

GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
April 1, 2024
6:30 p.m.

AGENDA

Call to Order:

Pledge of Allegiance:

Call to the Public (Public comment will be limited to two minutes per person) *:

Approval of Consent Agenda:

1. Payment of Bills: April 1, 2024
2. Request to approve the March 18, 2024 regular meeting minutes.

Approval of Regular Agenda:

3. Request for approval of the Uniform Video Service Local Franchise Agreement with WideOpenWest Mid Michigan, LLC (WOW! Internet, TV & Phone) including the revisions recommended by Township staff and counsel.
4. Consideration of a recommendation for approval of a special land use application, environmental impact assessment, and site plan to allow for a proposed automatic car wash. The site is on the northern portion of vacant parcel #4711-04-300-017 located on the east side of Latson Road south of Grand River Avenue. The request is petitioned by CWP West, LLC.
 - A. Disposition of Special Use Application.
 - B. Disposition of Environmental Impact Assessment (1-16-24)
 - C. Disposition of Site Plan (3-14-24)
5. Consideration of a recommendation for approval of a special land use application, environmental impact assessment, and site plan to allow for a proposed multi-tenant commercial center including a drive-through coffee shop and outdoor seating restaurant. The site consists of vacant parcels #4711-04-300-017 and 4711-09-100-004 and is located on the east side of Latson Road, south of Grand River Avenue. The request is petitioned by Kevin Bahnam, 1015 Latson Road LLC.
 - A. Disposition of Special Use Application.
 - B. Disposition of Environmental Impact Assessment (1-16-24)
 - C. Disposition of Site Plan (3-14-24)
6. Consideration of a recommendation for approval of a special land use application, environmental impact assessment, and site plan to allow for outdoor RV/camper storage.

The site is located at 2630 Grand River Avenue on the south side of Grand River Avenue, east of Chilson Road. The request is petitioned by Schafer Construction.

- A. Disposition of Special Use Application
- B. Disposition of Environmental Impact Assessment (11-29-23)
- C. Disposition of Site Plan (2-16-24)

7. Request for review and approval of a Certificate of License to conduct an outdoor assembly not to exceed 5,000 attendees on June 22, 2024 from 4:00pm to 10:00pm for the “Yellowstone County Music Festival” to be located at Mt. Brighton Ski Resort, 4141 Bauer Road, Brighton, MI 48116. The request is petitioned by the Greater Brighton Area Chamber of Commerce.
8. Request for approval of a proposal from Dell for Township employee computer rotation at a cost not to exceed \$4,989.60 from Capital Outlay <\$5,000 fund #101-900-975-000 as requested by Adam VanTassell, IT/Facilities Director.
9. Request for approval of a proposal from Secure Tech Group for additional security cameras to monitor the Survivor park and basketball court area at a cost not to exceed \$12,303 from Parks and Recreation: Security Upgrades fund #208-751-934-013 as requested by Adam VanTassell, IT/Facilities Director.
10. Request for approval of the Memorandum of Understanding with Howell Parks and Recreation (HAPRA) for park maintenance services and support for \$1,000 per month plus hourly rates for additional work orders and to eliminate the park trash collection Monday-Friday with Perfect Maintenance for cost savings to the Township of \$200 each month.
11. Request for approval of the agreement and proposal with Perfect Maintenance Cleaning Services to include a third weekly cleaning of the Township Hall for \$1,100 per month.
12. Review of ACLU press release and letter to the Township Clerk regarding improper removal of voters.

Correspondence
Member Discussion
Adjournment

*Citizen’s Comments- In addition to providing the public with an opportunity to address the Township Board at the beginning of the meeting, opportunity to comment on individual agenda items *may* be offered by the Chairman as they are presented.

BOARD PACKET

CHECK REGISTERS FOR TOWNSHIP BOARD MEETING

MEETING DATE: April 1, 2024

All information below through March 27, 2024

TOWNSHIP GENERAL EXPENSES	\$	450,511.03
March 29, 2024 Bi Weekly Payroll	\$	120,392.82
OPERATING EXPENSES DPW (503 FN)	\$	1,325,722.61
OPERATING EXPENSES Oak Pointe (592FN)	\$	86,777.30
OPERATING EXPENSES Lake Edgewood (593FN)	\$	57,957.51
TOTAL	\$	<u>2,041,361.27</u>

FNBCK Check Register

03/27/2024 10:19 AM
 User: denise
 DB: Genoa Township

CHECK REGISTER FOR GENOA TOWNSHIP
 CHECK NUMBERS 38780 - 40000

Page: 1/1

Check Date	Check	Vendor Name	Amount
Bank FNBCK CHECKING ACCOUNT			
03/14/2024	38780	Void Reason: WROTE ON CHECK WITH REPORT	0.00 V
03/14/2024	38781	BLUE CROSS & BLUE SHIELD OF MI	55,167.46
03/14/2024	38782	CONSUMERS ENERGY	475.20
03/14/2024	38783	FEDERAL EXPRESS CORP	155.71
03/14/2024	38784	PFEFFER, HANNIFORD, PALKA	3,750.00
03/14/2024	38785	STAPLES	360.64
03/14/2024	38786	STATE OF MICHIGAN	10.00
03/14/2024	38787	TRI COUNTY SUPPLY, INC.	776.38
03/14/2024	38788	VERIZON WIRELESS	406.90
03/18/2024	38789	BRIGHTON GARAGE DOOR	195.00
03/18/2024	38790	LIVINGSTON COUNTY CLERK, ELECTIONS	1,200.00
03/18/2024	38791	LIVINGSTON PRESS & ARGUS	550.00
03/18/2024	38792	SEWARD HENDERSON PLLC	4,047.00
03/18/2024	38793	STAPLES	523.08
03/18/2024	38794	US BANK EQUIPMENT FINANCE	2,213.31
03/20/2024	38795	COMCAST	637.20
03/20/2024	38796	COMCAST	637.20
03/20/2024	38797	COMCAST	646.76
03/20/2024	38798	NETWORK SERVICES GROUP, L.L.C.	1,875.00
03/20/2024	38799	MACALLISTER RENTAL	1,550.85
03/26/2024	38800	G/O SEWER AUTHORITY	1,825.00
03/26/2024	38801	MHOG UTILITIES	57,418.64 V
		Void Reason: WRONG VENDOR	
03/26/2024	38802	OAK POINTE OPERATING S/W	290.96
03/26/2024	38803		0.00 V
		Void Reason: PRINTED ON BY ACCIDENT	
03/26/2024	38804	GENOA TWP BUILD & GROUND 249/271	300,000.00
03/26/2024	38805	AMERICAN AQUA	52.80
03/26/2024	38806	CAPITAL ONE	616.18
03/26/2024	38807	COMCAST	949.42
03/26/2024	38808	DIANA LOWE	73.57
03/26/2024	38809	MICHIGAN ASSOC. OF PLANNING	75.00
03/26/2024	38810	NETWORK SERVICES GROUP, L.L.C.	475.00
03/26/2024	38811	STAPLES	66.77
03/26/2024	38812	WONDERLAND MARINE WEST	395.00
03/26/2024	38813	MHOG WATER AUTHORITY	13,095.00
03/26/2024	38814	MHOG WATER AUTHORITY	57,418.64
FNBCK TOTALS:			
Total of 35 Checks:			507,929.67
Less 3 Void Checks:			57,418.64
Total of 32 Disbursements:			450,511.03

March 29, 2024 Bi Weekly Payroll

03/26/2024 09:29 AM		PAYROLL REGISTER REPORT FOR GENOA CHARTER TOWNSHIP				Page 34 of 34	
		Payroll ID: 277					
		Pay Period End Date: 03/22/2024		Check Post Date: 03/29/2024		Bank ID: FNBCK	
* YTD values reflect values AS OF the check date based on all current adjustments, checks, void checks							
WELL IQ	0.00	0.00	0.00	2,582.40			
ZBA CHAIR	0.00	0.00	0.00	431.14			
ZBA MINUTES	0.00	0.00	0.00	726.60			
ZBA MINUTES OT	0.00	0.00	0.00	0.00			
ZBA PER DIEM	0.00	0.00	0.00	610.35			
Gross Pay This Period	Deduction Refund	Ded. This Period	Net Pay This Period	Gross Pay YTD	Dir. Dep.		
119,487.43	74.94	35,294.58	84,192.85	864,046.65	83,878.01		

03/26/2024 09:30 AM		Check Register Report For Genoa Charter Township				Page 1 of 1	
		For Check Dates 03/29/2024 to 03/29/2024					
Check Date	Bank	Check Number	Name	Check Gross	Physical Check Amount	Direct Deposit	Status
03/29/2024	FNBCK	14034	CROFT, TERRY L.	237.16	208.93	0.00	Open
03/29/2024	FNBCK	14035	MATKIN, RONALD	114.68	105.91	0.00	Open
03/29/2024	FNBCK	EFT913	FLEX SPENDING (TASC)	1,013.16	1,013.16	0.00	Open
03/29/2024	FNBCK	EFT914	INTERNAL REVENUE SERVICE	27,741.57	27,741.57	0.00	Open
03/29/2024	FNBCK	EFT915	PRINCIPAL FINANCIAL	5,211.00	5,211.00	0.00	Open
03/29/2024	FNBCK	EFT916	PRINCIPAL FINANCIAL	2,234.24	2,234.24	0.00	Open
Totals:		Number of Checks: 006		36,551.81	36,514.81	0.00	
Total Physical Checks:		2					
Total Check Stubs:		4					

Direct Deposit \$83,878.01
 Physical Check Amount \$36,514.81
 TOTAL \$120,392.82

503FN Check Register

03/27/2024 10:21 AM		CHECK REGISTER FOR GENOA TOWNSHIP		Page: 1/1	
User: denise		CHECK NUMBERS 6039 - 6500			
DB: Genoa Township					
Check Date	Check	Vendor Name	Amount		
Bank 503FN DPW-UTILITIES #233					
03/14/2024	6039	PFEFFER, HANNIFORD, PALKA	1,750.00		
03/14/2024	6040	UNITED STATES POSTAL SERVICE	77.08	V	
Void Reason: WRONG AMOUNT -AMOUNT CHANGED AFTER I HAD BILL.					
03/14/2024	6041	WEX BANK	4,297.17		
03/14/2024	6042	UNITED STATES POSTAL SERVICE	77.10		
03/15/2024	6043	ADVANCE AUTO PARTS	302.70		
03/15/2024	6044	AUTO-LAB OF LIVINGSTON	64.82		
03/15/2024	6045	MYERS AUTOMOTIVE	217.81		
03/15/2024	6046	PORT CITY COMMUNICATIONS, INC.	337.70		
03/15/2024	6047	RANDY'S SERVICE STATION	248.00		
03/15/2024	6048	SIGN WORKS	150.00		
03/15/2024	6049	TETRA TECH INC	8,030.00		
03/15/2024	6050	VERIZON WIRELESS	690.68		
03/15/2024	6051	WATER ENVIRONMENT FEDERATION	170.00		
03/15/2024	6052	WINDSTREAM	54.67		
03/18/2024	6053	CHAMPION CHEVROLET GMC	7,546.77		
03/20/2024	6054	ADVANCE AUTO PARTS	48.58		
03/21/2024	6055	HOME DEPOT CREDIT SERVICES	1,377.61		
03/25/2024	6056	DPW RESERVE FUND #233	60,000.00		
03/25/2024	6057	DPW RESERVE FUND #233	1,000.00		
03/25/2024	6058	DPW RESERVE FUND #233	100,000.00		
03/25/2024	6059	GENOA TWP GENERAL FUND	33,176.00		
03/25/2024	6060	GENOA TWP GENERAL FUND	26,183.00		
03/25/2024	6061	GRAND RIVER NEW USER FUND	80,000.00		
03/26/2024	6062	GENOA TWP GENERAL FUND	1,000,000.00	V	
Void Reason: SIGNATURE UPSIDE DOWN					
03/26/2024	6063	GENOA TWP GENERAL FUND	1,000,000.00		
503FN TOTALS:					
Total of 25 Checks:			2,325,799.69		
Less 2 Void Checks:			1,000,077.08		
Total of 23 Disbursements:			1,325,722.61		

592FN Check Register

Check Date	Check	Vendor Name	Amount
03/27/2024 10:22 AM			
User: denise		CHECK REGISTER FOR GENOA TOWNSHIP	Page: 1/1
DB: Genoa Township		CHECK NUMBERS 6049 - 6500	
Bank 592FN OAK POINTE OPERATING FUND #592			
03/14/2024	6049	AT&T LONG DISTANCE	123.55
03/14/2024	6050	CONSUMERS ENERGY	358.41
03/14/2024	6051	PFEFFER, HANNIFORD, PALKA	3,400.00
03/18/2024	6052	BRIGHTON ANALYTICAL LLC	220.00
03/18/2024	6053	CONSUMERS ENERGY	448.82
03/18/2024	6054	CORRPRO COMPANIES INC.	1,390.00
03/18/2024	6055	DETROIT PUMP & MFG. CO.	150.06
03/18/2024	6056	GENOA OCEOLA SWR & WTR AUTHORI	279.26
03/18/2024	6057	GENOA TOWNSHIP DPW FUND	21,704.92
03/18/2024	6058	GENOA TOWNSHIP DPW FUND	25,756.83
03/18/2024	6059	HYDROCOPR	299.25
03/18/2024	6060	LIVINGSTON PRESS & ARGUS	270.00
03/18/2024	6061	MACALLISTER RENTAL	516.95
03/18/2024	6062	NORTHERN PUMP & WELL, INC.	31,107.00
03/18/2024	6063	UIS SCADA	570.00
03/20/2024	6064	AT&T	182.25
592FN TOTALS:			
Total of 16 Checks:			86,777.30
Less 0 Void Checks:			0.00
Total of 16 Disbursements:			86,777.30

593FN Check Register

Check Date	Check	Vendor Name	Amount
03/27/2024 10:23 AM			
User: denise		CHECK REGISTER FOR GENOA TOWNSHIP	Page: 1/1
DB: Genoa Township		CHECK NUMBERS 4417 - 4600	
Bank 593FN LAKE EDGEWOOD OPERATING FUND #590			
03/15/2024	4417	CONSUMERS ENERGY	16.00
03/15/2024	4418	PFEFFER, HANNIFORD, PALKA	2,250.00
03/18/2024	4419	BRIGHTON ANALYTICAL LLC	201.00
03/18/2024	4420	EJ USA, INC.	2,909.36
03/18/2024	4421	GENOA OCEOLA SWR & WTR AUTHORI	139.63
03/18/2024	4422	GENOA TOWNSHIP DPW FUND	11,900.83
03/18/2024	4423	HARTLAND SEPTIC SERVICE, INC.	3,420.00
03/18/2024	4424	LIVINGSTON PRESS & ARGUS	80.00
03/18/2024	4425	LOREA TOPSOIL & AGGREGATE	46.00
03/18/2024	4426	TETRA TECH, INC.	25,966.75
03/20/2024	4427	GENOA TOWNSHIP DPW FUND	1,027.94
03/26/2024	4428	LAKE EDGEWOOD NEW USER 570	10,000.00
593FN TOTALS:			
Total of 12 Checks:			57,957.51
Less 0 Void Checks:			0.00
Total of 12 Disbursements:			57,957.51

**GENOA CHARTER TOWNSHIP BOARD
Regular Meeting
March 18, 2024
MINUTES**

Supervisor Rogers called the regular meeting of the Genoa Charter Township Board to order at 6:30 pm at the Township Hall. The following members were present constituting a quorum for the transaction of business: Bill Rogers, Paulette Skolarus, Jean Ledford, Terry Croft, Diana Lowe and Jeff Dhaenens. Absent was Robin Hunt. Also present was Township Manager Kelly VanMarter, and six people in the audience.

The Pledge of Allegiance was recited.

The call to the public was opened at 6:31 pm.

Ms. Melanie Johnson stated the Master Plan has maps regarding the proposed Latson Road PUD development, noting she was told that was not the exact plan being proposed. There are natural quality areas in this development, and with all of the roads and parking lots proposed, she wants to ensure there is a stormwater management plan in place and buffers between the residential areas surrounding it.

The call to the public was closed at 6:33 pm.

Approval of Consent Agenda:

Ms. Skolarus requested to have Item #2 moved to the Regular Agenda.

Moved by Skolarus, supported by Lowe, to approve the Consent Agenda as amended. **The motion carried unanimously.**

1. Payment of Bills: March 18, 2024

Approval of Regular Agenda:

Moved by Ledford, supported by Croft, to approve the Regular Agenda as amended. **The motion carried unanimously.**

2. Request to approve March 4, 2024 regular meeting minutes.

Ms. Skolarus noted one change needed.

Moved by Skolarus, supported by Lowe, to approve the March 4, 2024 regular meeting minutes as amended. **The motion carried unanimously.**

3. Request for approval of year-end budget amendments for Fiscal Year 2023/2024 involving budget fund numbers: 101, 202, 208, 212, 249, 401, and 464. (Roll Call)

Ms. Skolarus stated she would like to make the following changes to the 2024 budget. Account #101-262-703-001 should be changed from \$40,000 to \$53,000 and Account #101-262-802-003

should be reduced from \$9,000 to \$1,200. She stated that the revenue for the Clerk's budget may need to be amended because the State has said they are not paying for all expenses.

She gave each of the Board Members a spreadsheet showing a comparison of township employee salaries. She indicated that the Board had already reviewed this spreadsheet. Ms. VanMarter stated this information was not presented to the Board. Ms. Skolarus noted that Ms. VanMarter's total compensation is \$250,000 with benefits. She questioned if this was obtained from Compease. She did research and this is much higher than other managers in Livingston County. She stated the deputy clerk is underpaid.

Ms. VanMater stated that health insurance is based on family size, so this should not be considered when comparing compensation. The goal of the township was to have all employees' salaries at 95% of midpoint. And this year the goal is to have many employees moving towards 100% of midpoint. Ms. Skolarus stated that the township should be aiming to have employees at the high point.

Mr. Rogers stated the township uses Compease to ensure that employees' salaries are in line with other townships and municipalities in the County. Ms. Skolarus does not think Compease looked at just township governments. They looked at private companies. Ms. VanMarter stated they look across the state and nation for municipal salaries, including cities.

Ms. Skolarus stated automobile allowances are not in the budget. Ms. VanMarter stated it would be under "Mileage and Travel Expenses" and with contracted employees, it is included in their salaries. She added that tonight's agenda item is to approve the 2023/2024 amended budget. The 2024/2025 budget was adopted at the March 4, 2024 Board Meeting. Ms. Skolarus stated she did not have time to look at this previously because she was overwhelmed with the election. She would like to look at this in the future. Ms. VanMarter stated she has met with employees and they are very satisfied with their salaries. The Board has worked very hard to increase salaries to meet the 95% of midpoint.

Mr. Rogers noted that during COVID in 2020, the township remained open, with precautions in place, and did not have to lay off anyone. He applauded the Board and the employees for that.

Ms. VanMarter provided a review of the proposed changes.

Moved by Lowe, supported by Skolarus, to approve the year-end budget amendments for Fiscal Year 2023/2024 involving budget fund numbers: 101, 202, 208, 212, 249, 401, and 464 including the changes noted by the Clerk this evening. **The motion carried unanimously with a roll call vote (Ledford - yes, Croft - yes, Lowe - yes, Dhaenens - yes, Skolarus - yes, and Rogers - yes).**

- 4. Request to approve a \$1,200,000 project agreement with the Livingston County Road Commission to reconstruct approximately 1.6 miles of Chilson Road from Beck Road to Grand River Avenue through the Pavement Preservation Program (PPP) with the Township's cost not to exceed \$600,000 from Road Improvement Fund #401-446-812-007.**

Ms. VanMarter stated this is the final phase of the repaving of Chilson Road.

Moved by Lowe, supported by Croft, to approve a \$1,200,000 project agreement with the Livingston County Road Commission to reconstruct approximately 1.6 miles of Chilson Road from Beck Road to Grand River Avenue through the Pavement Preservation Program (PPP) with the Township's cost not to exceed \$600,000 from Road Improvement Fund #401-446-812-007. **The motion carried unanimously.**

5. Request for approval of the Uniform Video Service Local Franchise Agreement with WideOpenWest Mid Michigan, LLC (WOW! Internet, TV & Phone) including the revisions recommended by Township staff and counsel.

Ms. VanMarter stated that WOW had started working in the township prior to contacting her. The township must allow a telecommunications company to install their service but can negotiate the franchise fee percentage given to the township. Section VI shows this fee at five percent, which is the highest amount that can be given. She also included that PEG fees, which is that two percent of the total revenue for all video services, including provider-generated streaming video services, be provided to the township. Additionally, WOW must repair any damages and restore the ground after they are done with their work.

Ms. Skolarus stated that MiSignal does not give the township any money. Ms. VanMarter stated that they are under a Metro Act Permit which is a different type of agreement and they pay a different fee based on linear feet.

Mr. Dhaenens asked if Internet services can be included, because then the streaming services would be included. He requested this be asked of the attorney. He also asked if they are putting in all of their own infrastructure or are they going to use other companies' existing infrastructure. He is in support of this; however he would like to have these questions answered before voting to approve this.

Moved by Dhaenens, supported by Ledford, to table the approval of the Uniform Video Service Local Franchise Agreement with WideOpenWest Mid Michigan, LLC (WOW! Internet, TV & Phone) including the revisions recommended by Township staff and counsel. **The motion carried unanimously.**

Member Discussion

Ms. Skolarus stated a group called Stand Up Livingston wanted the township's Qualified Voter File lessened for residents who have moved out of state, and addresses where the apartment numbers are not included. Her office removed these voters based on a 1954 law, but the ACLU advised her that this was not to be done. Now she has 500 challenged voters and she must send notices Return Receipt Requested to them at a cost of \$9.00 each. She prefers to wait 12 years before she removes voters.

Ms. VanMarter asked for the Board's feedback on a diagram and photos that she presented this evening. She is proposing to reconfigure the Board table. Additionally, the large screen on the back wall would be swapped with the smaller screen behind the Board table and individual monitors would be installed for each of the Board Members. Mr. Dhaenens is in favor of this. He requested a mechanism be put in place to allow the board members to take control of what is being displayed. It would be helpful for the Planning Commission and ZBA when interacting with

the applicant and their proposals.

Ms. Lowe agrees with the proposed changes.

Supervisor Rogers stated the audio equipment will also be updated.

Mr. Dhaenens stated he will not be at the April 1, 2024 Board Meeting.

Adjournment

Moved by Dhaenens, supported by Lowe, to adjourn the meeting at 7:29 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas
Recording Secretary

Approved: Paulette Skolarus, Clerk
Genoa Charter Township

Bill Rogers, Supervisor
Genoa Charter Township



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Township Manager
DATE: March 13, 2024, Revised 03/27/24
RE: WOW! Cable Franchise Agreement

Please find attached Uniform Video Service Local Franchise Agreement from WOW! internet, TV, and phone. The Township has retained Mike Watza of the Kitch Firm as special counsel for Cable/Video, Metro Act and general telecommunications law issues. Mr. Watza has reviewed the agreement and recommended that we incorporate the revisions shown in red text on the attached.

In response to comments made at the last meeting at which this item was postponed, I can confirm that WOW intends to install all new infrastructure. Additionally, Mike Watza will be in attendance at Monday's meeting to answer any questions and a Mike Healy with WOW will be available to call/video into the meeting if necessary to answer your questions.

I support the revisions recommended by Mr. Watza and present the Agreement for your consideration as follows:

Moved by _____ and supported by _____ to approve the Uniform Video Service Local Franchise Agreement with WideOpenWest Mid Michigan, LLC (WOW! Internet, TV & Phone) subject to inclusion of the revisions recommended by Township staff and counsel.

Sincerely,

Kelly VanMarter

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter



380 Wright Industrial Parkway
Pottersville, Michigan 48876

February 2, 2023

Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Dear Ms. Skolarus

In the coming months, WOW! will be expanding its network to include Genoa Township. WOW! is excited to be able to offer its internet, video and telephone services to the residents of the Township once our construction and installation work has been completed. As dictated by the Michigan Public Service Commission, WOW! intends to enter into a Uniform Video Service Local Franchise Agreement with the Township to establish the terms for WOW!'s operations here. As you may be aware, this is a uniform template developed by the Commission intended to be used by all providers in all jurisdictions in the state. Please find enclosed two duplicate original agreements, including the instruction pages provided by the Commission which precede the actual agreement.

Please note that Section VI. A. ii. requires you to input the franchise fee percentage to be billed and collected from customers in the Township by WOW! and remitted to the Township quarterly. The same applies for PEG fees in Section VIII. A. 3. According to the Commission's rules, these must be the same percentages that other providers currently operating in your jurisdiction are paying.

Page 9 of the Agreement and page 2 of Attachment 1 are signature pages. On page 9, *Date submitted* is the date you received the Agreement from WOW! and *Date completed* and *approved* is the date of the Board's action.

Please keep one copy of the Franchise agreements as the Township's original. Then send one of the completed Agreements to my attention in the enclosed envelope as soon as it's complete. Please let me know if I can be of assistance.

Regards,


Michael Healy

Michael.healy@wowinc.com

224/339-2512 (mobile)

INSTRUCTIONS FOR UNIFORM VIDEO SERVICE LOCAL FRANCHISE AGREEMENT

Pursuant to 2006 Public Act 480, MCL 484.3301 *et seq*, any Video Service Provider seeking to provide video service in one or more service areas in the state of Michigan after January 30, 2007, shall file an application for a Uniform Video Service Local Franchise Agreement with the Local Unit of Government ("Franchising Entity") that the Provider wishes to service. Pursuant to Section 2(2) of 2006 PA 480, "Except as otherwise provided by this Act, a person shall not provide video services in any local unit of government without first obtaining a uniform video service local franchise as provided under Section 3." Procedures applicable to incumbent video service providers are set forth below.

As of the effective date (January 1, 2007) of the Act, no existing franchise agreement with a Franchising Entity shall be renewed or extended upon the expiration date of the agreement. The incumbent video Provider, at its option, may continue to provide video services to the Franchising Entity by electing to do one of the following:

1. Terminate the existing franchise agreement before the expiration date of the agreement and enter into a new franchise under a uniform video service local franchise agreement.
2. Continue under the existing franchise agreement amended to include only those provisions required under a uniform video service local franchise.
3. Continue to operate under the terms of an expired franchise until a uniform video service local franchise agreement takes effect. An incumbent video Provider with an expired franchise on the effective date has 120 days after the effective date of the Act to file for a uniform video service local franchise agreement.

On the effective date (January 1, 2007) of the Act, any provisions of an existing Franchise that are inconsistent with or in addition to the provisions of a uniform video service local Franchise Agreement are unreasonable and unenforceable by the Franchising Entity.

If, at a subsequent date, the Provider would like to provide video service to an additional Local Unit of Government, the Provider must file an additional application with that Local Unit of Government.

The forms shall meet the following requirements:

- The Provider must complete both the "Uniform Video Service Local Franchise Agreement" and "Attachment 1 - Uniform Video Service Local Franchise Agreement" forms if they are seeking a new/renewed Franchise Agreement, and send the forms by mail (certified, registered, first-class, return receipt requested, or by a nationally recognized overnight delivery service) to the appropriate Franchising Entity. Until otherwise officially notified by the Franchising Entity, the forms shall be sent to the Clerk or any official with the responsibilities or functions of the Clerk in the Franchising Entity. "**Attachment 2 - Uniform Video Service Local Franchise Agreement**" is not required to be filed at this time *unless* it is being used regarding amendments, terminations, or transfers pertaining to an existing Uniform Video Service Local Franchise Agreement. (Refer to Sections X to XII of the Agreement, as well as Section 3(4-6) of the Act.)
- Pursuant to Section 11 of the Act: Except under the terms of a mandatory protective order, trade secrets and commercial or financial information designated as such and submitted under the Act to the Franchising Entity or Commission are exempt from the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246 and **MUST BE KEPT CONFIDENTIAL.**
 1. The Provider may specify which items of information should be deemed "confidential." It is the responsibility of the provider to clearly identify and segregate any confidential information submitted to the franchising entity with the following information:

"[insert PROVIDER'S NAME]
[CONFIDENTIAL INFORMATION]"

2. The Franchising Entity receiving the information so designated as confidential is required (a) to protect such information from public disclosure, (b) exempt such information from any response to a FOIA request, and (c) make the information available only to and for use only by such local officials as are necessary to approve the franchise agreement or perform any other task for which the information is submitted.
3. Any Franchising Entity which disputes whether certain information submitted to it by a provider is entitled to confidential treatment under the Act may apply to the Commission for resolution of such a dispute. Unless and until the Commission determines that part or all of the information is not entitled to confidential treatment under the Act, the Franchising Entity shall keep the information confidential.

- Responses to all questions must be provided and must be amended appropriately when changes occur.
- All responses must be printed out, typed, signed/dated (where appropriate), and mailed (certified, registered, first class, return receipt requested, or by a national recognized overnight delivery service) to the appropriate party.
- The Agreement and Attachments are templates. Tab through the documents and fill in as appropriate, use the appropriate "dropdown box" (City/Village/Township) when indicated.
- For sections that need explanation, if the Provider runs out of space, the Provider should then submit the application with typed attachments that are clearly identified.
- The Franchising Entity shall notify the Provider as to whether the submitted Franchise Agreement is complete as required by this Act within 15 business days after the date that the Franchise Agreement is filed. If the Franchise Agreement is not complete, the Franchising Entity shall state in its notice the reasons the franchise agreement is incomplete. The Franchising Entity cannot declare an application to be incomplete because it may dispute whether or not the applicant has properly classified certain material as "confidential."
- A Franchising Entity shall have 30 days after the submission date of a complete Franchise Agreement to approve the agreement. If the Franchising Entity does not notify the Provider regarding the completeness of the Franchise Agreement or approve the Franchise Agreement within the time periods required under this subsection, the franchise agreement shall be considered complete and the Franchise Agreement approved. The Provider shall notify both the Franchising Entity and the Michigan Public Service Commission of such an approved and completed Agreement by completing **Attachment 3 - Uniform Video Service Local Franchise Agreement**.
- For changes to an existing Uniform Video Service Local Franchise Agreement (amendments, transfers, or terminations), the Provider must complete the "**Attachment 2 - Uniform Video Service Local Franchising Entity**" form, and send the form to the appropriate Franchising Entity.
- For information that is to be submitted to the Michigan Public Service Commission, please use the following address:

Michigan Public Service Commission
Attn: Video Franchising
P.O. Box 30221
Lansing, MI 48909

Fax: (517) 284-8200

Questions should be directed to the Telecommunications Division, Michigan Public Service Commission at (517) 284-8190.

UNIFORM VIDEO SERVICE LOCAL FRANCHISE AGREEMENT

THIS UNIFORM VIDEO SERVICE LOCAL FRANCHISE AGREEMENT (“Agreement”) is made, pursuant to 2006 PA 480, MCL 484.3301 *et seq.* (the “Act”) by and between the Township of Genoa, a Michigan municipal corporation (the “Franchising Entity”), and WideOpenWest Mid Michigan, LLC, a Delaware corporation doing business as WOW! Internet, TV & Phone.

I. Definitions

For purposes of this Agreement, the following terms shall have the following meanings as defined in the Act:

- A. “Cable Operator” means that terms as defined in 47 USC 522(5).
- B. “Cable Service” means that terms as defined in 47 USC 522(6).
- C. “Cable System” means that term as defined in 47 USC 522(7).
- D. “Commission” means the Michigan Public Service Commission.
- E. “Franchising Entity” means the local unit of government in which a provider offers video services through a franchise.
- F. “FCC” means the Federal Communications Commission.
- G. “Gross Revenue” means that term as described in Section 6(4) of the Act and in Section VI(D) of the Agreement.
- H. “Household” means a house, an apartment, a mobile home, or any other structure or part of a structure intended for residential occupancy as separate living quarters.
- I. “Incumbent video provider” means a cable operator serving cable subscribers or a telecommunication provider providing video services through the provider’s existing telephone exchange boundaries in a particular franchise area within a local unit of government on the effective date of this act.
- J. “IPTV” means internet protocol television.
- K. “Local unit of government” means a city, village, or township.
- L. “Low-income household” means a household with an average annual household income of less than \$35,000.00 as determined by the most recent decennial census.
- M. “METRO Act” means the Metropolitan Extension Telecommunications Rights-of-Way Oversight Act, 2002 PA 48, MCL 484.3101 *et seq.*
- N. “Open video system” or “OVS” means that term as defined in 47 USC 573.
- O. “Person” means an individual, corporation, association, partnership, governmental entity, or any other legal entity.
- P. “Public rights-of-way” means the area on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, or utility easements dedicated for compatible uses.
- Q. “Term” means the period of time provided for in Section V of this Agreement.
- R. “Uniform video service local franchise agreement” or “franchise agreement” means the franchise agreement required under the Act to be the operating agreement between each franchising entity and video provider in this state.
- S. “Video programming” means that term as defined in 47 USC 522(20).
- T. “Video service” means video programming, cable services, IPTV, or OVS provided through facilities located at least in part in the public rights-of-way without regard to delivery technology, including internet protocol technology. This definition does not include any video programming provided by a commercial mobile service provider defined in 47 USC 332(d) or provided solely as part of, and via, a service that enables users to access content, information, electronic mail, or other services offered over the public internet.
- U. “Video service provider” or “Provider” means a person authorized under the Act to provide video service.
- V. “Video service provider fee” means the amount paid by a video service provider or incumbent video provider under Section 6 of the Act and Section VI of this Agreement.
- W. Video Service includes Provider-generated Streaming Video

II. Requirements of the Provider

- A. An unfranchised Provider will not provide video services in any local unit of government without first obtaining a uniform video service local franchise agreement as provided under **Section 3 of the Act** (except as otherwise provided by the Act).
- B. The Provider shall file in a timely manner with the Federal Communications Commission all forms required by that agency in advance of offering video service in Michigan.
- C. The Provider agrees to comply with all valid and enforceable federal and state statutes and regulations.
- D. The Provider agrees to comply with all valid and enforceable local regulations regarding the use and occupation of public rights-of-way in the delivery of the video service, including the police powers of the Franchising Entity. **Including full restoration of all impacted/damaged facilities and road surfaces above and below the ROW.**
- E. The Provider shall comply with all Federal Communications Commission requirements involving the distribution and notification of federal, state, and local emergency messages over the emergency alert system applicable to cable operators.
- F. The Provider shall comply with the public, education, and government programming requirements of Section 4 of the Act.
- G. The Provider shall comply with all customer service rules of the Federal Communications Commission under 47 CFR 76.309 (c) applicable to cable operators and applicable provisions of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.
 - i. Including but not limited to: MCL 445.902; MCL 445.903 (1)(a) through 445.903(1)(cc); MCL 445.903(1)(ff) through (jj); MCL 445.903(2); MCL 445.905; MCL 445.906; MCL 445.907; MCL 445.908; MCL 445.910; MCL 445.911; MCL 445.914; MCL 445.915; MCL 445.916; MCL 445.918.
- H. The Provider agrees to comply with in-home wiring and consumer premises wiring rules of the Federal Communications Commission applicable to cable operators.
- I. The Provider shall comply with the Consumer Privacy Requirements of 47 USC 551 applicable to cable operators.
- J. If the Provider is an incumbent video provider, it shall comply with the terms which provide insurance for right-of-way related activities that are contained in its last cable franchise or consent agreement from the Franchising Entity entered before the effective date of the Act.
- K. The Provider agrees that before offering video services within the boundaries of a local unit of government, the video Provider shall enter into a Franchise Agreement with the local unit of government as required by the Act.
- L. The Provider understands that as the effective date of the Act, no existing Franchise Agreement with a Franchising Entity shall be renewed or extended upon the expiration date of the Agreement.
- M. The Provider provides an exact description of the video service area footprint to be served, pursuant to **Section 2(3)(e) of the Act**. If the Provider is not an incumbent video Provider, the date on which the Provider expects to provide video services in the area identified under **Section 2(3)(e) of the Act** must be noted. The Provider will provide this information in Attachment 1 - Uniform Video Service Local Franchise Agreement.
- N. The Provider is required to pay the Provider fees pursuant to **Section 6 of the Act**.

III. Provider Providing Access

- A. The Provider shall not deny access to service to any group of potential residential subscribers because of the race or income of the residents in the local area in which the group resides.
- B. It is a defense to an alleged violation of Paragraph A if the Provider has met either of the following conditions:
 - i. Within 3 years of the date it began providing video service under the Act and the Agreement; at least 25% of households with access to the Provider's video service are low-income households.
 - ii. Within 5 years of the date it began providing video service under the Act and Agreement and from that point forward, at least 30% of the households with access to the Provider's video service are low-income households.
- C. **[If the Provider is using telecommunication facilities]** to provide video services and has more than 1,000,000 telecommunication access lines in Michigan, the Provider shall provide access to its video service to a number of households equal to at least 25% of the households in the provider's telecommunication

service area in Michigan within 3 years of the date it began providing video service under the Act and Agreement and to a number not less than 50% of these households within 6 years. **The video service Provider is not required to meet the 50% requirement in this paragraph until 2 years after at least 30% of the households with access to the Provider's video service subscribe to the service for 6 consecutive months.**

- D. The Provider may apply to the Franchising Entity, and in the case of paragraph C, the Commission, for a waiver of or for an extension of time to meet the requirements of this section if 1 or more of the following apply:
- i. The inability to obtain access to public and private rights-of-way under reasonable terms and conditions.
 - ii. Developments or buildings not being subject to competition because of existing exclusive service arrangements.
 - iii. Developments or buildings being inaccessible using reasonable technical solutions under commercial reasonable terms and conditions.
 - iv. Natural disasters
 - v. Factors beyond the control of the Provider
- E. The Franchising Entity or Commission may grant the waiver or extension only if the Provider has made substantial and continuous effort to meet the requirements of this section. If an extension is granted, the Franchising Entity or Commission shall establish a new compliance deadline. If a waiver is granted, the Franchising Entity or Commission shall specify the requirement or requirements waived.
- F. The Provider shall file an annual report with the Franchising Entity and the Commission regarding the progress that has been made toward compliance with paragraphs B and C.
- G. Except for satellite service, the provider may satisfy the requirements of this paragraph and Section 9 of the Act through the use of alternative technology that offers service, functionality, and content, which is demonstrably similar to that provided through the provider's video service system and may include a technology that does not require the use of any public right-of-way. The technology utilized to comply with the requirements of this section shall include local public, education, and government channels and messages over the emergency alert system as required under Paragraph II(E) of this Agreement.

