

Site Plan Review

Reviewed for compliance to the City Ordinance,
Building and Fire Codes

Department	Reviewer	Approved
Planning	Chris McLeod 248-841-2572 mcleodc@RochesterHills.org	Yes
Building	Mark Artinian 248-841-2446 ArtinianM@RochesterHills.org	Yes
Engineering	Jason Boughton 248-841-2490 BoughtonJ@RochesterHills.org	Yes
Traffic	Keith Depp 248-841-2503 DeppK@RochesterHills.org	Yes
Nat. Resources	Matt Einheuser 248-841-2551 EinheuserM@RochesterHills.org	Yes
Fire	Lt. Jon Mills 248-841-2708 MillsJ@RochesterHills.org	Yes

with condition to provide cross access documents to City/Traffic prior to final approval.

PRELIMINARY SITE PLANS

JAX KAR WASH ROCHESTER HILLS

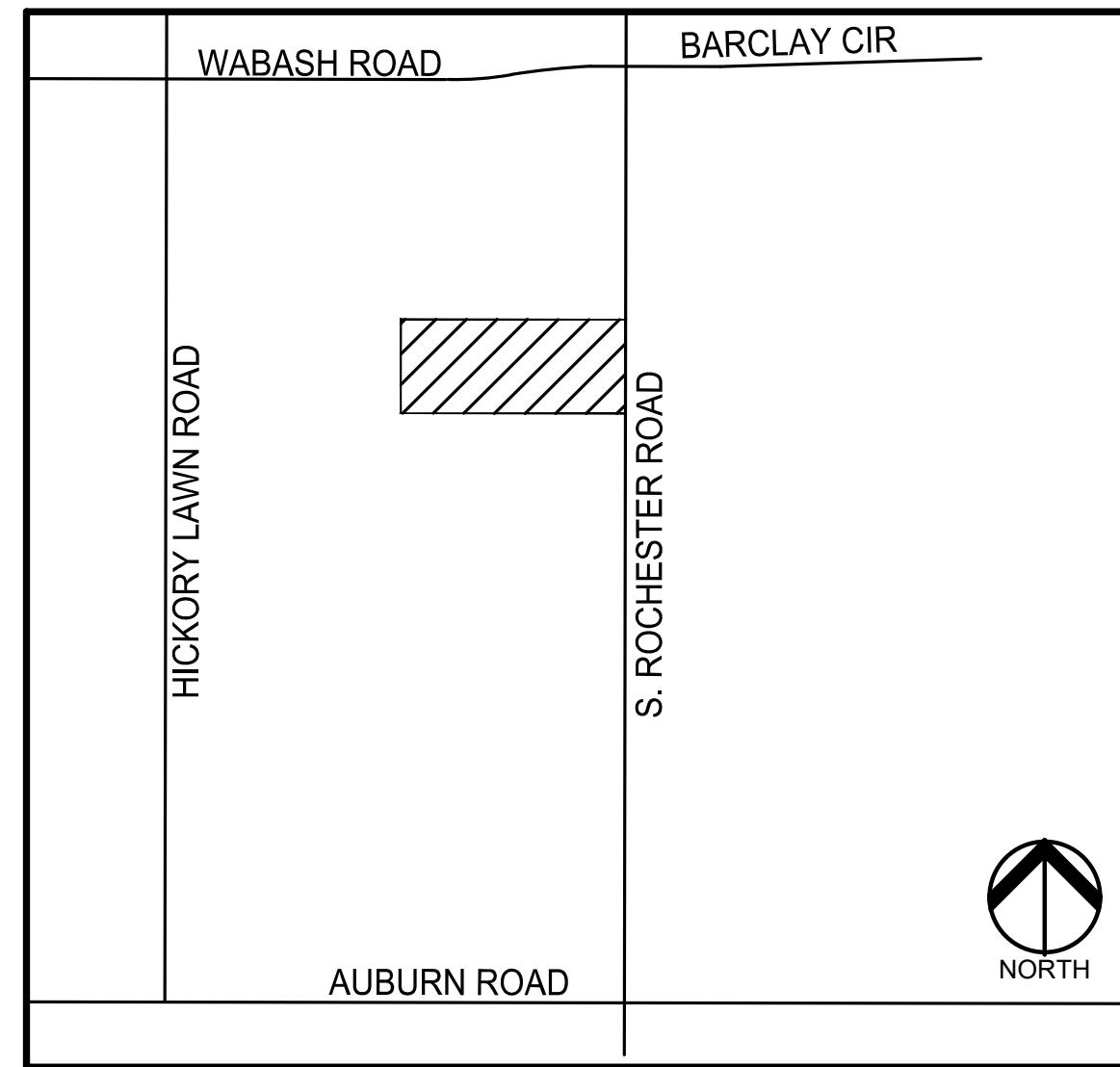
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI



JNRNB2022-0006
PSP2022-0015
Revision 3

Received
12/19/2022
City of Rochester Hills
Planning & Economic
Development

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL
7/8/2022		CITY OF ROCHESTER HILLS SPA APPROVAL



LOCATION MAP
NO SCALE

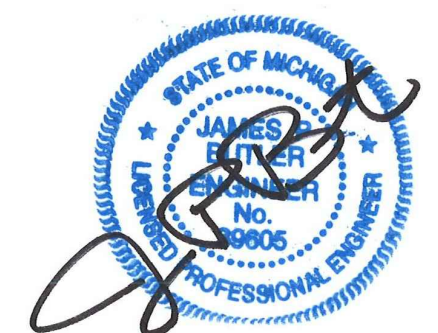
INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-2.0	OVERALL SITE PLAN
C-3.0	PRELIMINARY SITE PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-9.0	NOTES AND DETAILS
C-10.0	FIRE PROTECTION PLAN
L-1.0	PRELIMINARY LANDSCAPE PLAN
L-1.1	LANDSCAPE DETAILS
A100	FLOOR PLAN
A200	ELEVATIONS
LD100	LIGHTING PLAN & CALCULATIONS

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
JAX KAR WASH 28845 TELEGRAPH ROAD SOUTHFIELD, MI 48034 CONTACT: JASON MILEN PHONE: 248-353-4700 EMAIL: JASON@JAXKARWASH.NET	PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: SCOTT SIEG PHONE: 844.813.2949 EMAIL: SSIEG@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT
NUDELL ARCHITECTS 30403 W. 13 MILE ROAD FARMINGTON HILLS, MI 48334 CONTACT: BRIAN SMEDLEY PHONE: 248.324.8800 EMAIL: BSMEDLEY@JHN.COM	PEA GROUP 7927 MEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM



REVISIONS	
DESCRIPTION	DATE
SITE PLAN SUBMITTAL	7/8/2022
REVISED SITE PLAN SUBMITTAL	9/28/2022
REVISED SITE PLAN SUBMITTAL	11/16/2022
REVISED SITE PLAN SUBMITTAL	12/16/2022



NOT FOR CONSTRUCTION

CITY FILE #22-023 SECTION #27

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.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
DIMPLE IN ARROW ON A HYDRANT LOCATED APPROX. 89' NORTHWEST FROM THE NORTHWEST BUILDING CORNER OF TUFFY TIRE & AUTO (2716 S. ROCHESTER RD).
ELEV. - 771.66

BM #301
MAG NAIL & WASHER ON THE BASE OF A POWER POLE LOCATED APPROX. 83' NORTH OF BARNES & NOBLE (2800 S. ROCHESTER ROAD) IN A PARKING LOT ISLAND.
(NOT SHOWN ON SURVEY)
ELEV. - 767.87

LEGAL DESCRIPTION
PARCEL ID 15-27-477-067
Land in the City of Rochester Hills, Oakland County, Michigan, described as follows:
T3N, R11E, SEC 27 OAKLAND COUNTY CONDOMINIUM PLAN NO 2206 ROCHESTER AUTOMOTIVE CONDOMINIUM UNIT 1 L 51173 P 284 11-3-17 FR 065

FLOODPLAIN NOTE:
THE SUBJECT PARCEL LIES WITHIN AN AREA DETERMINED TO BE IN A NON-PRINTABLE PANEL, OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN (ZONE 'X') PER FEMA FLOOD INSURANCE RATE MAP NUMBER 26125C0394F, DATED SEPTEMBER 29, 2008.

LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- 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
- R M C RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:

ALTA/NSPS LAND TITLE SURVEY, NOWAK & FRAUS JOB NO. JB31, DATED 10/05/2017

GAS CONSUMERS ENERGY MAP 03-61-27-4 DATED 12/21/2009

WATER MAIN CITY OF ROCHESTER HILLS GIS, EMAIL DATED 06/07/2022

SANITARY SEWER CITY OF ROCHESTER HILLS GIS, EMAIL DATED 06/07/2022

STORM SEWER CITY OF ROCHESTER HILLS GIS, EMAIL DATED 06/07/2022

ELECTRIC HAVE NOT RECEIVED AS OF 06/08/2022

PEA GROUP
t: 844.813.2949
www.peagroup.com

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

CAUTION!!
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CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2716 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

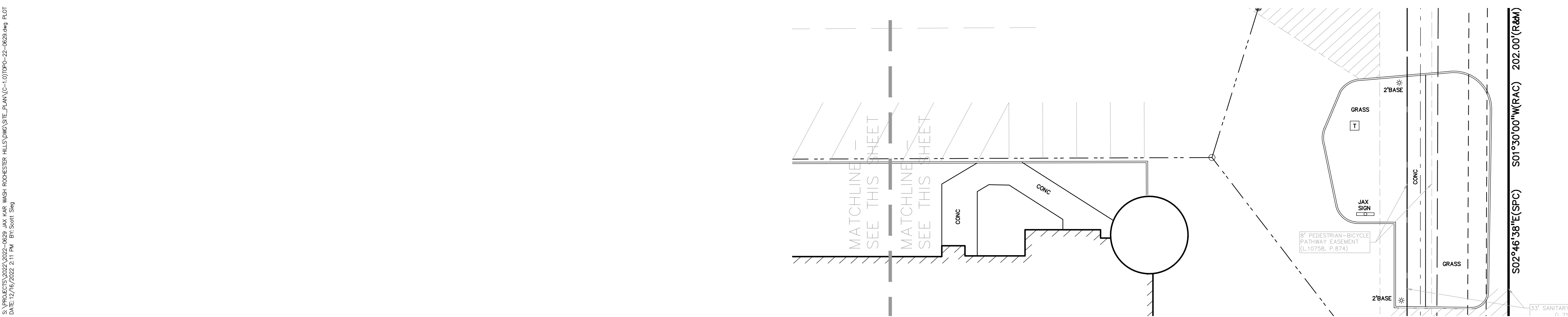
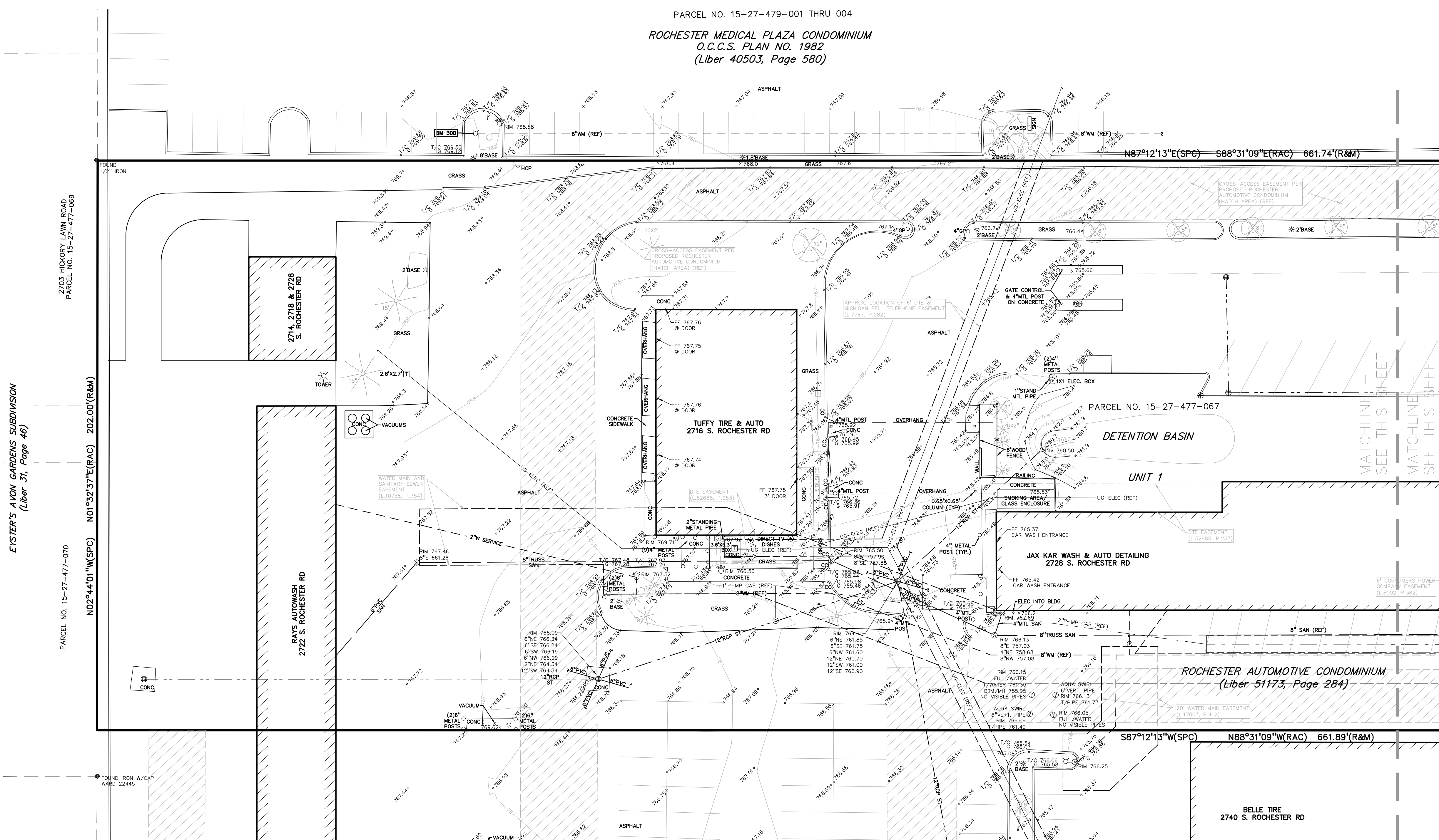
REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO. 2022-0629
P.M. LAA
DN. AJM
DES. SWS
DRAWING NUMBER:
C-1.0



NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

S:\PROJECTS\2022\0629-2022 JAX KAR WASH ROCHESTER HILLS\DWG\BTE_PLAN\C-1.0\TOPO-22-0629.dwg PLOT DATE: 12/16/2022 10:11 AM 01/16/2023 09:58

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
DIMPLE IN ARROW ON A HYDRANT LOCATED APPROX. 89' NORTHWEST FROM THE NORTHWEST BUILDING CORNER OF TUFFY TIRE & AUTO (2716 S. ROCHESTER RD).
ELEV. - 771.66

BM #301
MAG NAIL & WASHER ON THE BASE OF A POWER POLE LOCATED APPROX. 83' NORTH OF BARNES & NOBLE (2800 S. ROCHESTER ROAD) IN A PARKING LOT ISLAND.
(NOT SHOWN ON SURVEY)
ELEV. - 767.87

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T3N, R11E, SEC 27 OAKLAND COUNTY CONDOMINIUM PLAN NO 2206 ROCHESTER AUTOMOTIVE CONDOMINIUM UNIT 1 L 51173 P 284 11-3-17 FR 065

SITE DATA TABLE:

SITE AREA: 3.46 ACRES (150,905 SF.) NET AND GROSS
ZONING: B5 (AUTOMOTIVE BUSINESS DISTRICT)
PROPOSED USE: AUTOMOTIVE (8,632 SF)
BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 30 FT. (2 STORIES)
PROPOSED BUILDING HEIGHT = 28 STORY

EXISTING BUILDING FOOTPRINT AREA = 25,154 SF.
PROPOSED BUILDING FOOTPRINT AREA = 8,632 SF.

