

Owner / Developer

THE SURNOW COMPANY

Tel. (248) 865-3000 x 102

CONTACT: Sam Surnow

Architect

BIDDISON ARCHITECTURE

320 Martin Street
Suite 10
Birmingham, MI 48009
Tel. (248) 554-9500

CONTACT: Kevin Biddison, AIA

Civil Engineer

NOWAK & FRAUS ENGINEERS

46777 Woodward Ave.
Pontiac, MI 48342-5032
Tel. (248) 332-7931
Fax. (248) 332-8257

CONTACT: Brad W. Brickel, P.E.

Landscape Architect

NOWAK & FRAUS ENGINEERS

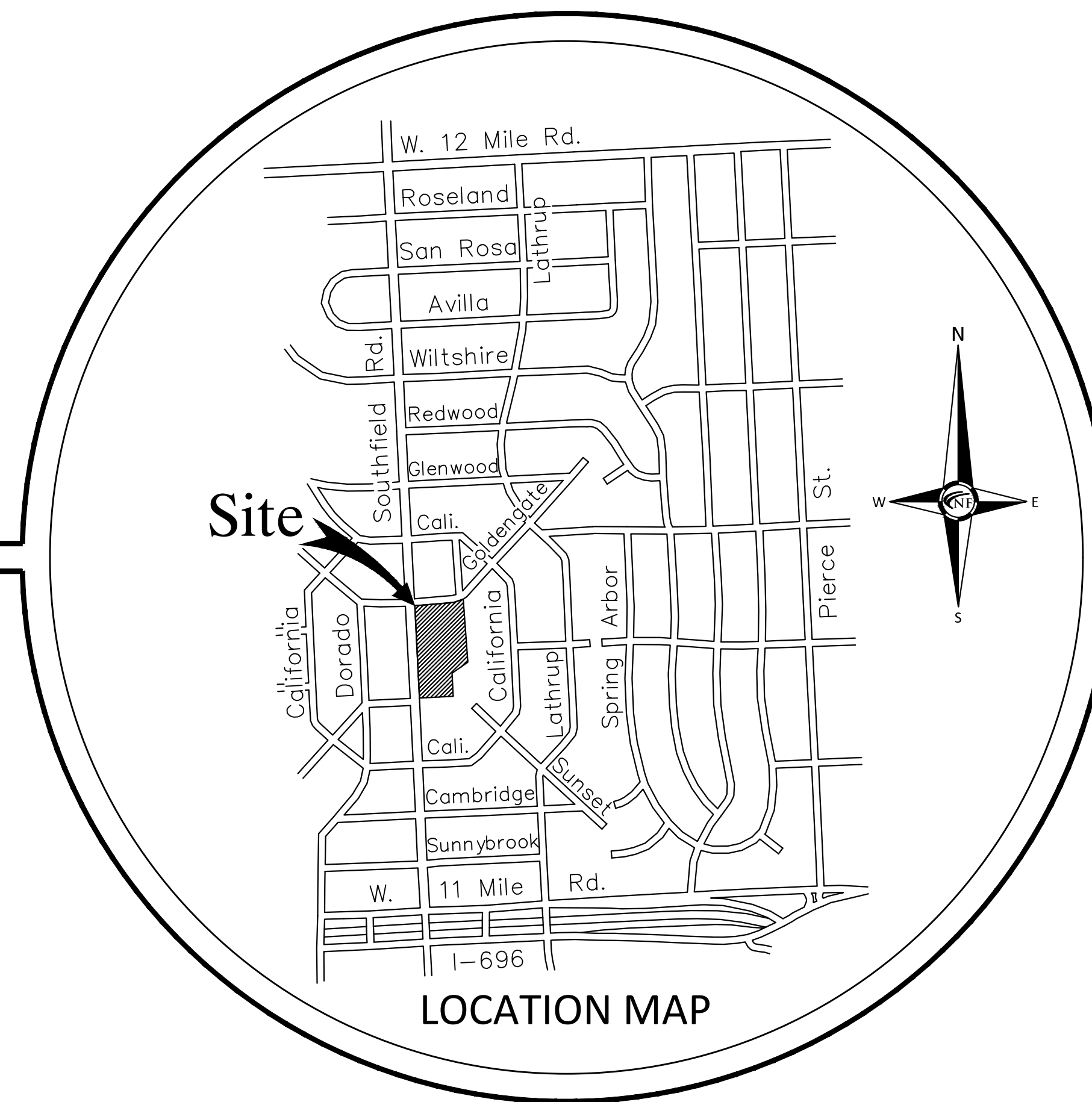
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Pontiac, MI 48342-5032
Tel. (248) 332-7931
Fax. (248) 332-8257

CONTACT: George Ostrowski, LLS, LEED AP

City of Lathrup,
Oakland County, Michigan
SITE PLAN DOCUMENTS
Prepared For
The Surnow Company

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LEGAL DESCRIPTION - PER TITLE COMMITMENT

LAND SITUATED IN THE CITY OF LATHRUP VILLAGE, COUNTY OF OAKLAND, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

LOT 1677 AND VACATED SOUTHFIELD SQUARE, FORMERLY KNOWN AS MONTEREY STREET LYING EASTERLY OF LOT 1677 AND WESTERLY OF LOTS 1665 TO 1689, EXCEPT THAT PART OF VACATED SOUTHFIELD SQUARE LYING SOUTH OF A LINE DRAWN BETWEEN THE NORTHWEST CORNER OF OF LOT 1680 AND A POINT 150 FEET FROM THE SOUTHEAST CORNER OF LOT 1677, ALONG THE EASTERLY BOUNDARY OF SAID LOT 1677, LOUISE LATHRUP'S CALIFORNIA BUNGALOW SUBDIVISION NO. 3, AS RECORDED IN LIBER 32 OF PLATS, PAGE 26, OAKLAND COUNTY RECORDS.

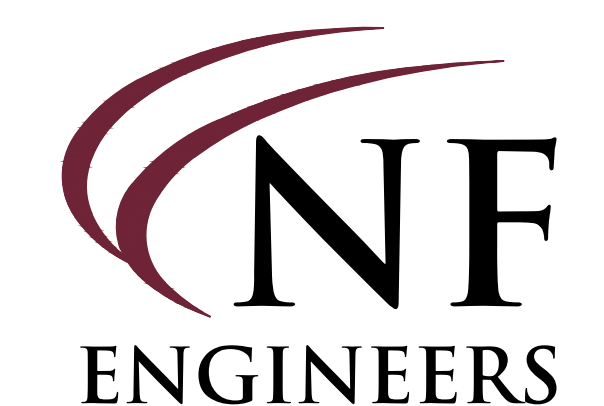
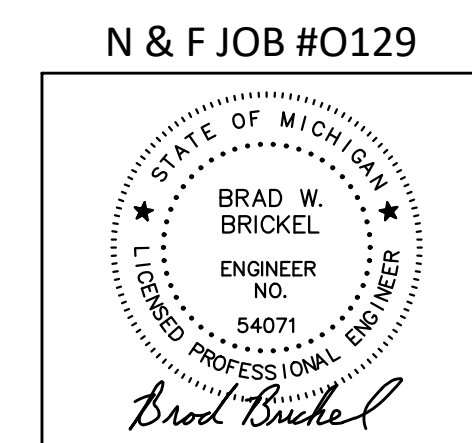
TAX ID NUMBER: 24-13-303-021

ADDRESS: 27700 SOUTHFIELD ROAD, LATHRUP VILLAGE, MI 48076

REVISIONS:
10-17-24 ISSUED FOR SITE PLAN REVIEW
01-10-25 REVISED PER CITY REVIEW
03-21-25 REVISED PER CITY/CLIENT

Project Name

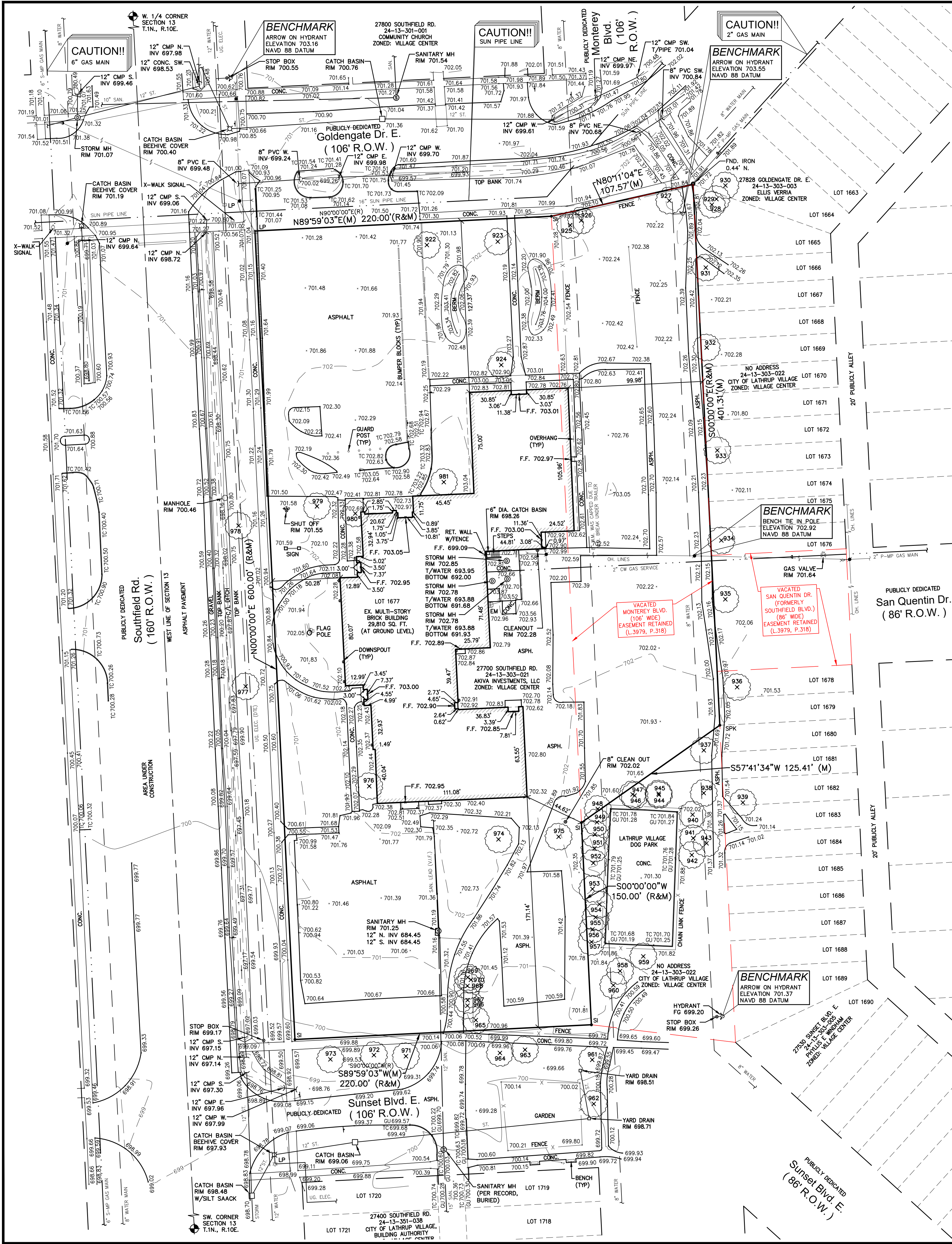
27700 Southfield Road



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
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PONTIAC, MI 48342-5032
TEL. (248) 332-7931
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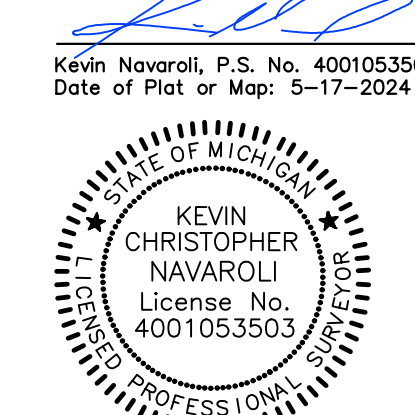
N & F JOB #0129



Miss Dig / Utility Disclaimer Note
 A Miss Dig Ticket number 202405104010, pursuant to Michigan Public Act 174 was entered for the surveyed property. Due to the extended reporting period for underground utility owners to provide their records, the survey may not reflect all the utilities at the time the survey was issued on May 17, 2024. The survey only reflects those utilities which could be observed by the surveyor in the field or as depicted by the utility company records furnished prior to the date this survey was issued. The client and/or their authorized agent shall verify with the utility owners and/or their authorized agents, the completeness and exactness of the utilities location.

DTE Disclaimer Note
 Please note that DTE has new regulations that may impact development within their easement or the public right of way. Client shall contact DTE to determine the "new structures and power line" requirements as they may apply to any future building or renovation of a structure. DTE energy can be contacted at 800-477-4747.

Certificate of Survey
 Certified to:
 -Akiva Investments, LLC, a Michigan limited liability company
 -First American Title Insurance Company
 This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2021 minimum standard detail requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and include items 1, 2, 3, 4, 6(a), 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, 17, 18 and 19 of Table A thereof. The field work was completed on May 7, 2024.



Kevin Navaroli, P.S. No. 4001053503
 Date of Plot or Map: 5-17-2024

Free Inventory List
 Job Number: O129
 Job Location: Lathrup Village
 Date: 4/30/2024
 Performed by: A. Simon
 Condition Description Notes:
 "Good" - no observed structural defects
 "Fair" - minor structural defects, marginal form, some insect activity noted
 "Poor" - major structural defects, poor form, insect infestation

*Structural defects may include decayed wood, cracks, roof problems, weak branch unions, cankers, poor tree architecture, dead/fallen branches due to various causes.

Tree #	Botanical Name	Common Name	Dia.	Type	Other Dia.	Condition	Comments	
1	Q22	Elaeagnus angustifolia	9.3	Triple	8.2, 7.5	Good	Some dead branches	
2	923	Acer saccharinum	silver maple	2.4	Spill	10.5	Good	Branches pruned
3	924	Acer saccharinum	silver maple	4.0			Good	
4	925	Platanus occidentalis	sycamore	19.9			Good	
5	926	Platanus occidentalis	sycamore	21.3			Fair	Crown broken off
6	927	Platanus occidentalis	sycamore	18.9			Good	
7	928	Rhamnus cathartica	common buckthorn	4.6			Good	
8	929	Rhamnus cathartica	common buckthorn	4.6			Good	
9	930	Ulmus americana	American elm	16.2			Good	
10	931	Ulmus americana	American elm	12.8			Good	
11	932	Pyrus calleryana	Bradford pear	8.9			Good	Suckers
12	933	Ulmus americana	boxwood	4.3			Fair	Halt of crown dead
13	934	Pyrus calleryana	Bradford pear	6.9			Good	Pruned, near overhead power line
14	935	Pyrus calleryana	Bradford pear	6.4			Good	Some dead branches
15	936	Pyrus calleryana	Bradford pear	9.6			Good	Some dead branches
16	937	Gleditsia triacanthos	honey locust	18			Good	Pruned, near overhead power line
17	938	Ulmus americana	American elm	11.3			Good	
18	939	Pyrus calleryana	Bradford pear	4.2			Good	Pruned, has suckers
19	940	Picea abies	Norway spruce	9.8			Good	
20	941	Picea abies	Norway spruce	12.3			Good	
21	942	Picea abies	Norway spruce	14.3			Good	
22	943	Acer platanoides	Norway maple	7.2			Good	
23	944	Picea abies	Norway spruce	14.1			Good	
24	945	Ulmus pumila	Siberian elm	6.4			Good	Crowded by surrounding tree
25	946	Ulmus pumila	Siberian elm	14.4			Fair	Trunk split
26	947	Picea abies	Norway spruce	12.1			Good	Shrubby understory
27	948	Picea abies	Norway spruce	9.8			Good	Shrubby understory
28	949	Picea abies	Norway spruce	9.2			Good	Shrubby understory
29	950	Picea abies	Norway spruce	12.2			Good	Shrubby understory
30	951	Picea abies	Norway spruce	8.5			Good	Shrubby understory
31	952	Picea abies	Norway spruce	13			Good	Shrubby understory
32	953	Picea abies	Norway spruce	7.6			Good	Shrubby understory
33	954	Picea abies	Norway spruce	10.6			Good	Shrubby understory
34	955	Picea abies	Norway spruce	11.8			Good	Shrubby understory
35	956	Picea abies	Norway spruce	8.8			Good	Shrubby understory
36	957	Picea abies	Norway spruce	11.6			Good	Shrubby understory
37	958	Picea abies	Norway spruce	10.7			Good	Shrubby understory
38	959	Picea abies	Norway spruce	13.3			Good	Shrubby understory
39	960	Quercus rubra	red oak	13			Good	Shrubby understory
40	961	Acer saccharinum	silver maple	24.1			Good	
41	962	Pyrus calleryana	Bradford pear	7.7	Spill	3	Good	
42	963	Acer saccharinum	silver maple	23.4			Good	
43	964	Acer saccharinum	silver maple	25.5			Good	
44	965	Rhamnus cathartica	common buckthorn	5.2	Multiple	5.1, 4.0, 3.2, 2.5	Good	Growing through chain link fence
45	966	Ulmus americana	American elm	10.5	Triple	8.3, 5.6	Good	Growing through chain link fence
46	967	Rhamnus cathartica	common buckthorn	4.4	Spill	4.4	Good	Growing through chain link fence
47	968	Rhamnus cathartica	common buckthorn	4	Multiple	2.2, 2.2, 2.2, 2.2	Good	Growing through chain link fence
48	969	Rhamnus cathartica	common buckthorn	6	Triple	2.5, 2	Good	Growing through chain link fence
49	970	Rhamnus cathartica	common buckthorn	6	Triple	5.4, 3	Good	Growing through chain link fence
50	971	Acer saccharinum	silver maple	9.6	Spill	8.1	Good	Growing through chain link fence
51	972	Acer saccharinum	silver maple	21.2	Triple	14.5	Good	
52	973	Acer saccharinum	silver maple	25.1	Triple	20.3, 6.8	Good	
53	974	Gleditsia triacanthos	honey locust	21.7			Good	
54	975	Platanus occidentalis	sycamore	5.5	Multiple	5.3, 4.3, 3.3, 3.3, 3.3	Fair	Main trunk removed, all matured suckers
55	976	Picea abies	Norway spruce	17.2			Good	Limbs pruned near building
56	977	Acer platanoides	Norway maple	5.3			Good	
57	978	Acer platanoides	Norway maple	4.4			Good	
58	979	Acer saccharinum	silver maple	25.4			Good	
59	980	Pseudotsuga menziesii	Douglas-fir	16.7			Good	Limbs pruned near building
60	981	Malus spp.	Flowering crabapple	11.9	Spill	9.8	Good	Puned

Title Report Notes
 Reference Title Connect, LLC (agent for: First American Title Insurance Company) commitment number: TC13-113055, commitment date: April 18, 2024.
 Schedule B, Part II - Exceptions:
 Exceptions: 1, 4, 5, 6, 11, 12, 13 and 14 refer to the ownership of the property and/or are not plottable.
 2. Any facts, rights, interests, or claims that are not shown by the public records but that could be ascertained by making inquiry of persons in possession of the land.
 3. Easements, encumbrances, or claims thereof, not shown by the public records.
 7. Covenants, conditions and restrictions and other provisions as contained in instrument recorded in Liber 1088, Page 77, Liber 1418, Page 265, Liber 2977, Page 365, Liber 3286, Page 415 - Oakland County Records. Please be advised that any provision contained in this document, or in a document that is attached, linked, or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable.
 8. Subject to the easements, restrictions and reservations contained in the Louise Lathrup's California Bungalow Subdivision No. 3 Plat recorded at Liber 32, Page(s) 26, Oakland County Records. [DOCUMENT DOES NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS. THE SURVEYED LAND IS WITHIN THE PROPERTY DESCRIBED IN SAID DOCUMENT].
 9. Interest of others in oil, gas and mineral rights, if any, whether or not recorded in the Public Records.
 10. Interest, if any, of the United States, State of Michigan, or any political subdivision thereof, in the oil and minerals in and under that may be produced from the captioned Land.
 15. Rights of the public and any governmental unit in any part of the land taken, deemed or used for street, road or highway purposes.
 16. Easements, if any, for public utilities, pipelines or facilities installed in any portion of the vacated street or alley, lying within the land, together with the right of ingress and egress to repair, maintain, replace and remove the same.
 17. Rights of tenants under any unrecorded leases.
 18. Terms, conditions and provisions contained in Resolution Vacating Street and Reserving Easement recorded in Liber 3075, page 318. [EASEMENT IS WITHIN THE SURVEYED LAND AND ITS LOCATION IS SHOWN]
 19. Notice of Historic District Designation recorded in Liber 21373, page 272. [DOCUMENT DOES NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS. THE SURVEYED LAND IS WITHIN THE PROPERTY DESCRIBED IN SAID DOCUMENT]

Survey Data
 Site area: 177,119 square feet or 4.066 acres
 Zones: Village Center District
 Parking spaces: No Striped Parking Spaces
 Building Setbacks: (L1088, P.77 & L1418, P.265)
 Front: 43 feet
 Side: 3 feet
 A Surveyor cannot make a certification on the basis of an interpretation or opinion of another party. A zoning endorsement letter should be obtained from the City of Lathrup Village to insure conformity as well as make a final determination of the required building setback requirements.

Legal Description - Per Title Commitment
 Land situated in the City of Lathrup Village, County of Oakland, State of Michigan, described as follows:
 Lot 1677 and vacated Southfield Square, formerly known as Monterey Street lying Easterly of Lot 1677 and Westerly of Lots 1665 to 1689, except that part of vacated Southfield Square lying South of a line drawn between the Northwest corner of Lot 1680 and a point 150 feet from the Southeast corner of Lot 1677, along the Easterly boundary of said Lot 1677, Louise Lathrup's California Bungalow Subdivision No. 3, as recorded in Liber 32 of Plats, Page 26, Oakland County Records.
 Tax ID Number: 24-13-303-021
 Address: 27700 Southfield Road, Lathrup Village, MI 48076

ALTA Survey Notes
 There is no visible evidence of current earth moving work, building construction or building additions.
 There is no proposed changes in street right of way lines and there is no evidence of recent street or sidewalk construction or repair.
 There is no visible evidence of site use as a solid waste dump, sump or sanitary landfill.
 Location of utilities existing on or serving the property as determined by observed evidence or evidence from plans requested by the surveyor and obtained from utility companies.
 The subject property has access to Golden Gate Drive, being a publicly dedicated road.

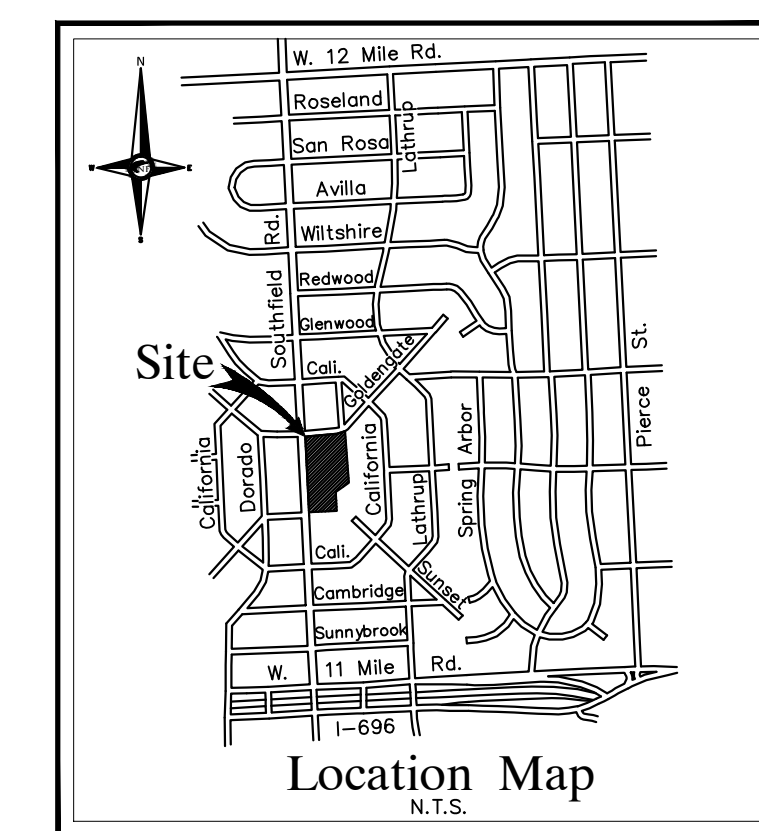
Basis of Bearing Note
 All bearings are in relation to the previously established East Right-of-Way line of Southfield Road (160' wide) of Louise Lathrup's California Bungalow Subdivision No. 3 as recorded in Liber 32 of Plats, Page 26, Oakland County Records. (Due North)

Flood Hazard Note
 The property described on this survey does not lie within a special flood hazard area as defined by the Federal Emergency Management Agency; the property lies within Zone X of the Flood Insurance Rate Map identified as map no. 26125C0676F bearing an effective date of 09/29/2006.

Topographic Survey Notes
 All elevations are existing elevations, unless otherwise noted.
 Utility locations were obtained from municipal officials and records of utility companies, and no guarantee can be made to the completeness, or exactness of location.

LEGEND

MANHOLE(MH)	EXISTING SANITARY SEWER
CO	EXISTING SAN. CLEAN OUT
MH	EX. COMBINED (COMB.) SEWER
HYDRANT(HYD)	GATE VALVE(GW)
MANHOLE(MH)	CATCH BASIN(CB)
UTILITY POLE GUY POLE	EXISTING STORM DRAIN
UP	EX. BEEHIVE CATCH BASIN
LP	EX. UNDERGROUND (UG.) CABLE
WIRE	OVERHEAD (OH.) LINES
ASPH.	ASPHALT
CONC.	CONCRETE
FD. / FND.	FOUND
RET. WALL	RETAINING WALL
R.O.W.	RIGHT-OF-WAY
SPK	SET PK NAIL
(TYP)	TYPICAL
(R)	RECORD
(M)	MEASURED
C/L	CENTERLINE
P/L	PROPERTY LINE
GM	GAS METER
EM	ELECTRIC METER
LS	LANDSCAPE
DS	DOWNSPOUT
GP	GUARD POST



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PROJECT
 27700 Southfield Road
 Lathrup Village, MI 48076

CLIENT
 The Surnow Company

Contact: Sam Surnow
 Phone: 248.865.3000 x102
 Email: sam@surnow.com

PROJECT LOCATION
 Part of the SW 1/4
 of Section 13
 T.1N., R.10E.,
 City of Lathrup Village,
 Oakland County, Michigan

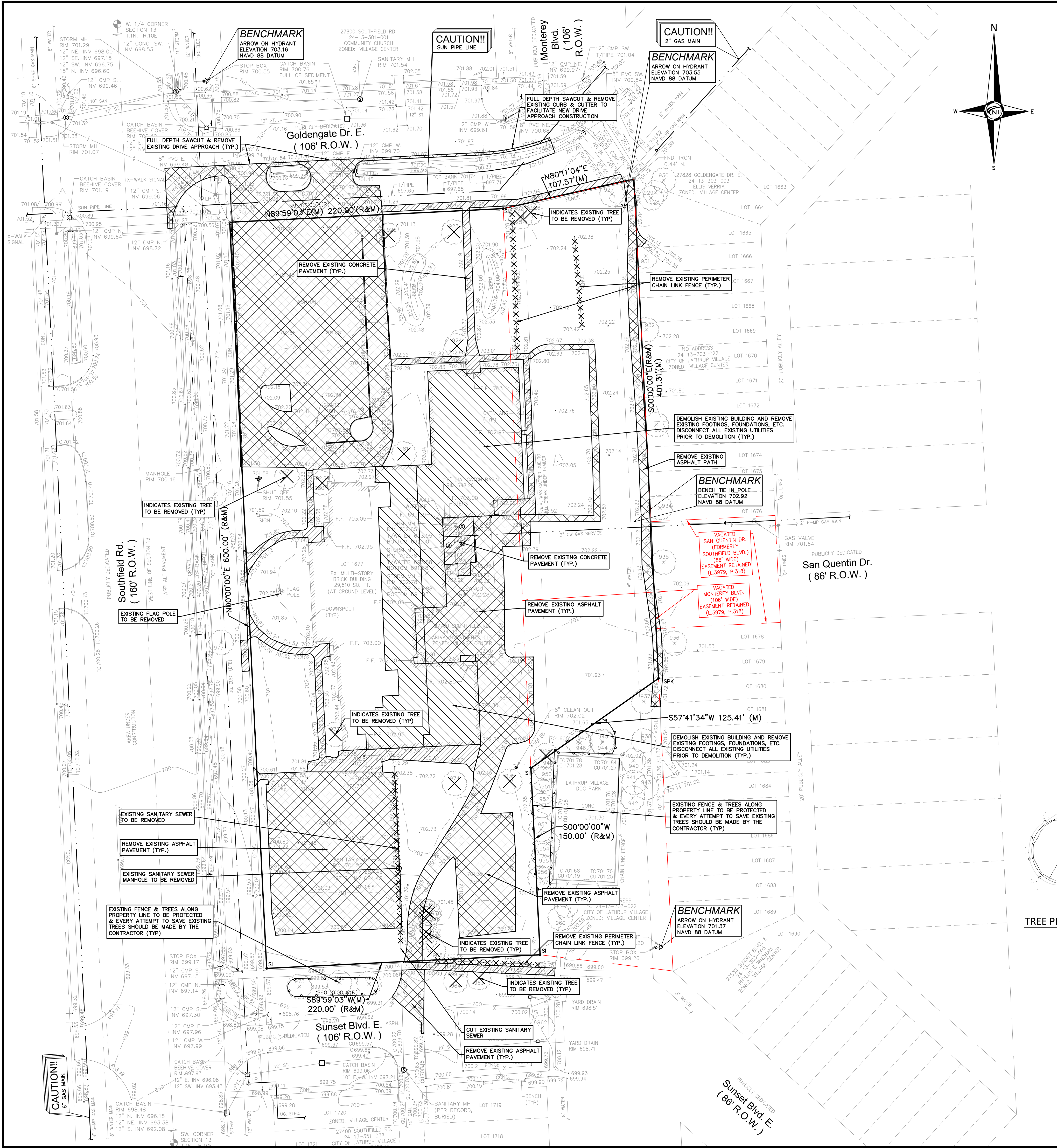
SHEET
 ALTA/NSPS Land Title /
 Topographic / Tree Survey

Know what's below
 Call before you dig.