IV. Responsibility of the Franchising Entity

- A. The Franchising Entity hereby grants authority to the Provider to provide Video Service in the Video Service area footprint, as described in this Agreement and Attachments, as well as the Act.
- B. The Franchising Entity hereby grants authority to the Provider to use and occupy the Public Rights-of-way in the delivery of Video Service, subject to the laws of the state of Michigan and the police powers of the Franchising Entity.
- C. The Franchising Entity shall notify the Provider as to whether the submitted Franchise Agreement is complete as required by the Act within 15 business days after the date that the Franchise Agreement is filed. If the Franchise Agreement is not complete, the Franchising Entity shall state in its notice the reasons the Franchise Agreement is incomplete. The Franchising Entity cannot declare an application to be incomplete because it may dispute whether or not the applicant has properly classified certain material as "confidential."
- D. The Franchising Entity shall have 30 days after the submission date of a complete Franchise Agreement to approve the agreement. If the Franchising Entity does not notify the Provider regarding the completeness of the Franchise Agreement or approve the Franchise Agreement within the time periods required under **Section 3(3) of the Act**, the Franchise Agreement shall be considered complete and the Franchise Agreement approved.
- i. If time has expired for the Franchising Entity to notify the Provider, The Provider shall send (via mail: certified or registered, or by fax) notice to the Franchising Entity and the Commission, using Attachment 3 of this Agreement.
- E. The Franchising Entity shall allow a Provider to install, construct, and maintain a video service or communications network within a public right-of-way and shall provide the provider with open, comparable, nondiscriminatory, and competitively neutral access to the public right-of-way.
- F. The Franchising Entity may not discriminate against a video service provider to provide video service for any of the following:
- i. The authorization or placement of a video service or communications network in public right-of-way.
 - ii. Access to a building owned by a governmental entity.
 - iii. A municipal utility pole attachment.
- G. The Franchising Entity may impose on a Provider a permit fee only to the extent it imposes such a fee on incumbent video providers, and any fee shall not exceed the actual, direct costs incurred by the Franchising Entity for issuing the relevant permit. A fee under this section shall not be levied if the Provider already has

paid a permit fee of any kind in connection with the same activity that would otherwise be covered by the permit fee under this section or is otherwise authorized by law or contract to place the facilities used by the Provider in the public right-of-way or for general revenue purposes.

- H. The Franchising Entity shall not require the provider to obtain any other franchise, assess any other fee or charge, or impose any other franchise requirement than is allowed under the Act and this Agreement. For purposes of this Agreement, a franchise requirement includes but is not limited to, a provision regulating rates charged by video service providers, requiring the video service providers to satisfy any build-out requirements, or a requirement for the deployment of any facilities or equipment.
- I. Notwithstanding any other provision of the Act, the Provider shall not be required to comply with, and the Franchising Entity may not impose or enforce, any mandatory build-out or deployment provisions, schedules, or requirements except as required by **Section 9 of the Act**.
- J. The Franchising Entity is subject to the penalties provided for under Section 14 of the Act.

V. Term

- A. This Franchise Agreement shall be for a period of 10 years from the date it is issued. The date it is issued shall be calculated either by (a) the date the Franchising Entity approved the Agreement, provided it did so within 30 days after the submission of a complete franchise agreement, or (b) the date the Agreement is deemed approved pursuant to **Section 3(3) of the Act**, if the Franchising Entity either fails to notify the Provider regarding the completeness of the Agreement or approve the Agreement within the time periods required under that subsection.
- B. Before the expiration of the initial Franchise Agreement or any subsequent renewals, the Provider may apply for an additional 10-year renewal under **Section 3(7) of the Act**.

VI. Fees Applicable to all Video Service including Provider-generated Streaming Video Service

- A. A video service Provider shall calculate and pay an annual video service provider fee to the Franchising Entity. The fee shall be 1 of the following:
 - i. If there is an existing Franchise Agreement, an amount equal to the percentage of gross revenue paid to the Franchising Entity by the incumbent video Provider with the largest number of subscribers in the Franchising Entity.
 - ii. At the expiration of an existing Franchise Agreement or if there is no existing Franchise Agreement, an amount equal to the percentage of gross revenue as established by the Franchising Entity of 5 % (percentage amount to be inserted by Franchising Entity which shall not exceed 5%) and shall be applicable to all providers
- B. The fee shall be due on a quarterly basis and paid within 45 days after the close of the quarter. Each payment shall include a statement explaining the basis for the calculation of the fee.
- C. The Franchising Entity shall not demand any additional fees or charges from a provider and shall not demand the use of any other calculation method other than allowed under the Act.
- D. For purposes of this Section, "gross revenues" means all consideration of any kind or nature, including, without limitation, cash, credits, property, and in-kind contributions received by the provider from subscribers for the provision of video service by the video service provider within the jurisdiction of the franchising entity.
 - 1. **Gross revenues shall include all of the following:**
 - i. All charges and fees paid by subscribers for the provision of video service, including equipment rental, late fees, insufficient funds fees, fees attributable to video service when sold individually or as part of a package or bundle, or functionally integrated, with services other than video service.
 - ii. Any franchise fee imposed on the Provider that is passed on to subscribers.
 - iii. Compensation received by the Provider for promotion or exhibition of any products or services over the video service.
 - iv. Revenue received by the Provider as compensation for carriage of video programming on that Provider's video service.
 - v. All revenue derived from compensation arrangements for advertising to the local franchise area.
 - vi. Any advertising commissions paid to an affiliated third party for video service advertising.
 - 2. **Gross revenues do not include any of the following:**
 - i. Any revenue not actually received, even if billed, such as bad debt net of any recoveries of bad debt.
 - ii. Refunds, rebates, credits, or discounts to subscribers or a municipality to the extent not already offset by subdivision (D)(i) and to the extent the refund, rebate, credit, or discount is attributable to the video service.

- iii. Any revenues received by the Provider or its affiliates from the provision of services or capabilities other than video service, including telecommunications services, information services, and services, capabilities, and applications that may be sold as part of a package or bundle, or functionality integrated, with video service.
 - iv. Any revenues received by the Provider or its affiliates for the provision of directory or internet advertising, including yellow pages, white pages, banner advertisement, and electronic publishing.
 - v. Any amounts attributable to the provision of video service to customers at no charge, including the provision of such service to public institutions without charge.
 - vi. Any tax, fee, or assessment of general applicability imposed on the customer or the transaction by a federal, state, or local government or any other governmental entity, collected by the Provider, and required to be remitted to the taxing entity, including sales and use taxes.
 - vii. Any forgone revenue from the provision of video service at no charge to any person, except that any forgone revenue exchanged for trades, barter, services, or other items of value shall be included in gross revenue.
 - viii. Sales of capital assets or surplus equipment.
 - ix. Reimbursement by programmers of marketing costs actually incurred by the Provider for the introduction of new programming.
 - x. The sale of video service for resale to the extent the purchaser certifies in writing that it will resell the service and pay a franchise fee with respect to the service.
- E. In the case of a video service that is bundled or integrated functionally with other services, capabilities, or applications, the portion of the video Provider's revenue attributable to the other services, capabilities, or applications shall be included in gross revenue unless the Provider can reasonably identify the division or exclusion of the revenue from its books and records that are kept in the regular course of business.
- F. Revenue of an affiliate shall be included in the calculation of gross revenues to the extent the treatment of the revenue as revenue of the affiliate has the effect of evading the payment of franchise fees which would otherwise be paid for video service.
- G. The Provider is entitled to a credit applied toward the fees due under **Section 6(1) of the Act** for all funds allocated to the Franchising Entity from annual maintenance fees paid by the provider for use of public rights-of-way, minus any property tax credit allowed under **Section 8 of the Metropolitan Extension Telecommunications Rights-of-Way Oversight Act (METRO Act)**, 2002 PA 48, MCL 484.3108. The credits shall be applied on a monthly pro rata basis beginning in the first month of each calendar year in which the Franchising Entity receives its allocation of funds. The credit allowed under this subsection shall be calculated by multiplying the number of linear feet occupied by the Provider in the public rights-of-way of the Franchising Entity by the lesser of 5 cents or the amount assessed under the **METRO Act**. The Provider is not eligible for a credit under this section unless the provider has taken all property tax credits allowed under the **METRO Act**.
- H. All determinations and computations made under this section shall be pursuant to generally accepted accounting principles.
- I. Any claims by a Franchising Entity that fees have not been paid as required under **Section 6 of the Act**, and any claims for refunds or other corrections to the remittance of the Provider shall be made within 3 years from the date the compensation is remitted.
- J. The Provider may identify and collect as a separate line item on the regular monthly bill of each subscriber an amount equal to the percentage established under **Section 6(1) of the Act**, applied against the amount of the subscriber's monthly bill.
- K. The Franchising Entity shall not demand any additional fees or charges from a Provider and shall not demand the use of any other calculation method other than allowed under the Act.

VII. Public, Education, and Government (PEG) Channels

- A. The video service Provider shall designate a sufficient amount of capacity on its network to provide for the same number of public, education, and government access channels that are in actual use on the incumbent video provider system on the **effective date of the Act** or as provided under **Section 4(14) of the Act**.
- B. Any public, education, or government channel provided under this section that is not utilized by the Franchising Entity for at least 8 hours per day for 3 consecutive months may no longer be made available to the Franchising Entity and may be programmed at the Provider's discretion. At such a time as the Franchising Entity can certify a schedule for at least 8 hours of daily programming for a period of 3 consecutive months, the Provider shall restore the previously reallocated channel.
- C. The Franchising Entity shall ensure that all transmissions, content, or programming to be retransmitted by a video service Provider is provided in a manner or form that is capable of being accepted and retransmitted by a Provider, without requirement for additional alteration or change in the content by the Provider, over the

particular network of the Provider, which is compatible with the technology or protocol utilized by the Provider to deliver services.

- D. The person producing the broadcast is solely responsible for all content provided over designated public, education, or government channels. The video service Provider *shall not* exercise any editorial control over any programming on any channel designed for public, education, or government use.
- E. The video service Provider is not subject to any civil or criminal liability for any program carried on any channel designated for public, education, or government use.
- F. If a Franchising Entity seeks to utilize capacity pursuant to **Section 4(1) of the Act** or an agreement under **Section 13 of the Act** to provide access to video programming over one or more PEG channels, the Franchising Entity shall give the Provider a written request specifying the number of channels in actual use on the incumbent video provider's system or specified in the agreement entered into under **Section 13 of the Act**. The video service Provider shall have 90 days to begin providing access as requested by the Franchising Entity. The number and designation of PEG access channels shall be set forth in an addendum to this agreement effective 90 days after the request is submitted by the Franchising Entity.
- G. A PEG channel shall only be used for noncommercial purposes.

VIII. PEG Fees Applicable to all Video Service including Provider-generated Streaming Video Service

- A. The video service Provider shall also pay to the Franchising Entity as support for the cost of PEG access facilities and services an annual fee equal to one of the following options:
 - 1. If there is an existing Franchise on the effective date of the Act, the fee (enter the fee amount 2) paid to the Franchising Entity by the incumbent video Provider with the largest number of cable service subscribers in the Franchising Entity as determined by the existing Franchise Agreement;
 - 2. At the expiration of the existing Franchise Agreement, the amount required under (1) above, which is 2 % of gross revenues. (The amount under (1) above is not to exceed 2% of gross revenues);
 - 3. If there is no existing Franchise Agreement, a percentage of gross revenues as established by the Franchising Entity and to be determined by a community need assessment, is _____% of gross revenues. (The percentage that is established by the Franchising Entity is not to exceed 2% of gross revenues.); and
 - 4. An amount agreed to by the Franchising Entity and the video service Provider.
- B. The fee required by this section shall be applicable to all providers, pursuant to Section 6(9) of the Act.
- C. The fee shall be due on a quarterly basis and paid within 45 days after the close of the quarter. Each payment shall include a statement explaining the basis for the calculation of the fee.
- D. All determinations and computations made under this section shall be pursuant to generally accepted accounting principles.
- E. Any claims by a Franchising Entity that fees have not been paid as required under **Section 6 of the Act**, and any claims for refunds or other corrections to the remittance of the Provider shall be made within 3 years from the date the compensation is remitted.
- F. The Provider may identify and collect as a separate line item on the regular monthly bill of each subscriber an amount equal to the percentage established under **Section 6(8) of the Act**, applied against the amount of the subscriber's monthly bill.
- G. The Franchising Entity shall not demand any additional fees or charges from a Provider and shall not demand the use of any other calculation method other than allowed under the Act.

IX. Audits

- A. No more than every 24 months, a Franchising Entity may perform reasonable audits of the video service Provider's calculation of the fees paid under **Section 6 of the Act** to the Franchising Entity during the preceding 24-month period only. All records reasonably necessary for the audits shall be made available by the Provider at the location where the records are kept in the ordinary course of business. The Franchising Entity and the video service Provider shall each be responsible for their respective costs of the audit. Any additional amount due verified by the Franchising Entity shall be paid by the Provider within 30 days of the Franchising Entity's submission of invoice for the sum. If the sum exceeds 5% of the total fees which the audit determines should have been paid for the 24-month period, the Provider shall pay the Franchising Entity's reasonable costs of the audit.
- B. Any claims by a Franchising Entity that fees have not been paid as required under **Section 6 of the Act**, and any claims for refunds or other corrections to the remittance of the provider shall be made within 3 years from the date the compensation is remitted.

X. Termination and Modification

This Franchise Agreement issued by a Franchising Entity may be terminated or the video service area footprint may be modified, except as provided under **Section 9 of the Act**, by the Provider by submitting notice to the Franchising Entity. The Provider will use Attachment 2, when notifying the Franchising Entity.

XI. Transferability

This Franchise Agreement issued by a Franchising Entity or an existing franchise of an incumbent video service Provider is fully transferable to any successor in interest to the Provider to which it is initially granted. A notice of transfer shall be filed with the Franchising Entity within 15 days of the completion of the transfer. The Provider will use Attachment 2, when notifying the Franchising Entity. The successor in interest will assume the rights and responsibilities of the original provider and will also be required to complete their portion of the Transfer Agreement located within Attachment 2.

XII. Change of Information

If any of the information contained in the Franchise Agreement changes, the Provider shall timely notify the Franchising Entity. The Provider will use Attachment 2, when notifying the Franchising Entity.

XIII. Confidentiality

Pursuant to Section 11 of the Act: Except under the terms of a mandatory protective order, trade secrets and commercial or financial information designated as such and submitted under the Act to the Franchising Entity or Commission are exempt from the Freedom of Information Act, 1976 PA 442, MCL 15.231 to 15.246 and **MUST BE KEPT CONFIDENTIAL**.

- A. The Provider may specify which items of information should be deemed "confidential." It is the responsibility of the provider to clearly identify and segregate any confidential information submitted to the franchising entity with the following information:
 "[insert PROVIDER'S NAME]
 [CONFIDENTIAL INFORMATION]"
- B. The Franchising Entity receiving the information so designated as confidential is required (a) to protect such information from public disclosure, (b) exempt such information from any response to a FOIA request, and (c) make the information available only to and for use only by such local officials as are necessary to approve the franchise agreement or perform any other task for which the information is submitted.
- C. Any Franchising Entity which disputes whether certain information submitted to it by a provider is entitled to confidential treatment under the Act may apply to the Commission for resolution of such a dispute. Unless and until the Commission determines that part or all of the information is not entitled to confidential treatment under the Act, the Franchising Entity shall keep the information confidential.

XIV. Complaints/Customer Service

- A. The Provider shall establish a dispute resolution process for its customers. Provider shall maintain a local or toll-free telephone number for customer service contact.
- B. The Provider shall be subjected to the penalties, as described under **Section 14 of the Act**, and the Franchising Entity and Provider may be subjected to the dispute process as described in **Section 10 of the Act**.
- C. Each Provider shall annually notify its customers of the dispute resolution process required under **Section 10 of the Act**. Each Provider shall include the dispute resolution process on its website.
- D. Before a customer may file a complaint with the Commission under **Section 10(5) of the Act**, the customer shall first attempt to resolve the dispute through the dispute resolution process established by the Provider in **Section 10(2) of the Act**.
- E. A complaint between a customer and a Provider shall be handled by the Commission pursuant to the process as described in **Section 10(5) of the Act**.
- F. A complaint between a Provider and a franchising entity or between two or more Providers shall be handled by the Commission pursuant to the process described in **Section 10(6) of the Act**.
- G. In connection with providing video services to the subscribers, a provider shall not do any act prohibited by Section 10(1)(a-f) of the Act. The Commission may enforce compliance to the extent that the activities are not covered by **Section 2(3)(l) in the Act**.

XV. Notices

Any notices to be given under this Franchise Agreement shall be in writing and delivered to a Party personally, by facsimile or by certified, registered, or first-class mail, with postage prepaid and return receipt requested, or by a nationally recognized overnight delivery service, addressed as follows:

If to the Franchising Entity:
(must provide street address)

If to the Provider:
(must provide street address)

Township of Genoa:

2911 Dorr Road

Brighton, MI 48116

Attn: Polly Skolarus

Fax No.:

WideOpenWest Mid Michigan, LLC

380 Wright Industrial Parkway

Pottersville, MI 48876

Attn: Michael Healy

Fax No.: 517-543-8057

Or such other addresses or facsimile numbers as the Parties may designate by written notice from time to time.

XVI. Miscellaneous

- A. **Governing Law.** This Franchise Agreement shall be governed by, and construed in accordance with, applicable Federal laws and laws of the State of Michigan.
- B. **The parties to this Franchise Agreement are subject to all valid and enforceable provisions of the Act.**
- C. **Counterparts.** This Agreement may be signed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute on and the same agreement.
- D. **Power to Enter.** Each Party hereby warrants to the other Party that it has the requisite power and authority to enter into this Franchise Agreement and to perform according to the terms hereof.
- E. **The Provider and Franchising Entity are subject to the provisions of 2006 Public Act 480.**
- F. **The Township reserves the right to amend this agreement as necessitated by changes in applicable law and further negotiated agreement with the Provider.**

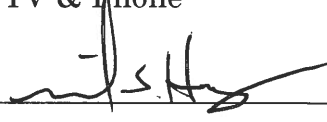
IN WITNESS WHEREOF, the Parties, by their duly authorized representatives, have executed this Franchise Agreement.

Township of Genoa, a Michigan Municipal Corporation

WideOpenWest Mid Michigan, LLC, a Delaware corporation doing business as WOW! Internet, TV & Phone

By _____
 Polly Skolarus
 Print Name
 Clerk
 Title
 2911 Dorr Road
 Address
 Brighton, MI 48116
 City, State, Zip
 810-227-5225
 Phone

 Fax
 polly@genoa.org
 Email

_____ 
 By
 Michael Healy
 Print Name
 Director, Government Relations
 Title
 380 Wright Industrial Parkway
 Address
 Pottersville, MI 48876
 City, State, Zip
 224-339-2512
 Phone
 517-543-8057
 Fax
 michael.healy@wowinc.com
 Email

FRANCHISE AGREEMENT (*Franchising Entity to Complete*)

Date submitted:
Date completed and approved:

ATTACHMENT 1

UNIFORM VIDEO SERVICE LOCAL FRANCHISE AGREEMENT (Pursuant To 2006 Public Act 480) (Form must be typed)

Date: February 2, 2024		
Applicant's Name: WideOpenWest Mid Michigan, LLC		
Address 1: 380 Wright Industrial Parkway		
Address 2: PO Box 360		Phone: 224-339-2512
City: Potterville	State: MI	Zip: 48876
Federal I.D. No. (FEIN): 04-3561701		

Company executive officers:

Name(s): Teresa Elder
Title(s): President and CEO

Person(s) authorized to represent the company before the Franchising Entity and the Commission:

Name: Michael Healy		
Title: Director, Government Relations		
Address: 380 Wright Industrial Parkway, Potterville, MI 48876		
Phone: 224-339-2512	Fax: 517-543-8057	Email: michael.healy@wowinc.com

Describe the video service area footprint as set forth in Section 2(3e) of the Act. (An exact description of the video service area footprint to be served, as identified by a geographic information system digital boundary meeting or exceeding national map accuracy standards.)

Area system prints attached hereto.

[Option A: for Providers that Options B and C are not applicable, a description based on a geographic information system digital boundary meeting or exceeding national map accuracy standards]

[Option B: for Providers with 1,000,000 or more access lines in Michigan using telecommunication facilities to provide Video Service, a description based on entire wire centers or exchanges located in the Franchising Entity]

[Option C: for an Incumbent Video Service Provider, it satisfies this requirement by allowing the Franchising Entity to seek right-of-way information comparable to that required by a permit under the METRO Act as set forth in its last cable franchise or consent agreement from the Franchising Entity entered into before the effective date of the Act]

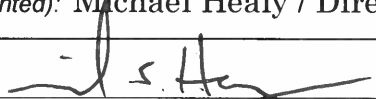
Pursuant to Section 2(3)(d) of the Act, if the Provider is not an incumbent video Provider, provide the date on which the Provider expects to provide video services in the area identified under Section 2(3)(e) (the Video Service Area Footprint).

Date: December 1, 2024

For All Applications:

**Verification
(Provider)**

I, Michael Healy, of lawful age, and being first duly sworn, now states: As an officer of the Provider, I am authorized to do and hereby make the above commitments. I further affirm that all statements made above are true and correct to the best of my knowledge and belief.

Name and Title (printed): Michael Healy / Director, Government Relations	
Signature: 	Date: 2/2/24

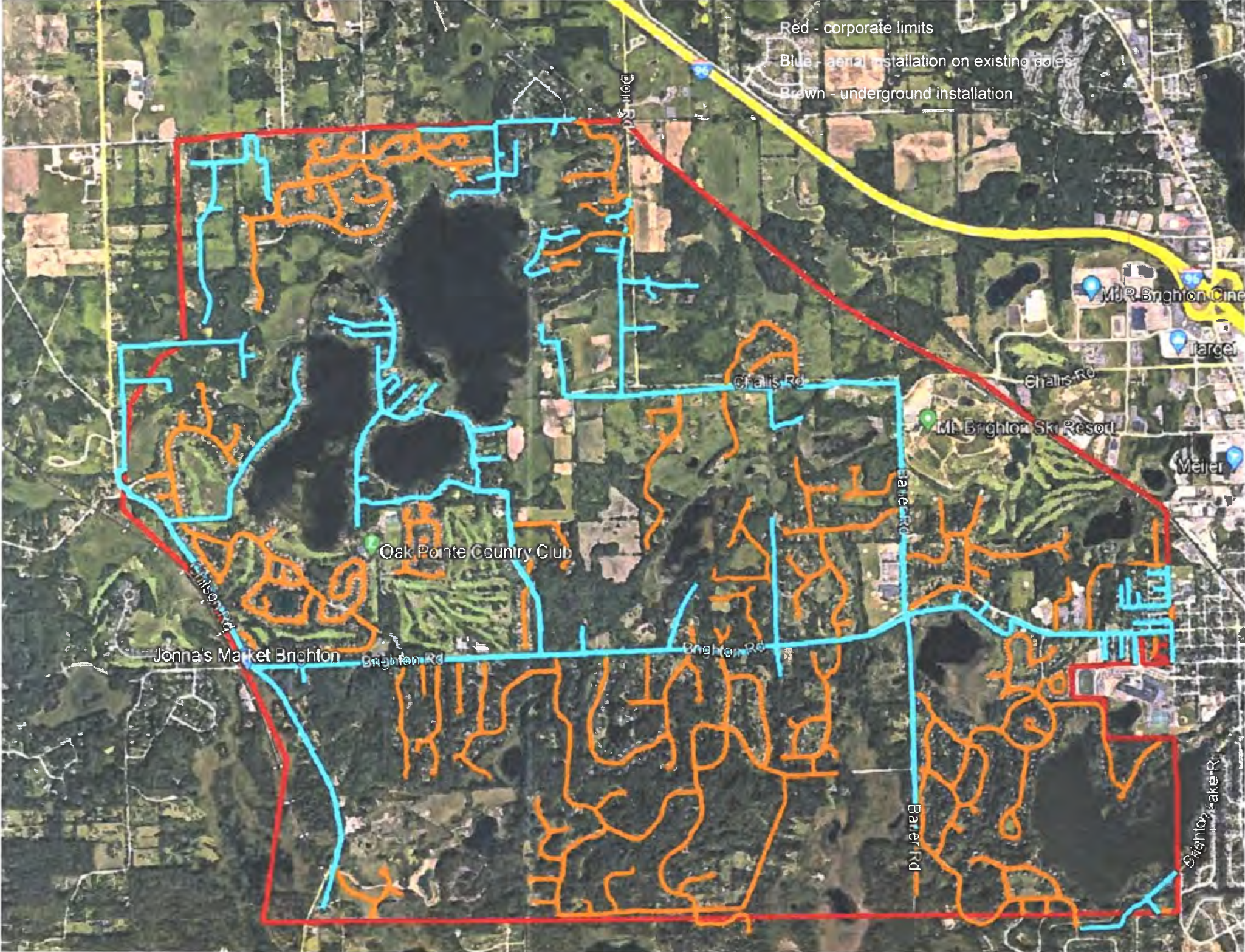
(Franchising Entity)

Township of Genoa, a Michigan municipal corporation

By
Polly Skolarus
Print Name
Clerk
Title
2911 Dorr Road
Address
Brighton, MI 48116
City, State, Zip
810-227-5225
Phone

Fax
polly@genoa.org
Email

Date



Red - corporate limits
Blue - aerial installation on existing poles
Brown - underground installation



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: March 27, 2024
RE: Mister Car Wash – vacant parcel #4711-04-300-017)
Special Land Use, Site Plan and Environmental Impact Assessment

Please find attached the project case a special land use permit, site plan and environmental impact assessment for a proposed automatic car wash with 19 vacuum stations on the northern portion of vacant parcel #4711-04-300-01. The site is located on the east side of Latson Road, south of Grand River Avenue. The property is zoned General Commercial District (GCD).

Township staff has been in contact with the Livingston County Road Commission who has concerns regarding the right in/right out driveway. Township Staff supports the 15-foot width or prefers the removal of the driveway and encourages cross connection to the north to alleviate the concerns of the Brighton Area Fire Dept.



SUPERVISOR
Bill Rogers
CLERK
Paulette A. Skolarus
TREASURER
Robin L. Hunt
TRUSTEES
Jean W. Ledford
Terry Croft
Diana Lowe
Jeff Dhaenens
MANAGER
Kelly VanMarter

Procedurally, the Planning Commission is to review the special land use, site plan and environmental impact assessment, and put forth recommendations to the Township Board following a public hearing. The project was heard before the Planning Commission on March 11th, 2024 and the Commission recommended approval. Based on the recommendation from the Planning Commission and on the review of the revised submittal, I offer the following for your consideration:

SPECIAL USE PERMIT

Moved by _____, Supported by _____ to APPROVE the Special Use Permit to allow for a proposed automatic car wash on the northern portion of vacant parcel #4711-04-300-017. The site is located on the east side of Latson Road, south side of Grand River Avenue. The special land use standards of Section 19.03 are generally met and the conditions of Section 7.02.02(l) have been met.

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to APPROVE the Environmental Impact Assessment dated January 16, 2024 to allow for a proposed automatic car wash on the northern portion of vacant parcel #4711-04-300-017. The site is located on the east side of Latson Road, south side of Grand River Avenue with the following condition:

- Official approval from MDOT for the stormwater discharge shall be submitted prior to land use permit issuance.

SITE PLAN

Moved by _____, Supported by _____ to APPROVE of the Site Plan dated March 14, 2024 to allow for a proposed automatic car wash on the northern portion of vacant parcel #4711-04-300-017. The site is located on the east side of Latson Road, south side of Grand River Avenue, with the following conditions:

- The required concrete pad at the Dumpster enclosure shall be installed.
- The property split shall be approved prior to land use permit issuance.
- The limited access driveway should remain at 15-foot width or preferably be eliminated. The applicant shall work with the Livingston County Road Commission, Brighton Area Fire Dept., and Township staff on the final design.
- The applicant shall use all available efforts to establish the connection to the north.
- An executed cross access easement with the property to the south shall be submitted and recorded prior to land use permit issuance.
- All site plan review overage fees must be paid prior to issuance of a land use permit.

If you should have any questions, please feel free to contact me.

Best Regards,



Amy Ruthig
Planning Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

GENOA TOWNSHIP

OCT 04 2023

RECEIVED

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: CWP West, LLC, 222 E. 5th Ave. Tucson, AZ 85705
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: 1015 Latson Road LLC 29592 Beck Road, Wixom, MI 48393

SITE ADDRESS: 1015 S. Latson Road, Howell, MI 48843 PARCEL #(s): 4711-04-300-017

APPLICANT PHONE: (206) 664-1303 OWNER PHONE: (248) 767-5337

OWNER EMAIL: kbahnam@usa2goquickstores.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Site is located on east side of Latson Rd just south of Grand River Avenue. Site is currently a vacant, cleared site. Site is immediately south of existing O'Reilly Auto Parts store at the intersection.

BRIEF STATEMENT OF PROPOSED USE: Proposed use is an automatic car wash with vacuum cleaning stations.

THE FOLLOWING BUILDINGS ARE PROPOSED: An automatic car wash building approximaely 5,432 sft in footprint.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: [Signature]

ADDRESS: 29592 Beck Rd, Wixom MI 48393

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Scott Tousignant of Boss Engineering at scottt@bosseng.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 10-2-22

PRINT NAME: Karam Bahnam PHONE: 248-767-5337

ADDRESS: 29592 Beck Rd, Wixom MI 48393



GENOA CHARTER TOWNSHIP
Special Land Use Application

GENOA TOWNSHIP

OCT 04 2023

RECEIVED

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: CWP West, LLC , 222 E. 5th Ave. Tucson, AZ 85705

Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (206) 664-1303

EMAIL: nkastern@mistercarwash.com

OWNER NAME & ADDRESS: 1015 Latson Road LLC, 29592 Beck Rd, Wixom, MI 48393

SITE ADDRESS: 1015 S Latson Rd, Howell, MI 48843

PARCEL #(s): 4711-04-300-017

OWNER PHONE: (248) 767-5337

EMAIL: kbahnam@usa2goquickstores.com

Location and brief description of site and surroundings:

Site is located on the East side of South Latson road, just South of Grand River Ave. The site is currently vacant. The site is zoned GCD with HDR and GCD to the east, GCD to the north, and NRPUD to the south and west. Site is immediately south of the existing O-Reilly Auto Parts on the south side of the Latson and Grand River Ave intersection. The site is currently vacant with tall grasses.

Proposed Use:

The proposed use will be an automatic automobile wash with supporting vacuum cleaning stations.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed use will still have commercial identity and promote internal revenue and jobs within the Township. The site is currently vacant and the proposed development will provide a nice landscaped corridor along the east side of Latson as the site is currently vacant and cleared land.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The proposed car wash will be designed, constructed, operated, and maintained to be compatible with the surrounding GCD zoned parcels. A large existing berm buffers to the HDR zoning to the east and additional plantings will be added to the east property line. A car wash is appropriate in this location given its proximity to the access points to I-96 on Latson Road. All surrounding uses are commercial uses with the exception of the HDR zoning to the rear of the property.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

The site has access from Latson Road and will have proposed cross access to an adjacent development to the south. Public water is available at the rear of the parcel and existing sanitary leads are stubbed for this vacant site. The site will be designed to accommodate fire truck circulation and will have adequate signing to promote vehicular and pedestrian safety. Continuation of the 8' wide sidewalk along Latson Road will be completed along the frontage.

- d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

The proposed use will provide adequate stacking spaces and parking on the site to ensure no impact on traffic on Latson Road. The use will contain additional landscaping at the rear of the property for additional screening to HDR zoning. The site lighting will be designed for compliance with Twp Ordinance to ensure no excess lighting. The site will not generate odors, smoke, fumes, or vibration.

- e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

7.02.02 (l) 1. The use will only have 1 Ingress driveway to Latson Road. 2) A landscaped berm currently exists on the property to the east. The development proposes additional landscape plantings (LO of a wall as the wall will be screened by the berm. 3) The washing facilities are enclosed within the building. 4) Vacuuming is not located in the required front yard and is 50+ ft from the HDR zoning. 5) Adequate stacking spaces are provided prior to entry into the automatic car wash and adequate drive aisles not in street ROW.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Kevin Bahnam, 1015 Latson Road LLC STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: [Signature]

ADDRESS: 29592 Beck Rd, Wixom MI 48393

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Scott Tousignant of Boss Engineering at scottt@bosseng.com
 Name Business Affiliation Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 10-2-23

PRINT NAME: Karan Bahnam PHONE: 248-767-5337

GENOA TOWNSHIP

OCT 04 2023

RECEIVED

Letter of Authorization

I, Kevin Bahnam 1015 Latson Road LLC, whose address is 29592 Beck Road, Wixom, MI 48393, Owner of the parcel located at 1015 S. Latson Road, Howell MI 48843 whose parcel ID is 4711-04-300-017 does hereby authorize CWP West, LLC, whose address is 222 E. 5th Ave, Tucson, AZ 85705, to make application for development on the aforementioned parcel.



Owner Signature: Kevin Bahnam, USA 2 Go Quick Stores

10-2-23

Date

Moved by Commissioner Rassel, supported by Commissioner Rauch, to table Open Public Hearing #1 until on or before the May 13, 2024 Planning Commission meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2...Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by CWP West, LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (1-16-24)
- C. Recommendation of Site Plan (1-16-24)

Mr. Scott Tousignant of Boss Engineering and Nicole Castern of Mister Car Wash were present. Ms. Tousignant stated they have received MDOT approval for the stormwater discharge. He provided a review of the changes, specifically the color scheme, additional landscaping has been added to the front, the number of signs have been reduced, the building lighting has been changed, the cross access easement has been obtained, and they have added the screening fence. Also, they have changed the entrance drive to show the right in/right out.

Mr. Borden reviewed his letter dated February 6, 2024.

- 1. Special Land Use (Section 19.03)
 - a. The special land use standards of Section 19.03 are generally met.
 - b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(l) need to be met to the Commission's satisfaction.
 - c. The submittal shows that they would not be in compliance with the noise ordinance after 10 pm. He suggests the applicant restrict the hours of operation to ensure compliance with the Township's Noise Ordinance.
 - d. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.
- 2. Use Conditions (Section 7.02.02(1))
 - a. The use conditions are met.
- 3. Site Plan Review
 - a. The revised building elevations comply with the material standards of Section 12.01.
 - b. Building materials, design and color scheme are subject to review and approval by the Planning Commission.
 - c. The landscape plan is deficient in width for the Latson Road greenbelt.
 - d. The waste receptacle details must identify the required concrete base pad.

Mr. Barber reviewed Ms. Byrne's letter dated February 6, 2024.

1. The Petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.
2. The impact assessment provides a predicted water and sewer usage based on the Township's REU table, which provides 25.2 REUs per car wash with recycle. Historic water usage was also provided from other Mister Car Wash facilities with an average usage of 21,277 gallons per day. This average water usage from similar facilities should be considered when calculating the REU amount for the proposed development.
3. The petitioner is proposing a closed pipe type underground detention basin comprised of four 48-inch diameter pipes to provide 12,489 cubic feet of storage. The current car wash, site drive, and parking improvements do not allow enough space for any at grade stormwater detention or retention.
4. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The LCRC has indicated that the existing storm sewer is under MDOT jurisdiction and approval from MDOT will be required to connect to it. If approval from MDOT cannot be obtained the proposed site layout and storm management plan would change significantly, therefore we recommend that approval from MDOT be obtained prior to bringing the site plan before the Township Planning Commission.
5. The LCRC completed a review of the traffic impact study and plans, and the study was revised per their recommendation. The study recommended signal modifications at the Grand River Avenue and Latson Road intersection, which would need to be reviewed and discussed with MDOT. The study also recommended restricting the northernmost site driveway to right-in-right-out and aligning the southernmost site driveway to align directly with the existing Lowes driveway. Both site driveway recommendations have been addressed on the revised plans.

The Brighton Area Fire Authority Fire Marshal's letter dated February 2, 2024 states "One-way emergency vehicle access roads shall be a minimum of 20-feet wide. With a width of 20-feet, this includes the one-way in/out entry to the property. Access roads to the site shall be provided and maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 84,000 pounds, this includes over the underground retention." Mr. Tousignant will address this with the Fire Marshal as they have the cross access drive that will be the emergency access, and not the right in/right out drive.

Commissioner Rauch thanked the applicant for making the changes that were discussed and requested. He asked that the blue framing shown on the fence be changed to the bronze color that is on the building. He asked about the noise ordinance issue noted by Mr. Borden. Ms. Castern stated they have submitted revised hours of operation, which are 7 am to 7 pm in the winter and 7 am to 8 pm in the winter, so they meet the ordinance.

Commissioner McCreary asked if the engineer's comment regarding the storm sewer has been addressed. Mr. Tousignant stated they have received MDOT's approval. She questioned

LCRC's request for the signal changes. Mr. Tougissant stated they will be working with MDOT to modify the signalization as requested.

Commissioner Dhaenens is satisfied with the landscaping provided and would not require the petitioner to add additional trees.

The call to the public was made at 7:36 pm with no response.

Moved by Commissioner Rassel, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Special Use Application to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue as this Commissioner finds that the special land use standards of Section 19.03 are generally met and the conditions of Section 7.02.02(l) have been met. **The motion carried unanimously.**

Moved by Commissioner Rassel, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 16, 2024 to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Rassel, supported by Commissioner Rauch, to recommend to the Township Board approval of the Site Plan dated January 16, 2024 to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue, with the following conditions:

- The color of the fencing shall be changed from blue to a dark bronze or black color.
- The required concrete pad at the Dumpster enclosure shall be installed.
- The Planning Commission approves the landscape deficiency.
- The property split of this parcel shall be approved.

The motion carried unanimously.

OPEN PUBLIC HEARING #3...Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by Kevin Bahnam, 1015 Latson Road LLC.

A. Recommendation of Special Use Application.

B. Recommendation of Environmental Impact Assessment (1-16-24)

C. Recommendation of Site Plan (1-16-24)

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
November 13, 2023**

MINUTES

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Diana Lowe, Eric Rauch, Tim Chouinard, Glynis McBain, Marianne McCreary, and Greg Rassel. Also present were Planning Director Amy Ruthig, Brian Borden of Safebuilt, and Shelby Byrne of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner Rauch, seconded by Commissioner Rassel, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST:

None

CALL TO THE PUBLIC:

The call to the public was made at 6:31 pm with no response.

OPEN PUBLIC HEARING #1... Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed automatic car wash located on vacant parcel #4711-04-300-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by CWP West, LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (10-26-23)
- C. Recommendation of Site Plan (10-25-23)

Mr. Brent LaVanway from Boss Engineering, Ms. Nicole Kastern of Mister Car Wash, and Mr. Frank Jarbou of CWP West, LLC were present.

Mr. LaVanway provided a review of the proposed project, noting this request is one part of a larger parcel and the second item on tonight's agenda will be for the other part. Ms. Kastern showed colored elevations and sample building materials.

Commissioner Rauch noted that the sign ordinance does not allow the number of signs shown. The proposed materials and colors meet the ordinance; however, while this item and Agenda

Item #2 are separate items, he suggested the two buildings use the same colors. The color tones proposed for Item #2 are lighter and more earth toned. They are more consistent with the surrounding buildings. The blue color proposed will need to be made darker, which is what was recently requested of a previous applicant.

Ms. Kastern stated they are two different brands and use different colors. She agreed that they do meet the ordinance.

Mr. Borden reviewed his letter dated November 8, 2023.

