROCHESTER ROAD
 ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS
 SITE/UTILITY LAYOUT 12/20/23
 SITE/UTILITY LAYOUT 04/17/24

ORIGINAL ISSUE DATE:
 AUGUST 15, 2022

DRAWING TITLE
DRAINAGE AREA MAP

PEA JOB NO. 2021-0117

P.M. LAA
 D.N. MT
 DES. SWS
 DRAWING NUMBER:

Site Drainage Data
 Select County: **Oakland**

Proposed

Impervious Area:	0.97 acre	C = 0.25
Greenbelt Area:	0.36 acre	
Total Area (A):	1.33 acre	
Weighted Coefficient of Runoff (C):	0.76	

Rainfall Intensity
 Flood Control Time of Concentration, T_c = **10.00 min**

Rainfall Intensity

Time of Concentration (T _c)	10.00 min
Since T _c <= 15 min, I ₁ = 2.0 in/hr	2.00 in/hr
I ₁ = 30.2 / [(T + 9.17) ^{0.81}]	2.00 in/hr
I ₁₀ = 50.12 / [(T + 9.17) ^{0.81}]	4.58 in/hr
I ₁₀₀ = 83.3 / [(T + 9.17) ^{0.81}]	7.62 in/hr

CPVC: Channel Protection Volume Control Volume
 V_{CPVC} = (4719)CA = **4,770 cf**

CPVC: Channel Protection Rate Control Volume: Extended Detention
 VED = (6897)CA = **6,971 cf**

CPVC Allowable Outlet Rate
 Q_{ED} = V_{ED} / (48*60*60) = **0.04 cfs**

Water Quality Control
 Forebay Volume = (545)CA = **551 cf**
 Forebay Release Rate: Q_{VF} = VF/(48*60*60) = **0.003 cfs**

100-Year Allowable Outlet Rate
 Since A < 2.0 Ac, Q₁₀₀ = 1.0 = **1.00 cfs/ac**

100-Year Peak Allowable Discharge
 Q_{100P} = Q₁₀₀(A) = **1.33 cfs**

100-Year Runoff Volume
 V_{100R} = (18,985)CA = **19,190 cf**

100-Year Peak Inflow
 Q_{100P} = C(I₁₀₀)A = **7.70 cfs**

Storage Curve Factor (Vs/Vr)
 R = 0.206 - 0.15 x ln(Q_{100P}/Q_{100IN}) = **0.469**

100-Year Storage Volume
 V_s = R(V_{100R}) = **9,000 cf**

No infiltration will be provided, so no CPVC deduction is taken.
 V₁₀₀ = V_s = **9,000 cf**

V₁₀₀ must be larger or equal to V_{ED}:
 Is V₁₀₀ >= V_{ED}? **Yes**

V₁₀₀ = **9,000 cf**

Mechanical Separator Sizing
 I₁ = 30.2 / [(T + 9.17)^{0.81}] = **2.76 in/hr**
 I₁₀ = 50.12 / [(T + 9.17)^{0.81}] = **4.58 in/hr**

Treatment Flow Rate
 Q_T = C(I₁)A = **2.79 cfs**

Bypass Flow Rate
 10 Year Peak Inflow: Q_{10Y} = **4.63 cfs**

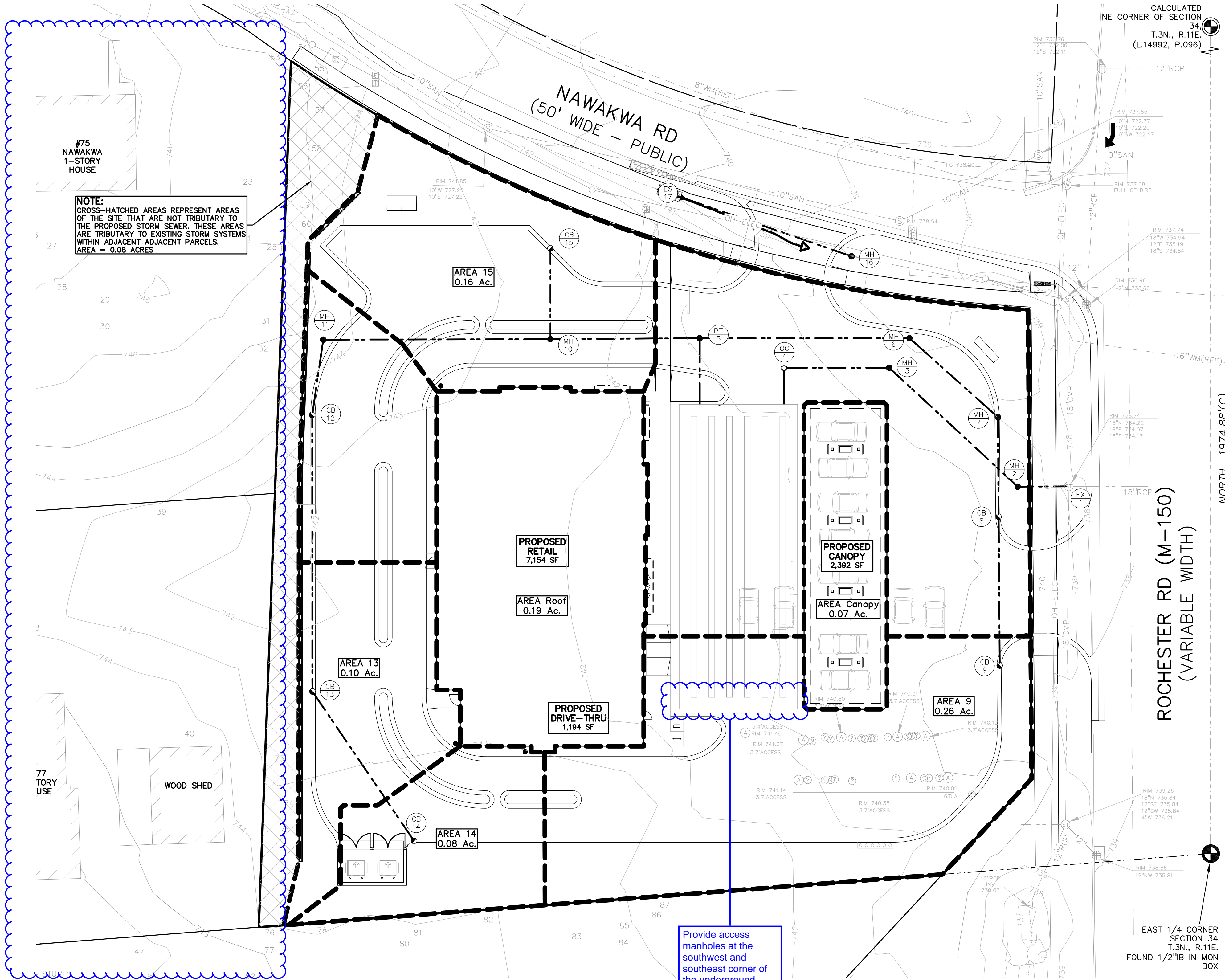
Select Unit: **CS-5**
 Selected Unit Treatment Flow Rate: **2.81 cfs**
 Selected Unit Bypass Flow Rate: **call Cortech cfs**

Design Requirements

CPVC Extended Detention: V _{ED}	=	6,971 cf
CPVC Allowable Outlet Rate: Q _{ED}	=	0.04 cfs
100-Year Storage Volume: V ₁₀₀	=	9,000 cf
100-Year Allowable Outlet Rate: Q ₁₀₀	=	1.33 cfs

Underground Detention Storage

Required Storage Volume:	9,000 cf
Pipe Diameter:	48 in
Pipe Volume per Linear Foot:	12.57 cf/ft
Total Pipe Length, L:	745 ft
Pipe Storage Volume:	9,362 cf
Storage in Stone backfill?	N
Porosity:	0 %
Stone Storage Volume:	0 cf
Stone Storage Volume per Linear Foot:	0.00 cf/ft
Provided System Volume:	9,362 cf
Lowest Grade over system:	640.90
Required Cover over system:	1.50 ft
Invert of Detention System:	734.62
Invert of OCS:	734.58



STORM SEWER SYSTEM DESIGN

Location: Oakland County

$I = \frac{B}{(T+D)^{0.81}} \times E$
 C = varies
 T = 15 (min.)
 B = 50.12 D = 9.17 E = 0.81
 Pipe "n" Value = **0.013**

FROM STR	TO STR	AREA (A) (Acres)	COEF. C	A x C	TOTAL AREA (Ax C) (Acres)	TOTAL AREA (Acres)	TIME t (min.)	INT. I (in/hr)	FLOW Q (cfs)	PIPE CAP. (cfs)	PIPE DIA. (in.)	PIPE LENGTH (ft.)	PIPE SLOPE (%)	MIN HG PER "Q"	VEL. FULL (ft./sec)	TIME FLOW (min.)	H.G.L. ELEV. UP STREAM	H.G.L. ELEV. DOWN STREAM	RIM ELEV. UP STREAM	RIM ELEV. DOWN STREAM	INVERT ELEV. UP STREAM	INVERT ELEV. DOWN STREAM	PIPE COVER UP STREAM	PIPE COVER DOWN STREAM	HGL COVER UP STREAM	HGL COVER DOWN STREAM
9	8	0.26	0.76	0.20	0.20	0.26	15.00	3.80	0.77	2.02	12	50	0.32	0.05%	2.6	0.3	736.11	735.95	738.85	738.60	735.31	735.15	2.37	2.28	2.74	2.65
8	7	0.30	0.85	0.26	0.46	0.57	15.30	3.76	1.73	2.02	12	34	0.32	0.23%	2.6	0.2	735.95	735.84	738.60	739.00	735.15	735.04	2.28	2.79	2.65	3.16
7	6	0.00	0.00	0.00	0.46	0.57	15.50	3.74	1.73	2.02	12	40	0.32	0.23%	2.6	0.3	735.84	735.72	739.00	739.54	735.04	734.92	2.79	3.46	3.16	3.82
6	5	0.00	0.00	0.00	0.46	0.57	15.80	3.70	1.73	2.02	12	71	0.32	0.23%	2.6	0.5	735.72	735.55	739.54	741.03	734.92	734.69	3.46	5.17	3.82	5.48
5	5A	0.00	0.00	0.00	0.76	1.00	16.30	3.64	2.77	2.02	12	22	0.32	0.81%	2.6	0.1	735.55	735.42	741.03	741.16	734.69	734.62	5.17	5.37	5.48	5.74
14	13	0.08	0.64	0.05	0.05	0.08	15.00	3.80	0.20	2.11	12	61	0.35	0.00%	2.7	0.4	736.49	736.28	741.15	740.96	735.69	735.48	4.29	4.31	4.66	4.67
13	12	0.10	0.77	0.08	0.13	0.18	15.40	3.75	0.48	2.11	12	93	0.35	0.02%	2.7	0.6	736.28	735.95	740.96	740.95	735.48	735.15	4.31	4.63	4.67	5.00
12	11	0.09	0.78	0.07	0.20	0.27	16.00	3.68	0.72	2.11	12	26	0.35	0.04%	2.7	0.2	735.95	735.86	740.95	741.62	735.15	735.06	4.63	5.39	5.00	5.76
11	10	0.00	0.00	0.00	0.20	0.27	16.20	3.65	0.72	2.11	12	77	0.35	0.04%	2.7	0.5	735.86	735.59	741.62	741.09	735.06	734.79	5.39	5.12	5.76	5.49
10	5	0.00	0.00	0.00	0.30	0.43	16.70	3.59	1.09	2.11	12	50	0.35	0.09%	2.7	0.3	735.59	735.42	741.09	741.03	734.79	734.62	5.12	5.25	5.49	5.61
4A	4	0.00	0.00	0.00	0.00	0.00	15.00	3.80	0.00	2.02	12	12	0.32	0.00%	2.6	0.1	735.42	735.38	740.92	747.85	734.62	734.58	5.13	12.10	5.50	12.47
4	3	0.00	0.00	0.00	0.00	0.00	15.10	3.79	0.00	2.02	12	36	0.32	0.00%	2.6	0.2	735.38	735.26	747.85	739.98	734.58	734.46	12.10	4.35	12.47	4.72
3	2	0.00	0.00	0.00	0.00	0.00	15.30	3.76	0.00	2.02	12	59	0.32	0.00%	2.6	0.4	735.26	735.08	739.20	739.20	734.46	734.28	4.35	3.76	4.72	4.12
2	1	0.00	0.00	0.00	0.00	0.00	15.70	3.71	0.00	2.02	12	17	0.32	0.00%	2.6	0.1	735.08	735.02	739.20	738.50	734.28	734.22	3.76	3.12	4.12	3.48
15	10	0.16	0.66	0.11	0.11	0.16	15.00	3.80	0.41	2.02	12	31	0.32	0.01%	2.6	0.2	736.63	736.53	740.15	741.09	735.83	735.73	3.15	4.18	3.52	4.55
17	16	0.00	0.00	0.00	0.00	0.00	15.00	3.80	0.00	2.11	12	61	0.35	0.00%	2.7	0.4	740.58	740.37	736.21	740.73	739.78	739.57	-4.73	0.00	-4.37	0.37

Soil Group B is 0.20 per the updated storm sewer standards approved in Sept of 2023, revise the C factor throughout.

State due to the proposed use of the property infiltration aka CPVC will not be required.

Provide access manholes at the southwest and southeast corner of the underground detention system.

Need to account for offsite drainage coming onto the property to verify storm sewer pipe is sized accordingly.

GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR MUST CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
- ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
- THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
- ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, CITY AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