DATE ISSUED/REVISED
 10-17-24 ISSUED FOR SITE PLAN REVIEW
 01-10-25 REVISED PER CITY REVIEW
 03-21-25 REVISED PER CITY CLIENT

DRAWN BY:
 M. Carnaghi
DESIGNED BY:
 K. Navaroli

APPROVED BY:
 K. Navaroli
DATE:
 October 17, 2024
SCALE:
 1" = 40'
 40 20 0 20 40 60
NFE JOB NO. O129 **SHEET NO.** SP01



DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE, THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANY'S ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE UTILITY COMPANY. REMOVAL OF THE UTILITY COMPANY'S COMMUNICATION SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

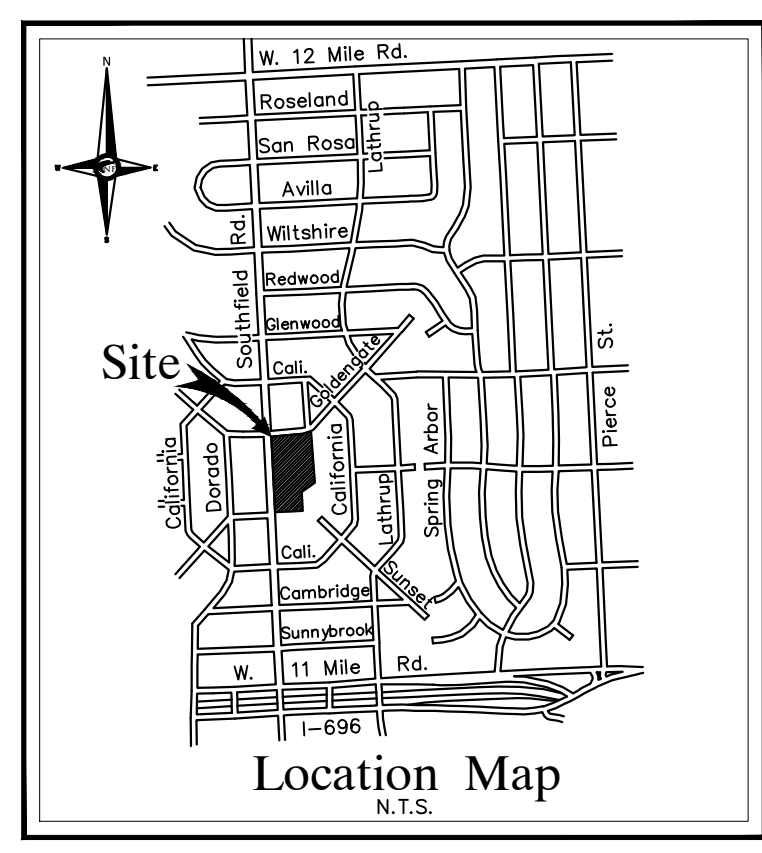
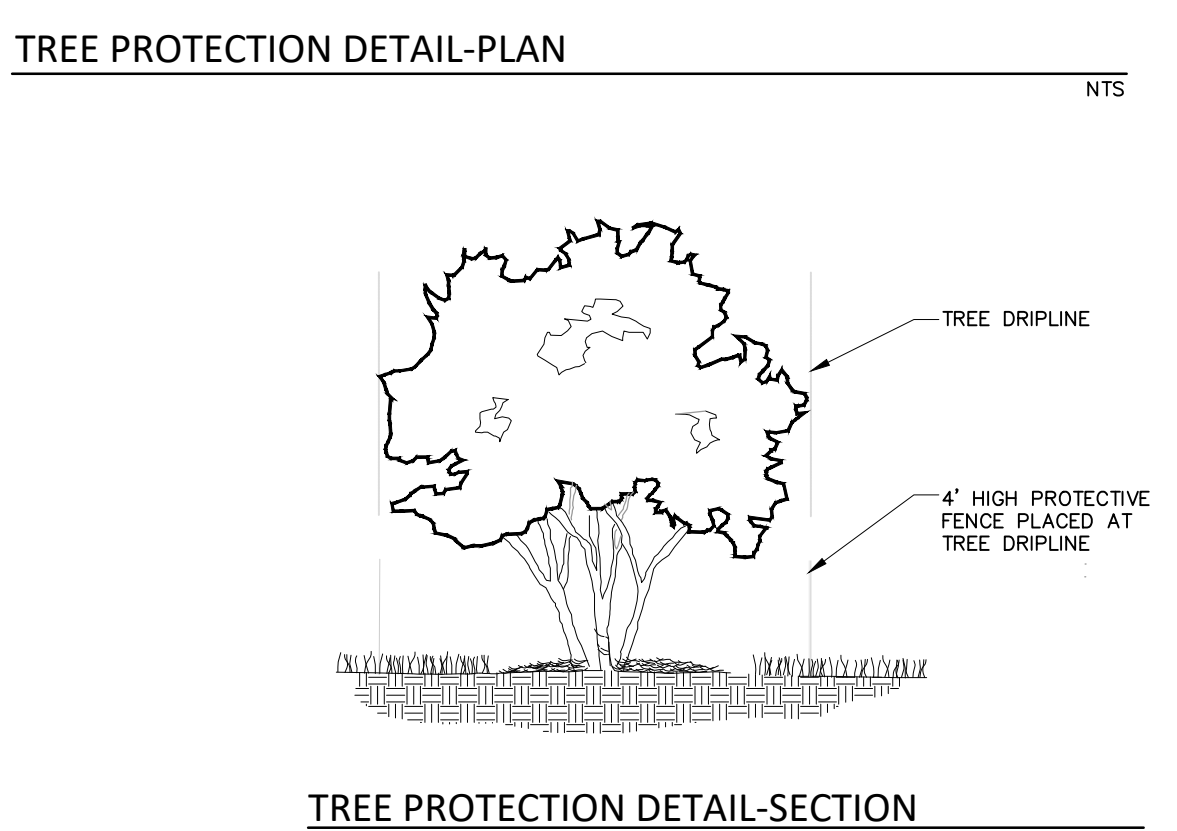
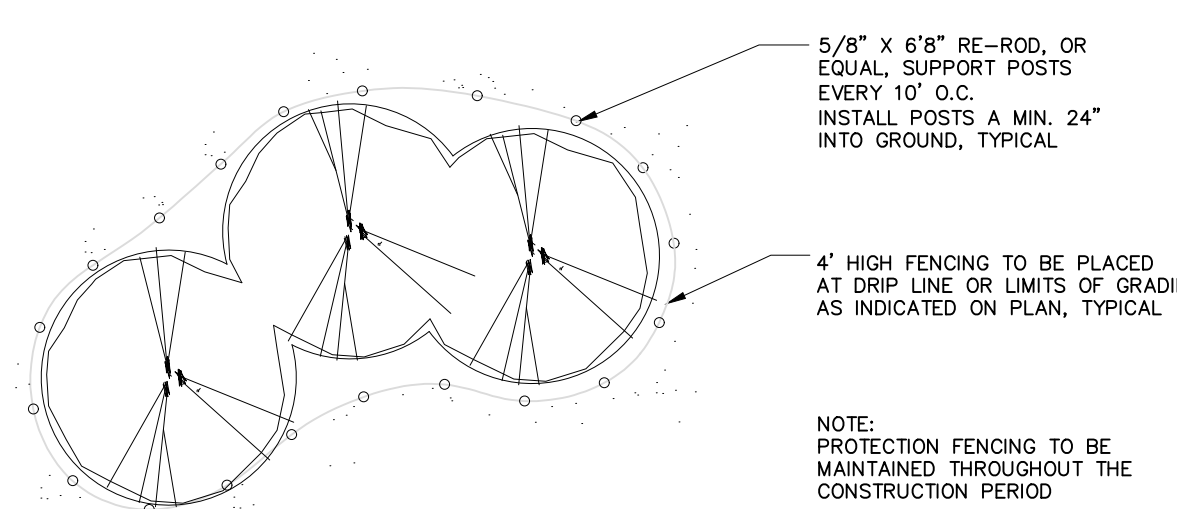
PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANNED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MDOT CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 98% OF MATERIALS MAXIMUM DENSITY.

GENERAL TREE PROTECTION NOTES

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



NF ENGINEERS
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LAND PLANNERS

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 FAX. (248) 332-8257
 WWW.NOWAKFRAUS.COM

SEAL

Brad Brickel

PROJECT
 27700 Southfield Road
 Lathrup Village, MI 48076

CLIENT
 The Surnow Company

Contact: Sam Surnow
 Phone: 248.865.3000 x 102
 Email: sam@surnow.com

PROJECT LOCATION
 Part of the SW 1/4
 of Section 13
 T.1N., R.10E.,
 City of Lathrup Village,
 Oakland County, Michigan

SHEET
 Demolition Plan

811
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DATE	ISSUED/REVISED
10-17-24	ISSUED FOR SITE PLAN REVIEW
01-10-25	REVISED PER CITY REVIEW
03-21-25	REVISED PER CITY/CLIENT

REMOVAL LEGEND

[Hatched Box]	INDICATES EXISTING BUILDING TO BE DEMOLISHED
[Cross-hatched Box]	INDICATES AREAS OF ASPHALT PAVEMENT TO BE REMOVED
[Diagonal Hatched Box]	INDICATES AREAS OF CONCRETE PAVEMENT/ SIDEWALK TO BE REMOVED

LEGEND

[Symbol]	MANHOLE	[Symbol]	EXISTING SANITARY SEWER
[Symbol]	HYDRANT	[Symbol]	EXISTING SAN. CLEAN OUT
[Symbol]	MANHOLE CATCH BASIN	[Symbol]	EXISTING WATER MAIN
[Symbol]	UTILITY POLE	[Symbol]	EXISTING STORM SEWER
[Symbol]	GUY POLE	[Symbol]	EX. R. Y. CATCH BASIN
[Symbol]	GUY WIRE	[Symbol]	EXISTING BURIED CABLES
[Symbol]	EXISTING GAS MAIN	[Symbol]	OVERHEAD LINES
[Symbol]	EXISTING UTILITY TO BE REMOVED	[Symbol]	LIGHT POLE
[Symbol]	EXISTING UTILITY TO BE ABANDONED	[Symbol]	SIGN
[Symbol]	CONSTRUCTION/TREE PROTECTION FENCING	[Symbol]	EXISTING GAS MAIN
[Symbol]	INDICATES EXISTING TREE TO BE REMOVED	[Symbol]	INDICATES UTILITY TO BE REMOVED

DRAWN BY:
 J. Lawrey

DESIGNED BY:
 A. Eizember

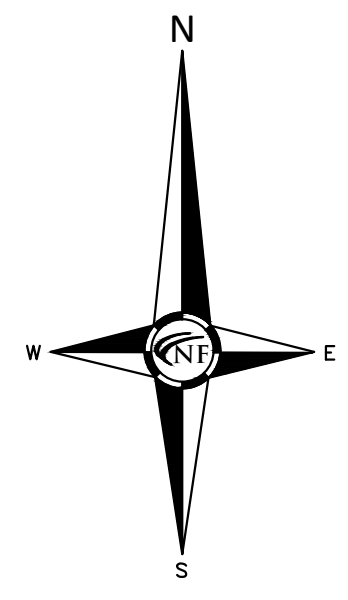
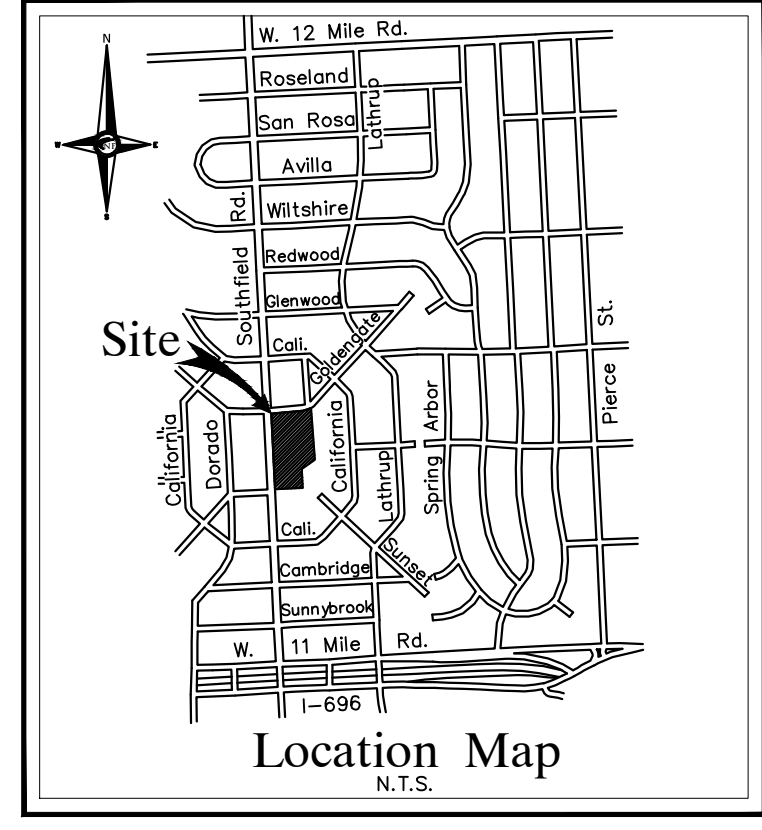
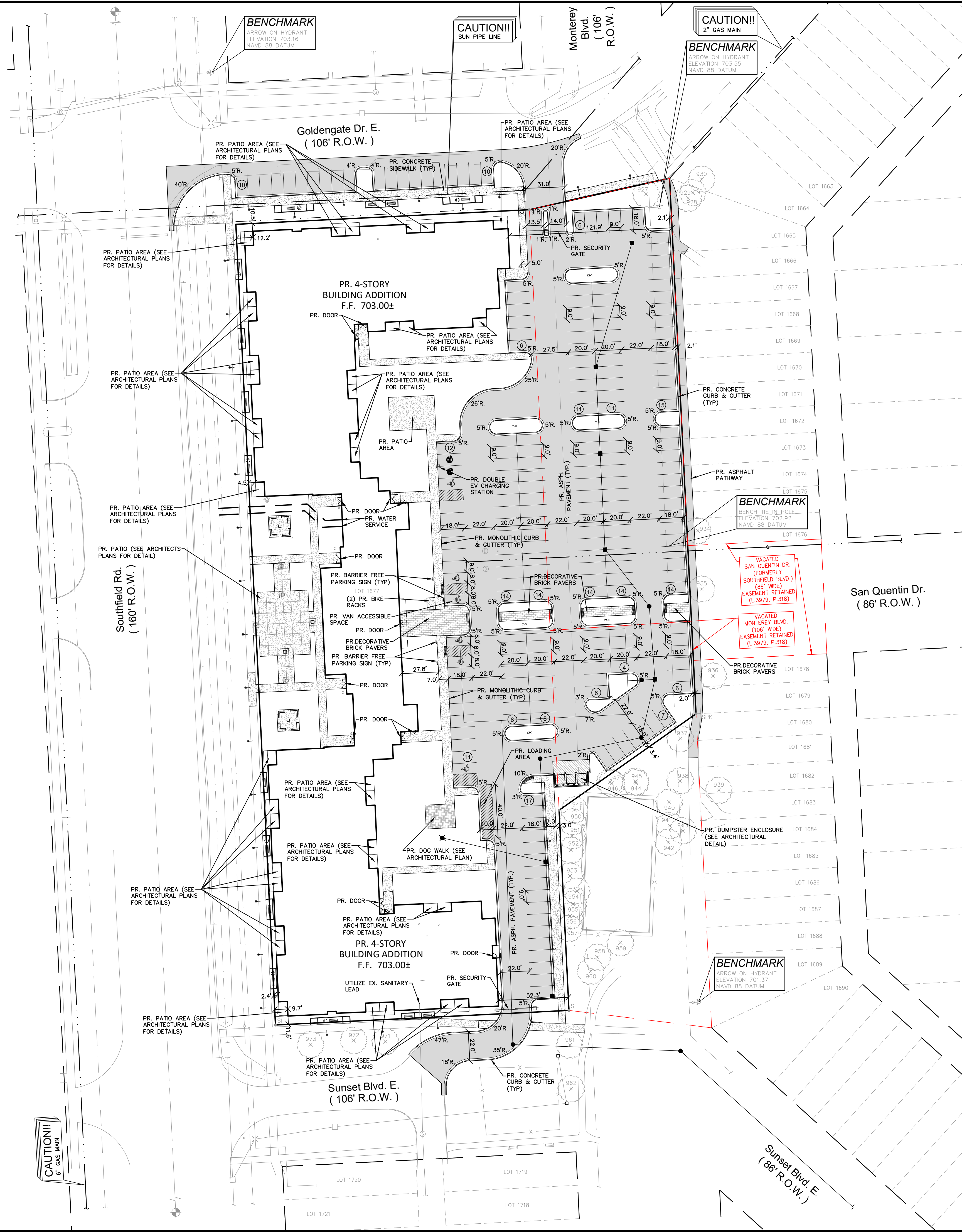
APPROVED BY:
 B. Brickel

DATE:
 October 17, 2024

SCALE: 1" = 30'

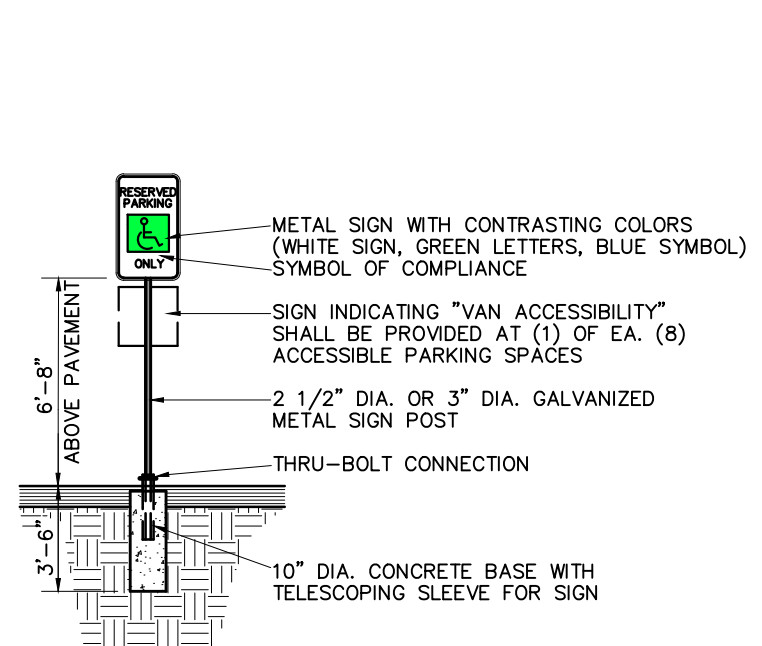
NFE JOB NO. **O129** SHEET NO. **SP02**

US00-2000 Plan, 0000-FILES, 07/28/2024, 12:00:00 AM, 1/20/2025, 8:49 AM



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BARRIER FREE PARKING SIGN DETAIL
 N.T.S.
 Provide (1) for each accessible parking space

NOTES
 REFER TO SHEETS SP05-SP05.1 FOR PAVING & GRADING PLANS
 REFER TO SHEETS SP07 FOR PRELIMINARY UTILITY PLANS
 REFER TO SHEETS SP06 FOR ADDITIONAL PROJECT NOTES AND DETAILS (TYP)

PERMIT NOTES
 AN EGE PERMIT IS REQUIRED FOR WETLAND & FLOOD PLAIN IMPACTS.
 ROAD PERMIT IS REQUIRED FOR ALL WORK WITHIN THE SOUTHFIELD ROAD RIGHT-OF-WAY.

UTILITY NOTE
 CONTRACTOR TO EXPOSE FIBER/ ELECTRIC/ TELEPHONE CONDUIT PRIOR TO COMMENCING CONSTRUCTION. UTILITY OWNER TO BE PRESENT. CONTRACTOR SHALL NOTIFY CIVIL ENGINEER OR RECORD FOLLOWING EXPOSURE TO COORDINATE.

DETENTION NOTE
 ON-SITE STORMWATER MANAGEMENT WILL BE PROVIDED TO MEET THE REQUIREMENT OF THE CITY OF LATHRUP VILLAGE ENGINEERING STANDARDS AND OAKLAND COUNTY WATER RESOURCES COMMISSIONER.

SITE DATA

SITE AREA	177,119 SFT. OR 4.066 ACRES	
ZONING	VILLAGE CENTER DISTRICT	
EXISTING:	1 SPACE / UNIT	192 SPACES
REQUIRED:	128 x 15	198 SPACES
PROVIDED:	ON SITE SPACES:	20 SPACES
	OFF SITE SPACES:	218 SPACES
	TOTAL SPACES:	238 SPACES

BICYCLE PARKING

REQUIRED:	1 SPACE/10 VEHICLE PARKING SPACES	20 SPACES
PROVIDED:	4 SPACES	

SITE AREA

SITE AREA	177,119.00 SFT.	100.0%
BUILDING FOOTPRINT	56,074.26 SFT.	31.7%
PARKING & DRIVES	81,025.53 SFT.	45.7%
OPEN SPACE	40,019.21 SFT.	22.6%

SETBACK REQUIREMENTS

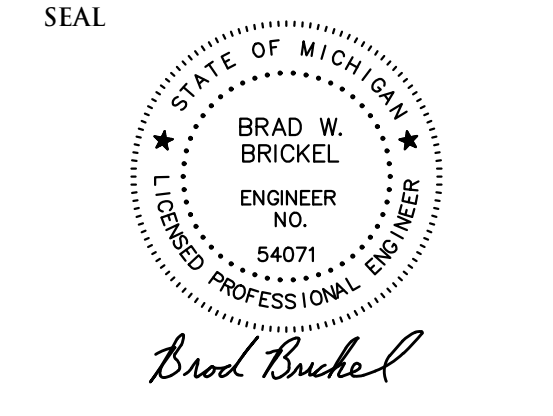
FRONT:	0'(WEST)	2.4'(WEST)
SIDE:	0'(NORTH)	10.5'(SOUTH)
REAR:	5'(EAST)	52.3'(EAST)

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

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



PROJECT
 27700 Southfield Road
 Lathrup Village, MI 48076

CLIENT
 The Surnow Company

Contact: Sam Surnow
 Phone: 248.865.3000 x 102
 Email: sam@surnow.com

PROJECT LOCATION
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 of Section 13
 T.1N., R.10E.,
 City of Lathrup Village,
 Oakland County, Michigan

SHEET
 Site Plan



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03-21-25	REVISED PER CITY/CLIENT

DRAWN BY:
 J. Lawrey

DESIGNED BY:
 A. Eizember

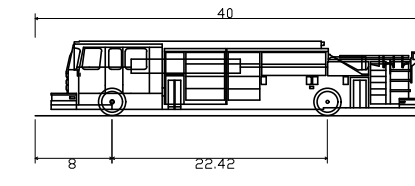
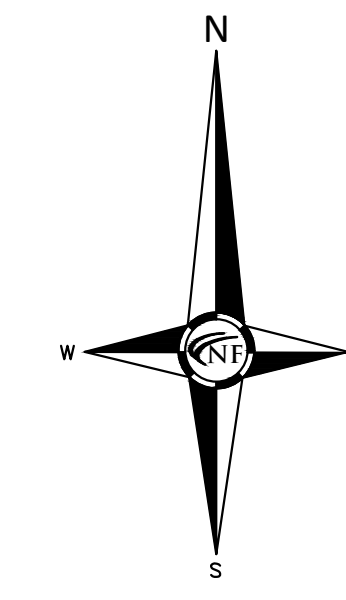
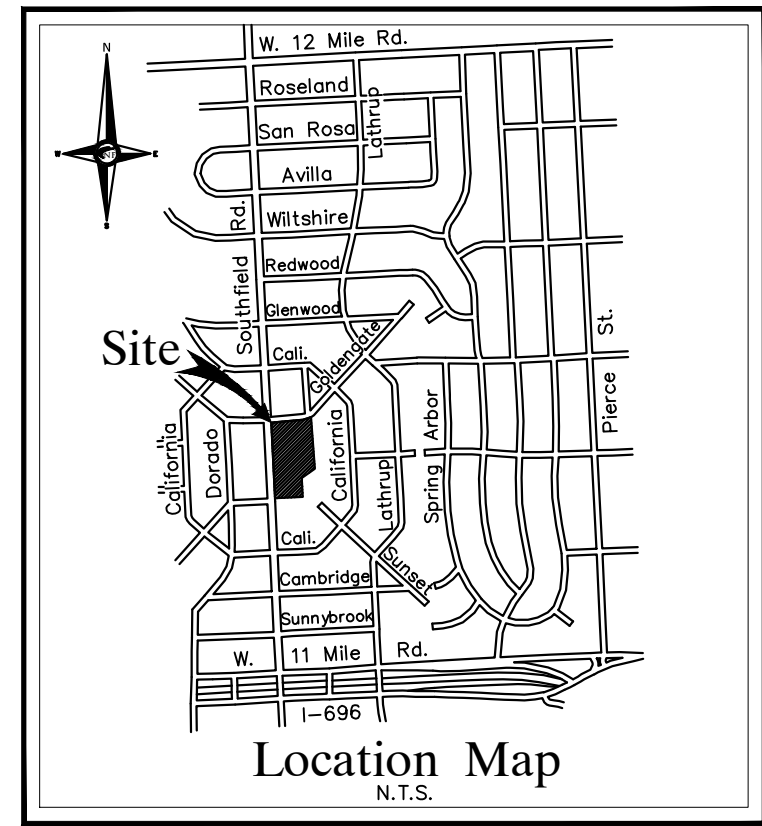
APPROVED BY:
 B. Brickel

DATE:
 October 17, 2024

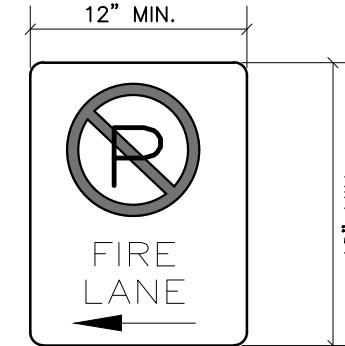
SCALE: 1" = 40'

NFE JOB NO. 0129 **SHEET NO.** SP03

US00-2000 File:0000-FILES\0728\0728\Site Plan\0128_SIT Plan_172012025_10:04 AM



Pumper Fire Truck - Lyone Fire
Overall Length 40.000ft
Overall Width 8.167ft
Overall Height 7.755ft
Min. Body Ground Clearance 0.655ft
Track Width 10.67ft
Lock-to-lock time 41.580ft
Curb to Curb Turning Radius

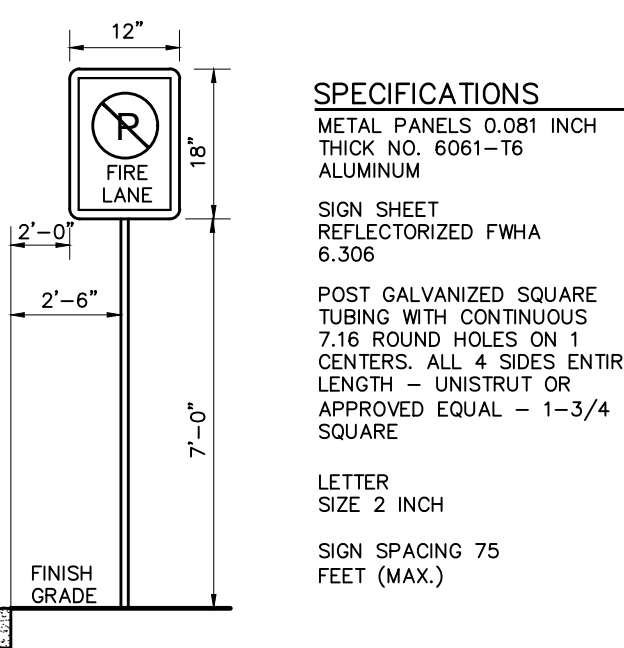


THE SYMBOL 'P' IS BLACK, CIRCUMSCRIBED IN A RED CIRCLE, WITH A RED SLASH ON A WHITE BACKGROUND AND BLACK BORDER.

THE SUPPLEMENTAL EDUCATIONAL PLAQUE NO. PARKING, WITH A RED LEGEND AND BORDER ON A WHITE BACKGROUND, MAY BE USED ABOVE THE SYMBOL.

CARE SHOULD BE EXERCISED TO SEE THAT THE SINGLE ARROWS POINT IN THE PROPER DIRECTION TO INDICATE THE REGULATED ZONE.

FIRE LANE SIGN DETAIL



NO PARKING SIGN DETAIL

N.T.S.