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(l) need to be met to the Commission's satisfaction.
- c. We suggest the applicant restrict the hours of operation to ensure compliance with the Township's Noise Ordinance. The hours of operation are 7 am to 10 pm. Ms. Kastern stated they are open from 7 am to 8 pm. Mr. Borden would like this added to the Impact Assessment.

2. Use Conditions (Section 7.02.02(l)):

- a. Landscaping is proposed in lieu of the required 6 foot solid fence or wall adjacent to the residential district. The Commission may allow this substitution, although a berm is not included.

3. Site Plan Review:

- a. The revised building elevations are generally compliant with the standards of Section 12.01; however, the west elevation is slightly deficient in the amount of brick or stone. It is required to be 70 percent.
- b. Building materials, design and color scheme are subject to review and approval by the Planning Commission.
- c. The proposed sidewalk easement is subject to review and approval by the Township Engineer.
- d. Consideration of the vacuum spaces as parking spaces results in excess of the 120 percent of parking allowed, which requires Planning Commission approval. He noted that if those spaces are not considered as parking, then they meet the ordinance.
- e. The landscape plan is deficient in width for the Latson Road greenbelt due to the shape of the property. As noted above, the wall or berm requirement for the easterly buffer zone is not proposed.
- f. The waste receptacle details must denote the required concrete base pad.

Additionally, the applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

Mr. LaVanway stated there is currently a berm with plantings on the east side of the site and they added additional evergreens. Their property is three feet lower than the adjacent residential

property and this causes a drainage issue so he is not sure adding a wall is the best solution. Commissioner Rauch is considering the residents to the east of the site.

Ms. Byrne reviewed her letter dated November 8, 2023.

1. The petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.
2. The impact assessment provides a predicted water and sewer usage based on the Township's REU table, which provides 25.2 REUs per car wash with recycle. Historic water usage was also provided from other Mister Car Wash facilities with an average usage of 21,277 gallons per day. This average water usage from similar facilities should be considered when calculating the REU amount for the proposed development.
3. The petitioner is proposing a closed pipe type underground detention basin comprised of four 48-inch diameter pipes to provide 12,489 cubic feet of storage. The current car wash, site drive, and parking improvements do not allow enough space for any at-grade stormwater detention or retention.
4. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The petitioner will need to obtain approval from the LCRC to connect to their storm sewer and said approval should be provided to the Township prior to final site plan approval. In the past, the LCRC has not allowed any increase in storm volume into their storm sewer. The underground detention design has been revised since the last submittal to allow for additional infiltration to limit the storm volume that would outlet into the LCRC sewer.
5. The petitioner has provided a traffic impact study for the proposed development. The study included expected traffic volumes from other proposed developments in the area in the no-build condition and recommended signal timing and length be modified at the Grand River Avenue and Latson Road for both the no-build and build condition. The Livingston County Road Commission will review the traffic impact study as part of their approval for the proposed site driveways and they will need to review the recommendation of optimized signal timings at the Grand River Avenue and Latson Road intersection.

Mr. LaVanway stated they have worked with the LCRC regarding the entrances and exits for both parcels.

Mr. LaVanway stated he has seen the review letter from the Brighton Area Fire Authority Fire Marshal dated November 3 and they will comply with all of their requests.

Per Chairman Grajek's request, Mr. LaVanway provided a review of the traffic impact study, which was done for both parcels being developed. There is a rating of "F" for both the morning and afternoon peak times in the current conditions. With this development, it shows these same ratings of "F" during peak times as well as during other times. All of the others were within the acceptable level. The primary suggestion from the traffic engineer is to change the signal timing at Latson and Grand River. This would need to be coordinated between the LCRC and MDOT.

Commissioner McBain questioned the site signage directing vehicles to the wash area or the vacuums. Ms. Kastern stated this signage would be part of the site plan. Commissioner McBain is concerned with the traffic flow inside the site.

Commissioner Rauch asked for details of the vacuums, the monument signs, and the landscaping on the Latson Road side for both locations.

The call to the public was made at 7:32 pm.

Ms. Denise Pollicella of 4200 Sweet Road stated she is the co-founder and Executive Director of the Coalition to Stop the Latson PUD. She is speaking on behalf of over 600 members regarding the car wash and multi-tenant commercial projects proposed this evening. Her group has been publicly maligned as anti-development. That is not their purpose. They are in favor of measured, thoughtful and responsible development in areas where it is appropriate. Neither of these proposals require a rezoning or intrusion into the residential area and they are in the right location. They do not agree that the township should be approving additional new commercial or industrial development when there are so many vacancies on the Latson Grand River corridor. Many areas on Grand River are blight and the township is not doing enough to encourage redevelopment. They do not have any objections to these proposed developments and they should be granted special land use permits.

Ms. Deborah McCormick of 2650 Springhill Drive is concerned about the traffic on Latson Road due to the car wash. This is a dangerous area. There is a car wash one mile down the road. She appreciates the time that is being taken by the Planning Commission reviewing this development.

Mr. Saman Abro with the car wash on Grand River stated that there are already eight car washes in Howell. Car washes can have up to 300 cars per hour and that will generate a lot of traffic. Antonio stated Mister Car Wash does not want to service the community. There are social media pages with complaints against them.

The call to the public was closed at 7:39 pm.

Commissioner Rauch suggested having this item tabled to allow the applicant to address the outstanding issues discussed this evening, specifically:

- Updating the renderings to show materials and colors more consistent with the proposed project to the south, adding additional glass along the west elevation, removing the blue material, and updating the number of signs to meet the ordinance.
- He is recommending a screen wall along the east side of the site be installed to limit the adverse impacts on the adjacent residential property.
- The hours of operations should be added to the Environmental Impact Assessment.
- Provide photographs of the vacuums in a subdued color.
- Creative landscaping along Latson Road.
- Details of the proposed ground sign.
- Updated traffic study to include the current residential development on Latson Road in Oceola Township. Commissioner McCreary agrees with Ms. McCormick regarding the traffic in that area.

- The LCRC's requirements for the stormwater and their response to the traffic impact study and what improvements they agree to make.

Commissioner McBain suggested reducing the number of vacuum bays, she reiterated her concerns regarding the traffic flow on the site and agrees with additional landscaping being needed on Latson Road.

Moved by Commissioner Rauch, supported by Commissioner Chouinard, to table Open Public Hearing Item #1 petitioned by CWP West, LLC. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2... Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-~~017-004~~ Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by Kevin Bahnam, 1015 Latson Road LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (10-26-23)
- C. Recommendation of Site Plan (10-25-23)

Mr. Brent LaVanway of Boss Engineering, Mr. Jeff Klatt, the architect, and Mr. Frank Jarbou of CWP West, LLC were present.

Mr. LaVanway provided a review of the project. This is a multi-use tenant building on the site adjacent to the previous agenda item and one of the tenants will include a drive thru. There is a partial existing wall on the east side and they are again proposing to add additional evergreens where there is no wall. They will be requesting two variances from the ZBA, one is for the location of the parking and the proximity of a drive thru to an existing drive thru.

Mr. Klatt showed colored building renderings and material samples. The building is modern with clear lines and the colors are consistent with other buildings in the area.

Mr. Borden reviewed his letter dated November 8, 2023.

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Sections 7.02.02(i) and (j) and the buffer zone requirements of Section 12.02.03 must be met to the Commission's satisfaction.
- c. If a favorable recommendation is made, the Commission may wish to include a condition that a sound study be provided for the drive-through speaker system when the tenant is known.



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

March 18th, 2024

Amy Ruthig, Planning Director
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: Mister Car Wash

Dear Ms. Ruthig,

Pursuant to the Genoa Township Planning Commission action on the Mister Car Wash project on March 11th, 2024, the following is a summary of revisions to the proposed plans.

1. The dumpster enclosure concrete pad is delineated, noted and dimensioned on the site plan sheet as requested.
2. A note has been added to the fence product sample image indicating the frame is to be black or bronze in color.
3. Revisions per the Livingston County Road Commission review letter dated March 13th, 2024 have been incorporated.

Should you have any questions concerning the modifications indicated above, please don't hesitate to ask.

Sincerely,

BOSS ENGINEERING COMPANY

A handwritten signature in blue ink that reads "Scott Tousignant". The signature is written in a cursive style with a large, sweeping flourish at the end.

Scott Tousignant, PE
Senior Project Manager
Scottt@bosseng.com



February 6, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Mister Car Wash – Special Land Use and Site Plan Review #3
Location:	1015 Latson Road – east side of Latson Road, south side of Grand River Avenue
Zoning:	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from CWP West, LLC for development of a Mister Car Wash automatic car wash at 1015 Latson Road (plans dated 1/16/24).

A. Summary

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(l) need to be met to the Commission’s satisfaction.
- c. We suggest the applicant restrict the hours of operation to ensure compliance with the Township’s Noise Ordinance.
- d. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Use Conditions (Section 7.02.02(l)):

- a. The use conditions are met.

3. Site Plan Review:

- a. The revised building elevations comply with the material standards of Section 12.01.
- b. Building materials, design and color scheme are subject to review and approval by the Planning Commission.
- c. The landscape plan is deficient in width for the Latson Road greenbelt.
- d. The waste receptacle details must identify the required concrete base pad.

B. Proposal/Process

The applicant proposes development of an automatic car wash on the vacant 1.58 acre site. The project includes a 5,432 square foot car wash building and 19 vacuum stations.

Table 7.02 allows automobile washes (automatic or self-serve) with special land use approval in the GCD. The request is also subject to the use conditions of Section 7.02.02(l).

Procedurally, the Planning Commission is to review the special land use, site plan, and Environmental Impact Assessment, and put forth recommendations to the Township Board following a public hearing.



Aerial view of site and surroundings (looking east)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Mixed Use – West Grand River. This classification states that “regional commercial uses, such as auto-oriented uses (including fast-food) are only intended at interchange uses and where otherwise currently existing along Grand River Avenue.”

The subject site is located near a major roadway intersection and within close proximity to an interchange. Furthermore, there are other auto-oriented uses (gas stations and a drive-through coffee shop) in the immediate area.

As such, the Commission may find that the proposal is consistent with the Master Plan and Future Land Use Map.

- 2. Compatibility.** Surrounding properties are primarily commercial/service in nature, though the site does abut residential zoning and land use along the south half of the east side lot line.

The use conditions of Section 7.02.02(c), which include setbacks for vacuum stations and screening requirements, are intended to help mitigate potential impacts of car washes.

The previous submittal included a noise impact analysis related to the car wash dryer and vacuum stations. In summary, the analysis finds that the proposed use will not generate noise levels above 80 dB at a property line between 7AM and 10PM.

This is in line with the Township’s Noise Ordinance; however, the analysis also notes that use past 10PM will exceed the 50 dB limitation of said Ordinance. As such, we suggest the applicant restrict the hours of operation to avoid any potential issues.

- 3. Public Facilities and Services.** Given that the site fronts Latson Road near Grand River Avenue and was previously developed, we anticipate that necessary public facilities and services are in place.

However, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Similar to comments above, in order to make a favorable finding under this criterion, the applicable use conditions must be met to the Commission’s satisfaction.

5. Mitigation. If further concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Use Conditions

Automobile washes are subject to the use requirements of Section 7.02.02(1), as follows:

1. Only one (1) ingress/egress driveway shall be permitted on any single street.

The site plan proposes 1 turn restricted ingress/egress driveway to/from Latson Road. The site also has cross-access with the proposed development to the south.

2. Where adjoining a residential district, a solid fence or wall six (6) feet in height shall be erected along any common lot line. Such fence or wall shall be continuously maintained in good condition. The Planning Commission may require landscaping, including a berm, as an alternative.

A portion of the east side lot line abuts residential zoning (HDR). The revised plan includes a 6' screen fence, as required.

3. All washing facilities shall be within a completely enclosed building.

This standard is met.

4. Vacuuming and drying may be located outside the building, but shall not be in the required front yard and shall be set back at least fifty (50) feet from any residential district.

This standard is met.

5. All cars required to wait for access to the facilities shall be provided stacking spaces fully off the street right-of-way which does not conflict with vehicle maneuvering areas to access gasoline pumps or vacuums, and as required Article 14, Parking and Loading-Unloading Standards.

Section 14.04 requires 15 stacking spaces. The site plan depicts 21 stacking spaces across 3 service lanes.

E. Site Plan Review

1. Dimensional Requirements. As noted in the table below, the proposal complies with the dimensional requirements of the GCD:

	Min. Lot Req.		Minimum Yard Setbacks (feet)				Max. Lot Coverage (%)	Max. Height
	Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking Lot		
GCD	1	150	35	15	50	20 front 10 side/rear	35% building 75% impervious	35' 2 stories
Proposed	1.48	390	41.7	57.6 (N) 221 (S)	62	No front parking 10 side (S) 10 rear	7.9% building 67.6% impervious	35' 1 story

2. Building Design and Materials. The primary building materials are stone and brick with metal siding and a metal roof.

The revised submittal includes material calculations that demonstrate compliance with the standards of Section 12.01.

Lastly, Section 12.01 requires the use of earth tone colors. The revised submittal has reduced the amount of bright blue to the overhead doors. This color is also depicted behind doors and windows.

Building materials and colors are subject to review and approval by the Planning Commission.

- 3. Pedestrian Circulation.** The site plan proposes an 8-foot wide concrete sidewalk along S. Latson. A portion of the sidewalk encroaches onto the property, though a note indicates that an easement will be provided.

The plan also provides internal pedestrian circulation between the vacuum stations and building, and attendant shelter and building.

- 4. Vehicular Circulation.** The site plan proposes 1 curb cut with a turn-restricted driveway along S. Latson. Cross-access is also provided with the proposed development to the south.

The revised plan includes pavement markings and directional signage, as well as a “collision detection system,” to aid vehicular circulations through the site.

The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation.

- 5. Parking.** Based on information contained in the submittal, the project requires 5 parking spaces. The site plan provides 20 vacuum station/parking spaces along the east side of the site.

The design and dimensions of parking spaces and drive aisles comply with Ordinance standards.

- 6. Exterior Lighting.** The lighting plan identifies 9 light poles, 4 wall mounted fixtures, 19 vacuum station fixtures, and 1 canopy fixture.

Based on the detail sheets, the proposed fixtures are downward direct LED, as required.

Pole heights and photometric readings along property lines comply with Ordinance standards. The revised plan also complies with the maximum lighting intensity.

- 7. Landscaping.** The landscape plan has been reviewed for compliance with the standards of Section 12.02, as follows:

Standard	Required	Proposed	Notes
Front yard greenbelt	20' width 10 canopy trees	10' to 20' width 11 canopy trees	Partially deficient in width
Buffer Zone C (N)	10' width 8 canopy trees OR 8 evergreen trees OR 30 shrubs	10' width 30 shrubs	In compliance
Buffer Zone C (S)	10' width 9 canopy trees OR 9 evergreen trees OR 35 shrubs	10' to 20' width 4 canopy trees 1 evergreen tree 19 shrubs	In compliance
Buffer Zone C (E)	10' width 6 canopy trees OR 6 evergreen trees OR 24 shrubs	10' width 32 shrubs	In compliance
Buffer Zone B (E)	20' width 6' wall OR 3' berm 10 canopy trees 10 evergreen trees 40 shrubs	23' width 6' screen fence 10 canopy trees 15 evergreen trees 40 shrubs	In compliance
Parking lot	2 canopy trees 220 SF landscaped area	2 canopy trees 300+ SF landscaped area	In compliance

The Commission has the authority to modify landscaping requirements, per Section 12.02.13.

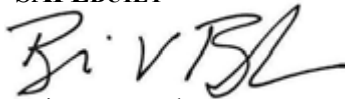
- 8. Waste Receptacle.** The proposed waste receptacle has been reviewed for compliance with the standards of Section 12.04, as follows:

	Requirement	Proposed	Comments
Location	Rear yard or non-required side yard	Rear yard	Requirement met
Access	Clear access w/ out damaging buildings/vehicles	Turning template demonstrates sufficient maneuvering area	Requirement met
Base design	9' x 15' concrete pad	Not depicted	Plans must denote required concrete base pad
Enclosure	3-sided enclosure w/ gate Masonry walls 6' height/taller than receptacle	3 sides w/ gate across 4 th CMU; colors match building 8' height	Requirements met

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



February 6, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Mister Car Wash
Site Plan Review No. 3**

Dear Ms. Ruthig:

Tetra Tech conducted a third review of the proposed Mister Car Wash site plan last dated January 16, 2024. The plan was prepared by Boss Engineering on behalf of 1015 Latson Road, LLC. The development is located on two parcels with a total of 3.38 acres on the east side of Latson Road, approximately 350 feet south of the Latson Road and Grand River Avenue intersection. The Petitioner is proposing to split the site into two parcels that are being reviewed separately, and this review includes a proposed 5,432 square foot car wash building on the proposed north parcel. The proposed improvements include a new parking lot, storm sewer, and underground detention.

We offer the following comments for your consideration:

GENERAL

1. The Petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.
2. The impact assessment provides a predicted water and sewer usage based on the Township's REU table, which provides 25.2 REUs per car wash with recycle. Historic water usage was also provided from other Mister Car Wash facilities with an average usage of 21,277 gallons per day. This average water usage from similar facilities should be considered when calculating the REU amount for the proposed development.

DRAINAGE AND GRADING

1. The Petitioner is proposing a closed pipe type underground detention basin comprised of four 48-inch diameter pipes to provide 12,489 cubic feet of storage. The current car wash, site drive, and parking improvements do not allow enough space for any at grade storm water detention or retention.
2. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The LCRC has indicated that the existing storm sewer is under MDOT jurisdiction and approval from MDOT will be required to connect to it. If approval from MDOT cannot be obtained the proposed site layout and storm management plan would change significantly, therefore we recommend that approval from MDOT be obtained prior to bringing the site plan before the Township Planning Commission.

Tetra Tech

3497 Coolidge Road, East Lansing, MI 48823
Tel 517.316.3930 Fax 517.484.8140 www.tetrattech.com

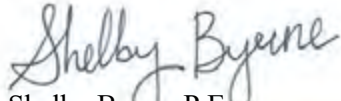
Ms. Amy Ruthig
Re: Mister Car Wash
Site Plan Review No. 3
February 6, 2024
Page 2

TRAFFIC AND PAVEMENT

1. The LCRC completed a review of the traffic impact study and plans, and the study was revised per their recommendation. The study recommended signal modifications at the Grand River Avenue and Latson Road intersection, which would need to be reviewed and discussed with MDOT. The study also recommended restricting the northern most site driveway to right-in-right-out and aligning the southernmost site driveway to align directly with the existing Lowes driveway. Both site driveway recommendations have been addressed on the revised plans.

We recommend the Petitioner address the above comments prior to Township approval. Please call or email if you have any questions.

Sincerely,



Shelby Byrne, P.E.
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

February 2, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Mister Car Wash
1015 S. Latson Rd.
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on January 17, 2024. The drawings are dated October 4, 2023 with latest revisions dated January 16, 2024. The project is based on proposed redevelopment of an existing vacant parcel for a new 5,432 square foot car wash development. Access to the site and the adjacent site have been modified per the LCRC requirements in this drawing set. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition. **Previously acknowledged and complied with notes have been removed from this letter.**

1. *One-way emergency vehicle access roads shall be a minimum of 20-feet wide. With a width of 20-feet, this includes the one-way in/out entry to the property. Access roads to the site shall be provided and maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 84,000 pounds, this includes over the underground retention.*

IFC D 103.6
IFC D 103.1
IFC D 102.1
IFC D 103.3

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

cc: Kelly VanMarter kelly@genoa.org

Livingston County Road Commission

3535 Grand Oaks Drive • Howell, Michigan 48843-8575
Telephone: (517) 546-4250 • Facsimile: (517) 546-9628
Internet Address: www.livingstonroads.org

March 13, 2024

Scott Tousignant
Boss Engineering
3121 E. Grand River Ave
Howell, MI 48843

Re: Mister Car Wash, Genoa Township, Section 4
LCRC# C-24-05

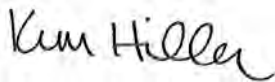
Dear Scott:

I have completed the review of the construction plans, dated January 16, 2024, for the above-referenced project and offer the following comments.

1. A contractor needs to be selected and the selected contractor must submit a certificate of insurance to the LCRC with the following language: "The Board of Livingston County Road Commissioners, the Livingston County Road Commission, and their officers, agents, and employees are listed additional insured parties with respects to General Liability." Please note this is note required for plan approval but will be required for issuance of a permit.
2. The type of MDOT concrete curb proposed within the Latson Road right-of-way should be labeled on the site plan.
3. No left turn signs will be needed at the approach and on the west side of Latson Road.
4. The LCRC requires the one-way approaches to be 15 feet wide from face of curb to face of curb. However, in the letter dated February 2, 2024, from the Brighton Area Fire Authority, they require a width of 20 feet. If the drive widths are expanded to 20 feet in width, it will promote the illegal usage of left turns into and out of the site. We do not believe the right in-right out would function as intended with the wider driveway width.
5. Proposed sidewalk grades need to be provided in accordance with ADA requirements on the grading plan.
6. The proposed concrete cross section within the Latson Road right-of-way will need to contain 8" of concrete.
7. Approval from the Livingston County Drain Commission and/or Genoa Township for the storm water system will need to be obtained and submitted prior to the issuance of the commercial driveway approach permit. MDOT approval has already been obtained and submitted for the discharge of the stormwater into their system at I-96 and Latson Road.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Kim Hiller, P.E.
Utilities and Permits Engineer

Cc: File
Amy Ruthig, Genoa Township (via email)
Ken Recker, LCDC (via email)



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

February 20th, 2024

Amy Ruthig, Planning Director
Genoa Township
2911 Dorr Road
Brighton, MI 48116

Re: Mister Car Wash

Dear Ms. Ruthig,

Pursuant to the administrative meeting held with Genoa Township Planning Commission on February 19th for the Mister Car Wash project, we offer the following as a summary of the changes per the meeting.

1. The cross-access easement for the future connection at O'Reilly's has been added. See the attached supplemental document indicating this proposed easement.
2. The geometrics of the right-in/right-out approach has been revised to be a little more aggressive on the island to further help prohibit improper turning movements. We will continue to work with the LCRC on the final geometrics.
3. It was noted that the LED strip lighting on the car wash roofline should be recessed so the light source isn't visible as well as to modify the color temperature from a yellow to a white color consistent with the building sconce lights in the renderings provided.

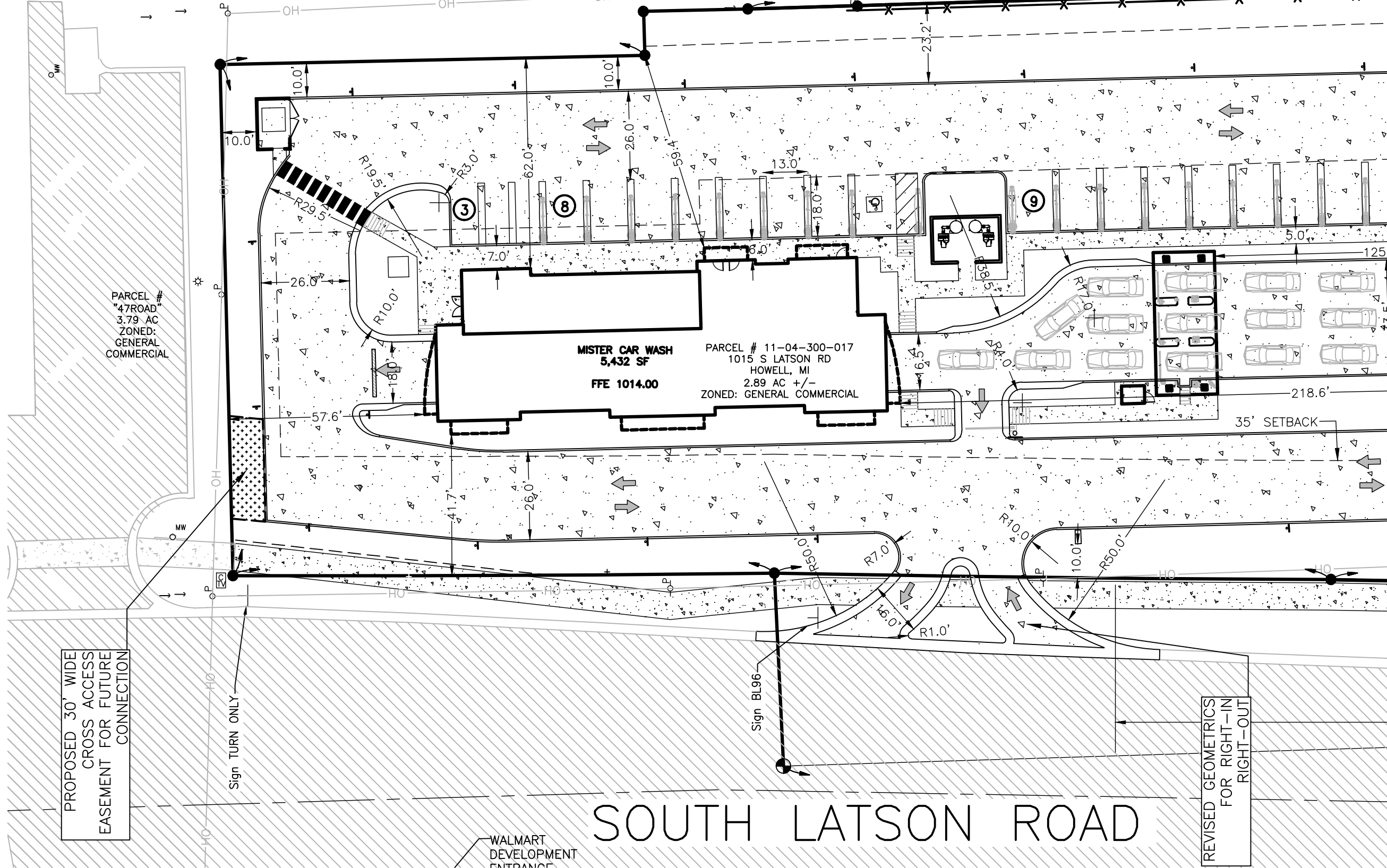
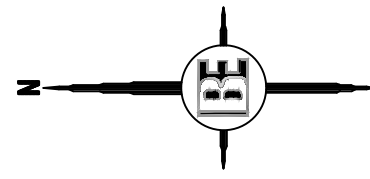
Should you have any questions concerning the modifications indicated above, please don't hesitate to ask.

Sincerely,

BOSS ENGINEERING COMPANY

A handwritten signature in blue ink, appearing to read "Scott Tousignant", is written over a horizontal line.

Scott Tousignant, PE
Senior Project Manager
Scottt@bosseng.com



PROPOSED 30' WIDE
CROSS ACCESS
EASEMENT FOR FUTURE
CONNECTION

Sign TURN ONLY

Sign BL.96

REVISED GEOMETRICS
FOR RIGHT-IN
RIGHT-OUT

SOUTH LATSON ROAD

WALMART
DEVELOPMENT
ENTRANCE

PARCEL #
"47ROAD"
3.79 AC
ZONED:
GENERAL
COMMERCIAL

MISTER CAR WASH
5,432 SF
FFE 1014.00

PARCEL # 11-04-300-017
1015 S LATSON RD
HOWELL, MI
2.89 AC +/-
ZONED: GENERAL COMMERCIAL

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS 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 LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

3 WORKING DAYS
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
FOR THE LOCATION OF UNDERGROUND FACILITIES

BEBOSS
Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

- LEGEND
- = STEEL ROD SET
 - = STEEL ROD/PIPE FD
 - ⊙ = MONUMENT FOUND
 - * = FENCE
 - (R) = RECORDED
 - (M) = MEASURED

CLIENT:	CWP WEST LLC		
JOB NO.	21-519	DATE	02/20/24
SHEET	1 OF 1	SCALE:	1" = 30'
		DR. ST	

**GENOA TOWNSHIP IMPACT ASSESSMENT
Mister Car Wash**

Prepared for:

**Property Owner
1015 Latson Road LLC
Kevin Bahnam**

**Applicant
CWP West, LLC
Nicole Kastern**

Prepared by:

Scott Tousignant, P.E.



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

**October 4, 2023
Revised: October 26, 2023
Revised: December 11, 2023
Revised: January 16, 2024**

DISCUSSION ITEMS

- A. Name(s) and address(es) of person(s) responsible for preparation of the Impact Assessment and a brief statement of their qualifications.

Prepared by:

Scott Tousignant, P.E.
Professional Engineer/Project Manager
Boss Engineering
3121 E Grand River
Howell, MI 48843

Prepared for:

Owner:
1015 Latson Road LLC / Kevin Bahnam
29592 Beck Road
Wixom, MI 48393

Applicant:
CWP West LLC / Nicole Kastern
222 E. 5th Ave
Tucson, AZ 85705

- B. Description of the site, including existing structures, man-made facilities, and natural features, all-inclusive to within 10' of the property boundary.***

The project site is on parcel # 4711-04-300-017 in Section 4, Genoa Township, Livingston County, MI.

The subject site is bordered:

- On the north by the 1.14 acre +/- parcel zoned General Commercial (GCD) with an existing O'Reilly Auto Parts store.
- On the east by the 9.13 acre +/- parcel zoned General Commercial (GCD) with the Country Corners Shopping center.
- On the east and south by the 12.09 acre +/- parcel zoned High Density Residential (HDR) with the Prentis Estates Apartments. An approximately 4' tall berm is directly along the property line here on the adjacent HDR parcel and is planted with large Red and Scotch Pines ranging in size from 11" d.b.h. to 24" d.b.h. There is an additional evergreen screen just south of the berm along the east property line planted with White Cedar.
- On the west by S. Latson Road and the Non-Residential PUD shopping center with Walmart, PetSmart, Lowe's and various fast-food restaurants.
- And on the south by a proposed commercial development immediately adjacent to the subject site.

MHOG sanitary runs along the west property line and South Latson Road. MHOG water runs along the east property line in the adjacent parcel. See the Existing Conditions for locations.

The subject site is a vacant parcel of land consisting of tall, unmaintained grasses and minimal trees. There is currently one existing commercial drive approach accessing the south end of the subject property. This commercial drive will be removed and a new drive installed further to the north as per LCRC recommendations as a right-in/right-out only with a full access drive provided on the adjacent site to the south (with a cross access easement).

C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.

These currently vacant parcels are flat (2-6% slopes) and covered by grass and weeds.

The soils are largely Miami Loam with 2 to 6% slopes. Other soils on site are Conover Loam and Washtenaw Silt Loam. The site drains via surface flow from east to west to the South Latson Road storm sewer system. No wetlands/streams/creeks or other water bodies are located on site.

D. Impact on storm water management: description of soil erosion control measures during construction.

Storm water will be managed on site and installed before any building construction. Underground storm water detention is planned with a discharge to the South Latson Road storm system and ultimately to the regional detention basin to the south at I-96. Detailed construction plans will be reviewed by the Township Engineer and the Soil Erosion Control plans will be reviewed and permit issued by the Livingston County Drain Commissioners office prior to construction commencing. Ongoing/periodic soil erosion inspections will occur per County requirements to ensure soil erosion is managed proactively.

E. Impact on surrounding land use: Description of proposed usage and other man-made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.

The proposed use on this General Commercial site includes an automatic car wash with supporting vacuum cleaning stations at the rear of the site. The proposed uses conform to existing and potential development patterns and will not negatively impact adjacent properties with added lighting, noise or air pollution. The site development will comply with Township Ordinances for lighting levels as well as noise levels. The uses proposed do not impact adjacent properties with noise, light or air pollution.

An existing berm and evergreen screening in the adjacent parcel to the north along the High-Density Residential (HDR) property line screens that use from these proposed commercial uses. Additional landscaping is proposed for the east property line to screen the HDR use. A 6' high screen fence is proposed along the property line shared with the residential zoning to the east. Proposed uses on this site are compatible with existing zoning and adjacent zoning on S. Latson Road. Given its proximity to the I-96/Latson interchange, a car wash use would be appropriate and consistent with surrounding land and uses.

Hours of operation for the car wash:

Summer hours: 7am – 8pm

Winter hours: 7am – 7pm

F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.

The proposed car wash does not add additional burden on the fire and police services as the site is surrounded by similar development that already receives coverage. The uses do not add population that impacts schools. The car wash will add to Township tax revenue as the site currently sits vacant. The car wash will add approximately 16 jobs which has a positive impact on the community.

G. Impact on public utilities: description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.

Storm water will be detained on-site via the use of an underground detention system. The storm water will be discharged at pre-development rates to the South Latson Road storm sewer system as the site currently sheet flows into this road storm system. Detailed construction plans would be reviewed by the Township Engineer and the Soil Erosion Control permit would be reviewed and issued by the Livingston County Drain Commissioner. MHOG sanitary sewer runs along the west property line and South Latson Road. It is expected that the site will be connected to MHOG sanitary sewer along South Latson Road and MHOG water along the east property line in the adjacent parcel. The proposed car wash use does utilize a good amount of water. One method in calculating water usage is utilizing the Townships REU Factor Table (at 25.2 REU's per automated car wash with recycle). This REU count calculates to approximate average daily usage of 6,500 gpd and peak day usage of 28,000 gpd. Per water usage records at three comparable facilities for Mister Car Wash, data that spans the last year and a half for those 3 locations averages out to 21,177 gpd of daily water usage. The MHOG public water is anticipated to accommodate the use. In response to the proposed uses water usage, the Mister Car Wash facility will utilize a water recycle system. The water recycle system is outlined in Appendix A attached herein.

H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.

No storing or handling of any hazardous materials is expected for this development.

I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.

A traffic study has been performed. It is prepared under separate cover and submitted to the Township and Livingston County Road Commission. In summary of the Traffic Impact Study performed by Colliers Engineering & Design, *“Based on the results of this study, the following should be considered to provide acceptable traffic operations with the proposed development project. 1) Optimize signal timings at the intersection of Grand River Avenue and Latson Road. 2) Construct two driveways to Latson Road with the S. site driveway aligned with the existing Lowes driveway and the N. site driveway restricted to right-in-right-out only.”*

The Livingston County Road Commission will be required to review and approve the commercial driveway approaches on South Latson Road. Communications with LCRC indicate that the proposed drive location is acceptable. A right-in/right-out access will be provided in front of the Mister Car Wash site with a full access drive provided on the adjacent site to the south. A cross access easement will be provided.

J. Special provisions: Deed restrictions, protective covenants, etc.

Detroit Edison easements are located at the north end of the northern parcel.

K. Description of all sources:

- Genoa Township Zoning Ordinance
- "Soil Survey of Livingston County Michigan" Soil Conservation Services, USDA
- Traffic Impact Study by Colliers Engineering & Design dated September 15, 2023

APPENDIX A
Water Reclaim System

Reducing and Recycling Water Through the Wash Process

We take water conservation seriously with state-of-the-art technologies

Reducing Freshwater Usage Through Recycling

Implementation of our water systems **reduces freshwater** usage by **11%**



Freshwater Use Reduced

- Freshwater usage **reduced 11%** by our water system design
- 33% of water, on average, is **recycled** during the wash process
- Sophisticated water filtration and storing systems that enable us to **recycle and reuse water** through the wash process

Environmentally Friendly

- Our proprietary cleaning products are **free of dyes**
- Concentrated proprietary chemistry **reduces plastic usage** in chemical storage
- Industry leader with installation of air gates on blower systems to **reduce energy pull** during the drying process



*It's not just about washing cars. It's about **how** we wash them.
We are focused on finding smarter ways to reduce our environmental impact and be more efficient in energy usage.*

1) On average, during the wash process.
2) RO: Reverse Osmosis process of filtering water and removing total dissolved solids to create soft water.

Inspection and Maintenance Guide

Prepared for:

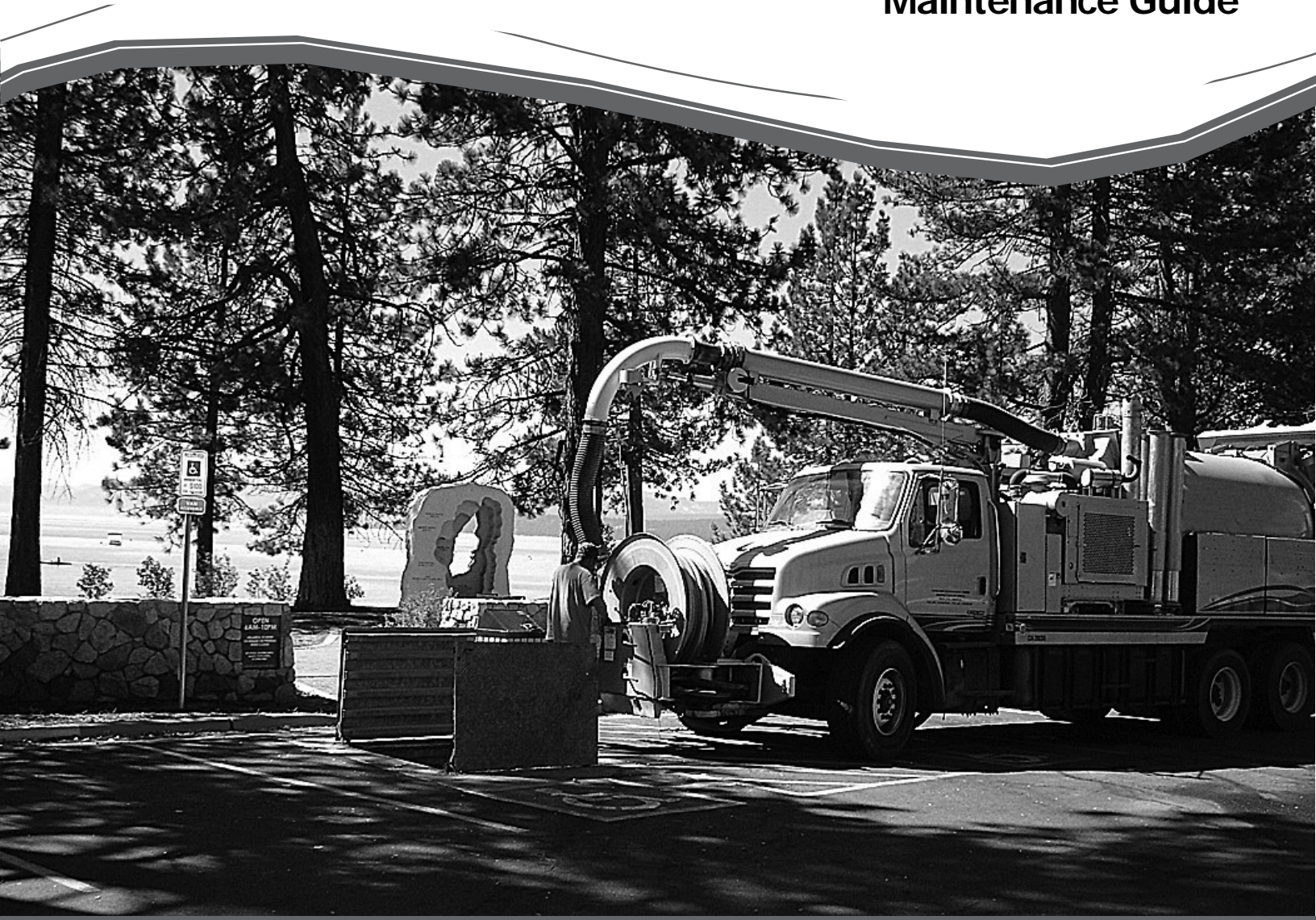
**Mister Car Wash
1015 S. Latson Road
Howell, MI 48843**

Prepared by:



3121 E. Grand River Howell, MI 48843
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Cascade Separator[®] Inspection and Maintenance Guide



Maintenance

The Cascade Separator® system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects sediment and debris will depend upon on-site activities and site pollutant characteristics. For example, unstable soils or heavy winter sanding will cause the sediment storage sump to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (i.e. spring and fall). However, more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment wash-down areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

A visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet chamber, flumes or outlet channel. The inspection should also quantify the accumulation of hydrocarbons, trash and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided in this Inspection and Maintenance Guide.