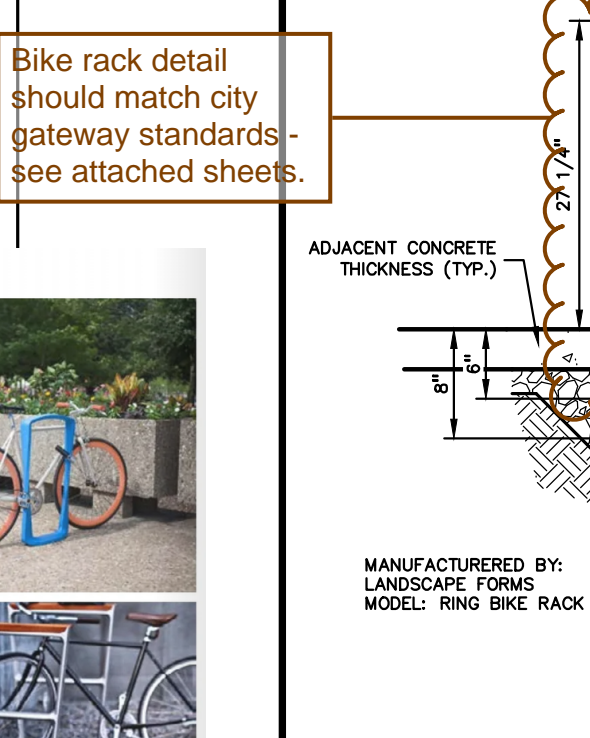
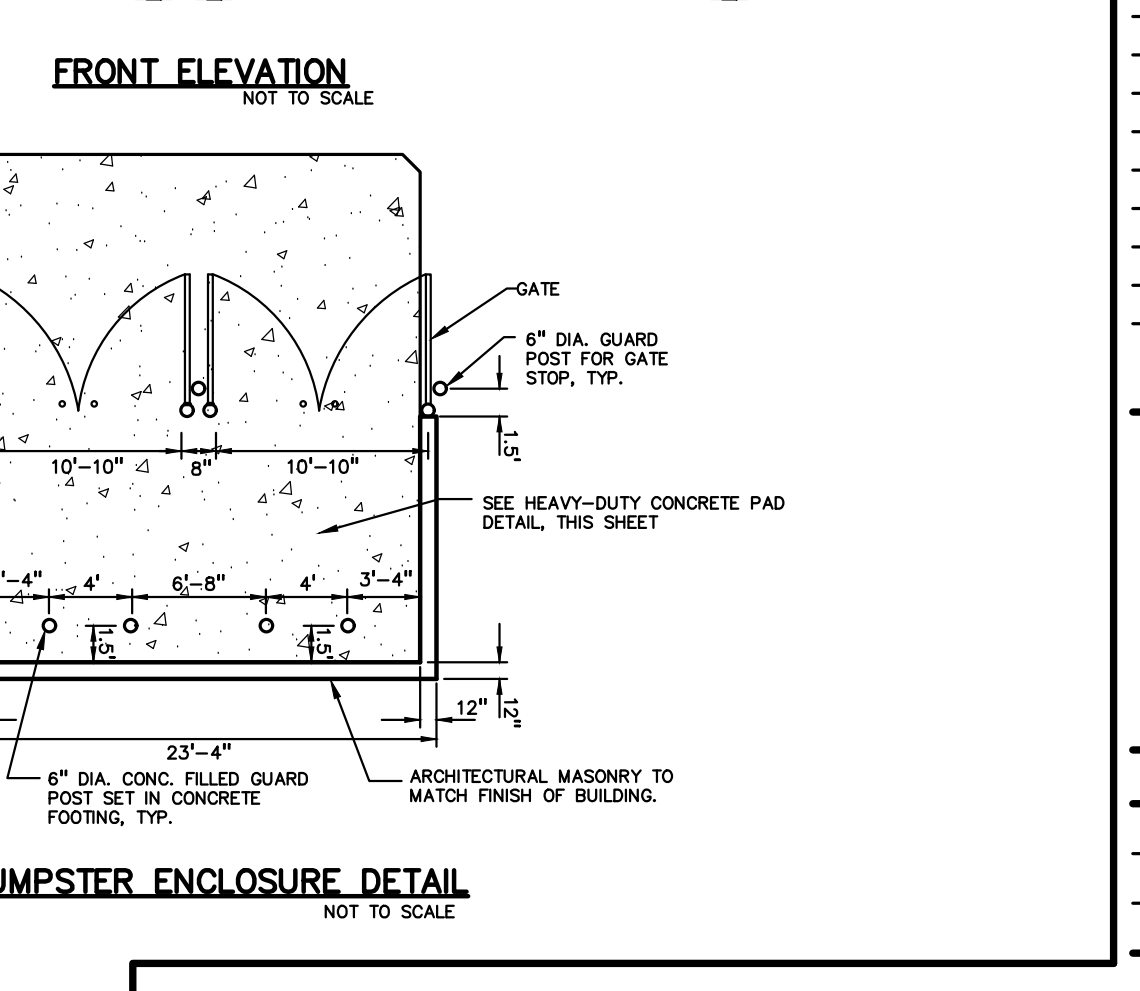
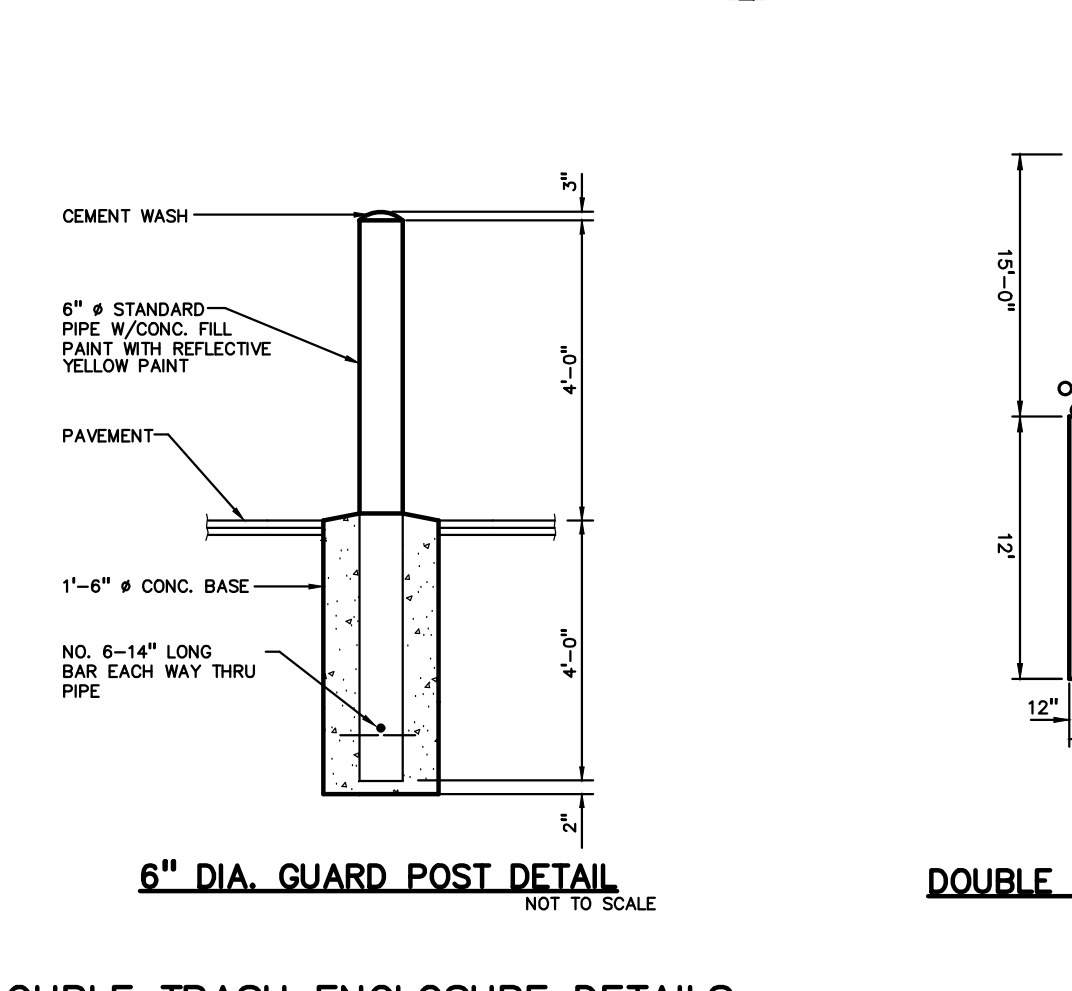
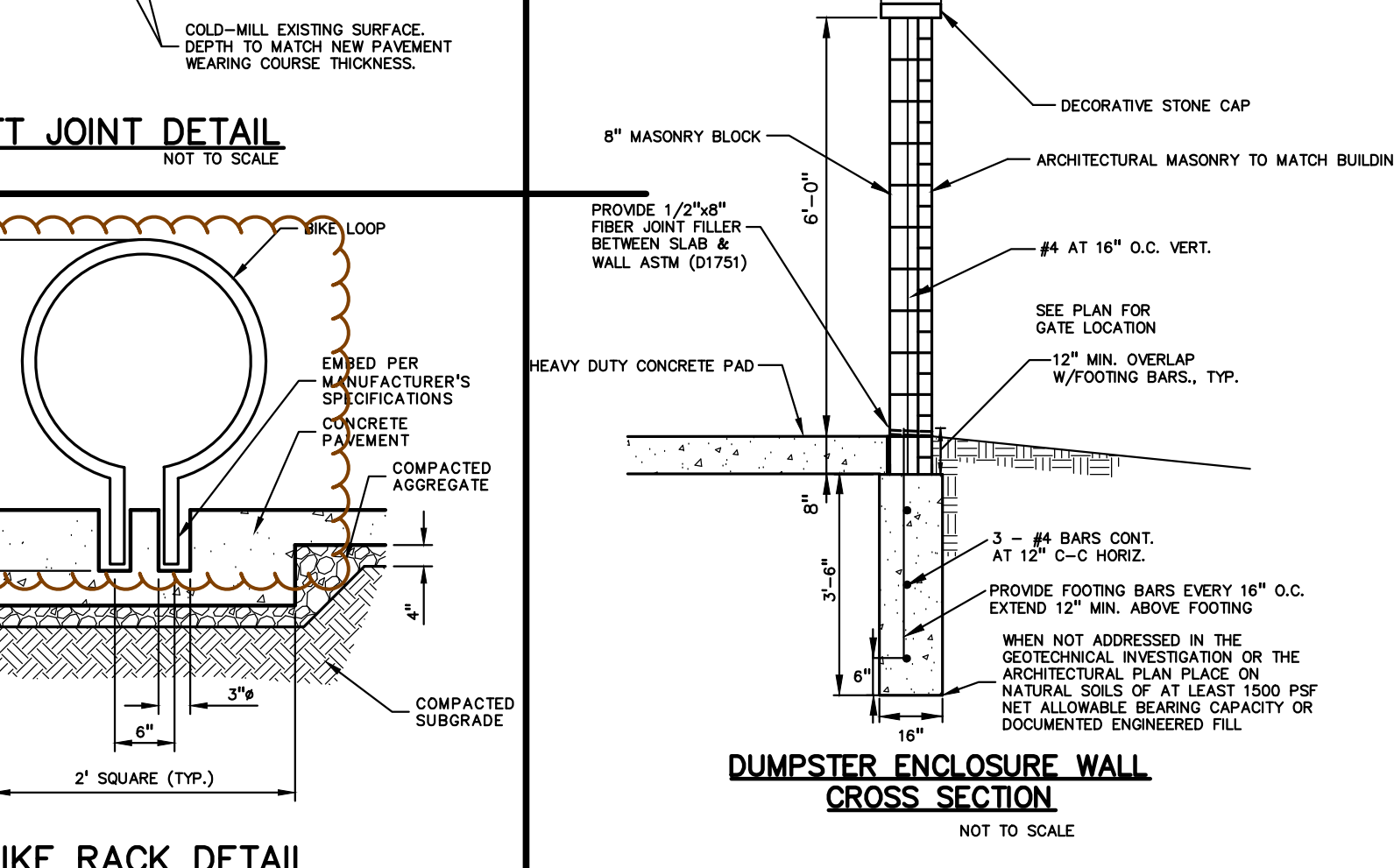
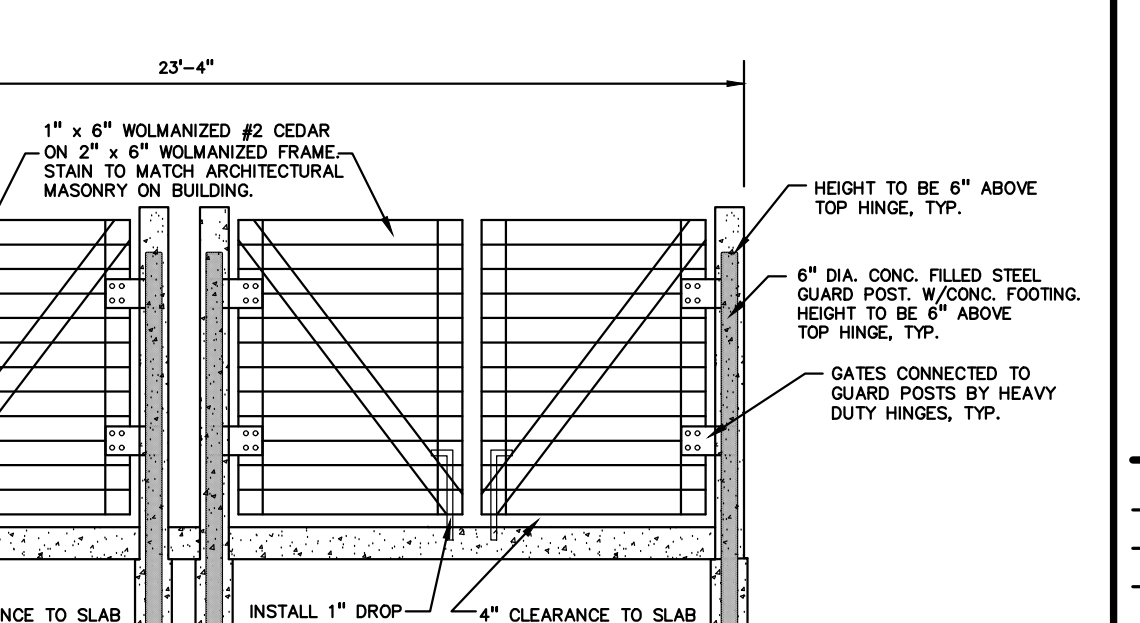
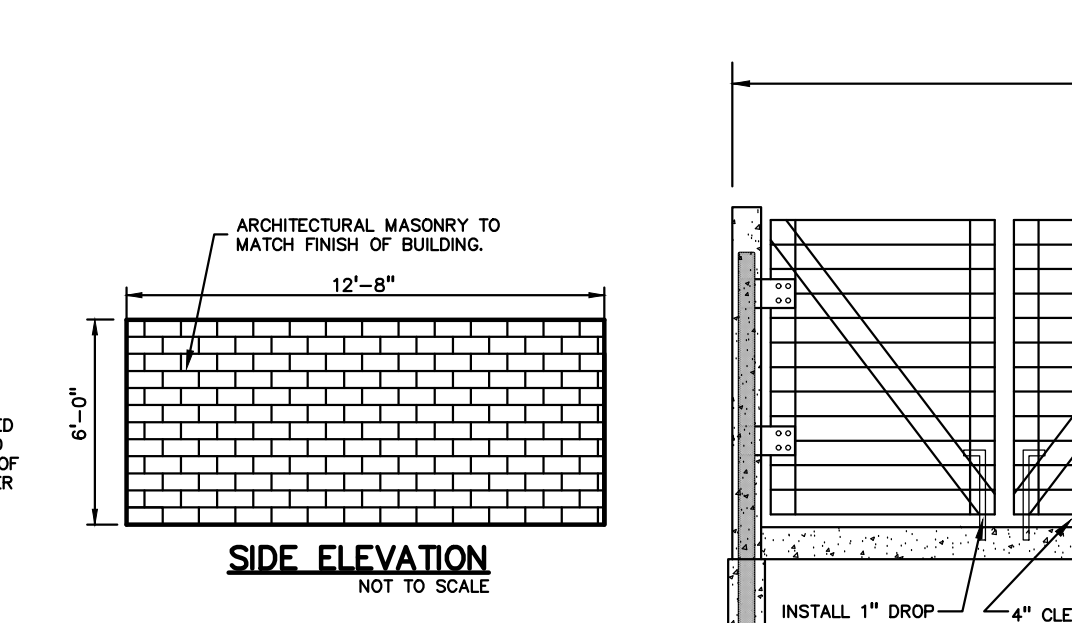
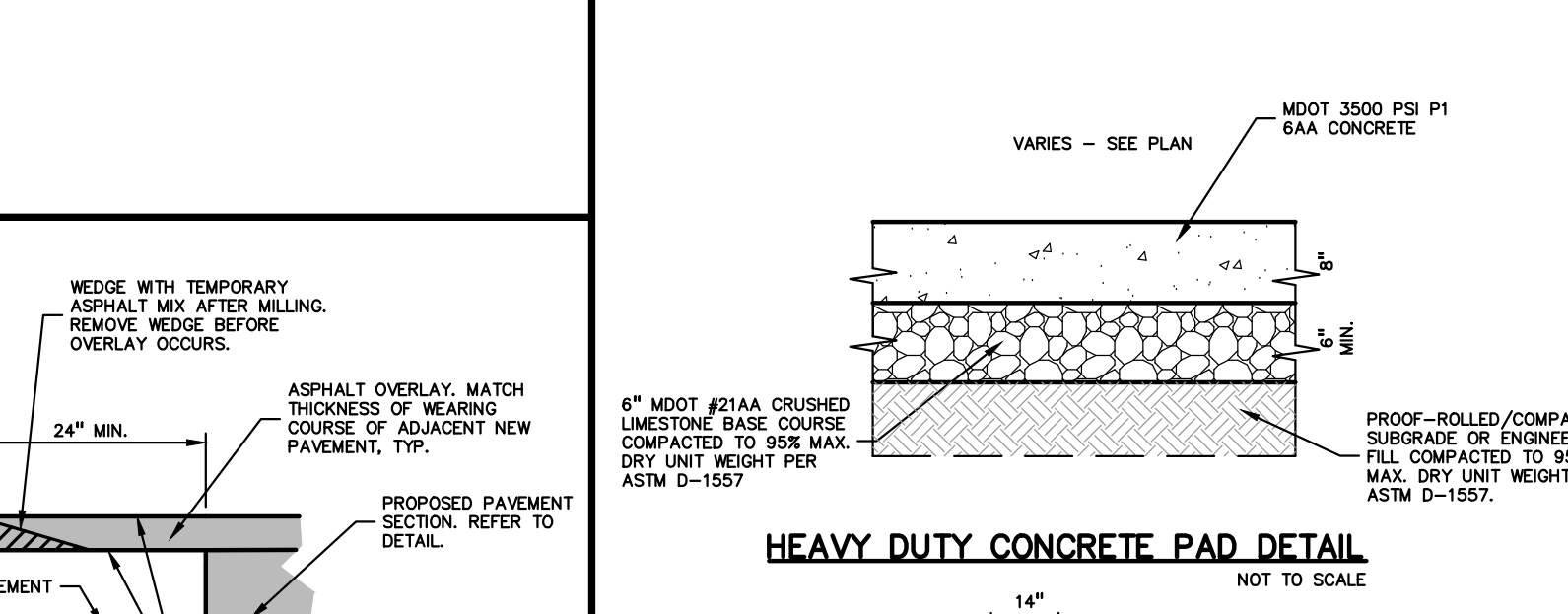
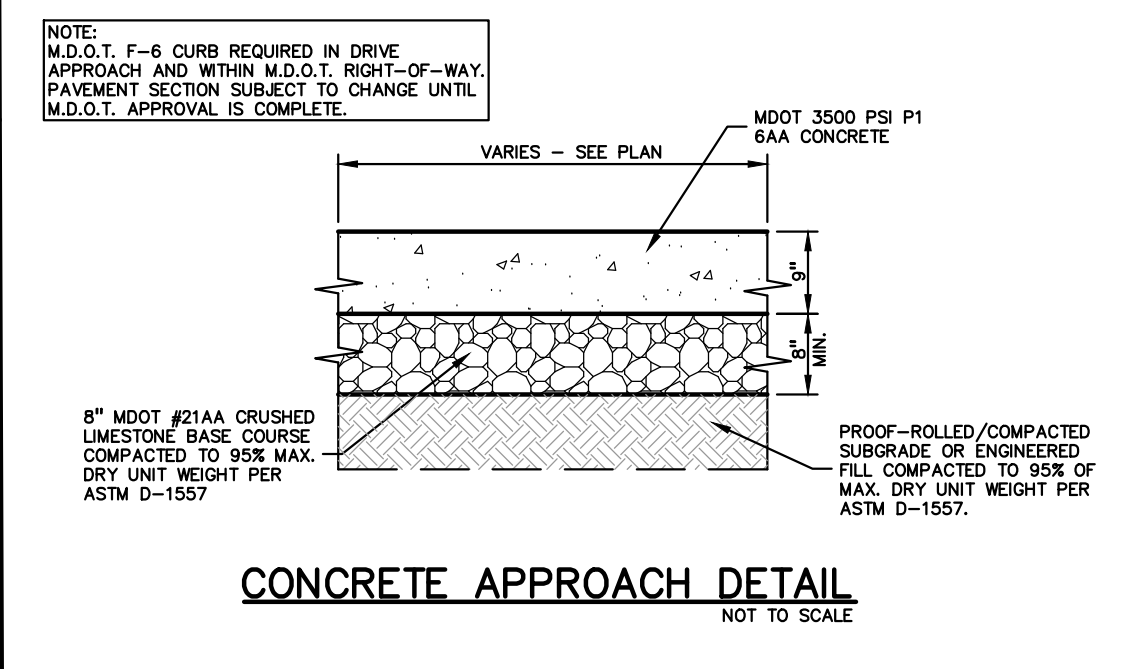
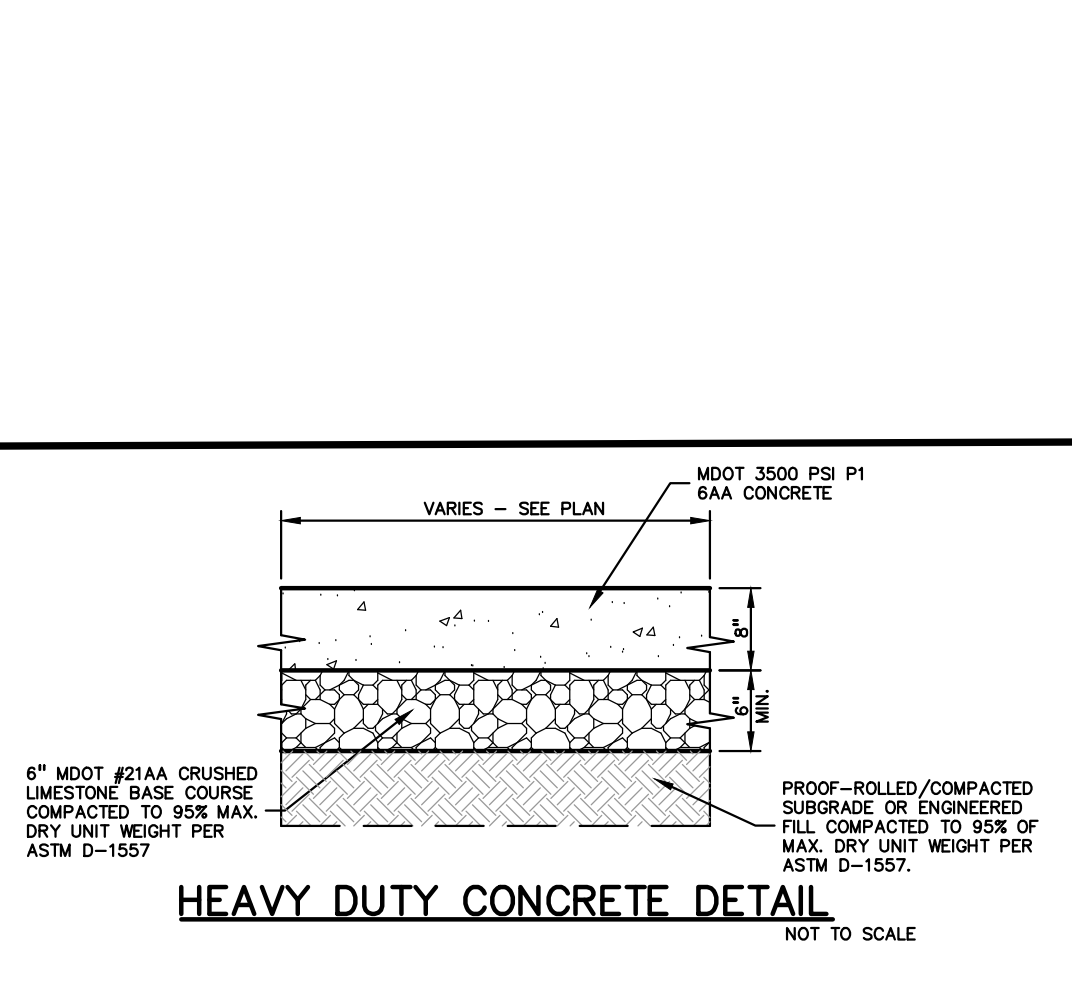
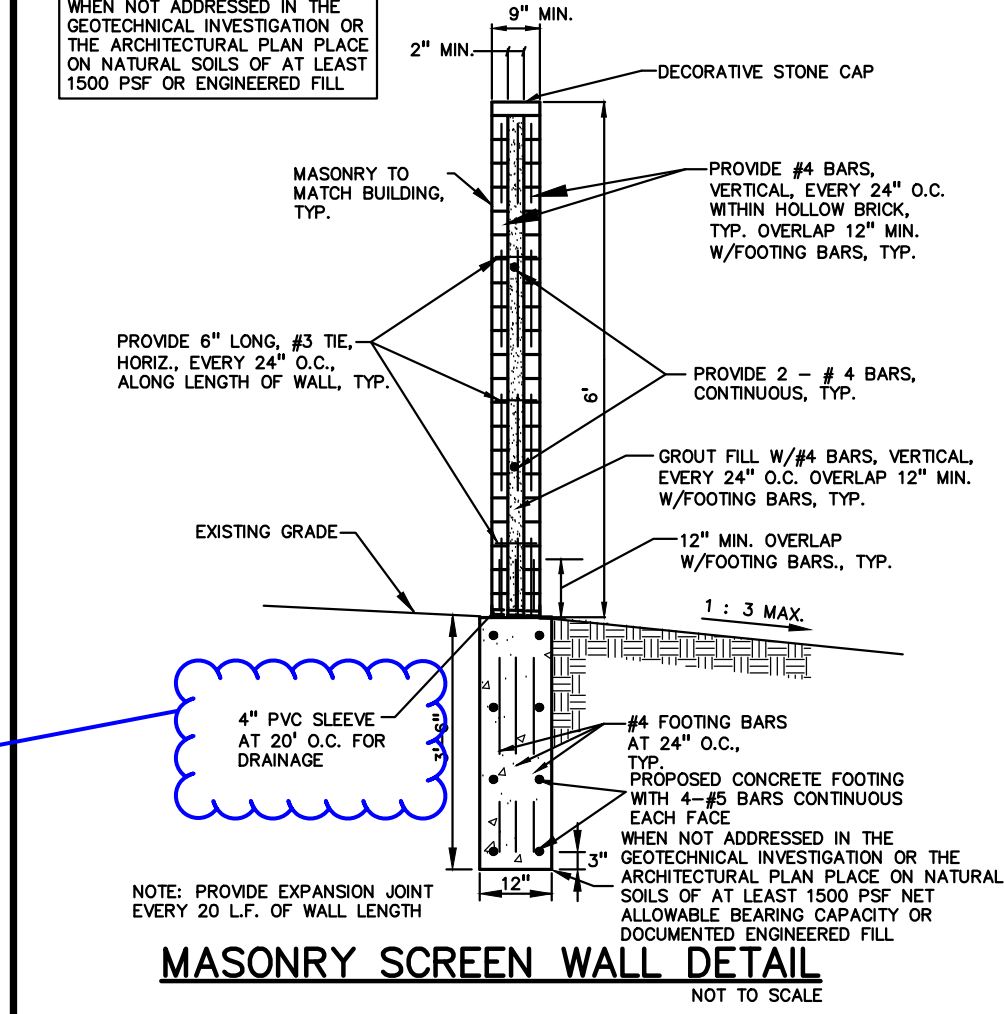
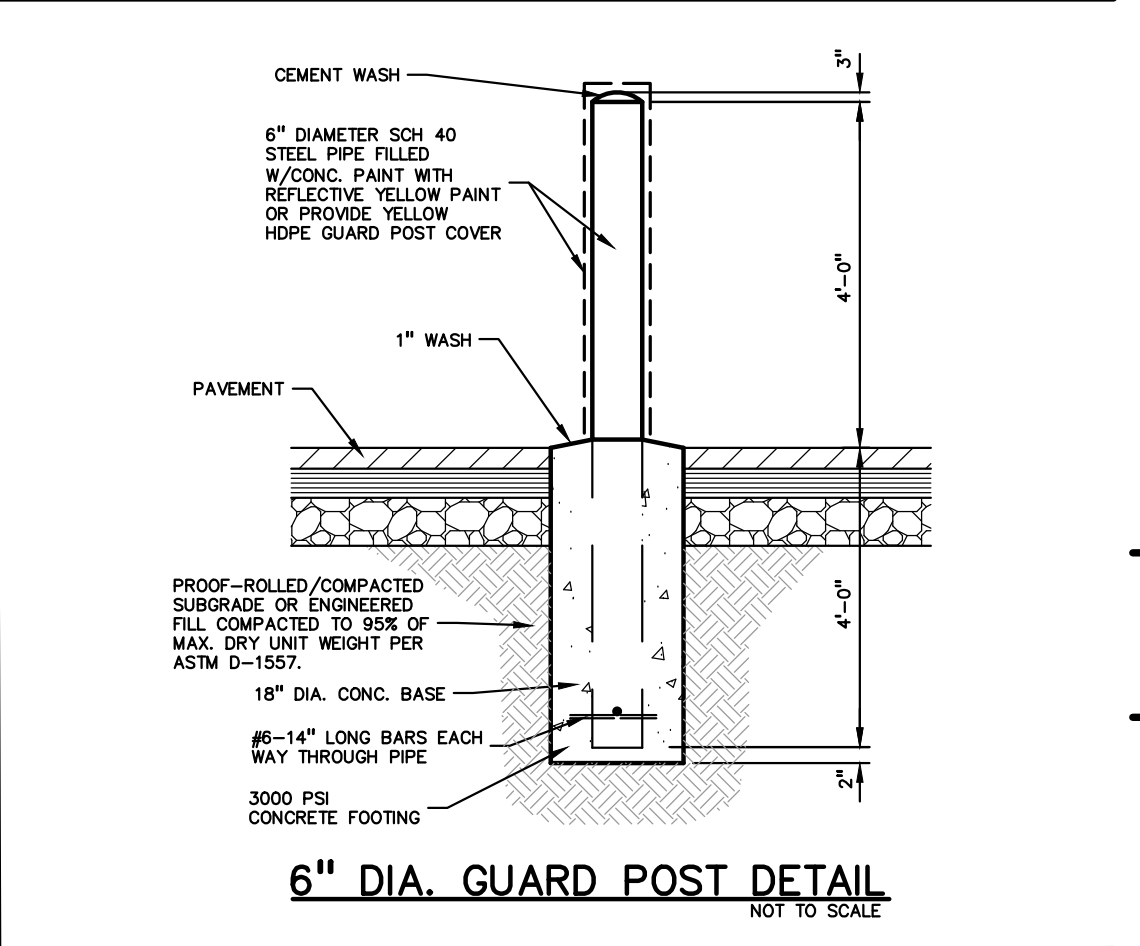
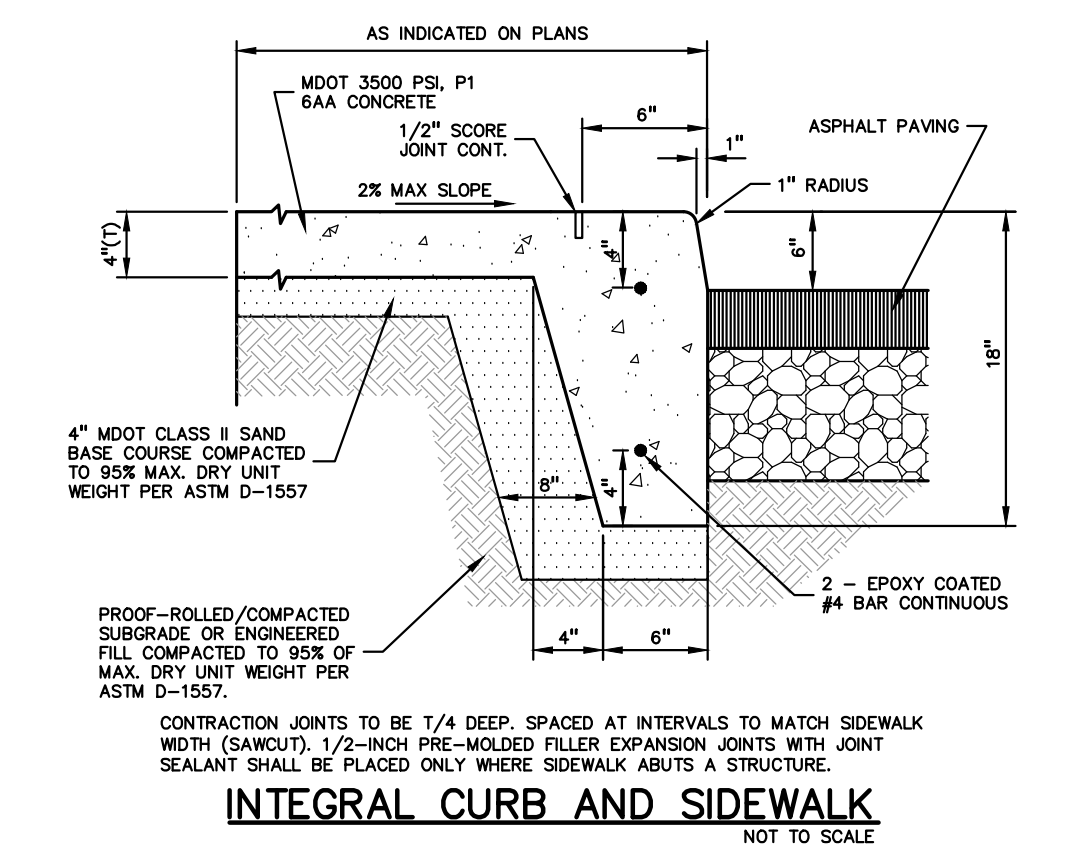
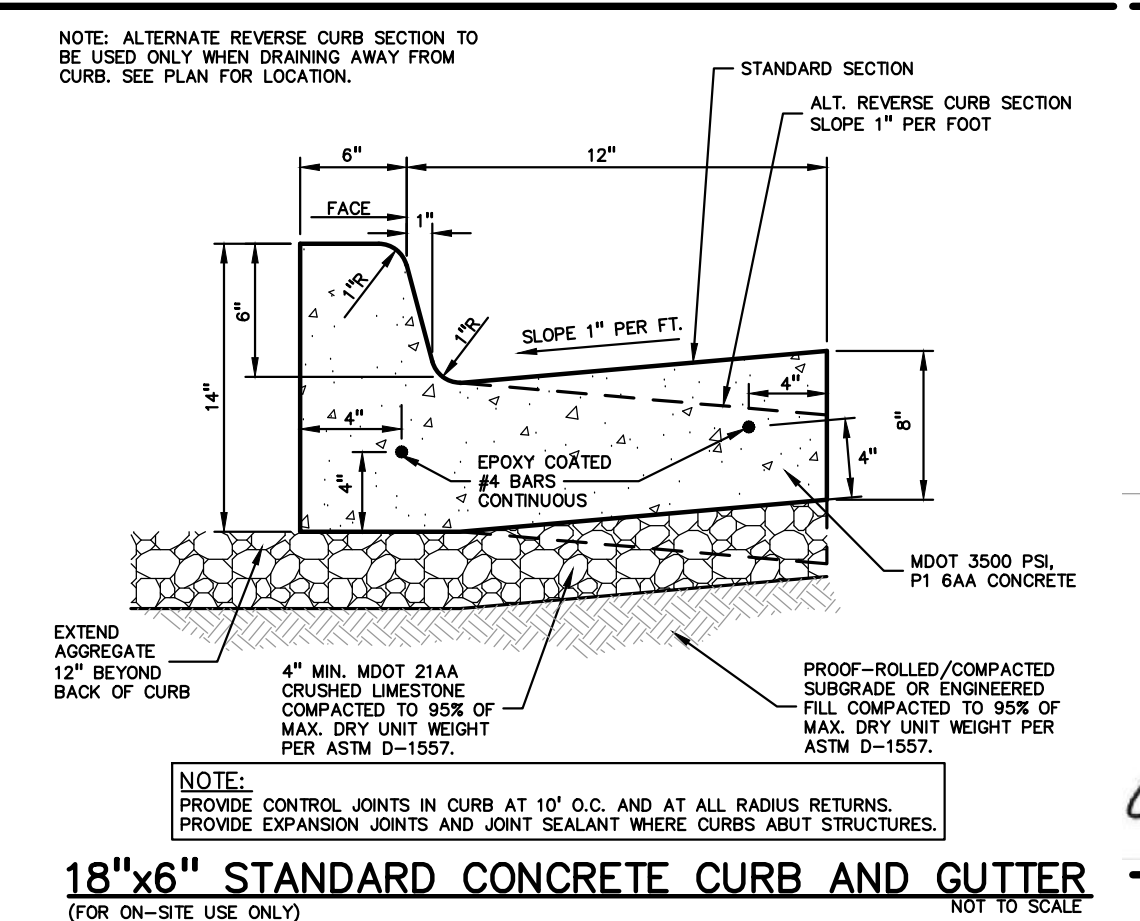
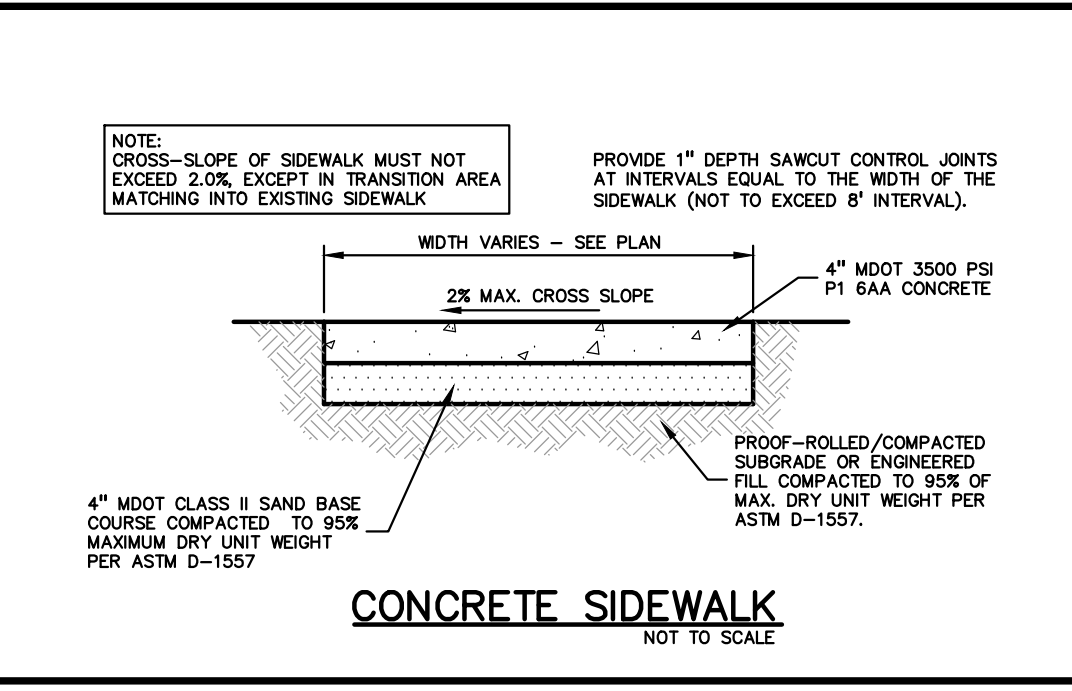
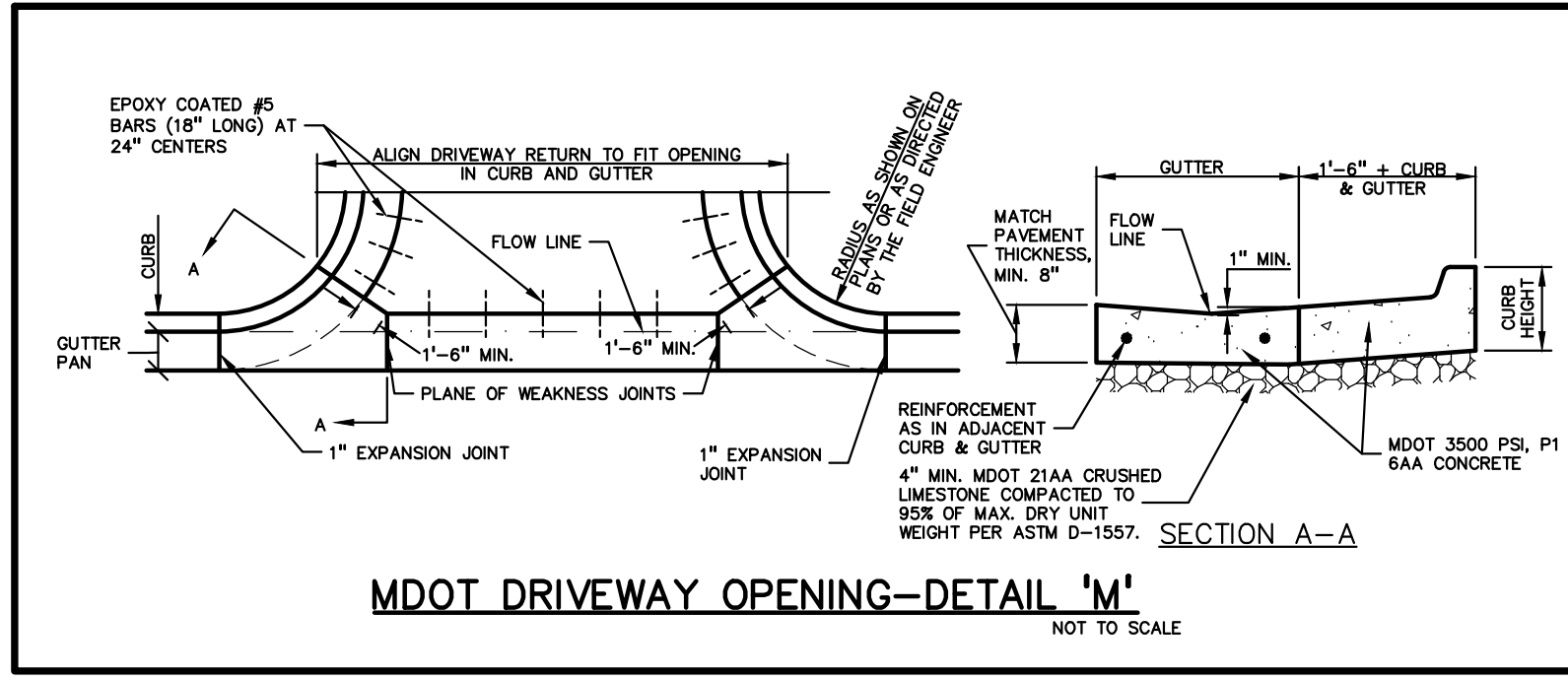
PAVING NOTES:

- IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
- PROVIDE EXPANSION JOINTS AND JOINT SEALANT AT TWO "END-OF-RADIUS" LOCATIONS (OPPOSITE SIDES AT EACH LONG END) OF CONCRETE CURB AND GUTTERS.
- REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
- CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS SHOULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT SHOULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
- CONCRETE PAVEMENT JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - WHERE PROPOSED CONCRETE ABUTS A STRUCTURE PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT. THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A 1/4" INCH TO ALLOW FOR SEALING.
 - WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT) PROVIDE 5/8" DOWELS EVERY 30" CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWEL SIZES AND SPACING MUST BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT.
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED CURBING PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT.
 - CONTROL LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:
 - 6-INCH THICK CONCRETE PAVEMENT: 12' X 12'
 - 8-INCH THICK CONCRETE PAVEMENT: 15' X 15'
 - IRREGULAR SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
- CONCRETE CURBING JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - WHERE PROPOSED CONCRETE CURBING ABUTS A STRUCTURE PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - WHERE PROPOSED CONCRETE ABUTS EXISTING CURBING PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT)
 - CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
 - IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS
 - CONTROL JOINTS SHALL BE PLACED A MAXIMUM 10' CENTER TO CENTER AND AT ALL RADIUS RETURNS

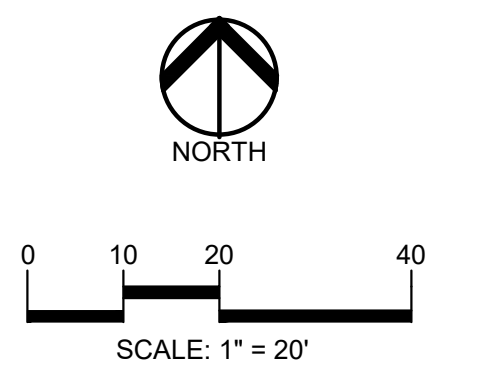
GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

- CONTRACTOR TO FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
- ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM OAKLAND COUNTY PRIOR TO CONSTRUCTION.
- ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.
- REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES (WILL BE PART OF FINAL SITE PLAN/ENGINEERING PLANS).
- ALL SLOPES EXCEEDING 1:6 MUST BE STABILIZED BY SODDING OR BY PLACING A MULCH BLANKET PEGGED IN PLACE OVER SEED.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 4" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITIES BY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL, IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
- ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION RI USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORG
- THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OB LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTA
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAV FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLJ
- SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NEECE THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDER THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
- ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED JOB.