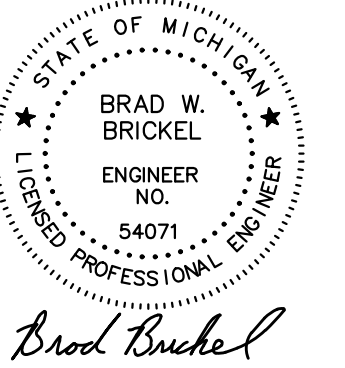
NOTES

- REFER TO SHEETS SP05-SP05.1 FOR PAVING & GRADING PLANS
- REFER TO SHEETS SP07 FOR PRELIMINARY UTILITY PLANS
- REFER TO SHEETS SP08 FOR ADDITIONAL PROJECT NOTES AND DETAILS (TYP)

LEGEND

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

SEAL



PROJECT
27700 Southfield Road
Lathrup Village, MI 48076

CLIENT
The Surnow Company

Contact: Sam Surnow
Phone: 248.865.3000 x 102
Email: sam@surnow.com

PROJECT LOCATION
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of Section 13
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City of Lathrup Village,
Oakland County, Michigan

SHEET
Fire Truck Turning Plan



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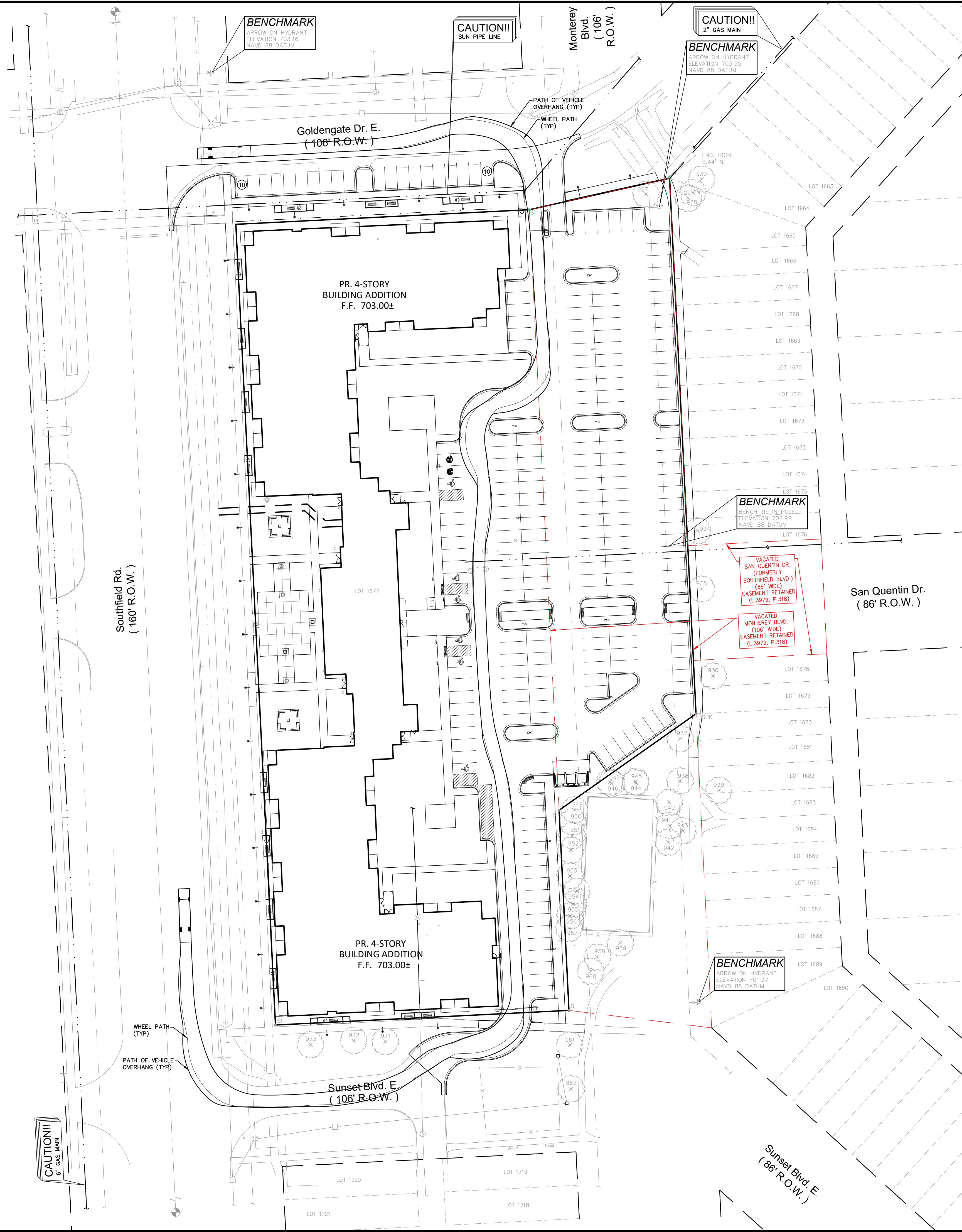
DATE ISSUED/REVISED
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03-21-25 REVISED PER CITY/CLIENT

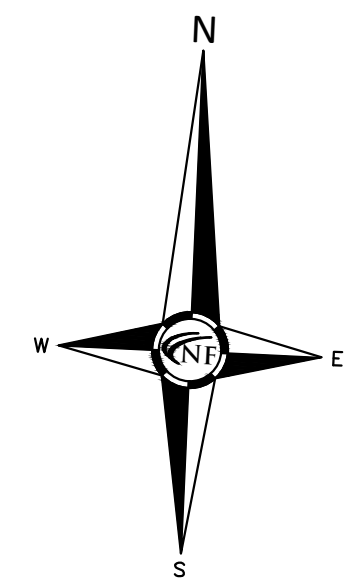
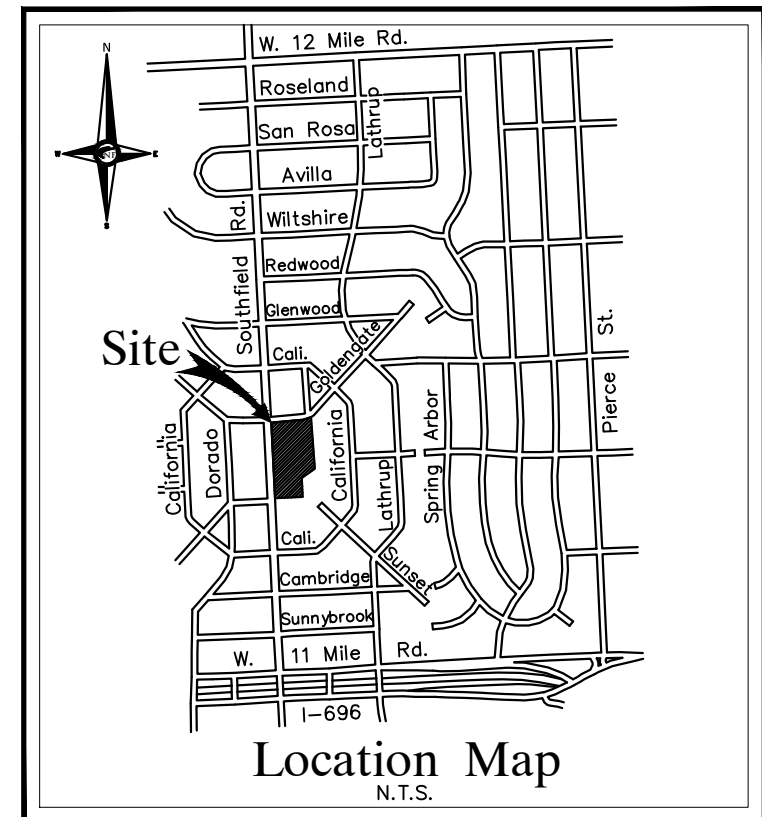
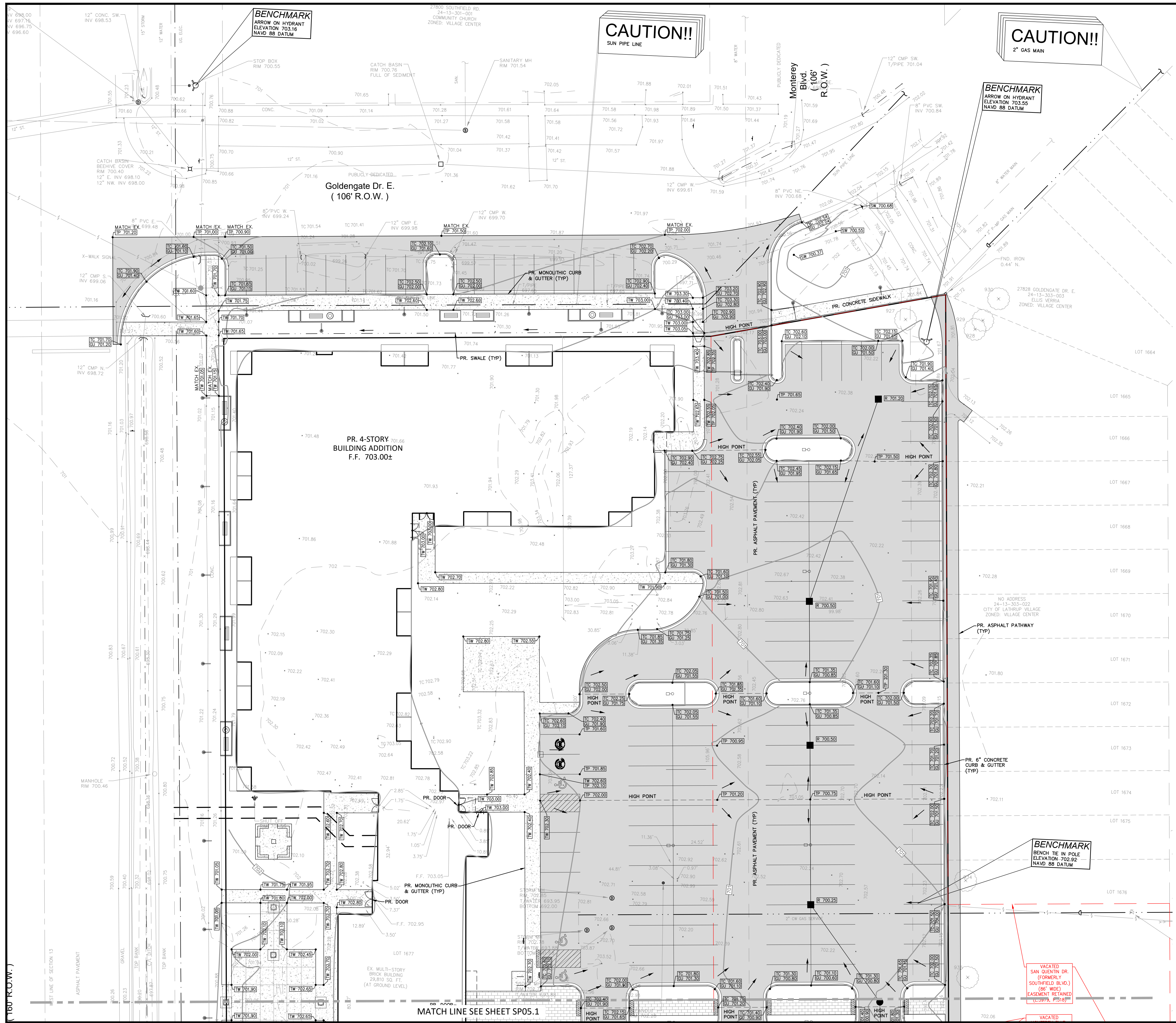
DRAWN BY:
J. Lawrey
DESIGNED BY:
A. Eizember
APPROVED BY:
B. Brickel

DATE:
October 17, 2024

SCALE: 1" = 40'

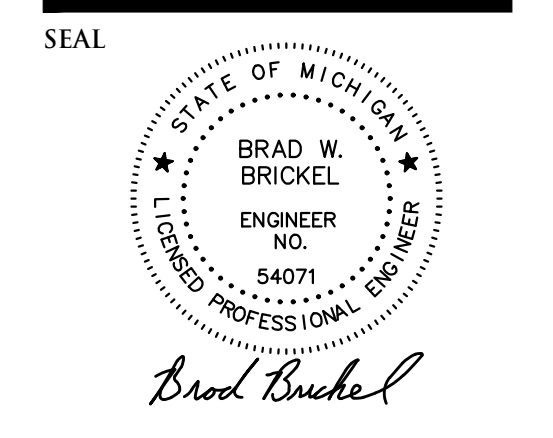
NFE JOB NO. SHEET NO.
O129 SP04





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 Oakland County, Michigan

SHEET
 Paving and Grading Plan

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 REFER TO SHEETS SP07 FOR PRELIMINARY UTILITY PLANS
 REFER TO SHEETS SP06 FOR ADDITIONAL PROJECT NOTES AND DETAILS (TYP)

NOTE
 AN EGLE PERMIT IS REQUIRED FOR WETLAND & FLOOD PLAIN IMPACTS.

PAVING LEGEND

	PROPOSED CONCRETE PAVEMENT
	PROPOSED ASPHALT PAVEMENT

LEGEND

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		GATE VALVE
	MANHOLE CATCH BASIN		EXISTING WATERMAIN
	UTILITY POLE		EXISTING STORM SEWER
	GUY POLE		EX. R. Y. CATCH BASIN
	GUY WIRE		EXISTING BURIED CABLES
	LIGHT POLE		OVERHEAD LINES
	SIGN		EXISTING GAS MAIN
	C.O. MANHOLE		PR. SANITARY SEWER
	HYDRANT		PR. WATER MAIN
	INLET		PR. STORM SEWER
	PR. R. Y. CATCH BASIN		PROPOSED LIGHT POLE
	TC 600.00		GU 600.00
	TW 600.00		TP 600.00
	TP 600.00		FG 600.00

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 A. Eizember

APPROVED BY:
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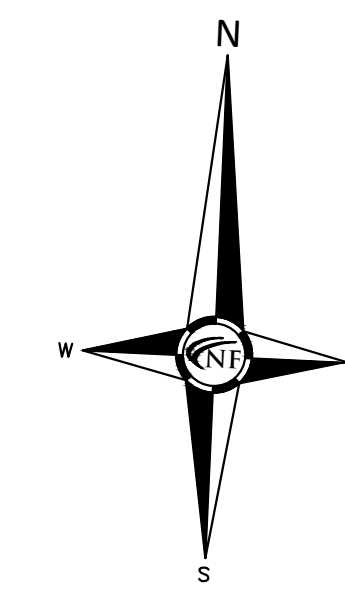
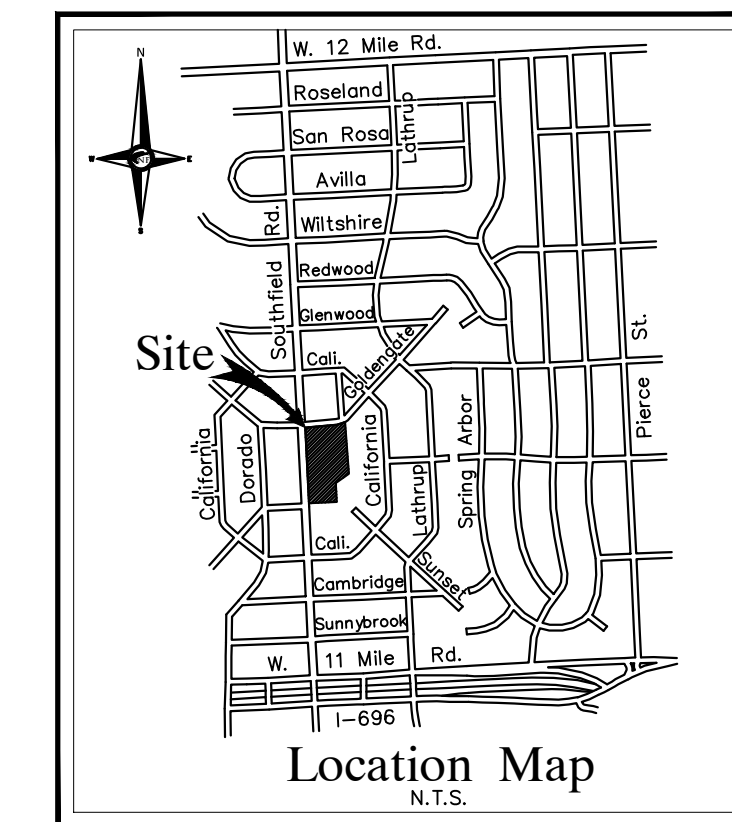
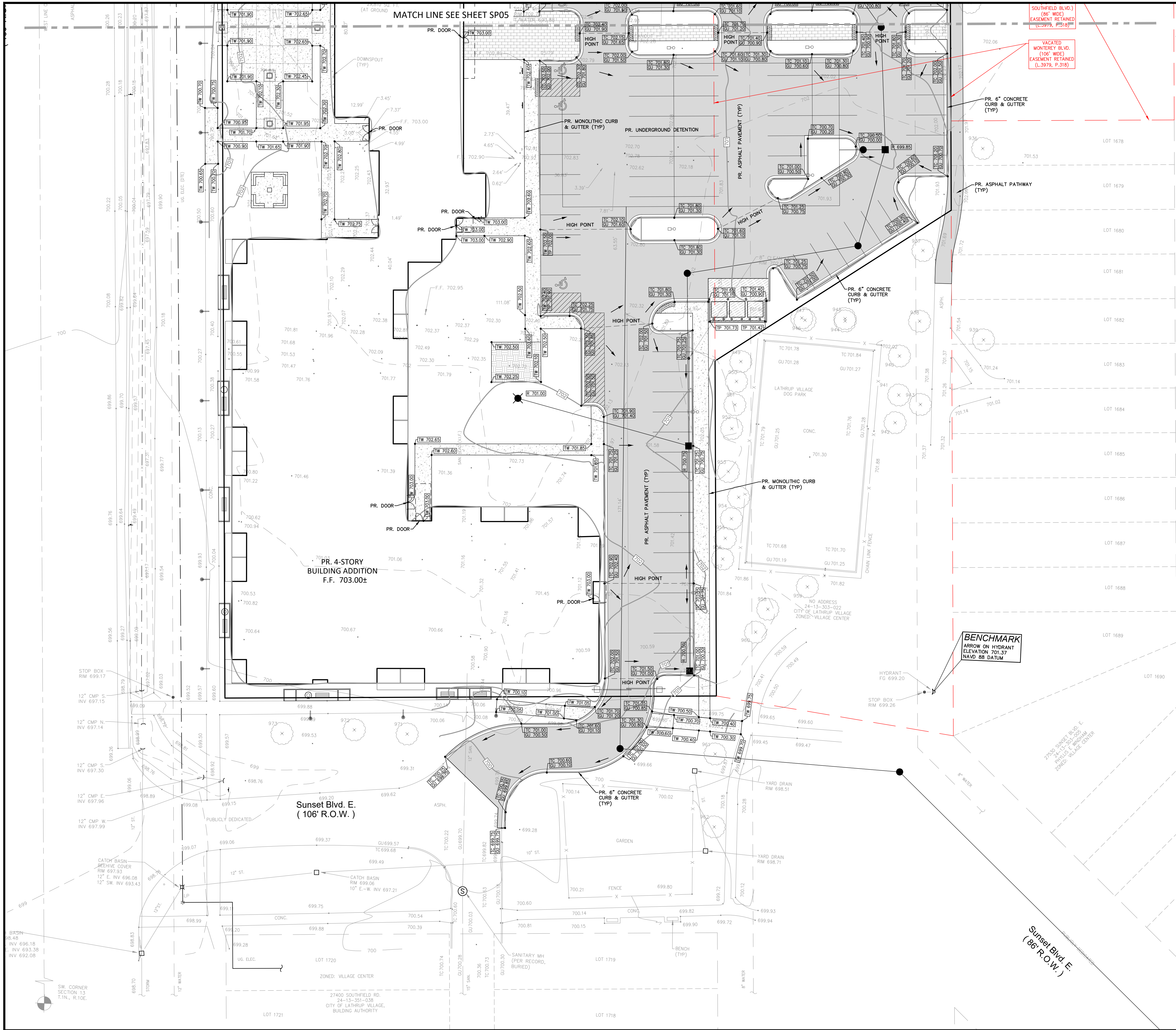
DATE:
 October 17, 2024

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
 O129 SP05

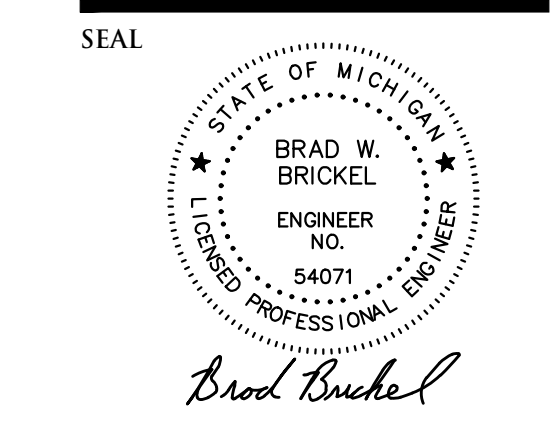


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SHEET
 Paving and Grading Plan

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NOTE
 AN EOLE PERMIT IS REQUIRED FOR WETLAND & FLOOD PLAIN IMPACTS.

PAVING LEGEND

[Symbol]	PROPOSED CONCRETE PAVEMENT
[Symbol]	PROPOSED ASPHALT PAVEMENT

LEGEND

[Symbol]	MANHOLE	EXISTING SANITARY SEWER
[Symbol]	HYDRANT	GATE VALVE
[Symbol]	MANHOLE	CATCH BASIN
[Symbol]	UTILITY POLE	GUY POLE
[Symbol]	[Symbol]	GUY WIRE
[Symbol]	[Symbol]	OVERHEAD LINES
[Symbol]	[Symbol]	LIGHT POLE
[Symbol]	[Symbol]	SIGN
[Symbol]	[Symbol]	EXISTING GAS MAIN
[Symbol]	[Symbol]	PR. SANITARY SEWER
[Symbol]	[Symbol]	PR. WATER MAIN
[Symbol]	[Symbol]	PR. STORM SEWER
[Symbol]	[Symbol]	PR. R. Y. CATCH BASIN
[Symbol]	[Symbol]	PROPOSED LIGHT POLE
[Symbol]	[Symbol]	PR. TOP OF CURB ELEVATION
[Symbol]	[Symbol]	PR. GUTTER ELEVATION
[Symbol]	[Symbol]	PR. TOP OF WALK ELEVATION
[Symbol]	[Symbol]	PR. TOP OF PWMT. ELEVATION
[Symbol]	[Symbol]	FINISH GRADE ELEVATION

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APPROVED BY:
 B. Brickel

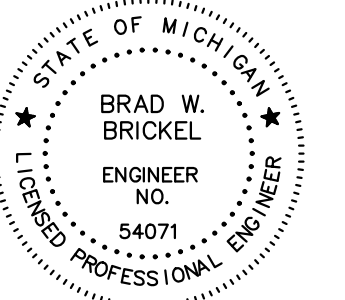
DATE:
 October 17, 2024

SCALE: 1" = 20'

NFE JOB NO. SHEET NO.
 O129 SP05.1

US00-2000 PWD\0000-FILES\0129\0129\SP05.Plot.dwg, 3/29/2025 10:04 AM

SEAL



Brad Brickel

PROJECT
27700 Southfield Road
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SHEET
Notes and Details



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J. Lawrey

DESIGNED BY:
A. Eizember

APPROVED BY:
B. Brickel

DATE:
October 17, 2024

SCALE: N.T.S.

NFE JOB NO. SHEET NO.
0129 SP06

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

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

ASPHALT: BASE COURSE - MDOT BITUMINOUS MIXTURE HMA, 4E ML; SURFACE COURSE - MDOT BITUMINOUS MIXTURE HMA, 5E ML; BOND COAT - MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD;

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-5184.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKewise ARRANGE FOR ALL INSPECTION.