Access to the Cascade Separator unit is typically achieved through one manhole access cover. The opening allows for inspection and cleanout of the center chamber (cylinder) and sediment storage sump, as well as inspection of the inlet chamber and slanted skirt. For large units, multiple manhole covers allow access to the chambers and sump.

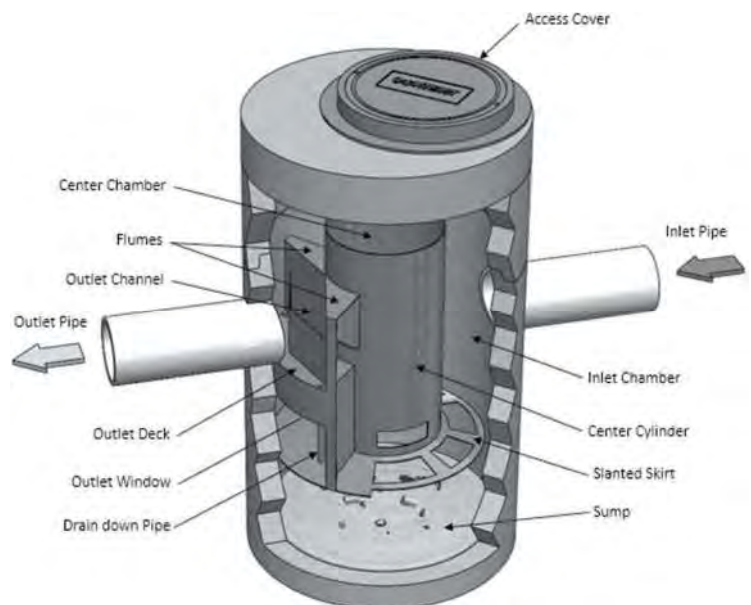
The Cascade Separator system should be cleaned before the level of sediment in the sump reaches the maximum sediment depth and/or when an appreciable level of hydrocarbons and trash has accumulated. If sorbent material is used, it must be replaced when significant discoloration has occurred. Performance may be impacted when maximum sediment storage capacity is exceeded. Contech recommends maintaining the system when sediment level reaches 50% of maximum storage volume. The level of sediment is easily determined by measuring the distance from the system outlet invert (standing water level) to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the chart in this document to determine if the height of the sediment pile off the bottom of the sump floor exceeds 50% of the maximum sediment storage.

Cleaning

Cleaning of a Cascade Separator system should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole cover and insert the vacuum tube down through the center chamber and into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The areas outside the center chamber and the slanted skirt should also be washed off if pollutant build-up exists in these areas.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. Then the system should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and to ensure proper safety precautions. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the Cascade Separator system must be done in accordance with local regulations. In many locations, disposal of evacuated sediments may be handled in the same manner as disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal. If any components are damaged, replacement parts can be ordered from the manufacturer.



Cascade Separator® Maintenance Indicators and Sediment Storage Capacities

Model Number	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y ³	m ³
CS-3	3	0.9	1.5	0.5	0.4	0.3
CS-4	4	1.2	2.5	0.8	0.7	0.5
CS-5	5	1.3	3	0.9	1.1	0.8
CS-6	6	1.8	3.5	1	1.6	1.2
CS-8	8	2.4	4.8	1.4	2.8	2.1
CS-10	10	3.0	6.2	1.9	4.4	3.3
CS-12	12	3.6	7.5	2.3	6.3	4.8

Note: The information in the chart is for standard units. Units may have been designed with non-standard sediment storage depth.



A Cascade Separator unit can be easily cleaned in less than 30 minutes.



A vacuum truck excavates pollutants from the systems.

Underground stormwater detention and infiltration systems must be inspected and maintained at regular intervals for purposes of performance and longevity.

Inspection

Inspection is the key to effective maintenance of CMP detention systems and is easily performed. Contech recommends ongoing, annual inspections. Sites with high trash load or small outlet control orifices may need more frequent inspections. The rate at which the system collects pollutants will depend more on-site specific activities rather than the size or configuration of the system.

Inspections should be performed more often in equipment washdown areas, in climates where sanding and/or salting operations take place, and in other various instances in which one would expect higher accumulations of sediment or abrasive/corrosive conditions. A record of each inspection is to be maintained for the life of the system.

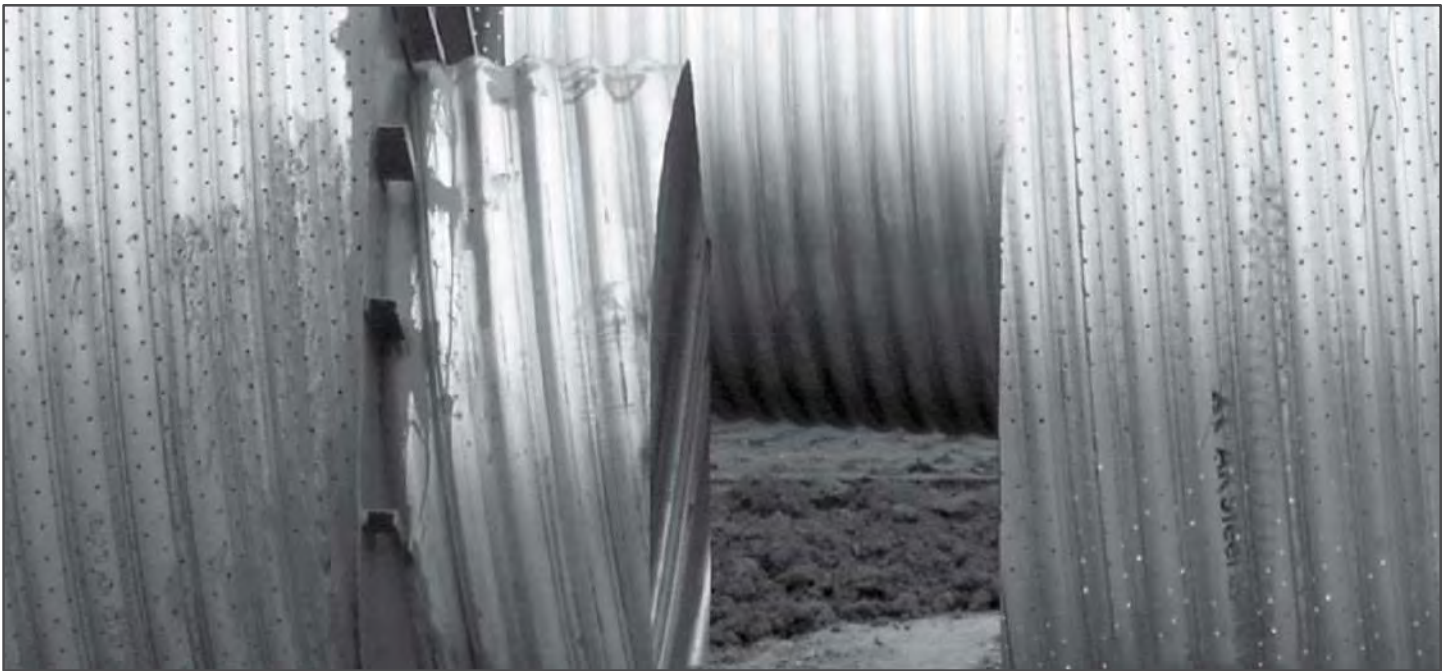
Maintenance

CMP detention systems should be cleaned when an inspection reveals accumulated sediment or trash is clogging the discharge orifice. Accumulated sediment and trash can typically be evacuated through the manhole over the outlet orifice. If maintenance is not performed as recommended, sediment and trash may accumulate in front of the outlet orifice. Manhole covers should be securely seated following cleaning activities. Contech suggests that all systems be designed with an access/inspection manhole situated at or near the inlet and the outlet orifice. Should it be necessary to get inside the system to perform maintenance activities, all appropriate precautions regarding confined space entry and OSHA regulations should be followed.

Annual inspections are best practice for all underground systems. During this inspection if evidence of salting/de-icing agents is observed within the system, it is best practice for the system to be rinsed, including above the spring line soon after the spring thaw as part of the maintenance program for the system.

Maintaining an underground detention or infiltration system is easiest when there is no flow entering the system. For this reason, it is a good idea to schedule the cleanout during dry weather.

The foregoing inspection and maintenance efforts help ensure underground pipe systems used for stormwater storage continue to function as intended by identifying recommended regular inspection and maintenance practices. Inspection and maintenance related to the structural integrity of the pipe or the soundness of pipe joint connections is beyond the scope of this guide.



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CMP DETENTION SYSTEMS

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Engineering
& Design

Traffic Impact Study

December 19, 2023

**Latson Road Commercial Development
Genoa Township, Livingston County, Michigan**

Prepared for:

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Appendix A | Traffic Count Data

Appendix B | Existing Conditions Data

Appendix C | No-Build Conditions Data

Appendix D | Build Conditions Data – Alternative 1

Appendix E | Build Conditions Data – Alternative 2

Introduction

This report presents the methodologies, analyses, results, and recommendations of a Traffic Impact Study (TIS) for the proposed commercial development project in Genoa Township, Livingston County, Michigan. The project site is located on the east side of Latson Road approximately 500 feet south of Grand River Avenue (I-96 BL) as shown on **Figure 1** and is currently vacant. The proposed development plans include construction of a 2,950 SF coffee-shop with drive-through, 2,700, SF sit-down restaurant, 4,025 SF of general retail space, and automated car wash. Two different site access alternatives were evaluated for the development per the request of LCRC as follows:

1. Alternative 1: A single site driveway to Latson Road aligned with the existing Lowes Drive.
2. Alternative 2: A single site driveway to Latson Road aligned with the existing Lowes Drive and right-in-right-out only driveway to Latson Road at the north end of the subject site.

A representation of the site plan is shown on **Figure 2**.

Latson Road is under jurisdiction of the Livingston County Road Commission (LCRC); whereby access permitting will be subject to LCRC review and standards. In accordance with LCRC standards a Traffic Impact Study (TIS) is required for site access permitting and project approvals. Additionally, the project is subject to Township review and approval as part of the site plan review process.

The purpose of this study is to identify the traffic related impacts, if any, of the proposed project on the adjacent road network. This study therefore includes analysis of the site access points as well as key off-site intersections surrounding the site. Analysis of the site access points will determine appropriate lane configurations as well as traffic control to process site traffic safely and efficiently. Key off-site intersections are analyzed to determine if new site-generated traffic passing through these locations would require improvements to mitigate any impacted traffic operations.

The scope of this study was developed based on Colliers Engineering & Design (CED) knowledge of the study area, understanding of the development program, accepted traffic engineering practice, and information published by the Institute of Transportation Engineers (ITE). Additionally, CED solicited input regarding the proposed scope of work from LCRC. The study analyses were completed using Synchro and SimTraffic, Version 11 traffic analysis software and in accordance with the methodologies and practices published by ITE and the applicable requirements of LCRC and the Township. This report is intended for use by LCRC and the Township to guide decisions related to development project approvals, access permitting, and identifying future roadway improvement needs.



**Latson Commercial Development
Genoa Township, MI**

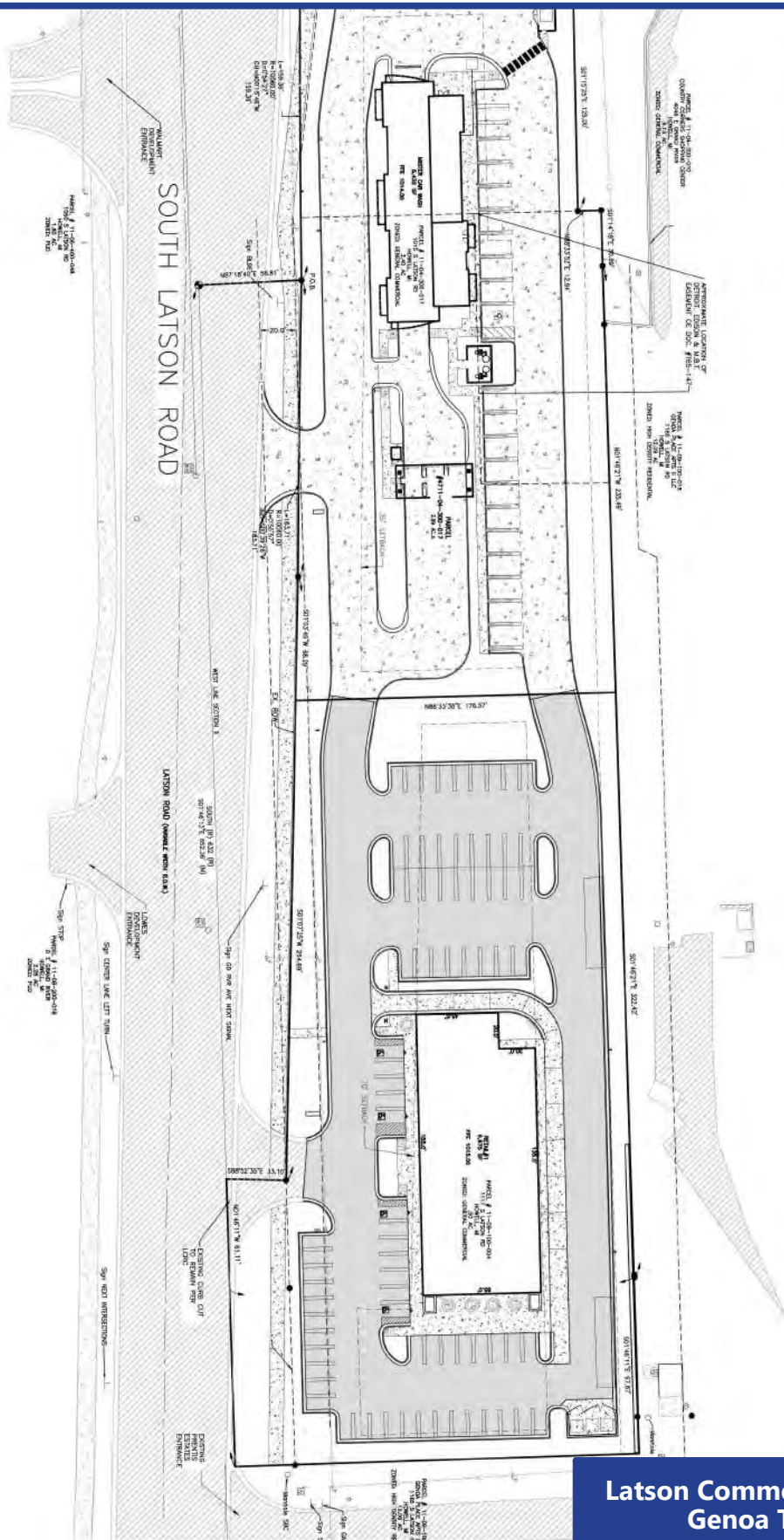
**Figure 1
Study Area Map**

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2	No Scale	Oct '23





PROJECT NO. 2023-001
 DATE: 10/23/23
 SHEET NO. 5 OF 5



SEE SHEET
 NOTES

Latson Commercial Development Genoa Township, MI

Figure 2 Site Plan

PROJECT		MISTER CAR WASH	
PREPARED FOR		CWP WEST LLC 222 E 1500 AVE NASHUA, NH 03078 USA 603 438	
TITLE		OVERALL SITE PLAN	
NO.	BY	REVISION	PER
1	ST		
2	ST		
3	ST		
4	ST		
5	ST		

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operate at a LOS F during the peak hours; however, the proposed right-in-right-out only driveway would help to reduce vehicular delays and queues. Additionally, although the results of Alternative 1 demonstrate acceptable traffic operations with the installation of a traffic signal at the Lowes Driveway / S. site driveway intersection with Latson road, another closely spaced traffic signal along Latson Road may result in increased crashes along the corridor. The addition of a right-in-right-out only driveway would have minimal impact to traffic operations and safety along the corridor if designed and signed properly and would provide a remedial measure prior to installing a new traffic signal along the corridor. Therefore, site access Alternative 2 is recommended for the development.

Table 10: Build Traffic Conditions – ALT 2

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				Build - ALT 1		Build - ALT 2		Build - ALT 1		Build - ALT 2	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Wal-Mart Drive / RIRO Site Drive	STOP (Minor)	EB	Left/Right	23.1	C	27.9	D	35.3	E	48.1	E
		WB	Right			13.4	B			19.6	C
		NB	Left	12.3	B	12.3	B	13.9	B	13.9	B
			Thru	Free		Free		Free		Free	
SB	Thru/Right	Free		Free		Free		Free			
Latson Road & Lowes Drive / Site Drive	STOP (Minor)	EB	Left	316.2	F	265.3	F	4,441.6	F	3,752.1	F
			Thru/Right	13.2	B	13.2	B	18.0	C	18.0	C
		WB	Left	296.3	F	296.3	F	2,842.9	F	2,842.9	F
			Thru/Right	13.2	B	12.6	B	18.4	C	16.3	C
		NB	Left	11.2	B	11.2	B	14.8	B	14.8	B
			Thru	Free		Free		Free		Free	
		SB	Left	10.8	B	10.8	B	14.8	B	14.8	B
			Thru/Right	Free		Free		Free		Free	

Conclusions

The Conclusions related to this Traffic Impact Study and relative analyses are as follows:

1. Existing weekday AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hour turning movement counts were collected by CED at the study intersections. At the signalized intersections of Latson Road with Grand River Avenue and Grand Oaks Drive, counts were collected on Wednesday, November 13th, 2019. At the unsignalized Lowes and Wal-Mart driveways with Latson Road, counts were collected on Thursday, August 10th, 2023.
2. All study intersection approaches and movements currently operate acceptably at a LOS D or better during both peak hours with the exception of the following:
 - a. The NB right-turn movement at the signalized intersection of Grand River Avenue & Latson Road currently operates at a LOS E during the AM peak hour. During the PM peak hour, the NB left-turn movement operates at a LOS E while the WB left, and right-turn movement and SB left-turn movement operate at a LOS F.
 - b. The STOP controlled Lowes Drive approach which currently operates at a LOS E during the PM peak hour.

3. Ambient traffic growth of 0.75% was applied to establish 2025 no-build traffic volumes without the proposed development. Several background developments were also identified in the study area and included in this study.
4. No-build conditions analyses indicate that several movements at the intersection of Grand River Avenue & Latson Road will experience degraded operations.
5. Future build conditions analyses indicate that most study intersection approaches and movements will continue to operate acceptably; however, there are several movements with undesirable or failing conditions at the intersection of Grand River Avenue & Latson Road that are expected to worsen in the future if those movements operating at a LOS E or F are not improved under no-build conditions.
6. Under site access Alternative 1, a traffic signal is warranted at the intersection of Latson Road & Lowes Drive / Site Drive and would operate acceptably during the peak hours.
7. Under site access Alternative 2, the addition of a right-in-right-out only driveway would help to alleviate vehicular delays at the intersection of Latson Road & Lowes Drive / Site Drive and would provide a remedial measure prior to installing another traffic signal along Latson Road. Therefore, site access Alternative 2 is recommended.
8. With the improvements outlined below, all study network intersections and site driveways will operate acceptably, or in a manner similar or improved compared to no-build conditions during the peak hours.

Based on the results of this study, the following should be considered to provide acceptable traffic operations with the proposed development project:

1. Optimize signal timings at the intersection of Grand River Avenue & Latson Road.
2. Construct two driveways to Latson Road with the S. site driveway aligned with the existing Lowes driveway and the N. site driveway restricted to right-in-right-out only.



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By Amy Ruthig at 3:56 pm, Nov 01, 2023

NOISE IMPACT ANALYSIS

**MISTER CAR WASH 1495 LATSON PROJECT
GENOA TOWNSHIP, MICHIGAN**

LSA

October 2023

NOISE IMPACT ANALYSIS

MISTER CAR WASH 1495 LATSON PROJECT GENOA TOWNSHIP, MICHIGAN

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Project No. 20231136



October 2023

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LIST OF ABBREVIATIONS AND ACRONYMS

CNEL	Community Noise Equivalent Level
dB	decibel(s)
dBA	A-weighted decibel(s)
L _{dn}	day-night average noise level
L _{eq}	equivalent continuous sound level
L _{max}	maximum instantaneous noise level
project	Mister Car Wash 1015 Latson Project

INTRODUCTION

This noise impact analysis evaluates the potential noise impacts and noise reduction measures associated with the proposed Mister Car Wash 1495 Latson Project (project) in Genoa Township, Michigan. This report is intended to satisfy the Genoa Township's requirement for a project-specific noise impact analysis by examining the impacts of the proposed uses on the project site and identifies whether any noise reduction measures to reduce project noise impacts would be necessary.

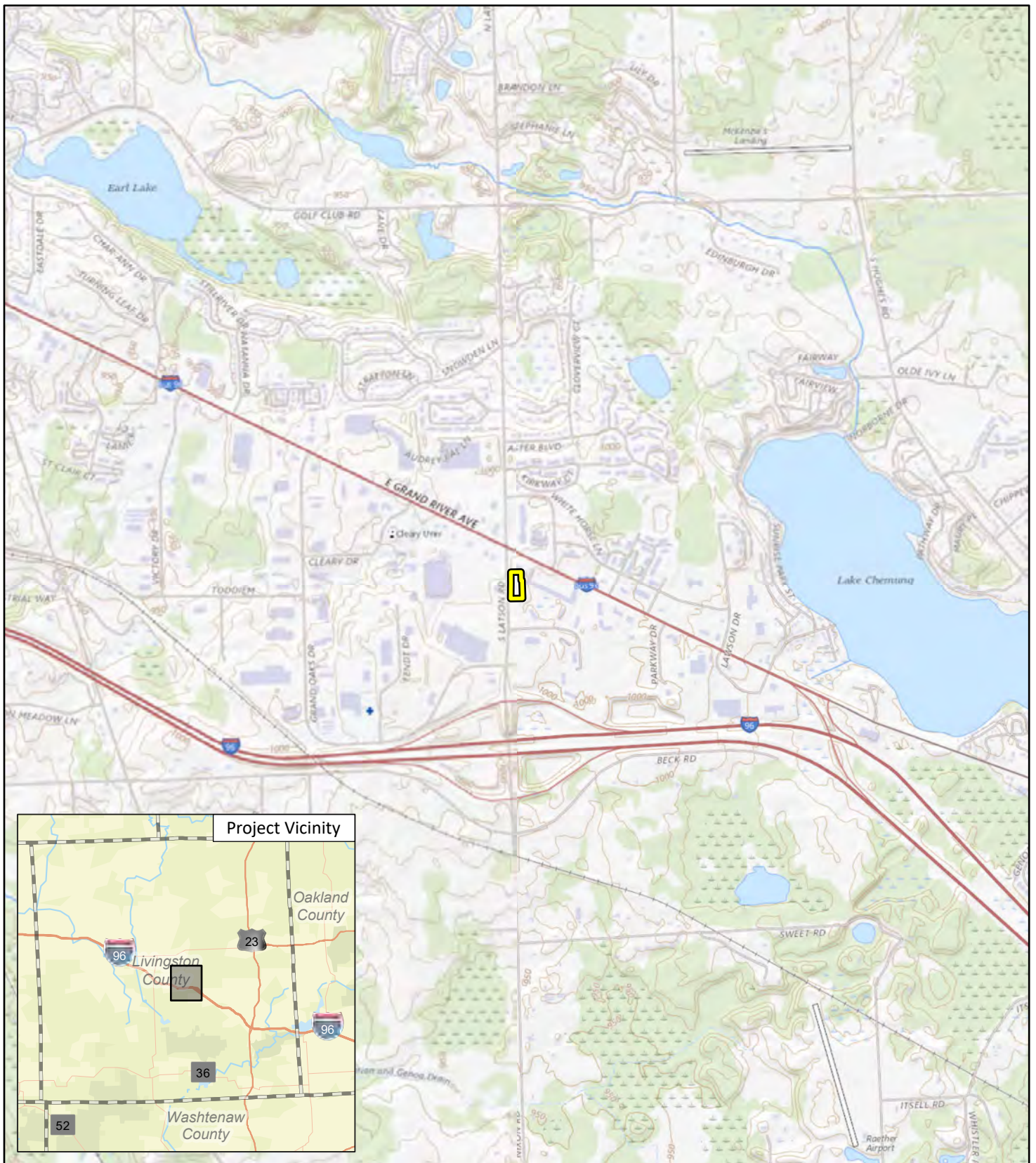
PROJECT LOCATION AND DESCRIPTION

The proposed Mister Carwash is at 1015 South Latson Road in Genoa Township, Michigan. The proposed project is adjacent to South Latson Road to the west, commercial uses to the north and northwest, residential uses to the southeast, and vacant land to the south. The project location map and site plan are presented on Figures 1 and 2, respectively.

EXISTING LAND USES IN THE PROJECT AREA

The project site is primarily surrounded by commercial developments and residential uses. The areas adjacent to the project site include the following uses:

- **North:** Existing commercial uses
- **East:** Existing commercial uses
- **Southeast:** Existing residential uses
- **South:** Existing vacant land
- **West:** South Latson Road followed by existing commercial uses




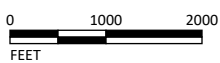
 Project Location

FIGURE 1

LSA



SOURCE: USGS The National Map (2017)

J:\20231136\GIS\Pro\1015 S Latson Rd\1015 S Latson Rd.aprx (10/25/2023)

1050 Latson Mister Car Wash
Project Location

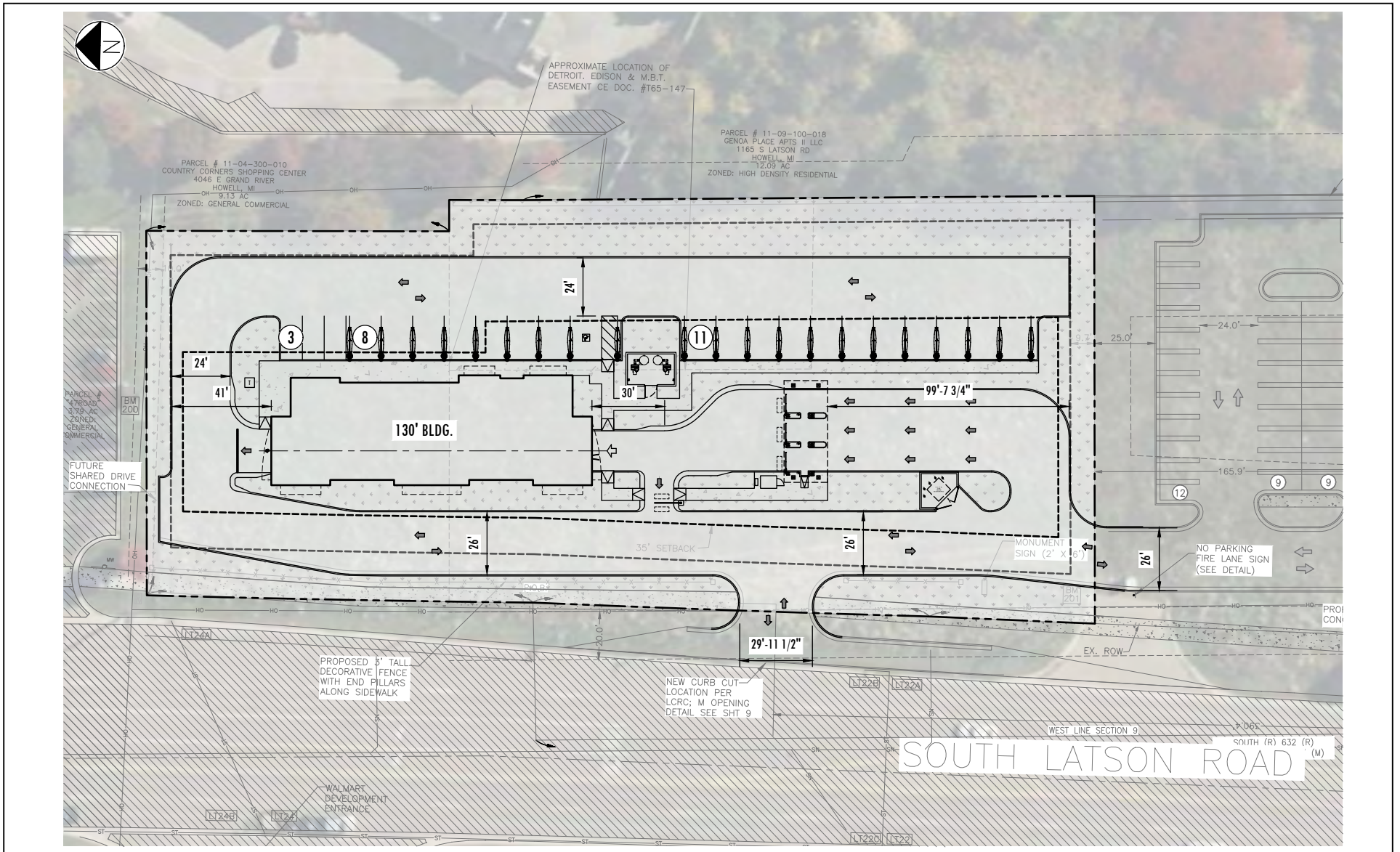
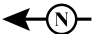


FIGURE 2

LSA



SOURCE: Mister
 I:\20231136\G\Site_Plan.ai (10/24/2023)

1050 Latson Mister Car Wash
 Site Plan

NOISE FUNDAMENTALS

CHARACTERISTICS OF SOUND

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a sound wave, which results in the tone's range from high to low. Loudness is the strength of a sound, and it describes a noisy or quiet environment; it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound wave combined with the reception characteristics of the human ear. Sound intensity refers to the power carried by sound waves per unit area in a direction perpendicular to that area. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound pressure level and its effect on adjacent sensitive land uses.

Measurement of Sound

Sound pressure level is measured with the A-weighted decibel (dBA) scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound, similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike linear units (e.g., inches or pounds), are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 dB is 10 times more intense than 1 dB, 20 dB is 100 times more intense than 1 dB, and 30 dB is 1,000 times more intense than 1 dB. Thirty decibels (30 dB) represents 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the sound's loudness. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound levels dissipate exponentially with distance from their noise sources. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations) the sound decreases 3 dB for each doubling of distance in a hard site environment. Line-source sound levels decrease 4.5 dB for each doubling of distance in a relatively flat environment with absorptive vegetation.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max} , which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first category includes audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater because this level has been found to be barely perceptible in exterior environments. Additionally, an increase of more than 5 dBA is typically considered readily perceptible in an exterior environment. The second category, potentially audible, refers to a change in the noise level between 1 dB and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category includes changes in noise levels of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to sound levels higher than 85 dBA. Exposure to high sound levels affects the entire system, with prolonged sound exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of sound exposure above 90 dBA would result in permanent cell damage. When the sound level reaches 120 dBA, a tickling sensation occurs in the human ear, even with short-term exposure. This level of sound is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by a feeling of pain in the ear (i.e., the threshold of pain). A sound level of 160–165 dBA will result in dizziness or a loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less-developed areas.

Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of sound level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., the number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted unless reported otherwise.)
L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 1%, 10%, 50%, and 90% of a stated time period, respectively.
Equivalent Continuous Noise Level, L _{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Day/Night Noise Level, L _{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dBA to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L _{max} , L _{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time. It is usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.

Source 1: *Technical Noise Supplement* (Caltrans 2013)

Source 2: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

Caltrans = California Department of Transportation

FTA = Federal Transit Administration

Table B: Common Sound Levels and Their Noise Sources

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 ft		
	— 100 —	
Gas lawn mower at 3 ft		
	— 90 —	
Diesel truck at 50 ft at 50 mph		Food blender at 3 ft
	— 80 —	Garbage disposal at 3 ft
Noisy urban area, daytime		
Gas lawn mower, 100 ft	— 70 —	Vacuum cleaner at 10 ft
Commercial area		Normal speech at 3 ft
Heavy traffic at 300 ft	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	

Source: *Technical Noise Supplement* (Caltrans 2013).

Caltrans = California Department of Transportation

dBA = A-weighted decibels

ft = feet

mph = miles per hour

REGULATORY SETTING

APPLICABLE NOISE STANDARDS

Genoa Township Noise Ordinance

Genoa Township addresses operational noise standards in Ordinance No. #011203: Noise Ordinance.

Section 3 states: *“No person, firm or corporation or other legal entity shall cause or create any unreasonable or unnecessarily loud noise or disturbance, injurious to health, peace, or quiet of the residents and property owners of the Township.*

Specific violations the following noises and disturbances are hereby declared to be a violation of this ordinance; provided however, that the specification of the same is not thereby to be construed to exclude other violations of this ordinance not specifically enumerated:

9. The operation of any machinery, equipment or mechanical device so as to emit unreasonably loud noise which is disturbing to the quiet, comfort or repose of any person.”

Section 4 states: *“No person shall conduct or permit any activity, including those specific prohibitions listing in section 3 that produces an OBA at or beyond the property line of the property on which it is conducted which exceeds the levels specified in Table I. Such noise levels shall be measured on the property line or on the adjacent property, which is receiving the noise. Where property is used for both residential and commercial purposes, the limitations set forth below for commercial property shall apply.”*

Table I of the Ordinance provides the specific noise levels standards which applicable when a commercial property is producing sound onto a residential property. The established noise level standards are: 80 dBA from 7:00 a.m. to 10:00 p.m. and 50 dBA from 10:00 p.m. to 7:00 a.m.

OVERVIEW OF THE EXISTING NOISE ENVIRONMENT

This section describes the existing noise environment in the project site vicinity. Noise monitoring and traffic noise modeling were used to quantify existing and future noise levels at the project site.

In Genoa Township, vehicle traffic is the primary source of noise. Other significant local noise sources include railroad noise, airport noise, industrial noise, construction noise, and mechanical equipment noise.

EXISTING NOISE LEVEL MEASUREMENTS

To assess existing noise levels, LSA conducted two long-term noise measurements in the vicinity of the project site. The long-term noise measurements were recorded for 24 hours between October 9 and October 10, 2023. The long-term noise measurements captured hourly L_{eq} data. Sources that dominate the existing noise environment include traffic on Latson Road. Noise measurement data collected during long-term noise monitoring are summarized in Table D and shown on Figure 3. Noise measurement sheets are provided in Appendix A.

Table D: Long-Term Noise Level Measurements

Location	Daytime Noise Levels ¹ (dBA L_{eq})	Nighttime Noise Levels ² (dBA L_{eq})
LT-1: On a utility pole north of project site, approximately 160 feet from the Latson Road centerline.	62.5 – 70.4	52.5 – 64.1
LT-2: On a tree near northwest of Prentis Estates Apartments, approximately 250 feet from the Latson Road centerline.	60.0 – 64.6	53.2 – 62.1

Source: Compiled by LSA Associates, Inc. (2023).

¹ Noise levels during the hours from 7:00 a.m. to 10:00 p.m.

² Noise levels during the hours from 10:00 p.m. to 7:00 a.m.

L_{dn} = day-night sound Level

dBA = A-weighted decibels

L_{eq} = equivalent continuous sound level

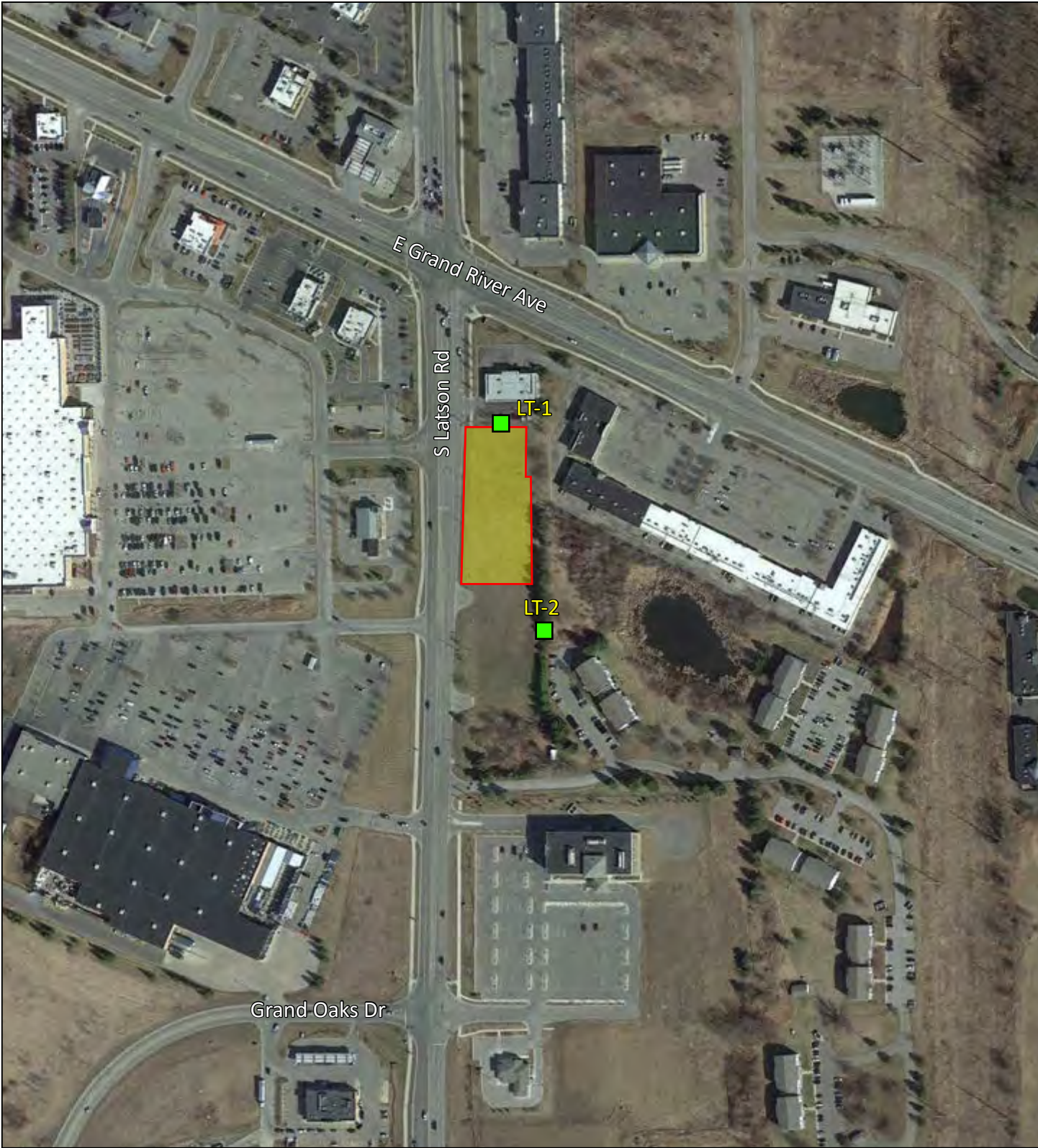
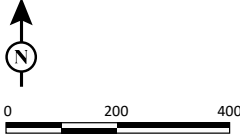


FIGURE 3

LSA

LEGEND

- Project Site Boundary
- LT-1** Long-term Noise Monitoring Location



SOURCE: Google Earth 2023
 I:\20231136\G\Noise_Locs.ai (10/24/2023)

1050 Latson Mister Car Wash
 Noise Monitoring Locations

PROJECT IMPACTS

LONG-TERM OPERATIONAL NOISE IMPACTS

The proposed car wash operations could affect existing off-site sensitive land uses. The two main stationary sources of noise include noise generated by the car wash tunnel and vacuum equipment. Operations of the car wash are expected to take place within the daytime hours between 7:00 a.m. and 10:00 p.m. It is assumed that no operations would occur during nighttime hours. The following provides a detailed noise analysis and discussion of each stationary noise source.