S:\PROJECTS\2021\0817-ROCH-ROCHESTER HILLS FILED\NETA\DWG\SITE PLANS\CG-9\DETAILS-21-0117.dwg PLOT DATE: 7/19/2022 10:59 AM



811 Know what's below. Call before you dig.

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. YOU GUARANTEE THE ACCURACY OF THE INFORMATION PROVIDED AS TO THE COMPLETENESS OF THE INFORMATION. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
3420 ROCHESTER ROAD, LLC
2920 NORTHWESTERN HIGHWAY, SUITE 450
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS	
SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

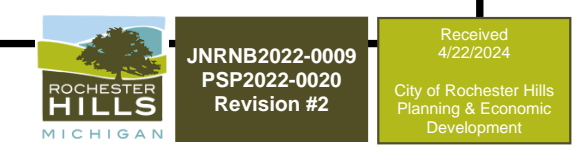
ORIGINAL ISSUE DATE:
AUGUST 15, 2022

DRAWING TITLE
NOTES AND DETAILS

PEA JOB NO.	2021-0117
P.M.	LAA
DN.	MT
DES.	SWS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION
CITY FILE #22-029 SECTION #34

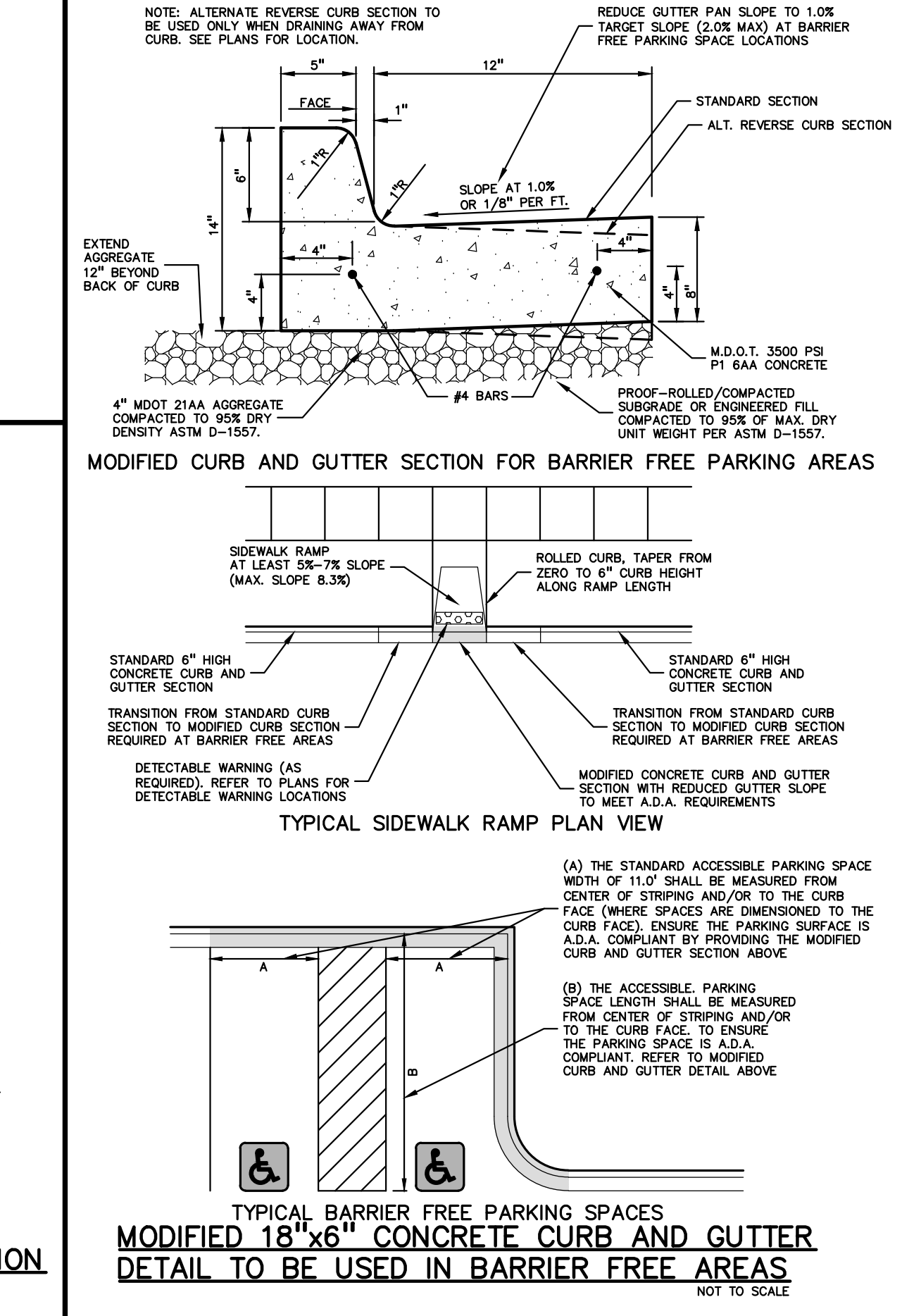
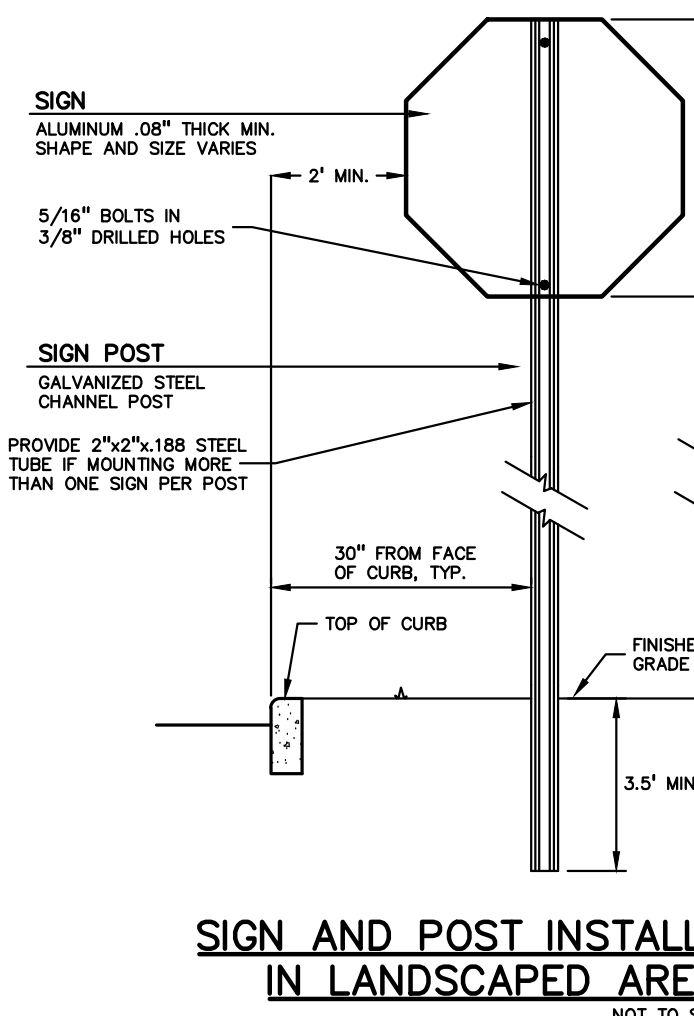
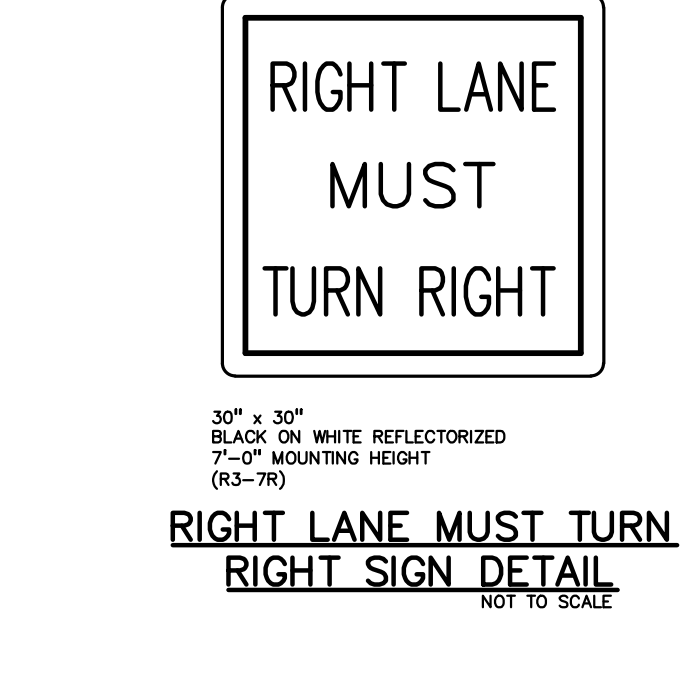
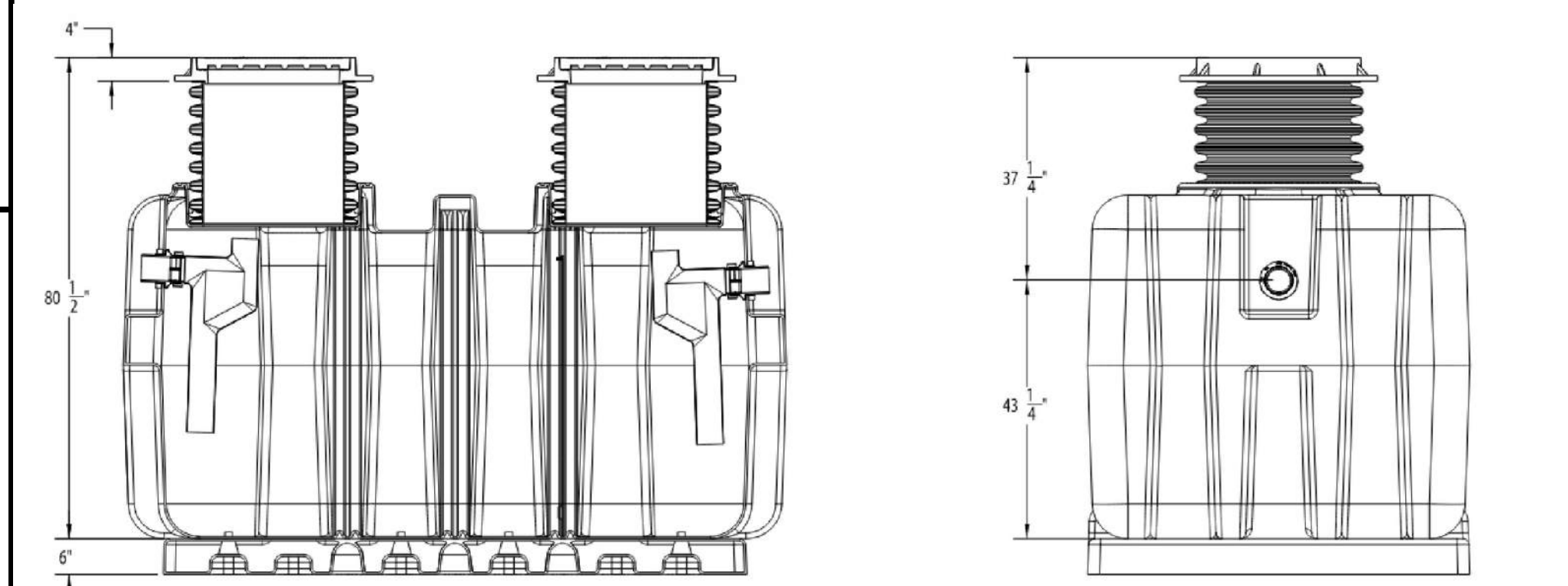
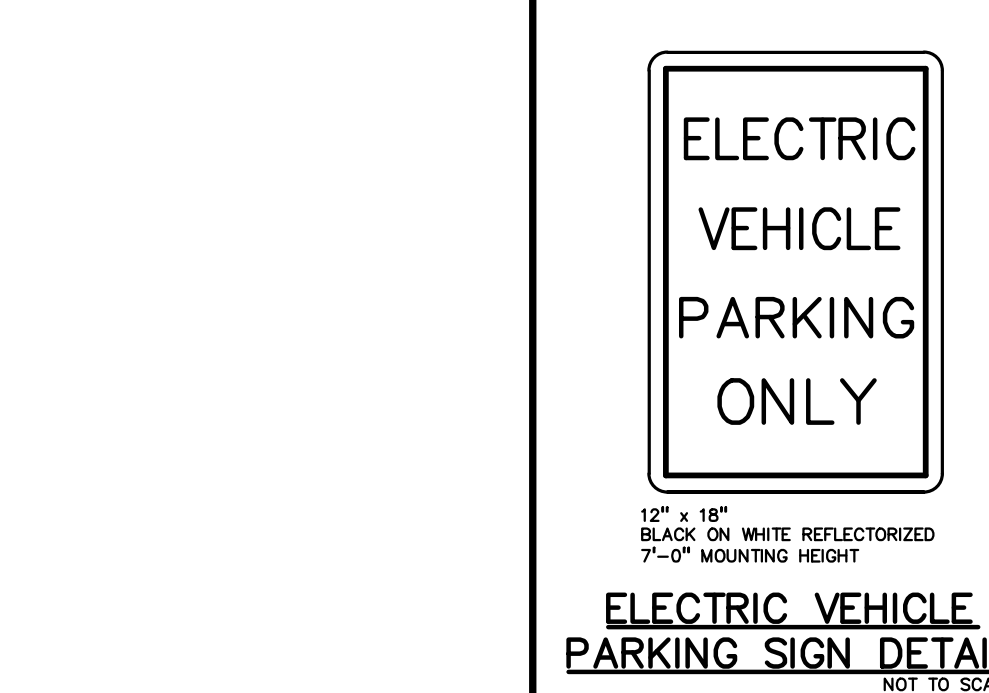
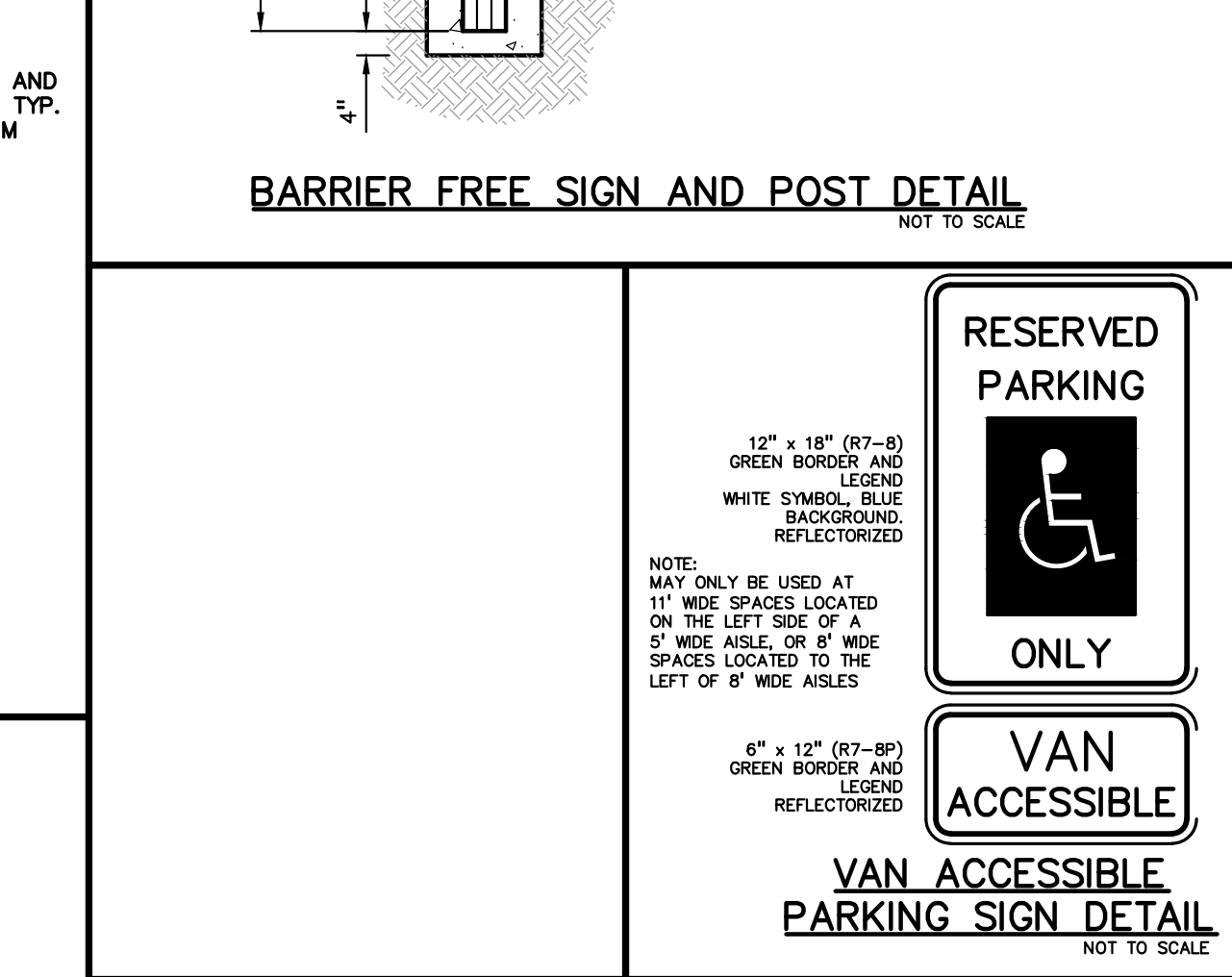
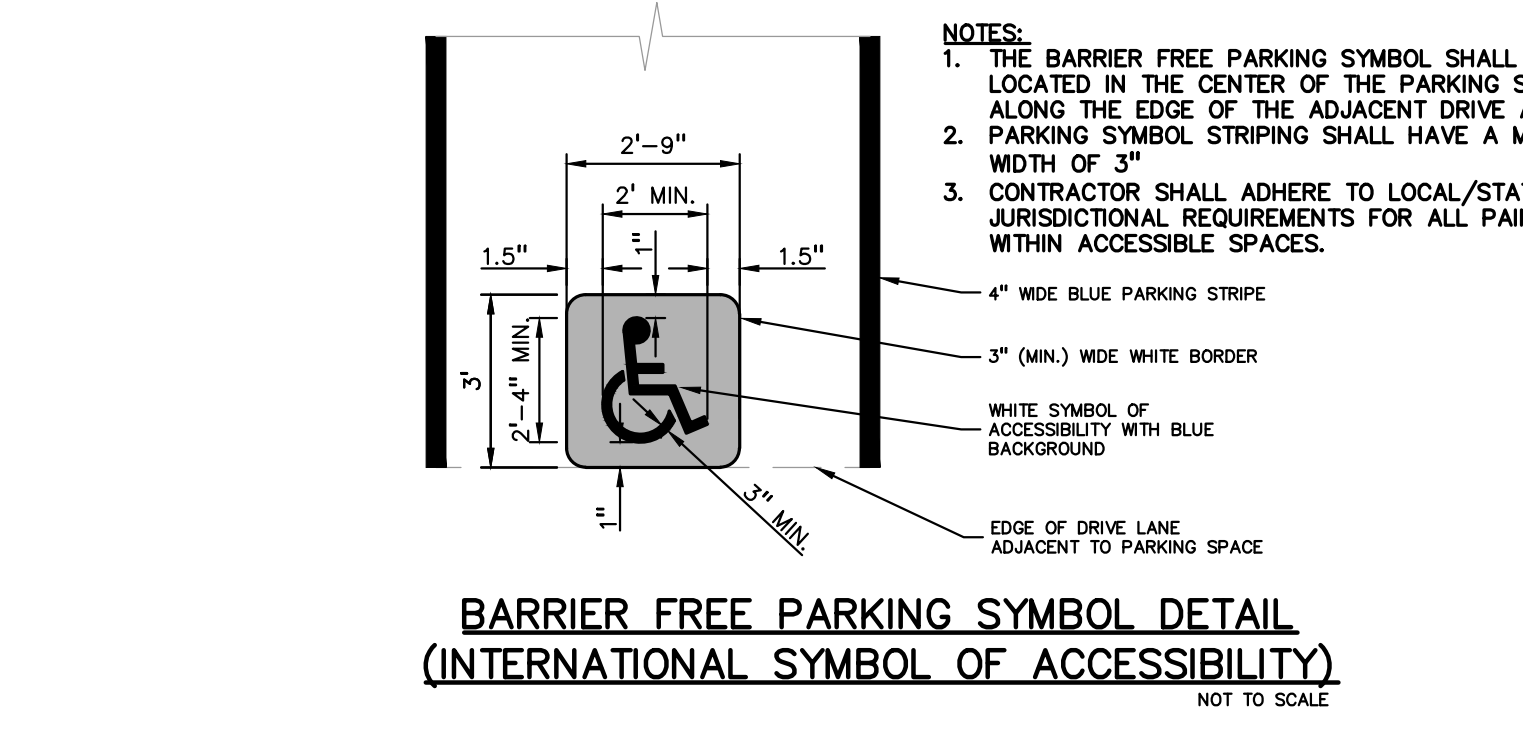
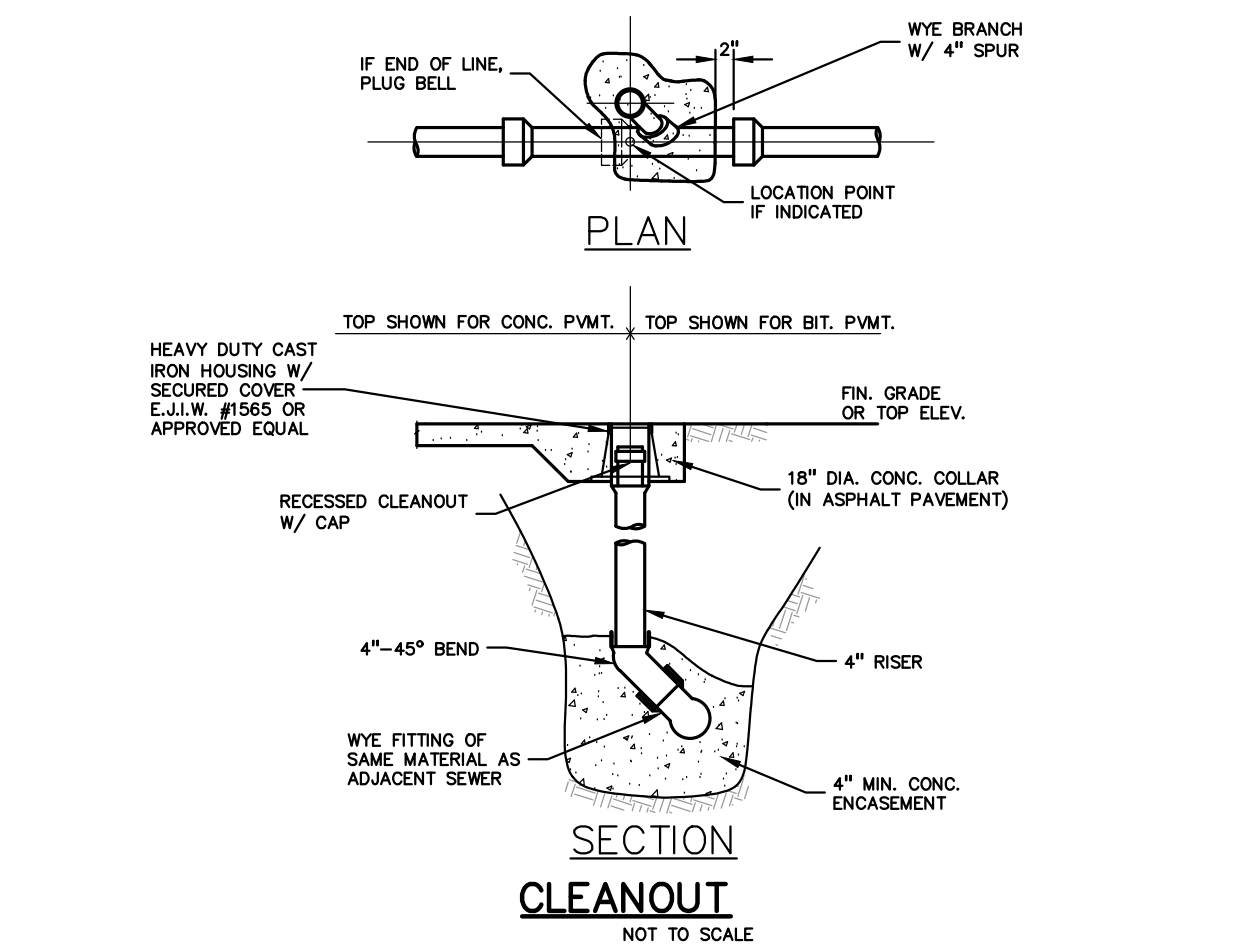
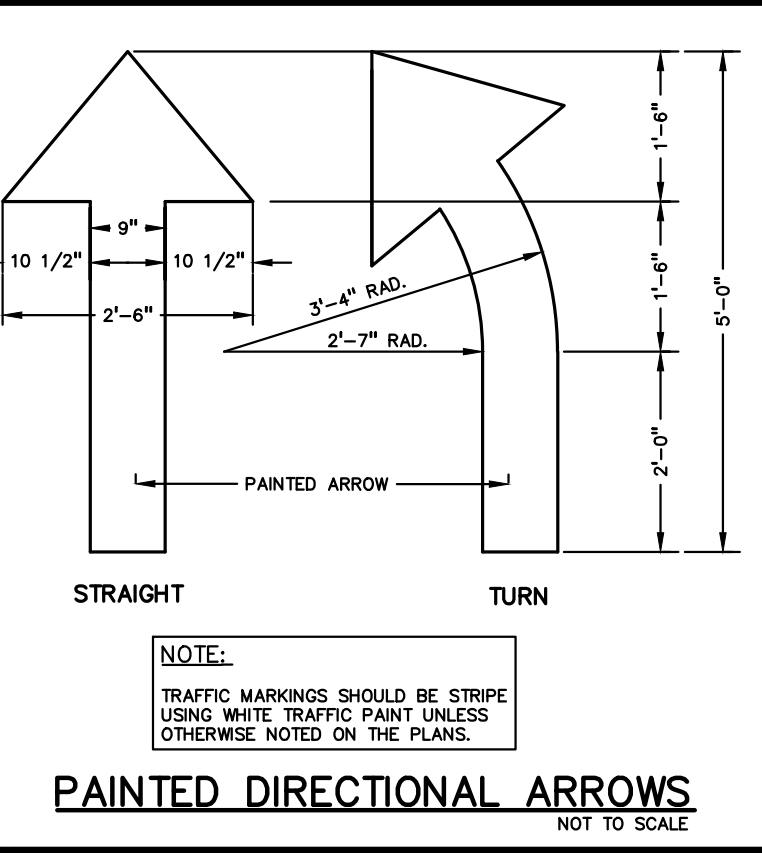
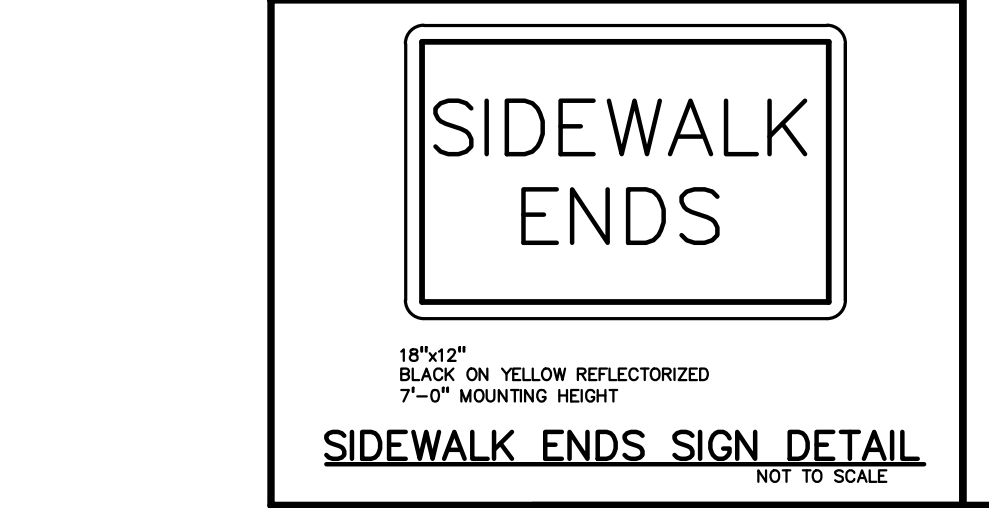
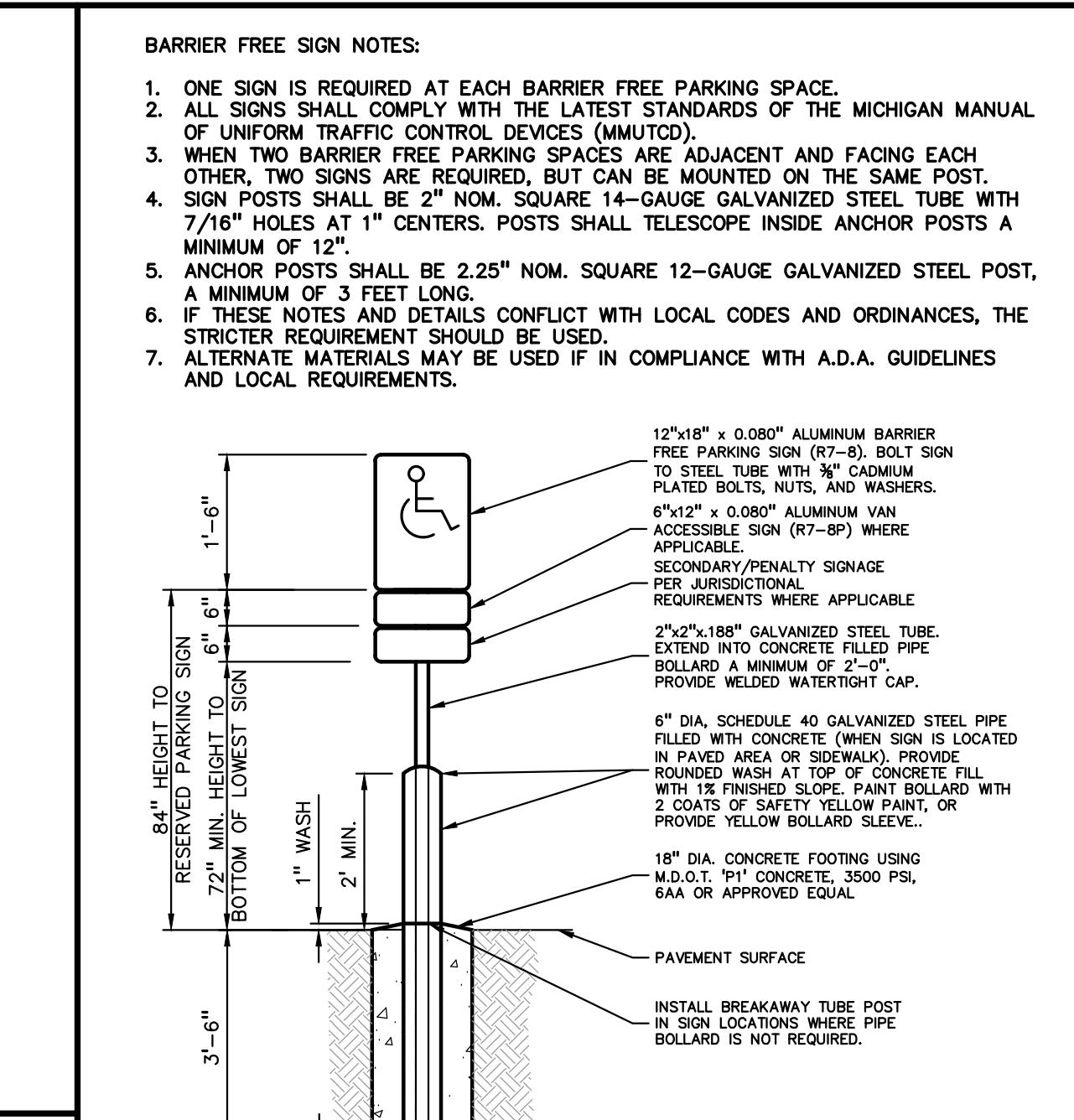
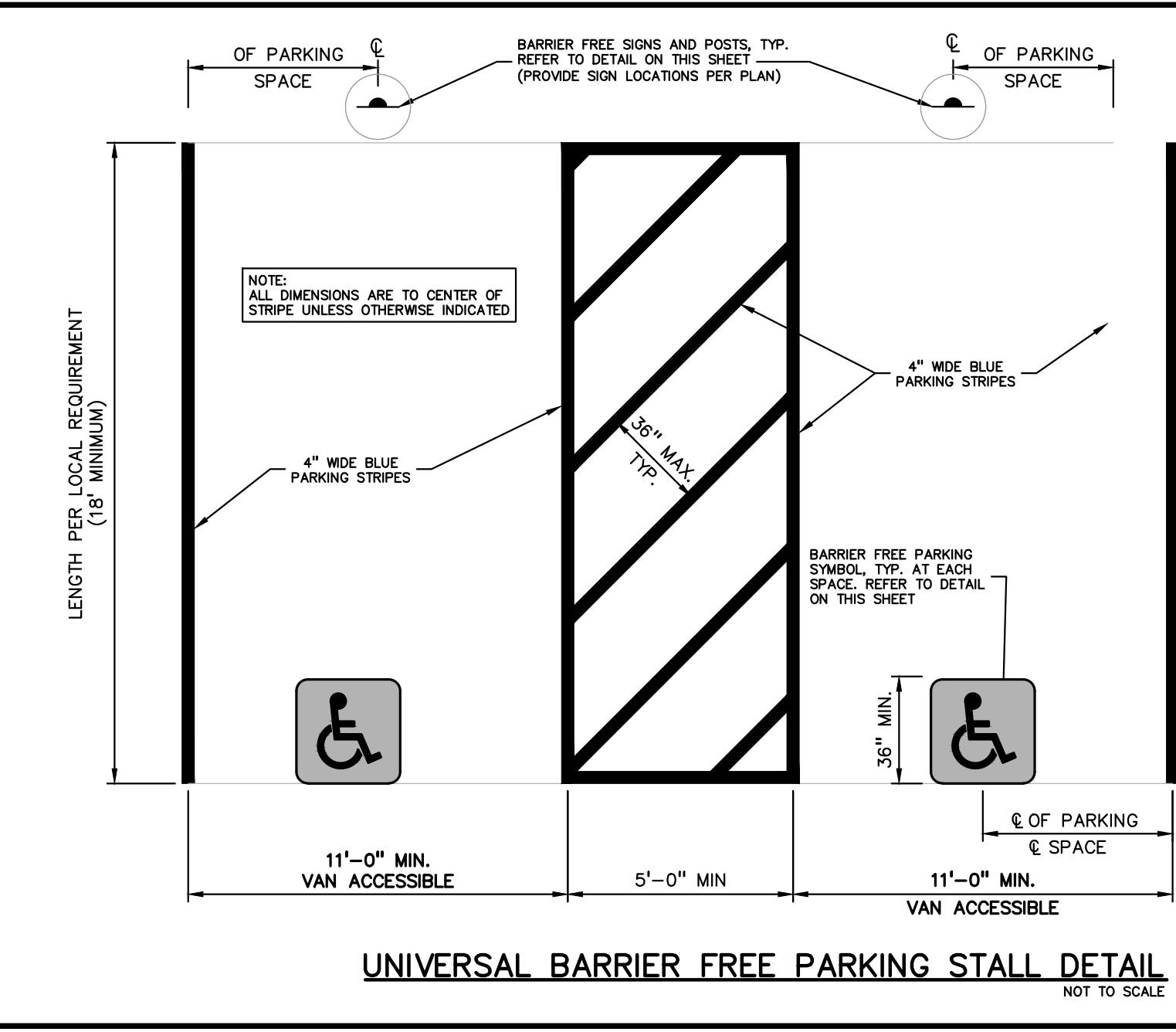
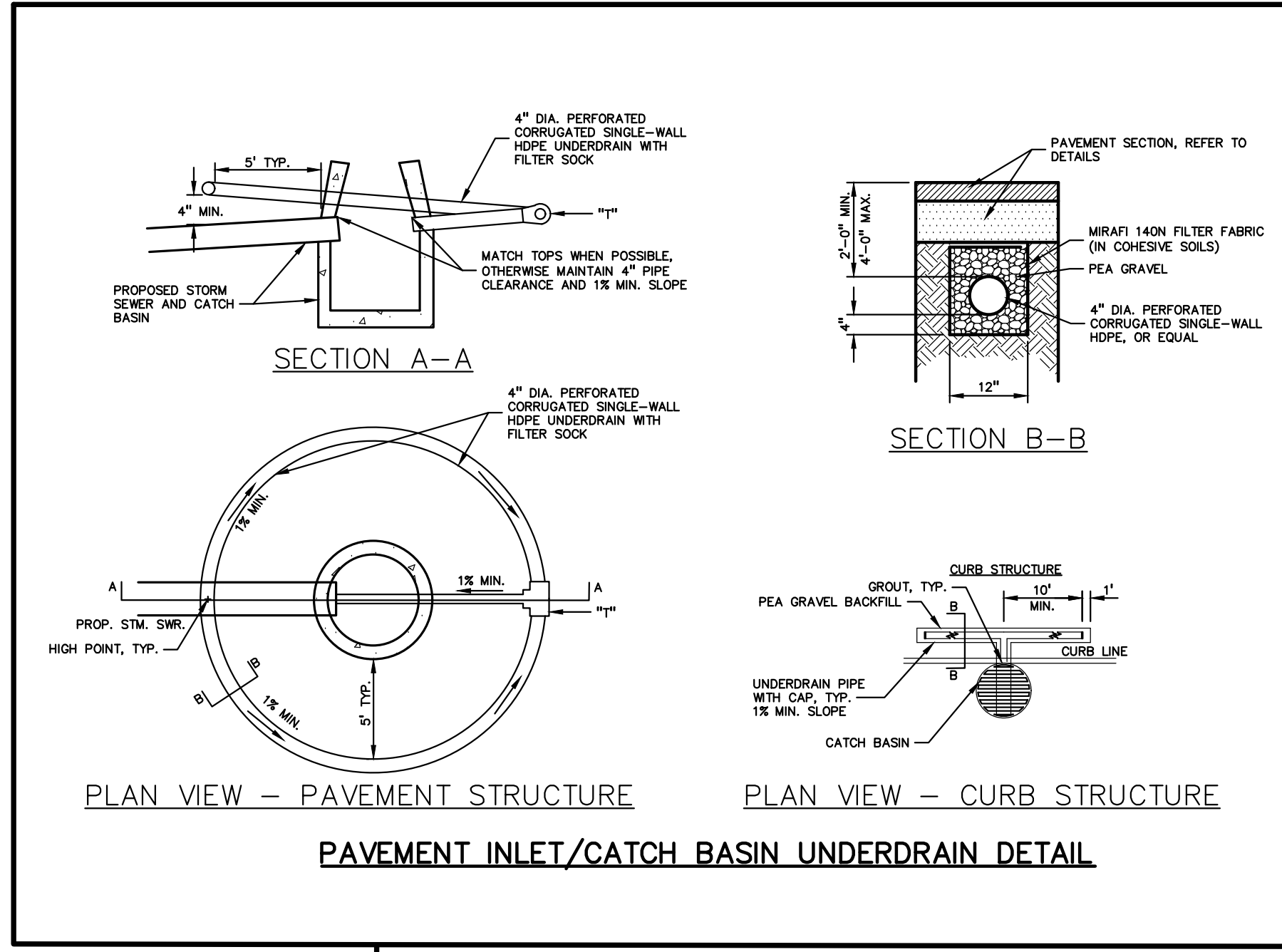
C-9.1