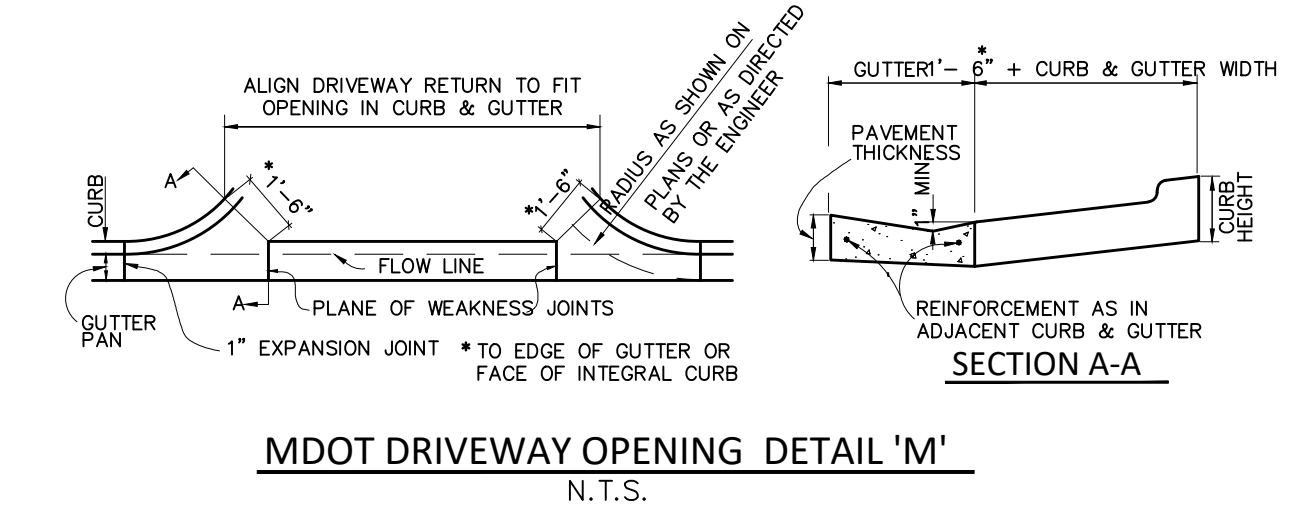
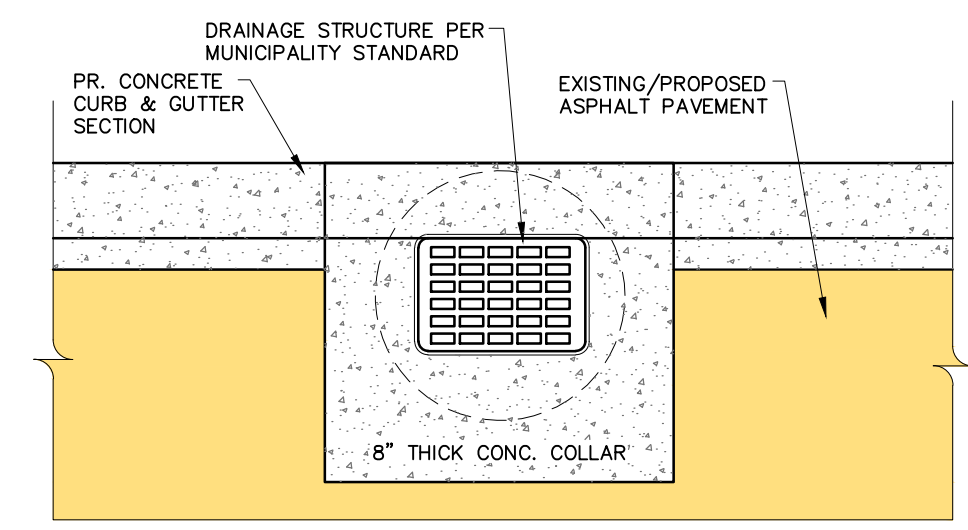
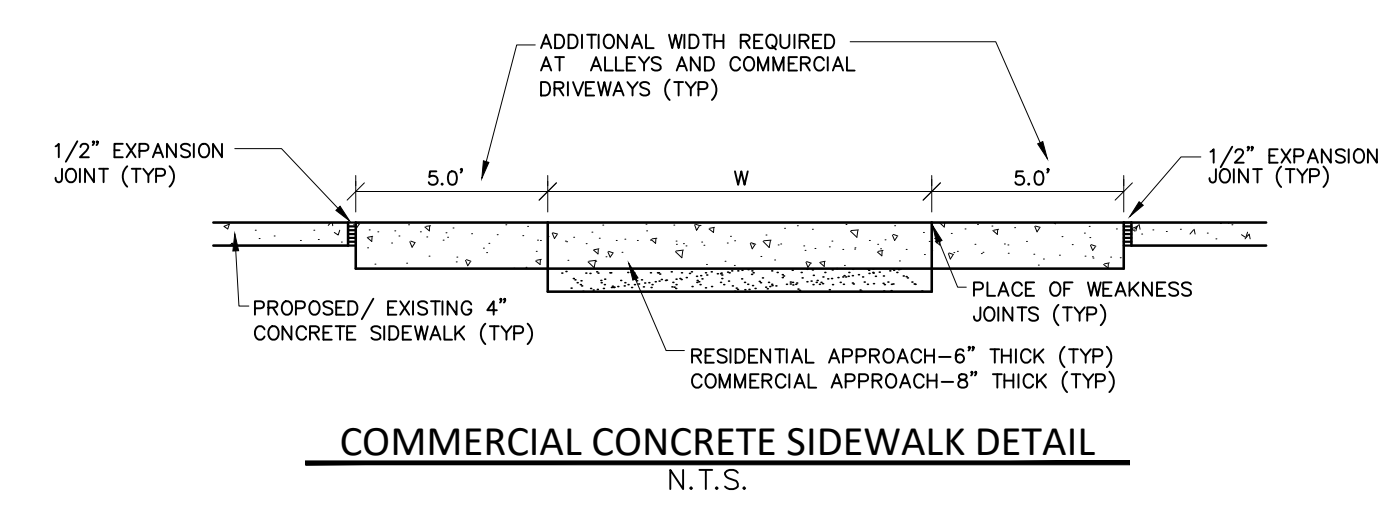
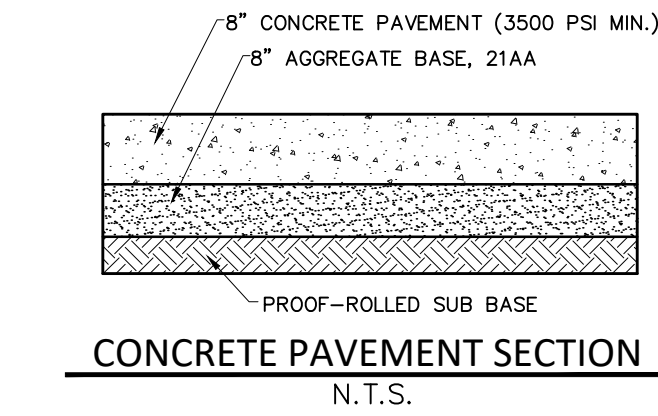
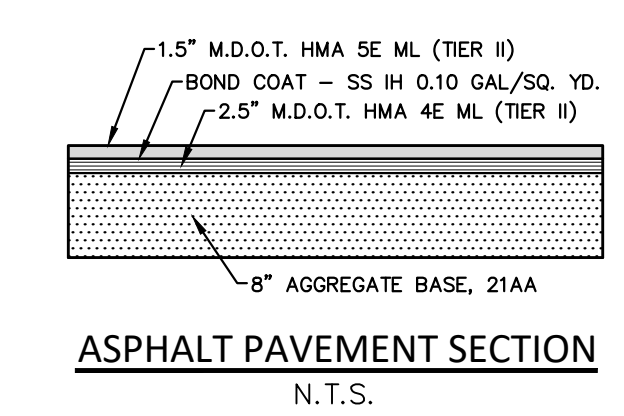
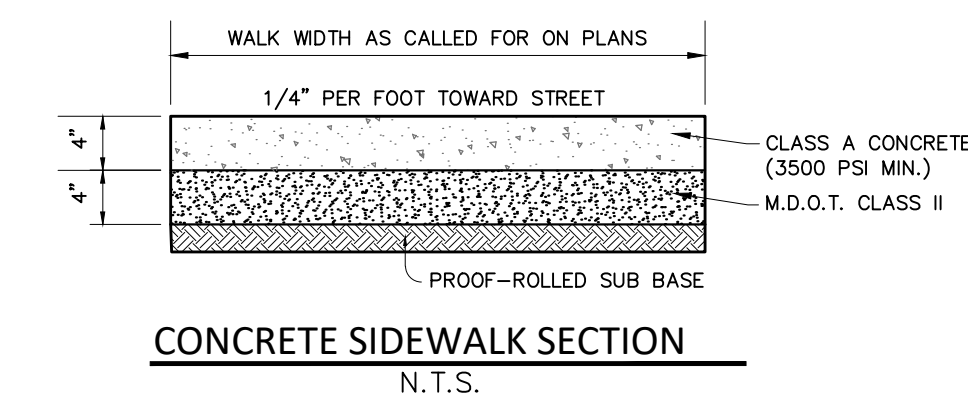
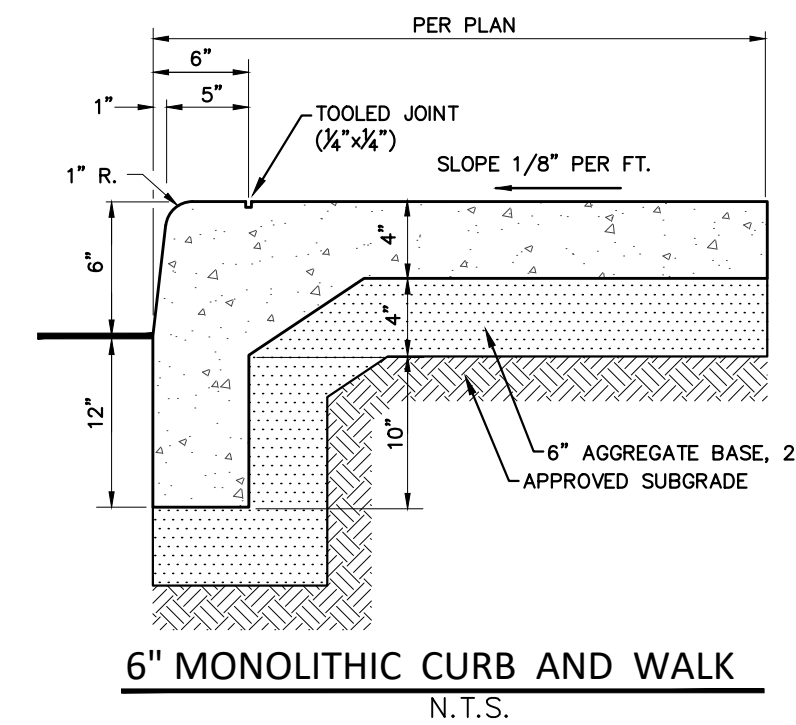
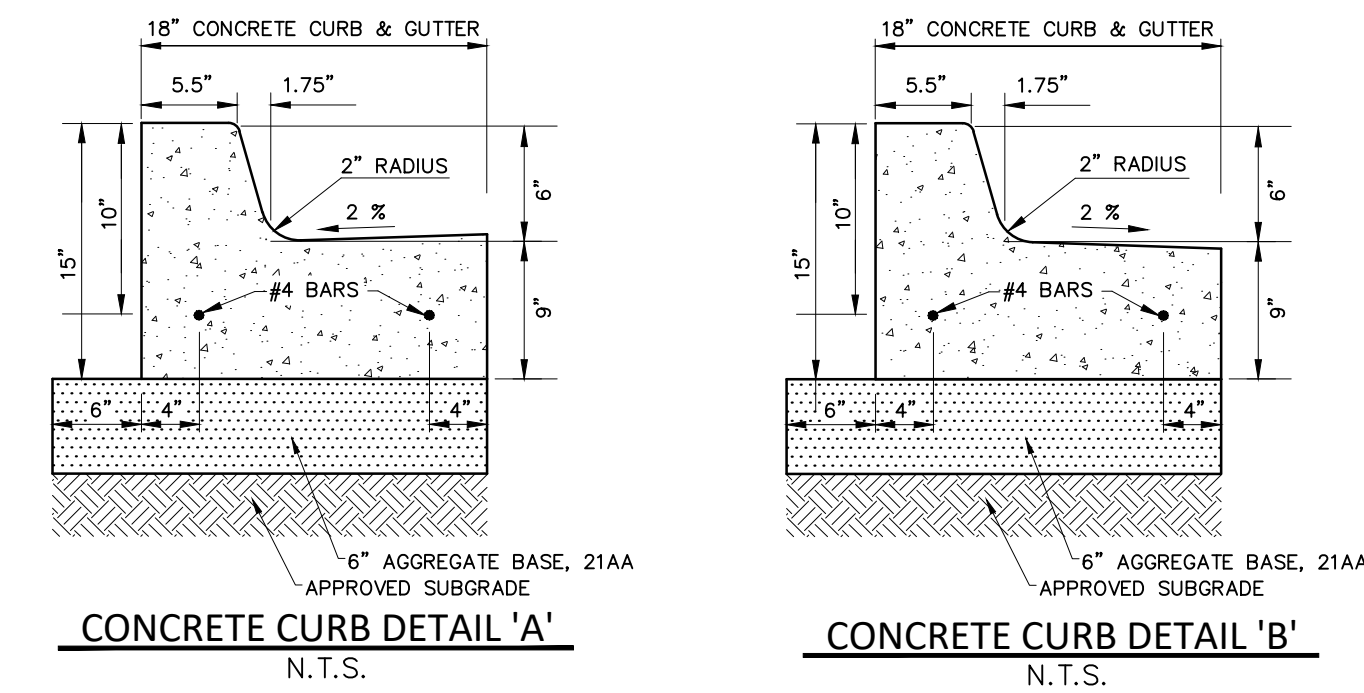
EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

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

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

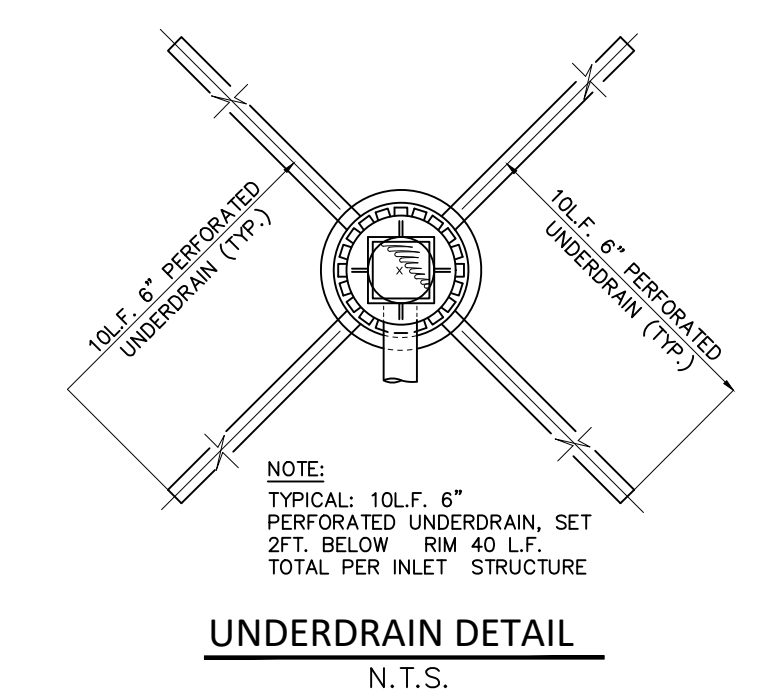
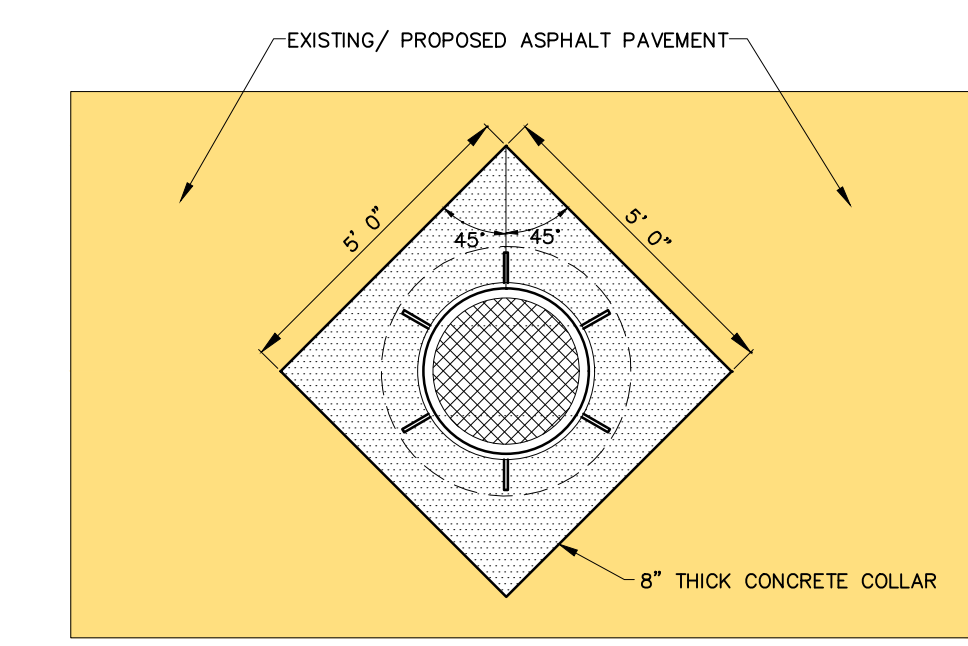
ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

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



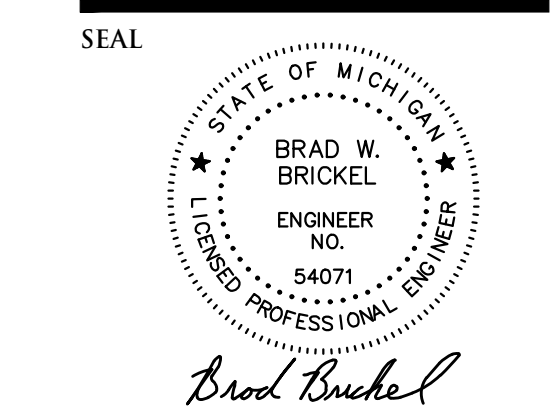
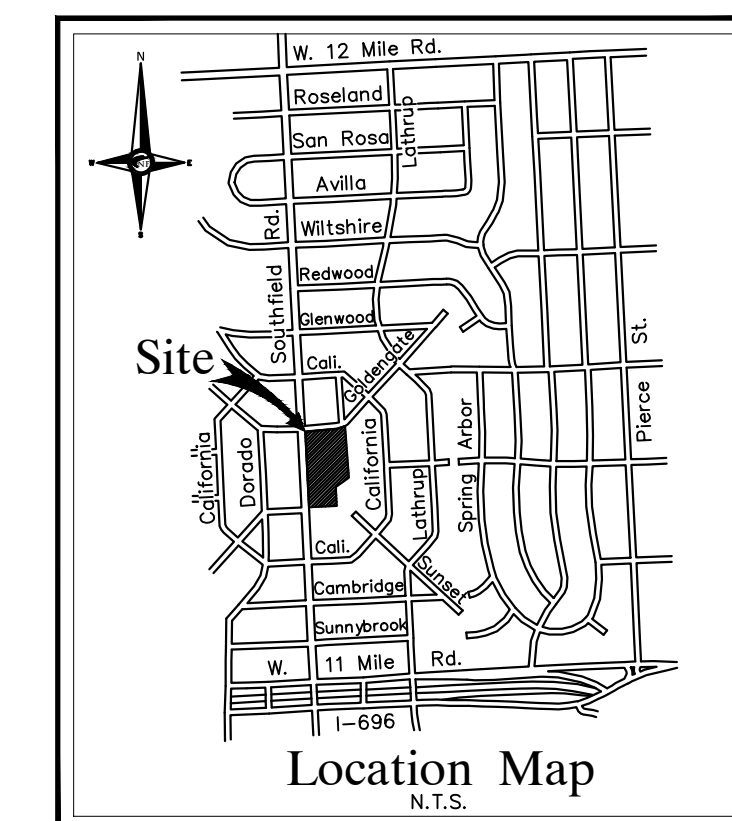
DRAINAGE STRUCTURE BOXOUT DETAIL I
N.T.S.

MDOT DRIVEWAY OPENING DETAIL 'M'
N.T.S.



DRAINAGE STRUCTURE BOXOUT DETAIL II
N.T.S.

UNDERDRAIN DETAIL
N.T.S.



PROJECT
 27700 Southfield Road
 Lathrup Village, MI 48076

CLIENT
 The Surnow Company

Contact: Sam Surnow
 Phone: 248.865.3000 x 102
 Email: sam@surnow.com

PROJECT LOCATION
 Part of the SW 1/4
 of Section 13
 T.1N., R.10E.,
 City of Lathrup Village,
 Oakland County, Michigan

SHEET
 Utility Plan



DATE ISSUED/REVISED
 10-17-24 ISSUED FOR SITE PLAN REVIEW
 01-10-25 REVISED PER CITY REVIEW
 03-21-25 REVISED PER CITY/CLIENT

DRAWN BY:
 J. Lawrey
 DESIGNED BY:
 A. Eizember
 APPROVED BY:
 B. Brickel
 DATE:
 October 17, 2024
 SCALE: 1" = 40'
 NFE JOB NO. SHEET NO.
 O129 SP07

LEGEND

MANHOLE	EXISTING SANITARY SEWER
HYDRANT	SAN. CLEAN OUT
MANHOLE CATCH BASIN	EXISTING WATER MAIN
UTILITY POLE	EXISTING STORM SEWER
GUY WIRE	EX. R. Y. CATCH BASIN
GUY WIRE	EXISTING BURIED CABLES
MANHOLE	OVERHEAD LINES
HYDRANT	LIGHT POLE
INLET	SIGN
MANHOLE	EXISTING GAS MAIN
GATE VALVE	PR. SANITARY SEWER
C.B. MANHOLE	PR. WATER MAIN
MANHOLE	PR. STORM SEWER
MANHOLE	PR. R. Y. CATCH BASIN
MANHOLE	SAND BACKFILL (95% DENSITY)
MANHOLE	PROPOSED LIGHT POLE

REQUIRED DETENTION VOLUME CALCULATIONS
 100 Year Post-Development Detention Volume

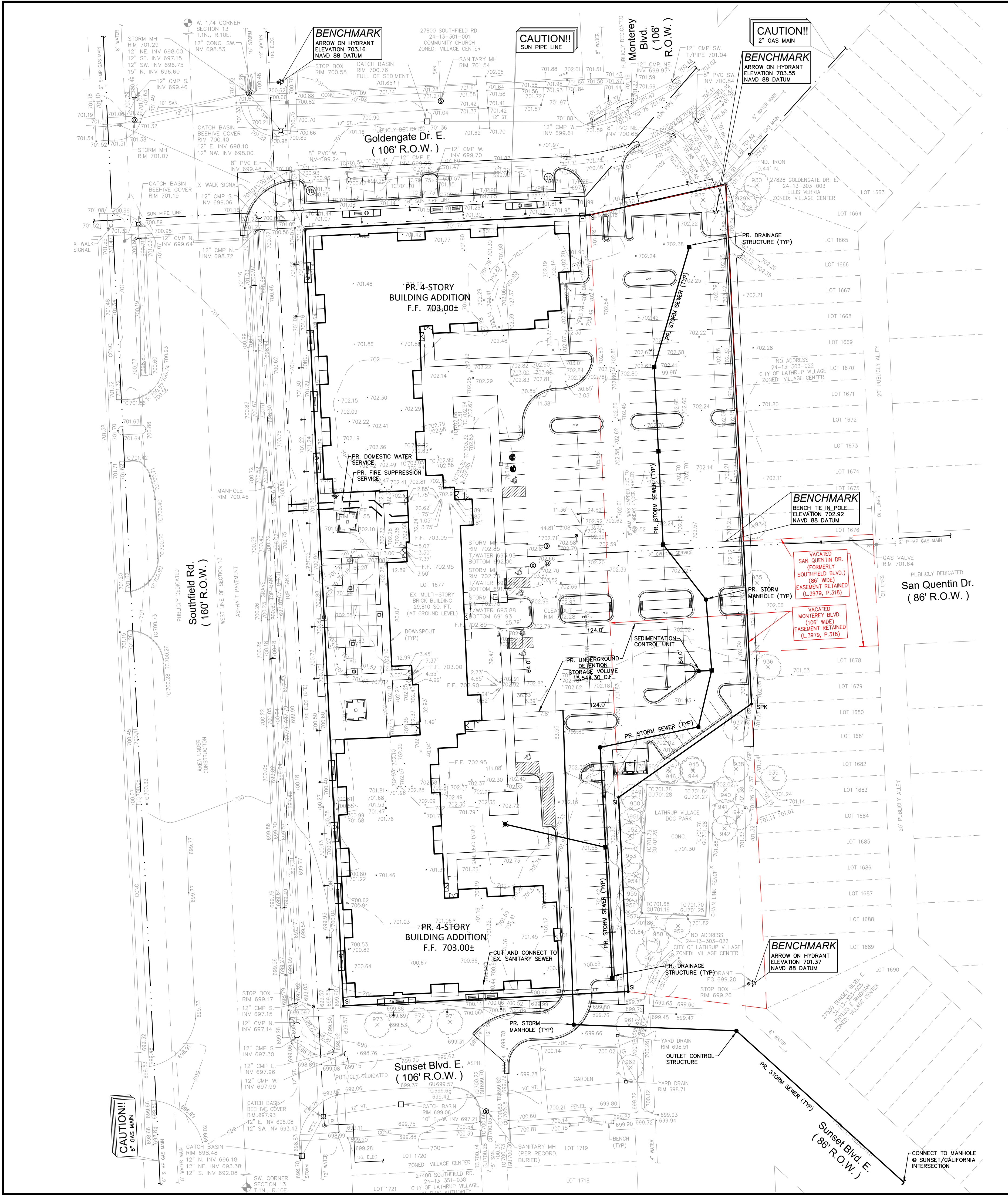
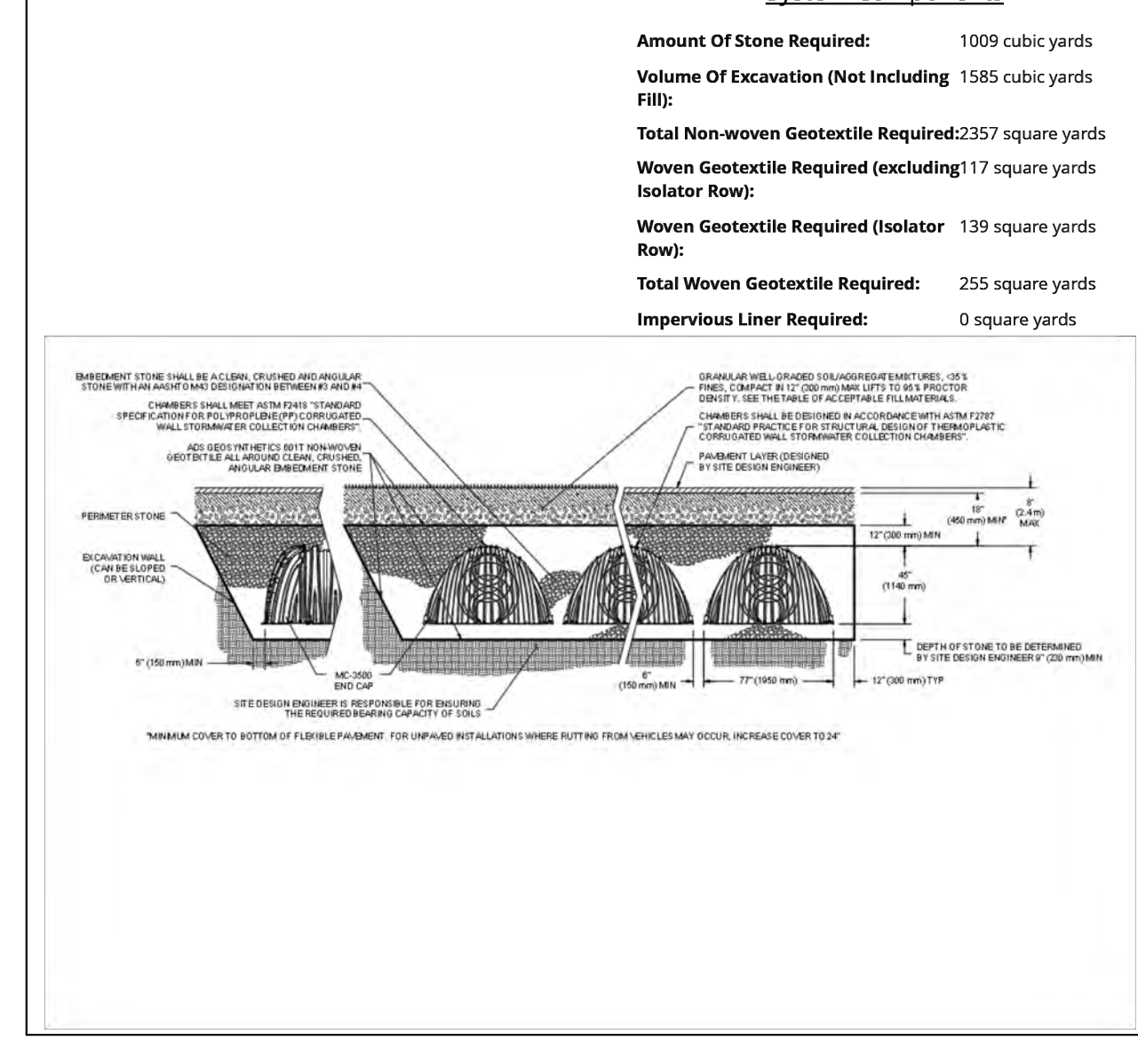
Name of Project:	Name
Location of Project:	Location
NFE Project No.:	9999-00
Contributing Acreage "A":	4.07 ac
Weighted Runoff Coefficient "C":	0.80
Time of Concentration "Tc":	10.00 min
1. Calculate Required Water Quality Volume (Vwq) (1" Rainfall Event)	
Vwq = 3630C(A)	11,819 cft
2. Calculate Required Water Quality Rate (Qwq)	
Qwq = (C(A)30.20/(Tc+9.17))^0.81	8.99 cfs
3. Calculate Required Channel Protection Volume (Vcp-r) (1.3" Rainfall Event)	
Vcp-r = 4719C(A)	15,365 cft
4. Calculate Required Extended Detention Volume (Ved) (1.9" Rainfall Event)	
Ved = 6897C(A)	22,457 cft
5. Calculate Extended Detention Outlet Rate (Qed) (48 hour discharge)	
Qed = Ved / [(48 hr)(60 min)(60 sec)] = Ved/(172800)	0.13 cfs
6. Calculate 100-year Rainfall Intensity (I100)	
I100 = 83.3/(Tc+9.17)^0.81	7.62 in/hr
7. Calculate 100-year Storm Inlet Rate (Q100-in)	
Q100-in = (C)(I100)(A)	24.80 cfs
8. Determine the Variable Release Rate (Qvrr)	
Qvrr = 1.1055*(0.206^LN(A))	0.82 cfs/ac
9. Calculate Allowable 100-year Storm Outlet Rate (Q100P)	
Q100P = (Qvrr)(A)	N/A cfs/ac
10. Calculate Storage Curve Factor (R)	
R = 0.206*(0.15)(LN(Q100P/Q100-in))	0.508
11. Calculate Required 100-year Storm Volume in (V100R)	
V100R = 18,585C(A)	61,815 cft
12. Calculate 100-year Storm Detention Storage Volume (V100D)	
V100D = (V100R)(R)	31,371 cft
Vsp(Lore)H	0 cft
TOTAL DETENTION VOLUME REQUIRED:	31,371 cft

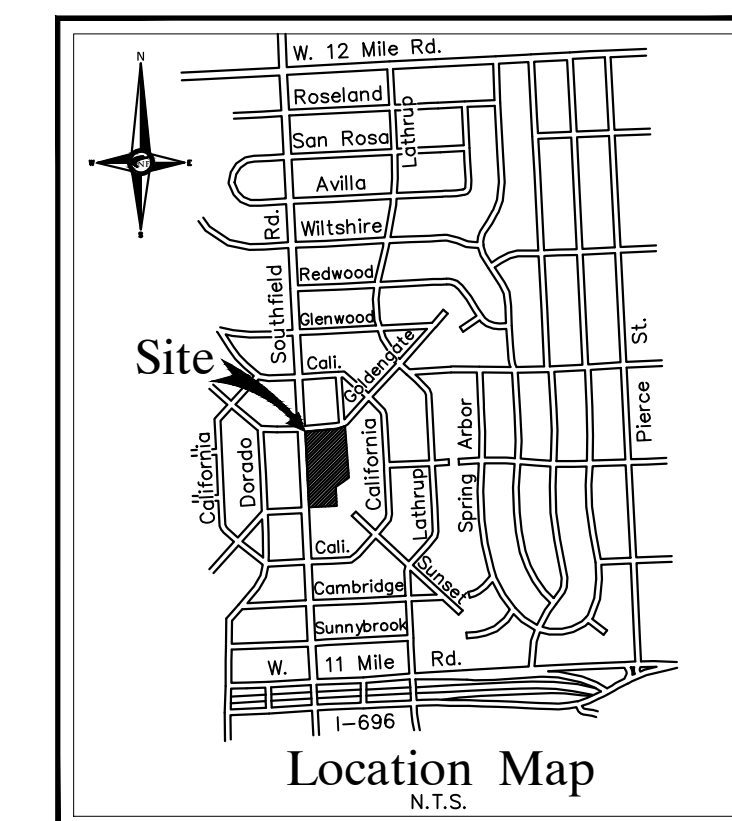
PROVIDED DETENTION VOLUME CALCULATIONS
 Circular Underground Detention System

PIPE STORAGE VOLUME	
Total Linear Feet of Proposed U.G. Detention Pipe	1,225 ft
Proposed Pipe Diameter	48 in
Proposed Pipe Cross-Sectional Area	12.57 sq ft
Total Storage Provided in Pipe	15,394 cft
STONE TRENCH STORAGE VOLUME	
Proposed Porous Stone Trench Width	0.00 ft
Proposed Porous Stone Trench Height (Above Pipe Invert)	0.00 ft
Cross-Sectional Area of Trench	0.00 sq ft
Subtract Pipe Cross-Sectional Area	-12.57 sq ft
Net Cross-Sectional Porous Stone Trench Area	-12.57 sq ft
Minimum Stone Trench Backfill Porosity (%)	0%
Effective Storage Provided in Trench Backfill Cross-Section	0.00 sq ft
Total Storage Provided in Porous Stone Trench	0 cft
TOTAL U.G. DETENTION VOLUME PROVIDED	15,394 cft

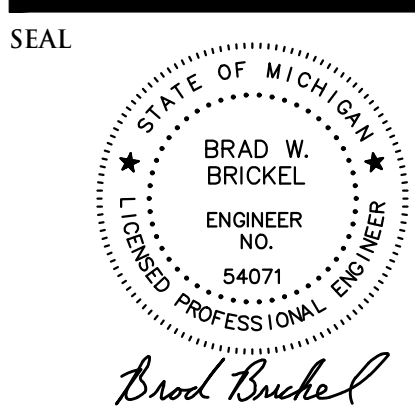
ADS

User Inputs	Results
Chamber Model:	MC-3500
Outlet Control Structure:	Yes
Project Name:	
Engineer:	N/A
Project Location:	
Measurement Type:	Imperial
Required Storage Volume:	15500 cubic ft.
Stone Porosity:	0%
Stone Foundation Depth:	9 in.
Stone Above Chambers:	12 in.
Design Constraint Dimensions:	(70 ft. x 130 ft.)
	System Volume and Bed Size
Installed Storage Volume:	15544.30 cubic ft.
Storage Volume Per Chamber:	109.90 cubic ft.
Number of Chambers Required:	139
Number of End Caps Required:	18
Chamber Rows:	9
Maximum Length:	124.55 ft.
Maximum Width:	64.35 ft.
Approx. Bed Size Required:	7776.08 square ft.
Average Cover Over Chambers:	N/A.
	System Components
Amount of Stone Required:	1009 cubic yards
Volume of Excavation (Not Including) 1585 cubic yards Fill):	
Total Non-woven Geotextile Required:	2357 square yards
Woven Geotextile Required (excluding 17 square yards Isolator Row):	
Woven Geotextile Required (Isolator Row):	139 square yards
Total Woven Geotextile Required:	255 square yards
Impervious Liner Required:	0 square yards