Car Wash Operations

The project would construct a drive-through car wash with a total of 19 vacuum stations that would generate operational noise.

The vacuum stations are powered by equipment east of the project site, as shown on Figure 2. Based on reference noise specifications from noise measurements conducted by LSA at a similar Mister Car Wash (LSA 2023), the turbine used for this project would generate a noise level of 74.9 dBA at 10 feet, and each of the vacuum stations would generate a noise level of 74.3 dBA at 2 feet. For the purposes of this noise analysis, both vacuum equipment locations were assumed to be in operation simultaneously. The vacuum turbine is surrounded by a 6-foot-tall enclosure.

Based on reference noise level measurements gathered at a similar Mister Car Wash, noise levels at the car wash tunnel exit are 78.7 dBA L_{eq} at a distance of 25 feet. Additionally, noise levels at the car wash tunnel entrance are 75.8 dBA L_{eq} at a distance of 25 feet.

To determine the effect of future noise levels generated by the proposed project on noise-sensitive uses, a 3-D noise model (i.e., SoundPLAN) was used to incorporate the site topography, existing property line walls, existing and proposed buildings, and stationary noise sources. Printouts of the SoundPLAN noise model are presented in Appendix B.

Cumulative Unmitigated Impact Assessment

As shown on the SoundPLAN printouts in Appendix B, noise levels generated by the car wash operations would be below 80 dBA L_{eq} at the property line of the closest residential uses to the southeast. Because noise levels would not exceed the applicable criteria of 80 dBA L_{eq} , project operations would comply with the desired noise criteria.

CONCLUSION

The proposed project would not generate on-site stationary noise from car wash operations resulting in noise levels above 80 dBA L_{eq} at the nearest sensitive uses and would comply with the Township's noise standards. Should car wash operations occur outside of the daytime hours of 7:00 a.m. to 10:00 p.m., noise levels may exceed the Township's nighttime standard of 50 dBA L_{eq} or the minimum existing ambient noise levels of approximately 53 dBA L_{eq} at the residential uses to the southeast.

REFERENCES

California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual. FTA Report 0123*. Office of Planning and Environment. September.

Genoa Township. 2023. *Code of Ordinances*.

LSA Associates, Inc. (LSA). 2023. *Mister Car Wash Sartell Noise Measurements*. January 11.

APPENDIX A

NOISE MEASUREMENT SHEETS

Noise Measurement Survey – 24 HR

Project Number: 20231136

Test Personnel: Moe Abushanab

Project Name: 1050 Latson Rd MCW

Equipment: Spark 706RC (SN:17815)

Site Number: LT-1 Date: 10/9/23

Time: From 4:00 p.m. To 4:00 p.m.

Site Location: Located on a utility pole north of project site, approximately 160 feet away from the Latson Road centerline.

Primary Noise Sources: Vehicle traffic noise on Latson Road and adjacent commercial uses

Comments: _____

Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-1

Start Time	Date	Noise Level (dBA)		
		L _{eq}	L _{max}	L _{min}
4:00 PM	10/9/23	70.4	90.1	59.5
5:00 PM	10/9/23	68.4	88.6	58.8
6:00 PM	10/9/23	66.2	83.4	56.5
7:00 PM	10/9/23	64.3	77.2	55.4
8:00 PM	10/9/23	63.7	88.8	53.5
9:00 PM	10/9/23	62.5	78.5	53.7
10:00 PM	10/9/23	60.7	81.0	50.6
11:00 PM	10/9/23	57.8	70.6	47.5
12:00 AM	10/10/23	55.1	69.3	43.7
1:00 AM	10/10/23	53.1	65.3	45.1
2:00 AM	10/10/23	52.5	70.4	42.2
3:00 AM	10/10/23	56.9	80.9	46.3
4:00 AM	10/10/23	58.8	82.1	47.0
5:00 AM	10/10/23	62.0	74.8	52.4
6:00 AM	10/10/23	64.1	78.5	54.5
7:00 AM	10/10/23	65.0	76.3	57.5
8:00 AM	10/10/23	65.6	84.6	56.7
9:00 AM	10/10/23	65.3	82.6	57.6
10:00 AM	10/10/23	65.4	83.3	57.1
11:00 AM	10/10/23	65.6	76.1	56.6
12:00 PM	10/10/23	66.1	84.1	57.2
1:00 PM	10/10/23	66.3	86.8	58.6
2:00 PM	10/10/23	67.0	83.2	57.7
3:00 PM	10/10/23	66.9	81.4	57.7

Source: Compiled by LSA Associates, Inc. (2023).

dBA = A-weighted decibel

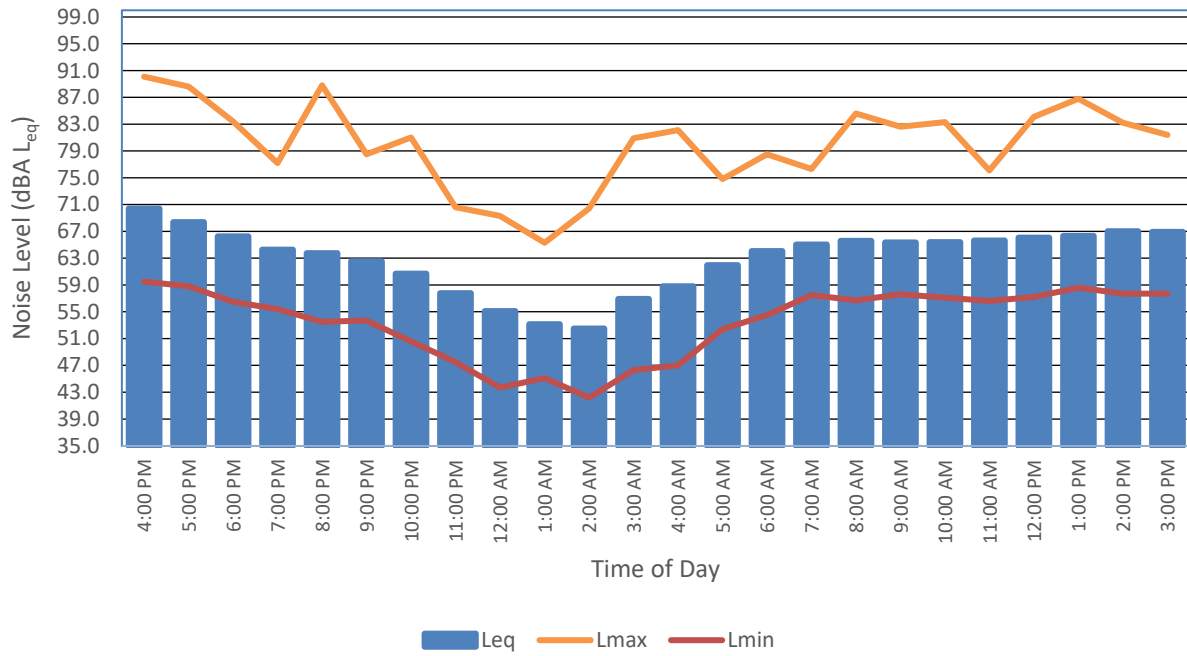
L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

L_{min} = minimum measured sound level

Long-Term (24-Hour) Noise Level Measurement

LT-1:



Noise Measurement Survey – 24 HR

Project Number: 20231136

Test Personnel: Moe Abushanab

Project Name: 1050 Latson Rd MCW

Equipment: Spark 706RC (SN:18571)

Site Number: LT-2 Date: 10/9/23

Time: From 4:00 p.m. To 4:00 p.m.

Site Location: Located on a tree near northwest of Prentis Estates Apartments, approximately 250 feet away from the Latson Road centerline.

Primary Noise Sources: Vehicle traffic noise on Latson Road

Comments: _____

Photo:



Long-Term (24-Hour) Noise Level Measurement Results at LT-2

Start Time	Date	Noise Level (dBA)		
		L _{eq}	L _{max}	L _{min}
4:00 PM	10/9/23	64.2	79.6	57.3
5:00 PM	10/9/23	64.5	70.0	58.3
6:00 PM	10/9/23	63.6	73.4	57.2
7:00 PM	10/9/23	62.0	69.7	55.9
8:00 PM	10/9/23	61.1	74.6	55.2
9:00 PM	10/9/23	60.0	73.8	52.8
10:00 PM	10/9/23	58.4	73.9	49.6
11:00 PM	10/9/23	56.1	63.4	47.8
12:00 AM	10/10/23	54.0	63.9	45.0
1:00 AM	10/10/23	53.5	63.7	44.9
2:00 AM	10/10/23	53.2	63.4	43.3
3:00 AM	10/10/23	55.8	63.7	45.8
4:00 AM	10/10/23	57.2	68.1	47.4
5:00 AM	10/10/23	60.3	69.8	52.8
6:00 AM	10/10/23	62.1	71.7	55.9
7:00 AM	10/10/23	63.1	70.3	58.2
8:00 AM	10/10/23	63.0	69.4	57.4
9:00 AM	10/10/23	62.5	72.2	56.9
10:00 AM	10/10/23	62.3	70.9	55.4
11:00 AM	10/10/23	62.8	75.0	55.6
12:00 PM	10/10/23	63.7	85.8	56.1
1:00 PM	10/10/23	63.3	71.5	57.0
2:00 PM	10/10/23	63.3	70.3	57.7
3:00 PM	10/10/23	64.6	83.4	43.9

Source: Compiled by LSA Associates, Inc. (2023).

dBA = A-weighted decibel

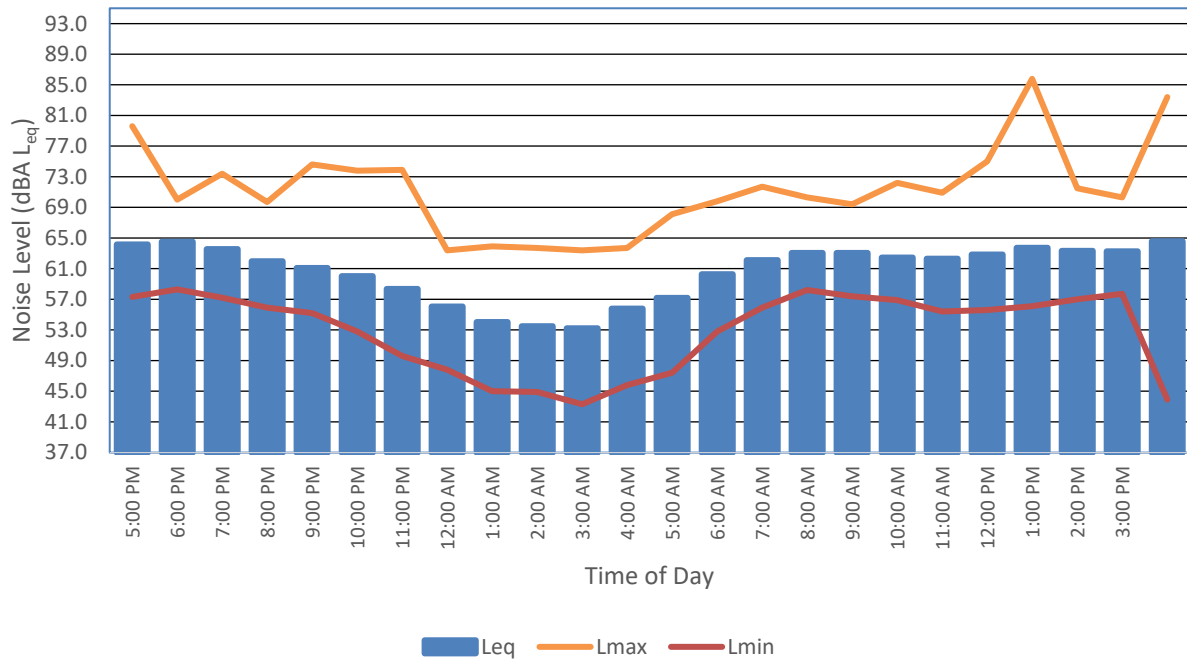
L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

L_{min} = minimum measured sound level

Long-Term (24-Hour) Noise Level Measurement

LT-2



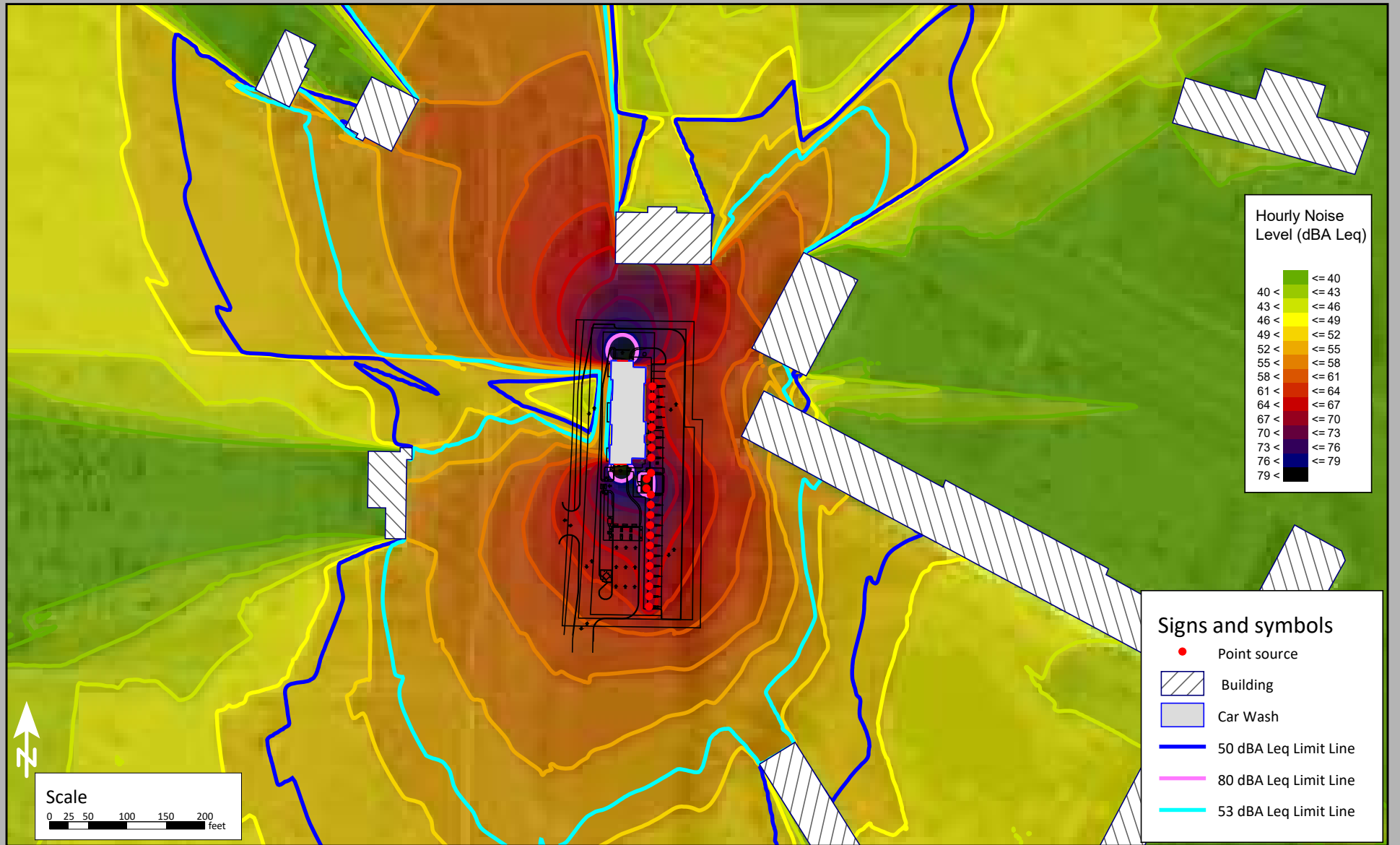
APPENDIX B

SOUNDPLAN NOISE MODEL PRINTOUTS

1495 Laston Rd Howell MCW

Project No. 20231136

Project Operational Noise Levels



PROPERTY DESCRIPTION:

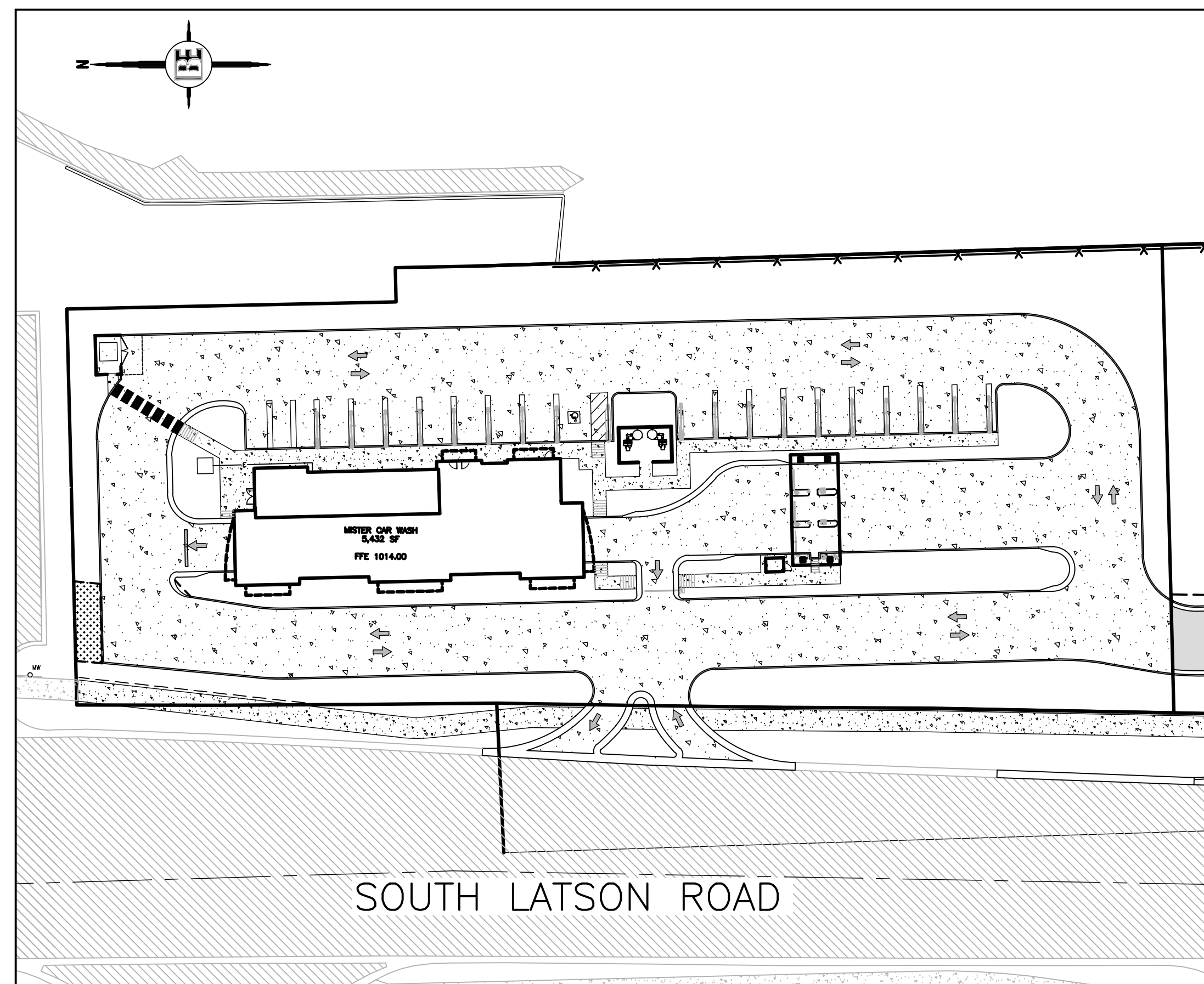
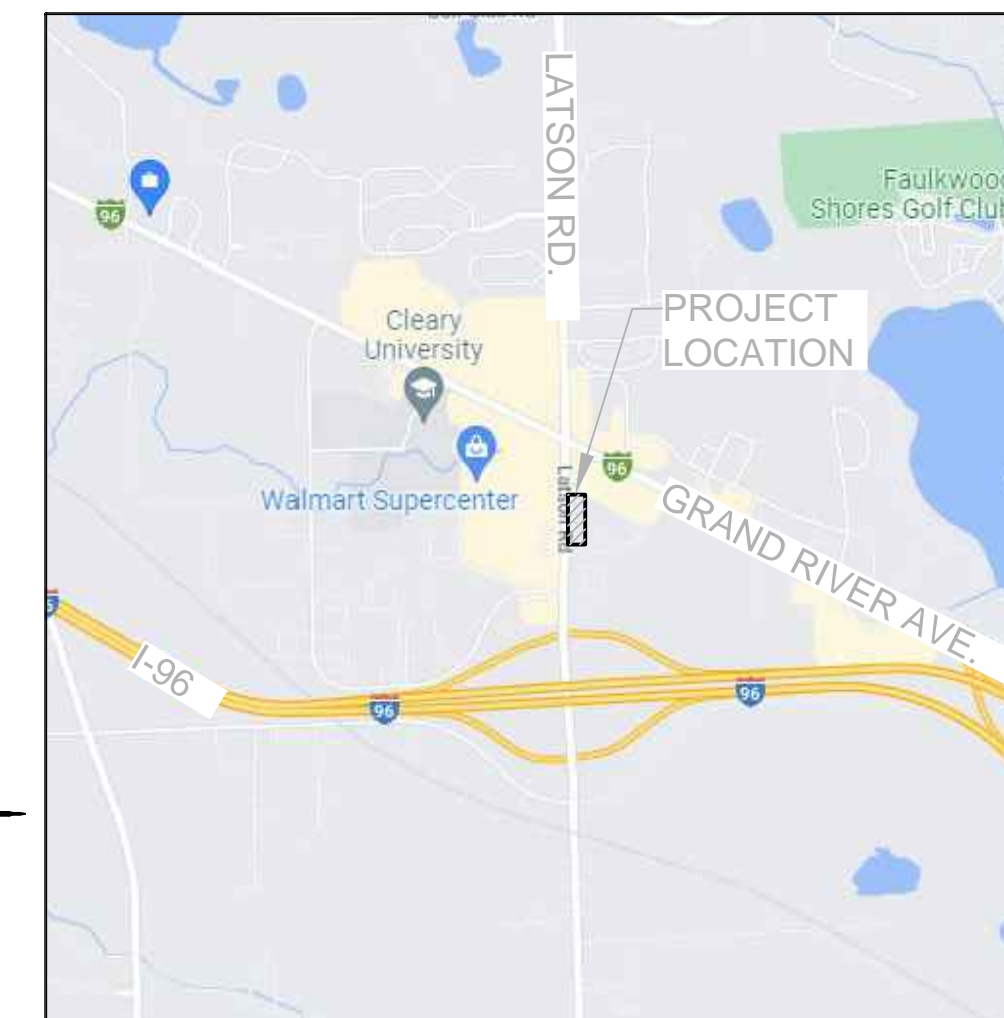
PROPERTY DESCRIPTION PER METRO CONSULTING ASSOCIATES
 PROJECT #1037-17-8480 DATED 01-19-18 PARCEL
 #4711-04-300-017

Commencing at the Southwest Corner of Section 4, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said corner being N01°46'11"W 19.43 feet from a point referenced in Quit Claim Deed dated January 29, 1957, recorded April 4, 1961 in Liber 391, Page 382, Livingston County Records; thence N87°19'47"E 56.01 feet along the North line of said Section 9 and the South line of said Section 4, as established and approved by the Livingston County Rezonement Peer Group, dated June 6, 2002 and recorded in LSC# 1710m, Livingston County Records to the POINT OF BEGINNING; thence S59°35'12"E 159.36 feet along the arc of a 10,060.00 foot radius non-tangential circular curve to the left, having a central angle of 00°54'27" having a chord which bears N00°15'46"W 159.36 feet along the East line of MDOT Right-of-Way as recorded in Instrument # 2011R-023812; Livingston County Records; thence N88°33'52"E 12.94 feet along the South line of Parcel 3 as described in a Warranty Deed recorded June 6, 2016, in Instrument # 2016R-019204 and the North line of the Consumers Power Company land per Warranty Deed recorded in 533, Page 13, Livingston County Records; thence S01°15'25"E 125.00 feet along said Consumers Power Company land and parallel with the West line of said Section 4; thence the following four (4) courses along the North, East and South line of a Quit-Claim Deed to Consumers Power Company, recorded in Liber 391, Page 382, Livingston County Records: (1) N88°33'52"E 12.94 feet recorded as 13.00 feet; (2) S01°14'18"E 30.69 feet to the South line of said Section 4; (3) S01°46'21"E 260.49 feet and (4) S88°33'38"W 177.83 feet along the North line of the South 97.67 feet as stated in Warranty Deed recorded in Liber 432, Page 199, Livingston County Records; thence N01°46'11"W 61.11 feet along the West line of said Section 9 and within the Right-of-Way of Latson Road (Variable width); thence S88°52'35"E 33.10 feet along the South line of MDOT Right-of-Way as recorded in Instrument # 2011R-023812; thence the following two (2) courses along said Right-of-Way: (1) N01°07'25"E 93.32 feet and (2) 163.71 feet along the arc of a 10,060.00 foot radius circular curve to the left, with a central angle of 00°55'57", having a chord which bears N00°39'28"E 163.71 feet to the POINT OF BEGINNING. Containing 2.88 acres of land, more or less. Being part of the SW 1/4 of the SW 1/4 of Section 4 and part of the NW 1/4 of Section 9, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan. Subject to the right of the Public over the West 33.00 feet thereof, as occupied by Latson Road (Variable Width), being subject to any other Easement and restrictions of record, if any.

RESULTANT PARCEL PROPOSED PARCEL 1 (NORTH):
 Part of the Northwest 1/4 of Section 9 and Part of the Southwest 1/4 of Section 4, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northwest Corner of Section 9, also being the Southwest 1/4 of Section 4, said corner being North 01 degree 46 minutes 11 seconds West, 19.43 feet from a point referenced in Quit Claim Deed, dated January 29, 1957, recorded April 4, 1961 in Liber 391, Page 382, Livingston County Records; thence along the North line of Section 9 and the South line of Section 4, N 87°18'40" E, 56.81 feet, to the POINT OF BEGINNING of the Parcel to be described; thence along the East line of MDOT Right-of-Way for Latson Road, as recorded in Instrument # 2011R-023812, Livingston County Records, Northerly along an arc right, having a length of 159.36 feet, a radius of 10,060.00 feet, a central angle of 00°54'27", and a long chord which bears N 00°15'46" W, 159.36 feet; thence N 88°33'52" E, 12.94 feet; thence S 01°15'25" E, 125.00 feet; thence N 88°33'52" E, 12.94 feet; thence S 01°14'18" E, 30.69 feet, to a point on the South line of Section 4 and the North line of Section 9; thence S 01°46'21" E, 260.49 feet; thence S 88°33'38" W, 177.83 feet; thence along the East line of MDOT Right-of-Way for Latson Road, as recorded in Instrument # 2011R-023812, Livingston County Records, the following two (2) courses: 1) N 01°07'25" E, 93.32 feet; 2) Northerly along an arc right, having a length of 163.71 feet, a radius of 10,060.00 feet, a central angle of 00°55'57", and a long chord which bears N 00°39'28" E, 163.71 feet, to the POINT OF BEGINNING, containing 1.58 acres, more or less, and including the use of Latson Road. Also subject to any other easements or restrictions of record.

Bearings are based on Michigan State Plane Coordinate System, South Zone and legal description per Chicago Title Insurance Company, File No.: 21040145- C, Policy No.: 7430600-224063018, dated 6-4-21:

SITE PLAN FOR MISTER CAR WASH PART OF NW QUARTER, SECTION 4 GENOA CHARTER TOWNSHIP, LIVINGSTON COUNTY, MI



OVERALL SITE MAP
NO SCALE

LOCATION MAP
NO SCALE

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EXISTING CONDITIONS, DEMOLITION, & NATURAL FEATURES PLAN
4	OVERALL SITE PLAN
5	SITE PLAN
6	GRADING & DRAINAGE PLAN
7	SOIL EROSION & SEDIMENTATION CONTROL PLAN
8	UTILITY PLAN
9	LANDSCAPE PLAN
10	CONSTRUCTION DETAILS
11	BASIN DETAILS
12	UNDERGROUND DETENTION DETAILS
13-16	MHOG DETAILS

Detail sheets removed for packet brevity. Contact staff to review details

PLANS BY OTHERS

PRE-1	PRELIMINARY EXTERIOR ELEVATIONS
PRE-2	PRELIMINARY EXTERIOR ELEVATIONS
PRE-3	PRELIMINARY FLOOR PLAN
PRE-4	PRELIMINARY ATTENDANT SHELTER PLANS & DETAILS
PRE-5	PRELIMINARY CANOPY PLANS & DETAILS
PRE-6	PRELIMINARY DUMPSTER ENCLOSURE PLAN & ELEVATIONS
PRE-7	PRELIMINARY VACUUM EQUIPMENT ENCLOSURE PLAN & ELEVATIONS
PXP	ELECTRICAL SITE PLAN - PHOTOMETRIC

PERMITS & APPROVALS		
AGENCY	DATE SUBMITTED	DATE APPROVED
TOWNSHIP ENGINEERING APPROVAL	-	-
LARC	-	-
LDCD SESC	-	-
EGL - ACT 399	-	-

INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

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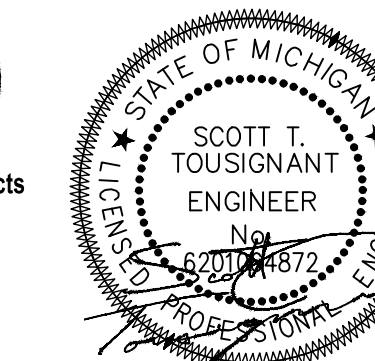
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4	ST	ST	PER LARC AND PC COMMENTS	3-14-24
3	ST	ST	LAYOUT MODIFICATIONS	01-16-24
2	ST	ST	PER P.C. MEETING	12-11-23
1	ST	ST	PER TOWNSHIP COMMENTS	10-25-23
NO	BY	CK	REVISION	DATE

JOB NO: 21-519

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
2. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
3. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
4. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
5. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
6. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET ADA REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER PRIOR TO WORK COMMENCING.
7. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON PRIOR TO BEGINNING CONSTRUCTION.
8. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
9. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
10. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
11. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
12. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
13. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
14. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
16. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
17. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
18. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
19. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
21. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
22. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
23. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
24. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.
25. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT ARE INCLUDED IN THE CONTRACT. ANY ITEMS NOT SPECIFICALLY DESIGNATED IN THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
26. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF APPROVED CONSTRUCTION PLANS, WITH THE LATEST REVISION DATE, ON SITE PRIOR TO THE START OF CONSTRUCTION, IN THE EVENT OF ANY QUESTIONS PERTAINING TO THE INTENT OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR A FINAL DETERMINATION FROM THE DESIGN ENGINEER.
27. THE CONTRACTOR, NOT THE OWNER OR THE ENGINEER, ARE RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SAFE EXECUTION OF THE PROJECT SCOPE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS.
28. THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING CONSTRUCTION STAKING AS NECESSARY. CONTRACTOR TO NOTIFY CONSTRUCTION SURVEYOR OF REPLACEMENT STAKES NEEDED WHICH SHALL BE AT THE CONTRACTORS EXPENSE.
29. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FRANCHISE UTILITY SERVICES (CABLE, ELECTRIC, GAS, ETC.) OWNER AND/OR CONTRACTOR SHALL WORK WITH UTILITY COMPANIES ON FURNISHING SITE UTILITY LAYOUTS AND PROVIDING CONDUIT CROSSINGS AS REQUIRED.
30. DAMAGE TO ANY EXISTING UTILITIES OR INFRASTRUCTURE (INCLUDING PAVEMENT, CURB, SIDEWALK, ETC.) SHALL PROMPTLY BE REPLACED IN KIND AND SHALL BE AT THE CONTRACTORS EXPENSE.
31. COORDINATION OF TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND PER ALL CITY/TOWNSHIP/COUNTY REQUIREMENTS. COPIES OF ALL TEST REPORTS SHALL BE FURNISHED TO THE DESIGN ENGINEER.
32. PRIOR TO THE START OF CONSTRUCTION, PROTECTION FENCING SHALL BE ERECTED AROUND THE TREE DRIPLINE OF ANY TREES INDICATED TO BE SAVED WITHIN THE LIMITS OF DISTURBANCE.
33. THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE IMPACTED/DISTURBED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY DRAINAGE PROVISIONS.
34. SOIL BORING LOGS ARE REPRESENTATIVE OF SPECIFIC POINTS ON THE PROJECT SITE, AND IF PROVIDED TO THE CONTRACTOR ARE FOR INFORMATIONAL PURPOSES ONLY.
35. WHERE CITY/TOWNSHIP STANDARD CONSTRUCTION DETAILS/SPECIFICATIONS ARE PROVIDED AND ARE IN CONFLICT WITH NOTES AND SPECIFICATIONS HEREIN, THE CITY/TOWNSHIP STANDARD SHALL GOVERN.

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CONTRACTOR TO FOLLOW MANUFACTURER SPECS/RECOMMENDATIONS THAT SUPERCEDE PLANS

GENERAL GRADING & SESC NOTES

1. THE CONTRACTOR SHALL HAVE IN PLACE ALL REQUIRED EROSION CONTROL METHODS AS INDICATED ON THE CONSTRUCTION PLANS AND AS REQUIRED BY GENERAL PRACTICE. SPECIFIC MEANS, METHODS AND SEQUENCES OF CONSTRUCTION MAY DICTATE ADDITIONAL SOIL EROSION CONTROL MEASURES BE NEEDED. THE CONTRACTOR SHALL COORDINATE WITH THE DESIGN ENGINEER ON THESE ANTICIPATED METHODS. ADDITIONAL SOIL EROSION CONTROL METHODS SHALL BE INCIDENTAL TO THE SCOPE OF WORK.
2. ACTUAL FIELD CONDITIONS MAY DICTATE ADDITIONAL OR ALTERNATE SOIL EROSION CONTROL MEASURES BE UTILIZED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR FIELD CONDITIONS THAT WARRANT ADDITIONAL AND/OR ALTERNATIVE SESC MEASURES BE UTILIZED.
3. AT THE CLOSE OF EACH DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION OPERATIONS, MATERIALS, DEBRIS, ETC ARE CONTAINED ON-SITE.
4. AT THE CLOSE OF EACH WORKING DAY, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS AT THE FLOW LINE.
5. ALL SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE PER MDEGL REGULATIONS AND BEST PRACTICES. ALL SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR.
6. THE SOIL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE UNTIL SUCH A TIME THAT THE SITE IS DETERMINED TO BE ESTABLISHED WITH ACCEPTABLE AMOUNT OF VEGETATIVE GROUND COVER.
7. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
8. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
9. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
10. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
11. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOOT CLASS II).

GENERAL LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY. ALL STOCK SHALL BE NURSERY GROWN, CONFORMING TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", AND IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. STOCK SHALL EXHIBIT NORMAL GROWTH HABIT AND BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, & DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 2. ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT, AND SECURELY WRAPPED AND BOUND.
 3. ALL PLANT BED MATERIALS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, OTHER EXTRANEIOUS OBJECTS, AND POOR SOILS TO A MINIMUM DEPTH OF 12-INCHES AND BACKFILLED TO GRADE WITH SPECIFIED PLANTING MIX (SEE BELOW).
 4. PLANTING MIXTURE SHALL CONSIST OF 5 PARTS TOPSOIL FROM ON-SITE (AS APPROVED), 4 PARTS COARSE SAND, 1 PART SPHAGNUM PEAT MOSS (OR APPROVED COMPOST), AND 5 LBS OF SUPERPHOSPHATE FERTILIZER PER CU. YD. OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED FOR UNIFORM CONSISTENCY.
 5. ALL PLANT BEDS AND INDIVIDUAL PLANTS, NOT OTHERWISE NOTED SHALL BE MULCHED WITH A 4-INCH LAYER OF SHREDDED BARK MULCH. EDGE OF MULCH BEDS AS SHOWN. DECIDUOUS TREES IN LAWN AREAS SHALL RECEIVE A 5-FT DIAMETER CIRCLE OF MULCH AND CONIFER TREES 8-FT (PLANTED CROWN OF TREE) UNLESS OTHERWISE NOTED.
 6. LANDSCAPE STONE SHALL BE INSTALLED WHERE NOTED OR INDICATED (HATCHED). STONE SHALL BE 3/4"-1-1/4" WASHED RIVER GRAVEL OR AS SELECTED AND SHALL BE INSTALLED TO A MINIMUM DEPTH OF 3-INCHES.
 7. ALL LANDSCAPE BEDS, UNLESS OTHERWISE NOTED SHALL BE INSTALLED OVER WEED BARRIER FABRIC - WATER PERMEABLE FILTRATION FABRIC OF NON-WOVEN POLYPROPYLENE OR POLYESTER FABRIC. FABRIC SHALL BE OF SUITABLE THICKNESS FOR APPLICATION.
 8. ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
 9. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD OF TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT, DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL SPECIFICATIONS.
 10. EDGING SHALL BE PROVIDED FOR ALL LANDSCAPE BEDS NOT ADJACENT TO CONCRETE PAVEMENT. EDGING SHALL BE BLACK ALUMINUM EDGING, 3/16-INCH X 4-INCH. INSTALL PER MANUFACTURER'S INSTRUCTIONS, ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
 11. SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUE GRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4-INCH AT TIME OF PLANTING, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10-INCHES BY 18-INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36-HOURS AFTER CUTTING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN-OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF 1 MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.
12. ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.
- SEED MIXTURE SHALL BE AS FOLLOWS:
 KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES - ADLPHI, RUGBY, GLADE, OR PARADE) 30%
 RUBY RED OR DAWSON RED FINE FESCUE 30%
 ATLANTA RED FESCUE 20%
 PENNFINE PERENNIAL RYE 20%
- THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 LBS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:
 10% NITROGEN - MIN 25% FROM A UREA FORMALDEHYDE SOURCE
 0 % PHOSPHATE
 10% POTASH - SOURCE POTASSIUM SULFATE OR POTASSIUM NITRATE
- THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 LBS PER 1000 SQ FT OF BULK FERTILIZER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RE-SEEDED AND SUCH RE-SEEDED SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
13. ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 6-INCH LAYER OF CLEAN, FRIABLE TOPSOIL. THE SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
 14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.