GENERAL BARRIER FREE NOTES:

THE FOLLOWING NOTES PROVIDE AN OUTLINE OF SOME OF THE REQUIREMENTS CONTAINED WITHIN THE "STANDARDS FOR ACCESSIBLE DESIGN - AMERICANS WITH DISABILITIES ACT 2010", AND "ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES", ICC/ANSI A117.1-2009. THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE REQUIREMENTS PRESENTED WITHIN THESE DOCUMENTS, WHICH ARE AVAILABLE IN FULL UPON REQUEST.

- AN ACCESSIBLE ROUTE CONSISTS OF WALK SURFACES, CURB RAMP AND RAMPS. AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE SITE FROM ACCESSIBLE PARKING SPACES, ACCESSIBLE PASSENGER LOADING ZONES, PUBLIC STREETS AND SIDEWALKS, AND PUBLIC TRANSPORTATION STOPS TO THE BUILDING OR FACILITY ENTRANCE THEY SERVE.
- THE RUNNING SLOPE OF ALL WALKING SURFACES SHALL NOT EXCEED 5% (1:20) AND THE CROSS-SLOPE SHALL NOT EXCEED 2% (1:48).
- WALKING SURFACES MUST BE LEVEL WITH PERMITTED VERTICAL CHANGES IN LEVEL NOT TO EXCEED 1/4", OR BEVELED CHANGES IN LEVEL NOT TO EXCEED 1/2". REFER TO DETAIL ON THIS SHEET. ANY CHANGE IN LEVEL GREATER THAN 1/2" MUST BE RAMPED.
- TURNING SPACES ALONG ACCESSIBLE ROUTES MUST BE AT LEAST 5 FEET WIDE IN ALL DIRECTIONS AND NOT EXCEED 2% SLOPE (1:48) IN ANY DIRECTION.
- ACCESSIBLE ROUTES WILL BE DESIGNED TO BE A MINIMUM OF 5 FEET WIDE. THE MINIMUM CLEAR WIDTH IS 3 FEET.
- RAMPS ALONG ACCESSIBLE ROUTES WILL HAVE A RUNNING SLOPE GREATER THAN 5% (1:20) AND LESS THAN 8.3% (1:12).
- THE CROSS-SLOPE OF RAMP RUNS SHALL NOT EXCEED 2% (1:48).
- THE MINIMUM CLEAR WIDTH OF ANY RAMP IS 36 INCHES.
- THE MAXIMUM RISE FOR ANY RAMP (NOT INCLUDING CURB RAMPS) SHALL NOT EXCEED 30 INCHES. LANDINGS ARE REQUIRED AT THE TOP AND BOTTOM OF EACH RAMP. LANDINGS SHALL HAVE A CROSS-SLOPE NOT EXCEEDING 2% (1:48), SHALL BE 5 FEET LONG AND AT LEAST AS WIDE AS THE RAMP CLEAR WIDTH. IF THERE IS A CHANGE OF DIRECTION AT A LANDING, THEN THE LANDING MUST BE AT LEAST 5 FEET WIDE AND 5 FEET LONG.
- HANDRAILS ARE REQUIRED FOR ANY RAMP (NOT INCLUDING CURB RAMPS) WITH A RISE GREATER THAN 6 INCHES. ALL HANDRAILS ARE REQUIRED TO HAVE EDGE PROTECTION UNLESS ADJOINING ANOTHER ACCESS POINT OR IF THE VERTICAL DROP-OFF AT THE EDGE OF THE RAMP DOES NOT EXCEED 1/2" IN 10 FEET. EDGE PROTECTION CAN BE PROVIDED BY MEANS OF A 4" MIN. CURB OR BARRIER.
- CURB RAMPS ALONG ACCESSIBLE ROUTES SHALL NOT BE STEEPER THAN 8.3% (1:12). APPROACHING SLOPES TO THE RAMP CANNOT EXCEED 5%, WHICH INCLUDES SIDEWALKS, PAVEMENT, GUTTERS ETC.
- IF CURB RAMP SIDES ARE FLARED, THE FLARES SHALL NOT BE STEEPER THAN 10% (1:10).
- CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.
- HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
- WHERE DETECTABLE WARNING IS REQUIRED AT CURB RAMPS, THE DETECTABLE WARNING SHALL BE 24" MINIMUM IN DEPTH AND SHALL EXTEND THE FULL WIDTH OF THE RAMP. THE DETECTABLE WARNING SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE.
- FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PARKING SPACES, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED.
- ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO A BUILDING ENTRANCE.
- BARRIER FREE CAR PARKING SPACES SHALL BE A MINIMUM OF 11 FEET WIDE WITH AN ACCESS AISLE 5 FEET WIDE MINIMUM.
- SURFACE SLOPES WITHIN THE PARKING SPACES AND AISLES SHALL NOT EXCEED 2% (1:48).
- VERTICAL AREAS INCLUDING PARKING SPACES, AISLES AND PATHWAYS, REQUIRE A MINIMUM VERTICAL CLEARANCE OF 98 INCHES.
- ACCESSIBLE PARKING SPACES ARE REQUIRED TO BE IDENTIFIED BY SIGNS. THE SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. VAN PARKING SPACES ARE REQUIRED TO BE DESIGNATED AS "VAN ACCESSIBLE". REFER TO DETAILS ON THIS SHEET.



LASER/SHEAR:	DATE:	SCALE:	1:19
BRAKE PRESS:	DATE:	SCALE:	1:19
WELDED BY:	DATE:	SCALE:	1:19
CLEAN/PAINT:	DATE:	SCALE:	1:19
COMPLETED BY:	DATE:	SCALE:	1:19
REVIEWED BY:	DATE:	SCALE:	1:19
APP: [Signature]	DATE:	SCALE:	1:19

PEA GROUP
 t: 844.813.2949
 www.peagroup.com

STATE OF MICHIGAN
 JAMES W. [Signature]
 License No. 039800
 PROFESSIONAL ENGINEER

NORTH

0 10 20 40
 SCALE: 1" = 20'

811 Know what's below. Call before you dig.

CAUTION!!
 THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATION AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
3420 ROCHESTER ROAD, LLC
 29200 NORTHWESTERN HIGHWAY, SUITE 450
 FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
 3420 ROCHESTER ROAD
 ROCHESTER HILLS, OKLAHOMA COUNTY, MICHIGAN

REVISIONS	
SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
 AUGUST 15, 2022