SEAL



PROJECT
27700 Southfield Road
Lathrup Village, MI 48076

CLIENT
The Surnow Company

Contact: Sam Surnow
Phone: 248.865.3000 x 102
Email: sam@surnow.com

PROJECT LOCATION
Part of the SW 1/4
of Section 13
T.1N., R.10E.,
City of Lathrup Village,
Oakland County, Michigan

SHEET
Soil Erosion Control Plan



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DESIGNED BY:
A. Eizember
APPROVED BY:
B. Brickel
DATE:
October 17, 2024
SCALE: 1" = 40'
NFE JOB NO. SHEET NO.
O129 SP08

SOIL EROSION CONTROL - SEQUENCE OF OPERATION (NEW CONSTRUCTION)

- INSTALL CRUSHED CONCRETE ACCESS DRIVE AND TEMPORARY CULVERTS AT THE SITE ENTRANCE AS INDICATED ON THE PLANS.
- INSTALL SILT FENCE OR SIMILAR APPROVED SILT BARRIER ALONG PROPERTY LINES AND AROUND SENSITIVE NATURAL FEATURES AS INDICATED ON THE PLANS.
- EXCAVATE A SHALLOW SWALE/DITCH AROUND PERIMETER OF SITE. GRADE THE TEMPORARY SWALE TO AN EXISTING DRAINAGE FACILITY. PLACE OUTLET FILTER IN EXISTING UPSTREAM STORM SEWER FACILITIES.
- IF INDICATED ON CONSTRUCTION PLANS, SEDIMENTATION BASINS, DETENTION POND, ETC., SHALL BE CONSTRUCTED PRIOR TO THE INSTALLATION OF ANY OTHER WORK.
- STRIP EXISTING TOPSOIL, VEGETATION AND ORGANIC MATTER FROM BUILDING PAD AND PARKING AREAS. COMMENCE LAND BALANCE AND MASS GRADING OPERATIONS. MAINTAIN A MINIMUM BUFFER OF 15' OF EXISTING VEGETATION WHEREVER POSSIBLE AROUND SITE PERIMETER. STOCK PILES SHOULD BE LOCATED AWAY FROM EXISTING DRAINAGE FACILITIES.
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- COMMENCE FINAL GRADING AND TRIMMING OPERATIONS. PREPARE SUBGRADE FOR INSTALLATION OF PROPOSED PAVEMENT.
- SEED AND MULCH ALL DISTURBED SITE AREAS AND INSTALLED SITE LANDSCAPING.
- REMOVE CONSTRUCTION DEBRIS AND JET VAC NEWLY INSTALLED STORM SEWER SYSTEM AS REQUIRED BY THE MUNICIPALITY.
- REMOVE ALL REMAINING TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ONCE PERMANENT MEASURES ARE ESTABLISHED.
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- VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.
- ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

NO.	DESCRIPTION	DATE
1.	INSTALL PERIMETER FILTER FABRIC FENCING AND STONE FILTER WHERE REQUIRED.	MARCH 2025
2.	MASS GRADE SITE.	MARCH 2025
3.	COMMENCE UNDERGROUND UTILITY WORK.	MAY 2025
4.	INSTALL INLET FILTERS ON PROPOSED DRAINAGE STRUCTURES.	MAY 2025
5.	FILL IN SEDIMENTATION TRAPS AND PAVE SITE.	JULY 2025
6.	COMPLETE ALL BUILDINGS AND LANDSCAPE ACTIVITY.	JULY 2025
7.	JET VAC NEW STORM SEWER SYSTEM AS REQUIRED.	NOVEMBER 2025
8.	REMOVE ALL TEMPORARY SOIL EROSION MEASURES.	NOVEMBER 2025

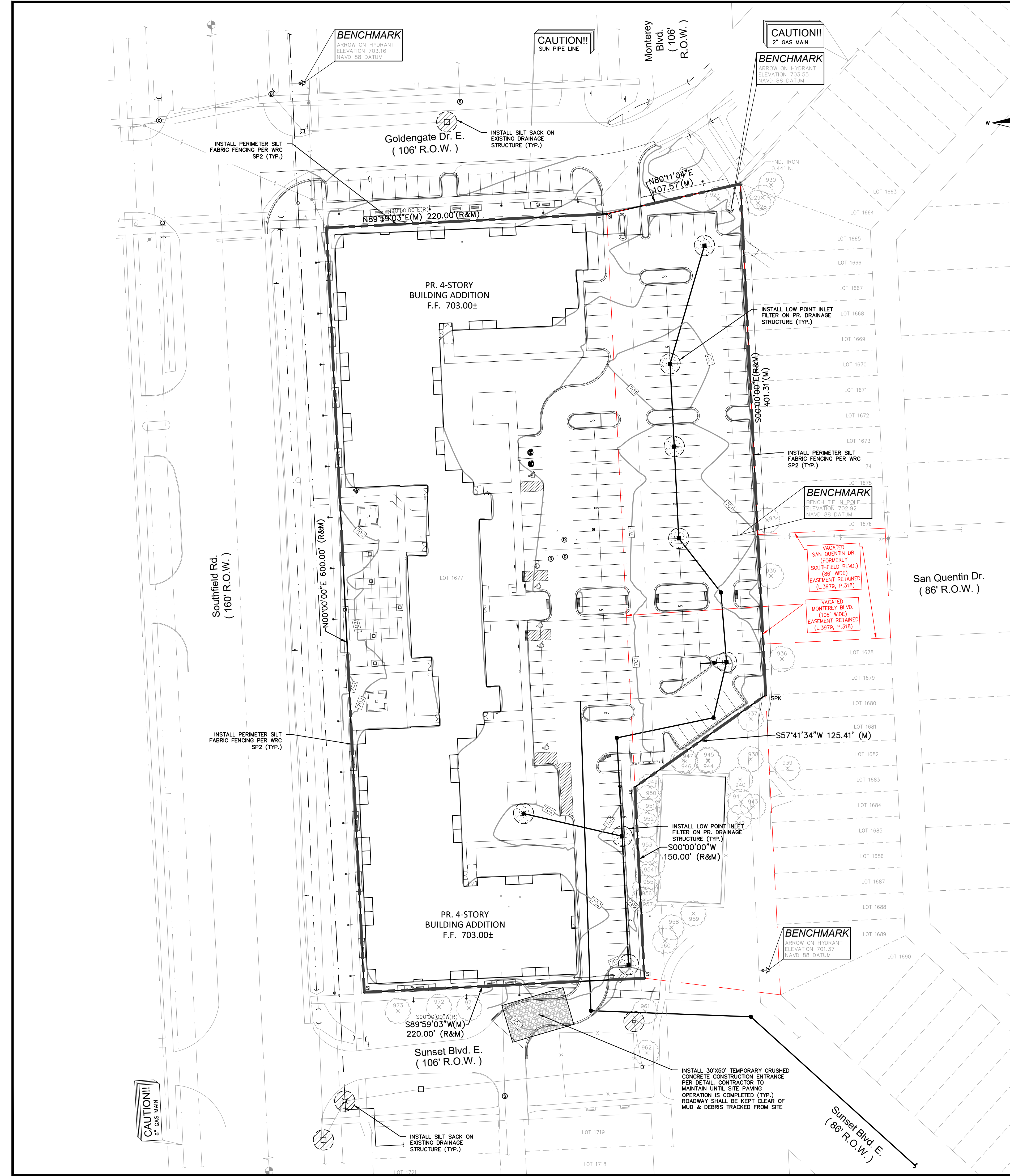
ESTIMATED QUANTITIES

DESCRIPTION	QUANTITY	UNITS
SILT FABRIC FENCING	1,695	L.F.
INLET FILTER	6	E.A.
SILT SACK OR EQUAL	4	E.A.

LEGEND

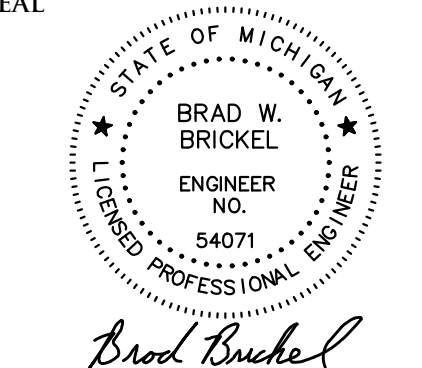
- INDICATES LIMITS OF SILT FABRIC FENCE
- INDICATES LIMITS OF DRAINAGE DISTRICT AREA
- INDICATES LIMITS OF SOIL DISRUPTION
- INDICATES LOW POINT INLET FILTER OR PROPOSED DRAINAGE STRUCTURE
- INDICATES SILT SACK OR EQUAL ON EXISTING DRAINAGE STRUCTURE
- INDICATES DRAINAGE DISTRICT AREA

AREA A
0.00 ACRE
C=0.95



US00-2000-PDW-0000-FILES\0728\0728\0728\Site Plan\0129_SSP.dwg, 10/17/2024, 8:51 AM

SEAL



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Lathrup Village, MI 48076

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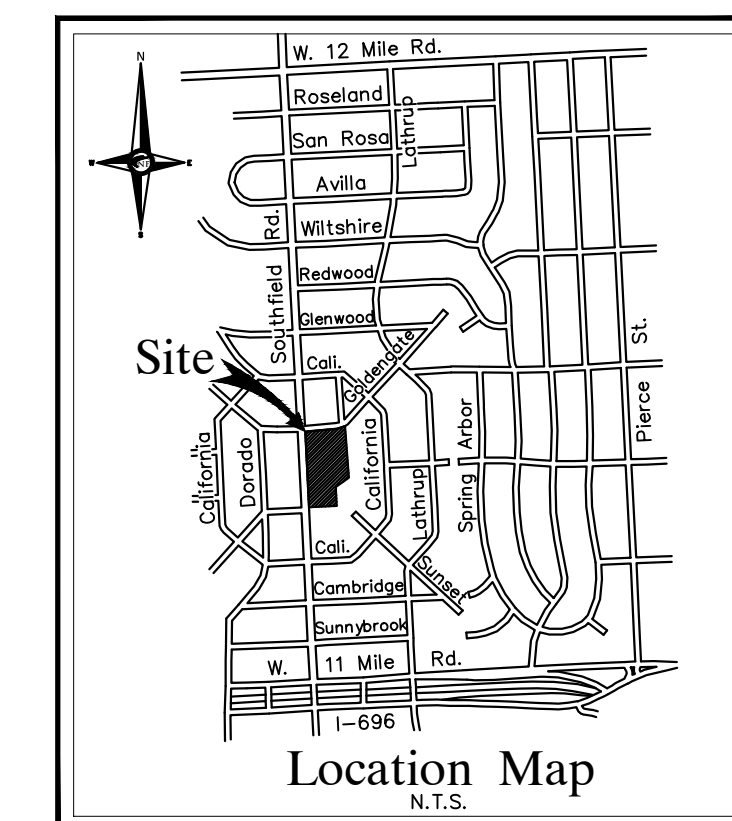
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APPROVED BY:
B. Brickel

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SCALE: 1" = 40'
40 20 0 20 40 60

NFE JOB NO. SHEET NO.
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- PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
- VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.
- ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

NO.	DESCRIPTION	DATE
1.	INSTALL PERIMETER FILTER FABRIC FENCING AND STONE FILTER WHERE REQUIRED.	MARCH 2025
2.	MASS GRADE SITE.	MARCH 2025
3.	COMMENCE UNDERGROUND UTILITY WORK.	MAY 2025
4.	INSTALL INLET FILTERS ON PROPOSED DRAINAGE STRUCTURES.	MAY 2025
5.	FILL IN SEDIMENTATION TRAPS AND PAVE SITE.	JULY 2025
6.	COMPLETE ALL BUILDINGS AND LANDSCAPE ACTIVITY.	JULY 2025
7.	JET VAC NEW STORM SEWER SYSTEM AS REQUIRED.	NOVEMBER 2025
8.	REMOVE ALL TEMPORARY SOIL EROSION MEASURES.	NOVEMBER 2025

ESTIMATED QUANTITIES

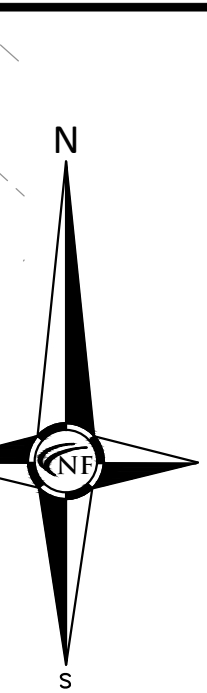
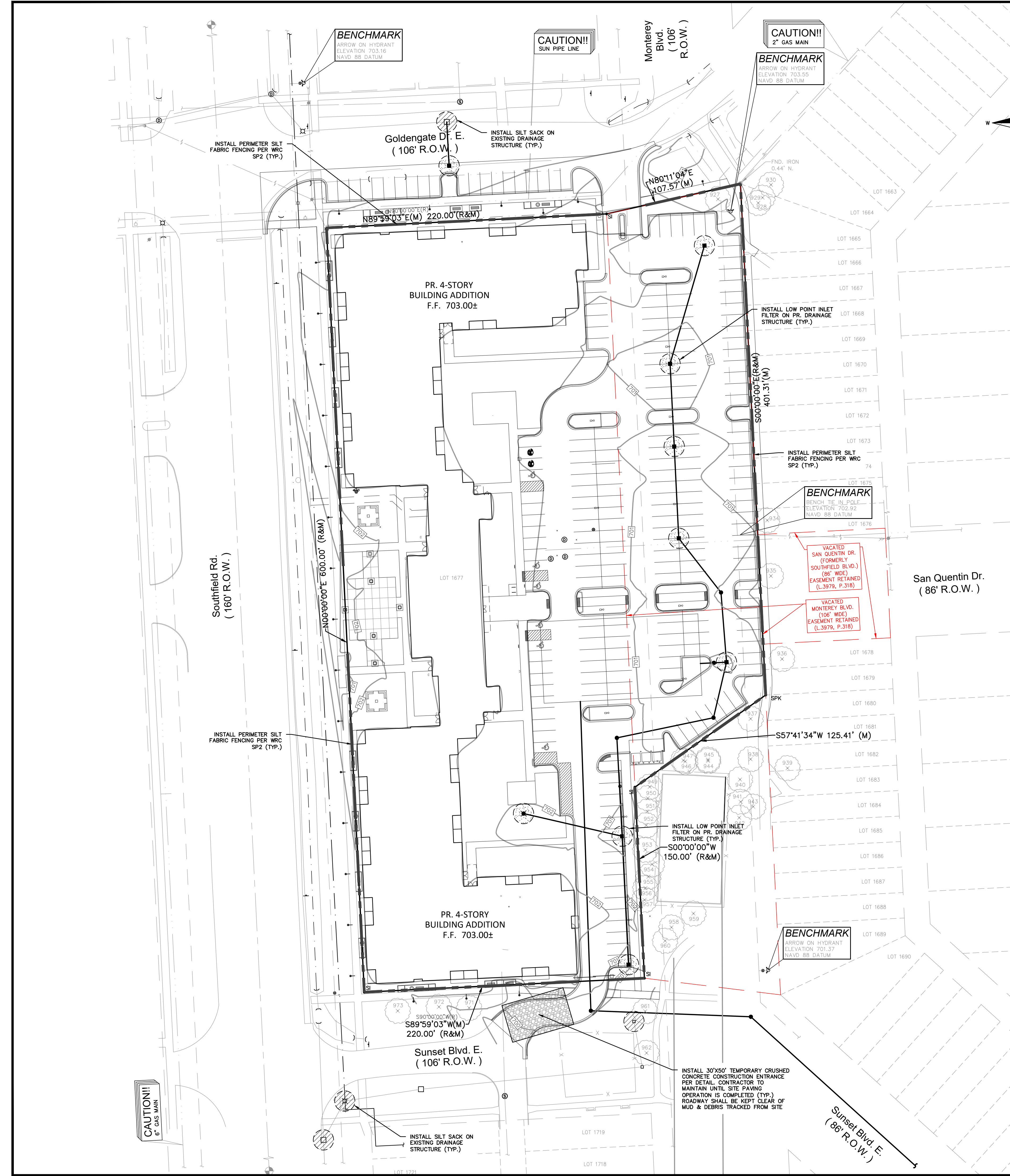
SOIL EROSION

DESCRIPTION	QUANTITY	UNITS
SILT FABRIC FENCING	1,695	L.F.
INLET FILTER	9	E.A.
SILT SACK OR EQUAL	4	E.A.

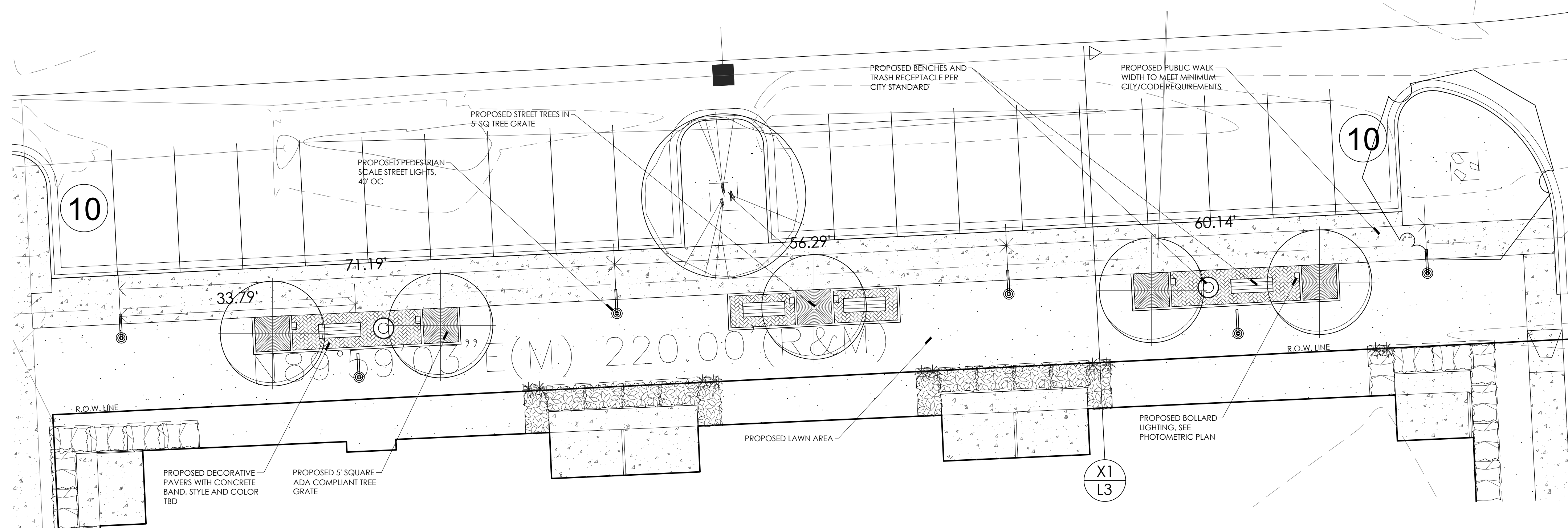
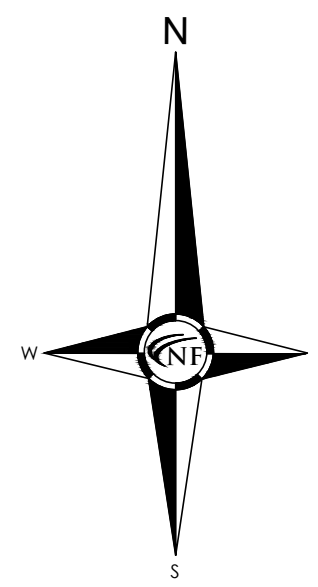
LEGEND

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

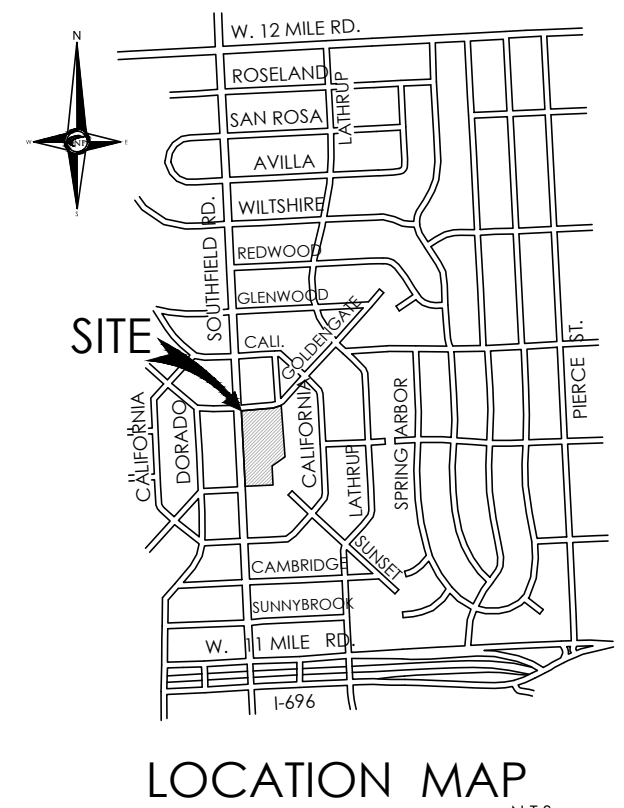
AREA A
0.00 ACRE
C=0.95



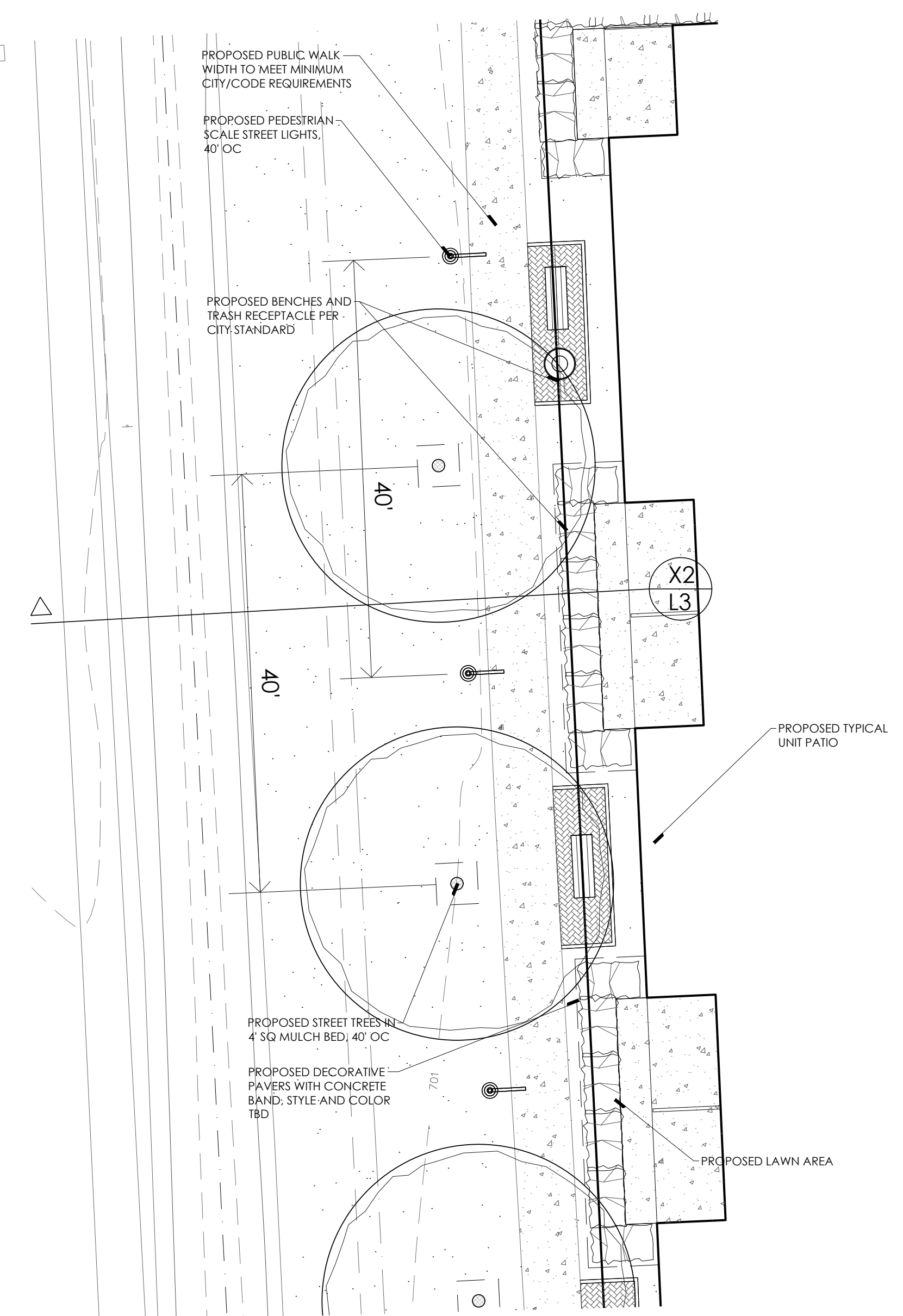
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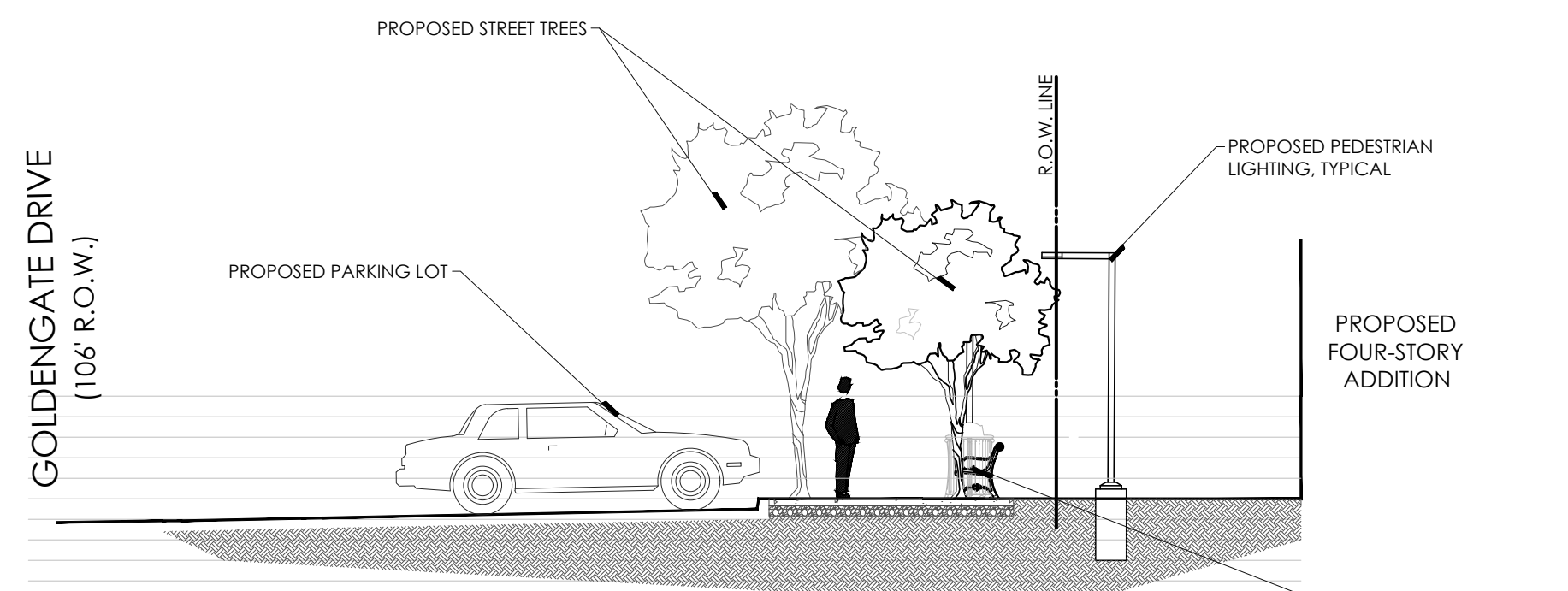
PARTIAL GOLDENGATE DRIVE STREETSCAPE NTS



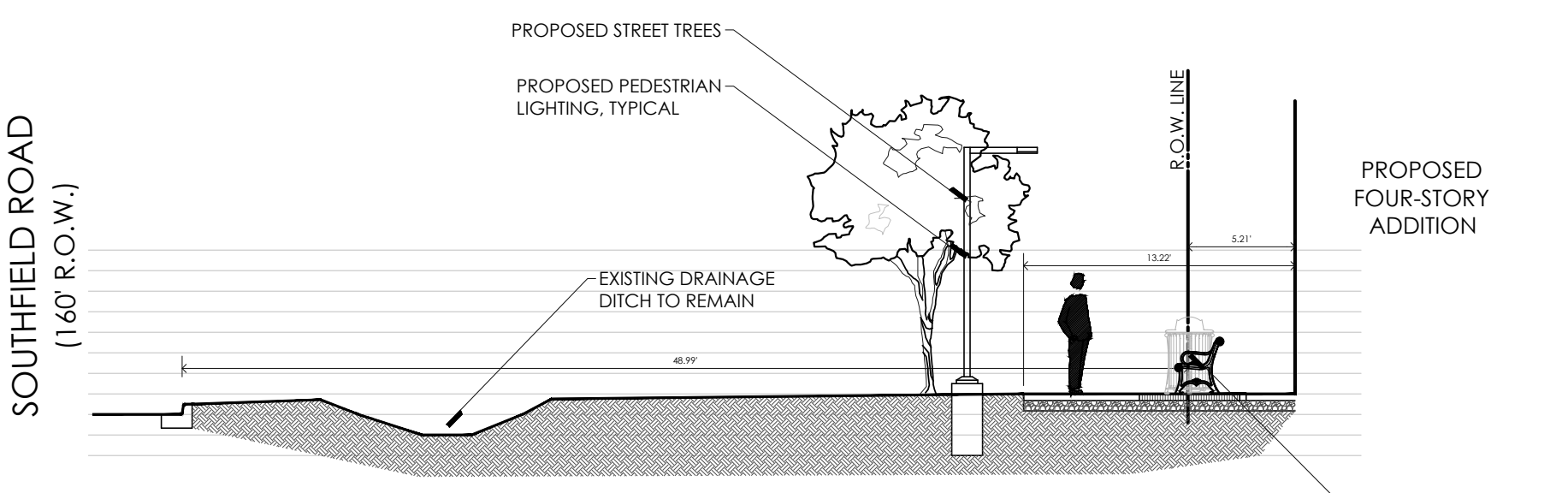
LOCATION MAP N.T.S.