GENERAL UTILITY NOTES

1. BEDDING SHALL EXTEND A MINIMUM OF 4" BELOW THE PIPE, UNLESS OTHERWISE NOTED ON THE PLANS. BEDDING SHALL BE OF UNIFORM GRADATION MDOOT 66A STONE OR MDOOT CLASS II GRANULAR MATERIAL FOR SANITARY AND STORM PIPE AND MDOOT CLASS II GRANULAR MATERIAL ONLY FOR WATERMAIN.
2. WHERE UNSTABLE GROUND CONDITIONS ARE ENCOUNTERED, STONE BEDDING SHALL BE USED AS DIRECTED BY THE ENGINEER.
3. BACKFILL SHALL BE OF A SUITABLE MATERIAL AND SHALL BE FREE OF ANY ORGANIC MATERIALS AND ROCKS.
4. BACKFILL ABOVE THE PIPE SHALL BE OF GRANULAR MATERIAL MDOOT CLASS II TO A POINT 12" ABOVE THE TOP OF THE PIPE. WHERE THE TRENCH IS NOT WITHIN THE INFLUENCE OF THE ROAD, SUITABLE SITE MATERIAL MAY BE COMPACTED AND UTILIZED FROM A POINT 12" ABOVE THE PIPE TO GRADE. WHERE THE TRENCH IS WITHIN A 1:1 INFLUENCE OF THE ROAD, GRANULAR MATERIAL, MDOOT CLASS II OR III, IS TO BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 12" IN THICKNESS. COMPACTION SHALL BE 95% AS DETERMINED BY AASHTO T99.
5. 18" MINIMUM VERTICAL SEPARATION AND 10" HORIZONTAL SEPARATION IS TO BE MAINTAINED BETWEEN WATERMAIN AND SANITARY/STORM SEWER TO THE MAXIMUM EXTENT POSSIBLE.

GENERAL STORM NOTES

1. ALL STORM PIPE LENGTHS ARE SHOWN FROM C/L TO C/L OF STRUCTURE OR FROM C/L OF STRUCTURE TO DISCHARGE END OF FLARED END SECTION.
2. STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
 2.1. RCP(REINFORCED CONCRETE PIPE); SHALL MEET THE REQUIREMENTS OF ASTM C76 WITH MODIFIED GROOVED TONGUE AND RUBBER GASKETS MEETING THE REQUIREMENTS OF ASTM C443. RCP TO BE EITHER CLASS IV OR V AS CALLED OUT ON THE PLANS.
 2.2. HDPE(HIGH DENSITY POLYETHYLENE); SHALL MEET THE REQUIREMENTS OF ASTM F2648.
 2.3. PP(POLYPROPYLENE); SHALL MEET THE REQUIREMENTS OF ASTM F2881.
 2.4. PVC(POLYVINYL CHLORIDE); SHALL MEET THE REQUIREMENTS OF ASTM D3034.
3. STORM PIPE JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212. HDPE AND PP PIPE GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477.
4. ALL STORM PIPE TO HAVE WATERTIGHT PREMIUM JOINTS, UNLESS OTHERWISE NOTED ON THE PLANS.
5. STORM DRAINAGE STRUCTURES SHALL BE FURNISHED WITH STEPS WHICH SHALL BE STEEL ENCASED WITH POLYPROPYLENE PLASTIC OR EQUIVALENT. STEPS SHALL BE SET AT 16" CENTER TO CENTER.
6. ALL FLARED END SECTIONS 15" AND LARGER SHALL BE FURNISHED WITH AN ANIMAL GRATE.
7. FLARED END SECTIONS DISCHARGING STORM WATER SHALL RECEIVE A MINIMUM OF 10 SQ YDS OF PLAIN CRESTLESTONE RIP RAP WITH A MINIMUM STONE SIZE OF 6" AND SHALL BE PLACED ON A GEOTEXTILE FABRIC WRAP.
8. ALL CATCH BASINS WITHIN THE ROADWAY SHALL INCLUDE INSTALLATION OF 6" DIAMETER PERFORATED PIPE SUBDRAIN.
9. STORM DRAINAGE STRUCTURE COVERS SHALL BE OF THE FOLLOWING (OR APPROVED EQUAL):
 TYPE LOCATION FRAME COVER/INLET
 'MH' ALL 1040 SANITARY-SOLID SELF-SEALING STORM-VENTED
 'CB' TYPE A CURB 7000-T1-M FLAT GRATE WITH VERT. OPEN BACK
 'CS' TYPE B CURB 7065-T1-M FLAT GRATE WITH ROLL BACK
 'CB' PAVEMENT/SHOULDER 1020-M1 FLAT GRATE
 'CB' OPEN AREA 1020-01 BEEHIVE GRATE 4" HIGH
 'CB' GUTTER 5100 CONCAVE INLET

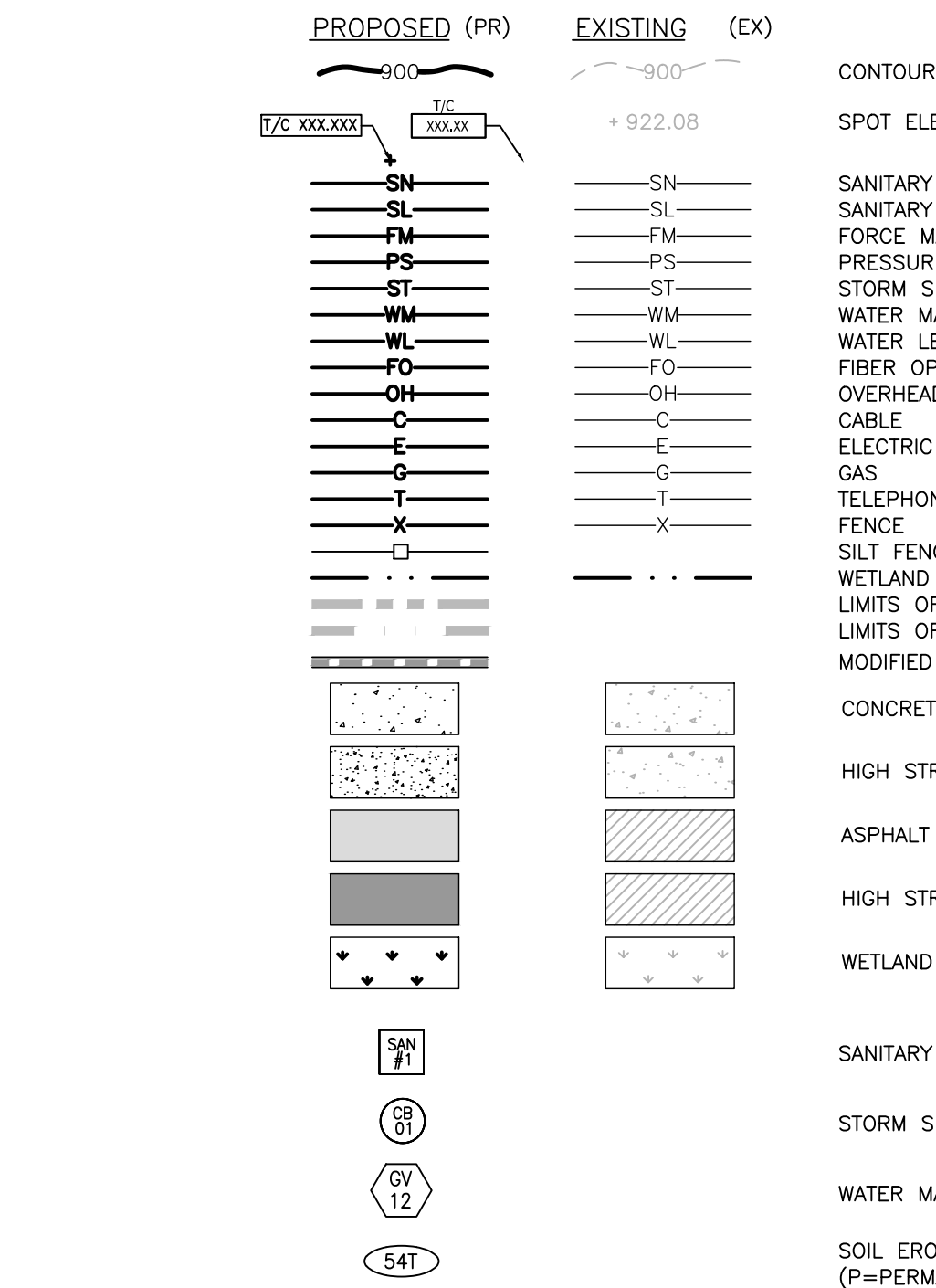
GENERAL SANITARY NOTES

1. ALL SANITARY PIPE LENGTHS ARE SHOWN FROM C/L OF STRUCTURE TO C/L OF STRUCTURE.
2. SANITARY PIPE MATERIALS SHALL BE AS FOLLOWS:
 2.1. PVC SDR-26 (SANITARY MAIN)
 2.2. PVC SDR-23.5 (SANITARY LEADS)
 2.3. HDPE DR-11 (SANITARY FORCEMAIN)
3. ALL PVC SDR SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3034 AND D2241. PVC SCHD 40 PIPE SHALL MEET THE REQUIREMENTS OF ASTM D1785. GASKET JOINTS FOR SANITARY PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3139 AND D3212.
4. SANITARY STRUCTURES SHALL BE FURNISHED WITH STEPS WHICH SHALL BE STEEL ENCASED WITH POLYPROPYLENE PLASTIC OR EQUIVALENT. STEPS SHALL BE SET AT 16" CENTER TO CENTER.
5. ALL NEW MANHOLES SHALL BE MINIMUM 4' DIAMETER, PRECAST MANHOLE SECTIONS AND AN ECCENTRIC CONE. PRECAST MANHOLE JOINTS SHALL BE INSTALLED WITH BUTYL ROPE MEETING THE REQUIREMENTS OF ASTM C990.
6. MANHOLES SHALL BE CONSTRUCTED WITH FLOW CHANNEL WALLS THAT ARE FORMER, AT A MINIMUM, TO THE SPRINGLINE OF THE PIPE.
7. ALL NEW MANHOLES SHALL HAVE AN APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH MANHOLE WALLS.
8. WHEREVER AN EXISTING MANHOLE IS TO BE TAPPED, THE STRUCTURE SHALL BE CORED AND A KOR-N-SOAL BOOT UTILIZED FOR THE PIPE CONNECTION.
9. ALL MANHOLES SHALL BE PROVIDED WITH WATERTIGHT COVERS. COVERS TO BE EJCO 1040 TYPE 'A' SOLID COVER.
10. A MAXIMUM OF 12" OF GRADE ADJUSTMENT RINGS SHALL BE USED TO ADJUST THE FRAME ELEVATION. BUTYL ROPE SHALL BE USED BETWEEN EACH ADJUSTMENT RING.
11. SANITARY SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 1.0%.
12. CLEANOUTS SHALL BE INSTALLED EVERY 100', AT ALL BENDS AND STUBS.
13. PUBLIC SANITARY SEWER SHALL BE CENTERED WITHIN A 20 FOOT WIDE SANITARY SEWER EASEMENT.

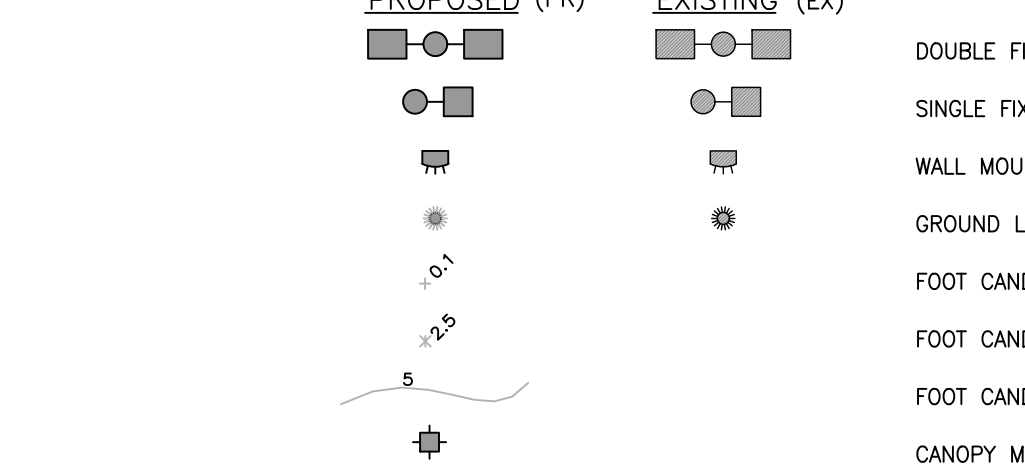
GENERAL WATERMAIN NOTES

1. WATERMAIN PIPE MATERIALS SHALL BE AS FOLLOWS:
 1.1. D.I.P. CL52 (WATERMAIN)
 1.2. TYPE 'K' COPPER (WATER LATERAL - MAIN TO CURB STOP)
 1.3. HDPE DR-9 (WATER LATERAL - CURB STOP TO STUB)
2. WATERMAIN FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO AWWA C110.
3. WATERMANS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651. BAC-T SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH R235.11110 OF THE ADMINISTRATIVE RULES PROMULGATED UNDER MICHIGAN SAFE DRINKING WATER ACT, 1976 PA 399, AS AMENDED.
4. ALLOWABLE LEAKAGE OR HYDROSTATIC PRESSURE TESTING SHALL BE IN ACCORDANCE WITH AWWA C600 AND C605.
5. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURERS CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.
6. A FULL STOCK OF PIPE SHALL BE LAID CENTERED AT A PIPE CROSSING IN ORDER TO MAINTAIN THE MAXIMUM SEPARATION OF WATERMAIN JOINT TO THE CROSSING PIPE.
7. WATERMAIN SHALL BE INSTALLED WITH A MINIMUM OF 5.5' OF COVER FROM FINISHED GRADE TO TOP OF PIPE AND NO MORE THAN 8' OF COVER, UNLESS SPECIAL CONDITIONS WARRANT.
8. WATERMAIN VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES, NON-RISING STEMS, COUNTERCLOCKWISE OPEN, AWWA C509.
9. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE WITH CAST IRON VALVE BOX. THE HYDRANT PUMPER HOSE CONNECTION SHALL FACE THE ROADWAY.
10. THE BREAKAWAY FLANGE AND ALL BELOW GRADE FITTINGS SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.
11. PUBLIC WATERMAIN SHALL BE CENTERED WITHIN A 25 FOOT WIDE WATERMAIN EASEMENT.

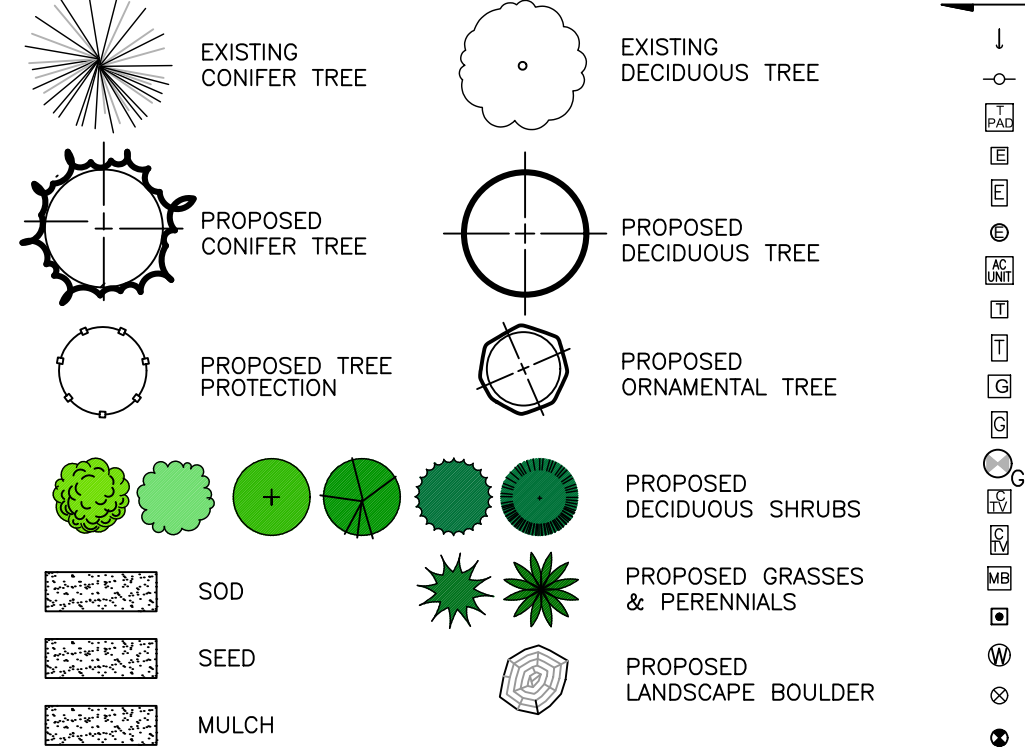
LINES & HATCHES LEGEND



LIGHTING LEGEND



LANDSCAPE LEGEND



ABBREVIATIONS

FFE	FINISHED FLOOR ELEVATION
BFE	BASEMENT FLOOR ELEVATION
GFE	GARAGE FLOOR ELEVATION
FG	FINISHED GRADE
T/A	TOP OF ASPHALT
T/C	TOP OF CONCRETE/CURB
T/W	TOP OF WALK
T/P	TOP OF PIPE
B/P	BOTTOM OF PIPE
F/L	FLOW LINE
RIM	RIM ELEVATION (AT FLOW LINE)
INV	INVERT ELEVATION
MH	MANHOLE
CB	CATCH BASIN
RY	REAR YARD
YD	YARD DRAIN
RD	ROOF DRAIN
FES	FLARED END SECTION
CMP	CORRUGATED METAL PIPE
GPP	CORRUGATED PLASTIC PIPE
RCP	REINFORCED CONCRETE PIPE
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
DIP	DUCTILE IRON PIPE
GV	GATE VALVE
GVW	GATE VALVE IN WELL
QVB	GATE VALVE IN BOX
HYD	HYDRANT
FDC	FIRE DEPARTMENT CONNECTION
UP	UTILITY POLE
NFV	NOT FIELD VERIFIED
TR	TO BE REMOVED
L	LIBER
P	PAGE
L.C.R.	LIVINGSTON COUNTY RECORDS
(M&R)	MEASURED AND RECORD
L.O.B.	POINT OF BEGINNING

SYMBOL LEGEND

—	STORM DRAINAGE FLOW
—	GUY WIRE
—	POWER POLE
—	TRANSFORMER PAD
—	ELECTRICAL RISER
—	U.G. ELECTRICAL MARKER
—	ELECTRICAL METER
—	AIR CONDITIONING UNIT
—	TELEPHONE RISER
—	U.G. TELEPHONE MARKER
—	GAS RISER
—	GAS METER
—	U.G. GAS MARKER
—	CABLE TV RISER
—	U.G. CABLE TV MARKER
—	MAILBOX
—	WELL
—	WATER MANHOLE
—	GATE VALVE (EXISTING)
—	GATE VALVE (PROPOSED)
—	HYDRANT (EXISTING)
—	HYDRANT (PROPOSED)
—	CATCH BASIN (EXISTING)
—	YARD CATCH BASIN (EXISTING)
—	CATCH BASIN (PROPOSED)
—	STORM MANHOLE (EXISTING)
—	STORM MANHOLE (PROPOSED)
—	END SECTION (EXISTING)
—	END SECTION (PROPOSED)
—	SANITARY MANHOLE (EXISTING)
—	SANITARY MANHOLE (PROPOSED)
—	PUMP CHAMBER
—	TRAFFIC SIGN
—	SIGN (EXISTING)
—	SIGN (PROPOSED)
—	SOIL BORING
—	STEEL ROD SET
—	STEEL ROD OR PIPE FOUND
—	WOOD LATH SET
—	HUB SET
—	MONUMENT FOUND
—	SECTION CORNER
—	GAS PUMP
—	ANTENNA
—	SATELLITE DISH
—	NEWSPAPER BOX
—	PARKING METER
—	PHONE BOOTH
—	HANDICAP SYMBOL
—	BENCHMARK
—	LIGHT POLE

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 Engineers Surveyors Planners Landscape Architects
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 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

MISTER CAR WASH

PROJECT: CWP WEST LLC
 232 E 7TH AVE
 TULSA, AZ 85705
 206.664.1393

PREPARED FOR: CWP WEST LLC
 232 E 7TH AVE
 TULSA, AZ 85705
 206.664.1393

DESIGNED BY: ST
 DRAWN BY: ST
 CHECKED BY:
 SCALE: 21 SCALE
 JOB NO: NO 549
 DATE: 10/04/2023
 SHEET NO. 2

NO	BY	DATE	REVISION PER
1	ST	10-25-23	
2	ST	12-11-23	
3	ST	1-16-24	
4	ST	3-14-24	

PER LORC AND PC COMMENTS
 LAYOUT MODIFICATIONS
 PER P.C. MEETING
 PER TOWNSHIP COMMENTS

SANITARY SEWER INVENTORY:		STORM SEWER INVENTORY:	
SM1	RM=1009.24 INV. N=1002.04 (8") INV. S=1002.14 (8")	LT2B	RM=1009.05 M INV. S=1003.27 R (15")
SM2	RM=1011.15 INV. N=1004.05 (8") INV. S=1004.15 (8")	LT2A	RM=1009.36 M INV. S=1002.78 R (18") INV. N=1002.85 R (15") INV. E=1006.00 R (12")
SM3	RM=1012.06 INV. N=1005.11 (8") INV. S=1005.16 (8")	LT2A	RM=1011.90 R INV. N=1001.10 R (24") INV. S=1008.20 R (12")
SM4	RM=1013.91 INV. N=1006.81 (8") INV. S=1006.91 (8") INV. E=1008.91 (8")	LT2A	RM=1012.23 M INV. S=1009.90 R (24") INV. N=1003.90 R (24") INV. E=1007.00 R (12")
		LT2A	RM=1009.12 M INV. W=1006.50 (12")
		LT2A	RM=1009.51 R INV. W=1006.50 (12")
		LT2A	RM=1009.64 M INV. S=1007.00 R (12")
		LT2A	RM=1011.93 M INV. W=1008.00 R (12") INV. N=1008.00 R (12")

STORM SEWER INVENTORY:		STORM SEWER INVENTORY:	
LT22	RM=1010.55 M INV. S=1001.55 R (24") INV. N=1001.65 R (18") INV. E=1006.78 R (12") INV. N=1006.90 R (12")	LT2B	RM=1012.86 M INV. S=1001.13 R INV. N=1000.70 R (24") INV. E=1008.00 R (12")
LT22A	RM=1010.48 M INV. W=1007.10 R (12") INV. N=1007.20 R (12")	LT2B	RM=1012.62 M INV. W=1012.94 R INV. W=1009.00 R (12")
LT22B	RM=1010.40 M INV. S=1007.30 R (12")	LT2B	RM=1013.17 M INV. S=1000.00 R (30") INV. N=1000.50 R (24") INV. E=1008.50 R (12")
LT22C	RM=1010.46 M INV. S=1007.00 R (12")	LT2B	RM=1013.07 M INV. W=1009.50 R (12")

GENERAL SURVEY NOTES:

- BEARINGS WERE ESTABLISHED FROM METRO CONSULTING ASSOCIATES, JOB NO. SG-19193, DATED 01/19/2018.
- SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
- EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
- ELEVATIONS WERE ESTABLISHED WITH GPS USING OPUS GPS POST-PROCESSING. (NAVD83 DATUM)
- CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
- THE LOCATIONS OF STORM SEWER, SANITARY SEWER & WATERMAIN, AS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES ALONG WITH DRAWINGS SUPPLIED BY MDOT AND MHOC.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
- ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.
- THERE WAS SNOW ON THE GROUND AT THE TIME OF FIELDWORK FOR THIS SURVEY.

SOIL NOTES:

THE PROJECT SITE IS COMPRISED OF THE FOLLOWING SOIL TYPE ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE:
 Cvrab -- CONOVER LOAM, 0 TO 4 % SLOPES
 MoB -- MIAMI LOAM, 2 TO 6 % SLOPES
 Wh -- WASHTENAW SILT LOAM

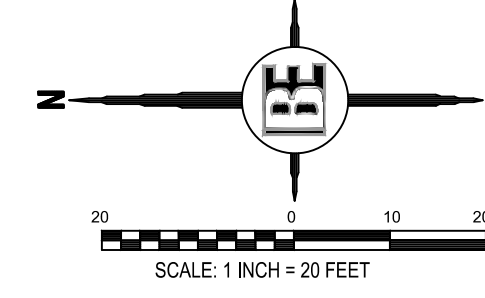
SITE BENCHMARKS (NAVD83):

- BM #200 = NAIL/TAG S/S POWER POLE
ELEV.=1013.34
- BM #201 = NAIL/TAG NE/S POWER POLE
ELEV.=1014.28
- BM #202 = NAIL/TAG NE/S POWER POLE
ELEV.=1013.57
- BM #203 = NORTH EAST CORNER TRANS-PAD
ELEV.=1011.58

NATURAL FEATURES NARRATIVE:

NATURAL FEATURES WERE IDENTIFIED DURING AN ON-SITE VISIT TO THE PROPERTY ON SEPTEMBER 28, 2023. SITE IS VACANT AND PRIMARILY CAN BE DESCRIBED AS UNMANICURED TALL GRASS.
 ENTIRE SITE IS RELATIVELY FLAT, WITH A LOWER ELEVATION AT LATSON ROAD. SITE SLOPES WESTERLY TO LATSON ROAD AT SLOPES OF 2-4%. SOILS ARE ALSO UNIFORM PER USDA NRCS SOILS DATA CONSISTING OF MIAMI LOAM FOR ABOUT 80% OF THE SITE. THE REMAINDER IS STATED AS WASHTENAW SILT LOAM AT THE EAST SIDE OF THE SITE AND A SMALL AREA OF CONOVER LOAM AT THE NORTHWEST CORNER OF THE SUBJECT SITE.

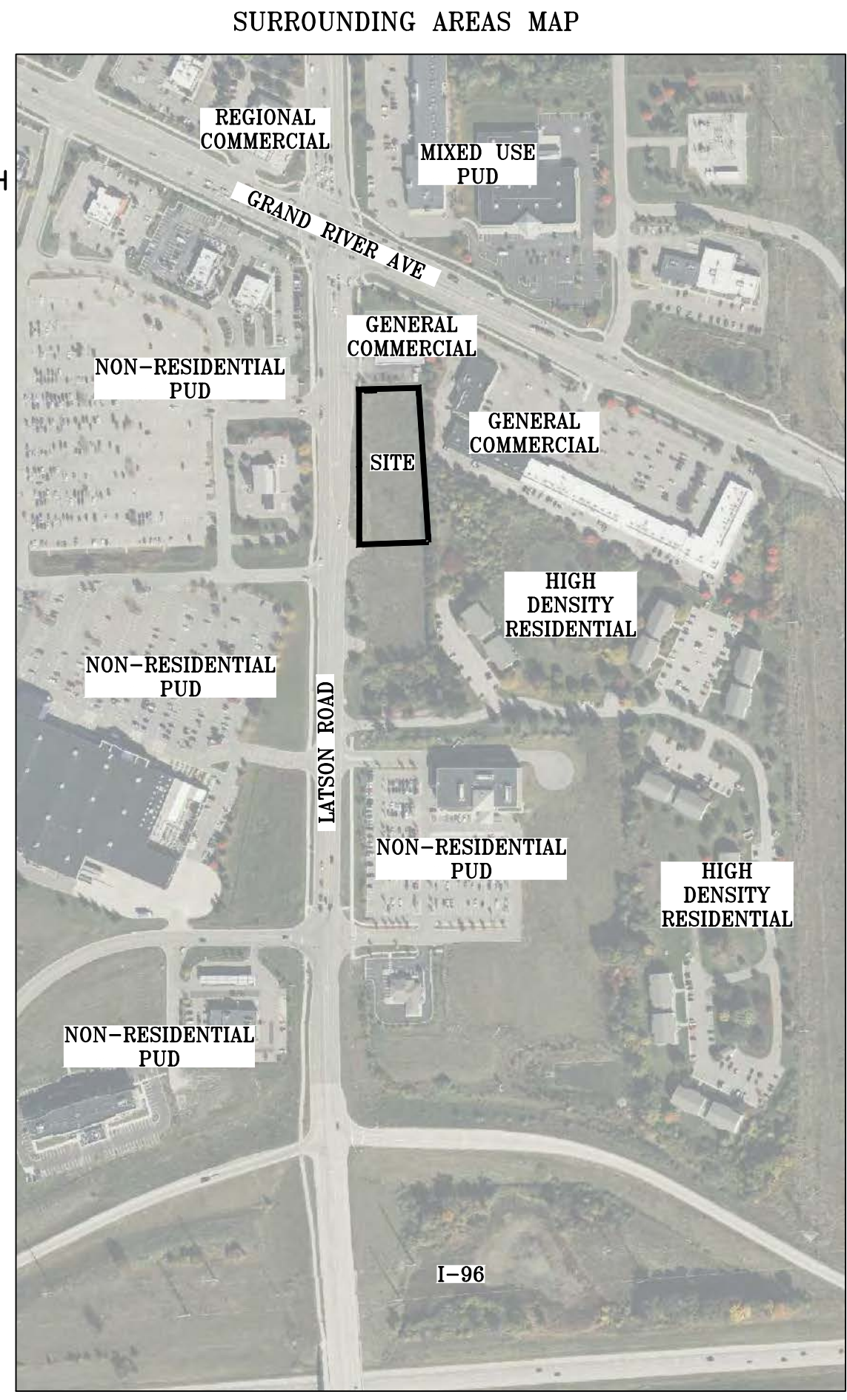
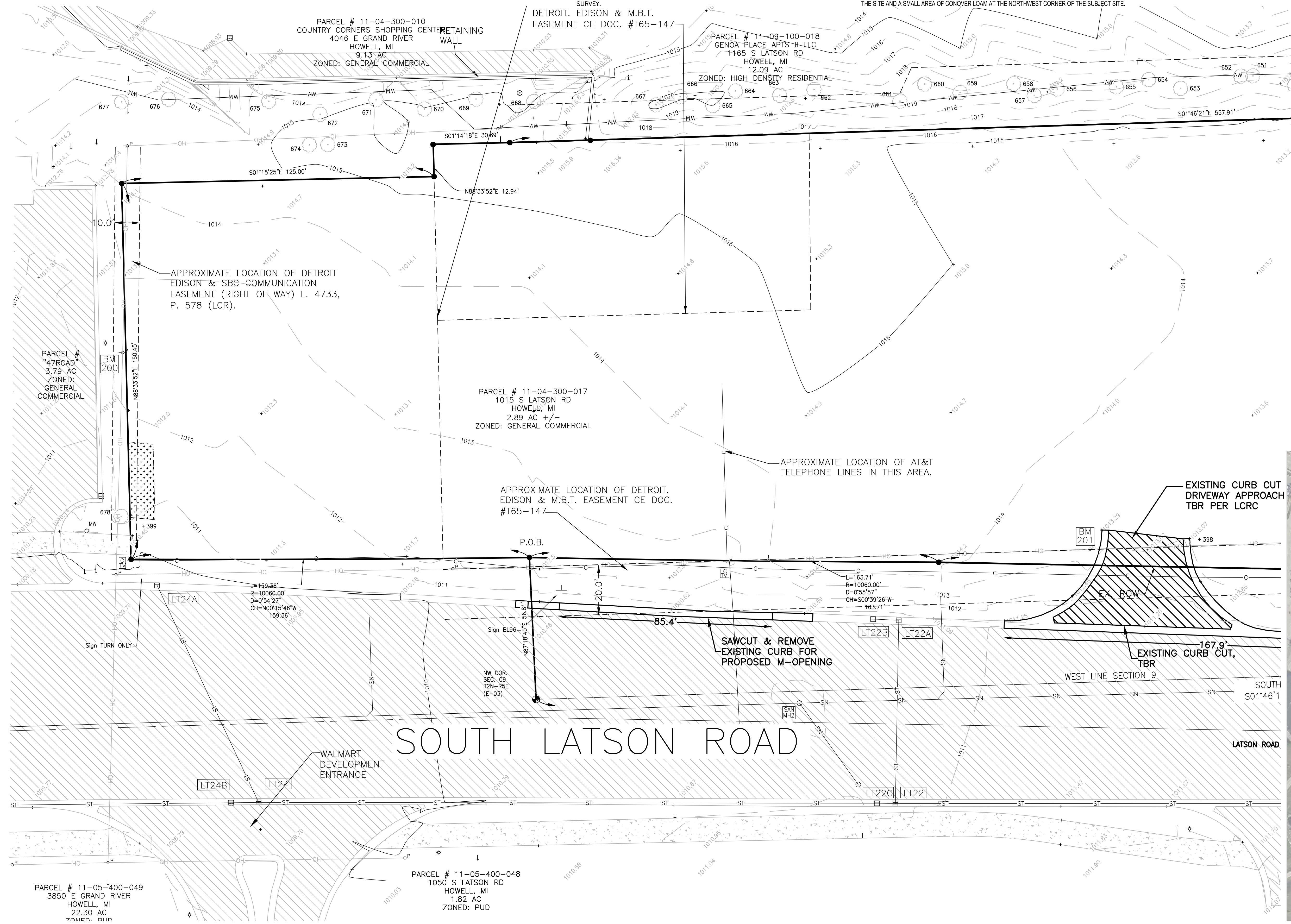
SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



Tag #	Botanical Name	Common Name	Size	Condition
651	Pinus resinosa	Red Pine	11', 15"	fair
652	Pinus resinosa	Red Pine	15"	fair
653	Pinus resinosa	Red Pine	10', 15', 17'	good
654	Pinus resinosa	Red Pine	10', 11'	good
655	Pinus resinosa	Red Pine	24"	good
656	Pinus sylvestris	Scotch Pine	20"	good
657	Pinus resinosa	Red Pine	21"	good
658	Pinus resinosa	Red Pine	16"	good
659	Pinus resinosa	Red Pine	11', 11'	good
660	Pinus resinosa	Red Pine	16"	good
661	Pinus resinosa	Red Pine	16"	good
662	Pinus resinosa	Red Pine	16"	poor
663	Pinus resinosa	Red Pine	16"	poor
664	Pinus resinosa	Red Pine	16"	poor
665	Pinus resinosa	Red Pine	16"	fair
666	Pinus resinosa	Red Pine	16"	fair
667	Pinus resinosa	Red Pine	16"	poor
668	Acer rubrum	Red Maple	6"	good
669	Acer rubrum	Red Maple	6.5"	good
670	Pyrus calleryana	Callery Pear	12"	good
671	Pyrus calleryana	Callery Pear	8"	good
672	Pyrus calleryana	Callery Pear	12"	good
673	Prunus avium	Sweet Cherry	12' 5' 6.5"	good
674	Pinus avium	Sweet Cherry	8' 11"	good
675	Acer rubrum	Red Maple	7.5"	good
676	Acer rubrum	Red Maple	11"	good
677	Acer rubrum	Red Maple	5.5"	good
678	Acer saccharinum	Silver Maple	7.5"	good

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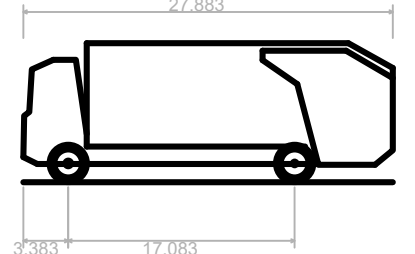
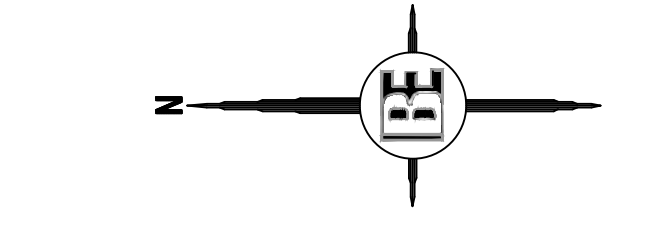
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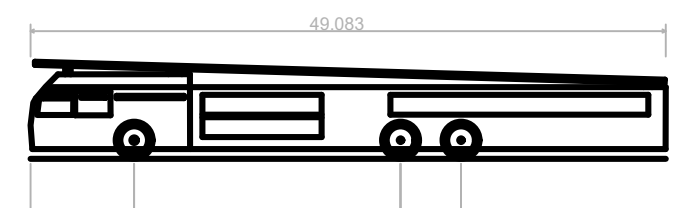
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PROJECT:	MISTER CAR WASH
PREPARED FOR:	CWP WEST LLC 232 E 5TH AVE TUCSON, AZ 85705 206-664-1303
TITLE:	EXISTING CONDITIONS, DEMO & NATURAL FEATURES PLAN
DATE:	10/04/2023
DESIGNED BY:	ST
DRAWN BY:	ST
CHECKED BY:	
SCALE:	1" = 20'
JOB NO.:	21-519
DATE:	10/04/2023
SHEET NO.:	3