DRAWING TITLE
NOTES AND DETAILS

PEA JOB NO.	2021-0117
P.M.	LAA
DN.	MT
DES.	SWS
DRAWING NUMBER:	C-9.2

NOT FOR CONSTRUCTION
 CITY FILE #22-029 SECTION #34

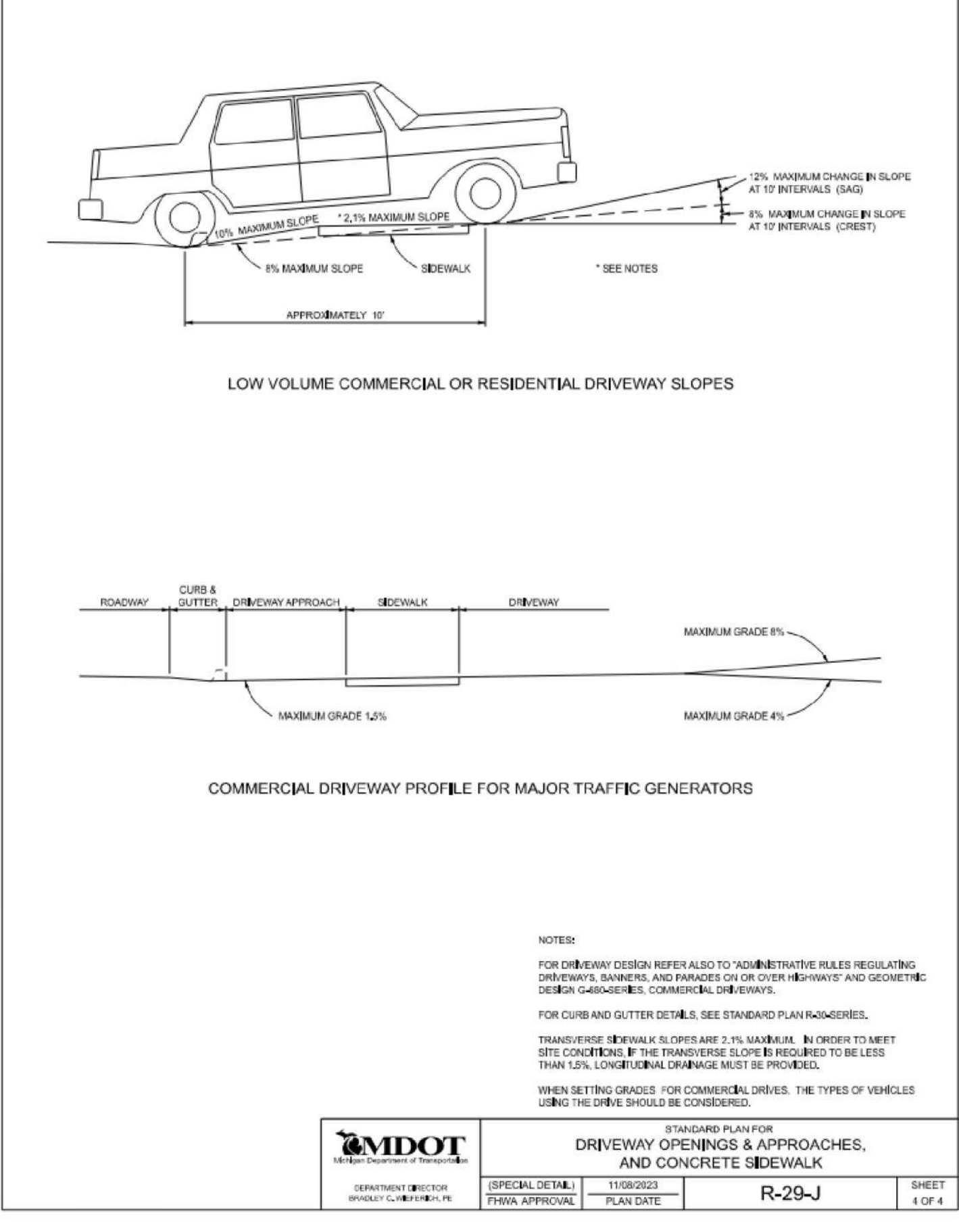
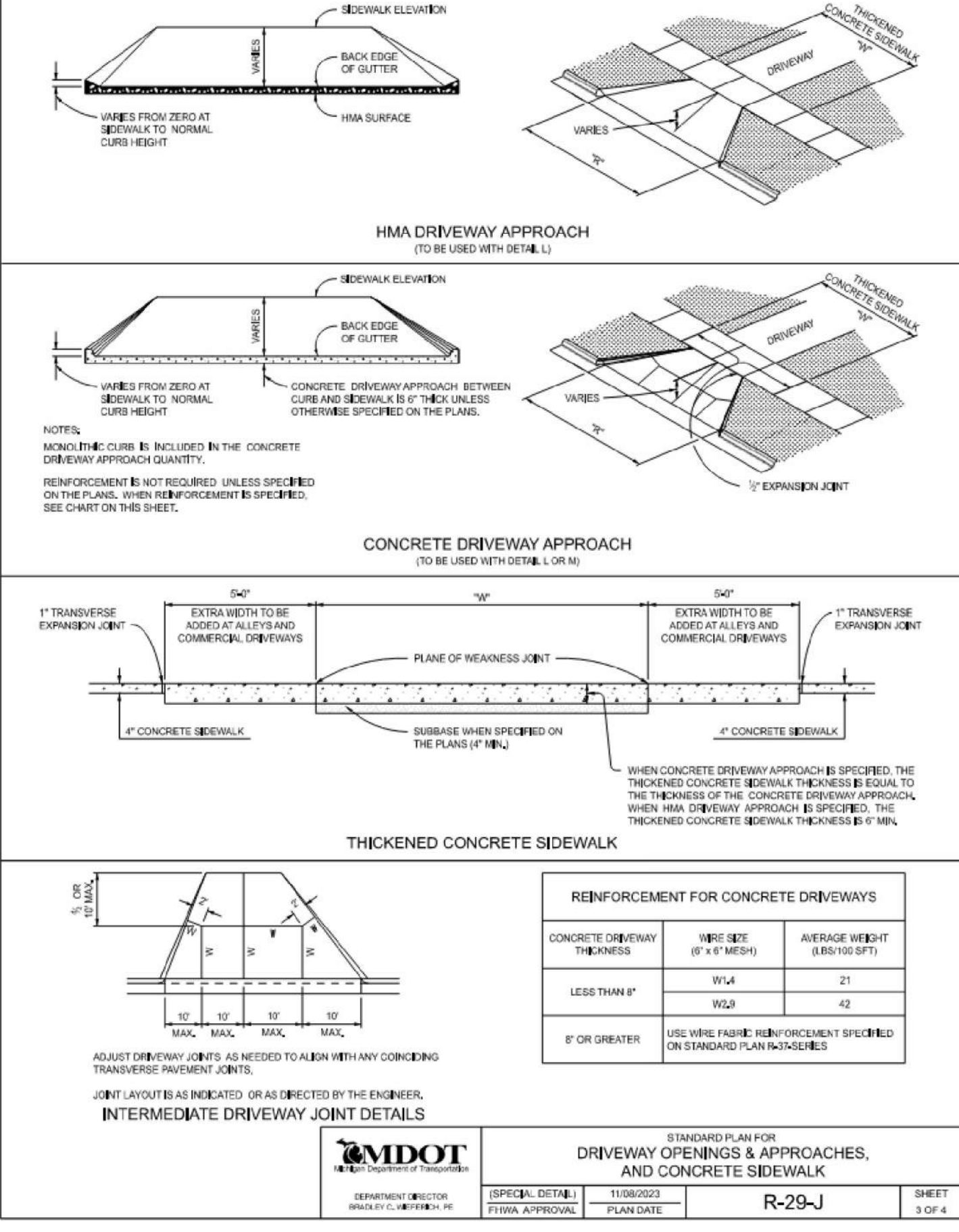
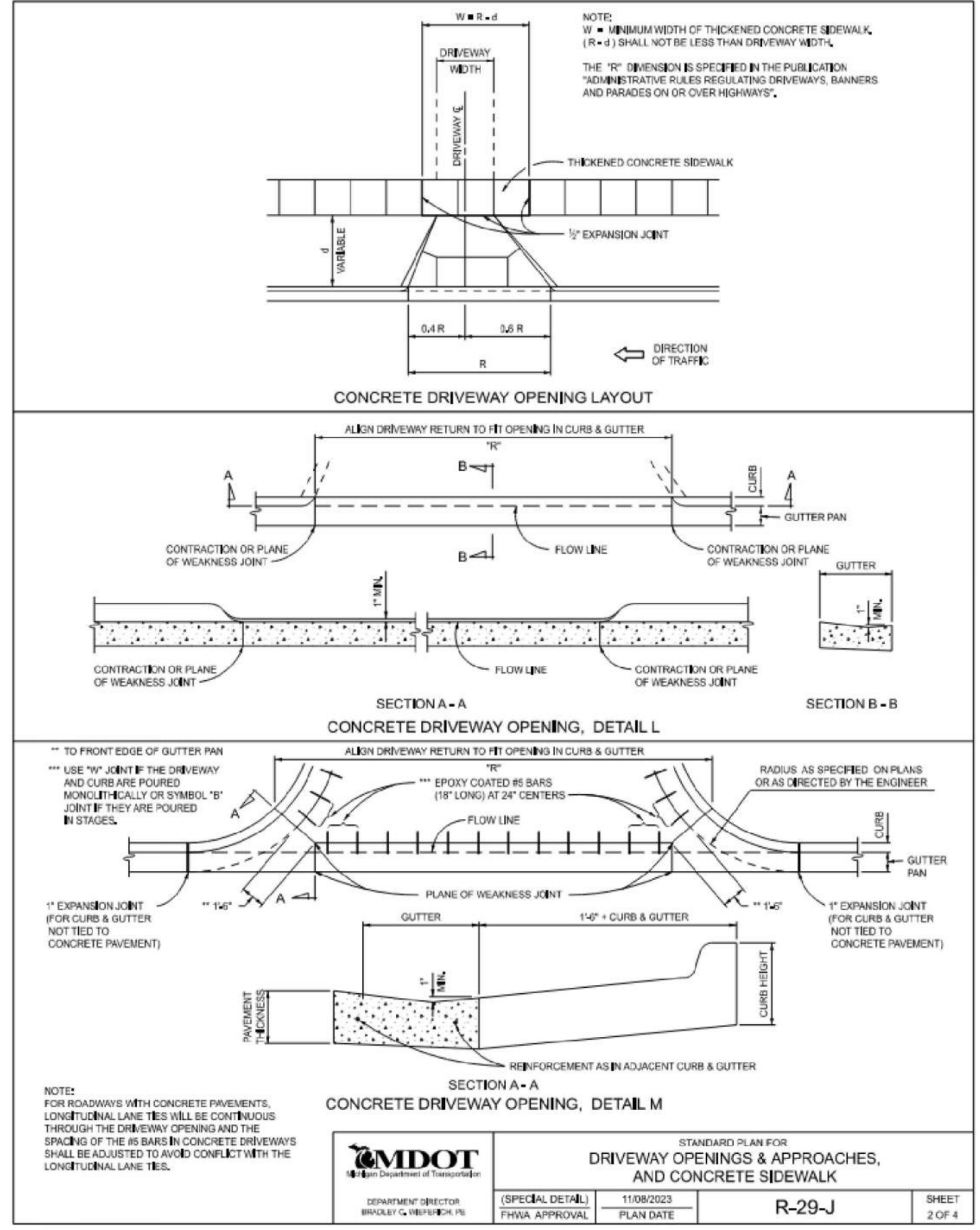
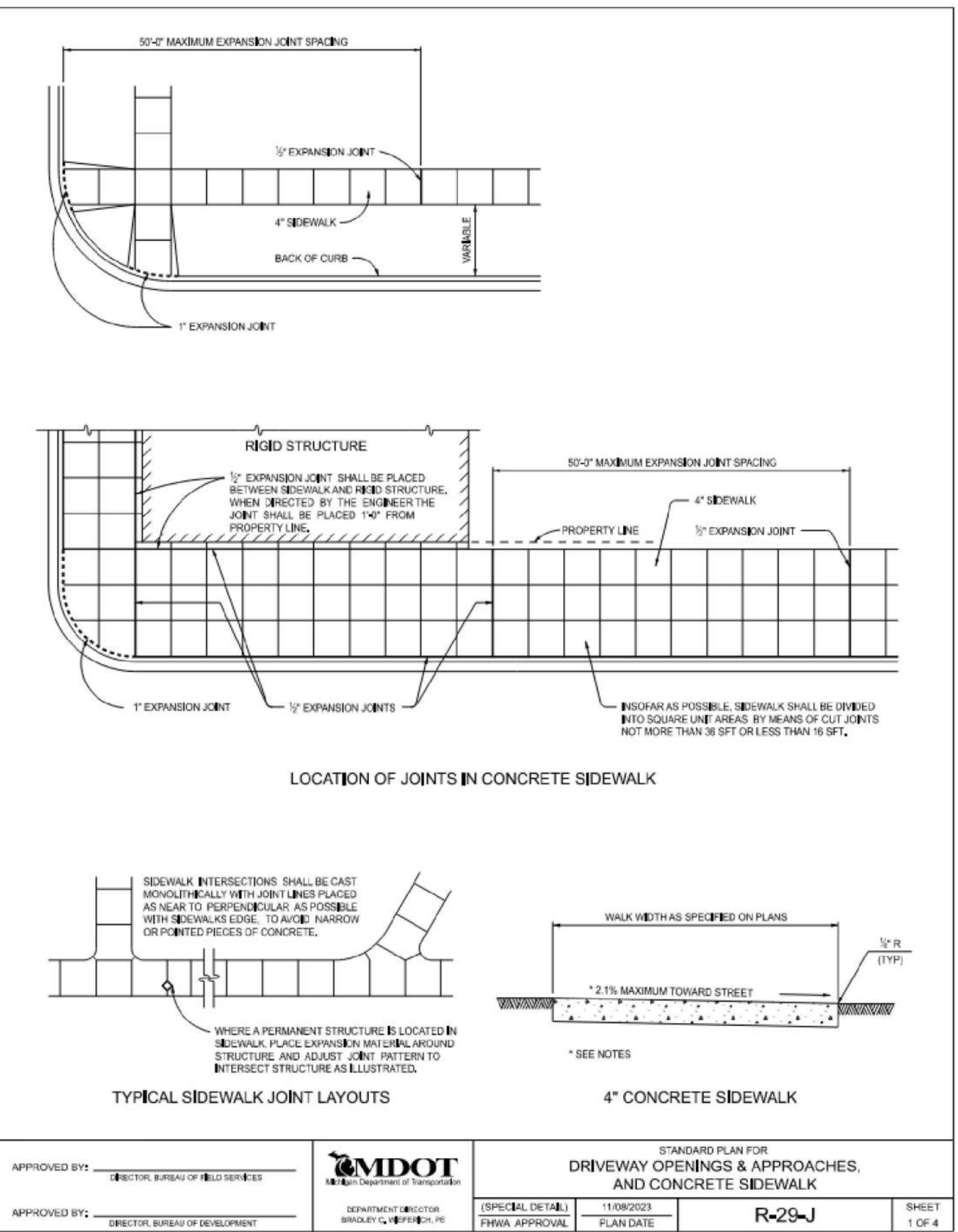
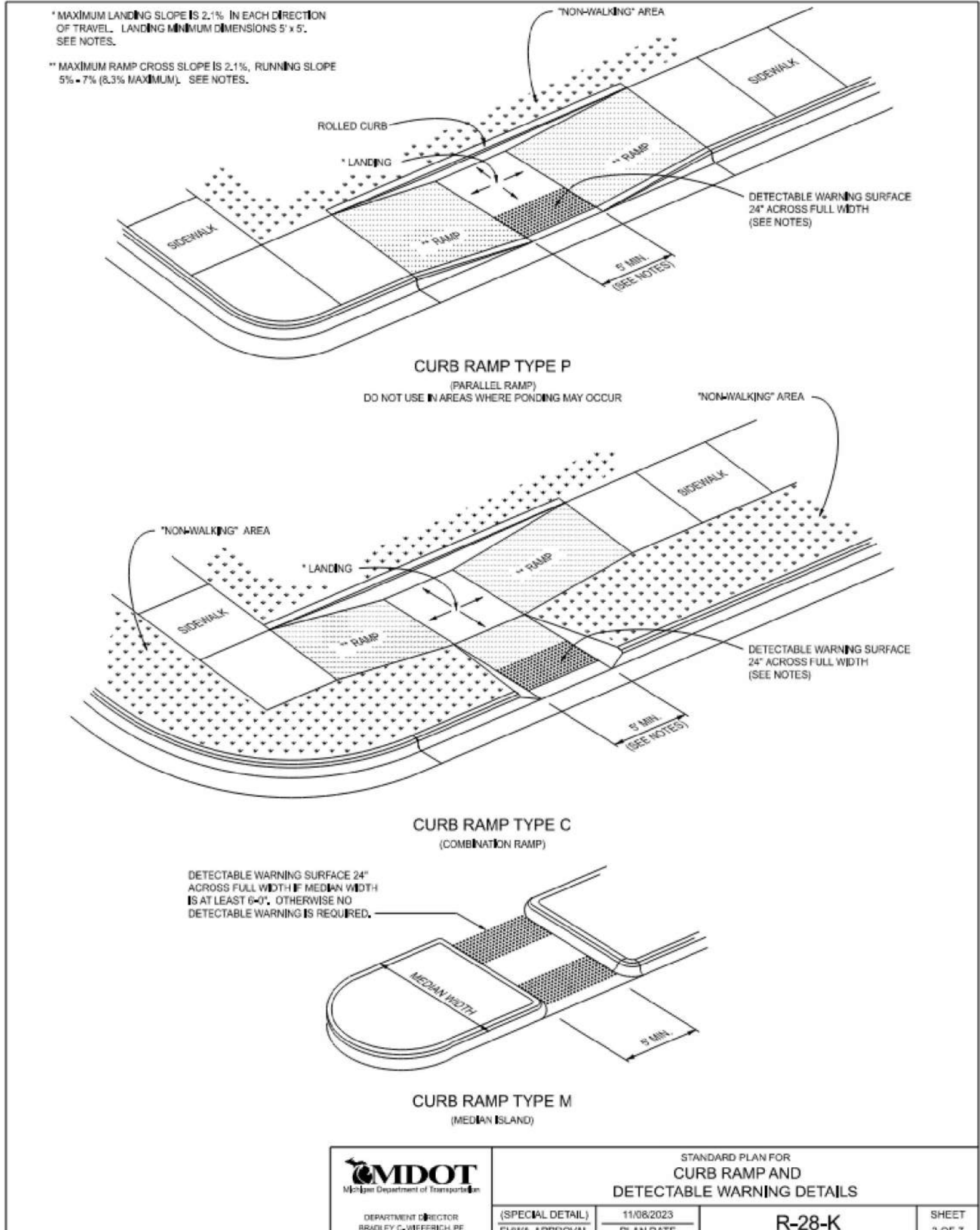
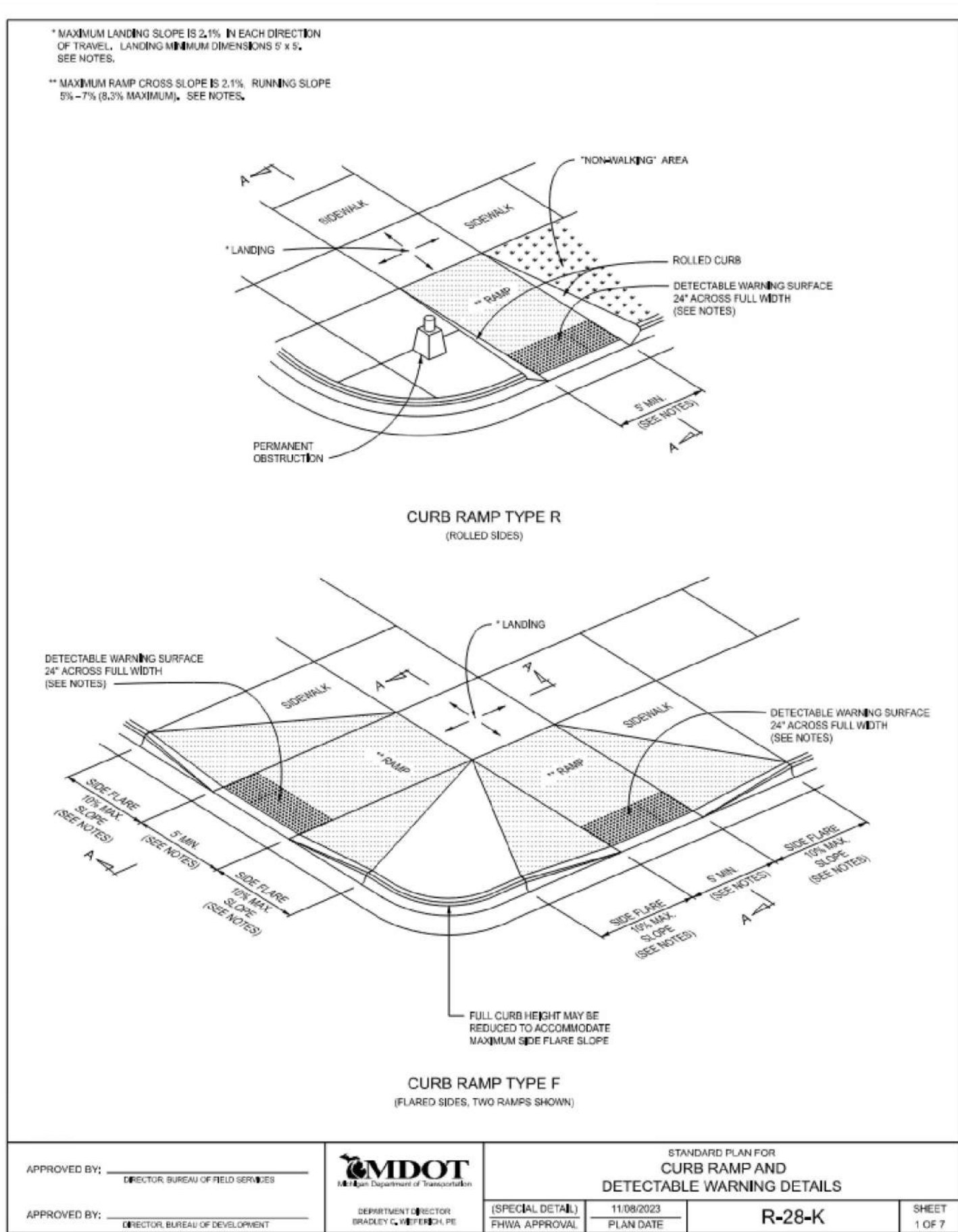
S:\PROJECTS\2021\2021-0117 ROCHESTER HILLS FIELD METAL UNITS SITE PLANS\0-9\02DETAILS-21-0117.dwg PLOT DATE: 7/15/2024 3:07 PM 80 36601 5mg



0 10 20 40
SCALE: 1" = 20'



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



CLIENT
3420 ROCHESTER ROAD, LLC
29200 NORTHWESTERN HIGHWAY,
SUITE 450
FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS	
SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
AUGUST 15, 2022

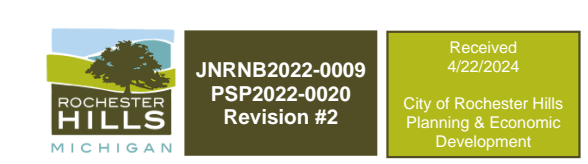
DRAWING TITLE

M.D.O.T. DETAILS

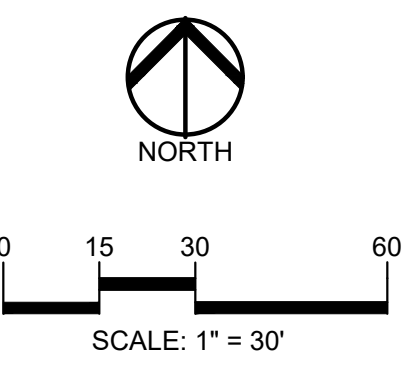
PEA JOB NO. 2021-0117
P.M. LAA
DN. MT
DES. SWS
DRAWING NUMBER:

C-9.4

NOT FOR CONSTRUCTION
CITY FILE #22-029 SECTION #34



S:\PROJECTS\2021\2021-0117 ROCHESTER HILLS FIELD FILE\DRAWINGS\DETAILS-21-0117.dwg PLOT DATE: 11/15/2023 10:07 AM 80 (Sheet) 5/25



CAUTION!!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY AN APPROXIMATE. NO GUARANTEE AS TO ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
3420 ROCHESTER ROAD, LLC
 29200 NORTHWESTERN HIGHWAY,
 SUITE 450
 FARMINGTON HILLS, MICHIGAN 48334

PROJECT TITLE
3420 ROCHESTER ROAD
 3420 ROCHESTER ROAD
 ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

REVISIONS	
SITE/UTILITY LAYOUT	12/20/23
SITE/UTILITY LAYOUT	04/17/24

ORIGINAL ISSUE DATE:
 AUGUST 15, 2022
 DRAWING TITLE
TREE PLAN

PEA JOB NO.	2021-0117
P.M.	LAA
DN.	JLE
DES.	JLE
DRAWING NUMBER:	

KEY:

- = EXISTING TREES TO REMAIN OUTSIDE SITE BOUNDARY
- = EXISTING TREES TO REMAIN
- = EXISTING TREES TO BE REMOVED
- = TREE PROTECTION FENCE SEE DETAIL SHEET L-1.1

SEE SHEET T-1.1 FOR EXISTING TREE LIST



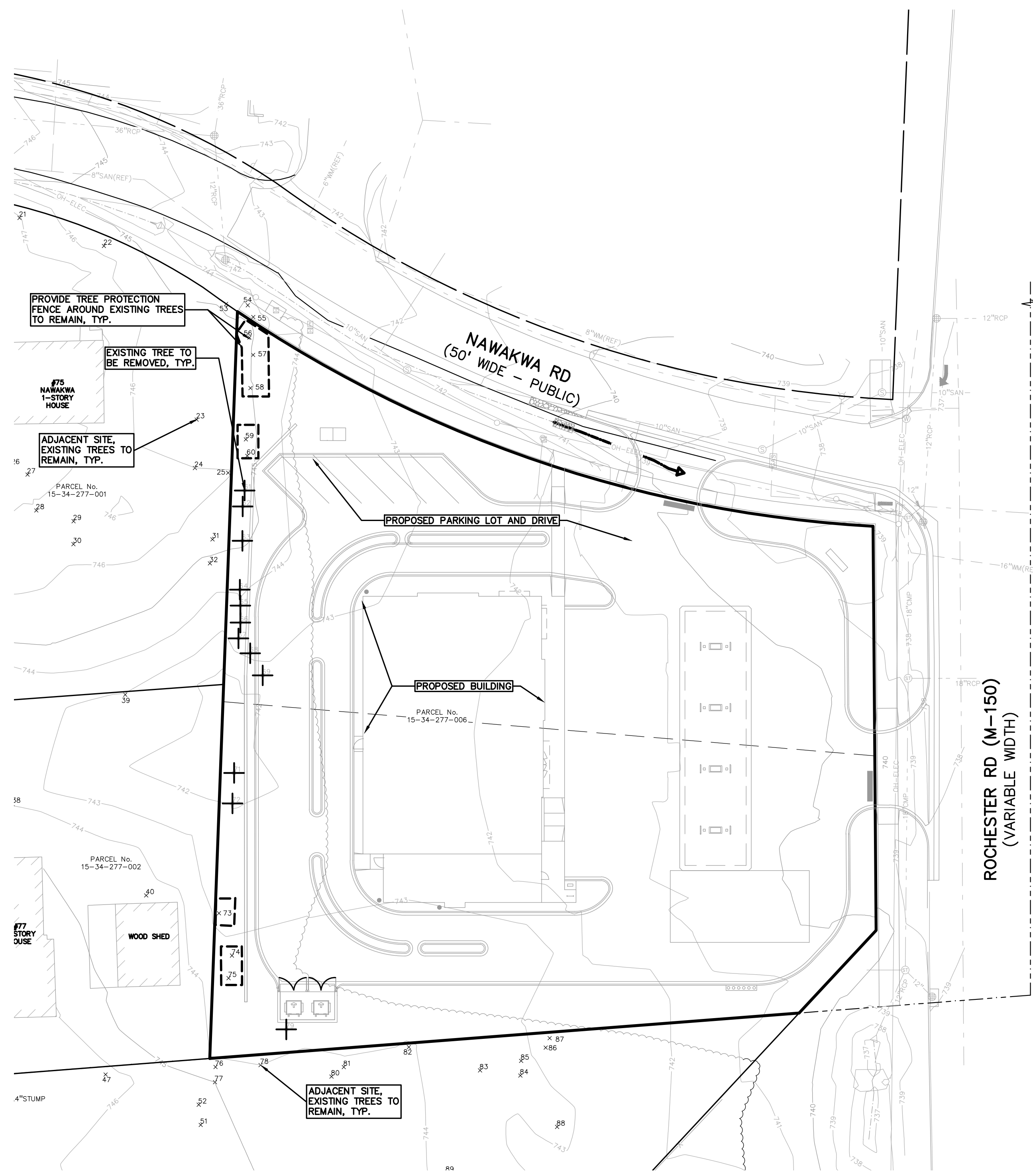
REGULATED ON SITE TREES

REGULATED TREES REMOVED:	12	
SPECIMEN TREES REMOVED:	0	
DBH OF SPECIMEN TREES REMOVED:	0	INCHES = 0 REPLACEMENT INCHES
SPECIMEN REPLACEMENT TREES:	0	TREES
SPECIMEN TREES TO REMAIN ON-SITE:	0	TREES
REPLACEMENT REQUIRED:	12+0-0= 12	TREES (MIN. 2" DECIDUOUS OR 8" EVERGREEN)

TOTAL TREES ON SITE:	20
EXEMPT TREES IN BUILDING:	0
TREES TO REMAIN ON SITE:	8
% TREES TO REMAIN:	(8)/(20-0) = 40.0%

EXISTING TREES:

CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENT	EXEMPT?	SPECIMEN	SAVE / REMOVE	OFFSITE/ NIC	IN BLDING
56	AU	11	Austrian Pine	Pinus nigra	FAIR		N	S	N	N
57	AU	12	Austrian Pine	Pinus nigra	FAIR		N	S	N	N
58	AU	12	Austrian Pine	Pinus nigra	FAIR		N	S	N	N
59	AU	12	Austrian Pine	Pinus nigra	FAIR		N	S	N	N
60	AU	7	Austrian Pine	Pinus nigra	FAIR		N	S	N	N
41	AU	11	Austrian Pine	Pinus nigra	POOR		N	R	N	N
42	AU	10	Austrian Pine	Pinus nigra	POOR		N	R	N	N
43	AU	11	Austrian Pine	Pinus nigra	FAIR		N	R	N	N
64	AU	11	Austrian Pine	Pinus nigra	FAIR		N	R	N	N
65	AU	12	Austrian Pine	Pinus nigra	FAIR		N	R	N	N
66	SC	7	Scotch Pine	Pinus sylvestris	POOR		N	R	N	N
67	SC	10	Scotch Pine	Pinus sylvestris	FAIR		N	R	N	N
68	BW	9	Black Walnut	Juglans nigra	GOOD		N	R	N	N
69	BX	7	Box elder	Acer negundo	FAIR		N	R	N	N
71	AU	10	Austrian Pine	Pinus nigra	POOR		N	R	N	N
72	AU	8	Austrian Pine	Pinus nigra	POOR		N	R	N	N
73	BX	15	Box elder	Acer negundo	POOR		N	S	N	N
74	SC	8	Scotch Pine	Pinus sylvestris	POOR		N	S	N	N
75	BW	8	Black Walnut	Juglans nigra	POOR		N	S	N	N
79	B	6	Basswood	Tilia americana	FAIR	X7	N	R	N	N

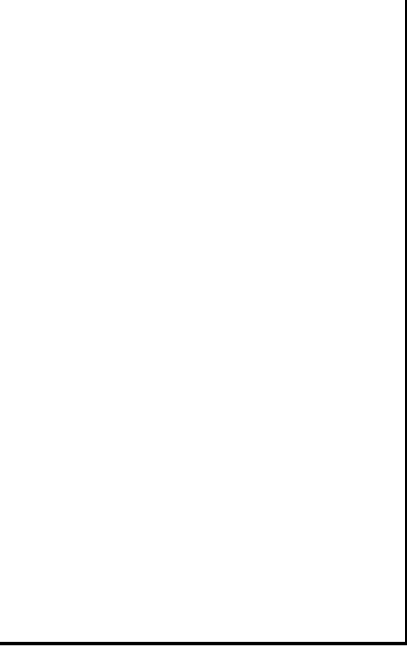
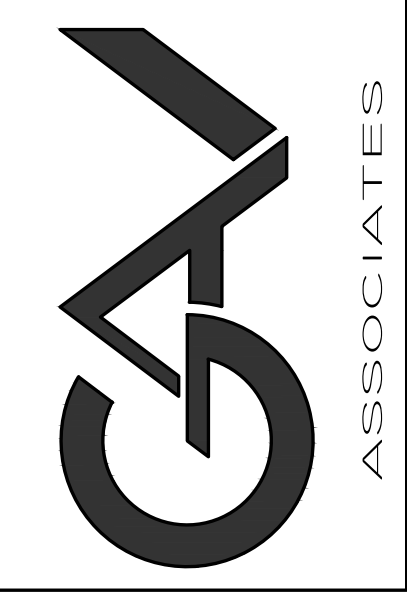


S:\PROJECTS\2021-0117-ROCH HILLS FILEL META\DWG\STATE PLANS\T-1.0\TREE PLAN-21-0117.dwg PLOT
 DATE: 07/26/2024 10:21 AM 81366666.dwg

ISSUED FOR	DATE
REVIEW	10-1-2021
REVIEW	1-10-2022
REVIEW	1-24-2022
SPA REVISION	4-14-2024

ARCHITECTURAL DESIGN
 RESIDENTIAL
 COMMERCIAL
 INDUSTRIAL

G.A.V. ASSOCIATES, INC
 2401 ORCHARD LAKE RD. STE. 100A
 FARMINGTON, MICHIGAN 48338
 PH: (248) 985-9101
 WEB: WWW.GAVASSOCIATES.COM



PROPOSED DRAWINGS FOR:
GAS STATION
3420 ROCHESTER ROAD
ROCHESTER HILLS, MICHIGAN

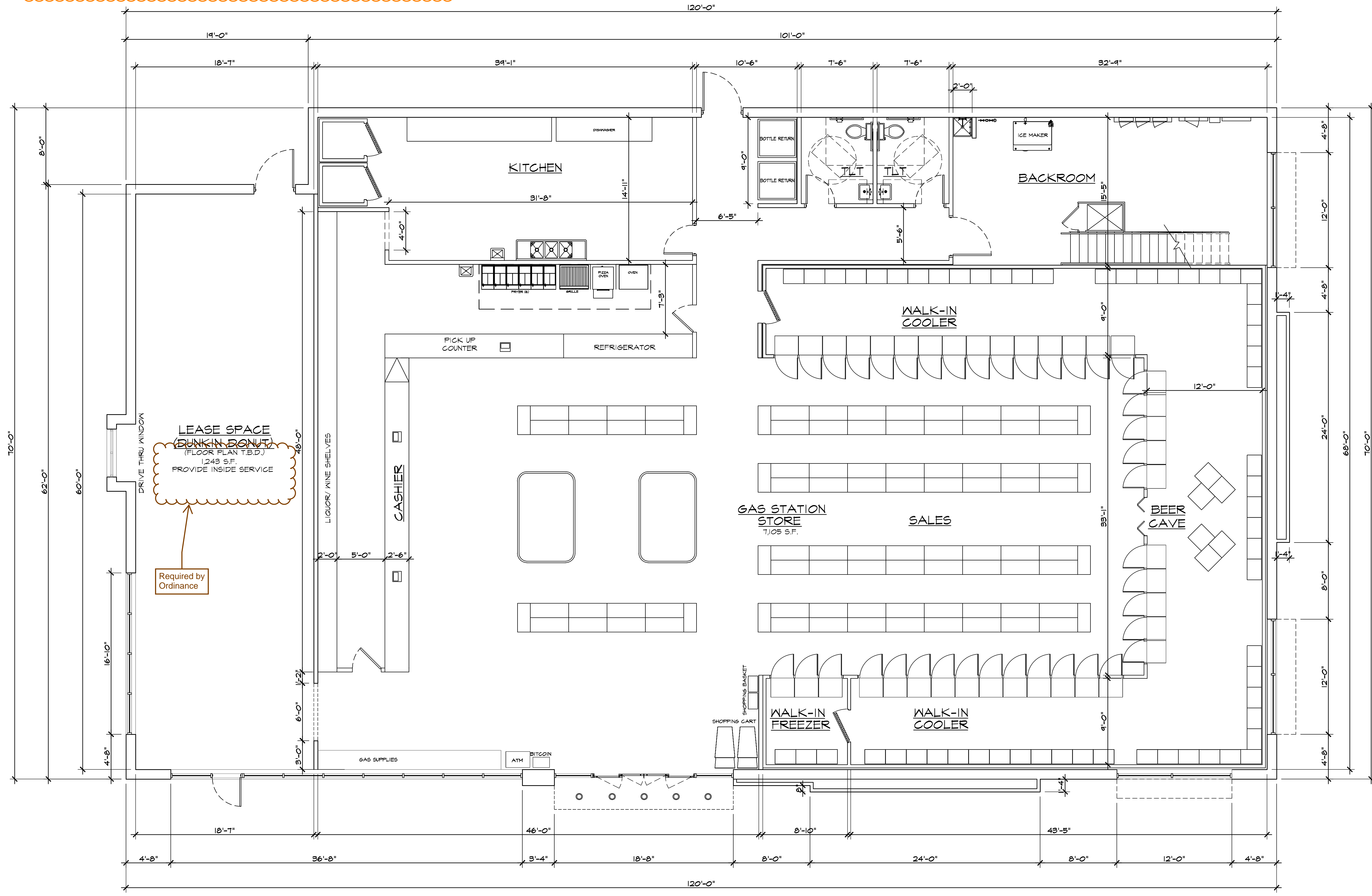
DRAWN:	DESIGNED:	CHECKED:
M.B.	G.A.	G.A.
SCALE : AS SHOWN		
FILE NAME :		
JOB # 21091		
SHEET TITLE FLOOR PLAN		
SHEET # A.101		

PROJECT DESCRIPTION
 PROPOSED 1 STORY COMMERCIAL BUILDING, THE INTERIOR TO BE BUILT OUT INTO GAS STATION (CONVENIENCE/ RETAIL STORE) & TENANT.