TOTAL BUILDING FOOTPRINT AREA = 33,786 SF.
BUILDING LOT COVERAGE = 22.39%

EXISTING OPEN AREA = 0.55 ACRES (23,958 SF)
PROPOSED OPEN AREA = 0.60 ACRES (26,278 SF)

SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
FRONT (EAST)	25'	411.99'
SIDE (NORTH)	0'	50.16'
SIDE (SOUTH)	0'	43.83'
REAR (WEST)	50'	136.12'

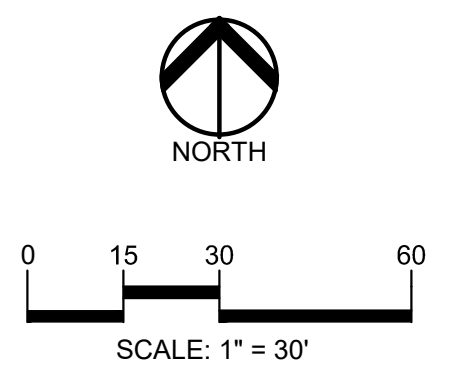
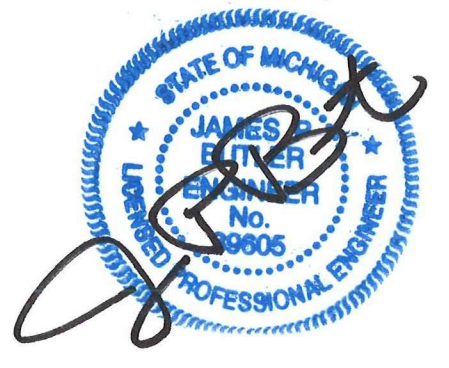
PARKING CALCULATIONS:

JAX KAR WASH = 1 SPACE PER EMPLOYEES + 4 STACKING PER WASH BAY + 1 EXTRA STACKING FOR POST WASH DETAILING:
JAX KAR WASH = 3 EMPLOYEES + 8 (2 WASH BAYS) + 1 EXIT STACKING = 12 SPACES

JAX KAR DETAILING = 1 SPACE PER EMPLOYEES + 1 SPACE PER DETAILING STATION
JAX KAR DETAILING = 6 EMPLOYEES + 6 (DETAILING STATIONS) = 12 SPACES

SELF SERVE CAR WASH = 1 SPACE PER WASH BAY + 1 SPACE FOR POST WASH DETAILING:
SELF SERVE CAR WASH = 5 WASH BAYS + 5 (POST WASH DETAILING) = 10 SPACES

TOTAL REQUIRED PARKING = 34 SPACES INCLUDING 2 BARRIER FREE
TOTAL PROPOSED PARKING SPACES = 38 SPACES INCLUDING 2 BARRIER FREE



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CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV.	DESCRIPTION	DATE
REV. 1	SITE PLAN SUBMITTAL	09.28.22
REV. 2	SITE PLAN SUBMITTAL	11.16.22
REV. 3	SITE PLAN SUBMITTAL	12.16.22

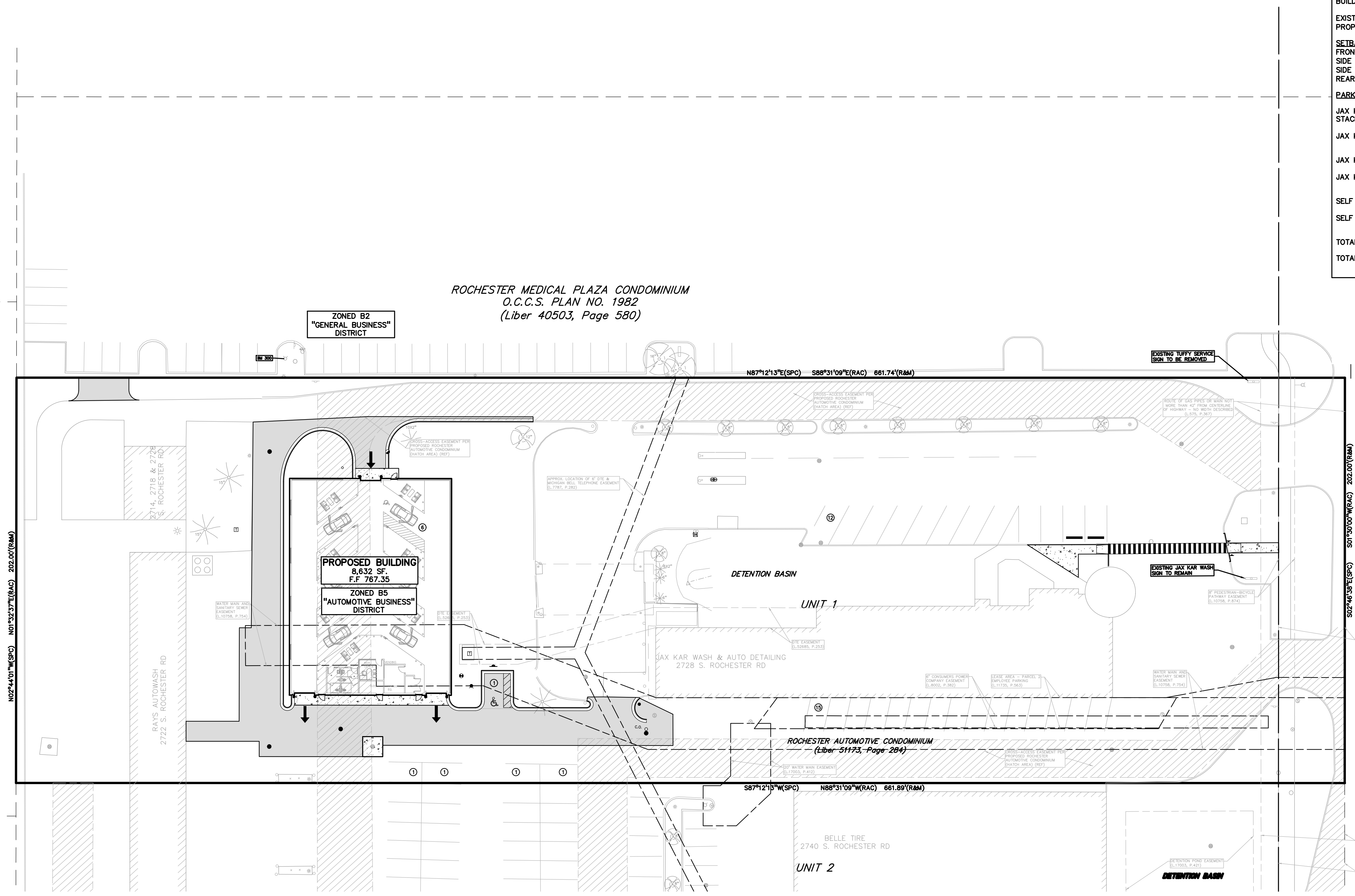
ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
OVERALL SITE PLAN

PEA JOB NO.	2022-0629
P.M.	LAA
DN.	AJM
DES.	SWS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION
SITE FILE #22-023 SECTION #27

C-2.0



ROCHESTER MEDICAL PLAZA CONDOMINIUM
O.C.C.S. PLAN NO. 1982
(Liber 40503, Page 580)

ZONED B2
"GENERAL BUSINESS"
DISTRICT

PROPOSED BUILDING
8,632 SF.
F.F. 767.35
ZONED B5
"AUTOMOTIVE BUSINESS"
DISTRICT

ROCHESTER AUTOMOTIVE CONDOMINIUM
(Liber 51173, Page 284)

BELLE TIRE
2740 S. ROCHESTER RD
UNIT 2

S:\PROJECTS\2022\023-022-029 JAX KAR WASH ROCHESTER HILLS\DWG\SITE_PLAN\C-2-001-DWG-22-0629.dwg PLOT DATE: 12/17/2022 10:52 AM 8/15/2022 10:52 AM

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
DUMPLE IN ARROW ON A HYDRANT LOCATED APPROX. 89' NORTHWEST FROM THE NORTHWEST BUILDING CORNER OF TUFFY TIRE & AUTO (2716 S. ROCHESTER RD).
ELEV. - 771.66

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(NOT SHOWN ON SURVEY)
ELEV. - 767.87

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ROCHESTER MEDICAL PLAZA CONDOMINIUM
O.C.C.S. PLAN NO. 1982
(Liber 40503, Page 580)

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN LIGHTPOLE

SIGN LEGEND:

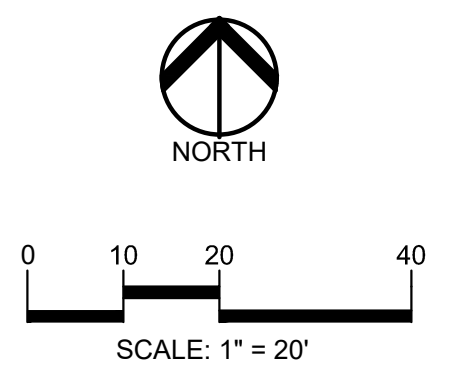
- 'EXIT ONLY' SIGN [1]
- 'CROSSWALK' SIGN [2]
- 'BARRIER FREE PARKING' SIGN [3]
- 'VAN ACCESSIBLE' SIGN [4]

REFER TO DETAIL SHEET FOR SIGN DETAILS

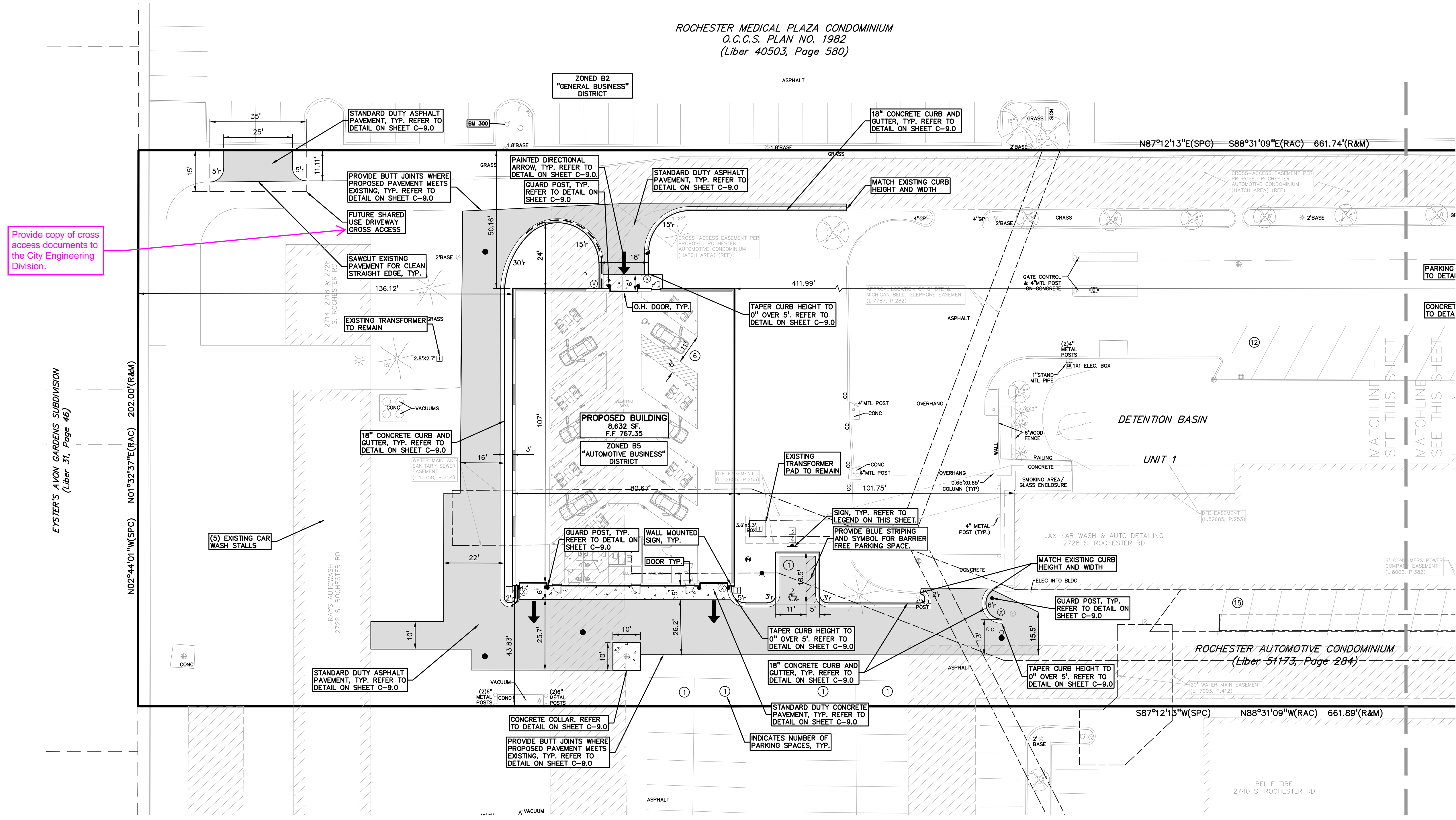


GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- 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.
- REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.



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Provide copy of cross access documents to the City Engineering Division.

ESTYER'S AVON GARDENS SUBDIVISION
(Liber 31, Page 46)

CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
PRELIMINARY SITE PLAN

PEA JOB NO. 2022-0629

P.M. LAA
DN. AJM
DES. SWS

DRAWING NUMBER:

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

C-3.0

S:\PROJECTS\2022\0629-2929 JAX KAR WASH ROCHESTER HILLS\DWG\SITE_PLAN\C-3.0\DWG-22-0629.rvt
DATE: 12/17/2022 10:52 AM BY: 60166@aei.com

BENCHMARKS
(GPS DERIVED - NAVD88)

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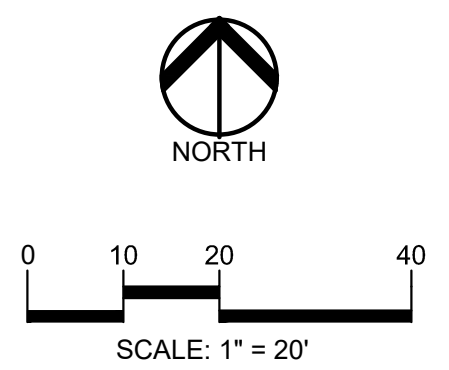
PARCEL NO. 15-27-479-001 THRU 004
ROCHESTER MEDICAL PLAZA CONDOMINIUM
O.C.C.S. PLAN NO. 1982
(Liber 40503, Page 580)

GRADING LEGEND:

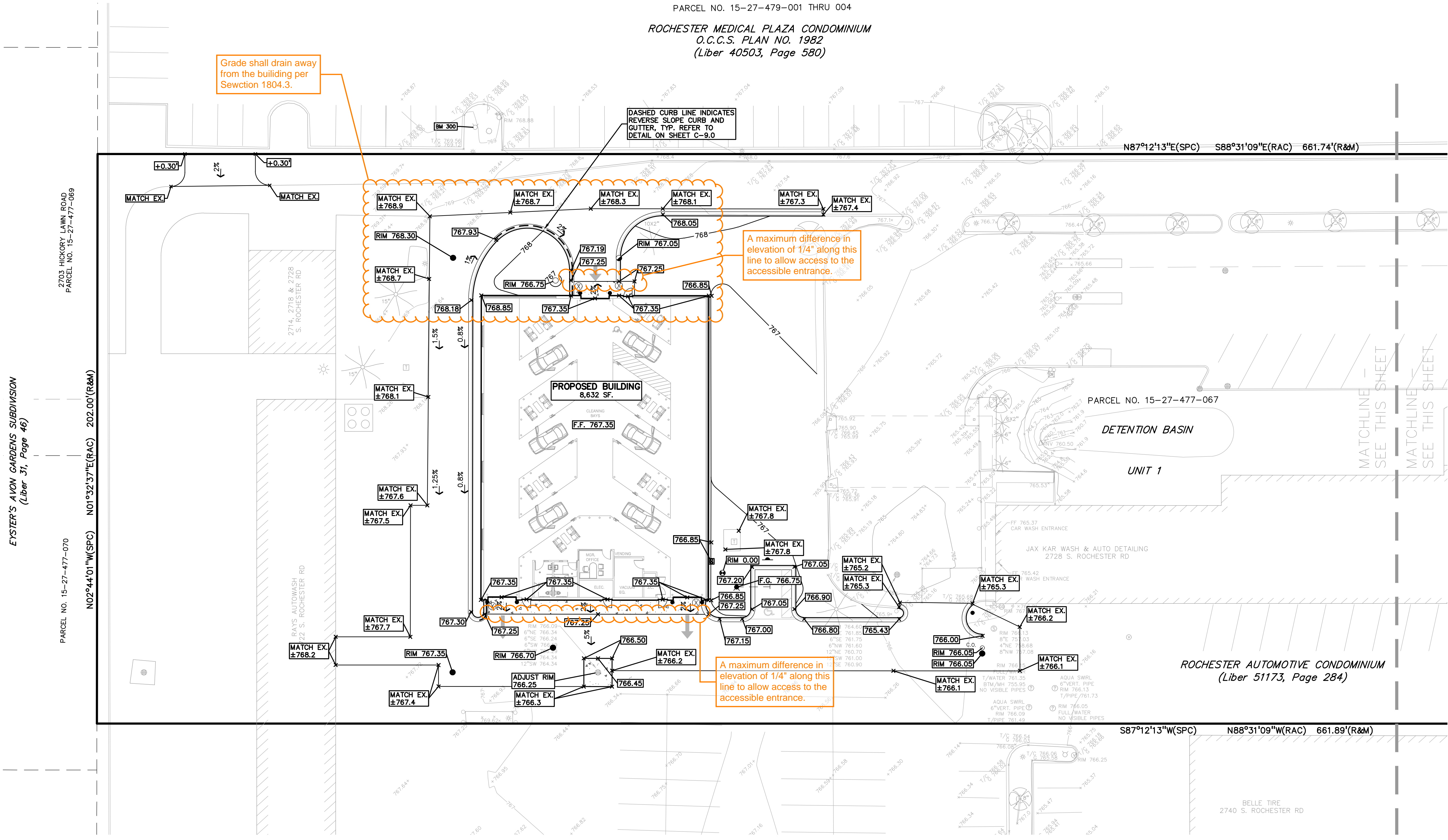
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RIM = RIM ELEVATION
- B/W = BOTTOM OF WALL



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Grade shall drain away from the building per Section 1804.3.

DASHED CURB LINE INDICATES REVERSE SLOPE CURB AND GUTTER. TYP. REFER TO DETAIL ON SHEET C-9.0

A maximum difference in elevation of 1/4" along this line to allow access to the accessible entrance.

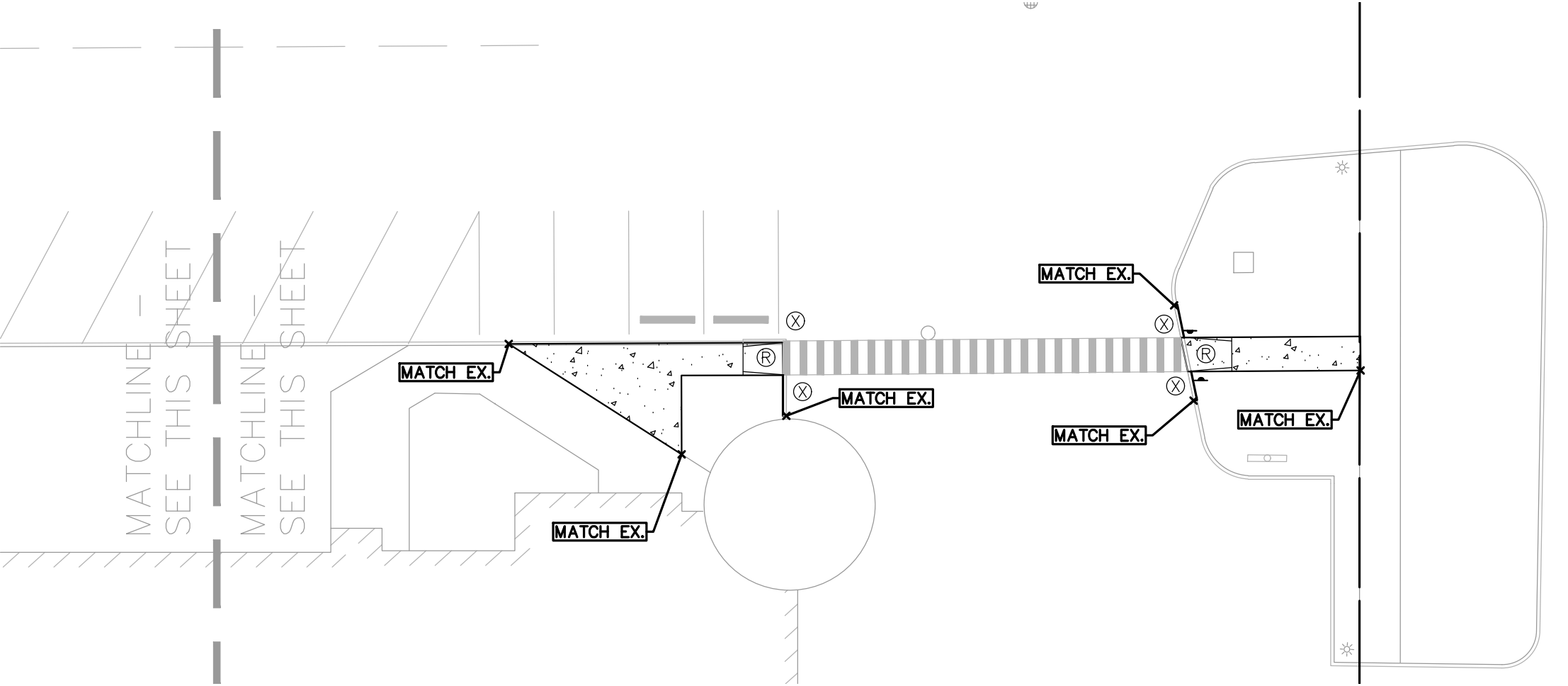
A maximum difference in elevation of 1/4" along this line to allow access to the accessible entrance.