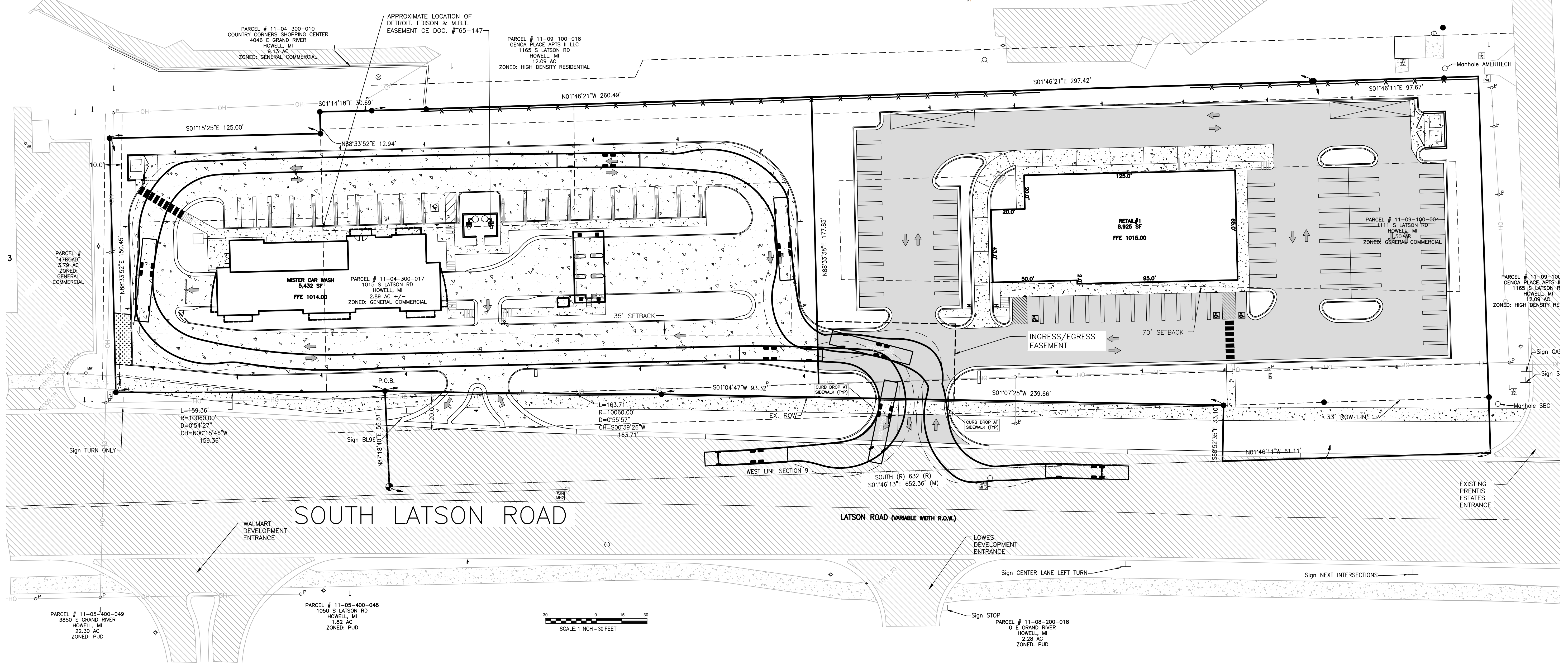
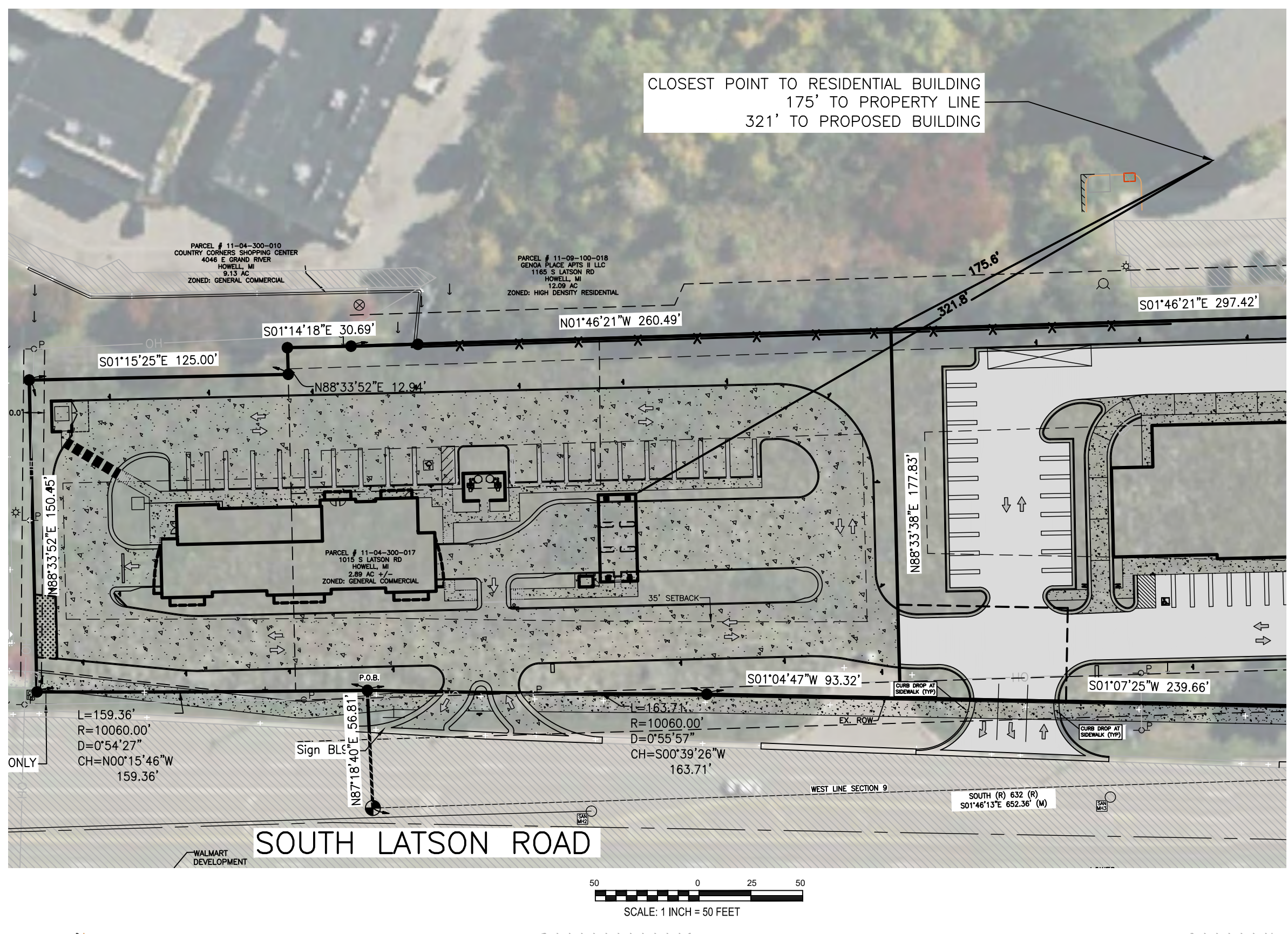
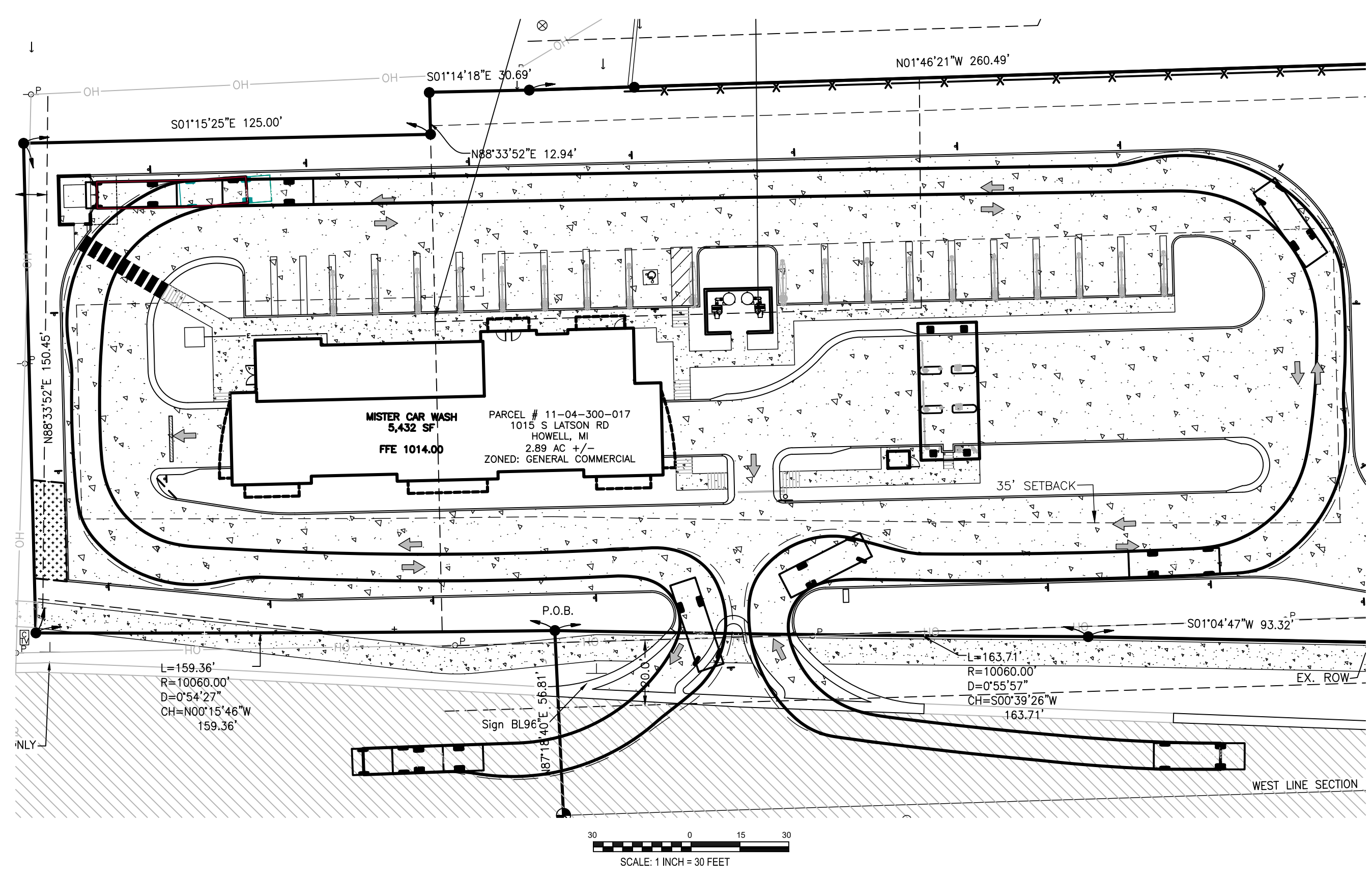
SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



Hino 338 M + Wayne Royal GT14 Refuse Truck
 Overall Length 27.88ft
 Overall Width 8.04ft
 Overall Body Height 10.48ft
 Min Body Ground Clearance 1.31ft
 Track Width 8.04ft
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 27.40ft



Brighton Area Fire Authority
 Overall Length 49.08ft
 Overall Width 8.16ft
 Overall Body Height 7.50ft
 Min Body Ground Clearance 0.75ft
 Track Width 8.16ft
 Lock-to-lock time 5.00s
 Max Steering Angle (Virtual) 45.00°



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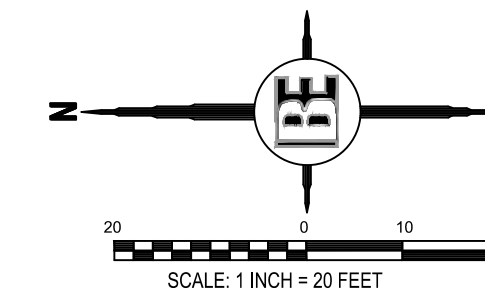
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PROJECT	MISTER CAR WASH
PREPARED FOR	CWP WEST LLC 232 E 7TH AVE TULSA, AZ 85705 206.664.1393
TITLE	OVERALL SITE PLAN
DESIGNED BY:	ST
DRAWN BY:	ST
CHECKED BY:	
SCALE:	VARIES
JOB NO:	21-519
DATE:	10/04/2023
SHEET NO.	4



SCREEN FENCE SAMPLE IMAGE
MANUFACTURER: FENCETAC
PRODUCT: SANDSTONE VINYL

BLACK OR BRONZE
COLORED FRAMING



SEE SHEET 2 FOR GENERAL
NOTES AND LEGEND

SITE DATA
 PARCEL # 4711-04-300-017
 1015 S. LATSON RD
 HOWELL, MI
 GENOA TOWNSHIP
 3.40 AC
 ZONING: GENERAL COMMERCIAL DISTRICT (GCD)
 CURRENT USE: VACANT

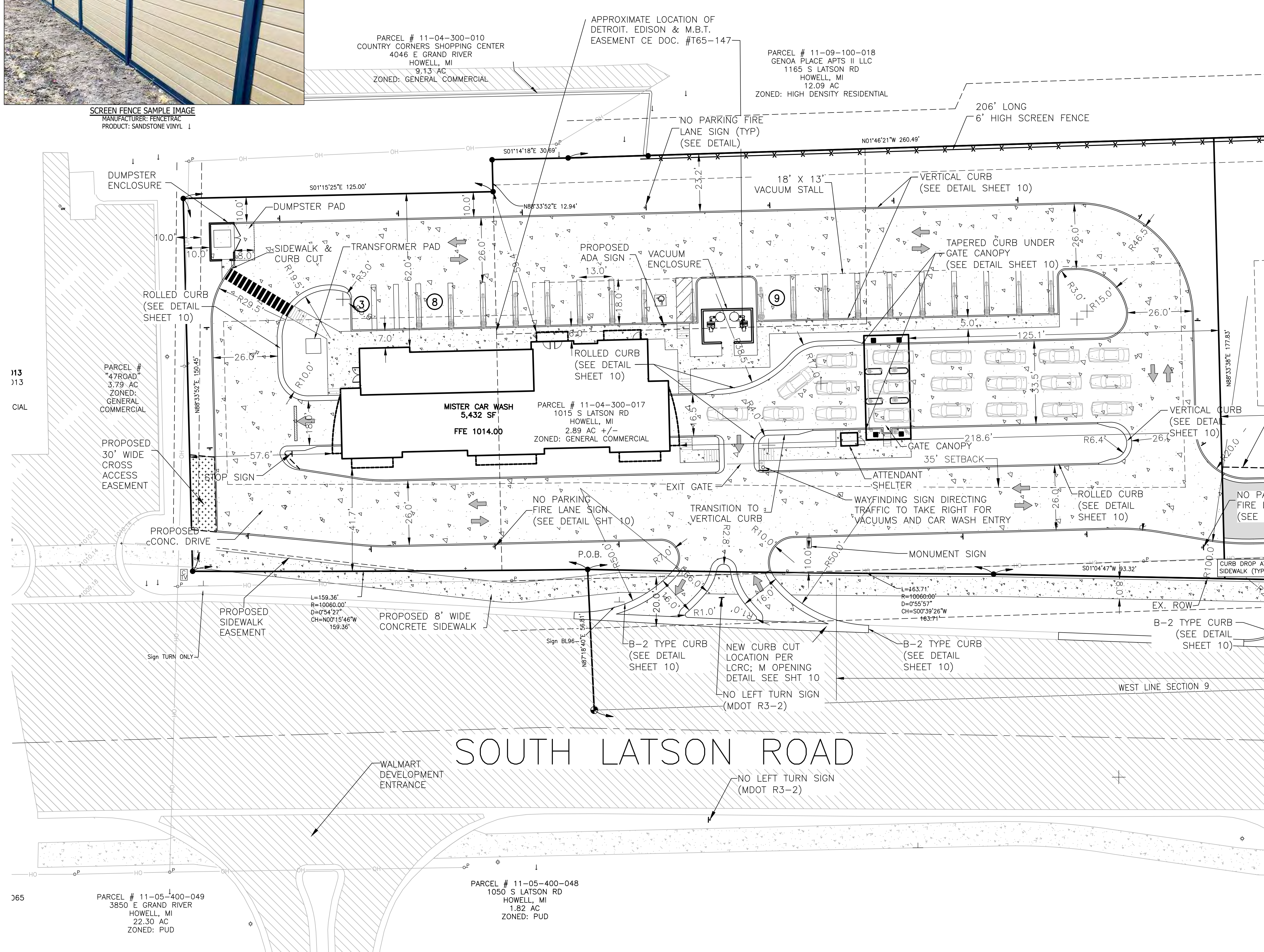
GENERAL COMMERCIAL DISTRICT
 - MIN. LOT AREA: 1 ACRE
 - MIN. LOT WIDTH: 150 FT
 - BUILDING SETBACK:
 FRONT: 35 FT (IF NO PARKING IN FRONT YARD) PROVIDED
 SIDE: 15 FT 41.7 FT
 REAR: 50 FT 57.6 FT
 59.4 FT
 - PARKING SETBACK:
 FRONT: 20 FT PROVIDED
 SIDE: 10 FT 10.0 FT
 REAR: 10 FT 10.0 FT
 - MAX LOT COVERAGE: PROVIDED
 PARCEL AREA: 68,794 SFT (1.58 AC)
 BUILDING: 35% 5,432 SFT (7.9%)
 IMPERVIOUS: 75% 46,524 SFT (67.6%)
 - MAX BUILDING HEIGHT: 35 FT (2 STORIES) 35.0 FT

PARKING CALCULATIONS:
 - AUTOMOBILE WASH: 2 SPACES PLUS 1 PER EMPLOYEE PER PEAK SHIFT
 2 + 3 EMPLOYEES (PEAK SHIFT)
 REQUIRED: 5 SPACES
 PROVIDED: 20 SPACES (INCLUDES VACUUM SPACES WHICH ARE UTILIZED
 AS ADDITIONAL PARKING SPACES DURING TIMES OF EMPLOYEE SHIFT
 CHANGES)
 LOADING/UNLOADING SPACES: 10' x 50'
 WAIVER REQUESTED: LOADING ZONE N/A FOR PROPOSED USE

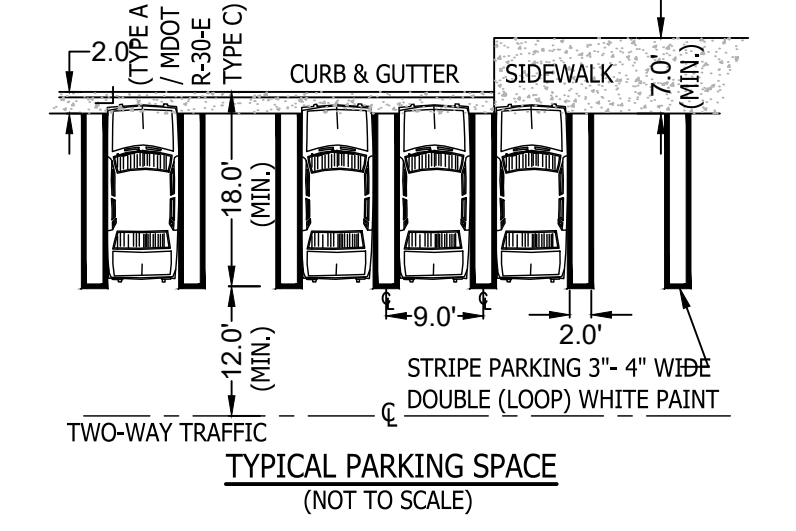
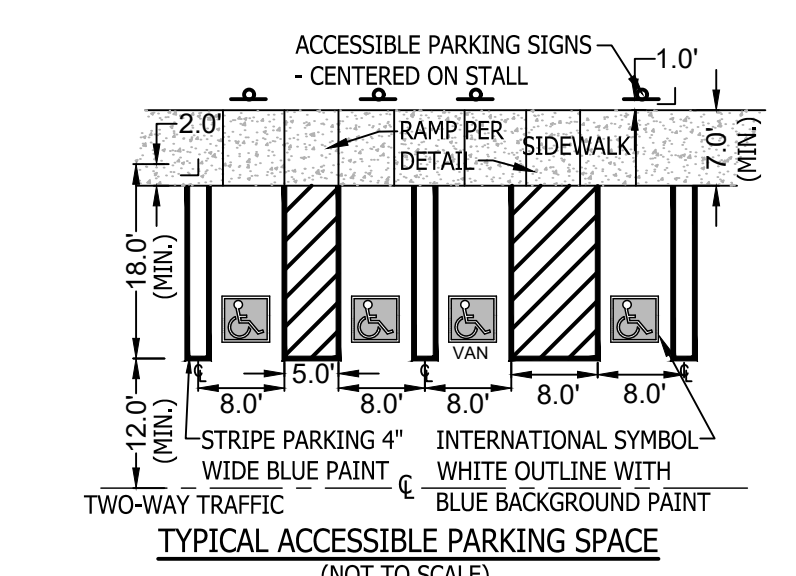
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 COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL
 BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT
 UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE
 APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY
 FROM THE PLANS.

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- GENERAL NOTES**
- ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO REDUCE GLARE AND SHALL BE ARRANGED TO NOT INTERFERE WITH THE VISION OF PERSONS ON ADJACENT ROADWAYS OR ADJACENT PROPERTY.
 - ALL SIGNS SHALL MEET LOCAL MUNICIPALITY ORDINANCE REQUIREMENTS.
 - THE BUILDING ADDRESS SHALL BE A MINIMUM 6" HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET. THE LOCATION AND SIZE SHALL BE VERIFIED PRIOR TO INSTALLATION.
 - A KEY BOX/NOX BOX SHALL BE LOCATED NEAR THE FRONT ENTRY (FINAL LOCATION TO BE DETERMINED BETWEEN THE OWNER & FIRE MARSHALL).
 - ONE SIDE OF THE STREET SHALL BE MARKED AS A FIRE LANE AND SHALL HAVE APPROPRIATE SIGNAGE AT 50' INTERVALS.
 - ACCESS ROADS TO THE SITE SHALL BE PROVIDED AND MAINTAINED DURING CONSTRUCTION.
 - ACCESS ROADS SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 84,000 LBS.
 - A MINIMUM VERTICAL CLEARANCE OF 13.5 FEET SHALL BE MAINTAINED THROUGHOUT THE SITE. THIS INCLUDES ENCROACHMENTS FROM LARGE TREE CANOPIES, LIGHTING, ETC.
 - DURING THE CONSTRUCTION PROCESS, THE BUILDING WILL BE EVALUATED FOR EMERGENCY RESPONDER RADIO SIGNAL STRENGTH. IF COVERAGE IS FOUND TO BE QUESTIONABLE OR INADEQUATE, AN APPROVED CONTRACTOR SHALL BE HIRED TO PERFORM A GRID TEST OF THE FACILITY. IF THE SIGNAL STRENGTH COVERAGE IS FOUND TO BE NON-COMPLIANT, AN APPROVED EMERGENCY RESPONDER RADIO COVERAGE SYSTEM SHALL BE PROVIDED IN THE BUILDING.
 - SITE LIGHTING SHALL BE PLACED ON TIMERS TO BE OFF DURING NON-USE HOURS TO THE EXTENT POSSIBLE WHILE MAINTAINING SITE SAFETY. SITE LIGHTING SHALL BE PROGRAMMED TO TURN OFF AT NIGHT WHEN ACTIVITIES ARE NO LONGER OCCURRING ON THE PROPERTY.
 - VACUUMS ARE TURNED OFF AT NIGHT.



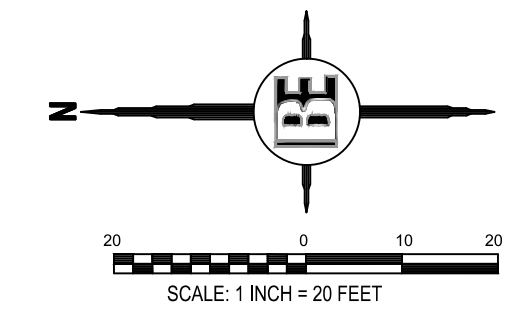
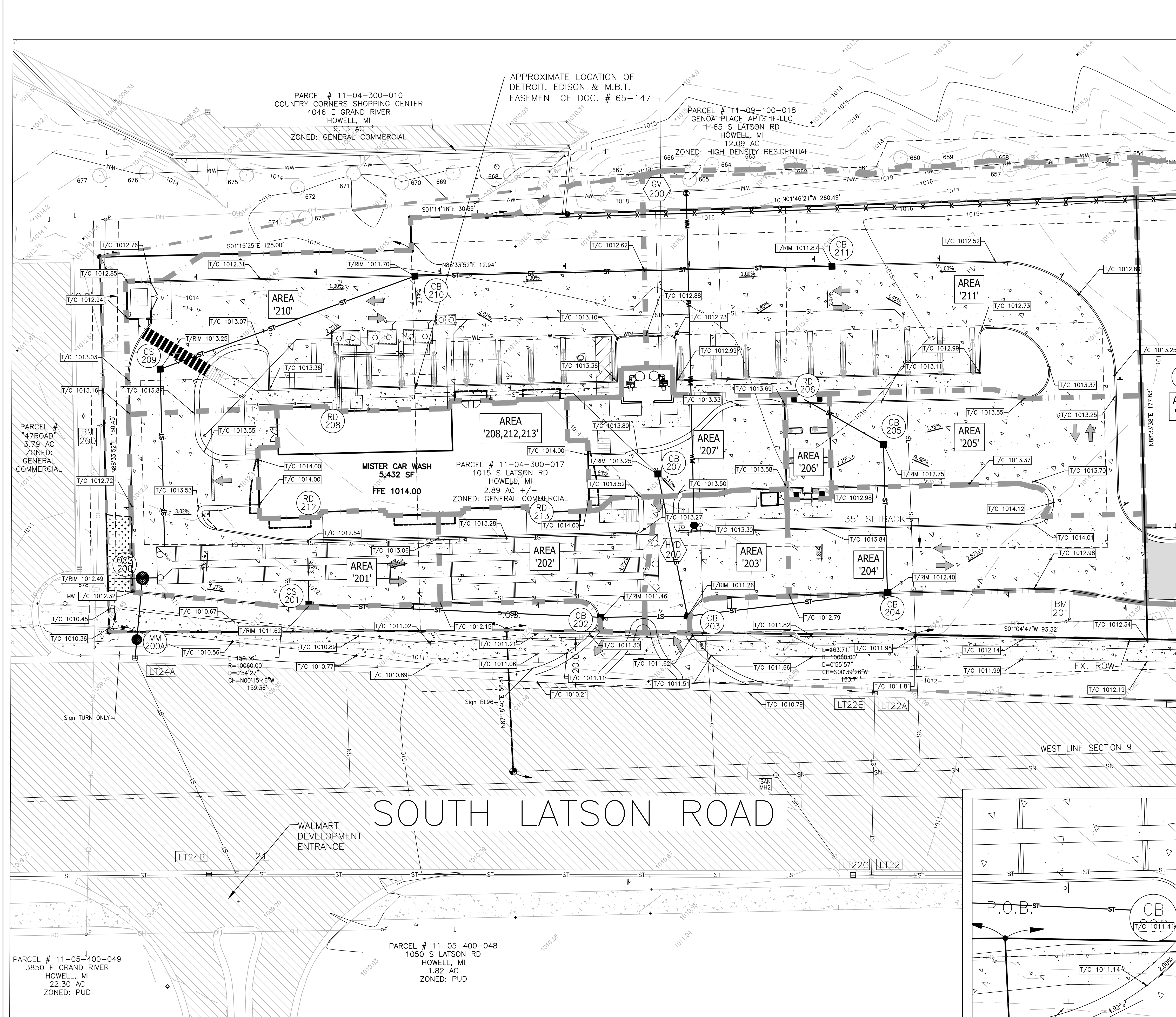
MISTER CAR WASH

PROJECT: MISTER CAR WASH
 PREPARED FOR: CWP WEST LLC
 232 E 7TH AVE
 TULSA, OK 74106
 206.664.1303

DESIGNED BY: ST
 DRAWN BY: ST
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 21-519
 DATE: 10/04/2023
 SHEET NO. 5

NO	BY	REVISION PER	DATE
1	ST	PER TOWNSHIP COMMENTS	10-25-23
2	ST	PER P.C. MEETING	12-11-23
3	ST	LAYOUT MODIFICATIONS	1-16-24
4	ST	PER LORC AND PC COMMENTS	3-14-24

FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

DRAINAGE AREA TABLE				
DRAINAGE AREA	TOTAL AREA (AC)	IMP. AREA (AC)	C VALUE	A ² C
200	-	-	-	-
201	0.15	0.12	0.77	0.12
202	0.08	0.06	0.74	0.06
203	0.06	0.05	0.80	0.05
204	0.13	0.10	0.72	0.09
205	0.12	0.10	0.80	0.09
206	0.02	0.02	0.90	0.02
207	0.08	0.06	0.75	0.06
208	0.05	0.05	0.90	0.05
210	0.33	0.23	0.69	0.23
211	0.41	0.19	0.52	0.22
212	0.04	0.04	0.90	0.04
213	0.04	0.04	0.90	0.04
TOTALS	1.51	1.07	0.69	1.05

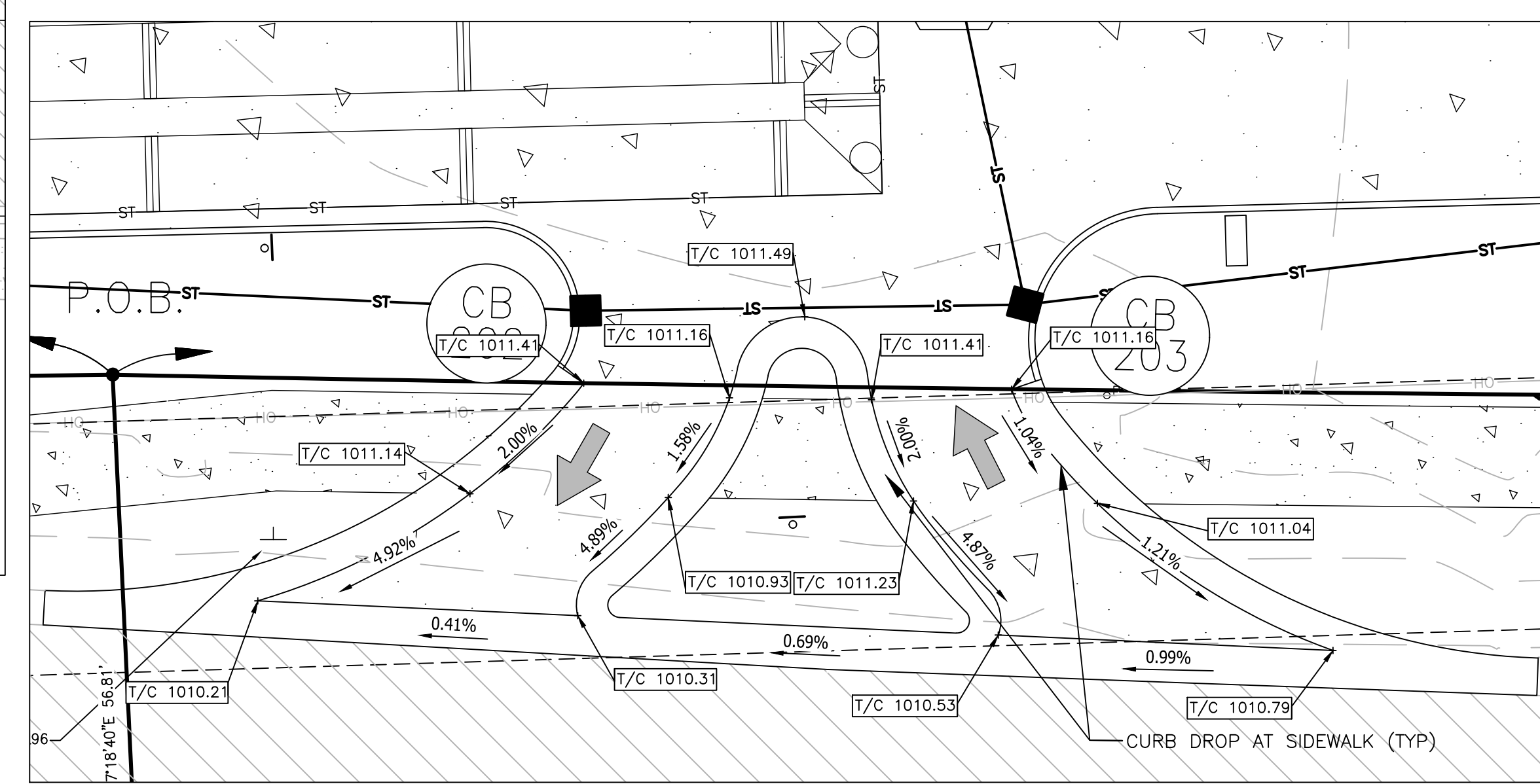
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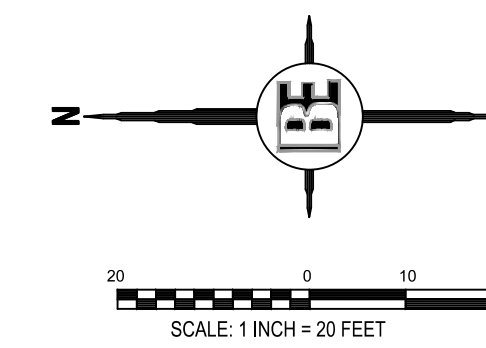
PROJECT: MISTER CAR WASH
PREPARED FOR: CWP WEST LLC
232 E 5TH AVE
TULSON, AZ 85705
206.664.1303

NO	BY	DATE	REVISION
1	ST	10-25-23	PER TOWNSHIP COMMENTS
2	ST	12-11-23	PER P.C. MEETING
3	ST	1-16-24	LAYOUT MODIFICATIONS
4	ST	3-14-24	PER LORC AND P.C. COMMENTS

DESIGNED BY: ST
DRAWN BY: DH
CHECKED BY:
SCALE: 1" = 20'
JOB NO: 21-519
DATE: 10/04/2023
SHEET NO. 6



ENTRANCE GRADING DETAIL
(SCALE: 1" = 10')



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, OR ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DEPTH, AND ELEVATION OF UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.