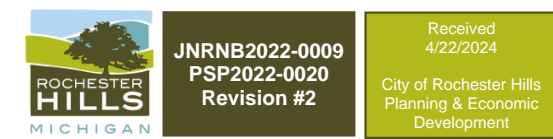
PROJECT DATA:
 USE GROUP: M = MERCANTILE & B = BUSINESS
 CONSTRUCTION TYPE: 2B
 GROSS FLOOR AREA: 8,348 SF (TOTAL BUILDING)
 GAS STATION: 7,105 SF
 LEASE SPACE (DUNKIN DONUT): 1,243 SF
 OUTDOOR GAS CANOPY: 2,342 SF
 TOTAL BUILDING & CANOPY: 10,740 SF

Gas station & store.
 Lease space (Dunkin Donut) would be an A-2 unless the occupant load is less than 50. If so, it would be a 'B' use.

Please address the highlighted items circled in red on the attached "Commercial Site Plan Review Checklist".



FLOOR PLAN
 8,348 SF. SCALE: 3/16" = 1'-0"

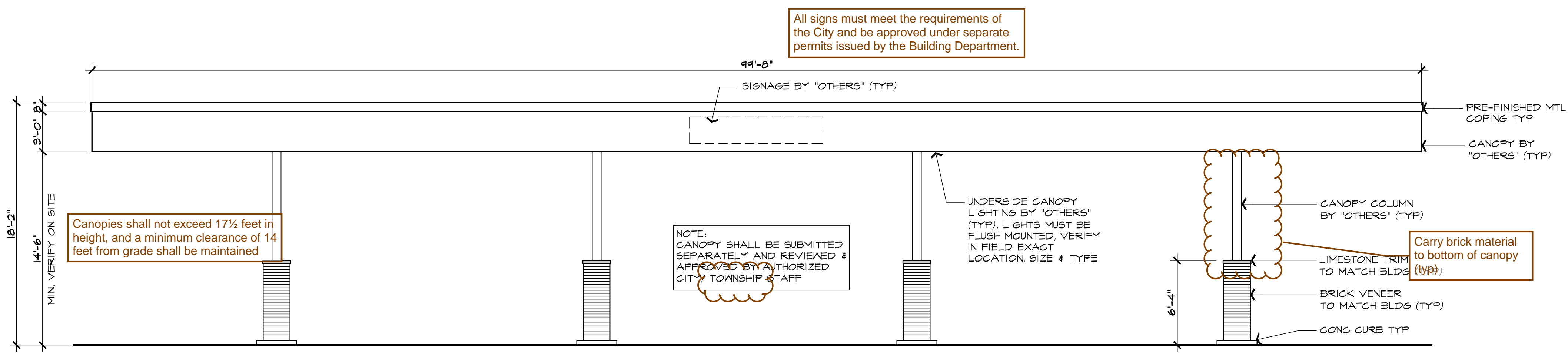


ISSUED FOR	DATE
REVIEW	1-24-2022
SPA REVISION	4-14-2024

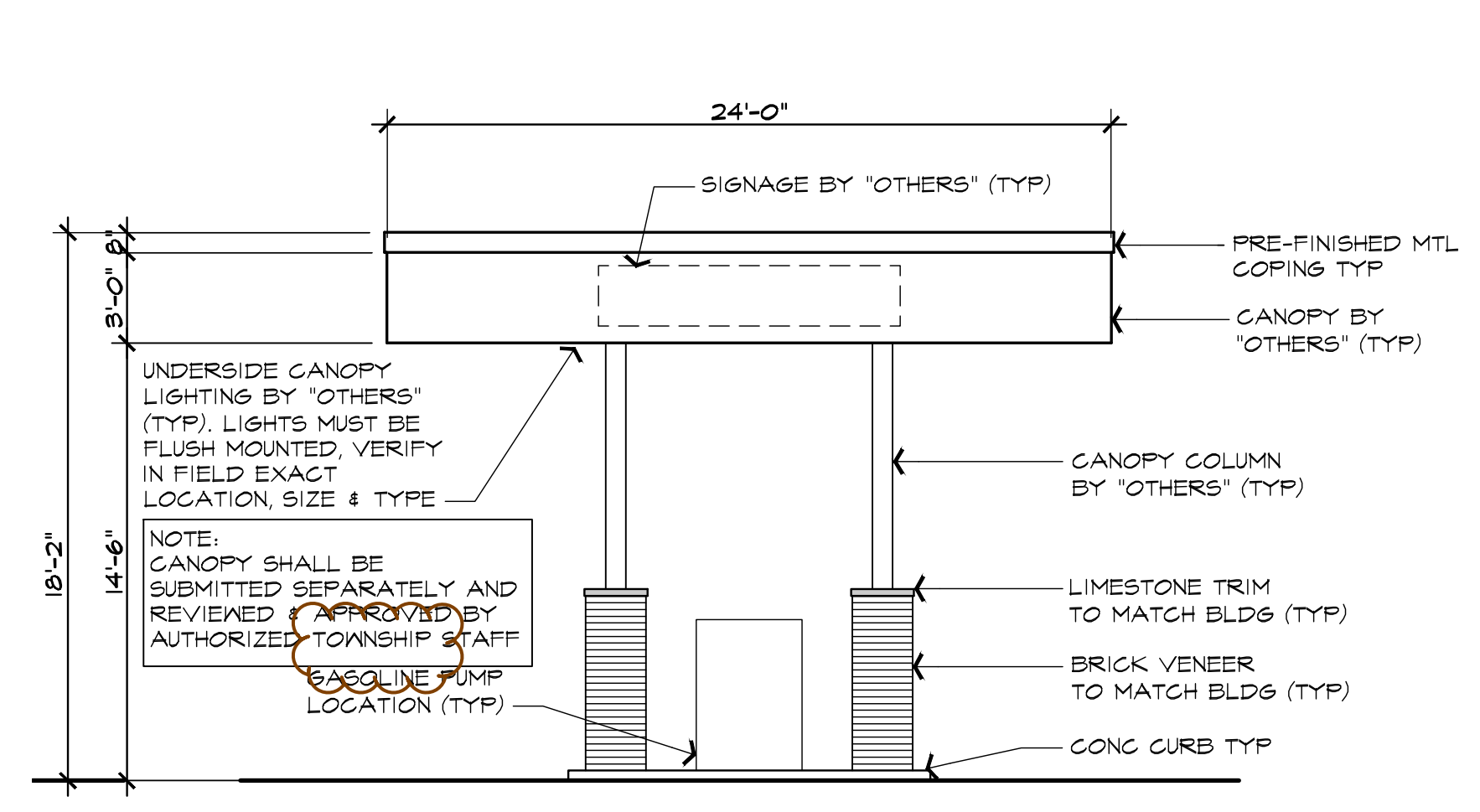
ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

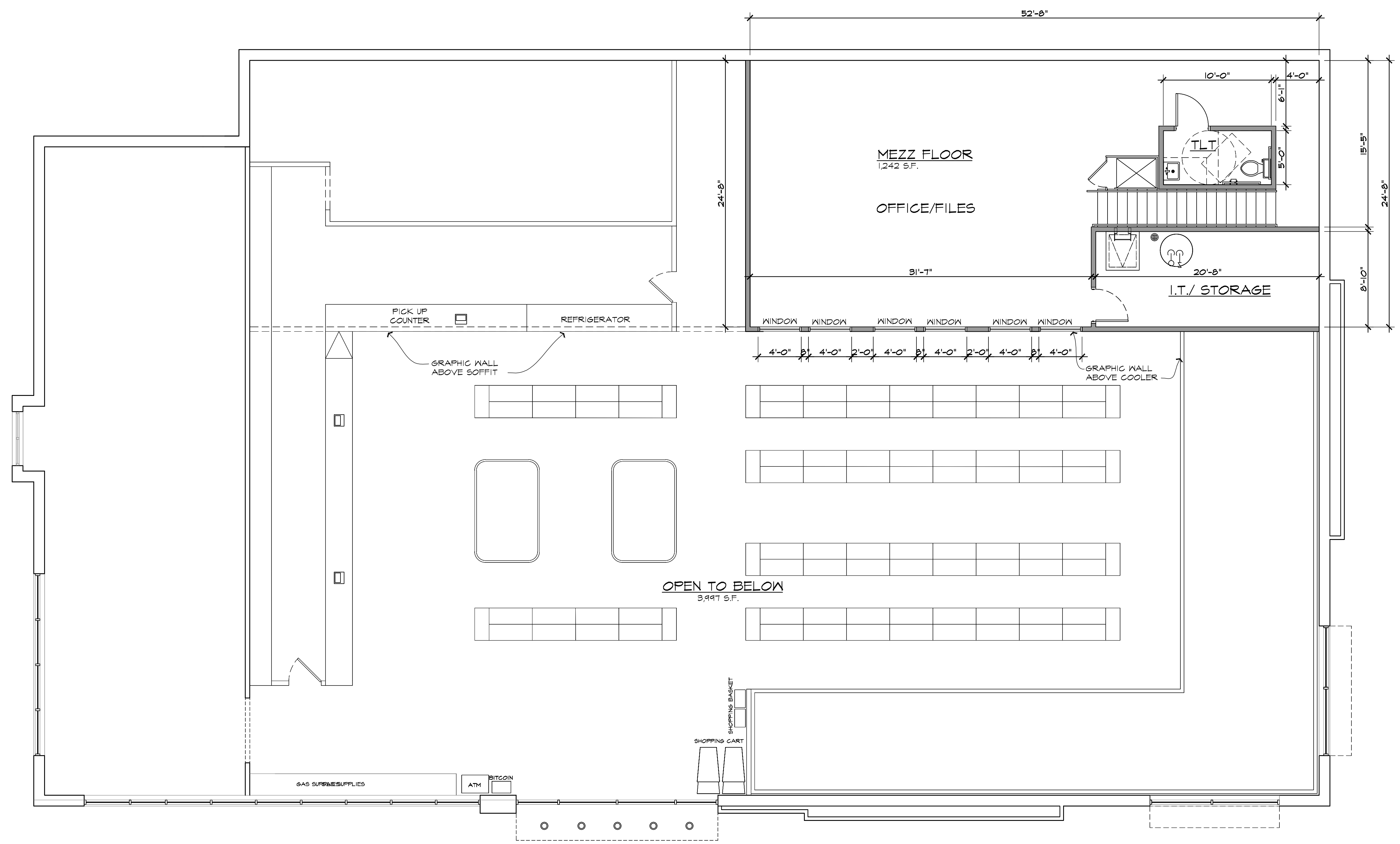
G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48336
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM

FUELING STATION CANOPY EAST/ WEST ELEVATION
SCALE: 3/16" = 1'-0"



FUELING STATION CANOPY SOUTH/ NORTH ELEVATION
SCALE: 3/16" = 1'-0"



MEZZ FLOOR PLAN
SCALE: 3/16" = 1'-0"

PROPOSED DRAWINGS FOR:
GAS STATION
3420 ROCHESTER ROAD
ROCHESTER HILLS, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
M.B.	S.A.	S.A.
SCALE : AS SHOWN		
FILE NAME :		
JOB # 21091		
SHEET TITLE MEZZ FLOOR PLAN		
SHEET # A.102		

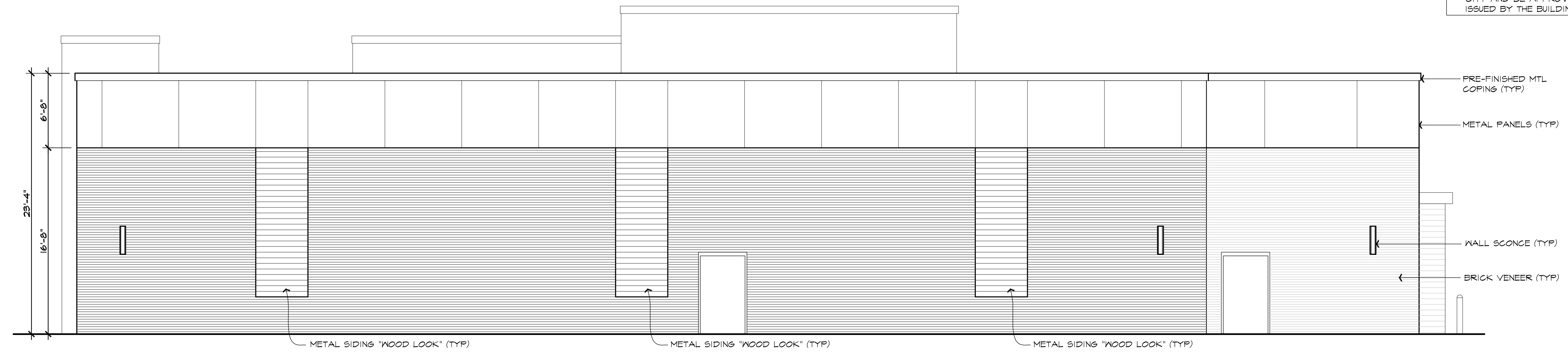
NOTE:
 * ALL SIGNS MUST MEET THE REQUIREMENTS OF THE CITY AND BE APPROVED UNDER SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT (TYP).

ISSUED FOR	DATE
REVIEW	1-24-2022
SPA REVISION	4-14-2024

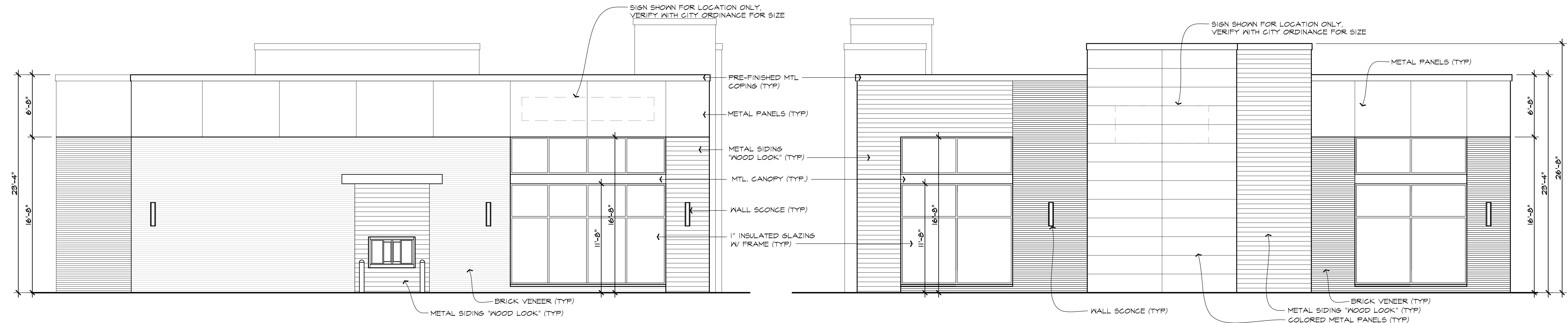
ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
 2401 ORCHARD LAKE RD. STE. 100A
 FARMINGTON, MICHIGAN 48336
 PH: (248) 985-9101
 WEB: WWW.GAVASSOCIATES.COM

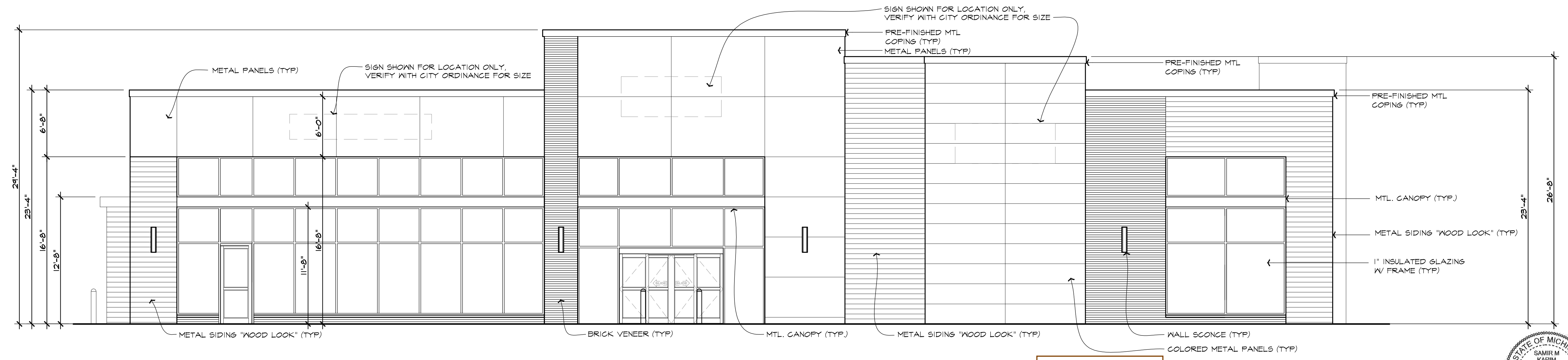



WEST ELEVATION
 SCALE: 3/16" = 1'-0"



SOUTH ELEVATION
 SCALE: 3/16" = 1'-0"

NORTH ELEVATION
 SCALE: 3/16" = 1'-0"



EAST ELEVATION
 SCALE: 3/16" = 1'-0"

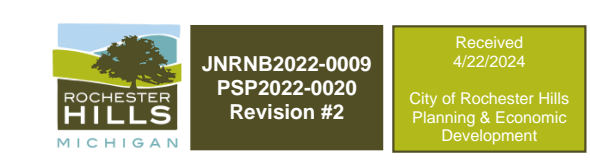
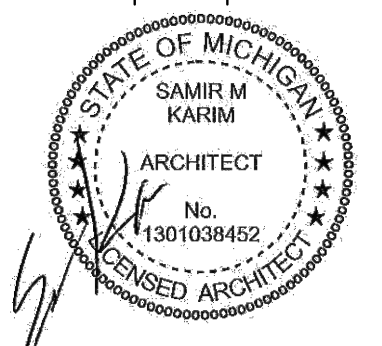
Additional brick veneer on east facade may be necessary upon Planning Commission review. Adding brick veneer along base of facade - across all facade materials may be appropriate to increase percentage of masonry and provide additional durability.

PROPOSED DRAWINGS FOR:
GAS STATION
3420 ROCHESTER ROAD
ROCHESTER HILLS, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
M.B.	S.A.	S.A.
SCALE : AS SHOWN		
FILE NAME :		
JOB # 21091		

SHEET TITLE
EXTERIOR ELEVATIONS

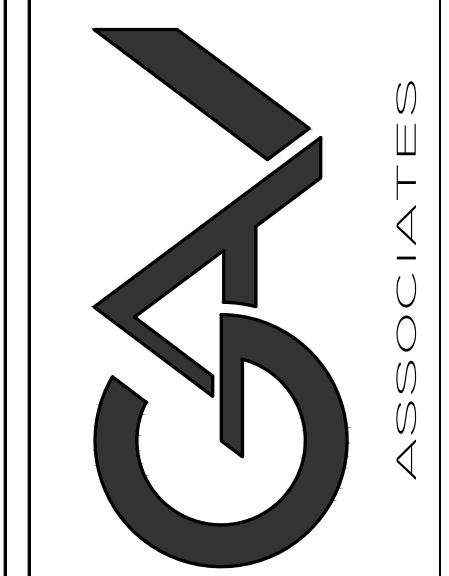
SHEET #
A.201



ISSUED FOR	DATE
REVIEW	8-24-2022
SPA REVISION	4-19-2024

ARCHITECTURAL DESIGN
 RESIDENTIAL COMMERCIAL INDUSTRIAL

G.A.V. ASSOCIATES, INC
 24001 ORCHARD LAKE RD. STE. 100A
 FARMINGTON, MICHIGAN 48336
 PH: (248) 986-9101
 WEB: WWW.GAVASSOCIATES.COM



PROPOSED DRAWINGS FOR:
 GAS STATION
 3420 ROCHESTER ROAD
 ROCHESTER HILLS, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
M.B.	S.A.	S.A.

SCALE : AS SHOWN

FILE NAME :

JOB # 21091

SHEET TITLE
 EXTERIOR RENDERINGS

SHEET #
 A.202

NOTE:
 • ALL SIGNS MUST MEET THE REQUIREMENTS OF THE CITY AND BE APPROVED UNDER SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT (TYP).
 • ALL ROOF MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED FROM VIEW.
 • THE MAXIMUM PARAPET HEIGHT OF ANY STRUCTURE IS FOUR FEET.



WEST ELEVATION

SCALE: 3/16" = 1'-0"

These architectural features should provide some level of projection from facade and should be carried to grade level.



SOUTH ELEVATION

SCALE: 3/16" = 1'-0"



NORTH ELEVATION

SCALE: 3/16" = 1'-0"

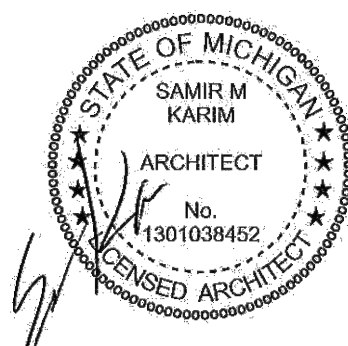


EAST ELEVATION

SCALE: 3/16" = 1'-0"

JNRNB2022-0009
 PSP2022-0020
 Revision #2

Received 8/22/2024
 City of Rochester Hills
 Planning & Economic
 Development

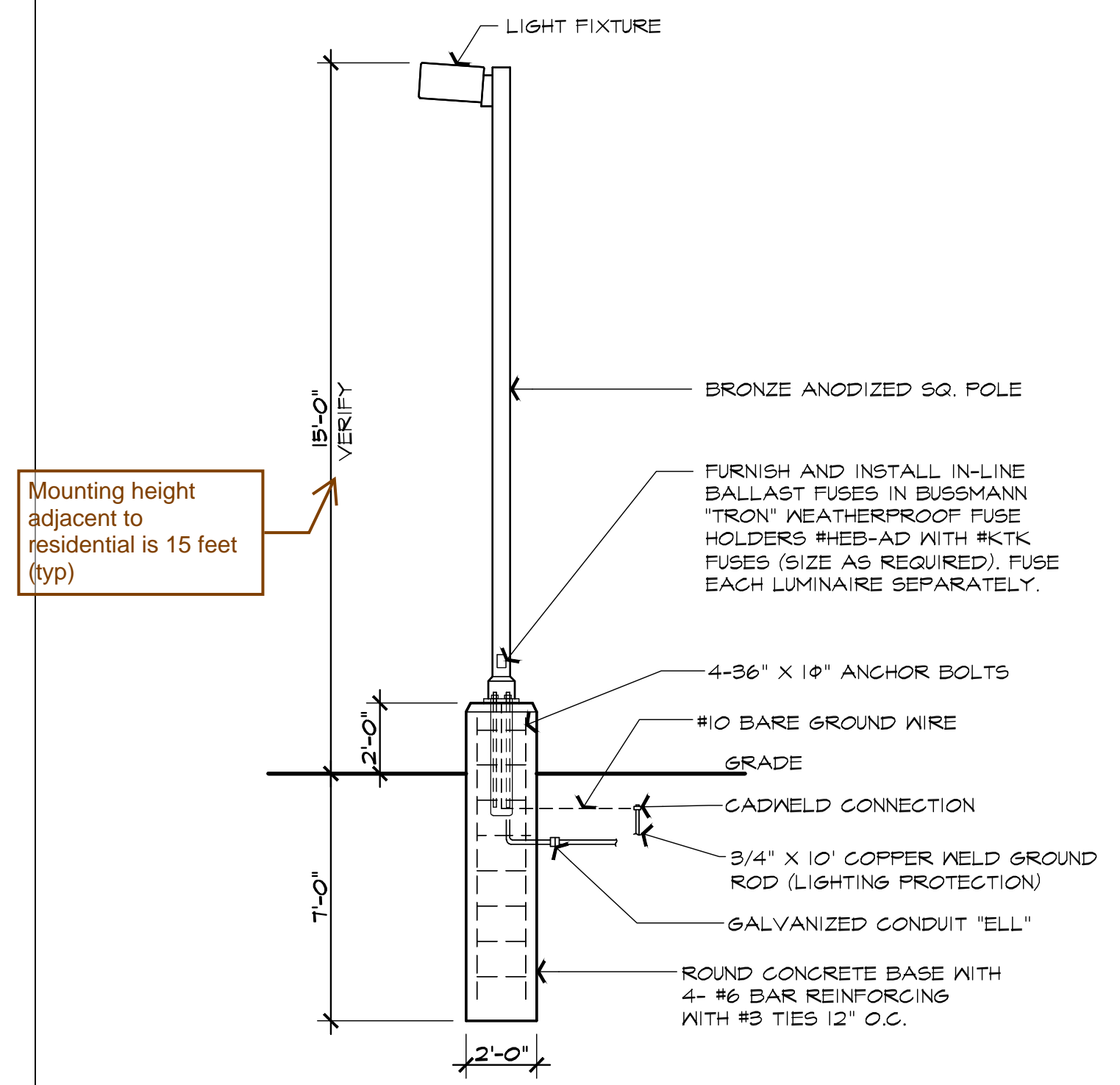


Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Lumen Multiplier	Light Loss Factor	Wattage	Efficiency	Distribution
BLC	BLC	6	Lithonia Lighting	D5X1 LED P6 30K 80CRI BLC4	D-Series Size 1 Area Luminaire P6 Performance Package 3000K CCT 30 CRI Type 4 Extreme Backlight Control		1	19440	1	0.9	165.25	100%	TYPE IV, SHORT BUS RATING: 60 - 00 - 64
C	C	10	Gree Lighting	CPY250-G-8L-30K8-F-UL-xxxx-xxxx	CONFIGURED FROM CPY250 Canopy Luminaire, 13L Lumen Package, 5700K, 10 CRI, Flat Lens, 120-277V UL-xxxx-xxxx	56C STMTG12-EO	1	1675	1	0.9	59	100%	
M	M	12	6-LIGHTING/GR055 CHANDELIER - ST. LOUIS, MISSOURI	SL 0452-0-W-TB-A-A	3-36LED 11"ARRAYS BEAM EXTERIOR 37W WALL SCORCE WHITE FLAT REFLECTOR W/WHITE ACRYLIC LENS ROAL STRATO #RSLD095 01A		1	2514	1	0.9	49	100%	

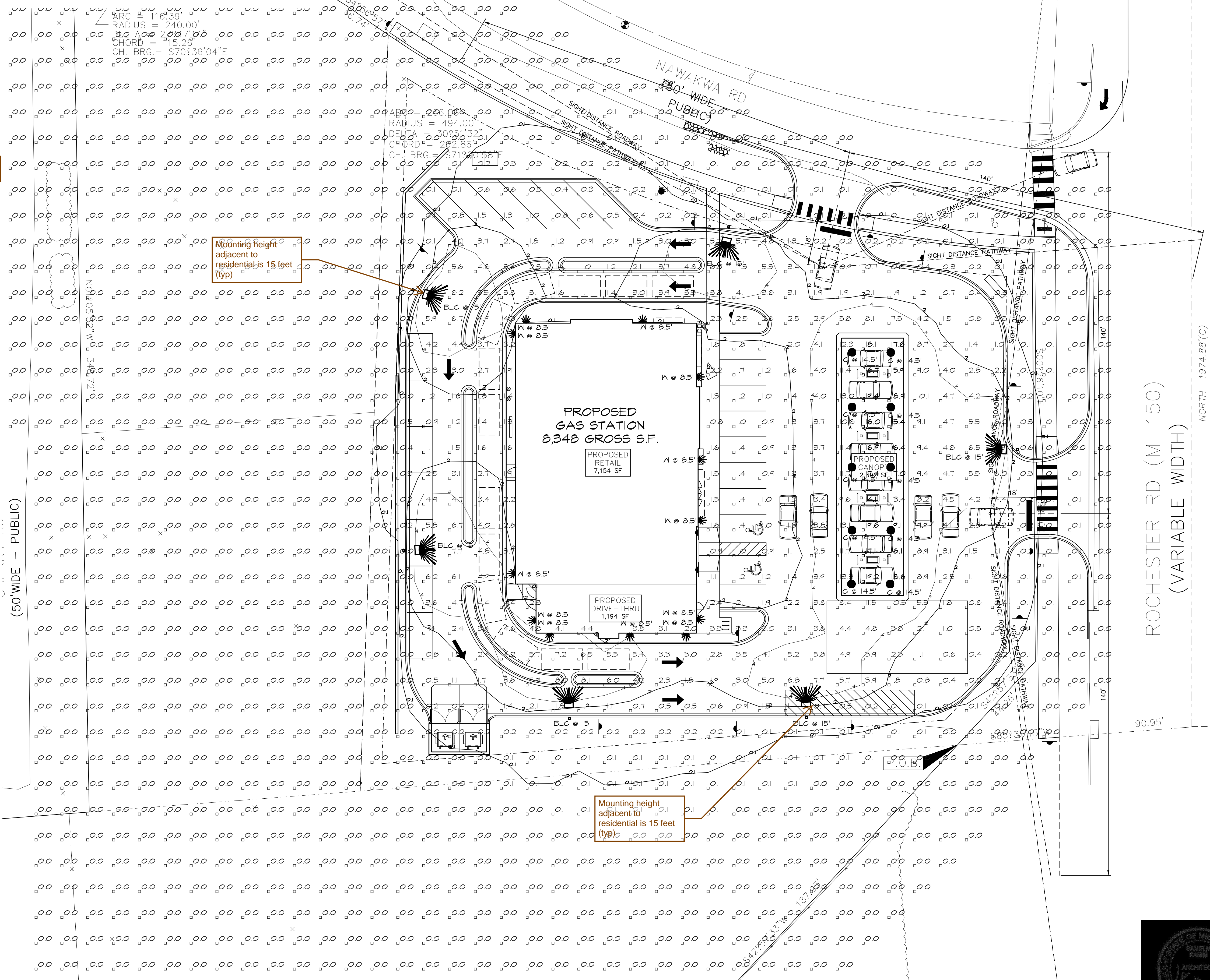
Description	Symbol	Avg. Foot-Candle	Peak Foot-Candle	Maximum Foot-Candle	Avg. Foot-Candle	Peak Foot-Candle	Maximum Foot-Candle
Parking Lot	□	0.4 fc	18.6 fc	0.4 fc	N/A	N/A	N/A
Canopy	□	17.1 fc	18.6 fc	19.2 fc	1.5 fc	1.5 fc	1.5 fc

- NOTE:**
- ALL LIGHTING FIXTURES SHALL NOT EXCEED THE HEIGHT OF THE DISTRICT THAT ARE LOCATED IN, MEASURED FROM THE GROUND LEVEL TO THE CENTERLINE OF THE LIGHT SOURCE, WALL SCENCES AND/OR LIGHT POLES SHALL BE NON-GLARE LIGHTING.
 - ALL LIGHTING ON THE SITE SHALL PREVENT THE ADVERSE EFFECTS OF INAPPROPRIATE LIGHTING, INCLUDING GLARE, LIGHT TRESPASS ONTO ADJOINING PROPERTIES, LIGHT POLLUTION AND SKY GLOW, AND ENERGY WASTE.
 - ALL THE EXTERIOR LIGHTING (INCLUDING WALL-PACK FIXTURES) SHALL BE FULLY SHIELDED AND DOWNWARD-DIRECTED.
 - CANOPY STRUCTURE MUST HAVE RECESSED CANOPY FIXTURES WITH DIFFUSERS THAT DO NOT EXTEND BELOW THE CEILING SURFACE OF THE CANOPY.