2703 HICKORY LAWN ROAD
PARCEL NO. 15-27-477-069

2703 HICKORY LAWN ROAD
PARCEL NO. 15-27-477-070

2703 HICKORY LAWN ROAD
PARCEL NO. 15-27-477-071

S:\PROJECTS\2022\022-023-JAX KAR WASH ROCHESTER HILLS\DWG\BTE_PLAN\C-40\GRADE-22-0629.rvt PLOT
DATE: 12/17/2022 10:52 AM BY: 60156@pea.com



CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
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2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO. 2022-0629

P.M. LAA
DN. AJM
DES. SWS

DRAWING NUMBER:

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

C-4.0

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
DIME PL IN ARROW ON A HYDRANT LOCATED APPROX. 89' NORTHWEST FROM THE NORTHWEST CORNER OF TUFFY TIRE & AUTO (2716 S. ROCHESTER RD).
ELEV. - 771.66

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STORM RUN-OFF CALCS:

SITE = 3.46 AC

EXISTING SITE:
IMPERVIOUS AREA = 2.91 (c=0.95)
PERVIOUS AREA = 0.55 (c=0.35)
C FACTOR = 0.855

PROPOSED SITE:
IMPERVIOUS AREA = 2.84 (c=0.95)
PERVIOUS AREA = 0.62 (c=0.35)
C FACTOR = 0.842

THE PROPOSED STORM RUN-OFF WILL BE LESS THAN EXISTING CONDITIONS. NO STORM SEWER IMPROVEMENTS ARE BEING PROPOSED.

SANITARY SEWER BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)

CAR WASH/DETAILING

Building Area (SF)	33,786
Unit Factor	0.29 /1,000 SF
REU	9.8
Population (P) (3.5 PEOPLE/EDU)	34.3 People

TOTAL

REU	9.8
Population	34 People
Average Flow (100 GPCPD)	3,400 G.P.D.
	0.005 C.F.S.
P (1000s)	0.034
Peaking Factor (PF)	4.35
PF = (18+sqrt(P))/(4+sqrt(P))	
Peak Flow (G.D.P.)	14,776 G.P.D.
Peak Flow (C.F.S.)	0.023 C.F.S.
6" Pipe Capacity Provided =	0.73 C.F.S.

WATER MAIN BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)

CAR WASH/DETAILING

Building Area (SF)	33,786
Unit Factor	0.29 /1,000 SF
REU	9.8
Population (P) (3.5 PEOPLE/EDU)	34.3 People

TOTAL

REU	9.8
Population	34 People
Average Flow (150 GPCPD)	5,100 G.P.D.
	0.008 C.F.S.
	0.005 M.G.D.
Design Max. Flow = (2*avg)	10200.00 G.P.D.
	0.016 C.F.S.
	0.010 M.G.D.
Building Type =	IB
Required Fire Flow =	1500 psi for 2 hours

UTILITY LEGEND:

- OH-ELEC-POLE & GUY WIRE
- UG-CATV
- UG-COMM
- UG-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
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

PEA GROUP
t: 844.813.2949
www.peagroup.com

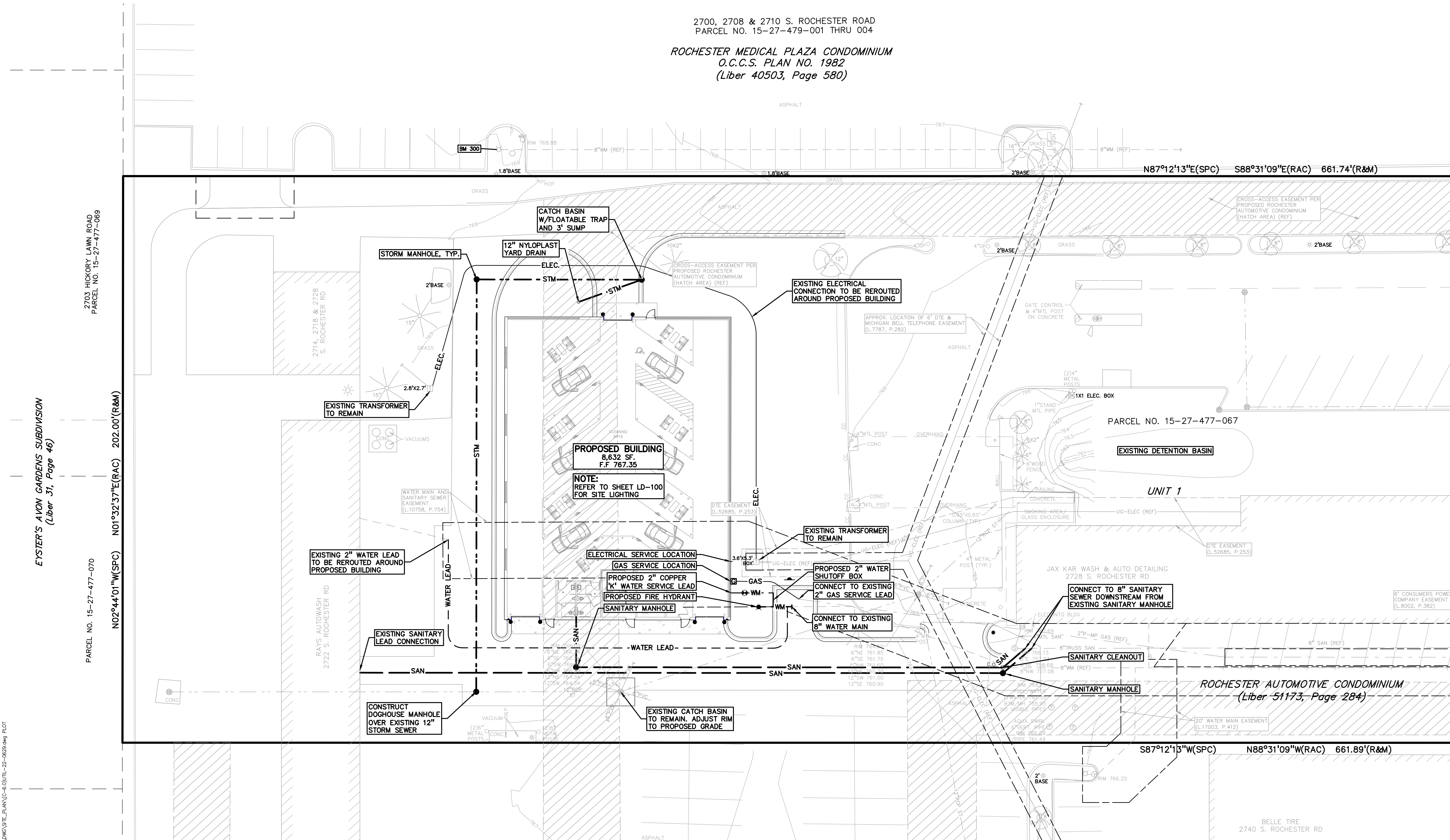
STATE OF MICHIGAN
JAMES B. STUBBS
No. 00005
PROFESSIONAL ENGINEER

NORTH

0 10 20 40
SCALE: 1" = 20'

2700, 2708 & 2710 S. ROCHESTER ROAD
PARCEL NO. 15-27-479-001 THRU 004

ROCHESTER MEDICAL PLAZA CONDOMINIUM
O.C.C.S. PLAN NO. 1982
(Liber 40503, Page 580)



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

CAUTION!!
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CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
PRELIMINARY UTILITY PLAN

PEA JOB NO. 2022-0629

P.M.	LAA
DN.	AJM
DES.	SWS

DRAWING NUMBER:

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

C-6.0

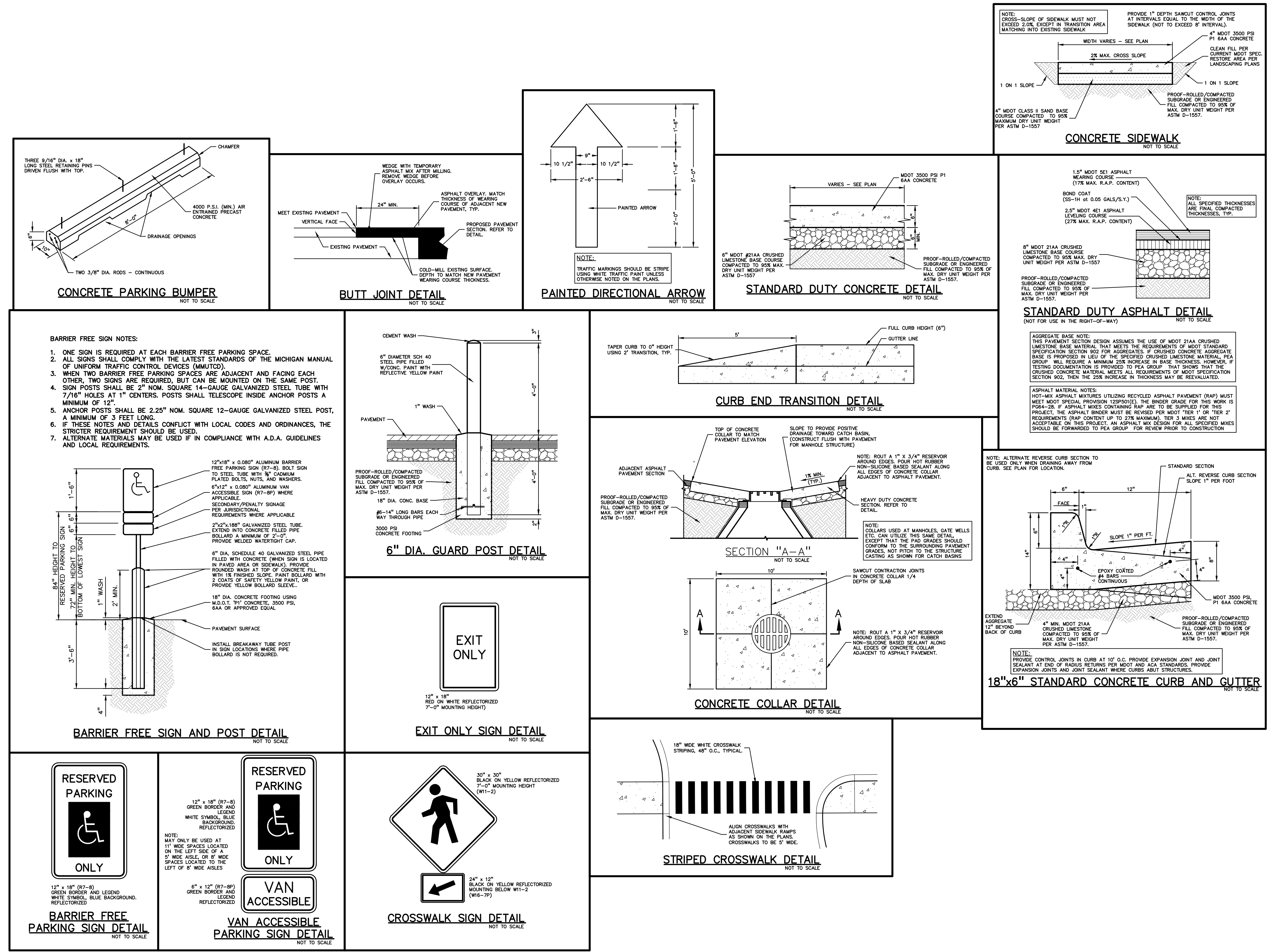
S:\PROJECTS\2022\023-029 JAN. 2022\023-029 2718 SOUTH ROCHESTER HILLS\DWG\BTE_PLAN\02-6-00\TITLE-22-0629.dwg PLOT
DATE: 12/17/2022 10:27 AM 07/08/2022 10:49



0 10 20 40
SCALE: 1" = 20'



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CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
**JAX KAR WASH
ROCHESTER HILLS**
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OKLAHOMA COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022
DRAWING TITLE
**NOTES AND
DETAILS**

PEA JOB NO.	2022-0629
P.M.	LAA
DN	AJM
DES.	SWS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

C-9.0

S:\PROJECTS\2022\0629-2929 JAX KAR WASH ROCHESTER HILLS\DWG\BTE_PLAN\IC-9-00DETAILS-22-0629.rvt PLOT DATE: 12/16/2022 2:15 PM 01/16/2023 08:59

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
DIMPLE IN ARROW ON A HYDRANT LOCATED APPROX. 89' NORTHWEST FROM THE NORTHWEST BUILDING CORNER OF TUFFY TIRE & AUTO (2716 S. ROCHESTER RD).
ELEV. - 771.66

BM #301
MAG NAIL & WASHER ON THE BASE OF A POWER POLE LOCATED APPROX. 83' NORTH OF BARNES & NOBLE (2800 S. ROCHESTER ROAD) IN A PARKING LOT ISLAND.
(NOT SHOWN ON SURVEY)
ELEV. - 767.87

LEGAL DESCRIPTION
PARCEL ID 15-27-477-067
Land in the City of Rochester Hills, Oakland County, Michigan, described as follows:
T3N, R11E, SEC 27 OAKLAND COUNTY CONDOMINIUM PLAN NO 2206 ROCHESTER AUTOMOTIVE CONDOMINIUM UNIT 1 L 51173 P 284 11-3-17 FR 065

FIRE DEPARTMENT NOTES:

FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE. FIRE LANE SIGNS SHALL BE SPACED NOT MORE THAN 100 FEET APART, AND SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE" IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

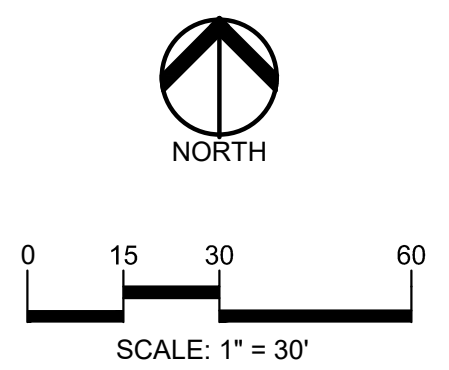
-FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 503.

CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC CHAPTER 14.

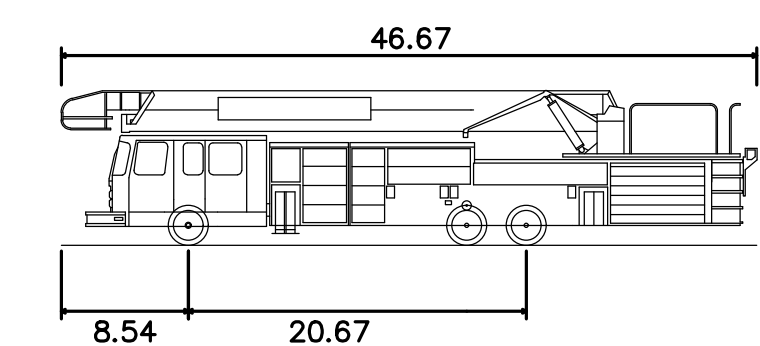
OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. CONTACT ROCHESTER HILLS FIRE DEPARTMENT FOR PERMIT INFORMATION.

-FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 307.6.2 & 307.6.2.3

A KNOX KEY SYSTEM SHALL BE INSTALLED AT EACH BUILDING IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE KNOXBOX.COM. IFC 2006 SEC. 506



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Rochester Hills Fire Truck	
Overall Length	46.67ft
Overall Width	8.500ft
Min Wheel Radius	42.5ft

CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

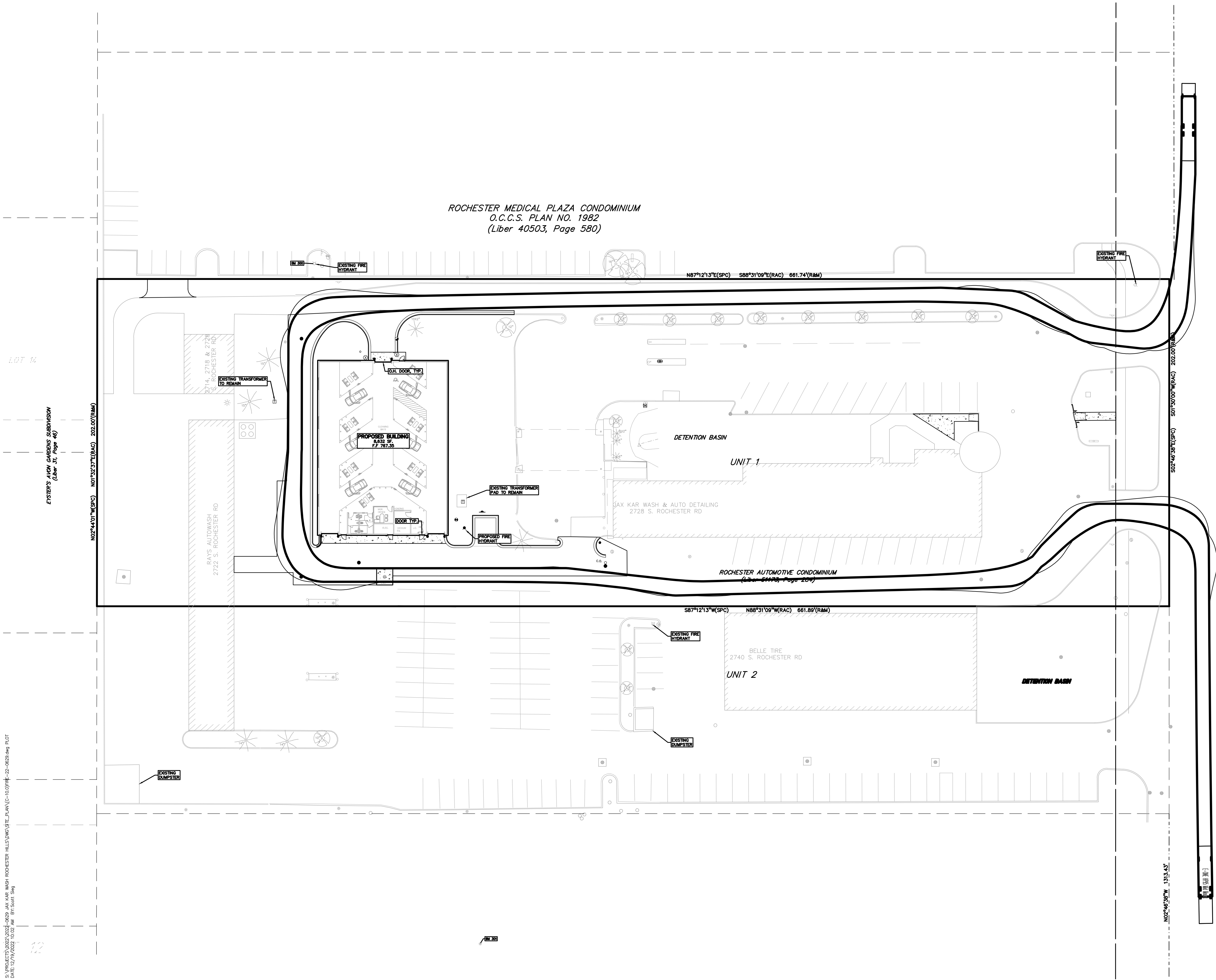
ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
FIRE PROTECTION PLAN

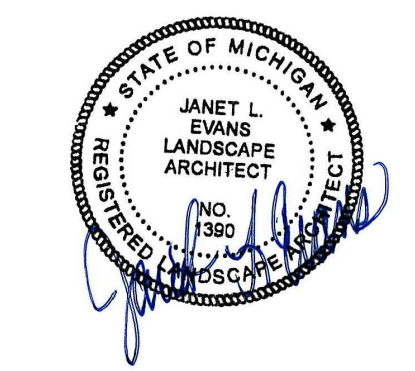
PEA JOB NO.	2022-0629
P.M.	LAA
DN	AJM
DES.	SWS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27

C-10.0



S:\PROJECTS\2022\0629-2022 JAN JAX KAR WASH ROCHESTER HILLS\DWG\SITE_PLAN\C-10.0\PEA-22-0629.dwg PLOT DATE: 12/17/2022 10:02 AM 07:05:01 AM



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CLIENT
JAX KAR WASH
 28845 TELEGRAPH ROAD
 SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
 2718 SOUTH ROCHESTER ROAD
 ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
 JULY 8, 2022

DRAWING TITLE
PRELIMINARY LANDSCAPE PLAN

PEA JOB NO. 2022-0629

P.M. LAA
 DN. JMS
 DES. JLE

DRAWING NUMBER:

KEY

- = ROW TREES
- ☼ = REPLACEMENT TREES
- ⊕ = BUFFER TREES
- ⊖ = TREE PROTECTION FENCING
- ⊙ = SHRUBS
- ▨ = ROCK BED SEE DETAIL SHT. L-1.1
- ▨ = IRRIGATED SEED LAWN
- ▨ = RESTORE IRRIGATED SEED LAWN
- ⊗ = EXISTING TREE TO REMAIN
- ⊗ = EXISTING TREE TO BE REMOVED

SEE SHEET L-1.1 FOR PLANTING NOTES AND LANDSCAPE DETAILS

LANDSCAPE CALCULATIONS: B5 AUTOMOTIVE BUSINESS DISTRICT
 PER CITY OF ROCHESTER HILLS ZONING ORDINANCE

RIGHT OF WAY AT SOUTH ROCHESTER ROAD
 REQUIRED: 1 DEC/35 LF FRONTAGE, 1 ORN/60 LF FRONTAGE
 200 LF/35 = 6 DEC
 200 LF/60 = 3 ORN
 PROVIDED: 6 DEC TREES, 3 ORN, AND SHRUB HEDGE

TREE REPLACEMENT:
 ALL REGULATED TREES ARE TO BE REPLACED AT A ONE TO ONE BASIS. ALL SPECIMEN TREES ARE TO BE REPLACED AT A MINIMUM OF 50% OF LOST DBH.
 REQUIRED: 3 REGULATED EVG TREES REMOVED = 3 - 10' EVG TREES REPLACED
 PROVIDED: 3, 10' EVG TREES PROVIDED

NORTH BUFFER OF B-5 ADJ. TO B-2 DISTRICT:
 REQUIRED: 1.5 DEC, 1 EVG, AND 4 SHRUBS PER 100 LF AND MINIMUM 6' WIDE YARD
 661 LF/100 = 6.61 * 1.5 = 10 DEC, 7 EVG, AND 28 SHRUBS REQUIRED
 PROVIDED: 1 PROPOSED DEC, 9 EXISTING DEC, 6 PROPOSED EVG, 1 EXISTING EVG, AND 40 PROPOSED SHRUBS IN NORTH PARKING ISLANDS PER CITY COMMENT

SOUTH BUFFER OF B-5 DISTRICT:
 REQUIRED: B-5 ADJACENT TO B-5 NONE REQUIRED
 PROVIDED: N/A

WEST BUFFER OF R-3 DISTRICT:
 REQUIRED: 2.5 DEC, 1.5 ORN, 8 EVG, AND 10 SHRUBS PER 100 LF AND MINIMUM 8' WIDE YARD WITH SCREEN WALL
 PROVIDED: EXISTING SCREEN WALL BUFFER

IRRIGATION NOTES:
 ALL LANDSCAPE AREAS MUST BE IRRIGATED. WATERING WILL ONLY OCCUR BETWEEN THE HOURS OF 12AM-5AM.

PLANT REQUIREMENTS:
 NO MORE THAN 20% OF A SINGLE PLANT SPECIES ON SITE. ALL DEC TREES SHOULD BE A MIN OF 3" CAL, ORN TREES SHOULD BE A MIN OF 2" CAL. EVG TREES A MIN OF 10' HT, OR 5' SPREAD. ALL SHRUBS SHOULD BE 30" MIN HEIGHT OR 24" IN SPREAD.

CITY OF ROCHESTER HILLS NOTES:

TREE PLANTING RESTRICTIONS:
 Prior approval is required to plant any tree or shrub on the public right-of-way. All trees and shrubs must be planted at least 10' from the edge of the public road. Shade trees and shrubs must be planted at least 5' from the edge of the public walkway. Evergreen and ornamental trees must be planted at least 10' from the edge of the public walkway. No trees or shrubs may be planted within the triangular area formed at the intersection of any street right-of-way lines at a distance along each line of 25' from their point of intersection. No trees or shrubs may be planted in the triangular area formed at the intersection of any driveway with a public walkway at a distance along each line of 15' from their point of intersection. Trees must be 3' off any sight lines. All trees and shrubs must be planted at least 10' from any fire hydrant. Shade and evergreen trees must be at least 15' away from the nearest overhead wire. Trees must be planted a minimum of 5' from an underground utility, unless the city's Landscape Architect requires a greater distance. These requirements are incorporated into the plan.

CLOSING COMMENT:
 Prior to the release of the performance bond, the City of Rochester Hills Forestry Division needs to inspect all trees, existing or planted, to identify any that pose a hazard to the safe use of the public right-of-way. Forestry may require the developer to remove, and possibly replace, any such trees.

PER CITY OF ROCHESTER HILLS MAINTENANCE AGREEMENT:

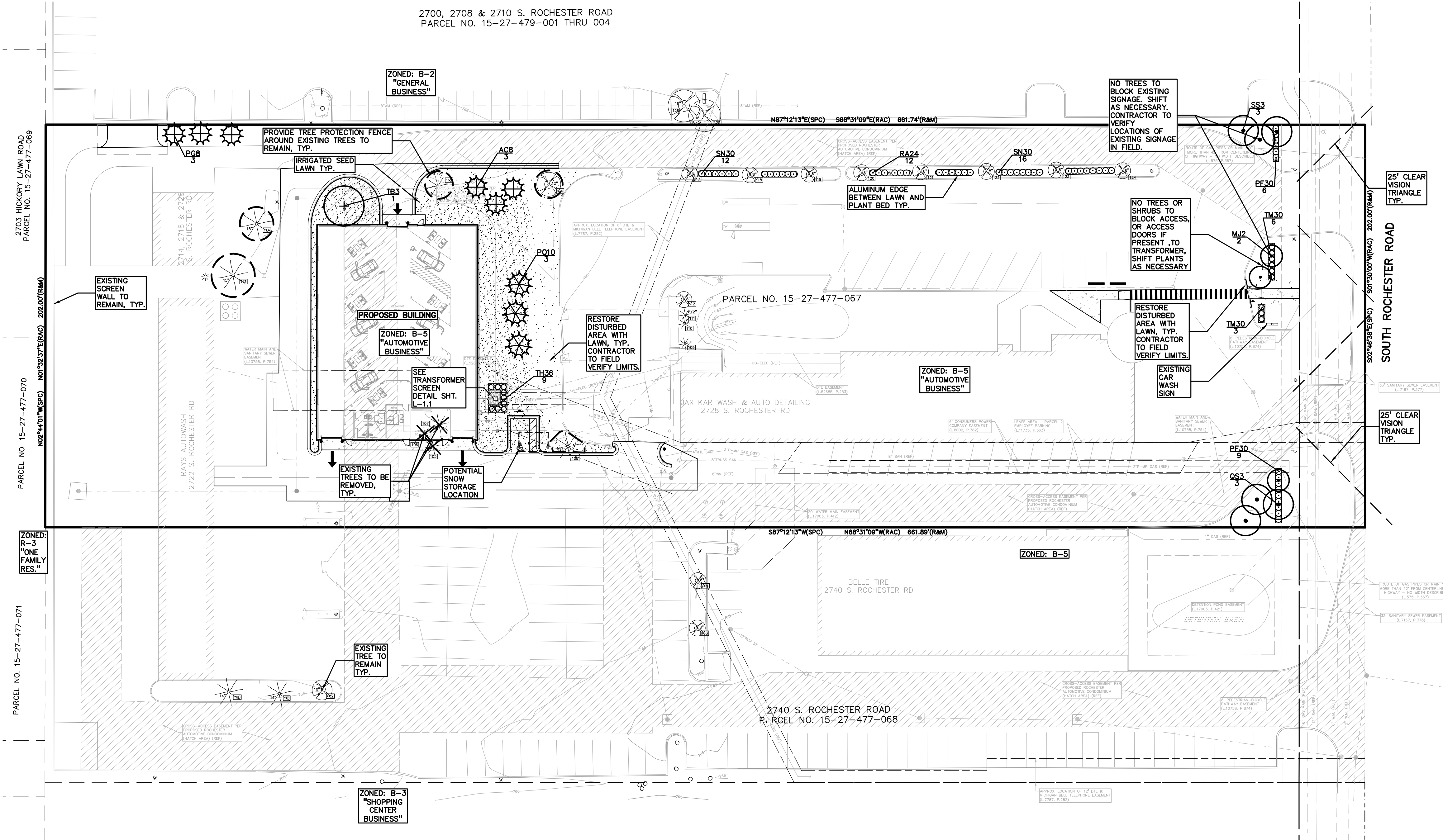
Section 138-12.109 Maintenance
 The owner of the property shall be responsible for all maintenance of site landscaping, as follows:

- Landscaping shall be kept in a neat, orderly and healthy growing condition, free from debris and refuse.
- Pruning shall be minimal at the time of installation, only to remove dead or diseased branches. Subsequent pruning shall assure proper maturation of plants to achieve their approved purpose.
- All dead, damaged, or diseased plant material shall be removed immediately and replaced within six (6) months after it dies or in the next planting season, whichever occurs first. For purposes of this Section, the planting season for deciduous plants shall be between March 1 and June 3 and for evergreen plants shall be between March 1 and June 3. Plant material installed to replace dead or diseased material shall be as close as practical to the size of the material it is intended to replace. The City may notify property owners of the need to replace dead, damaged, or diseased material.
- The approved landscape plan shall be considered a permanent record and integral part of the Site Plan Approval. Unless otherwise approved in accordance with the aforementioned procedures, any revisions to or removal of plant materials, or non-compliance with the maintenance requirements of this Section 138-12.109 will place the parcel in non-conformity with the approved landscape plan and be a violation of this Ordinance.
- If protected trees are damaged, a fine shall be issued on an inch-by-inch basis at a monetary rate as defined by the Forestry Department.

NOT FOR CONSTRUCTION
 CITY FILE #22-023 SECTION #27

L-1.0

2700, 2708 & 2710 S. ROCHESTER ROAD
 PARCEL NO. 15-27-479-001 THRU 004



PLANT LIST FOR L-1.0

TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
3	SS3	Slender Silhouette Sweetgum	<i>Liquidambar styraciflua 'Slender Silhouette'</i>	3" Cal.	B&B
3	MJ2	Marilee Crab	<i>Malus 'Jarmin' PP14337 (white, 10' wide, upright, fruitless)</i>	2" Cal.	B&B
3	QS3	Skinny Genes Oak	<i>Quercus alba 'JFS-KW2QX' P.A.F. (col./fastigate, 10' wide)</i>	3" Cal.	B&B
1	TB3	Boulevard Linden	<i>Tilia americana 'Boulevard'</i>	3" Cal.	B&B
10		TOTAL DECIDUOUS TREES			

EVERGREEN TREE LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
3	AC8	Concolor Fir	<i>Abies concolor</i>	8' Ht.	B&B
3	PG8	Black Hills Spruce	<i>Picea glauca 'Densata'</i>	8' Ht.	B&B
3	PO10	Serbian Spruce	<i>Picea omorika</i>	10' Ht.	B&B
9		TOTAL EVERGREEN TREES			

SHRUB PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
15	PF30	Abbotswood Potentilla	<i>Potentilla fruticosa 'Abbotswood'</i>	30" Ht.	Cont.
12	RA24	Gro Low Sumac	<i>Rhus aromatica 'Gro-Low'</i>	24" Ht.	Cont.
28	SN30	Neon Flash Spirea	<i>Spiraea japonica 'Neon Flash'</i>	30" Ht.	Cont.
9	TH36	Hicks Yew	<i>Taxus x media 'Hicksii'</i>	36" Ht.	Cont.
9	TM30	Dense Yew	<i>Taxus x media 'Densiformis'</i>	30" Ht.	Cont.
73		TOTAL SHRUBS			

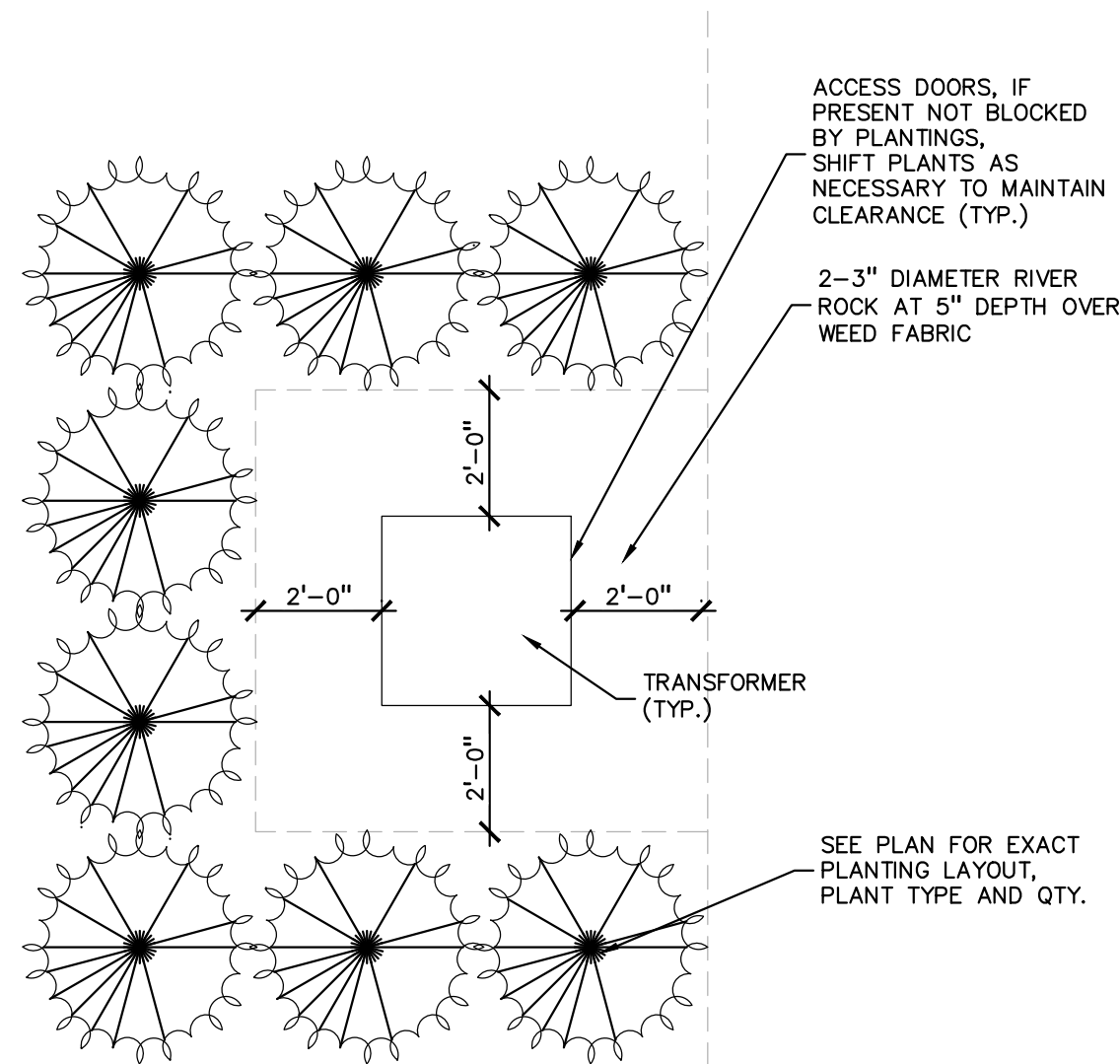
EXISTING TREE INVENTORY - 22-0629

Tree Tag	D.B.H. (Inches)	Common Name	Scientific Name	Regulated	Specimen	Removed/Severed
100	14"	Pine	<i>Pinus spp</i>	Y	N	S
101	14"	Pine	<i>Pinus spp</i>	Y	N	S
102	10"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
103	8"	Sycamore/London Plane	<i>Platanus spp</i>	Y	N	S
104	8"	Sycamore/London Plane	<i>Platanus spp</i>	Y	N	S
105	8"	Spruce	<i>Picea spp</i>	Y	N	R
106	6"	Spruce	<i>Picea spp</i>	Y	N	R
107	10"	Spruce	<i>Picea spp</i>	Y	N	R
108	14"	Spruce	<i>Picea spp</i>	Y	N	S
109	6"	Arbutifoliae	<i>Thuja occidentalis</i>	Y	N	S
110	6"	Arbutifoliae	<i>Thuja occidentalis</i>	Y	N	S
111	6X2"	Arbutifoliae	<i>Thuja occidentalis</i>	Y	N	S
112	8"	Crabapple	<i>Malus spp</i>	Y	N	S
113	15"	Pine	<i>Pinus spp</i>	Y	N	S
114	15"	Pine	<i>Pinus spp</i>	Y	N	S
115	10X2"	Spruce	<i>Picea spp</i>	Y	N	S
116	12"	Maple	<i>Acer spp</i>	Y	N	S
117	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
118	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
119	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
120	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
121	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
122	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
123	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
124	8"	Honeylocust	<i>Gleditsia triacanthos</i>	Y	N	S
125	16"	Pine	<i>Pinus spp</i>	Y	N	S
126	16"	Pine	<i>Pinus spp</i>	Y	N	S