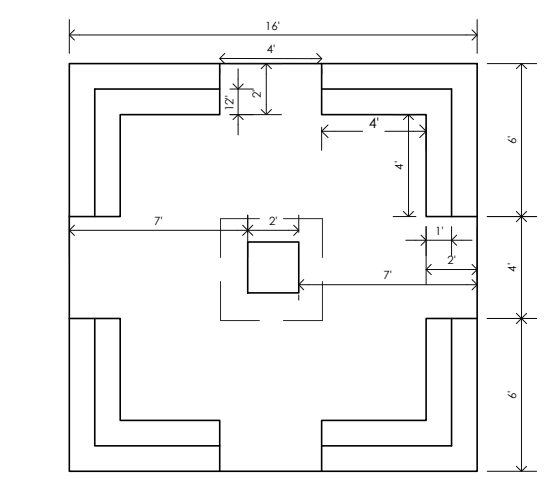
PARTIAL SOUTHFIELD ROAD STREETSCAPE NTS



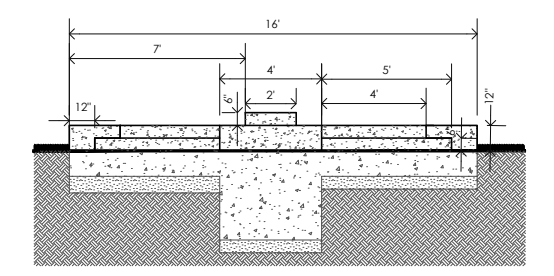
X1 GOLDENGATE STREETScape SECTION NTS



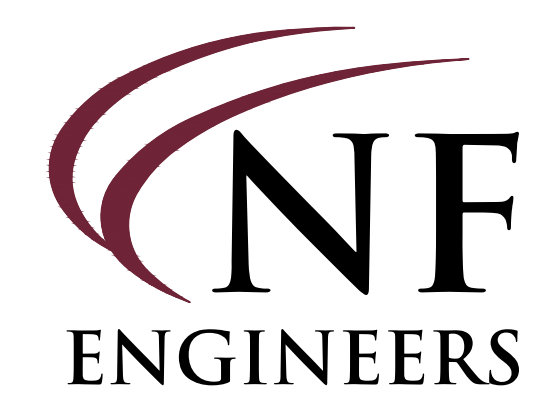
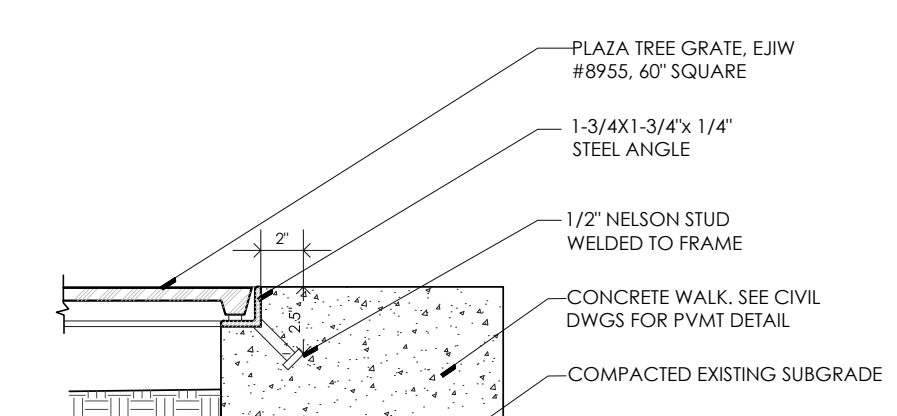
X2 SOUTHFIELD STREETScape SECTION NTS



ART INSTALLATION BASE NTS

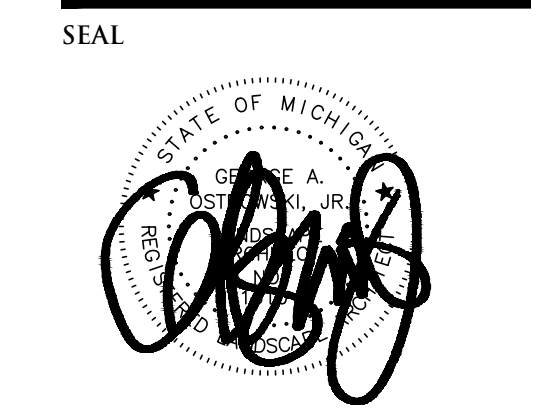


TREE GRATE INSTALLATION NTS



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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



PROJECT
27700 Southfield Road
Lathrup Village, MI 48076

CLIENT
The Surnow Company

Contact: Sam Surnow
Phone: 248.865.3000 x 102
Email: sam@surnow.com

PROJECT LOCATION
Part of the SW 1/4
of Section 13
T.1N., R.10E.,
City of Lathrup Village,
Oakland County, Michigan

SHEET
Landscape Details



REVISIONS

10/17/2024	ISSUED FOR SITE PLAN REVIEW
01/10/2025	REVISED PER CITY REVIEW
03/12/2025	REVISED PER CLIENT

DRAWN BY:
G. Ostrowski
DESIGNED BY:
G. Ostrowski
APPROVED BY:
G. Ostrowski
DATE:
May 22, 2024

SCALE: VARIES
40 20 0 20 40 60

NFE JOB NO. SHEET NO.
0129 **L3**

PROPOSED BUILDING ADDITION FOR:

27700 SOUTHFIELD ROAD, LATHRUP VILLAGE

BIDDISON

ARCHITECTURE

320 MARTIN ST. LL 10 BIRMINGHAM MI 48009
248.554.9500

CONDITIONS OF WORK

CONSTRUCTION COORDINATION:

1. ALL CONTRACTORS SHALL REVIEW ALL DRAWINGS & ARE RESPONSIBLE FOR A COMPLETE REVIEW & SITE VISIT. ITEMS AFFECTING ALL TRADES ARE PLACED THROUGHOUT SET & NO "EXTRAS" FOR MISSED ITEMS IN OTHER SECTIONS WILL BE PERMITTED. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT OF ANY AMBIGUITY, INCONSISTENCY OR ERRORS WHICH THEY DISCOVER UPON EXAMINATION OF DOCUMENTS, THE SITE OR LOCAL CONDITIONS.
2. ANY CONTRACTOR OR SUBCONTRACTOR BY SUBMITTING A BID WARRANTS THAT HE HAS VISITED THE SITE AND IS AWARE OF ANY AND ALL SITE CONDITIONS AFFECTING HIS BID.
3. THE CONTRACTOR BY COMMENCING WORK ACCEPTS THE CONDITIONS OF THE SITE & THE COMPLETENESS OF CONTRACT DOCUMENTS.
4. FIELD VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT. DO NOT SCALE DRAWINGS USE FIGURED DIMENSIONS ONLY.
5. ANY MATERIAL OR LABOR NEITHER SHOWN ON THE DRAWINGS NOR SPECIFIED, BUT WHICH IS OBVIOUSLY NECESSARY TO COMPLETE THE WORK IN A WORKMANLIKE MANNER SHALL BE FURNISHED WITHOUT COST TO THE OWNER.
6. ALL MATERIALS FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR SHALL BE FREE FROM DEFECTS. ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF (1) YEAR FROM DATE OF ACCEPTANCE OF WORK. DURING THIS PERIOD THE GENERAL CONTRACTOR SHALL CORRECT ANY PROBLEMS DUE TO DEFECTIVE MATERIALS OR FAULTY WORKMANSHIP AT NO COST TO THE OWNER. ANY PROBLEM THAT OCCURS DURING CONSTRUCTION SHALL IMMEDIATELY BE CORRECTED TO THE SATISFACTION OF THE OWNER.
7. NO SUBSTITUTIONS OF SPECIFIED MATERIAL OR EQUIPMENT WILL BE ACCEPTED UNLESS WRITTEN REQUEST FOR APPROVAL HAS BEEN RECEIVED BY THE ARCHITECT AND CONTRACTOR HAS RECEIVED WRITTEN APPROVAL FROM ARCHITECT.
8. DURING AND AT THE COMPLETION OF THE CONTRACTOR'S DAILY WORK, CONTRACTOR IS RESPONSIBLE FOR THE CLEANING UP AND REMOVAL OF ALL RUBBISH AND DEBRIS BEFORE LEAVING THE PROJECT JOB SITE.

PERMITS & SAFETY:

1. GENERAL CONTRACTOR SHALL APPLY & SUBMIT FOR BUILDING PERMIT.
2. GENERAL CONTRACTOR SHALL OBTAIN "ALL RISK" INSURANCE AND ALL CUSTOMARY STATUTORY INSURANCE FOR COMPREHENSIVE GENERAL LIABILITY, ETC. AS REQUIRED BY OWNER/LANDLORD.
3. GENERAL CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OF WORK, MATERIALS, FIXTURES, ETC. IN LEASED SPACE FROM LOSS OR DAMAGE FROM FIRE, THEFT OR VANDALISM.
4. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA). THE FOLLOWING ARE STRICTLY PROHIBITED WORK PRACTICES.
 - A. ANY COMBUSTIBLE MATERIALS ABOVE FINISHED CEILING OR IN ANY NON-SPRINKLED LOCATIONS.
 - B. IMPOSING ANY STRUCTURAL LOAD, TEMPORARY OR PERMANENT ON ANY PART OF THE LANDLORD'S WORK OR STRUCTURE WITHOUT PRIOR WRITTEN APPROVAL.
 - C. CUTTING ANY HOLES IN LANDLORD'S EXISTING FLOOR SLABS, WALLS OR ROOF WITHOUT PROPER APPROVAL'S PROPER APPROVALS FROM LANDLORD. BEFORE STARTING ANY UNDERSLAB WORK CONTRACTORS MUST CHECK WITH THE LANDLORD OR SUPERINTENDENT OF THE LANDLORD'S GENERAL CONTRACTOR TO DETERMINE IF ANY COMMON UTILITY OR OTHER TENANT UTILITY LINES EXIST WITHIN THE SPACE.

CODE COMPLIANCE:

1. WORK INDICATED IS TO BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES.
2. FIRE EXTINGUISHERS SHALL BE PROVIDED BY G.C. AND INSTALLED PER THE FIRE MARSHALL'S INSTRUCTIONS.
3. ALL WALL FINISHES TO MEET CLASS III FLAME SPREAD RATINGS IN ACCORDANCE WITH MBC-2015 CHAPTER 8.
4. INTERIOR FINISHES IN EXIT ACCESS CORRIDORS, OTHER EXIT WAYS, ROOMS, AND ENCLOSED SPACES IN USE GROUPS "B" AND "S" IN SPRINKLED BUILDINGS ARE REQUIRED TO HAVE AT LEAST A CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPED 0-450; RATING AS LISTED IN THE 2015 MICHIGAN BUILDING CODE.
5. SAFETY GLAZING MUST HAVE PERMANENT IDENTIFICATION IN ACCORDANCE WITH THE 2015 MICHIGAN BUILDING CODE.
6. ALL REQUIREMENTS OF THE MICHIGAN BARRIER FREE ACT & THE AMERICAN'S WITH DISABILITIES ACT SHALL BE MAINTAINED TO COMPLY WITH ICC/A117.1-2009.
7. ALL OFFICE FURNITURE & EQUIPMENT TO BE PROVIDED BY TENANT. SHOWN FOR LAYOUT PURPOSES ONLY. TO COMPLY WITH ADA-ICC/A117.1-2009 (TYP.) REQUIREMENTS, A MINIMUM OF 5% BUT NOT LESS THAN (1) OF THE LUNCHROOM TABLES AND EMPLOYEE WORKSTATIONS (CUBICLES) SHALL BE ACCESSIBLE. ACCESSIBLE TABLE AND WORKSTATION TOPS SHALL BE 28" MIN. TO 34" MAX. A.F.F. KNEE AND TOE CLEARANCES AS FOLLOWS SHALL ALSO APPLY- TOE: 4" MIN. HIGH, 17" MIN. TO 25" MAX. DEPTH, AND 30" MIN. WIDE. KNEE: 27" MIN. HIGH, 11" DEEP @ 9" HIGH TO 8" DEEP @ 27" HIGH, AND 30" MIN. WIDE.
8. ALL ENTRANCE AND EXIT DOORS SHALL HAVE BARRIER FREE ACCESSIBILITY TO COMPLY WITH ICC/A117.1-2009.
9. TO COMPLY WITH ADA - ICC/A117.1-2009 (TYP.) REQUIREMENTS, CHANGES IN LEVEL GREATER THAN 1/2" SHALL BE RAMPED AND CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED A MAXIMUM OF 1:2.
10. ALL LUNCHROOM APPLIANCES TO BE PROVIDED BY TENANT. TO COMPLY WITH ADA-ICC/A117.1-2009 (TYP.) REQUIREMENTS, DISHWASHERS MUST FIT UNDER A 34" HIGH (32 1/4" CLEAR UNDER) COUNTERTOP. THE REFRIGERATOR MUST BE A SIDE-BY-SIDE OR BOTTOM FREEZER UNIT, AND ALL MICROWAVE CONTROLS TO BE NO HIGHER THAN 46" A.F.F. TO MEET OBSTRUCTED HIGH SIDE REACH REQUIREMENTS.
11. SIGNAGE INDICATING ACCESSIBILITY PROVISIONS SHALL BE PROVIDED AT EACH DOOR TO AN EXIT DISCHARGE. A TACTILE SIGN STATING EXIT AND COMPLYING WITH ICC/ANSI A117.1-2009 SHALL BE PLACED ADJACENT TO THE DOOR. PLEASE REFER TO SHEET A. 601 FOR ADDITIONAL INFORMATION AND LOCATION.

Consultants

Project data

GOVERNING CODES: 2015 MICHIGAN BUILDING CODE
2021 MICHIGAN PLUMBING CODE
2021 MICHIGAN MECHANICAL CODE
2015 MICHIGAN REHABILITATION CODE
2015 INTERNATIONAL FUEL GAS CODE
MICHIGAN ELECTRICAL CODE, 2017 N.E.C.
W/PART 8 STATE AMENDMENTS
ICC/ANSI A117.1-2015 AND MICHIGAN
BARRIER FREE DESIGN LAW OF PUBLIC
ACT 1 OF 1966 AS AMENDED.
MICHIGAN UNIFORM ENERGY CODE RULES
PART 10 WITH ANSI/ASHRAE/IESNA
STANDARD 90.1-2015
2015 INTERNATIONAL FIRE CODE
NFPA 13 - 2010
NFPA 72 - 2010

BUILDING USE GROUP(S): RESIDENTIAL

SHEET INDEX

T.101	TITLE SHEET
SP.101	ARCHITECTURAL SITE PLAN
SP.102	SITE DETAILS
A.101	FIRST AND SECOND FLOOR PLANS
A.102	THIRD AND FOURTH FLOOR PLANS
A.103	ENLARGED COMMON AREA FLOOR PLANS
A.201	EXTERIOR ELEVATIONS
A.202	EXTERIOR ELEVATIONS
A.203	EXTERIOR ELEVATIONS
A.300	SITE RENDERING
A.301	EXTERIOR RENDERINGS
A.302	EXTERIOR RENDERINGS
A.303	EXTERIOR RENDERINGS
A.304	INTERIOR RENDERINGS
A.305	INTERIOR RENDERINGS
L.201	SITE PHOTOMETRIC STUDY
L.202	SITE LIGHTING FIXTURES

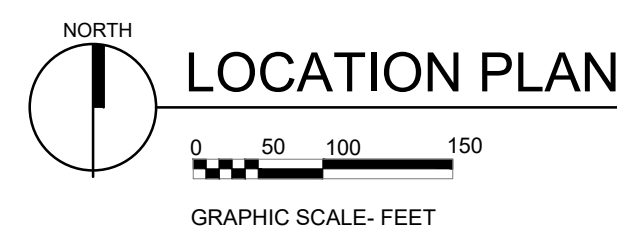
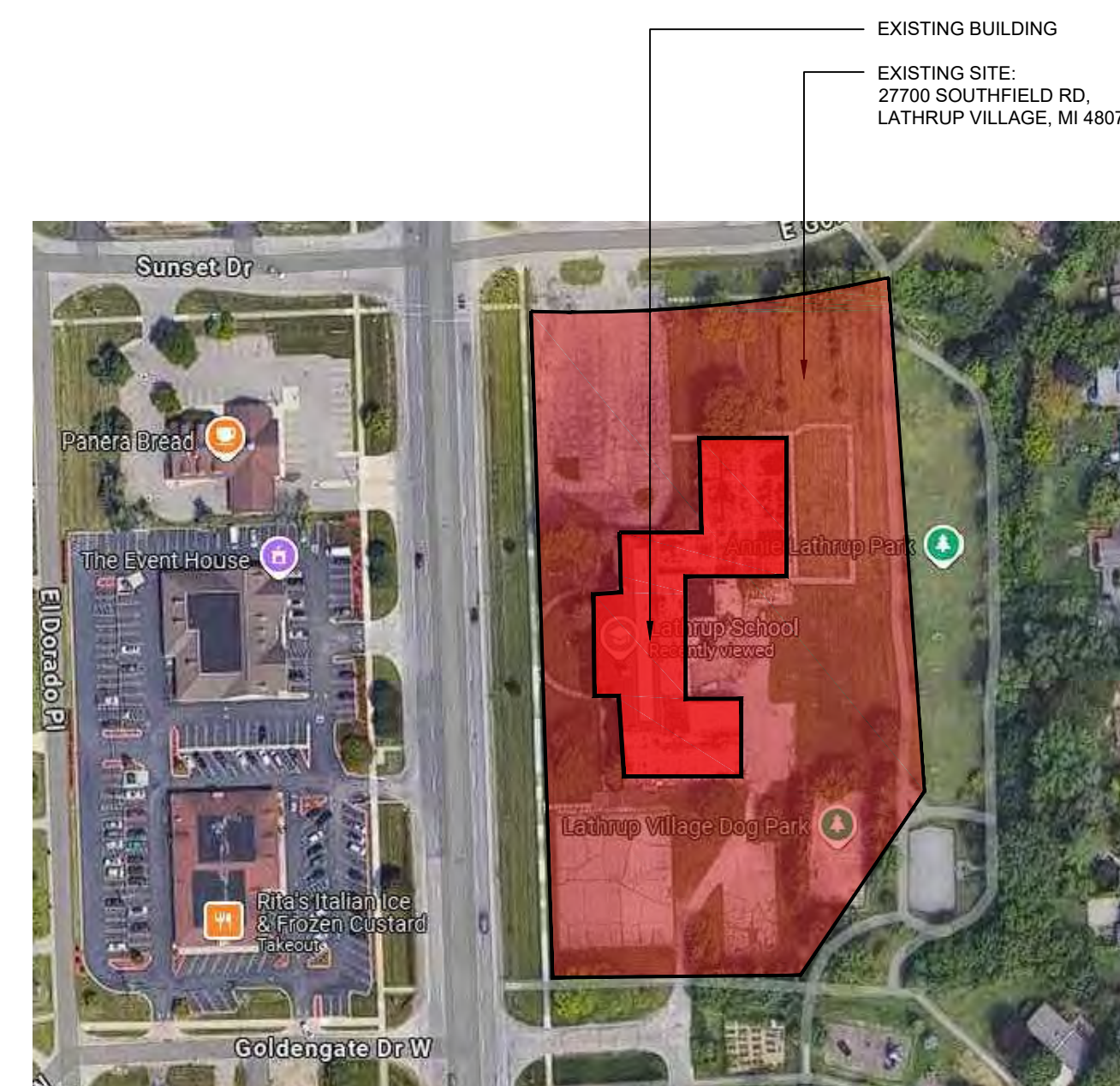
PROJECT ADDRESS

27700 Southfield Road
Lathrup Village, Michigan 48076

Zoned: VC Village Center

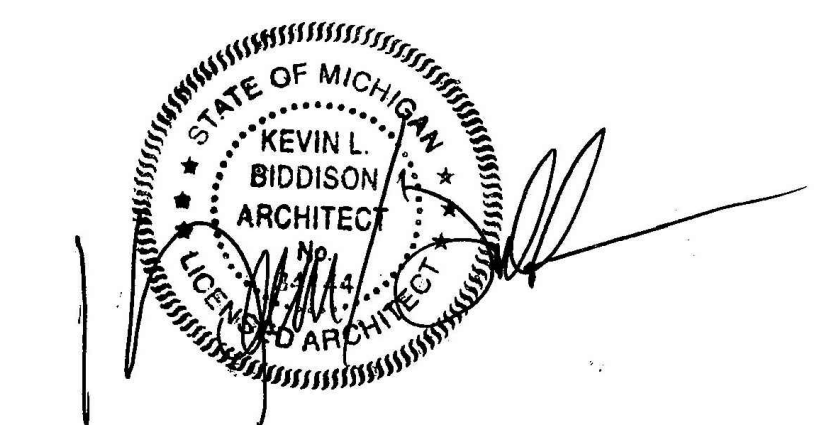
APPLICANT INFORMATION

Akiva Investments LLC
320 Martin St, Suite 100
Birmingham, MI 48009
e. Sam@Surnow.com
p. 248.877.4000



Issued for

SITE PLAN REVIEW	10.18.24
REVISED PER CITY REVIEW	01.10.25
REVISED PER CITY REVIEW	03.31.25

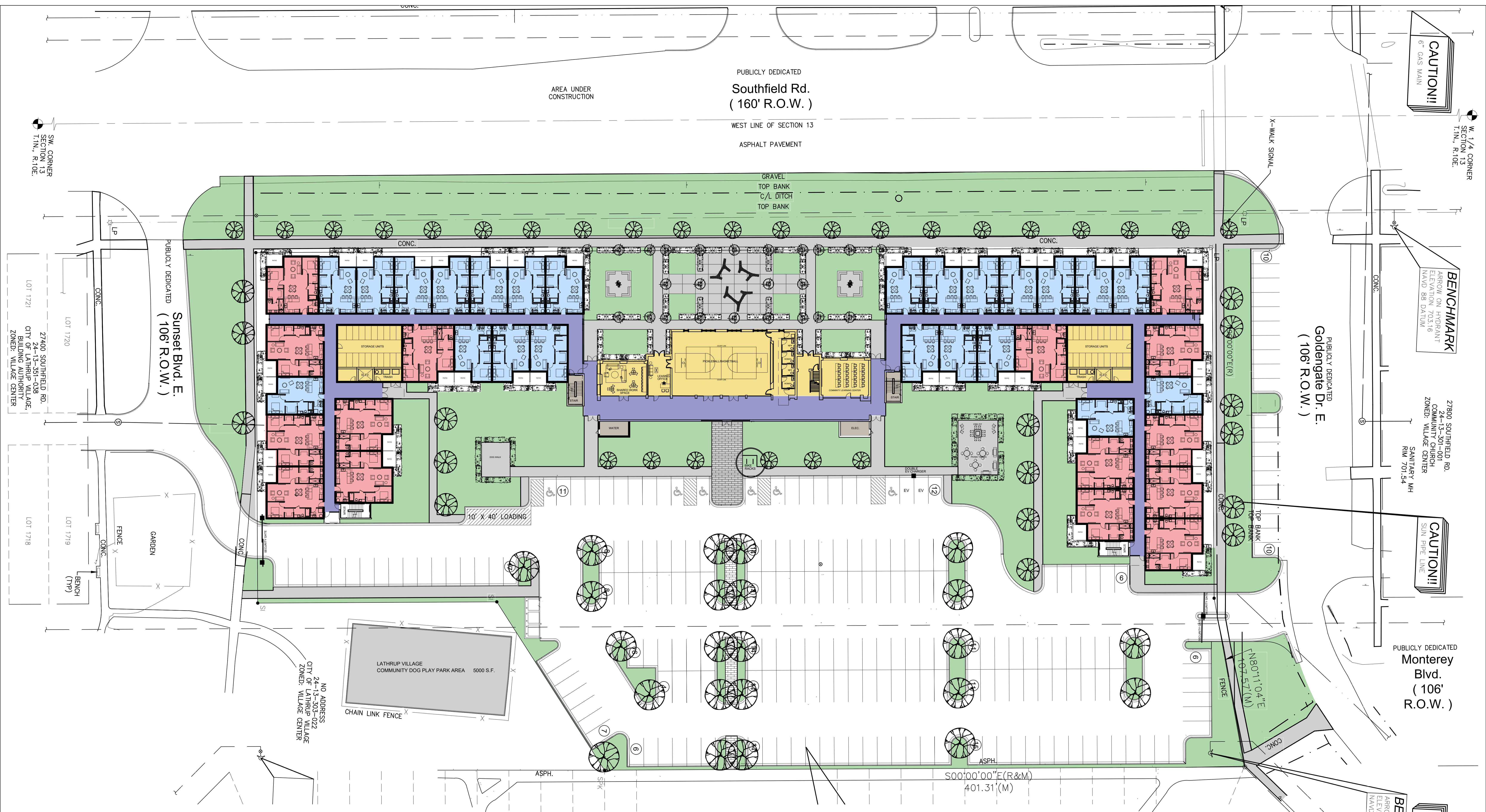


Project no.

2118-24

Sheet no.

T.101



BUILDING AREAS PER FLOOR	
FIRST FLOOR AREA	54,312 s.f. TOTAL
SECOND FLOOR AREA	51,236 s.f. TOTAL
THIRD FLOOR AREA	43,358 s.f. TOTAL
FOURTH FLOOR AREA	41,168 s.f. TOTAL
TOTAL BUILDING AREA	190,074 s.f. TOTAL

UNIT COUNT PER FLOOR					
UNIT TYPE	FLOOR 1	FLOOR 2	FLOOR 3	FLOOR 4	TOTAL
1 BEDROOM	23	23	22	15	83
2 BEDROOM	15	15	15	17	62
				TOTAL	145

FIRST FLOOR/SITE PLAN

PARKING ON SITE: 198 SPACES + 20 SPACES NORTH OFFSITE

TOTAL PARKING TO MEET CITY REQMTS.: 1.5 PER UNIT= 218 SPACES

SW CORNER SECTION 13 T.1N., R.10E.

27400 SOUTHFIELD RD. 24-13-301-001 CITY OF LATHRUP VILLAGE, BUILDING AUTHORITY ZONED: VILLAGE CENTER

LOT 1721 LOT 1720 LOT 1719 LOT 1718

NO ADDRESS 24-13-303-022 CITY OF LATHRUP VILLAGE ZONED: VILLAGE CENTER

AREA UNDER CONSTRUCTION

PUBLICLY DEDICATED Southfield Rd. (160' R.O.W.) WEST LINE OF SECTION 13 ASPHALT PAVEMENT

Sunset Blvd. E. (106' R.O.W.)

Goldengate Dr. E. (106' R.O.W.)