- NOTE:**
- LED LIGHT SOURCES SHALL HAVE A CORRELATED COLOR TEMPERATURE THAT DOES NOT EXCEED 3,000K.
 - ALL THE EXTERIOR LIGHTING IN NON-RESIDENTIAL DISTRICTS SHALL INCORPORATE AUTOMATIC TIMERS AND SHALL BE TURNED OFF BETWEEN THE HOURS OF MIDNIGHT AND SUNRISE, EXCEPT FOR LIGHTING NECESSARY FOR SECURITY PURPOSES OR ACCESSORY TO A USE THAT CONTINUES AFTER MIDNIGHT.
 - EXTERIOR LIGHTING SHALL BE FULLY SHIELDED AND DIRECTED DOWNWARD AT A 90 DEGREE ANGLE.
 - ALL FIXTURES SHALL COMPLY WITH ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA STANDARDS.



POLE LIGHT DETAIL TYPE "BLC"



SITE LIGHTING PHOTOMETRIC PLAN

SCALE: 1" = 20'-0"

ISSUED FOR	DATE
GPA	8-22-2022
GPA REVISION	4-14-2024

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD, STE. 180A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM

PROPOSED DRAWINGS FOR:
GAS STATION
3420 ROCHESTER ROAD
ROCHESTER HILLS, MICHIGAN

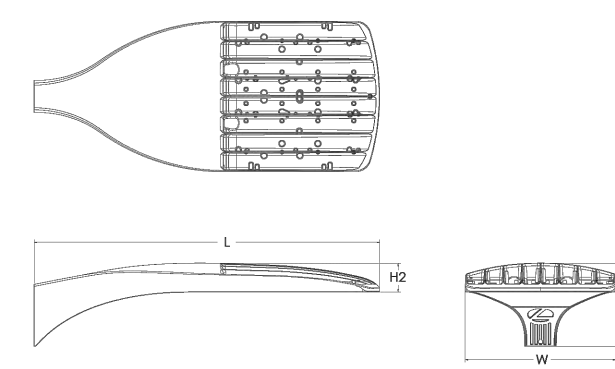
DRAWN:	DESIGNED:	CHECKED:
M.B.	G.A.	G.A.
SCALE: AS SHOWN		
FILE NAME:		
JOB #: 21091		
SHEET TITLE		
SITE LIGHTING PHOTOMETRIC PLAN		
SHEET #		
SP.101		





Specifications

EPA: 0.69 ft² (0.06 m²)
 Length: 32.71" (83.3 cm)
 Width: 14.26" (36.2 cm)
 Height H1: 7.88" (20.0 cm)
 Height H2: 2.73" (6.9 cm)
 Weight: 34 lbs (15.4 kg)



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 into a high performance, high efficacy, long-life luminaire.

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: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAR2 PIRNH DBBK

LED	LEDs	Color Temperature	Color Rendering Index	Distribution	Voltage	Mounting
DSX1 LED	Forward optics	(this section 70CRI only)	70CRI	AFR Automotive front row	T5M type V medium	MVOLT (120V-277V) ¹
P1	P6	30K 3000K	70CRI	T15 type I short	T5LG type V low glare	HVOLT (247V-480V) ^{1A}
P2	P7	40K 4000K	70CRI	T2M type II medium	T5W type V wide	XVOLT (277V-480V) ^{1A}
P3	P8	50K 5000K	70CRI	T3M type III medium	BLC3 type II backlight control	RPA Round pole mounting (R5 drilling)
P4	P9	(this section 80CRI only, extended lead times apply)	80CRI	T3LG type III low glare ¹	BLC4 type IV backlight control ¹	SPA Square pole mounting (R5 drilling)
P5	P5	27K 2700K	80CRI	T4M type IV medium	T4LG type IV low glare ¹	RPA Round pole mounting (R5 drilling)
P10	P12	30K 3000K	80CRI	T4LG type IV low glare ¹	TCO Right corner cutoff ¹	RPA Round pole mounting (R5 drilling)
P11	P13	35K 3500K	80CRI	TFM Forward throw medium	RCO Right corner cutoff ¹	SPA Square pole mounting (R5 drilling)
		40K 4000K	80CRI			WBA Wall bracket ¹
		50K 5000K	80CRI			MA Mast arm adaption (mounts on 2.38" OD horizontal tenon)

LED light sources shall have a correlated color temperature that does not exceed 3,000K.

CPY Series - Version C
 CPY250* LED Canopy/Soft Luminaire

Product Description

The CPY250* LED Canopy/Soft Luminaire has an extremely thin profile constructed of rugged cast aluminum. It can be surface mounted easily from below the canopy deck and can be pendant mounted. Direct imaging of the LEDs is eliminated with a highly efficient patterned flat or 0.91" (23mm) drop glass lens.

Applications: Petroleum canopies, CNG fueling stations, soffits

Performance Summary

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: Up to 21,000

Efficacy: Up to 165 LPW

CRIs: Minimum 70 CRI (40K, 50K, 57K); 80 CRI (30K); 90 CRI (40K, 50K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty: 10 years for Luminaire/10 years for Colorfast DeltaGuard® finish/5 years for BML sensor/up to 5 years for Synapse® accessories/1 year for field-installed accessories

IP66 Rated (select models only)

Class I, Division 2 Hazardous Location for select models

*See <http://www.cree.com/ledlighting> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Accessories

Field-Installed

Direct Mount Luminaire
 Canopy Upgrade Kit (18 ga. steel, except where noted)
 CPY-UP250* - for use with Cree Lighting CAN-354 luminaires, 16 ga. 5052
 AA-BXC2M - for use with AA-Phelps, 21.62" (549mm) square
 AA-BXC2M - for use with Blue Franciscan, 22.86" (580mm) square
 AA-BXC2M - for use with LSI Dakota or Masters, 22.50" (572mm) square
 AA-BXC2M - for use with WhiteWay/White - RPA-A-Lens, 20.60" (523mm) square
 AA-BXC2M - for use with Edge Mount, 18.00" (457mm) square
 AA-BXC2M - for use with LSI Richmond or WhiteWay Civic, 23.00" (584mm) L x 13.00" (330mm) W

Pendant Mount Luminaire
 Pendant Mount Kit
 AA-PS120T* - 15" (381mm) pendant
 AA-PS180T* - 15" (381mm) pendant
 AA-PS220T* - 15" (381mm) pendant
 AA-PS240T* - 15" (381mm) pendant
 AA-PS260T* - 15" (381mm) pendant
 AA-PS280T* - 15" (381mm) pendant
 AA-PS300T* - 15" (381mm) pendant
 AA-PS320T* - 15" (381mm) pendant
 AA-PS340T* - 15" (381mm) pendant
 AA-PS360T* - 15" (381mm) pendant
 AA-PS380T* - 15" (381mm) pendant
 AA-PS400T* - 15" (381mm) pendant
 AA-PS420T* - 15" (381mm) pendant
 AA-PS440T* - 15" (381mm) pendant
 AA-PS460T* - 15" (381mm) pendant
 AA-PS480T* - 15" (381mm) pendant
 AA-PS500T* - 15" (381mm) pendant
 AA-PS520T* - 15" (381mm) pendant
 AA-PS540T* - 15" (381mm) pendant
 AA-PS560T* - 15" (381mm) pendant
 AA-PS580T* - 15" (381mm) pendant
 AA-PS600T* - 15" (381mm) pendant
 AA-PS620T* - 15" (381mm) pendant
 AA-PS640T* - 15" (381mm) pendant
 AA-PS660T* - 15" (381mm) pendant
 AA-PS680T* - 15" (381mm) pendant
 AA-PS700T* - 15" (381mm) pendant
 AA-PS720T* - 15" (381mm) pendant
 AA-PS740T* - 15" (381mm) pendant
 AA-PS760T* - 15" (381mm) pendant
 AA-PS780T* - 15" (381mm) pendant
 AA-PS800T* - 15" (381mm) pendant
 AA-PS820T* - 15" (381mm) pendant
 AA-PS840T* - 15" (381mm) pendant
 AA-PS860T* - 15" (381mm) pendant
 AA-PS880T* - 15" (381mm) pendant
 AA-PS900T* - 15" (381mm) pendant
 AA-PS920T* - 15" (381mm) pendant
 AA-PS940T* - 15" (381mm) pendant
 AA-PS960T* - 15" (381mm) pendant
 AA-PS980T* - 15" (381mm) pendant
 AA-PS1000T* - 15" (381mm) pendant
 AA-PS1020T* - 15" (381mm) pendant
 AA-PS1040T* - 15" (381mm) pendant
 AA-PS1060T* - 15" (381mm) pendant
 AA-PS1080T* - 15" (381mm) pendant
 AA-PS1100T* - 15" (381mm) pendant
 AA-PS1120T* - 15" (381mm) pendant
 AA-PS1140T* - 15" (381mm) pendant
 AA-PS1160T* - 15" (381mm) pendant
 AA-PS1180T* - 15" (381mm) pendant
 AA-PS1200T* - 15" (381mm) pendant
 AA-PS1220T* - 15" (381mm) pendant
 AA-PS1240T* - 15" (381mm) pendant
 AA-PS1260T* - 15" (381mm) pendant
 AA-PS1280T* - 15" (381mm) pendant
 AA-PS1300T* - 15" (381mm) pendant
 AA-PS1320T* - 15" (381mm) pendant
 AA-PS1340T* - 15" (381mm) pendant
 AA-PS1360T* - 15" (381mm) pendant
 AA-PS1380T* - 15" (381mm) pendant
 AA-PS1400T* - 15" (381mm) pendant
 AA-PS1420T* - 15" (381mm) pendant
 AA-PS1440T* - 15" (381mm) pendant
 AA-PS1460T* - 15" (381mm) pendant
 AA-PS1480T* - 15" (381mm) pendant
 AA-PS1500T* - 15" (381mm) pendant
 AA-PS1520T* - 15" (381mm) pendant
 AA-PS1540T* - 15" (381mm) pendant
 AA-PS1560T* - 15" (381mm) pendant
 AA-PS1580T* - 15" (381mm) pendant
 AA-PS1600T* - 15" (381mm) pendant
 AA-PS1620T* - 15" (381mm) pendant
 AA-PS1640T* - 15" (381mm) pendant
 AA-PS1660T* - 15" (381mm) pendant
 AA-PS1680T* - 15" (381mm) pendant
 AA-PS1700T* - 15" (381mm) pendant
 AA-PS1720T* - 15" (381mm) pendant
 AA-PS1740T* - 15" (381mm) pendant
 AA-PS1760T* - 15" (381mm) pendant
 AA-PS1780T* - 15" (381mm) pendant
 AA-PS1800T* - 15" (381mm) pendant
 AA-PS1820T* - 15" (381mm) pendant
 AA-PS1840T* - 15" (381mm) pendant
 AA-PS1860T* - 15" (381mm) pendant
 AA-PS1880T* - 15" (381mm) pendant
 AA-PS1900T* - 15" (381mm) pendant
 AA-PS1920T* - 15" (381mm) pendant
 AA-PS1940T* - 15" (381mm) pendant
 AA-PS1960T* - 15" (381mm) pendant
 AA-PS1980T* - 15" (381mm) pendant
 AA-PS2000T* - 15" (381mm) pendant
 AA-PS2020T* - 15" (381mm) pendant
 AA-PS2040T* - 15" (381mm) pendant
 AA-PS2060T* - 15" (381mm) pendant
 AA-PS2080T* - 15" (381mm) pendant
 AA-PS2100T* - 15" (381mm) pendant
 AA-PS2120T* - 15" (381mm) pendant
 AA-PS2140T* - 15" (381mm) pendant
 AA-PS2160T* - 15" (381mm) pendant
 AA-PS2180T* - 15" (381mm) pendant
 AA-PS2200T* - 15" (381mm) pendant
 AA-PS2220T* - 15" (381mm) pendant
 AA-PS2240T* - 15" (381mm) pendant
 AA-PS2260T* - 15" (381mm) pendant
 AA-PS2280T* - 15" (381mm) pendant
 AA-PS2300T* - 15" (381mm) pendant
 AA-PS2320T* - 15" (381mm) pendant
 AA-PS2340T* - 15" (381mm) pendant
 AA-PS2360T* - 15" (381mm) pendant
 AA-PS2380T* - 15" (381mm) pendant
 AA-PS2400T* - 15" (381mm) pendant
 AA-PS2420T* - 15" (381mm) pendant
 AA-PS2440T* - 15" (381mm) pendant
 AA-PS2460T* - 15" (381mm) pendant
 AA-PS2480T* - 15" (381mm) pendant
 AA-PS2500T* - 15" (381mm) pendant
 AA-PS2520T* - 15" (381mm) pendant
 AA-PS2540T* - 15" (381mm) pendant
 AA-PS2560T* - 15" (381mm) pendant
 AA-PS2580T* - 15" (381mm) pendant
 AA-PS2600T* - 15" (381mm) pendant
 AA-PS2620T* - 15" (381mm) pendant
 AA-PS2640T* - 15" (381mm) pendant
 AA-PS2660T* - 15" (381mm) pendant
 AA-PS2680T* - 15" (381mm) pendant
 AA-PS2700T* - 15" (381mm) pendant
 AA-PS2720T* - 15" (381mm) pendant
 AA-PS2740T* - 15" (381mm) pendant
 AA-PS2760T* - 15" (381mm) pendant
 AA-PS2780T* - 15" (381mm) pendant
 AA-PS2800T* - 15" (381mm) pendant
 AA-PS2820T* - 15" (381mm) pendant
 AA-PS2840T* - 15" (381mm) pendant
 AA-PS2860T* - 15" (381mm) pendant
 AA-PS2880T* - 15" (381mm) pendant
 AA-PS2900T* - 15" (381mm) pendant
 AA-PS2920T* - 15" (381mm) pendant
 AA-PS2940T* - 15" (381mm) pendant
 AA-PS2960T* - 15" (381mm) pendant
 AA-PS2980T* - 15" (381mm) pendant
 AA-PS3000T* - 15" (381mm) pendant
 AA-PS3020T* - 15" (381mm) pendant
 AA-PS3040T* - 15" (381mm) pendant
 AA-PS3060T* - 15" (381mm) pendant
 AA-PS3080T* - 15" (381mm) pendant
 AA-PS3100T* - 15" (381mm) pendant
 AA-PS3120T* - 15" (381mm) pendant
 AA-PS3140T* - 15" (381mm) pendant
 AA-PS3160T* - 15" (381mm) pendant
 AA-PS3180T* - 15" (381mm) pendant
 AA-PS3200T* - 15" (381mm) pendant
 AA-PS3220T* - 15" (381mm) pendant
 AA-PS3240T* - 15" (381mm) pendant
 AA-PS3260T* - 15" (381mm) pendant
 AA-PS3280T* - 15" (381mm) pendant
 AA-PS3300T* - 15" (381mm) pendant
 AA-PS3320T* - 15" (381mm) pendant
 AA-PS3340T* - 15" (381mm) pendant
 AA-PS3360T* - 15" (381mm) pendant
 AA-PS3380T* - 15" (381mm) pendant
 AA-PS3400T* - 15" (381mm) pendant
 AA-PS3420T* - 15" (381mm) pendant
 AA-PS3440T* - 15" (381mm) pendant
 AA-PS3460T* - 15" (381mm) pendant
 AA-PS3480T* - 15" (381mm) pendant
 AA-PS3500T* - 15" (381mm) pendant
 AA-PS3520T* - 15" (381mm) pendant
 AA-PS3540T* - 15" (381mm) pendant
 AA-PS3560T* - 15" (381mm) pendant
 AA-PS3580T* - 15" (381mm) pendant
 AA-PS3600T* - 15" (381mm) pendant
 AA-PS3620T* - 15" (381mm) pendant
 AA-PS3640T* - 15" (381mm) pendant
 AA-PS3660T* - 15" (381mm) pendant
 AA-PS3680T* - 15" (381mm) pendant
 AA-PS3700T* - 15" (381mm) pendant
 AA-PS3720T* - 15" (381mm) pendant
 AA-PS3740T* - 15" (381mm) pendant
 AA-PS3760T* - 15" (381mm) pendant
 AA-PS3780T* - 15" (381mm) pendant
 AA-PS3800T* - 15" (381mm) pendant
 AA-PS3820T* - 15" (381mm) pendant
 AA-PS3840T* - 15" (381mm) pendant
 AA-PS3860T* - 15" (381mm) pendant
 AA-PS3880T* - 15" (381mm) pendant
 AA-PS3900T* - 15" (381mm) pendant
 AA-PS3920T* - 15" (381mm) pendant
 AA-PS3940T* - 15" (381mm) pendant
 AA-PS3960T* - 15" (381mm) pendant
 AA-PS3980T* - 15" (381mm) pendant
 AA-PS4000T* - 15" (381mm) pendant
 AA-PS4020T* - 15" (381mm) pendant
 AA-PS4040T* - 15" (381mm) pendant
 AA-PS4060T* - 15" (381mm) pendant
 AA-PS4080T* - 15" (381mm) pendant
 AA-PS4100T* - 15" (381mm) pendant
 AA-PS4120T* - 15" (381mm) pendant
 AA-PS4140T* - 15" (381mm) pendant
 AA-PS4160T* - 15" (381mm) pendant
 AA-PS4180T* - 15" (381mm) pendant
 AA-PS4200T* - 15" (381mm) pendant
 AA-PS4220T* - 15" (381mm) pendant
 AA-PS4240T* - 15" (381mm) pendant
 AA-PS4260T* - 15" (381mm) pendant
 AA-PS4280T* - 15" (381mm) pendant
 AA-PS4300T* - 15" (381mm) pendant
 AA-PS4320T* - 15" (381mm) pendant
 AA-PS4340T* - 15" (381mm) pendant
 AA-PS4360T* - 15" (381mm) pendant
 AA-PS4380T* - 15" (381mm) pendant
 AA-PS4400T* - 15" (381mm) pendant
 AA-PS4420T* - 15" (381mm) pendant
 AA-PS4440T* - 15" (381mm) pendant
 AA-PS4460T* - 15" (381mm) pendant
 AA-PS4480T* - 15" (381mm) pendant
 AA-PS4500T* - 15" (381mm) pendant
 AA-PS4520T* - 15" (381mm) pendant
 AA-PS4540T* - 15" (381mm) pendant
 AA-PS4560T* - 15" (381mm) pendant
 AA-PS4580T* - 15" (381mm) pendant
 AA-PS4600T* - 15" (381mm) pendant
 AA-PS4620T* - 15" (381mm) pendant
 AA-PS4640T* - 15" (381mm) pendant
 AA-PS4660T* - 15" (381mm) pendant
 AA-PS4680T* - 15" (381mm) pendant
 AA-PS4700T* - 15" (381mm) pendant
 AA-PS4720T* - 15" (381mm) pendant
 AA-PS4740T* - 15" (381mm) pendant
 AA-PS4760T* - 15" (381mm) pendant
 AA-PS4780T* - 15" (381mm) pendant
 AA-PS4800T* - 15" (381mm) pendant
 AA-PS4820T* - 15" (381mm) pendant
 AA-PS4840T* - 15" (381mm) pendant
 AA-PS4860T* - 15" (381mm) pendant
 AA-PS4880T* - 15" (381mm) pendant
 AA-PS4900T* - 15" (381mm) pendant
 AA-PS4920T* - 15" (381mm) pendant
 AA-PS4940T* - 15" (381mm) pendant
 AA-PS4960T* - 15" (381mm) pendant
 AA-PS4980T* - 15" (381mm) pendant
 AA-PS5000T* - 15" (381mm) pendant
 AA-PS5020T* - 15" (381mm) pendant
 AA-PS5040T* - 15" (381mm) pendant
 AA-PS5060T* - 15" (381mm) pendant
 AA-PS5080T* - 15" (381mm) pendant
 AA-PS5100T* - 15" (381mm) pendant
 AA-PS5120T* - 15" (381mm) pendant
 AA-PS5140T* - 15" (381mm) pendant
 AA-PS5160T* - 15" (381mm) pendant
 AA-PS5180T* - 15" (381mm) pendant
 AA-PS5200T* - 15" (381mm) pendant
 AA-PS5220T* - 15" (381mm) pendant
 AA-PS5240T* - 15" (381mm) pendant
 AA-PS5260T* - 15" (381mm) pendant
 AA-PS5280T* - 15" (381mm) pendant
 AA-PS5300T* - 15" (381mm) pendant
 AA-PS5320T* - 15" (381mm) pendant
 AA-PS5340T* - 15" (381mm) pendant
 AA-PS5360T* - 15" (381mm) pendant
 AA-PS5380T* - 15" (381mm) pendant
 AA-PS5400T* - 15" (381mm) pendant
 AA-PS5420T* - 15" (381mm) pendant
 AA-PS5440T* - 15" (381mm) pendant
 AA-PS5460T* - 15" (381mm) pendant
 AA-PS5480T* - 15" (381mm) pendant
 AA-PS5500T* - 15" (381mm) pendant
 AA-PS5520T* - 15" (381mm) pendant
 AA-PS5540T* - 15" (381mm) pendant
 AA-PS5560T* - 15" (381mm) pendant
 AA-PS5580T* - 15" (381mm) pendant
 AA-PS5600T* - 15" (381mm) pendant
 AA-PS5620T* - 15" (381mm) pendant
 AA-PS5640T* - 15" (381mm) pendant
 AA-PS5660T* - 15" (381mm) pendant
 AA-PS5680T* - 15" (381mm) pendant
 AA-PS5700T* - 15" (381mm) pendant
 AA-PS5720T* - 15" (381mm) pendant
 AA-PS5740T* - 15" (381mm) pendant
 AA-PS5760T* - 15" (381mm) pendant
 AA-PS5780T* - 15" (381mm) pendant
 AA-PS5800T* - 15" (381mm) pendant
 AA-PS5820T* - 15" (381mm) pendant
 AA-PS5840T* - 15" (381mm) pendant
 AA-PS5860T* - 15" (381mm) pendant
 AA-PS5880T* - 15" (381mm) pendant
 AA-PS5900T* - 15" (381mm) pendant
 AA-PS5920T* - 15" (381mm) pendant
 AA-PS5940T* - 15" (381mm) pendant
 AA-PS5960T* - 15" (381mm) pendant
 AA-PS5980T* - 15" (381mm) pendant
 AA-PS6000T* - 15" (381mm) pendant
 AA-PS6020T* - 15" (381mm) pendant
 AA-PS6040T* - 15" (381mm) pendant
 AA-PS6060T* - 15" (381mm) pendant
 AA-PS6080T* - 15" (381mm) pendant
 AA-PS6100T* - 15" (381mm) pendant
 AA-PS6120T* - 15" (381mm) pendant
 AA-PS6140T* - 15" (381mm) pendant
 AA-PS6160T* - 15" (381mm) pendant
 AA-PS6180T* - 15" (381mm) pendant
 AA-PS6200T* - 15" (381mm) pendant
 AA-PS6220T* - 15" (381mm) pendant
 AA-PS6240T* - 15" (381mm) pendant
 AA-PS6260T* - 15" (381mm) pendant
 AA-PS6280T* - 15" (381mm) pendant
 AA-PS6300T* - 15" (381mm) pendant
 AA-PS6320T* - 15" (381mm) pendant
 AA-PS6340T* - 15" (381mm) pendant
 AA-PS6360T* - 15" (381mm) pendant
 AA-PS6380T* - 15" (381mm) pendant
 AA-PS6400T* - 15" (381mm) pendant
 AA-PS6420T* - 15" (381mm) pendant
 AA-PS6440T* - 15" (381mm) pendant
 AA-PS6460T* - 15" (381mm) pendant
 AA-PS6480T* - 15" (381mm) pendant
 AA-PS6500T* - 15" (381mm) pendant
 AA-PS6520T* - 15" (381mm) pendant
 AA-PS6540T* - 15" (381mm) pendant
 AA-PS6560T* - 15" (381mm) pendant
 AA-PS6580T* - 15" (381mm) pendant
 AA-PS6600T* - 15" (381mm) pendant
 AA-PS6620T* - 15" (381mm) pendant
 AA-PS6640T* - 15" (381mm) pendant
 AA-PS6660T* - 15" (381mm) pendant
 AA-PS6680T* - 15" (381mm) pendant
 AA-PS6700T* - 15" (381mm) pendant
 AA-PS6720T* - 15" (381mm) pendant
 AA-PS6740T* - 15" (381mm) pendant
 AA-PS6760T* - 15" (381mm) pendant
 AA-PS6780T* - 15" (381mm) pendant
 AA-PS6800T* - 15" (381mm) pendant
 AA-PS6820T* - 15" (381mm) pendant
 AA-PS6840T* - 15" (381mm) pendant
 AA-PS6860T* - 15" (381mm) pendant
 AA-PS6880T* - 15" (381mm) pendant
 AA-PS6900T* - 15" (381mm) pendant
 AA-PS6920T* - 15" (381mm) pendant
 AA-PS6940T* - 15" (381mm) pendant
 AA-PS6960T* - 15" (381mm) pendant
 AA-PS6980T* - 15" (381mm) pendant
 AA-PS7000T* - 15" (381mm) pendant
 AA-PS7020T* - 15" (381mm) pendant
 AA-PS7040T* - 15" (381mm) pendant
 AA-PS7060T* - 15" (381mm) pendant
 AA-PS7080T* - 15" (381mm) pendant
 AA-PS7100T* - 15" (381mm) pendant
 AA-PS7120T* - 15" (381mm) pendant
 AA-PS7140T* - 15" (381mm) pendant
 AA-PS7160T* - 15" (381mm) pendant
 AA-PS7180T* - 15" (381mm) pendant
 AA-PS7200T* - 15" (381mm) pendant
 AA-PS7220T* - 15" (381mm) pendant
 AA-PS7240T* - 15" (381mm) pendant
 AA-PS7260T* - 15" (381mm) pendant
 AA-PS7280T* - 15" (381mm) pendant
 AA-PS7300T* - 15" (381mm) pendant
 AA-PS7320T* - 15" (381mm) pendant
 AA-PS7340T* - 15" (381mm) pendant
 AA-PS7360T* - 15" (381mm) pendant
 AA-PS7380T* - 15" (381mm) pendant
 AA-PS7400T* - 15" (381mm) pendant
 AA-PS7420T* - 15" (381mm) pendant
 AA-PS7440T* - 15" (381mm) pendant
 AA-PS7460T* - 15" (381mm) pendant
 AA-PS7480T* - 15" (381mm) pendant
 AA-PS7500T* - 15" (381mm) pendant
 AA-PS7520T* - 15" (381mm) pendant
 AA-PS7540T* - 15" (381mm) pendant
 AA-PS7560T* - 15" (381mm) pendant
 AA-PS7580T* - 15" (381mm) pendant
 AA-PS7600T* - 15" (381mm) pendant
 AA-PS7620T* - 15" (381mm) pendant
 AA-PS7640T* - 15" (381mm) pendant
 AA-PS7660T* - 15" (381mm) pendant
 AA-PS7680T* - 15" (381mm) pendant
 AA-PS7700T* - 15" (381mm) pendant
 AA-PS7720T* - 15" (381mm) pendant
 AA-PS7740T* - 15" (381mm) pendant
 AA-PS7760T* - 15" (381mm) pendant
 AA-PS7780T* - 15" (381mm) pendant
 AA-PS7800T* - 15" (381mm) pendant
 AA-PS7820T* - 15" (381mm) pendant
 AA-PS7840T* - 15" (381mm) pendant
 AA-PS7860T* - 15" (381mm) pendant
 AA-PS7880T* - 15" (381mm) pendant
 AA-PS7900T* - 15" (381mm) pendant
 AA-PS7920T* - 15" (381mm) pendant
 AA-PS7940T* - 15" (381mm) pendant
 AA-PS7960T* - 15" (381mm) pendant
 AA-PS7980T* - 15" (381mm) pendant
 AA-PS8000T* - 15" (381mm) pendant
 AA-PS8020T* - 15" (381mm) pendant
 AA-PS8040T* - 15" (381mm) pendant
 AA-PS8060T* - 15" (381mm) pendant
 AA-PS8080T* - 15" (381mm) pendant
 AA-PS8100T* - 15" (381mm) pendant
 AA-PS8120T* - 15" (381mm) pendant
 AA-PS8140T* - 15" (381mm) pendant
 AA-PS

3420 S. ROCHESTER RD.
NEW FUEL CENTER & DRIVE THRU
PSP 2022 - 0020

~~SEPT. 19, 2022~~
~~JAN. 23, 2024 (REISSUED)~~



BUILDING DEPARTMENT
CITY OF ROCHESTER HILLS



Commercial Site Plan Review Checklist

Document 4.4.1250

Revised 4/19/21

Created 04/03/17

The following information is required on plans submitted for Site Plan Review.