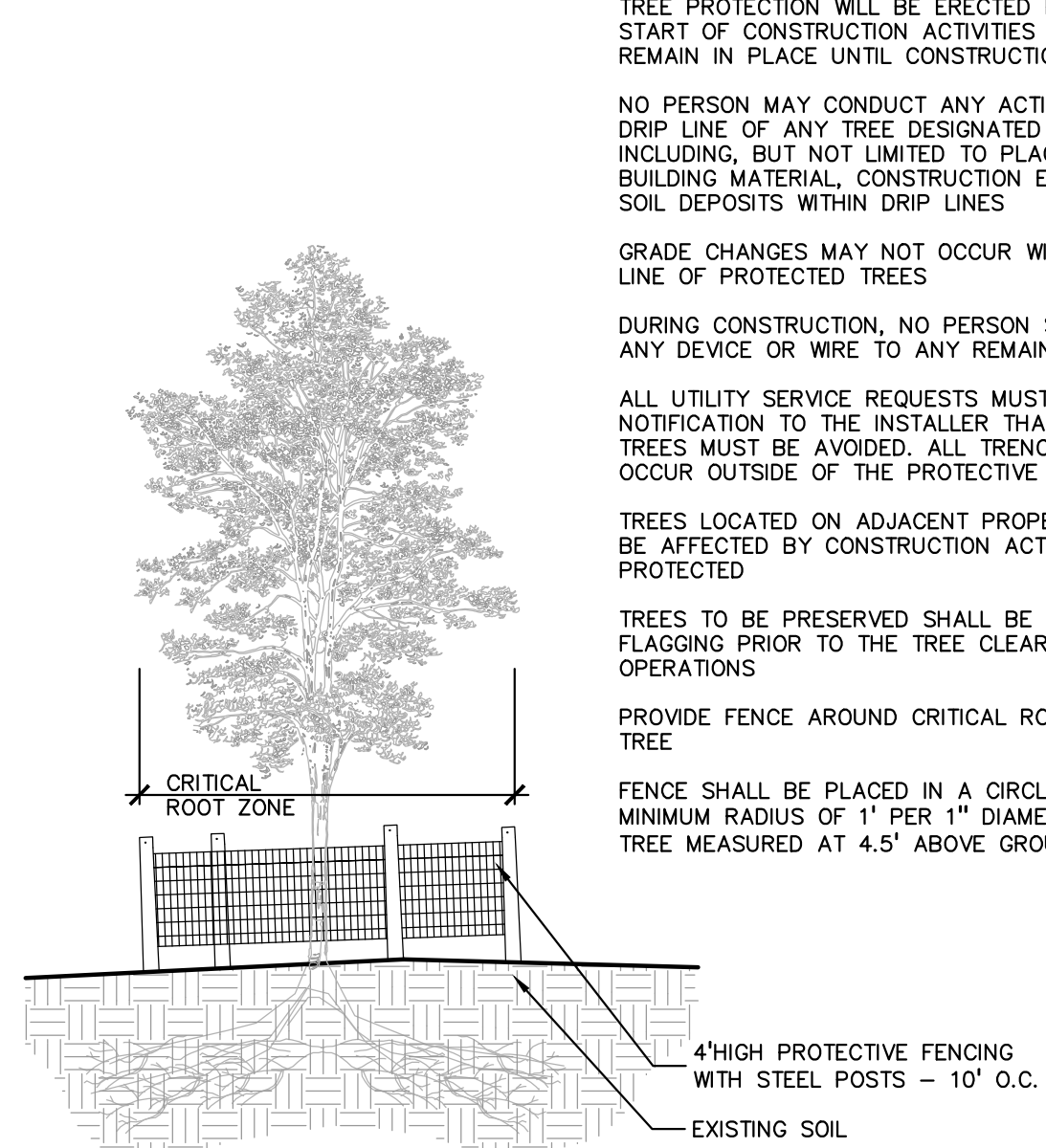
S:\PROJECTS\2022\0222-0629 - JAX KAR WASH ROCHESTER HILLS\DWG\SITE_PLAN\L-1.0 LANDSCAPE PLAN-22-0629.dwg
 PLOT DATE: 12/19/2022 10:50:00 AM Plot: 12/19/2022

GENERAL PLANTING NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIO 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
- ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
- ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
- IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
- ALL PLANTING BEDS SHALL RECEIVE 4" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS, SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
- ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
- SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
- FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
- CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
- TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY / DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.



6 TRANSFORMER SCREENING DETAIL FOR ACCESS REF.
SCALE: 1" = 3'-0"



3 TREE PROTECTION DETAIL
SCALE: 1" = 3'-0"

TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE

NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT OR SOIL DEPOSITS WITHIN DRIP LINES

GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES

DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE

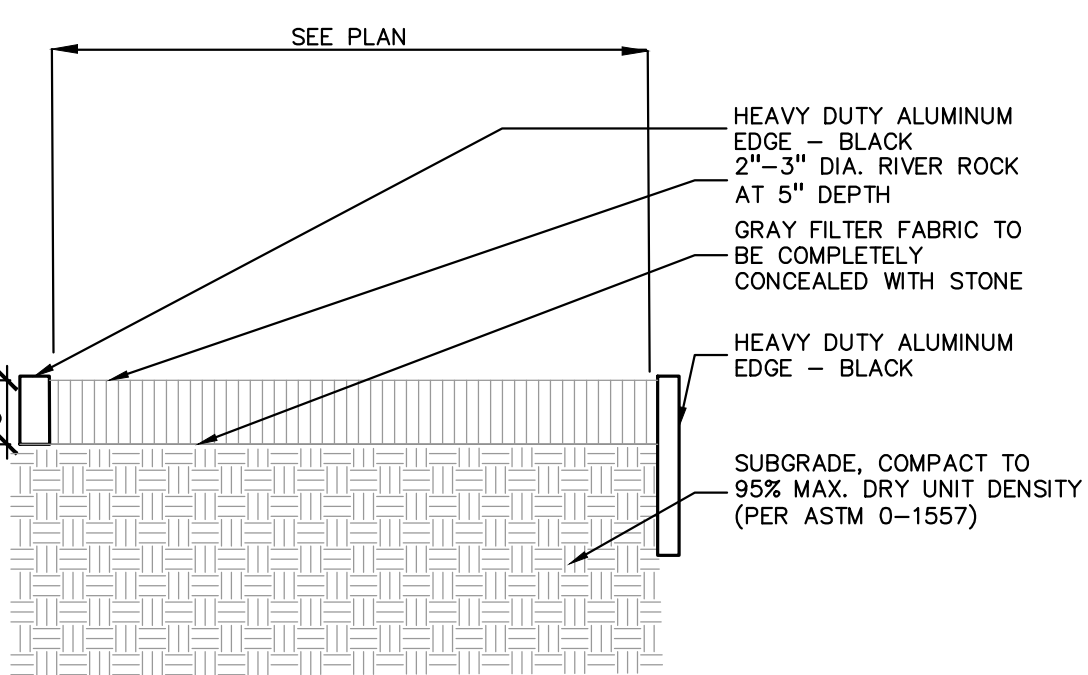
ALL UTILITY SERVICE REQUESTS MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING

TREES LOCATED ON ADJACENT PROPERTY THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES MUST BE PROTECTED

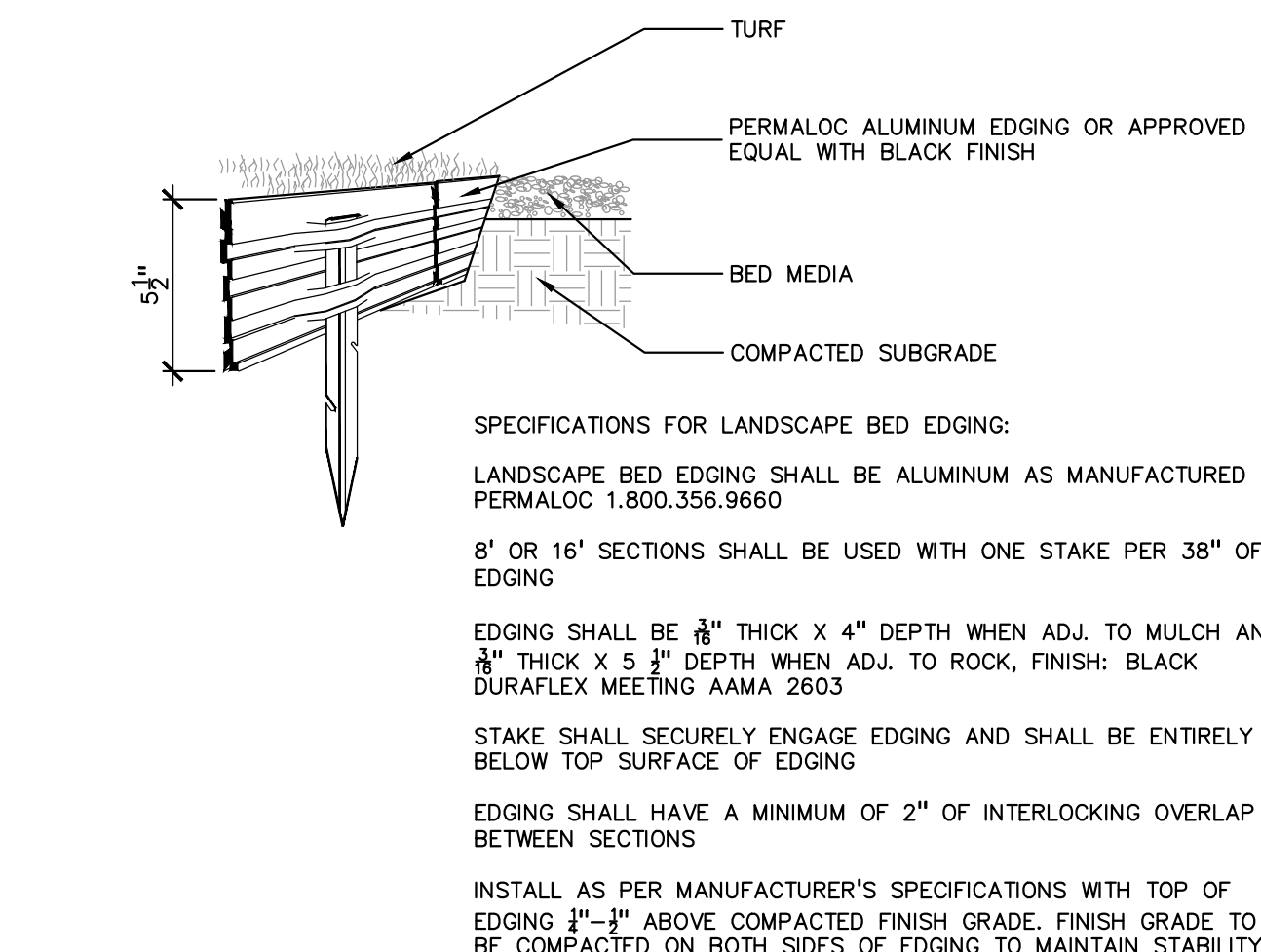
TREES TO BE PRESERVED SHALL BE IDENTIFIED WITH FLAGGING PRIOR TO THE TREE CLEARING OPERATIONS

PROVIDE FENCE AROUND CRITICAL ROOT ZONE OF TREE

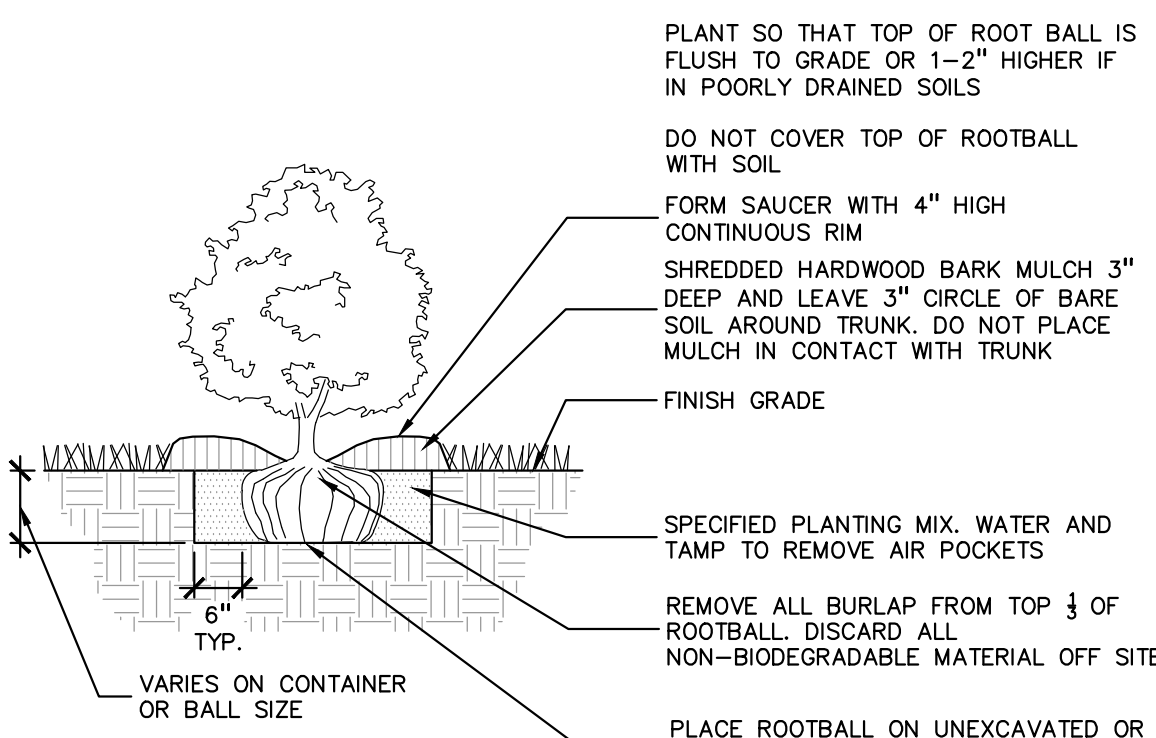
FENCE SHALL BE PLACED IN A CIRCLE WITH A MINIMUM RADIUS OF 1" PER 1" DIAMETER OF THE TREE MEASURED AT 4.5' ABOVE GROUND



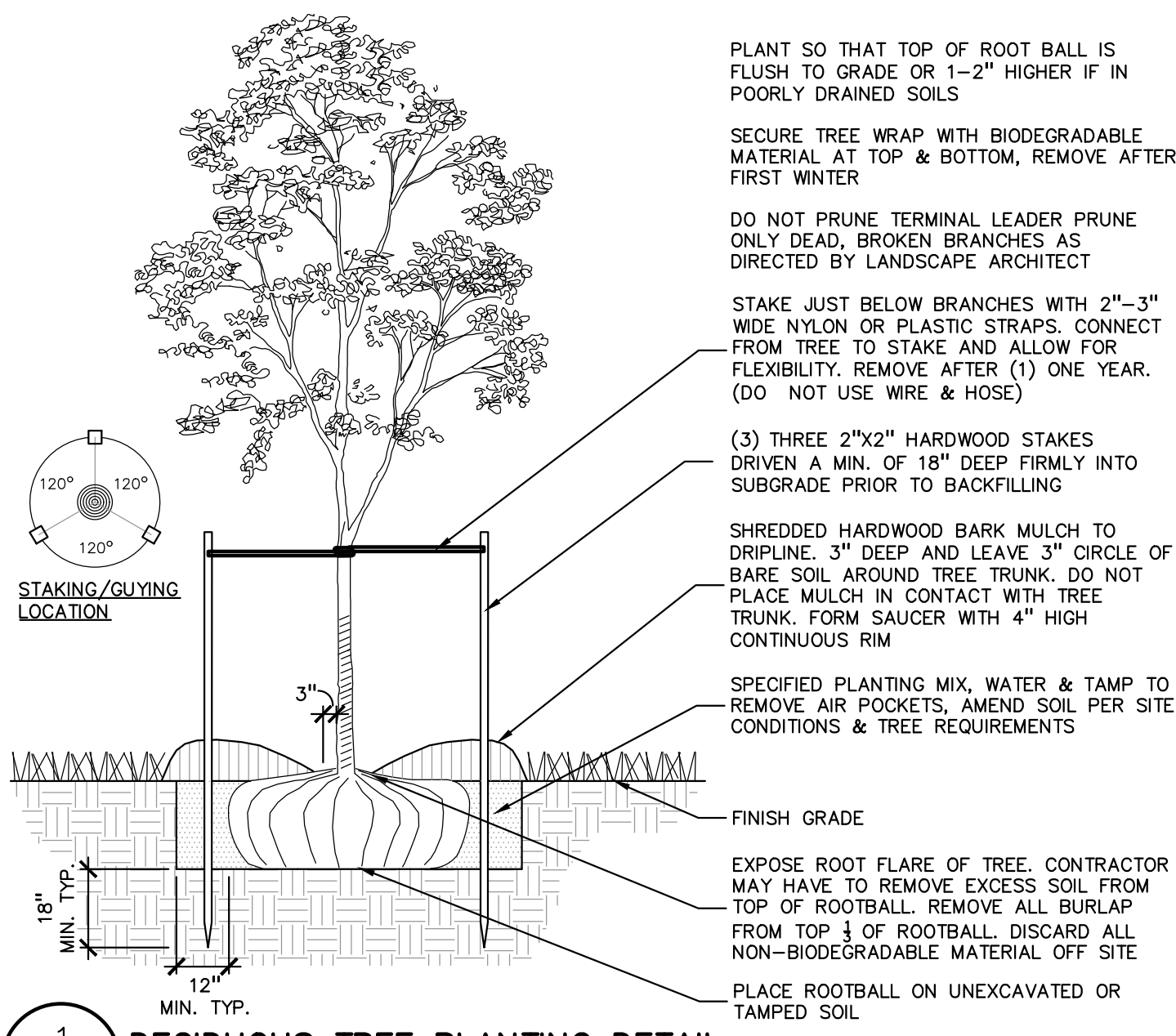
5 RIVER ROCK EDGE DETAIL
SCALE: 1 1/2" = 1'-0"



2 ALUMINUM EDGE DETAIL
SCALE: 1/2" = 1'-0"

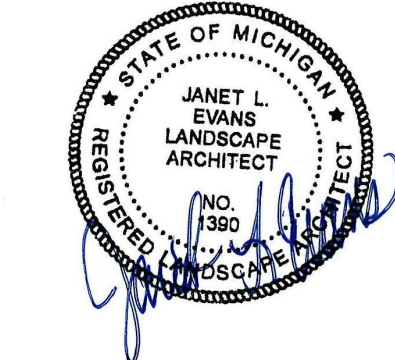


4 SHRUB PLANTING DETAIL
SCALE: 1" = 2'-0"



1 DECIDUOUS TREE PLANTING DETAIL
SCALE: 1" = 3'-0"

NOT FOR CONSTRUCTION
CITY FILE #22-023 SECTION #27



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.