CAUTION!! 6" GAS MAIN

W. 1/4 CORNER SECTION 13 T.1N., R.10E.

BENCHMARK ARROW ON HYDRANT ELEVATION 703.16 NAVD 88 DATUM

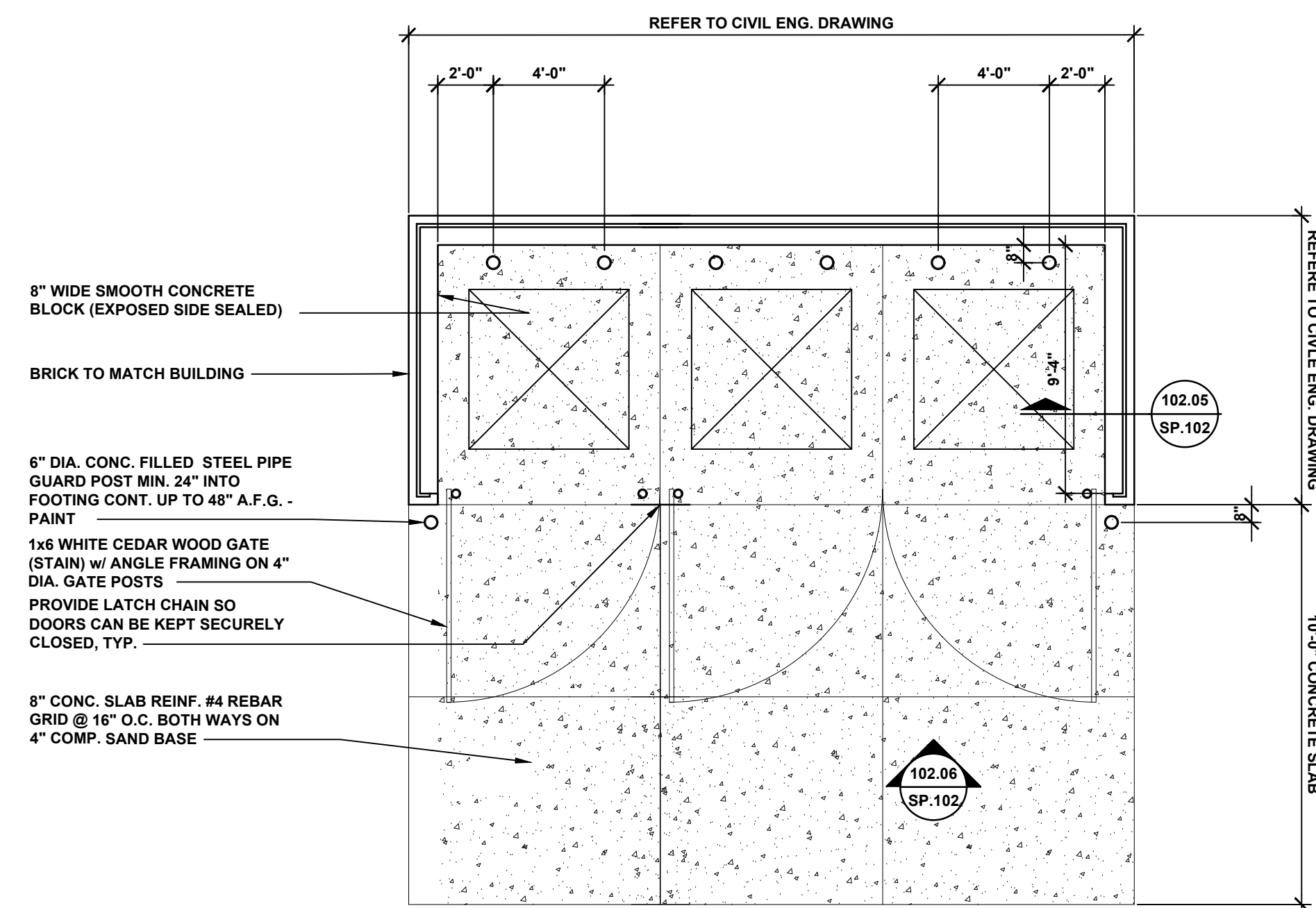
27600 SOUTHFIELD RD. 24-13-301-001 COMMUNITY CHURCH ZONED: VILLAGE CENTER SANITARY MH RIM 701.54

CAUTION!! SUN PIPE LINE

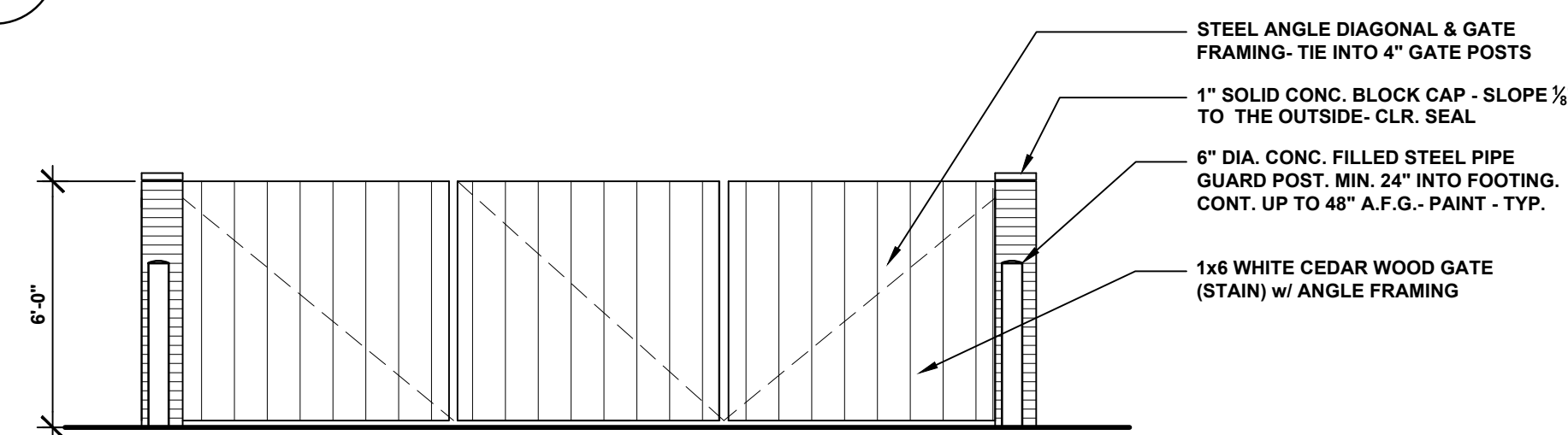
PUBLICLY DEDICATED Monterey Blvd. (106' R.O.W.)

BENCHMARK ARROW ON HYDRANT ELEVATION 703.55 NAVD 88 DATUM

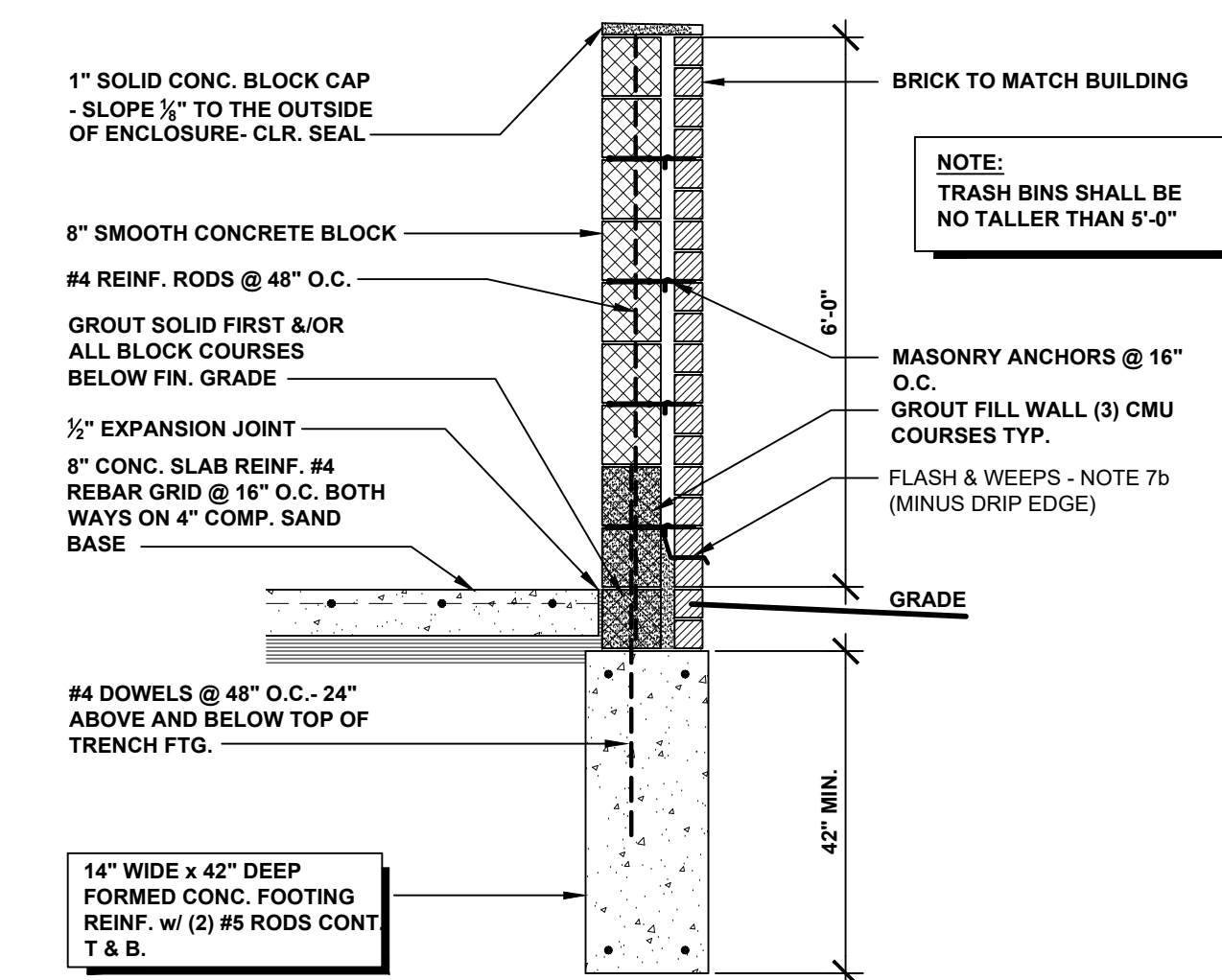
CAUTION!! 2" GAS MAIN



102.07 TRASH ENCLOSURE PLAN
SP.102 NOT TO SCALE



102.06 TRASH ENCLOSURE ELEVATION
SP.102 NOT TO SCALE



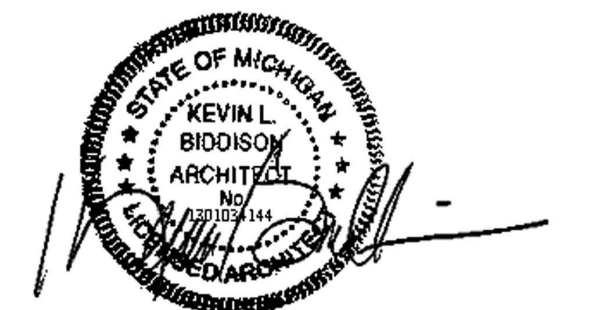
102.05 ENCLOSURE WALL SECTION
SP.102 NOT TO SCALE

PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

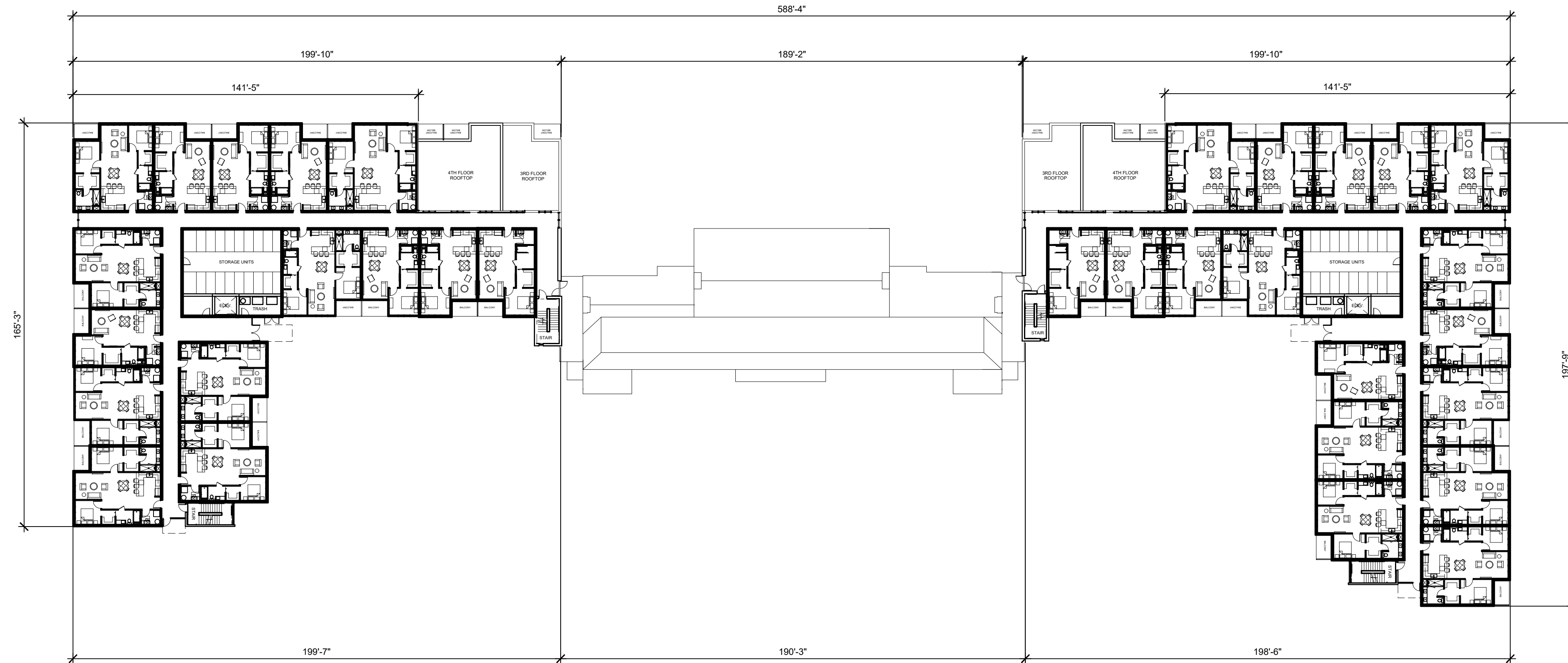
SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
PLANNING COMMISSION 03.31.25

**THIRD AND FOURTH
FLOOR PLANS**

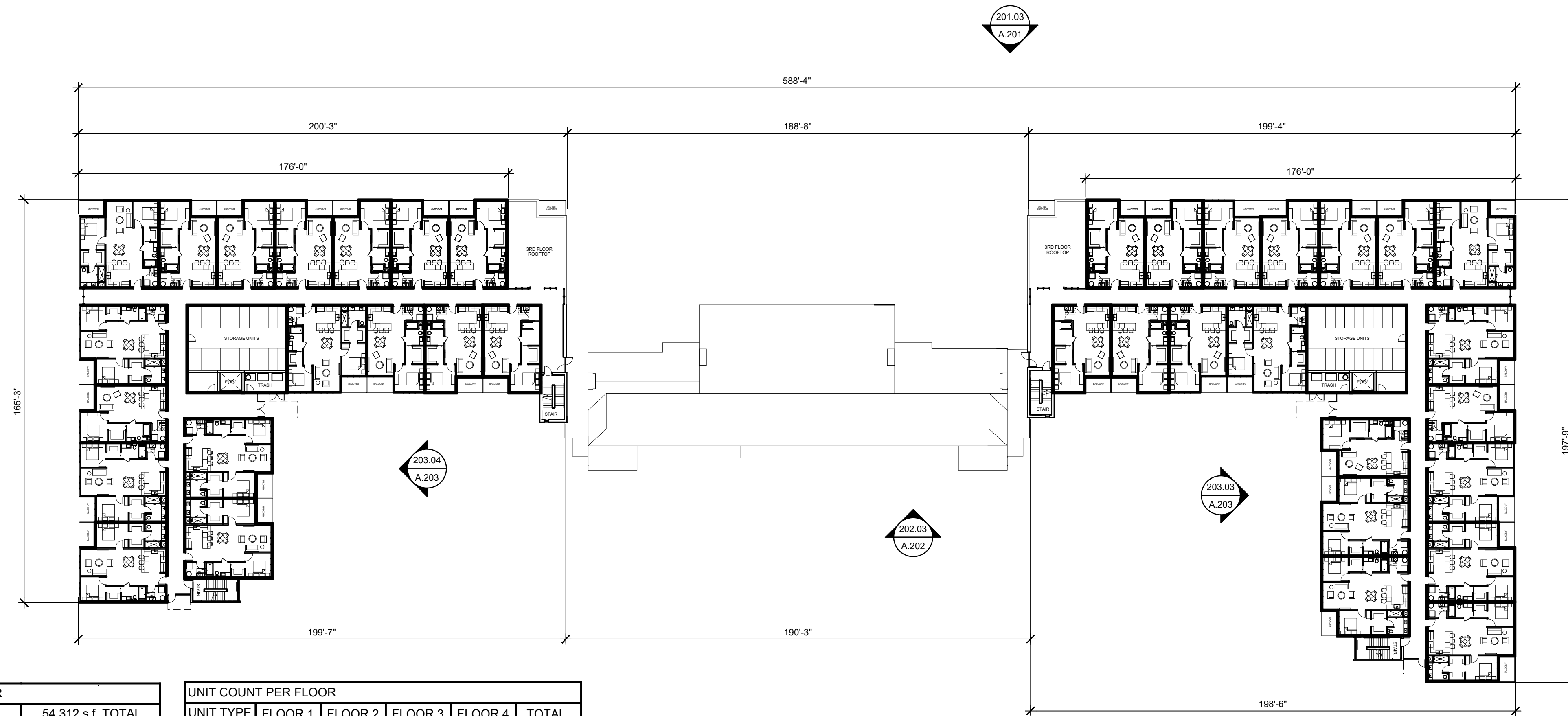


2118-24

A.102



FOURTH FLOOR PLAN
SCALE: 1/32"=1'-0"

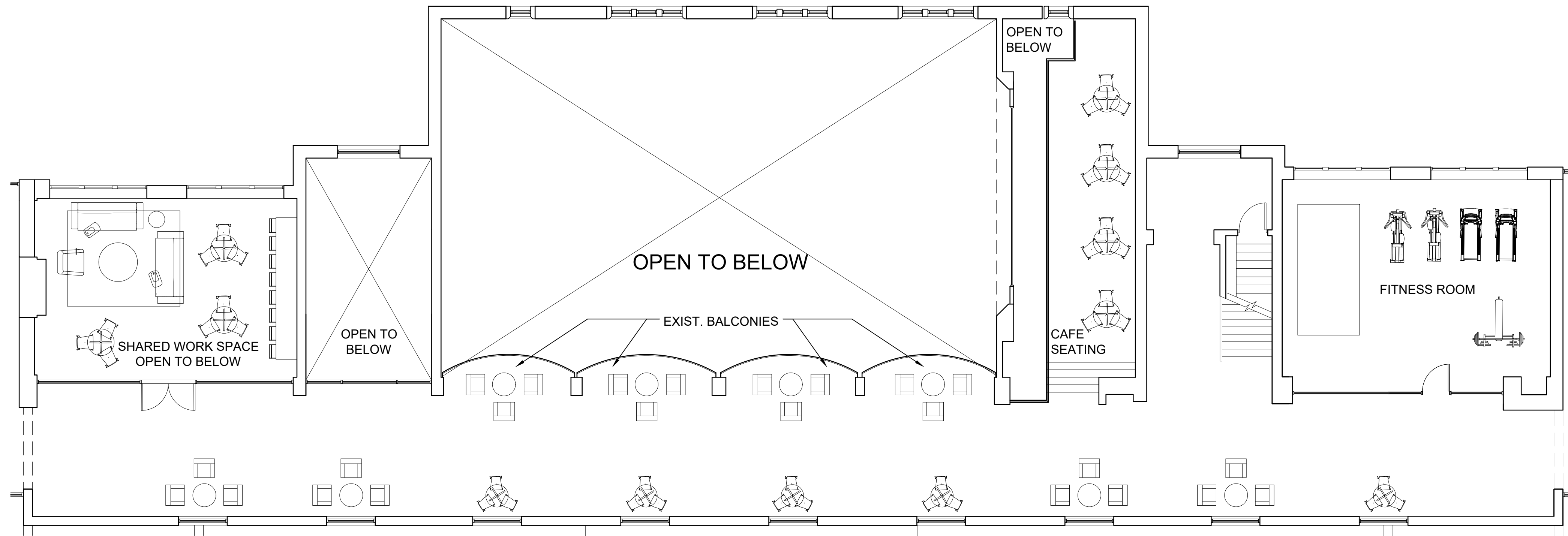


THIRD FLOOR PLAN
SCALE: 1/32"=1'-0"

BUILDING AREAS PER FLOOR	
FIRST FLOOR AREA	54,312 s.f. TOTAL
SECOND FLOOR AREA	51,236 s.f. TOTAL
THIRD FLOOR AREA	43,358 s.f. TOTAL
FOURTH FLOOR AREA	41,168 s.f. TOTAL
TOTAL BUILDING AREA	190,074 s.f. TOTAL

UNIT COUNT PER FLOOR					
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FIRST FLOOR/SITE PLAN
PARKING ON SITE: 198 SPACES + 20 SPACES NORTH OFFSITE
TOTAL PARKING TO MEET CITY REQMTS.: 1.5 PER UNIT= 218 SPACES

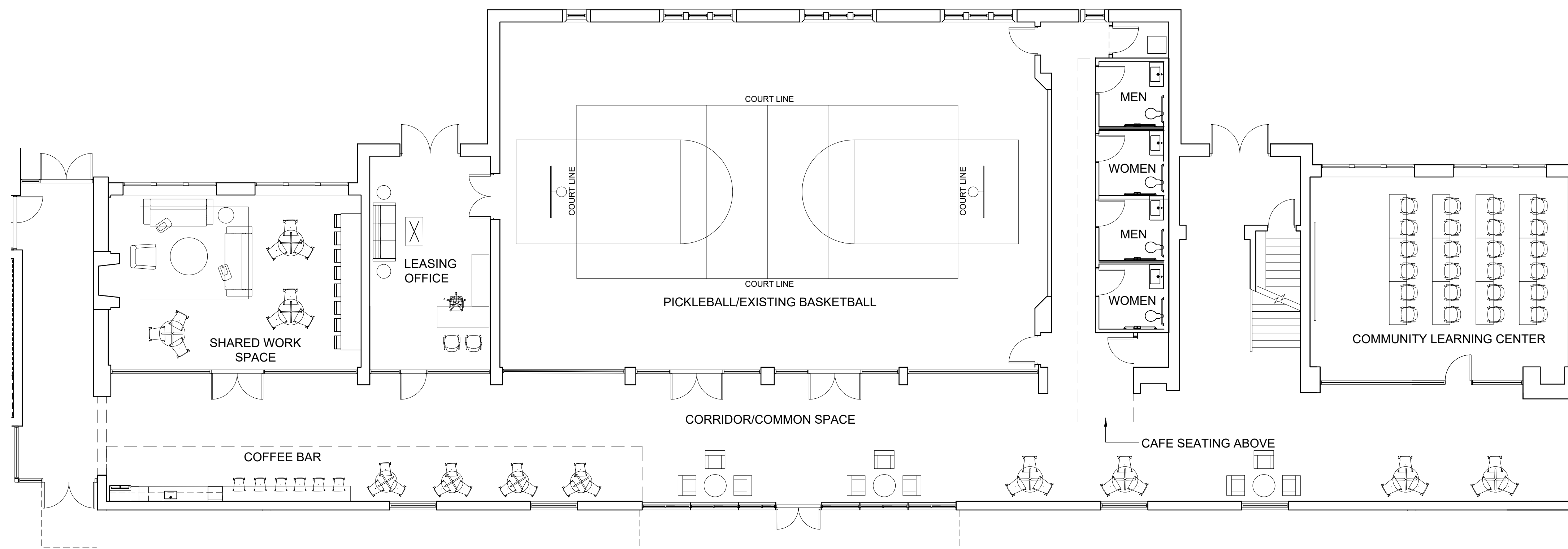


103.02
A.103 ENLARGED SECOND FLOOR COMMON AREA
SCALE: 1/8"=1'-0"

PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

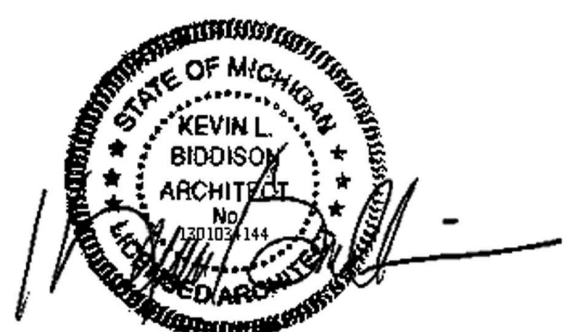
27700 Southfield Road
Lathrup Village, MI 48076

SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
PLANNING COMMISSION 3.31.25



103.01
A.103 ENLARGED FIRST FLOOR COMMON AREA
SCALE: 1/8"=1'-0"

**COMMON AREA
FLOOR PLANS**

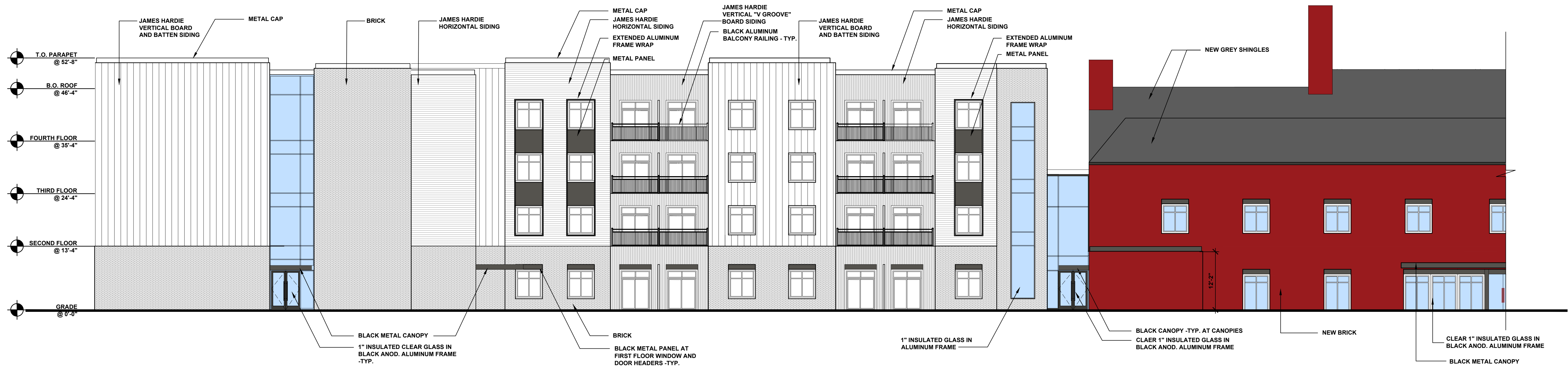


2118-24

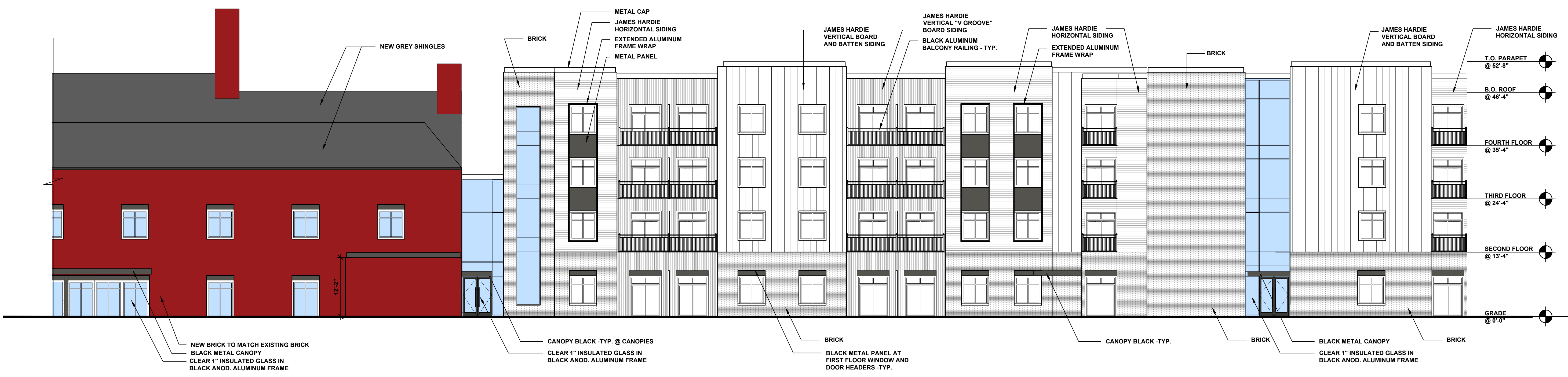
A.103



202.03 EAST ELEVATION
A.202 NOT TO SCALE



202.02 ENLARGED EAST ELEVATION
A.202 SCALE: 3/32"=1'-0"



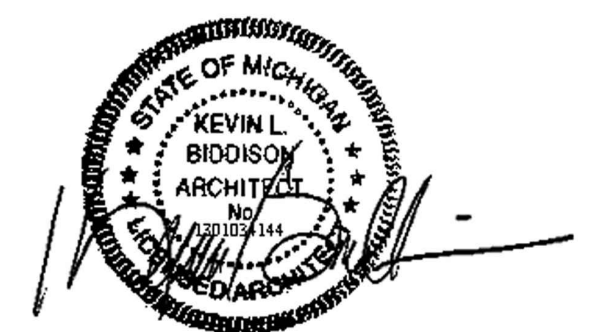
202.01 ENLARGED EAST ELEVATION
A.202 SCALE: 3/32"=1'-0"

PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

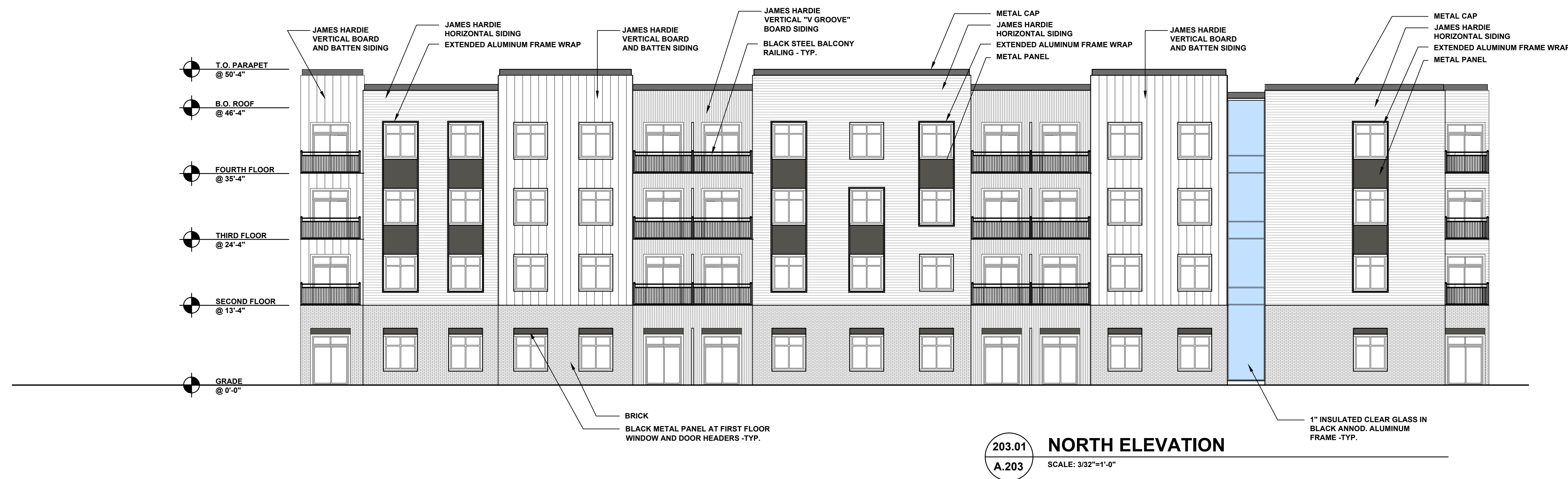
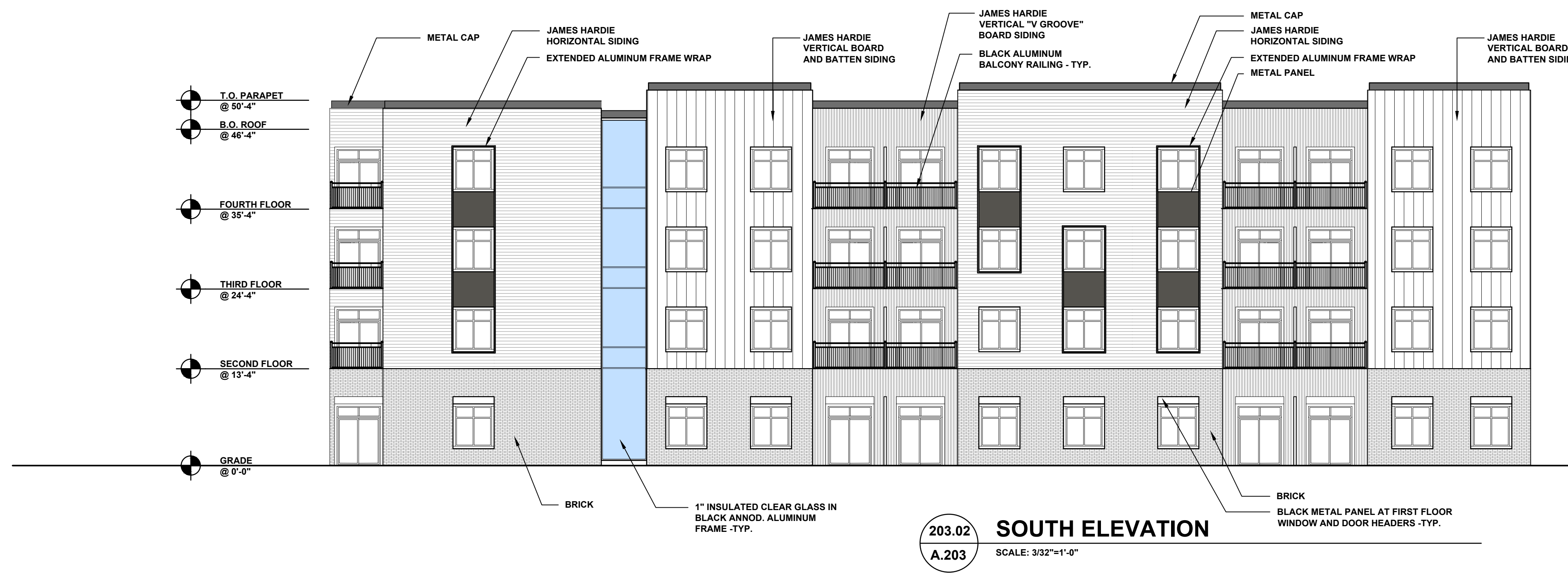
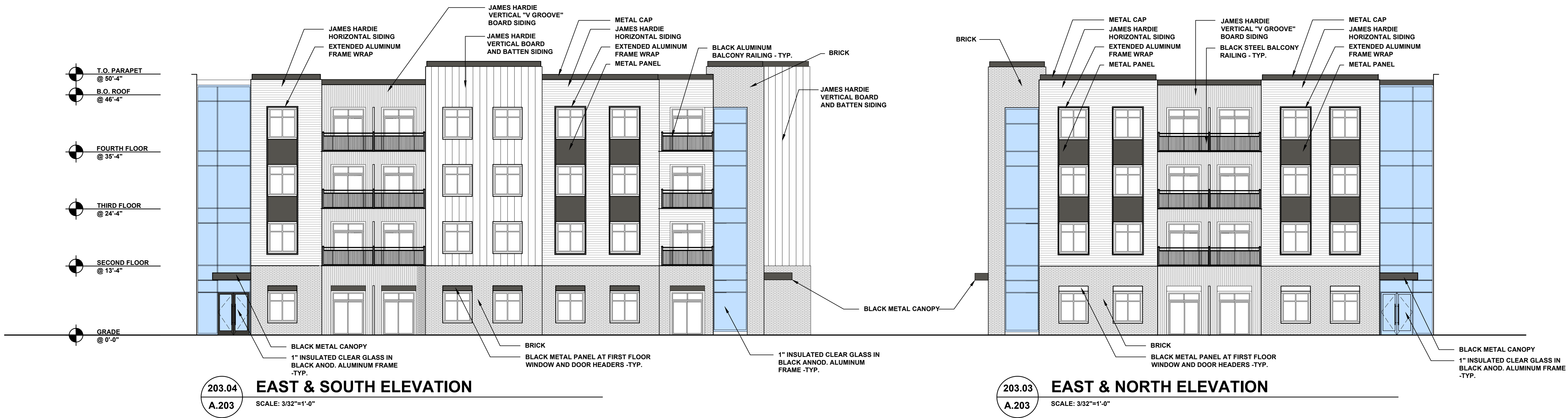
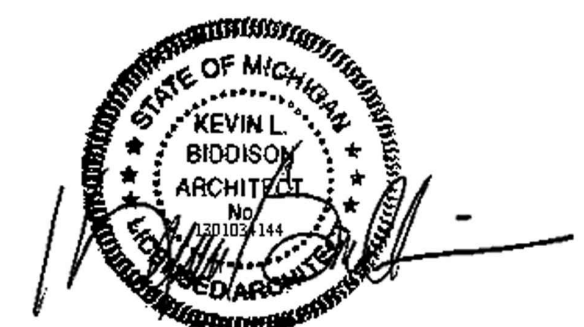
SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
REVISED PER CITY REVIEW 03.31.25

**EXTERIOR
ELEVATIONS**



2118-24

A.202



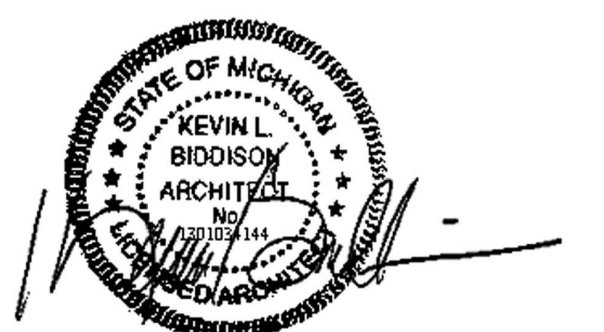


PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
REVISED PER CITY REVIEW 03.31.25

**EXTERIOR
RENDERINGS**



2118-24

A.300



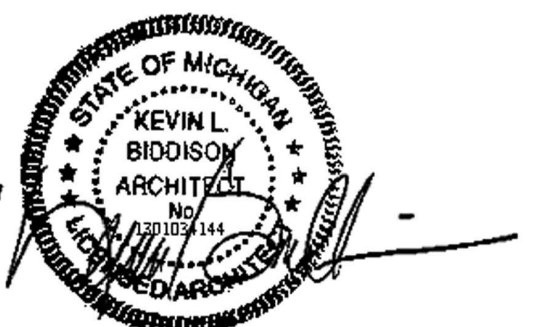
PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
REVISED PER CITY REVIEW 03.31.25



**EXTERIOR
RENDERINGS**



2118-24

A.301



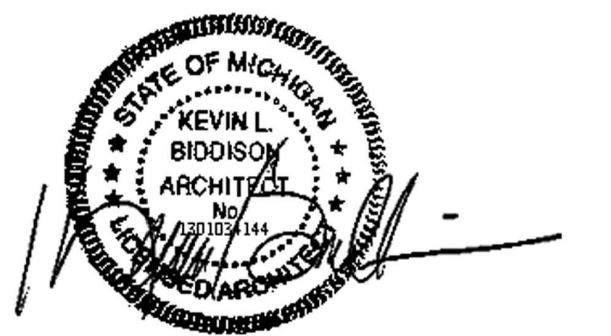
PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

SITE PLAN REVIEW 10.18.24
REVISED PER CITY REVIEW 01.10.25
REVISED PER CITY REVIEW 03.31.25

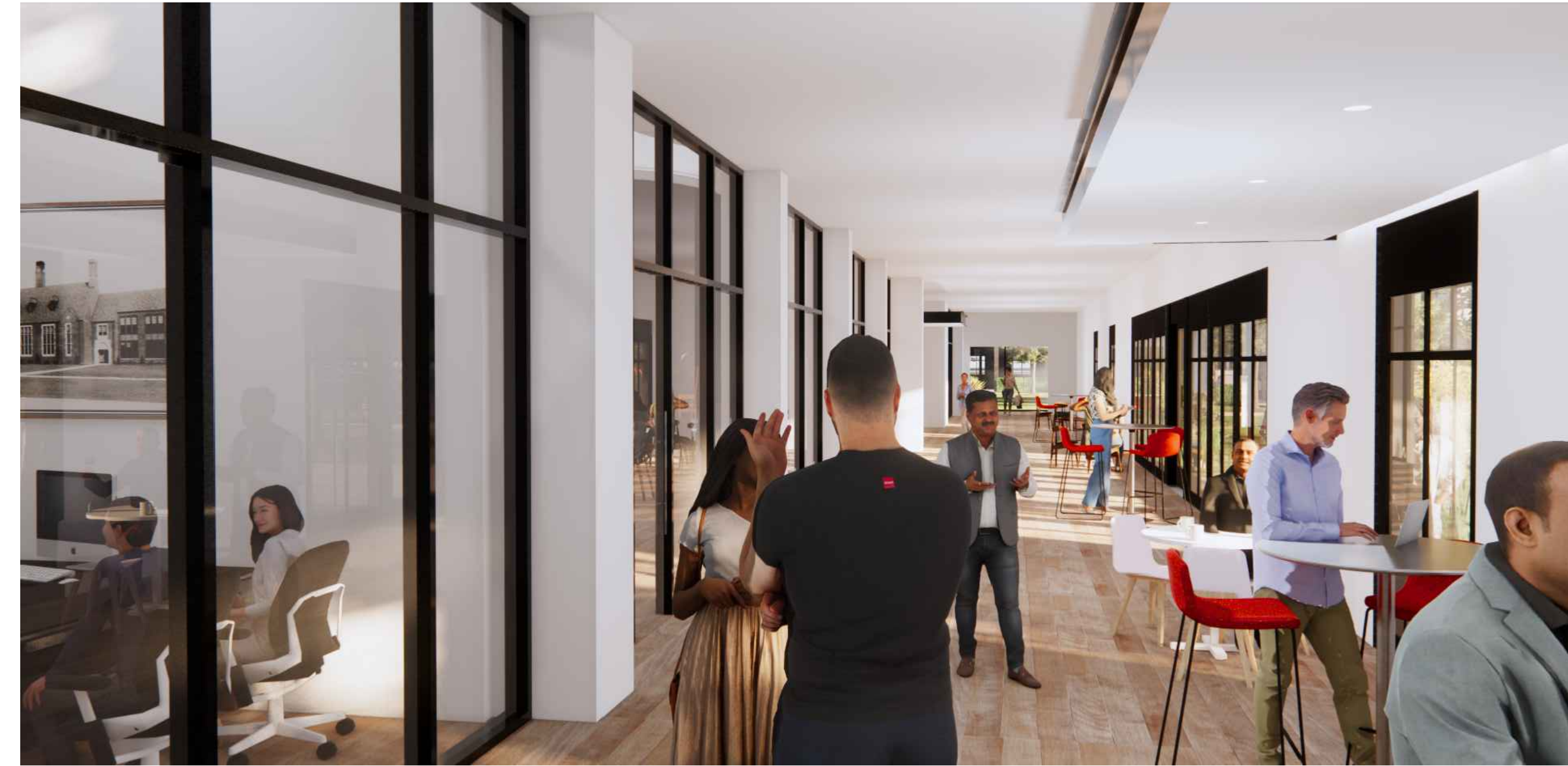
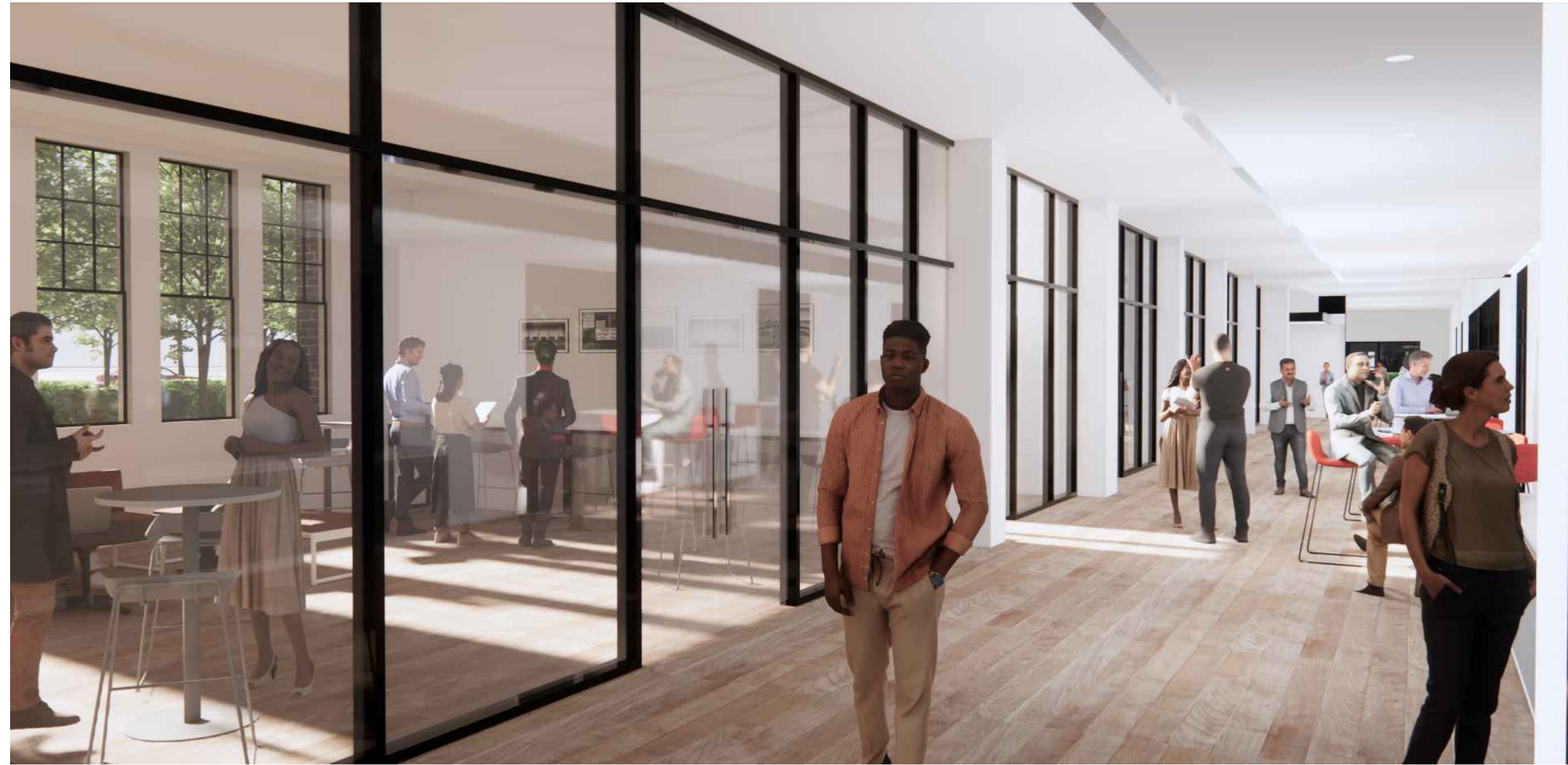


**EXTERIOR
RENDERINGS**



2118-24

A.302



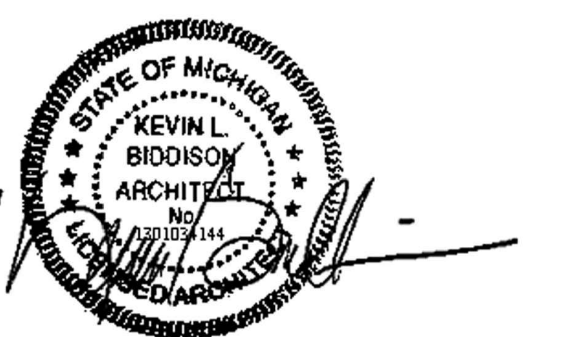
PROPOSED BUILDING ADDITION FOR:
**27700 Southfield Rd,
Lathrup Village**

27700 Southfield Road
Lathrup Village, MI 48076

SITE PLAN REVIEW 10.18.24



**INTERIOR
RENDERINGS**

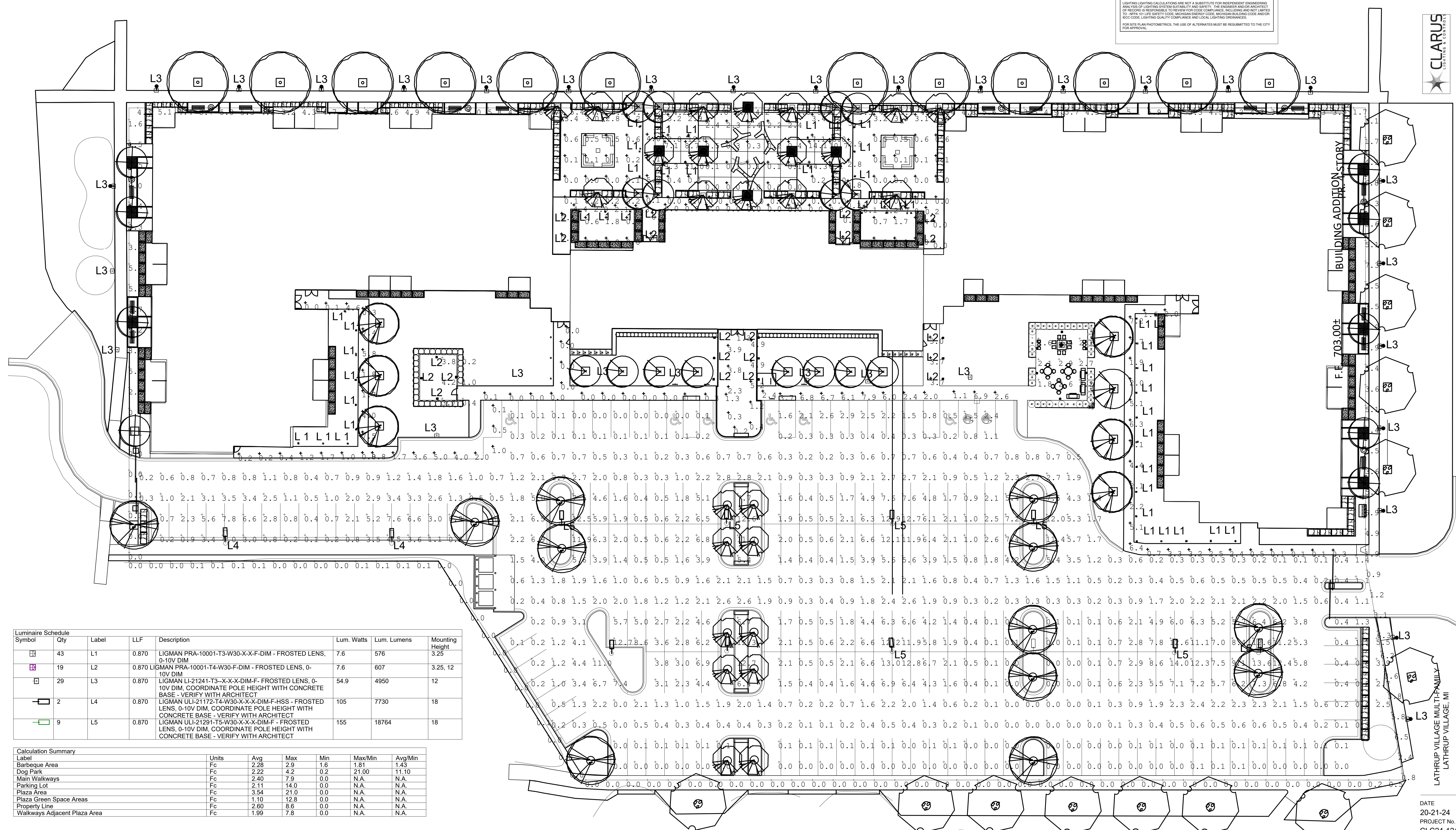


2118-24

A.304

NOTES:
 THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF LAYOUT TO EXISTING/FUTURE FIELD CONDITIONS AND ALL MANDATORY BUILDING AND LIFE SAFETY CODES AND COMPLIANCE.
 LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMP/LENS AND OTHER VARIABLE FIELD CONDITIONS.
 MOUNTING HEIGHTS INDICATED ARE FROM GRADE TO BOTTOM OF LUMINAIRE LENS OR FROM FLOOR TO BOTTOM OF LUMINAIRE LENS, UNLESS OTHERWISE NOTED.
 CLARUS DOES NOT ACT AS THE ELECTRICAL, CIVIL OR STRUCTURAL ENGINEER AND DOES NOT DETERMINE BASE REQUIREMENTS AND APPLICABLE CODE COMPLIANCE. CLARUS IS NOT LIABLE FOR ANY CODE COMPLIANCE DISCREPANCY.
 LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SAFETY AND SAFETY. THE ENGINEER AND/OR ARCHITECT OF RECORD IS RESPONSIBLE TO REVIEW FOR CODE COMPLIANCE, INCLUDING AND NOT LIMITED TO: NFPA 101 LIFE SAFETY CODE, MICHIGAN ENERGY CODE, MICHIGAN BUILDING CODE AND/OR IRC CODE, LIGHTING QUALITY COMPLIANCE AND LOCAL LIGHTING ORDINANCES.
 FOR SITE PLAN PHOTOMETRIC, THE USE OF ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

E: info@clarus-lighting.com
 P: 248.677.0852
 Madison Heights, MI 48071



Luminaire Schedule Symbol	Qty	Label	LLF	Description	Lum. Watts	Lum. Lumens	Mounting Height
☐	43	L1	0.870	LIGMAN PRA-10001-T3-W30-X-X-F-DIM - FROSTED LENS, 0-10V DIM	7.6	576	3.25
☐	19	L2	0.870	LIGMAN PRA-10001-T4-W30-F-DIM - FROSTED LENS, 0-10V DIM	7.6	607	3.25, 12
☐	29	L3	0.870	LIGMAN LI-21241-T3-X-X-DIM-F - FROSTED LENS, 0-10V DIM, COORDINATE POLE HEIGHT WITH CONCRETE BASE - VERIFY WITH ARCHITECT	54.9	4950	12
☐	2	L4	0.870	LIGMAN ULI-21172-T4-W30-X-X-DIM-F-HSS - FROSTED LENS, 0-10V DIM, COORDINATE POLE HEIGHT WITH CONCRETE BASE - VERIFY WITH ARCHITECT	105	7730	18
☐	9	L5	0.870	LIGMAN ULI-21291-T5-W30-X-X-DIM-F - FROSTED LENS, 0-10V DIM, COORDINATE POLE HEIGHT WITH CONCRETE BASE - VERIFY WITH ARCHITECT	155	18764	18

Calculation Summary Label	Units	Avg	Max	Min	Max/Min	Avg/Min
Barbeque Area	Fc	2.28	2.9	1.6	1.81	1.43
Dog Park	Fc	2.22	4.2	0.2	21.00	11.10
Main Walkways	Fc	2.40	7.9	0.0	N.A.	N.A.
Parking Lot	Fc	2.11	14.0	0.0	N.A.	N.A.
Plaza Area	Fc	3.54	21.0	0.0	N.A.	N.A.
Plaza Green Space Areas	Fc	1.10	12.8	0.0	N.A.	N.A.
Property Line	Fc	2.60	8.6	0.0	N.A.	N.A.
Walkways Adjacent Plaza Area	Fc	1.99	7.8	0.0	N.A.	N.A.

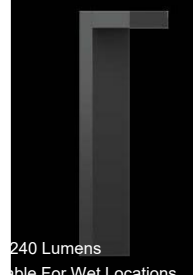
CALCULATIONS ARE TAKEN AT GRADE.

NORTH
 SCALE: 1"=20'-0"

LATHRUP VILLAGE MULTI-FAMILY
 LATHRUP VILLAGE, MI
 SITE PHOTOMETRIC CALCULATION
 DATE: 20-21-24
 PROJECT No. CLC24-121915
 SHEET No.

L-1, L-2

ULI-10022 Light Linear PT 1 Single Head Bollard



Area distribution bollard-integrated projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT 1 Bollard is an elegant minimalist bollard that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual optical chamber with integrated head cove houses a range of field-interchangeable optically controlled LEDs, providing Type II, III, IV & V distribution, as well as variations of the for precise light distribution requirements.

An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.

This product range is available in 2x and 3x options, as single & double head styles.

Customer specific wattages can be provided, contact the factory for more information.

Bollards can be provided with GFCI boxes positioned at specific heights specified by the customer.

Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000K or warmer LEDs must be selected.

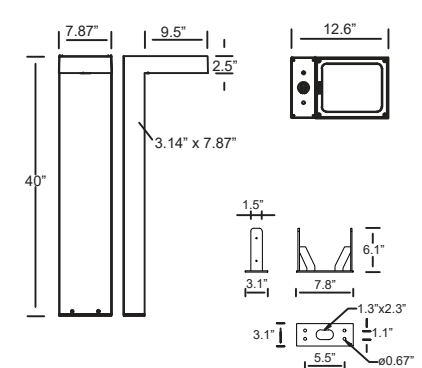
Optional Security Shield:

The Light Linear Bollard is available as a traffic rated security bollard.

This security bollard provides restraint of vehicular traffic in unobstructed areas.

Impact calculations show this bollard will stop a 5500lb/2.75 ton vehicle, traveling at 30mph.

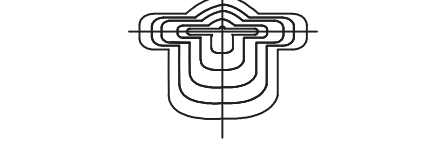
The galvanized pole must be fixed with concrete up to the waterproof floor housing to provide a solid concrete barrier.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

L-3

ULI-21241 Light Linear PT 8 Single Head Streetlight



Public realm contemporary column family. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT 8 is an elegant minimalist lighting column that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual optical chamber with integrated head cove houses a range of field-interchangeable optically controlled LEDs, providing Type II, III, IV & V distribution, as well as variations of the for precise light distribution requirements.

An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.

This product range is available in 2x and 3x options, as single & double head styles.

Customer specific wattages can be provided, contact the factory for more information.

Bollards can be provided with GFCI boxes positioned at specific heights specified by the customer.

Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000K or warmer LEDs must be selected.

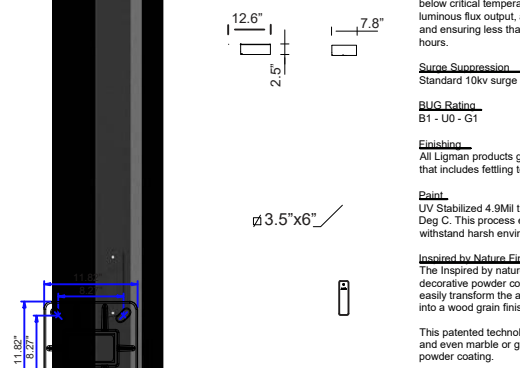
Optional Security Shield:

The Light Linear Bollard is available as a traffic rated security bollard.

This security bollard provides restraint of vehicular traffic in unobstructed areas.

Impact calculations show this bollard will stop a 5500lb/2.75 ton vehicle, traveling at 30mph.

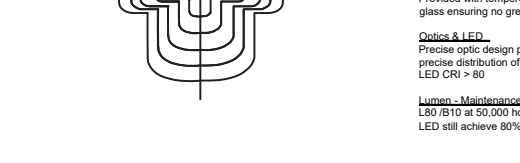
The galvanized pole must be fixed with concrete up to the waterproof floor housing to provide a solid concrete barrier.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

L-4, L-5

ULI-21173 Light Linear PT 3 Single Head Streetlight



Public realm contemporary column family. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT 3 is an elegant minimalist lighting column that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual optical chamber with integrated head cove houses a range of field-interchangeable optically controlled LEDs, providing Type II, III, IV & V distribution, as well as variations of the for precise light distribution requirements.

An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture.

This product range is available in 2x and 3x options, as single & double head styles.

Customer specific wattages can be provided, contact the factory for more information.

Bollards can be provided with GFCI boxes positioned at specific heights specified by the customer.

Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000K or warmer LEDs must be selected.

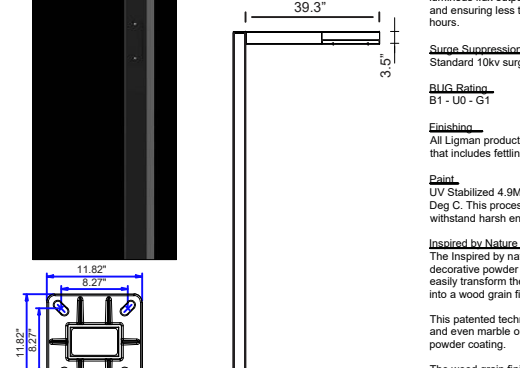
Optional Security Shield:

The Light Linear Bollard is available as a traffic rated security bollard.

This security bollard provides restraint of vehicular traffic in unobstructed areas.

Impact calculations show this bollard will stop a 5500lb/2.75 ton vehicle, traveling at 30mph.

The galvanized pole must be fixed with concrete up to the waterproof floor housing to provide a solid concrete barrier.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