- Section references and those in parentheses () relate to the Michigan Building Code - 2015 unless otherwise noted.
- Section references to accessibility items relate to the ICC A117.1-2009, unless otherwise noted.

BUILDING CODE REQUIREMENTS

- REFER TO ATTACHED LIST "CODES CURRENTLY IN EFFECT"
1. Provide a list of all construction codes that will be applicable to the project at the time of application for building permit.
 2. Classify the building with respect to occupancy in one or more of the groups listed in Section 302.
 - a. Where a building contains more than one occupancy group, identify the type of mixed uses and the corresponding occupancy groups including:
 - i. Accessory occupancies (508.2),
 - ii. Non-separated occupancies (508.3),
 - iii. Separated occupancies (508.4), and/or
 - iv. Combinations of the above
 3. Indicate proposed structures Construction Classification Type per the requirements of Section 602.
 4. Provide a building height and number of stories analysis based on Section 504 and Tables 504.3 and 504.4.
 - a. Include any increases allowed per applicable provisions of Sections 504 for automatic sprinkler system.
 5. Provide a building area analysis based on Section 506 and Table 506.2.
 - a. Include any increases allowed per applicable provisions of Sections 506 for frontage and/or automatic sprinkler system.
 6. Indicate if a full or limited area automatic sprinkler and/or fire alarm system will be installed per Chapter 9.
 - a. If an automatic sprinkler system exists and/or is proposed, show the location of the Fire Department Connection (FDC).
 7. Indicate setbacks from property lines and/or fire separation distances from adjacent buildings on the same site (107.2.5 and 705.3).
 - a. If two or more buildings are on the same lot, indicate whether they shall be regulated as separate buildings or shall be considered as portions of one building (503.1.2).
 - b. If treated as separate buildings indicate fire-resistant rating requirements for exterior walls based on Table 602 and allowable wall openings per Table 705.8.
 8. On the site plan and the floor plans identify all entrances per applicable provisions of Section 1105.
 - a. Identify all public entrances including all accessible public entrances (1105.1), all restricted entrances (1105.1.3), and all service entrances (1105.1.5).

IF REQUIRED

IF A CANOPY OVER GAS PUMPS IS PROPOSED.

9. Indicate any of the following applicable proposed accessible route/routes to the accessible entrances.
- a. Accessible routes within the site shall be provided from public transportation stops; accessible parking; accessible passenger loading zones; and public streets or sidewalks to the accessible building entrance served (1104.1).
 - i. Other than in buildings or facilities containing or serving Type B units, an accessible route shall not be required between site arrival points and the building or facility entrance if the only means of access between them is a vehicular way not providing for pedestrian access.
 - ii. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site (1104.2).
 - iii. An accessible route is not required between accessible buildings, accessible facilities, accessible elements and accessible spaces that have, as the only means of access between them, a vehicular way not providing for pedestrian access.
 - b. Provide sufficient grade information on the plans along the proposed accessible route/routes to verify compliance with the requirements of A117.1 Section 402.
 - c. Provide details (as applicable) of the following components along the proposed accessible route/routes to verify compliance with A117.1:
 - i. Section 404 for door maneuvering clearance and ground surface slope.
 - ii. Section 405 for ramps.
 - iii. Section for curb ramps. (RAMP 'TYPE P')
10. Indicate the number of accessible parking spaces provided including van accessible spaces as required by Section 1106.
- a. All accessible parking spaces shall be a Universal Barrier Free Design to allow van access in any accessible parking space per the City Ordinance Section 138-11.300. Universal barrier free spaces shall be 11 feet in width with a 5 foot access aisle.
 - b. Indicate the proposed surface slopes of accessible parking spaces and their access aisles. Provide sufficient point elevations on the plan at the perimeter of such spaces to clearly verify the provisions of A117.1 Section 502.5 have been satisfied (1:48 max slope).
 - c. Provide details of required accessible parking signage per the requirements of A117.1 Section 502.7.
 - d. Confirm that the accessible parking spaces are located on the shortest accessible route of travel from the parking to the accessible building entrance per A117.7 Section 1106.6.
 - e. Verify that accessible parking spaces are logically distributed throughout the site when multiple accessible building entrances are provided.
11. Indicate location of passenger loading zones that are required by Section 1106.7 or are being proposed.
- a. Provide details/dimensions of proposed passenger loading zones and their accessible access aisles per Section 1106.7 and A117.7 Section 503.
 - b. Indicate the proposed surface slopes of accessible passenger loading zone access aisles. Provide sufficient point elevations on the plan at the perimeter of access aisles to clearly verify the provisions of A117.1 Section 503.4 have been satisfied (1:48 max. slope).
 - c. Provide vertical clearance complying with A117.7 Section 503.5.
12. Detectible warnings are required at sidewalk ramps located in the road right-of-ways.
- a. Please refer to ADA (Americans Disability Act) requirements for details of detectible warnings at sidewalk ramps. Provide a detail on the plans complying with these requirements. Although not enforced by the City of Rochester Hills, the ADA (Americans Disability Act) requires detectible warnings to be provided at all sidewalk ramps (including

those on site). Conformance to these requirements is the responsibility of the project's designer and owner.

- ✓ 13. Provide sufficient grade information to verify compliance with Section 1804.3 for minimal drainage away from the building (2% minimum).
- ✓ 14. Confirm there is proper clearance between grade and exterior materials.
 - a. Various materials have clearance requirements based on code and/or manufacturer's requirements, i.e., wood siding requires 6 inches clearance between siding and earth and 2 inches between siding and concrete surfaces per Section 2304.12.1.5.



BUILDING DEPARTMENT CITY OF ROCHESTER HILLS



Codes Currently in Effect

The codes noted below are adopted by the City of Rochester Hills Codified Ordinance Sections 18-41 and 18-136.

Commercial:

Building: 2015 Michigan Building Code - Effective April 20, 2017

Rehab: 2015 Michigan Rehabilitation Code for Existing Buildings 2015 - Effective December 13, 2016

Accessibility: ICC ANSI A117.1 - 2009

Mechanical: 2021 Michigan Mechanical Code - 2021 IMC with Part 9A amendments and additions - Effective March 12, 2024

Electrical: 2023 Michigan Electrical Code - NFPA 70: 2023 National Electrical Code with Part 8 amendments and additions - Effective March 12, 2024

Plumbing: 2021 Michigan Plumbing Code - 2021 IPC with Part 7 amendments and additions - Effective March 12, 2024

Energy: 2015 Michigan Building Code - 2015 IECC with Part 10a amendments and additions and ASHREA 90.1.3 - 2013 - Effective September 20, 2017

Fuel gas: International Fuel Gas Code - 2021, as referenced in the 2021 Michigan Mechanical Code

Fire: International Fire Code - 2021, as referenced in the 2021 Michigan Mechanical Code

Fire Suppression: NFPA 13, 13R - 2019 per 2021 Part 9A Michigan Mechanical Code Rules.

Fire Alarm: NFPA 72 - 2019 as referenced in the 2021 Michigan Mechanical Code.

Residential:

All Trades: 2015 Michigan Residential Code with Administrative Rules Part 5 - Amendments - Effective February 8, 2022

Energy Code: 2015 Michigan Residential Code - Chapter 11 with Administrative Rules Part 5 - Amendments - Effective February 8, 2022

Fire Suppression: NFPA 13D - 2019 per 2021 Part 9A Michigan Mechanical Code Rules

Fire Alarm: NFPA 72 - 2013

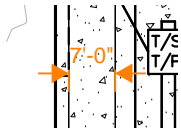
SITE PLAN - COMPLETE PACKAGE 2024_01_08 ..pdf Markup Summary

Building Department (8)



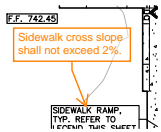
Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 1:14:28 PM
Status:

A building permit is required for the demolition of all the existing building and canopy.



Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 1:35:11 PM
Status:

7'-0"



Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 1:36:15 PM
Status:

Sidewalk cross slope shall not exceed 2%.



Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 2:11:18 PM
Status:

Gas station & store.



Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 2:11:21 PM
Status:

Lease space (Dunkin Donut) would be an A-2 unless the occupant load is less than 50. If so, it would be a 'B' use.



Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 2:31:21 PM
Status:

Please address the highlighted items circled in red on the attached "Commercial Site Plan Review Checklist".

Mark Artinian 248-841-2446
 ArtinianM@RochesterHills.org

Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 3:36:31 PM
Status:

Mark Artinian 248-841-2446
 ArtinianM@RochesterHills.org

No

Subject: Building Department
Author: Mark Artinian
Date: 5/8/2024 3:36:52 PM
Status:

No

Engineering Department (3)



Subject: Engineering Department
Author: Jason Boughton
Date: 4/23/2024 11:40:26 AM
Status:

The applicant needs to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to proceed with the construction plan review process.



Subject: Engineering Department
Author: Jason Boughton
Date: 4/23/2024 11:45:28 AM
Status:

City File #22-029 Section #34 in the lower right hand corner of each sheet

Jason Boughton 248-541-2490
 Boughton@rochester42.org Yes

Subject: Engineering Department
Author: Jason Boughton
Date: 4/23/2024 11:45:55 AM
Status:

Engineering Legal Review (8)

ANY, POLICY No. OP 405833.

Oakland, State of Michigan.
 recorded in Liber 17 of Plats, Page described as follows: Beginning to Subdivision, said line being also North Range 11 East, Avon g 388 41 25' W as measured on the East 1/4 corner of said

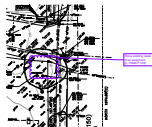
Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 9:40:22 AM
Status:

Liber



Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 9:55:10 AM
Status:

Measured metes and bounds does not close by 1 foot.



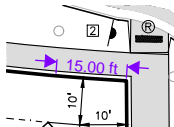
Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 10:46:49 AM
Status:

Show existing water main easement (L.15988 P.103)



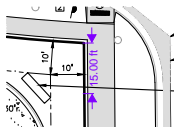
Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 11:03:22 AM
Status:

Show existing DTE easement (40379 P.734)



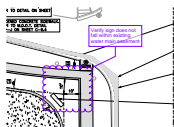
Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 11:15:04 AM
Status:

15.00 ft



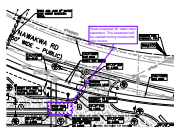
Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 11:15:06 AM
Status:

15.00 ft



Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 11:14:34 AM
Status:

Verify sign does not fall within existing water main easement



Subject: Engineering Legal Review
Author: Jenny McGuckin
Date: 5/2/2024 11:16:46 AM
Status:

Show proposed 20' water main easement. This easement will be needed during construction plan review.

Fire Department (8)



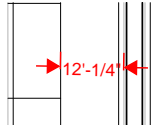
Subject: Fire Department
Author: Jon Mills
Date: 4/24/2024 2:56:56 PM
Status:

Use this Information fo the Auto Turn



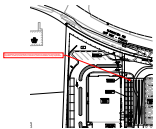
Subject: Fire Department
Author: Jon Mills
Date: 4/25/2024 3:19:48 PM
Status:

Reposition Proposed Fire Hydrant in this Location



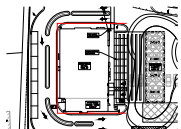
Subject: Fire Department
Author: Jon Mills
Date: 4/24/2024 3:03:52 PM
Status:

12'-1/4"



Subject: Fire Department
Author: Jon Mills
Date: 4/25/2024 3:12:49 PM
Status:

Fire Apparatus Access Roadways should be designed to support the load of the fire apparatus (75,000 pounds) and be surfaced to provide all weather driving capabilities.



Subject: Fire Department
Author: Jon Mills
Date: 4/24/2024 3:07:58 PM
Status:

331'-1"



Subject: Fire Department
Author: Jon Mills
Date: 4/25/2024 3:19:52 PM
Status:

Provide Auto Turn from Nawakwa to Rochester Rd



Subject: Fire Department
Author: Jon Mills
Date: 4/25/2024 3:19:39 PM
Status:

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 Rochester Hills Engineering Department at 248-656-4640.



Subject: Fire Department
Author: Jon Mills
Date: 4/25/2024 3:32:05 PM
Status:

Group (28)



Subject: Group
Author: macdonaldj
Date: 4/22/2024 1:47:24 PM
Status:

City of Rochester Hills Planning & Economic Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:35:46 AM
Status:

SP



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:35:39 AM
Status:



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:35:36 AM
Status:

LIP



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:35:31 AM
Status:

BP



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:35:50 AM
Status:



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:36:48 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:36:55 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:36:59 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:05 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:15 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:21 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:25 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:29 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:34 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:39 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:43 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:51 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:37:55 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:00 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:04 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:09 AM
Status:

Received
4/22/2024

City of Rochester Hills Planning & Economic
Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:13 AM
Status:

Received
 4/22/2024

City of Rochester Hills Planning & Economic
 Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:25 AM
Status:

Received
 4/22/2024

City of Rochester Hills Planning & Economic
 Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 9:38:32 AM
Status:

Received
 4/22/2024

City of Rochester Hills Planning & Economic
 Development



Subject: Group
Author: C.McLeod
Date: 5/2/2024 10:39:42 AM
Status:



REGL
 REGL
 SPEC
 DBH
 SPEC
 SPEC
 REPL

Subject: Group
Author: C.McLeod
Date: 5/2/2024 11:46:15 AM
Status:

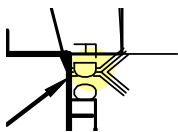


Subject: Group
Author: C.McLeod
Date: 5/6/2024 12:56:23 PM
Status:

Highlight (34)



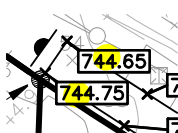
Subject: Highlight
Author: Jon Mills
Date: 4/24/2024 2:57:06 PM
Status:



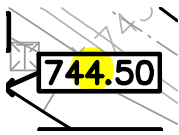
Subject: Highlight
Author: Jon Mills
Date: 4/24/2024 2:57:33 PM
Status:



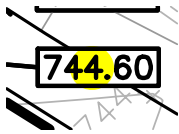
Subject: Highlight
Author: Jon Mills
Date: 4/24/2024 2:57:42 PM
Status:



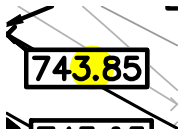
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:00 PM
Status:



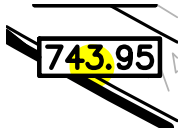
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:01 PM
Status:



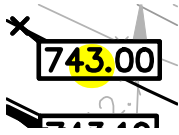
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:02 PM
Status:



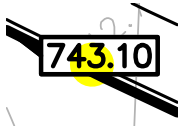
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:06 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:07 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:08 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:10 PM
Status:



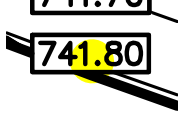
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:11 PM
Status:



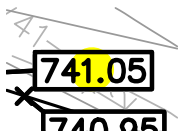
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:12 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:13 PM
Status:



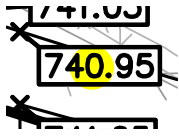
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:14 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:16 PM
Status:



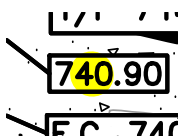
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:17 PM
Status:



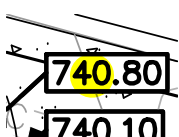
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:20 PM
Status:



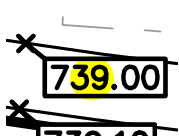
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:20 PM
Status:



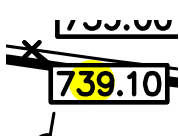
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:23 PM
Status:



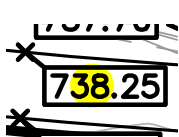
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:24 PM
Status:



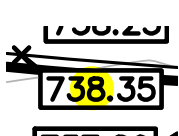
Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:43 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:44 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:45 PM
Status:



Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:46 PM
Status:

T/P 739
740.30
740.40

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:48 PM
Status:

740.30
740.40
T/S 739

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:49 PM
Status:

CROSS
2% ON

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:21:53 PM
Status:

741.05
740.90
740.90

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:12 PM
Status:

740.90
740.90

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:13 PM
Status:

40.25
/S 740.40
/P 740.40

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:17 PM
Status:

740.30
/S 740.40
/P 740.40

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:19 PM
Status:

S 741.80
P 741.80

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:39 PM
Status:

A 741.03
S 741.70
P 741.70

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 1:23:41 PM
Status:

Subject: Highlight
Author: Mark Artinian
Date: 5/8/2024 3:35:23 PM
Status:

Image (2)



Subject: Image
Author: Jon Mills
Date: 4/24/2024 2:56:09 PM
Status:



Subject: Image
Author: C.McLeod
Date: 5/8/2024 12:00:42 PM
Status:

Jenny McGuckin - YES (1)



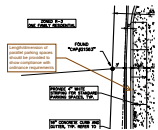
Subject: Jenny McGuckin - YES
Author: Jenny McGuckin
Date: 5/2/2024 11:40:32 AM
Status:

Natural Resources (1)



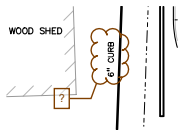
Subject: Natural Resources
Author: Matt Einheuser
Date: 5/3/2024 11:28:56 AM
Status:

Planning Department (48)



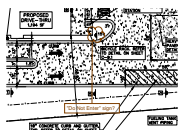
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 9:39:47 AM
Status:

Length/dimension of parallel parking spaces should be provided to show compliance with ordinance requirements



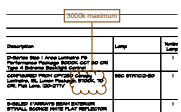
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 9:41:12 AM
Status:

?



Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 9:44:14 AM
Status:

"Do Not Enter" sign?



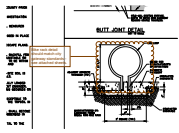
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 9:45:19 AM
Status:

3000k maximum



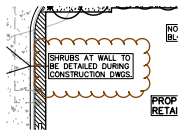
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 10:05:06 AM
Status:

Show as to be removed

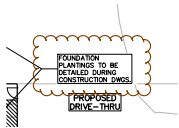


Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 10:08:37 AM
Status:

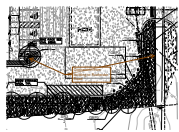
Bike rack detail should match city gateway standards - see attached sheets.



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:43:19 PM
Status:

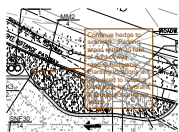


Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 10:35:31 AM
Status:



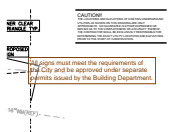
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 10:36:28 AM
Status:

Connection from building to Rochester Road



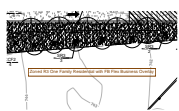
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:45:11 PM
Status:

Continue hedge to sidewalk. Parking areas within 30 feet of right of way require hedgerow. Planting locations will also need to respect clearance for hydrant and direction hydrant faces.



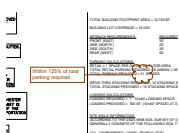
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 10:44:35 AM
Status:

All signs must meet the requirements of the City and be approved under separate permits issued by the Building Department.



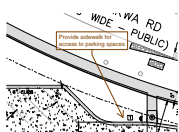
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:33:13 AM
Status:

Zoned R3 One Family Residential with FB Flex Business Overlay



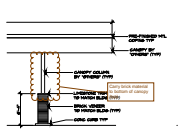
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:34:33 AM
Status:

Within 125% of total parking required.



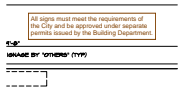
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:35:43 AM
Status:

Provide sidewalk for access to parking spaces



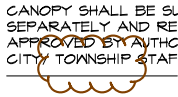
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:45:46 AM
Status:

Carry brick material to bottom of canopy (typ)

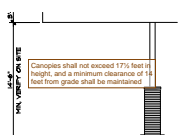


Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:43:03 AM
Status:

All signs must meet the requirements of the City and be approved under separate permits issued by the Building Department.

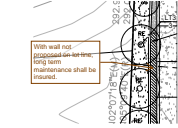


Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:43:26 AM
Status:



Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 11:45:18 AM
Status:

Canopies shall not exceed 17½ feet in height, and a minimum clearance of 14 feet from grade shall be maintained



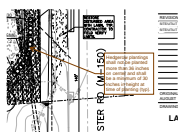
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 12:02:43 PM
Status:

With wall not proposed on lot line, long term maintenance shall be insured.



Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 12:03:21 PM
Status:

Irrigation plan shall be provided.



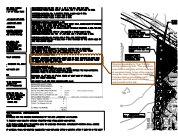
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 12:10:13 PM
Status:

Hedgerow plantings shall not be planted more than 36 inches on center and shall be a minimum of 30 inches in height at time of planting (typ).



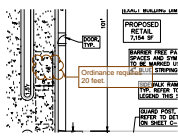
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 12:11:11 PM
Status:

Cost estimate will need to be updated to include all plantings and irrigation to establish required landscape bond amount.



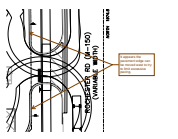
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 12:16:34 PM
Status:

Provide calculations for Type D Buffer utilizing a Masonry Wall. Tree and shrub requirements still apply with the exception of evergreen trees. In lieu of the required evergreen trees 0.5 deciduous trees and 2 shrubs shall be provided for each evergreen tree that would have been required without the wall.



Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 3:46:06 PM
Status:

Ordinance requires 20 feet.



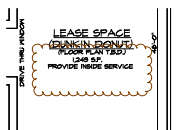
Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 3:57:12 PM
Status:

It appears the pavement edge can be moved west to try to limit excessive paving.



Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 4:09:38 PM
Status:

Since property to the south is zoned for residential purposes, a landscape buffer D is required between NB Neighborhood Business District and R One Family Districts.

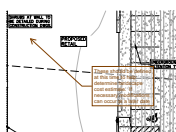


Subject: Planning Department
Author: C.McLeod
Date: 5/2/2024 4:10:03 PM
Status:



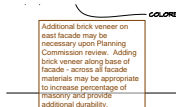
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:05:58 PM
Status:

Revise based on revised stacking space length required by Ordinance



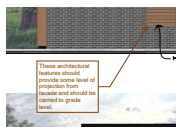
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:44:22 PM
Status:

These should be defined at this time to help determine landscape cost estimate. If necessary modifications can occur at a later date



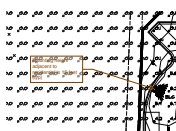
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:49:03 PM
Status:

Additional brick veneer on east facade may be necessary upon Planning Commission review. Adding brick veneer along base of facade - across all facade materials may be appropriate to increase percentage of masonry and provide additional durability.



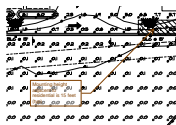
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:50:29 PM
Status:

These architectural features should provide some level of projection from facade and should be carried to grade level.



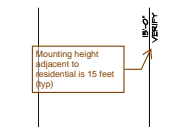
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:51:48 PM
Status:

Mounting height adjacent to residential is 15 feet (typ)



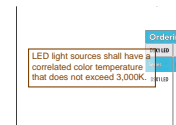
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:51:58 PM
Status:

Mounting height adjacent to residential is 15 feet (typ)



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:52:33 PM
Status:

Mounting height adjacent to residential is 15 feet (typ)



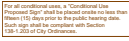
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:54:23 PM
Status:

LED light sources shall have a correlated color temperature that does not exceed 3,000K.



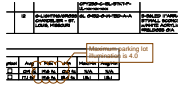
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:54:29 PM
Status:

LED light sources shall have a correlated color temperature that does not exceed 3,000K.



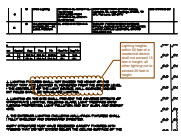
Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 12:55:19 PM
Status:

For all conditional uses, a "Conditional Use Proposed Sign" shall be placed onsite no less than fifteen (15) days prior to the public hearing date. Such sign shall be compliant with Section 138-1.203 of City Ordinances.



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:27:24 PM
Status:

Maximum parking lot illumination is 4.0



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:32:22 PM
Status:

Lighting heights within 50 feet of a residential district shall not exceed 15 feet in height, all other lighting not to exceed 20 feet in height.



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:32:48 PM
Status:

Wall pack are not permissible.



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:35:33 PM
Status:

SHALL BE ED SEPARATELY AND ED & APPROVED BY IZED TOWNSHIP STAFF



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:43:16 PM
Status:

These plantings are located offsite. These appear to be in ROW. ROW permit would be necessary to plant in these locations.



Subject: Planning Department
Author: C.McLeod
Date: 5/6/2024 2:48:25 PM
Status:

How do patrons in these parking spaces get into building without having to traverse drive through lane and maneuvering lanes.

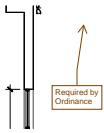


Subject: Planning Department
Author: C.McLeod
Date: 5/8/2024 11:56:18 AM
Status:

Assessing Yes

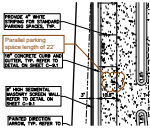


Subject: Planning Department
Author: C.McLeod
Date: 5/8/2024 11:58:25 AM
Status:



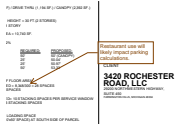
Subject: Planning Department
Author: C.McLeod
Date: 5/8/2024 3:52:50 PM
Status:

Required by Ordinance



Subject: Planning Department
Author: C.McLeod
Date: 5/8/2024 3:58:46 PM
Status:

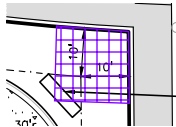
Parallel parking space length of 22'



Subject: Planning Department
Author: C.McLeod
Date: 5/8/2024 3:59:35 PM
Status:

Restaurant use will likely impact parking calculations.

Polygon (1)



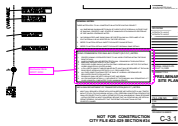
Subject: Polygon
Author: Jenny McGuckin
Date: 5/2/2024 11:15:00 AM
Status:

Traffic (1)



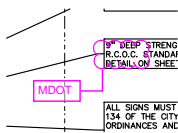
Subject: Traffic
Author: Keith
Date: 5/6/2024 3:18:40 PM
Status:

Traffic, Pathways, Sidewalks (7)



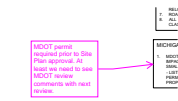
Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 3:17:57 PM
Status:

Rochester Rd is MDOT ROW.



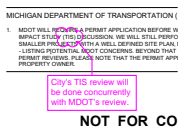
Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 1:46:34 PM
Status:

MDOT



Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 3:12:55 PM
Status:

MDOT permit required prior to Site Plan approval. At least we need to see MDOT review comments with next review.



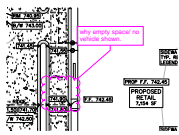
Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 1:49:45 PM
Status:

City's TIS review will be done concurrently with MDOT's review.



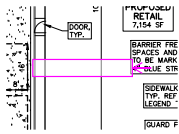
Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 3:15:37 PM
Status:

Install Pathway across property frontage. Coordination with MDOT & City as in 2027 MDOT/City plans to install pathway across the M-59 bridge.



Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 3:16:29 PM
Status:

why empty space/ no vehicle shown.



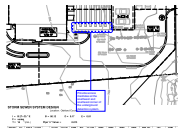
Subject: Traffic, Pathways, Sidewalks
Author: Keith
Date: 5/6/2024 3:17:49 PM
Status:

Underground Utilities (6)



Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:26:08 AM
Status:

Need to account for offsite drainage coming onto the property to verify storm sewer pipe is sized accordingly.



Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:36:43 AM
Status:

Provide access manholes at the southwest and southeast corner of the underground detention system.



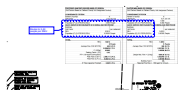
Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:37:41 AM
Status:

State due to the proposed use of the property infiltration aka CPVC will not be required.



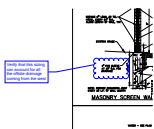
Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:39:03 AM
Status:

Soil Group B is 0.20 per the updated storm sewer standards approved in Sept of 2023, revise the C factor throughout.



Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:41:18 AM
Status:

Revise to 2.44 people per REU



Subject: Underground Utilities
Author: Jason Boughton
Date: 4/23/2024 11:43:14 AM
Status:

Verify that this sizing can account for all the offsite drainage coming from the west