CLIENT
JAX KAR WASH
28845 TELEGRAPH ROAD
SOUTHFIELD, MICHIGAN 48034

PROJECT TITLE
JAX KAR WASH ROCHESTER HILLS
2718 SOUTH ROCHESTER ROAD
ROCHESTER HILLS, OAKLAND COUNTY, MI

REVISIONS

REV. SITE PLAN SUBMITTAL	09.28.22
REV. SITE PLAN SUBMITTAL	11.16.22
REV. SITE PLAN SUBMITTAL	12.16.22

ORIGINAL ISSUE DATE:
JULY 8, 2022

DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO. 2022-0629

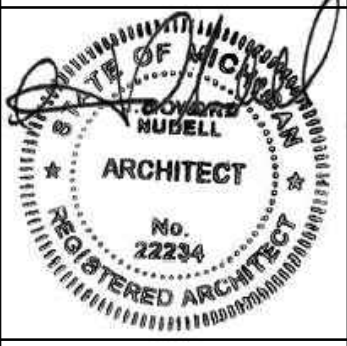
P.M. LA

DN. AEH

DES. JLE

DRAWING NUMBER:

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 COPYRIGHT YEAR 2021



project title
JAX ROCHESTER HILLS
 ROCHESTER HILLS, MI

sheet title
FLOOR PLAN
 DO NOT SCALE DRAWINGS
 USE FIGURED DIMENSIONS ONLY

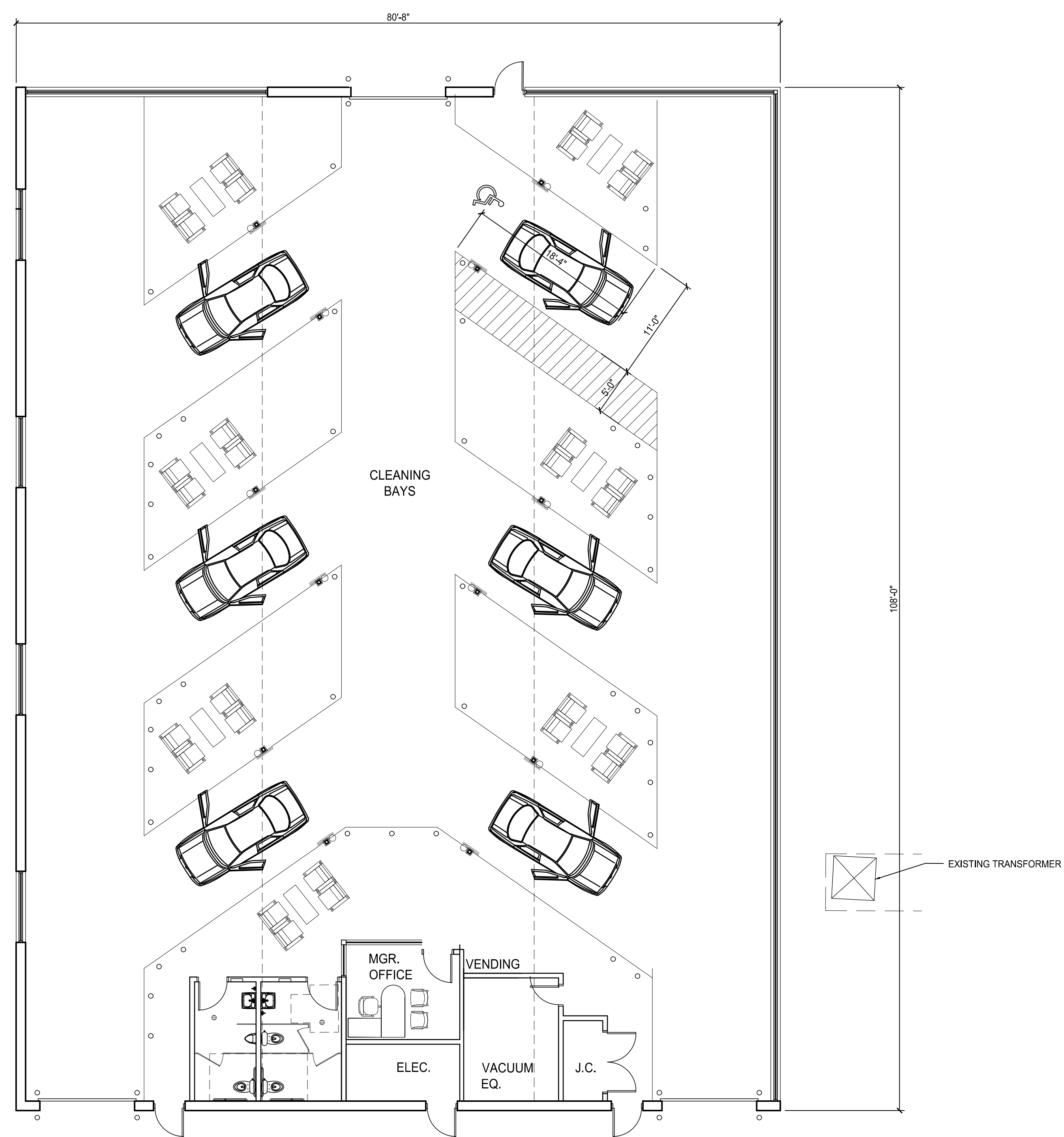
project number
2021-063
 drawn AJK
 checked BJS
 approved JHN
 issued for date
 REVISED SPA 12.02.2022

sheet

A100

**ROCHESTER HILLS, MI COMMERCIAL SITE PLAN
 REVIEW CHECKLIST ANALYSIS**

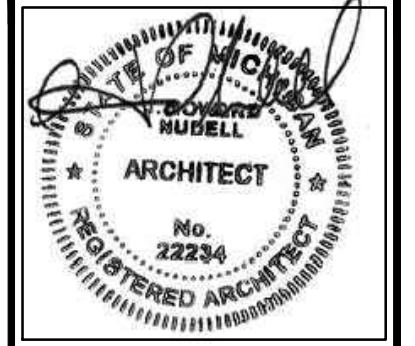
Current Applicable Codes	Building Code: 2015 Michigan Building Code Plumbing Code: 2018 Michigan Plumbing Code Electrical Code: 2017 National Electric Code Mechanical Code: 2015 Michigan Mechanical Code Energy Code: 2015 Michigan Energy Conservation Code Accessibility Code: ICCI A117.1-2009
MBC Section 304	Business Group B, Car Wash (similar use)
Table 602	Fire Separation Distances 10xX<30 and Xx30 require 0 (zero) hour rating for exterior walls
MBC Section 602.5	VB (5B). Proposed building will consist of CMU walls with steel joists roof structure
MBC Table 504.3	Type VB, Non-sprinklered, B use = 40' max height allowable. Proposed height = 28' 28'-40' therefore the building complies with this section
MBC Table 504.4	Type VB, Non-sprinklered, B use = 2 story maximum. Proposed building is one (1) story Therefore, building complies with this section
MBC Table 506.2	Type VB, Non-sprinklered, B use = 9,000 SF maximum allowable size. Proposed building is 8,712 SF 8,712 SF < 9,000 sf therefore the building complies with this section
MBC Section 903	Building will not be equipped with an Automatic Sprinkler System.



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project title

**JAX
ROCHESTER
HILLS**

ROCHESTER HILLS, MI

sheet title

ELEVATIONS

DO NOT SCALE DRAWINGS
USE FIGURED DIMENSIONS ONLY

project number

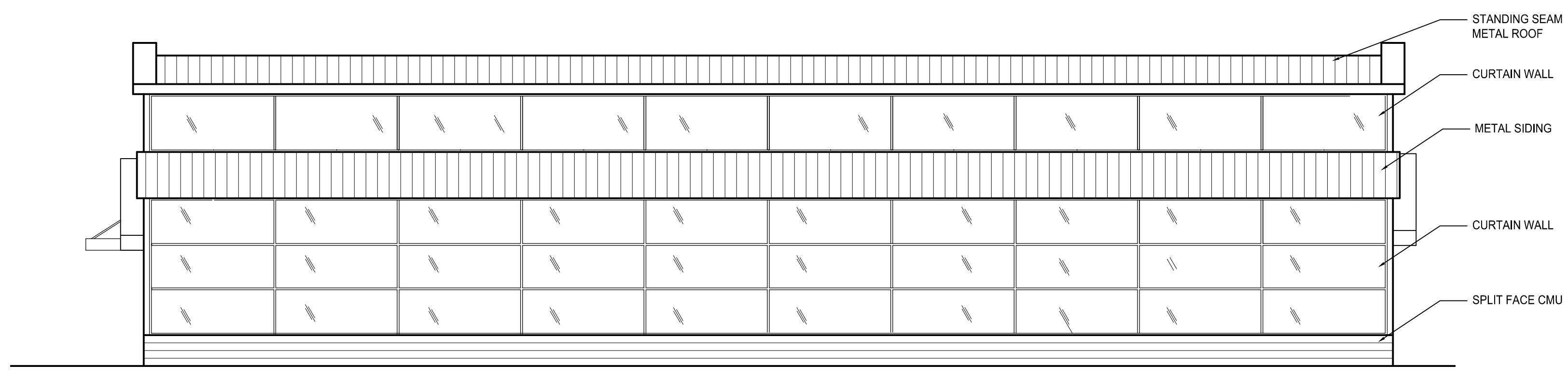
2021-063

drawn AJK
checked BJS
approved JHN

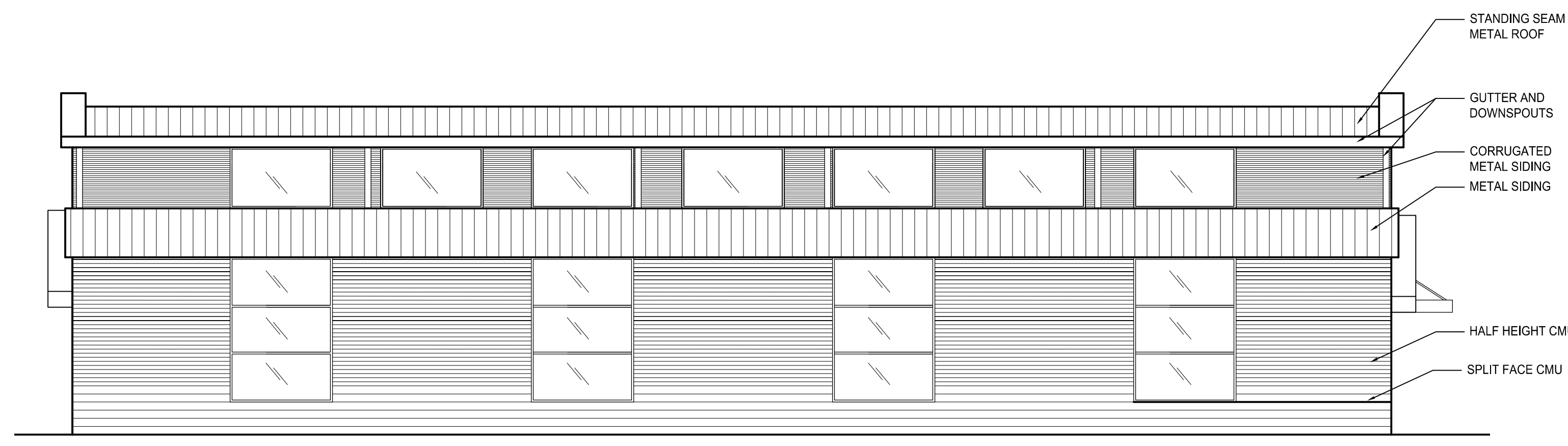
issued for date
SPA 07.06.2022

sheet

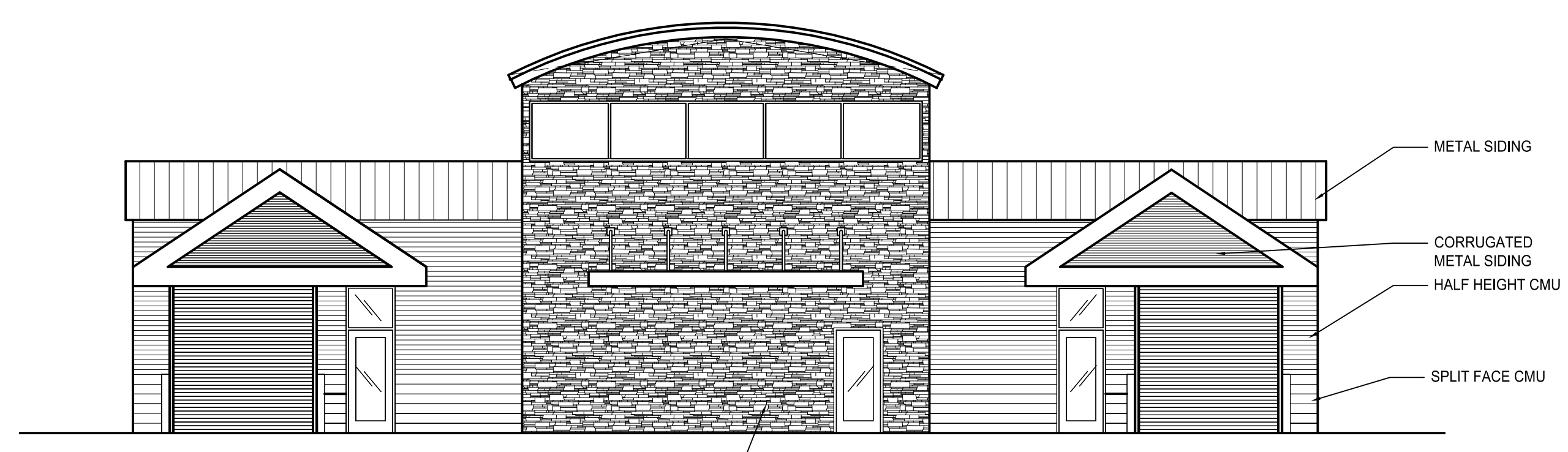
A200



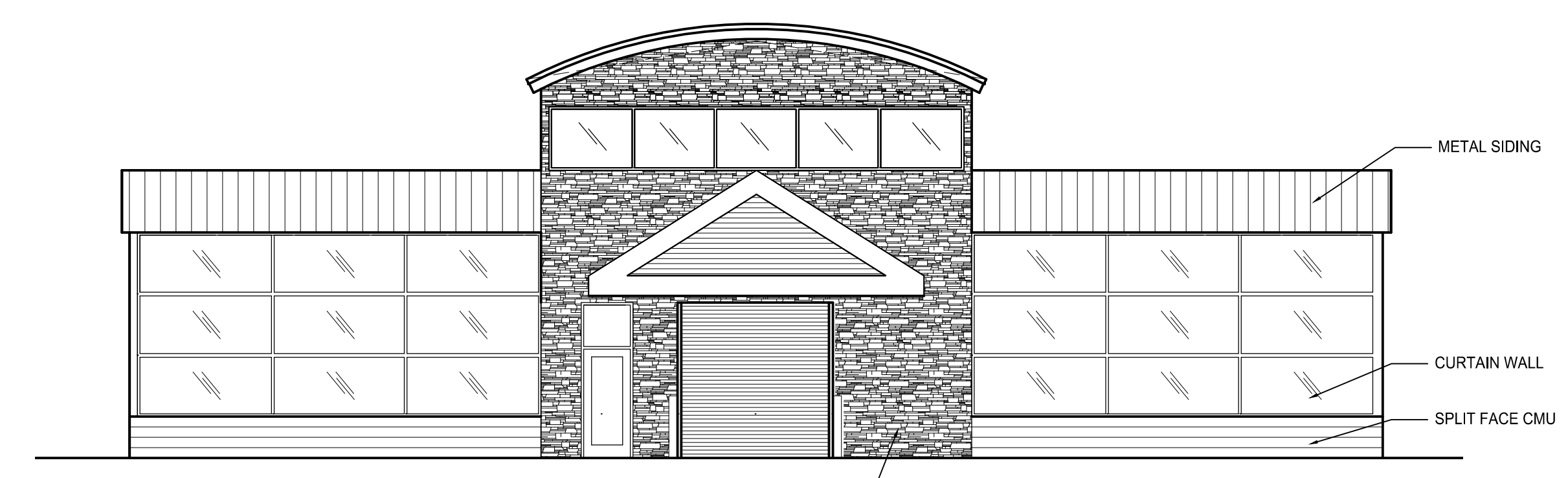
4
A100 A200
EAST ELEVATION
SCALE: 1/8" = 1'-0"



3
A100 A200
WEST ELEVATION
SCALE: 1/8" = 1'-0"



2
A100 A200
SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



1
A100 A200
NORTH ELEVATION
SCALE: 1/8" = 1'-0"



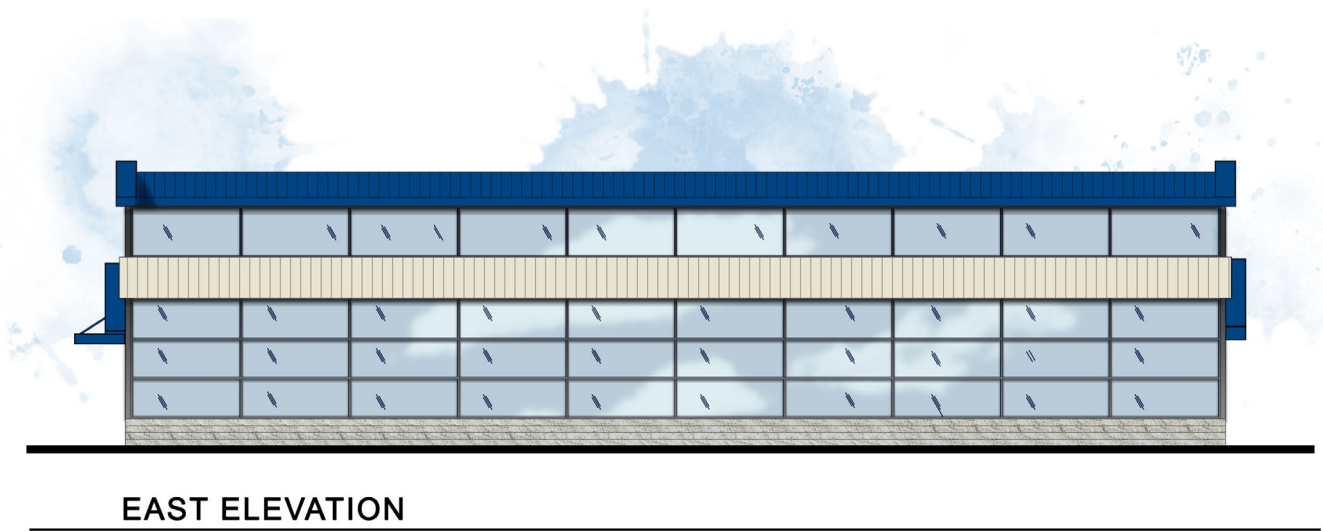
NORTH ELEVATION



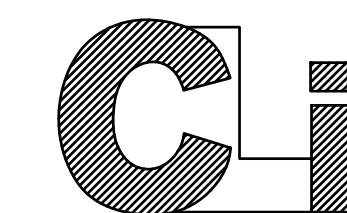
SOUTH ELEVATION



WEST ELEVATION



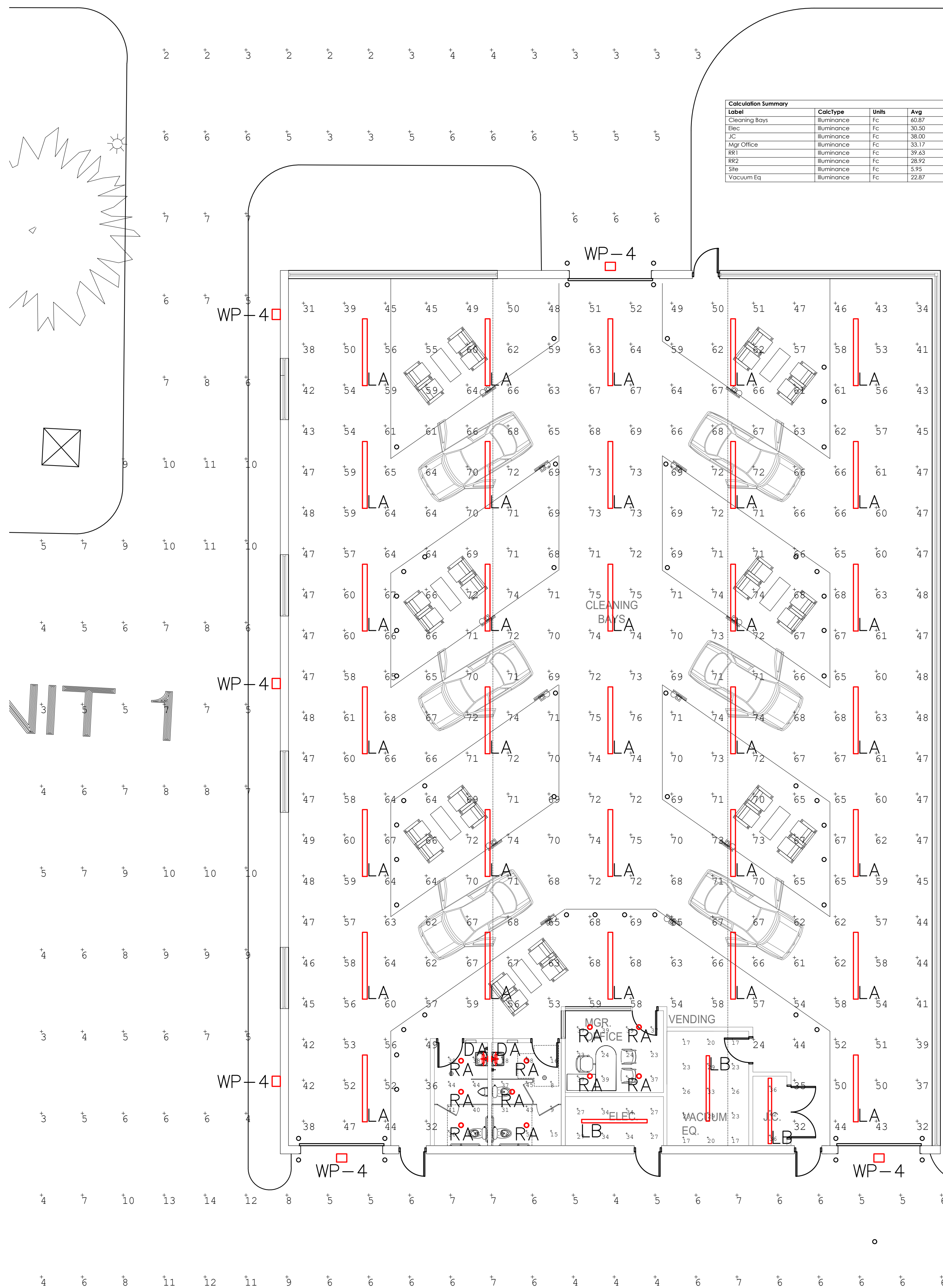
EAST ELEVATION



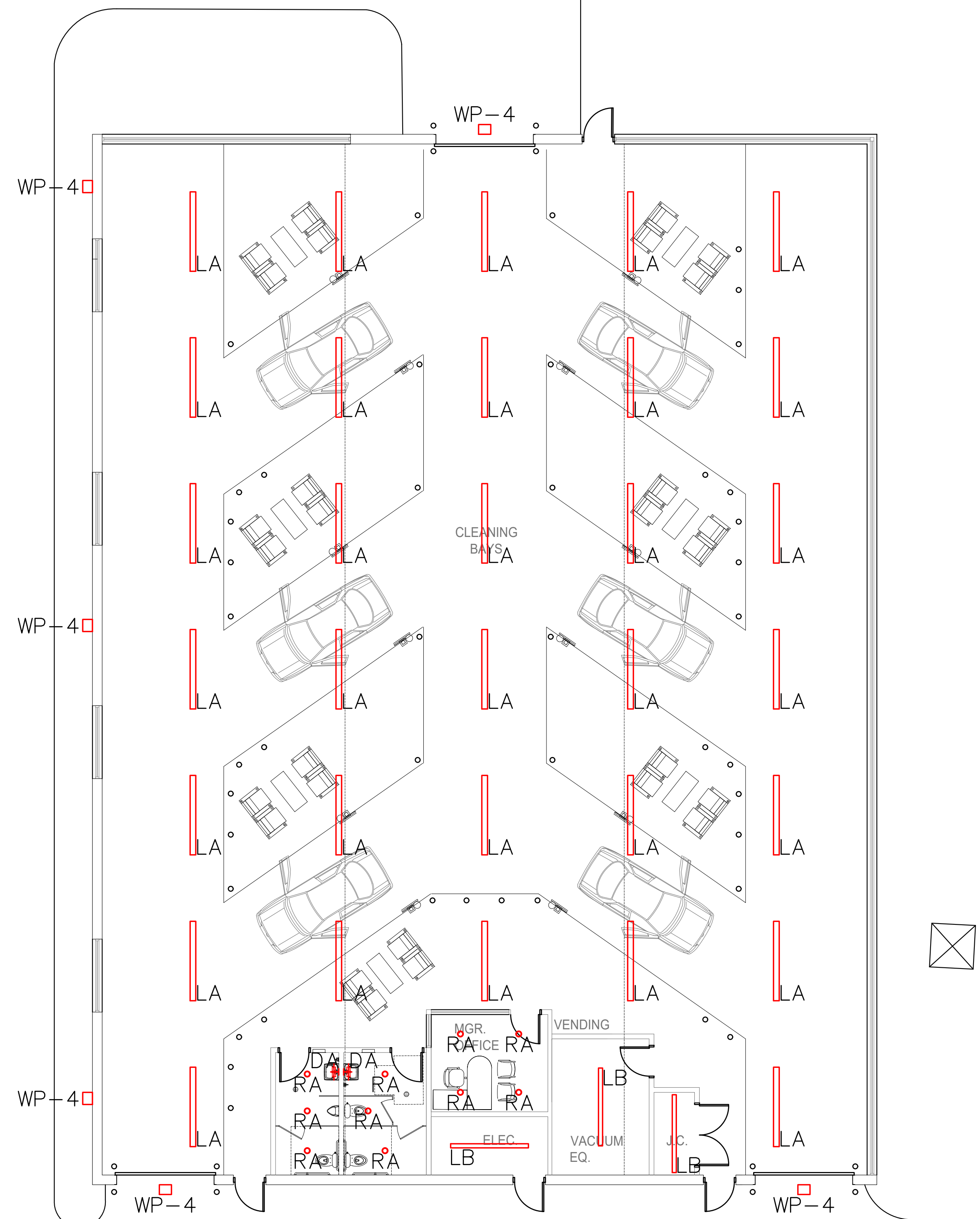
Commercial Lighting Industries
81161 Indo Boulevard, Indio, CA 92201
Tel: 800-755-0155 | Fax: 760-262-9940

No.	Issue	Date
1.	INITIAL DESIGN	06.30.22
2.	REVISION 1	11.16.22

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Cleaning Bays	Illuminance	Fc	60.87	76	24	2.54	3.17
Elec	Illuminance	Fc	30.50	34	27	1.13	1.26
JC	Illuminance	Fc	38.00	42	36	1.06	1.17
Mgr Office	Illuminance	Fc	33.17	39	23	1.44	1.70
RRI	Illuminance	Fc	39.43	44	35	1.13	1.26
RW2	Illuminance	Fc	28.92	38	8	3.62	7.50
Site	Illuminance	Fc	5.95	14	2	2.98	7.00
Vacuum Eq	Illuminance	Fc	22.87	33	17	1.35	1.94



2 LIGHTING CALCULATION
1/8" = 1'-0"



1 LIGHTING PLAN
1/8" = 1'-0"

NOTE:
NEW LIGHTING WILL INCORPORATE AUTOMATIC TIMERS AND SHALL BE TURNED OFF BETWEEN THE HOUSE OF MIDNIGHT AND SUNRISE, EXCEPT FOR LIGHTING NECESSARY FOR SECURITY PURPOSES.

EXISTING LIGHTING FIXTURES SHALL BE MODIFIED TO BE DOWNWARD DIRECTED AT A 90° ANGLE.

JAX CAR WASH
ROCHESTER HILLS
ROCHESTER, MI

ALL PLANS AND SPECIFICATIONS ARE THE PROPERTY OF COMMERCIAL LIGHTING INDUSTRIES. ALL MEASUREMENTS MUST BE CHECKED ON SITE BY THE CONTRACTOR AND ANY DISCREPANCIES BROUGHT TO THE ATTENTION OF THE DESIGNER OR ARCHITECT.

LIGHTING PLAN & CALCULATION

Scale: AS SHOWN Date: 06.30.22
Drawn By: K.D. Checked By: I.D.
Job No.:
Sheet No.: LD100

Contact Farren Halcovich with Commercial Lighting Industries, 800-755-0155, Farren@Commercial-Lighting.net for pricing

Note: If Lighting is owner supplied, the subcontractor on site is responsible for receiving the material, notifying of any damages within 72 hours and signing for missing items as Incomplete if they did not arrive.

Fixture Type	Description	Dimming Interface	Product Registration ID	Lamps, CCT, Lumen, Optics, CRI	Input Voltage	Fixture Wattage	Mounting, Finishes, Remarks & Other Notes
ARCHITECTURAL FIXTURE TYPES							
DA	Vanity light	ELV	CLI-00JCWDA	Asumed Integral LED, 3000K, 1500Lm, 90CRI	UNI-VAC	20	Surface Mounted Above Vanity Mirror. Fixture TBD.
LA	Vaportight	0-10v	CLI-00JCWLA	Integral LED, 4000K, 10000Lm, 85CRI	UNI-VAC	72	Mounting TBD. White finish. Suitable for Wet Locations.
LB	Linear Fixture	0-10v	CLI-00JCWLB	Integral LED, 4000K, 6000Lm, 85CRI	UNI-VAC	48	Pendant Mounted @ 10'-0" AFF.
RA	Downlight	0-10v	CLI-00JCWRA	Integral LED, 4000K, 900Lm, 70°, 80CRI	120-VAC	10	Recessed. Clear Reflector, Self Flanged.
WP-4	Wall Pack, Type 4 Distribution	TBD	CLI-00JCWWP4	Integral LED, 4000K, 14979Lm, Type 4 Distribution, 70CRI	UNI-VAC	110	Building Mounted @ 16'-0" AFG. Finish TBD.
		SUBSTITUTIONS ARE NOT ALLOWED AND VALUE ENGINEERING WILL NOT BE CONSIDERED WITHOUT EXPRESSED WRITTEN APPROVAL FROM THE ARCHITECT OR OWNER. NO EXCEPTIONS.					
CNTRL	Controls Package - TBD						

Notes, Exceptions, Clarifications

PURCHASING: All Lighting is supplied by _____. Consult with the above listed Mfgs for pricing at pre-established customer pricing. The complete package is approved and available at established discounted pricing from Commercial Lighting Industries, 81161 Indio Blvd, Indio, CA 92201, 800-755-0155. Contact _____, ____@Commercial-Lighting.net, for purchase order placement, and coordinating delivery of the package.

LTG SPEC VERIFICATION: Purchaser assumes responsibility for, and must verify with CLI the following prior to purchasing: Voltage, specific mounting details (including recessed downlight hanger bars if non-standard from the Mfg), NYC or Chicago codes, IC Rating, wind/gust pole factors, integral luminaire wiring gauge, custom reflector reflectances, Kelvin temperature, distribution, emergency use and dimming method. The above catalog #s may not be completely solidified at time of drawing issuance for construction.

PHOTOMETRIC COMPLIANCE: A complete Photometric drawing for this project as currently drawn and specified, has been submitted to approving authorities a applicable. Any substitutions or changes nullify the report and compliance and are strictly forbid without writtent approval from the owner, architect or lighting designer - **NO SUBSTITUTIONS ARE ALLOWED.**

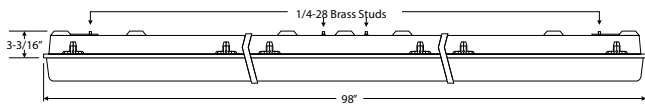
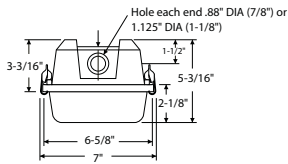
ENERGY COMPLIANCE: The purchasing party is responsible for solidifying the lighting package in compliance with the State Energy Code, both with respect to Lighting Power Density (LPD) and the use of mandated controls (dimmers, photocells, occupancy sensors, etc.). Consult with Istvan Derzsi, Sr. Lighting Designer of Commercial Lighting Industries 323-905-2220 to ensure compliance prior to ordering.

CONTROLS: The control system being implemented has been designed per meetings with the owner and architect, determining the complete requirements of the control system, and engineered to the exact specifications of the luminaires in this schedule, and in compliance with the State Energy Code. Any changes to the above would affect the Controls engineering and thus would require re-submission to all parties: Owner, Architect, Lighting Designer, Controls Manufacturer and the State Energy Compliance Department.

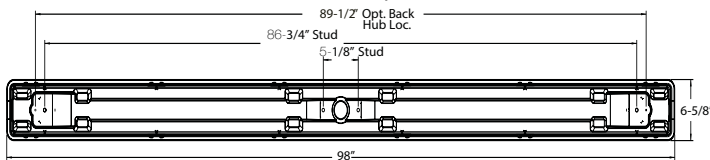
DIMMING: The method of dimming each fixture type (generally either Non-Dim, ELV/MLV, 0-10v or DALI/Ecosystem) may not have been known at the time the of preliminary specifications submission. Some luminaires may be available with different dimming than is indicated - see the catalog cuts. When requesting a quotation, and ordering, the purchaser must verify the dimming method desired (to match the wiring and type of dimming that will get installed) of each type and request the quotation accordingly. Once product is on site, the dimming installed will have to be compatible with the luminaires. Note: the default dimming specifications are: For CA, US - all 0-10V wherever possible if using central Control System - same. Otherwise, any luminaire that is not 0-10V or combo ELV/120V, is specified as ELV because it cannot be assumed that LV wiring will be run.

WIRING: 120V Leading Edge dimmers (old technology for mostly incandescent fixtures) aka Triac/120V dimming, and 120V Trailing Edge dimmers aka ELV dimming (utilizing standard 3 wire White/Black/Green) are not interchangeable with 0-10V dimming which has two additional low voltage wires (Grey/Violet) for analog control signal, using one volt increments from 0 to 10, thus dimming the LED fixtures down to 10% or even 1%. Each fixture much be ordered with the appropriate 120V or the 0-10V driver depending on which will dim it, they are NOT interchangeable. Do Not assume a fixture with 0-10V is "standard" and will thus dim correctly if only 120V dimming is available.

VOLTAGE: Voltage to be verified. See Volt column: DV means Dual-Volt - fixtures come compatible for either 120 or 277V. MV means Multi-Volt - fixtures come compatible for either 120/208/240/277/347 volts. TBD means the fixture comes in 120 or 277 but not both and thus the voltage for these fixtures must be verified prior to ordering.



External Top View



NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
24000	22352	166W
20000	20230	140W
18000	18050	120W
14000	14010	98W
10000	10010	78W
8000	8299	65W
6000	6186	46W
4000	3921	27W

FEATURES

The OW11 is an IP67 enclosed-and-gasketed linear vapor tight suitable for high-temperature, high-impact, wet environments. Durable, snap-in construction with easy-to-access, upgradeable wiring compartment and a lightweight design permits easy installation. Designed for surface or suspended mounting. DLC Premium-qualified. Typical applications include food processing, cold storage, parking garages, car washes, covered canopies, pedestrian tunnels, and where harsh conditions are present.

LUMENS	4000, 6000, 8000, 10000, 14000, 18000, 20000, 24000
CCT	30K, 35K, 40K, 50K
CRI	85+
COLOR QUALITY	3 Step MacAdam Ellipse
LENGTH	8'
MOUNTING	Suspended or Surface
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10)
EMERGENCY	10W - Up to 1000L output
AMBIENT TEMPERATURE	Operating Temperature: -20°C to 55°C
LIFETIME	L70 at 50,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%



CONSTRUCTION

Housing

- Fiberglass reinforced polyester (FRP) body is self-extinguishing (ASTM D635-74). FRP is lightweight but extremely durable and combats harsh temperatures, mildew, chemical-corrosion, and high-impact environments.
- Housings built with one watertight conduit entry point at either end.
- NSF-listed components and enclosure.

Enclosed-and-Gasketed

- One-piece, continuous poured-in-place gasket and flanged door provide watertight seal.
- Molded latch pockets are compatible with standard and tamper-proof latches in stainless steel and polycarbonate.
- Standard white polycarbonate cam latches seal enclosure.
- Optional stainless-steel latches, stainless steel tamper-proof latches, and polycarbonate tamper-proof latches.

Diffuser and Reflector

- Injection-molded acrylic diffuser.
- Reflectors painted with 93% reflective white coat. Specular reflector can be ordered as an option.

Thermal Management: LED board is attached to aluminum reflector, keeping engines cool and increasing LED life.

MAINTENANCE

LED engines and driver can be accessed from the bottom by removing diffuser and detaching LED tray. LED engines are removable and upgradable even after fixture installation. Spacers are located between driver and LED board. Rated for direct water contact per standards IP65/IP67, ensuring fixture can be safely washed, wiped and hosed down.

OPTICS

Injection-molded acrylic lens protects against impact, prevents yellowing, and minimizes glare. A contoured molded linear-ribbed lens diffuses the light for bright, smooth illumination. Internal crepe lens allows for an easy-to-maintain smooth surface.

Applications

Food processing, cold storage, parking garages, car washes, covered canopies, pedestrian tunnels.

- NSF International - Splash Zone 2: Wet or damp process areas; High-pressure purging and/or decontamination used in the process; Areas using high-pressure hose washdown.
- IP67 per IEC 60529 standard: Totally protected against dust/sand impact and complete immersion of up to 1 meter in water.
- IP65 per IEC 60529 standard: Totally protected against dust/sand impact

and protected against jets of water from a nozzle of 6.3mm.

- IP65 and IP67 rated when ceiling, surface, and pendant mounted. IP65/67 ratings do not apply when wall mounted.

Mounting

- Suitable for suspension by chain, cable, pendant and surface mounting.
- Shipped standard with two stainless steel mounting brackets for surface, stem, suspended chain, aircraft cable, and other mounting options.
- Cable, chain, and related hardware for suspended mounting must be ordered as accessories.

PERFORMANCE

The OW1IP-LED powered lighting technologies offer a higher return on investment than any other lighting technology. The light engines found in the OW1IP-LED are rated at 85+ CRI and available in multiple CCTs: 3000K, 3500K, 4000K and 5000K. All LEDs and LED fixtures are rated and tested to LM-79 and LM-80 standards. The LEDs are also binned to a s to achieve consistent color from fixture to fixture.

THERMAL MANAGEMENT

Our advanced thermal management system allows the light output of the LED engines to be maintained at 70% of initial lumens at 50,000 hours of operation.

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% or 5% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277, 347, or 480V.

ELECTRICAL

Powered by constant-current power LED drivers rated for 50 to 60Hz at 120-277V input, produce less than 20% THD, and have a power factor of .90 to 1.00. Optional 347V and 480V.

OPTIONS

Fixtures can be shipped pre-installed with daylight harvesting controls and occupancy sensors. Consult factory for details. Optional emergency battery back-up comes pre-installed on fixture and emergency push button is installed on fixture. Generator transfer device available.

WARRANTY

Five-year limited warranty on parts and components (labor not included).

LISTINGS

cULus
NSF International - Splash Zone 2
IP65 per IEC 60529 standard
IP67 per IEC 60529 standard
DLC Premium

Example: **8-OW1IP-LED-4000L-DIM10-MVOLT-30K-85**

8	OW1IP	LED									
FIXTURE SIZE	SERIES	TYPE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	DISTRIBUTION		
8- 8'	OW1IP - LED Vapor Tight	LED	4000L - 4000 lumens 6000L - 6000 lumens 8000L - 8000 lumens 14000L - 14000 lumens 18000L - 18000 lumens 20000L - 20000 lumens 24000L - 24000 lumens	DIM10 - 0-10V Dimming	MVOLT 347* 480 <small>*Consult factory for details</small>	30K 35K 40K 50K	85	0-EMG-LED-10W	Blank - General ND - Narrow Distribution MD - Medium Distribution WD - Wide Batwing Distribution AD - Aisle Distribution		
					OTHER OPTIONS			SUSPENDED MOUNTING			
					OW1IPFL - Injection-molded acrylic Lens (Standard)				GSS - Gripple Suspension System		
					OW1IPSR - Specular Reflector				VH - V Hook		
					INMS - Internal Motion Sensor with Photo Sensor(FSP-211)				CH - Heavy-duty Chain		
					MSPH - Motion Sensor with Photocell				YTAC - 10' Y-Toggle Aircraft Cable		
					WLMS - Wet Location Motion Sensor						
					SSL - Stainless Steel Latches						
					SSLTP - Stainless Steel Latches w/ Tamper Proof Screws						
					PCLTP - Poly. Latches w/ Tamper Proof Screws						
					USA - Made in America Compliance						
					FSP-311-B-D - 0-10V continuous dimming PIR photo/motion sensor with bluetooth control option.						

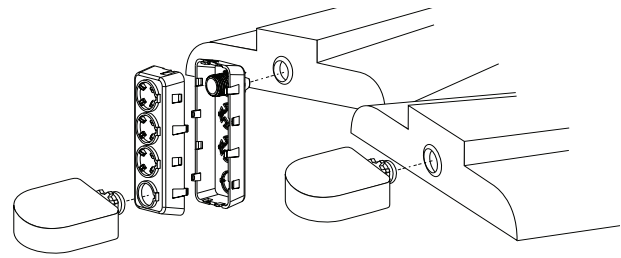
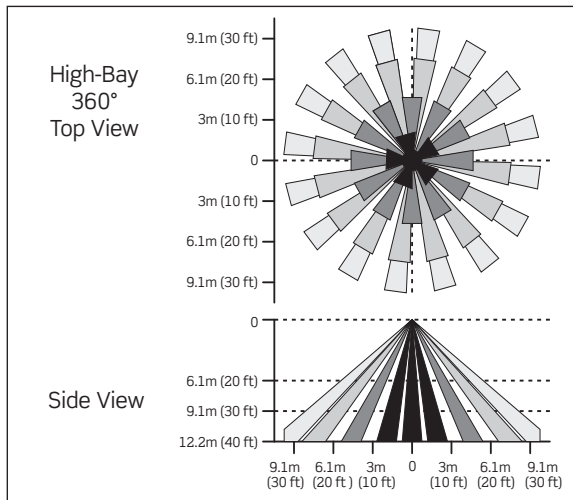
Passive Infrared Motion Sensor with Photocell



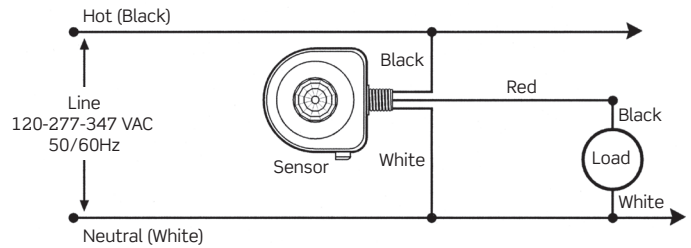
MSPH provides the most labor savings available with quick snap, 21" wire leads, and no power required to configure.

Passive Infrared Technology is used to sense occupancy by comparing the infrared energy from an object in motion and the background space. PIR sensors minimize false ON from background environmental conditions such as air movement to provide reliable detection of line-of-sight motion.

FIELD-OF-VIEW

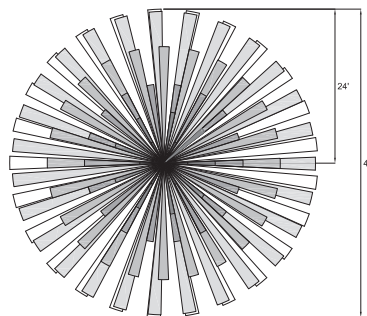


Wiring Diagram

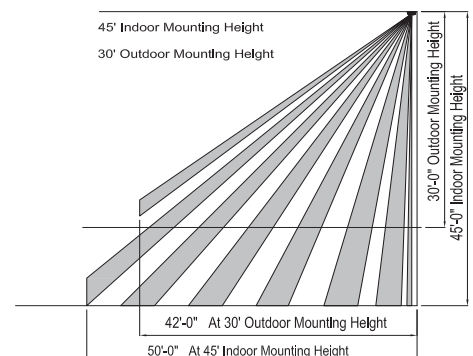


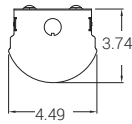
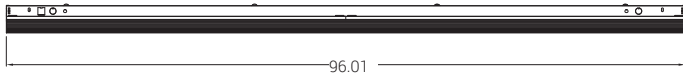
Wet Location Motion Sensor (IP65)

The HB3x0W occupancy sensor is designed to mount to a light fixture and control one load in the fixture. The sensor can be wired to control all ballasts in the fixture, or to control half of the ballasts to provide high/low lighting control. When motion is detected within the sensor's coverage area, the relay in the sensor closes, and lighting loads turn on automatically. When motion is no longer detected for the duration of the time delay setting, the relay opens and the lighting load is turned off. The sensitivity and time delay settings are factory preset at 100% and 15 minutes, respectively, which are suitable for most high bay applications. However, the values can be easily adjusted for specific applications using the DIP switches on the unit. Refer to the Installation Instructions for changing factory preset values, and for important start up instructions.



Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens





NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
20000	18986	152 W
14000	14351	114 W
8000	9280	74 W
6000	5965	48 W

Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%

FEATURES

The Architectural LED Linear combines a slim profile with clean lines, making it an ideal choice for library stacks or narrow aisles. The flexibility of the luminaire allows for continuous, uniform and glare-free illumination. Available in single pendant or continuous mounting for a seamless connection from luminaire to luminaire, with adjustable mounting heights. This distinct luminaire is a perfect solution for educational, healthcare, office, commercial and retail spaces.

LUMENS	6000, 8000, 14000, 20000
CCT	30K, 35K, 40K, 50K
CRI	85+ (standard), 90+
COLOR QUALITY	3 Step MacAdam Ellipse
LENGTH	2', 4', 8'
MOUNTING	Suspended or Surface
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUT2W, DIMST, ELD010.1, ELD0DMX.1, DALI.1
EMERGENCY	10W - Up to 1000L output
LIFETIME	L70 at 167,000 Hours
OPERATING TEMPERATURE	-20° C to 50°C ambient temperature
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21



OPTICS & PERFORMANCE

The optical system delivers high efficiency LED light that passes through a high quality, frosted acrylic lens for optimal performance, creating a glare-free and even distribution.

CONSTRUCTION

Body is constructed of heavy-duty 20-gauge cold rolled steel, painted with a high-gloss baked white enamel finish, with a frosted extruded lens that delivers highly efficient illumination.

CRM INSTALLATION

For continuous row mounting, the first luminaire in the row will always be the power supply feed. After plugging in the male and female harnesses, which are supplied with each luminaire, they will easily slide together, then secured with two screws from opposite directions in the connecting brackets.

DRIVER ELECTRICAL INFORMATION

Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120-277V input, produce less than 20% THD, and have a power factor of .90 to 1.00. Male and female 18-gauge 6 wire plug connectors are included with every luminaire to allow for simple hassle-free continuous wiring. Each luminaire must be installed male to female.

OPTIONS

Luminaires can be shipped pre-installed with daylight harvesting controls, occupancy sensors, and/or power packs for individual or room control solutions.

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED driver (120V forward phase only).

LUTH - Lutron LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology.

ELDO10.1 - EldoLED SoloDrive 0-10V. Dimming down to 0.1%.

DALI - DALI DT6, DT8 dimming down to 1%.

ELDODMX - EldoLED PowerDrive dimming down to 0.1%.

Please see EldoLED website for wiring diagrams and a list of compatible DMX and DALI control systems.

DIMST - Step Dimming

WARRANTY

Five-year warranty for parts and components. (Labor not included)

LISTINGS

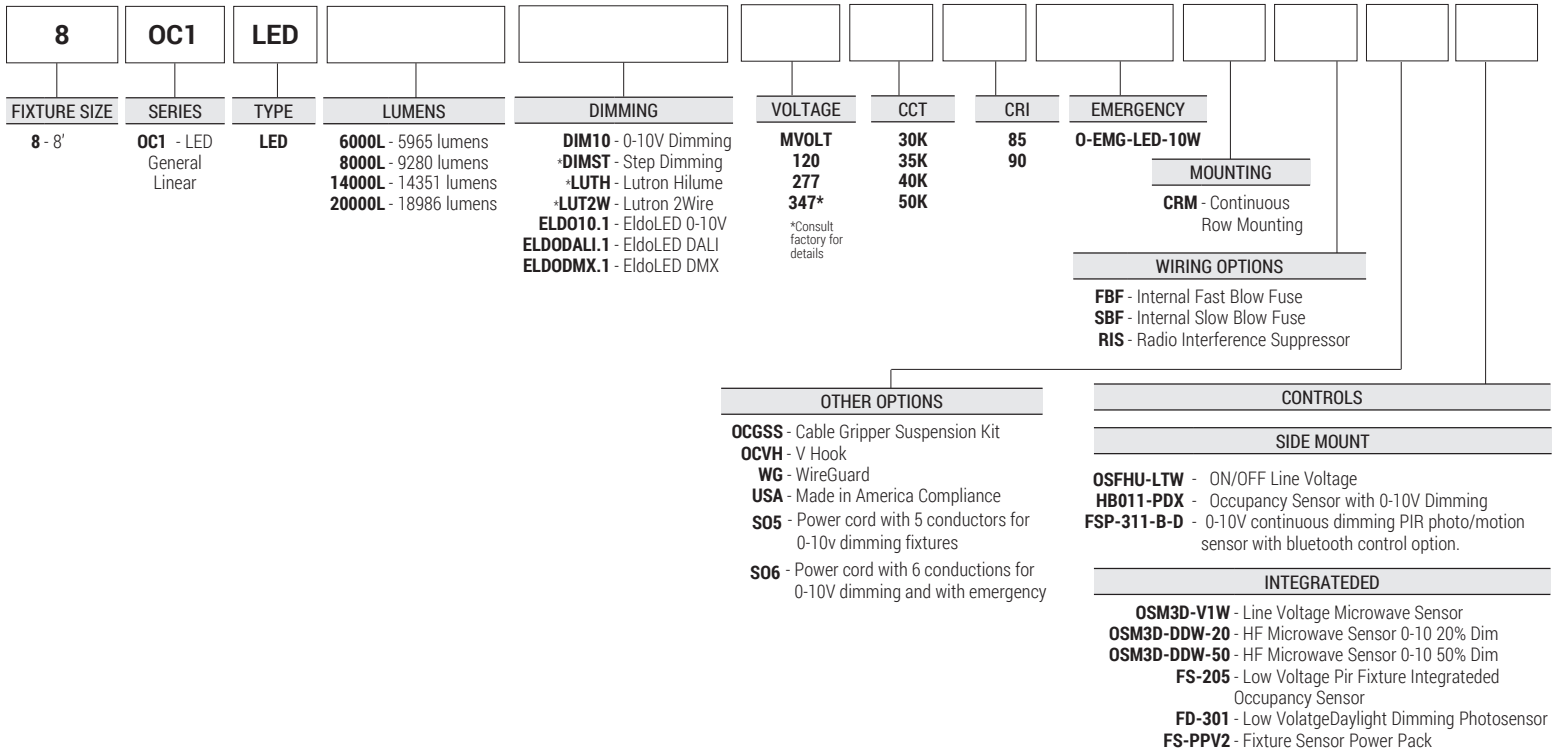
c-UL-us - Listed for Feed Through Wiring.

Listed for DLC, California Title 24 compliant.

c-UL us Listed for Damp location

Product not allowed to be in direct contact with water, sprinkler or rain

Example: **8-OC1-LED-6000L-DIM10-MVOLT-40K-85**



LUT2W are available in 120V only LUT2W up to 4000L
LUTH, ELDO10.1, ELDODALI.1, and ELDODMX.1 are available in 120V and 277V
-Reference last page for Control Options

*FD-301 & FS-205 require FS-PPV2- Power Pack