BEBOSS
Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

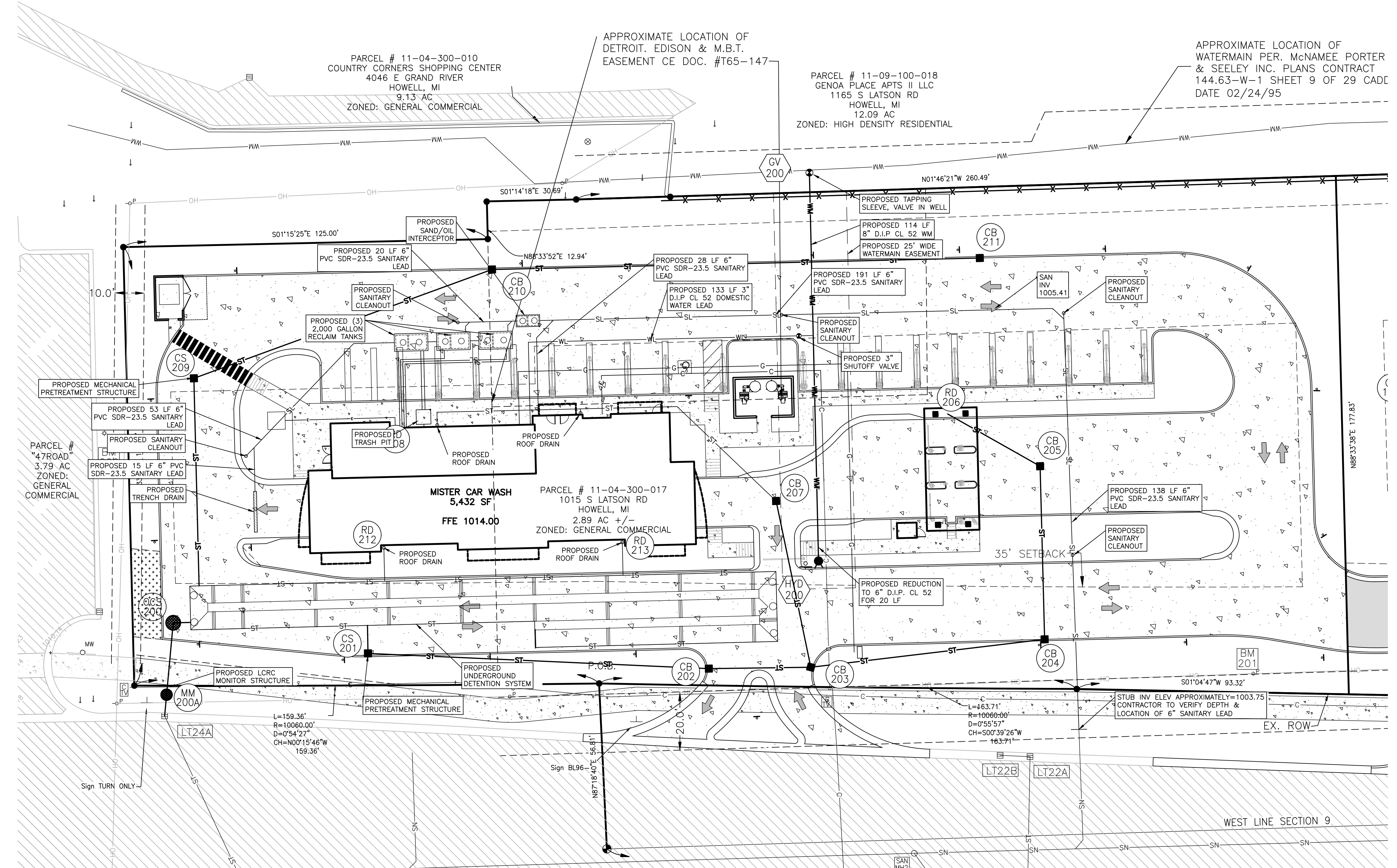
MISTER CAR WASH

PREPARED FOR: CWP WEST LLC
 232 E 5TH AVE
 TULSA, OK 74103
 206.664.1393

PROJECT: MISTER CAR WASH
 TITLE: UTILITY PLAN

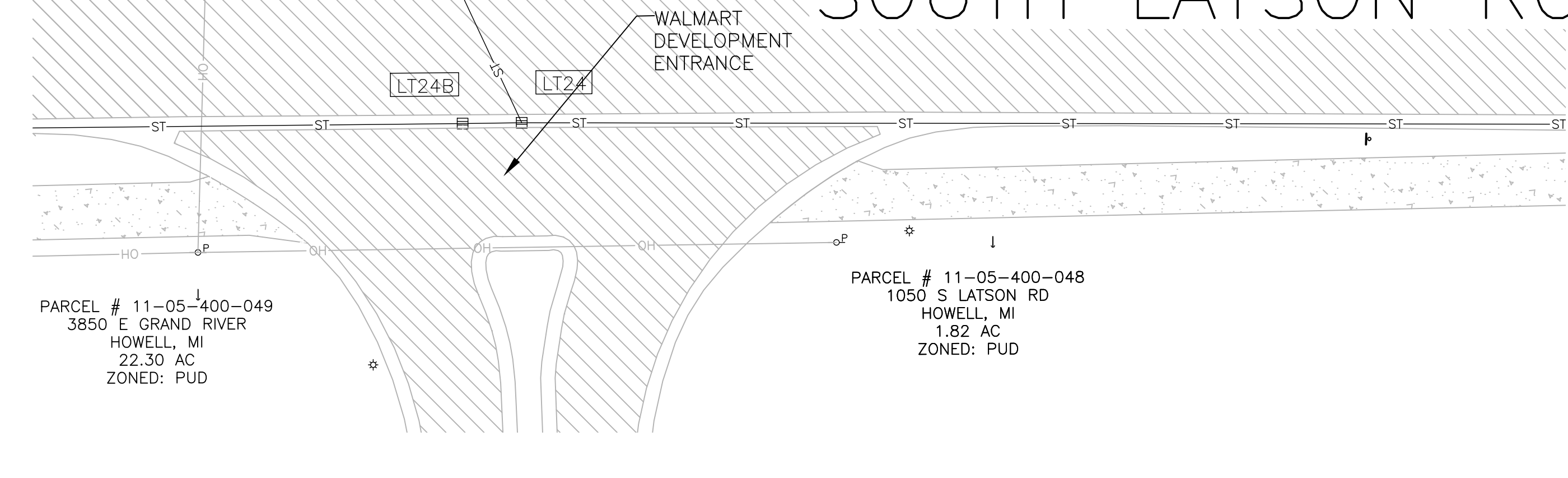
NO	BY	REVISION	DATE
1	ST	PER LORC AND P.C. COMMENTS	3-14-24
2	ST	LAYOUT MODIFICATIONS	1-16-24
3	ST	PER P.C. MEETING	12-11-23
4	ST	PER TOWNSHIP COMMENTS	10-25-23

DESIGNED BY: ST
 DRAWN BY: DH
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 21-519
 DATE: 10/04/2023
 SHEET NO. 8



SOUTH LATSON ROAD

FROM	TO	DRAIN AREA	ACRES	RUNOFF COEFF	EQUV AREA A * C	INTENSITY I	TIME OF CONC. Tc	ADJL RUNOFF Q	RUNOFF (CFS)	PIPE LENGTH (LF)	PIPE DIA (IN)	VELOCITY FLOWING FULL (FPS)	HYDRAULIC GRADIENT SLOPE %	ACTUAL SLOPE USED	MANNING COEFFICIENT	MANNING FLOW CAPACITY	MANNING'S VELOCITY (FT/SEC)	TIME (MIN)	HG ELEV UPPER END	HG ELEV LOWER END	RM ELEV UPPER END	RM ELEV LOWER END	INVERT UPPER END	INVERT LOWER END	DROP DISTANCE (FT)
206	205	206	0.02	0.90	0.02	4.38	15.00	0.07	36	6	1.58	0.30%	1.00%	0.013	0.56	2.87	0.21	1009.29	1008.93	1013.60	1012.75	1008.89	1008.53		
205	204	205	0.12	0.80	0.09	4.35	15.21	0.48	59	12	2.15	0.22%	0.50%	0.013	2.53	3.22	0.31	1008.93	1008.64	1012.75	1012.40	1008.13	1007.84		
204	203	204	0.13	0.72	0.09	4.32	15.52	0.88	81	12	2.49	0.30%	0.50%	0.013	2.53	3.22	0.42	1008.64	1008.23	1012.40	1011.59	1007.84	1007.43		
203	202	203	0.06	0.90	0.05	4.28	15.93	1.54	35	12	2.53	0.41%	0.50%	0.013	2.53	3.22	0.15	1008.23	1008.06	1011.59	1011.29	1007.43	1007.26		
202	201	202	0.08	0.74	0.06	4.28	16.12	1.79	117	12	3.08	0.45%	0.50%	0.013	2.53	3.22	0.81	1008.06	1007.49	1011.29	1011.62	1007.26	1006.87		
201	DET	201	0.15	0.77	0.12	4.26	16.12	2.29	10	12	3.86	0.72%	0.50%	0.013	2.53	3.22	0.05	1007.49	1007.42	1011.62	-	1006.87	1006.62		
208	207	208	0.05	0.90	0.05	4.38	15.00	0.20	129	6	2.22	0.60%	1.00%	0.013	0.56	2.87	0.75	1009.81	1008.52	1014.00	1013.25	1009.41	1008.12		
207	203	207	0.08	0.75	0.06	4.29	15.75	0.46	58	12	2.15	0.22%	0.50%	0.013	2.53	3.22	0.30	1008.52	1008.23	1013.25	1011.59	1007.72	1007.43		
211	210	211	0.41	0.52	0.22	4.38	15.00	0.94	167	12	2.49	0.30%	0.50%	0.013	2.53	3.22	0.87	1009.16	1008.32	1011.87	1011.70	1008.36	1007.52		
210	209	210	0.33	0.69	0.23	4.28	15.87	1.92	109	12	3.14	0.48%	0.50%	0.013	2.53	3.22	0.56	1008.32	1007.78	1011.70	1013.25	1007.52	1006.98		
209	DET	209	-	-	-	-	16.43	1.92	71	12	3.14	0.48%	0.50%	0.013	2.53	3.22	0.37	1007.78	1007.42	1013.25	1011.30	1006.98	1006.82		
212	DET	212	0.04	0.90	0.04	4.38	15.00	0.16	11	6	2.70	0.89%	2.00%	0.013	0.80	4.05	0.05	1010.65	1010.42	1014.00	-	1010.25	1010.02	3.00	
213	DET	213	0.04	0.90	0.04	4.38	15.00	0.16	11	6	2.70	0.89%	2.00%	0.013	0.80	4.05	0.05	1010.65	1010.42	1014.00	-	1010.25	1010.02	3.00	
DET	200	ALL	1.51	0.69	1.05	6.03	16.43	0.23	6	12	1.42	0.10%	0.32%	0.013	2.02	2.57	0.04	1007.42	1007.40	1011.30	1012.49	1006.62	1006.60		
200	200A	200	-	-	-	-	16.43	0.23	25	12	1.42	0.10%	0.32%	0.013	2.02	2.57	0.16	1007.40	1007.32	1012.49	1010.00	1006.60	1006.52		
200A	EX	200A	-	-	-	-	16.59	0.23	7	12	1.42	0.10%	0.32%	0.013	2.02	2.57	0.05	1007.32	1007.30	1010.00	-	1006.52	1006.50		

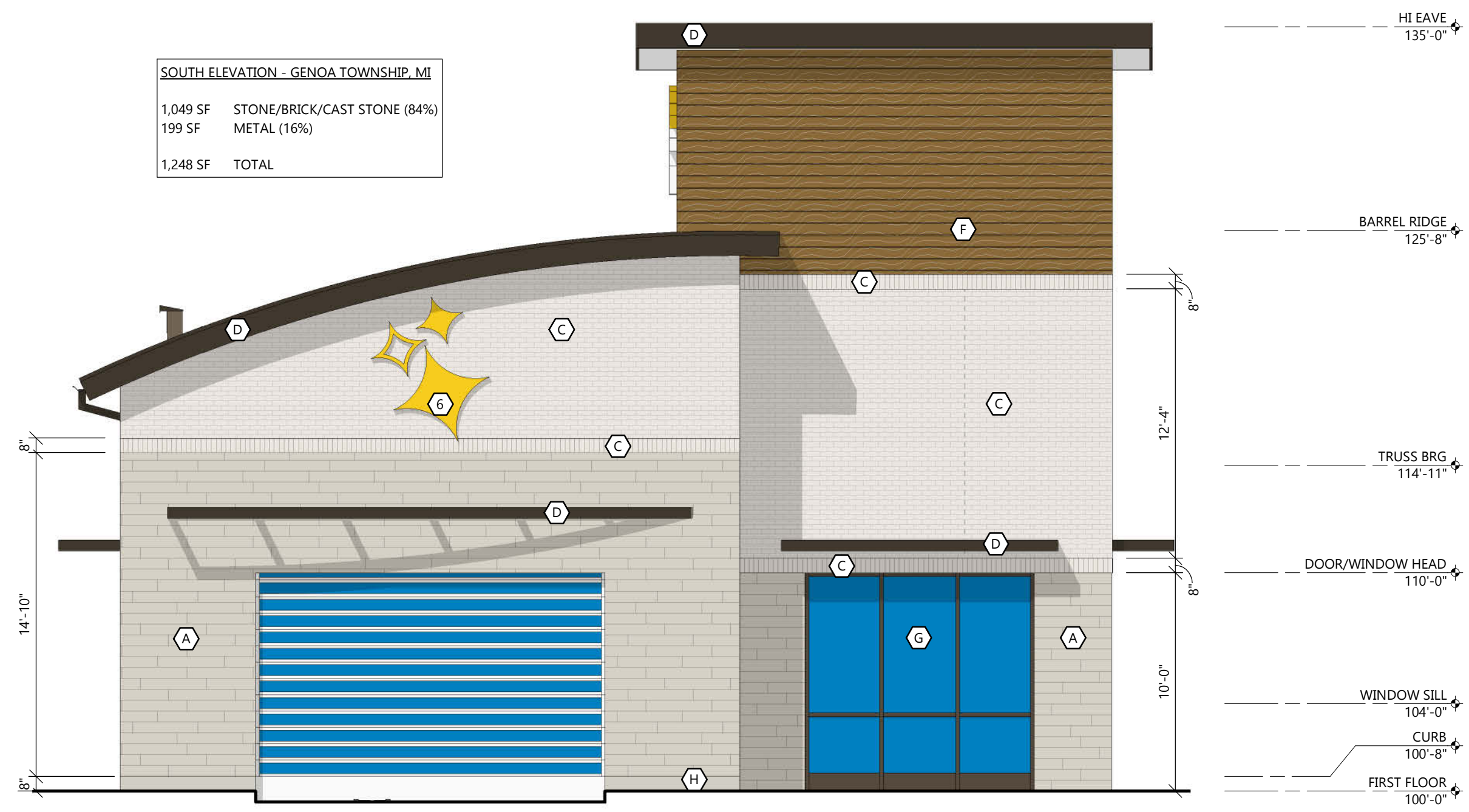


GENERAL NOTES

- ALL SIGNAGE SHOWN FOR INFORMATIONAL PURPOSES ONLY. ALL ADVERTISING SIGNAGE SUBJECT TO SEPARATE SIGN PERMIT SUBMITTAL AND APPROVAL.

EXTERIOR MATERIAL KEY

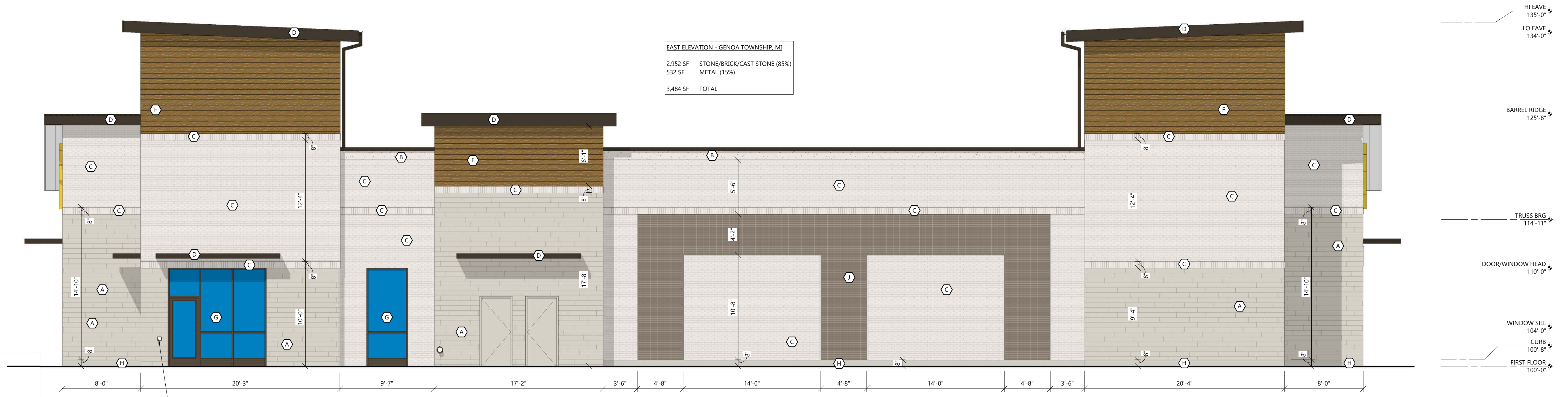
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	PRECAST STONE MOULDING COLOR: BROWN TEXTURE: SMOOTH
	BRICK VENEER (SEE ELEVATIONS FOR ORIENTATION) MFR: SUMMIT BRICK COLOR: ALASKAN TEXTURE: SMOOTH
	PREFINISHED METAL TRIM AND ACCESSORIES MFR: CTMRS (OR EQUAL) COLOR: PT-9 (DARK BRONZE)
	PREFINISHED STANDING SEAM METAL ROOF PANEL MFR: CTMRS (OR EQUAL) STYLE: LARGE BATTEN 24 GA COLOR: PT-9 (DARK BRONZE)
	PREFINISHED ALUMINUM BATTENS MFR: LUMABUILT STYLE: MOSAIC 1-1/2 BATTENS COLOR: HAZELNUT BROWN
	ALUMINUM STOREFRONT SYSTEM GLAZING: CLEAR FRAME: DARK BRONZE
	CONCRETE CURB TEXTURE: HAND RUB COLOR TO MATCH LIMESTONE
	BRICK VENEER MFR: SUMMIT BRICK COLOR: MATCH SW 7025 BACKDROP TEXTURE: SMOOTH



SOUTH ELEVATION - GENOA TOWNSHIP, MI

1,049 SF	STONE/BRICK/CAST STONE (84%)
199 SF	METAL (16%)
1,248 SF	TOTAL

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



EAST ELEVATION - GENOA TOWNSHIP, MI

2,952 SF	STONE/BRICK/CAST STONE (85%)
532 SF	METAL (15%)
3,484 SF	TOTAL

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

KNOX BOX INSTALLED PER 2015 IFC 506.1
• COORDINATE FINAL LOCATION w/ FIRE MARSHAL

PRELIMINARY EXTERIOR ELEVATIONS - 130' TUNNEL (RH)

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100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

COLLABORATION

Mister

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
MISTER CAR WASH #1495 (LATSON)
1015 S. LATSON RD. • HOWELL, MI 48843

PROFESSIONAL SEAL

PRELIMINARY DATES

OCT. 2, 2023
OCT. 26, 2023
OCT. 31, 2023
DEC 08, 2023
DEC 11, 2023
DEC. 21, 2023
JAN 12, 2024

JOB NUMBER
230105800

SHEET NUMBER
PRE-1

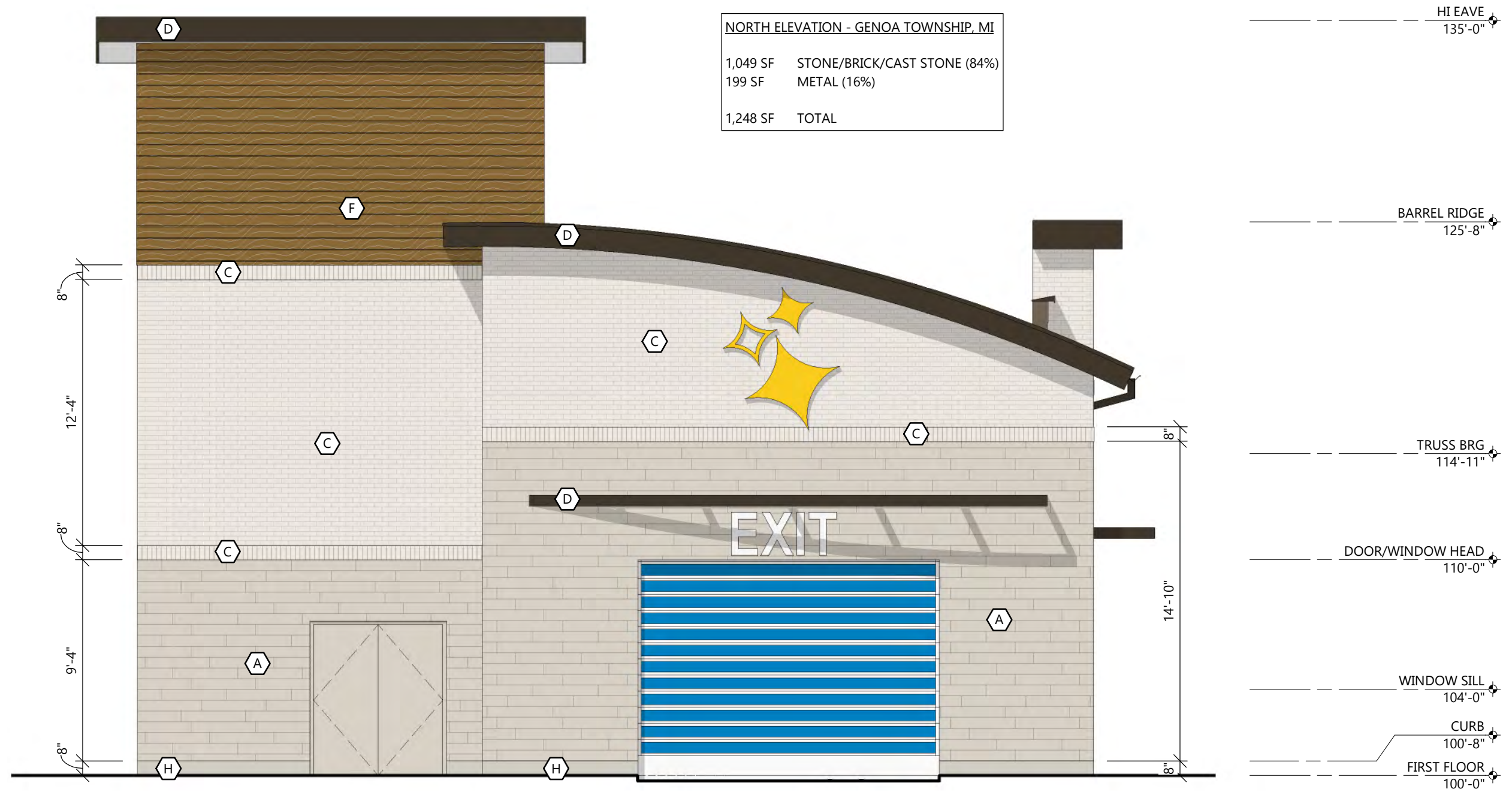
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GENERAL NOTES

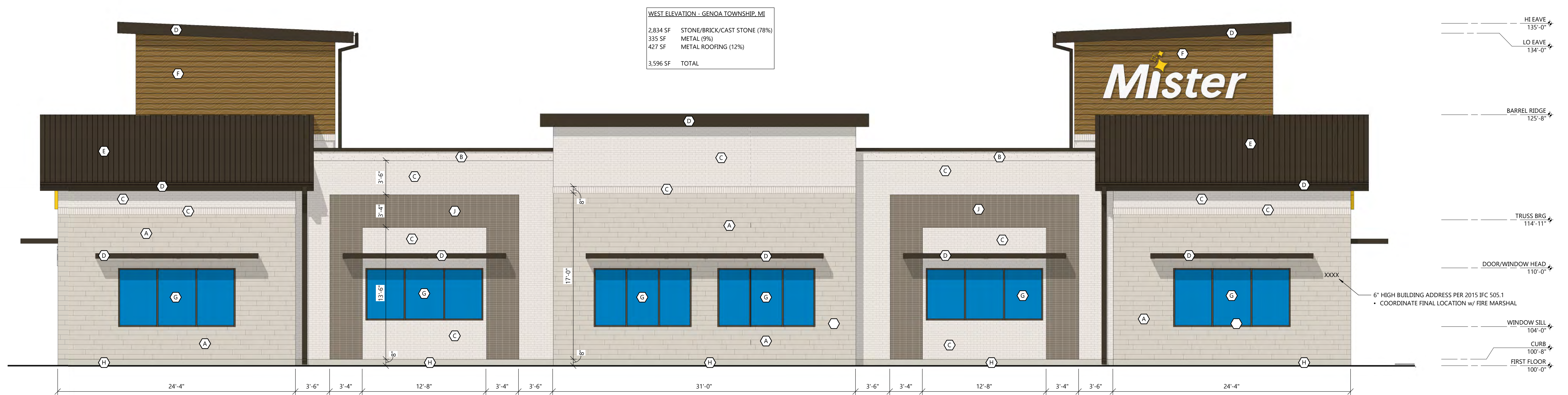
- ALL SIGNAGE SHOWN FOR INFORMATIONAL PURPOSES ONLY. ALL ADVERTISING SIGNAGE SUBJECT TO SEPARATE SIGN PERMIT SUBMITTAL AND APPROVAL.

EXTERIOR MATERIAL KEY

	STONE VENEER MFR: EL DORADO STONE STYLE: VANTAGE 30 (6" H x 30" L x -1" D) COLOR: WHITE ELM w/ MATCHING MORTAR JOINT
	PRECAST STONE MOULDING COLOR: BROWN TEXTURE: SMOOTH
	BRICK VENEER (SEE ELEVATIONS FOR ORIENTATION) MFR: SUMMIT BRICK COLOR: ALASKAN TEXTURE: SMOOTH
	PREFINISHED METAL TRIM AND ACCESSORIES MFR: CTMRS (OR EQUAL) COLOR: PT-9 (DARK BRONZE)
	PREFINISHED STANDING SEAM METAL ROOF PANEL MFR: CTMRS (OR EQUAL) STYLE: LARGE BATTEN 24 GA COLOR: PT-9 (DARK BRONZE)
	PREFINISHED ALUMINUM BATTENS MFR: LUMABUILT STYLE: MOSAC 1x6 BATTENS COLOR: HAZELNUT BROWN
	ALUMINUM STOREFRONT SYSTEM GLAZING: CLEAR FRAME: DARK BRONZE
	CONCRETE CURB TEXTURE: HAND RUB COLOR TO MATCH LIMESTONE
	BRICK VENEER MFR: SUMMIT BRICK COLOR: MATCH SW 7025 BACKDROP TEXTURE: SMOOTH



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



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

PRELIMINARY EXTERIOR ELEVATIONS - 130' TUNNEL (RH)

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DEC 11, 2023
DEC. 21, 2023
JAN 4, 2024
JAN 12, 2024

JOB NUMBER
230105800

SHEET NUMBER
PRE-2

NOT FOR CONSTRUCTION

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PROJECT INFORMATION

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PROFESSIONAL SEAL

PRELIMINARY DATES

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OCT. 26, 2023
JAN 12, 2024

NOT FOR CONSTRUCTION

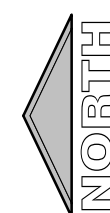
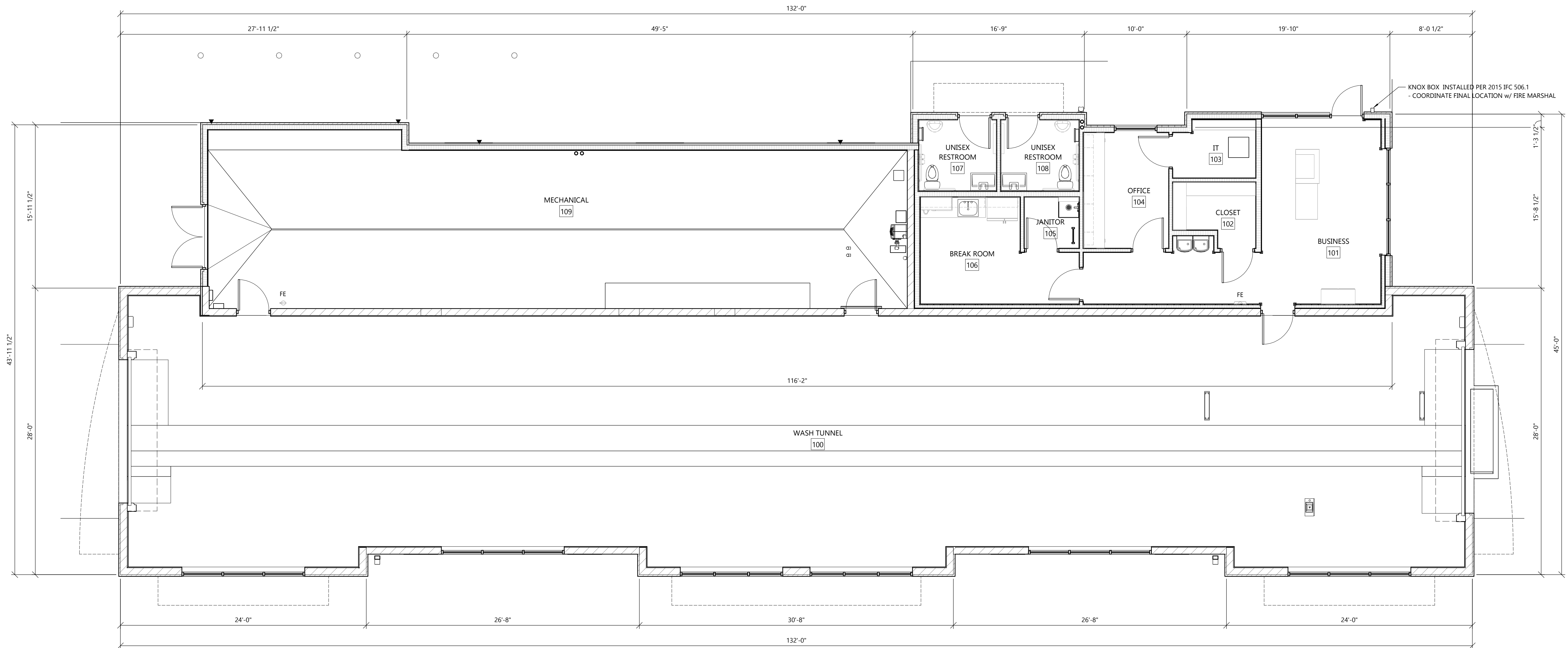
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230105800

SHEET NUMBER

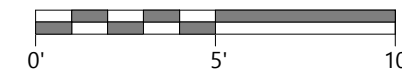
PRE-3

PRELIMINARY FLOOR PLAN



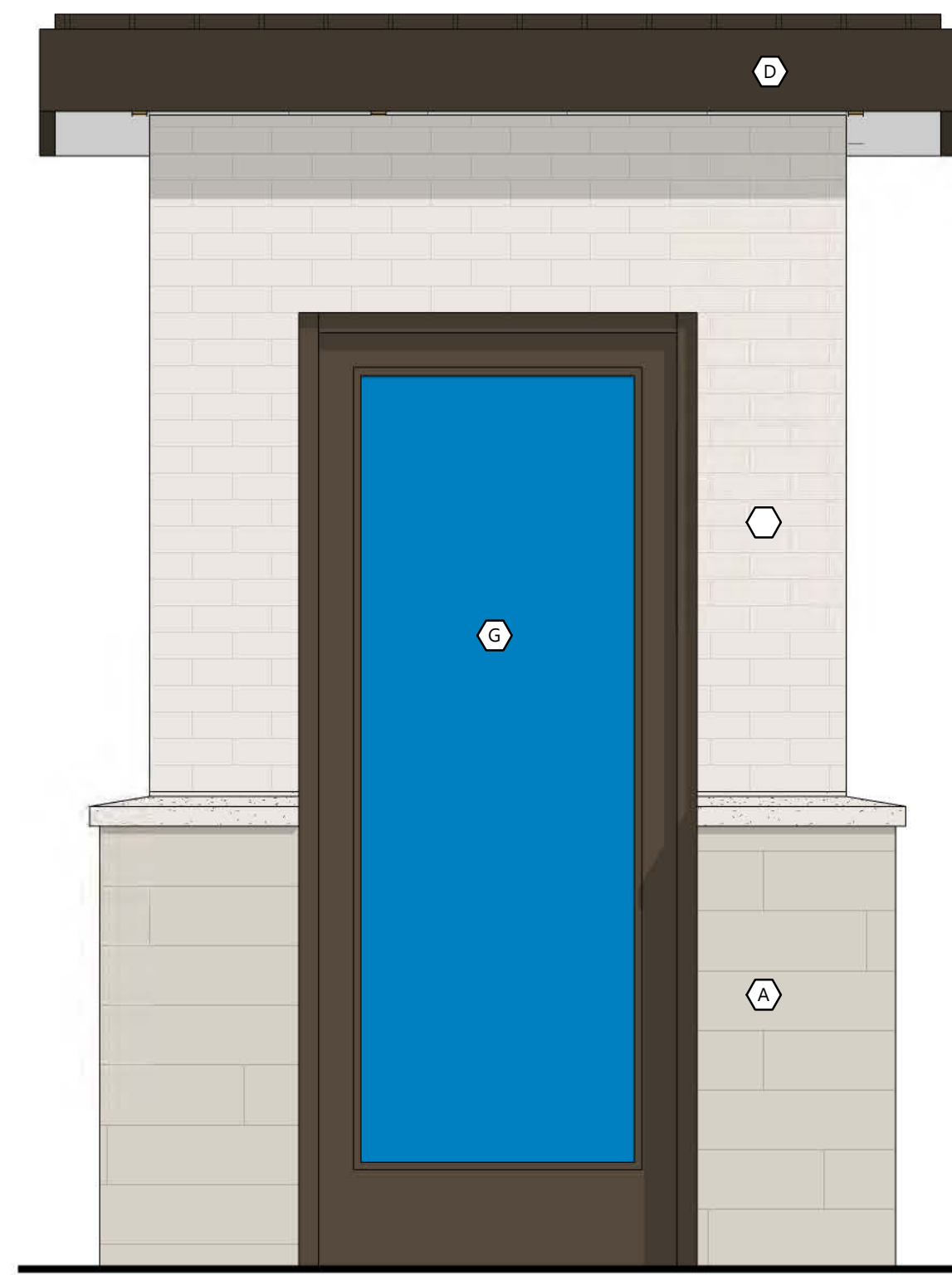
FLOOR PLAN

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





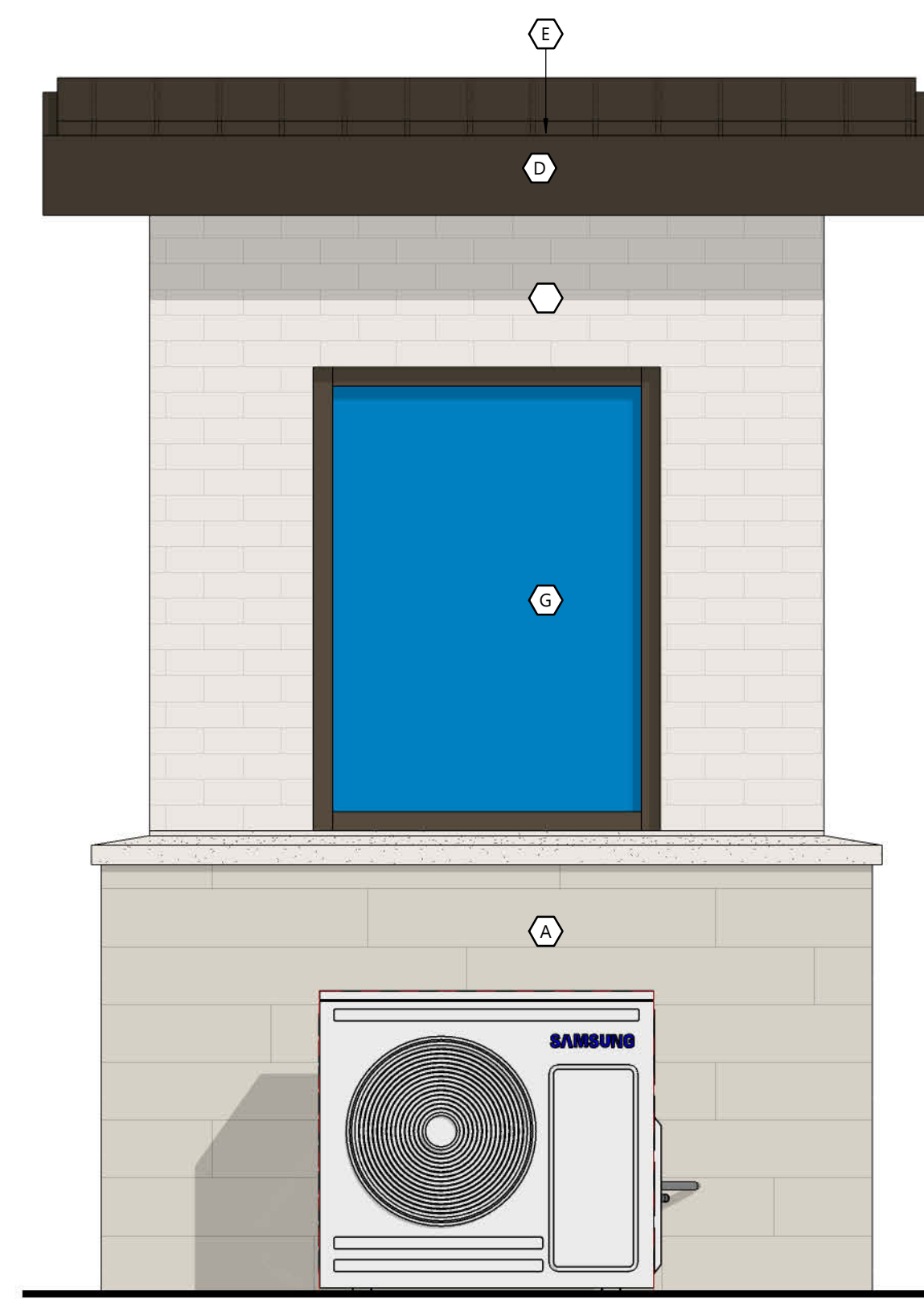
LEFT ELEVATION
SCALE: 3/4" = 1'-0"



FRONT ELEVATION
SCALE: 3/4" = 1'-0"



RIGHT ELEVATION
SCALE: 3/4" = 1'-0"



REAR ELEVATION
SCALE: 3/4" = 1'-0"

GENERAL NOTES

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EXTERIOR MATERIAL KEY

A	STONE VENEER MFR: EL DORADO STONE STYLE: VANTAGE 30 (6"H x 30"L x ~1"D) COLOR: WHITE ELM w/ MATCHING MORTAR JOINT
B	PRECAST STONE MOULDING COLOR: BROWN TEXTURE: SMOOTH
C	BRICK VENEER (SEE ELEVATIONS FOR ORIENTATION) MFR: SUMMIT BRICK COLOR: ALASKAN TEXTURE: SMOOTH
D	PREFINISHED METAL TRIM AND ACCESSORIES MFR: CTMRS (OR EQUAL) COLOR: PT-9 (DARK BRONZE)
E	PREFINISHED STANDING SEAM METAL ROOF PANEL MFR: CTMRS (OR EQUAL) STYLE: LARGE BATTEN 24 GA COLOR: PT-9 (DARK BRONZE)
F	PREFINISHED ALUMINUM BATTENS MFR: LUMABUILT STYLE: MOSAIC 1/6" BATTENS COLOR: HAZELNUT BROWN
G	ALUMINUM STOREFRONT SYSTEM GLAZING: CLEAR FRAME: DARK BRONZE
H	CONCRETE CURB TEXTURE: HAND RUB COLOR TO MATCH LIMESTONE
I	BRICK VENEER MFR: SUMMIT BRICK COLOR: MATCH SW 7025 BACKDROP TEXTURE: SMOOTH

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COLLABORATION

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
MISTER CAR WASH #1495 (LATSON)
1015 S. LATSON RD. • HOWELL, MI 48843

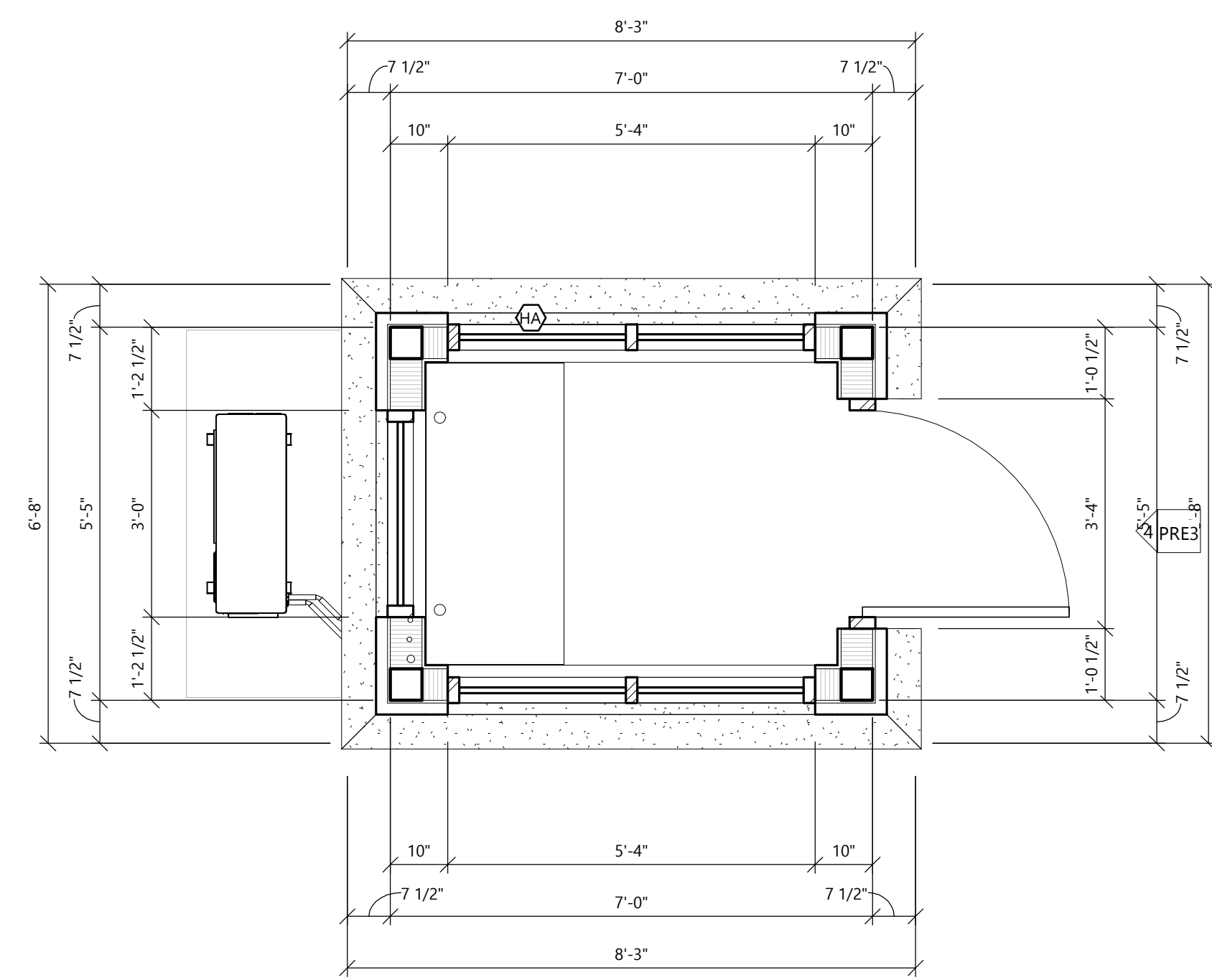
PROFESSIONAL SEAL

PRELIMINARY DATES
OCT. 2, 2023
JAN 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230105800

SHEET NUMBER
PRE-4



SHELTER PLAN
SCALE: 1/2" = 1'-0"

PRELIMINARY ATTENDANT SHELTER PLANS AND DETAILS

GENERAL NOTES

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	BRICK VENEER MFR: SUMMIT BRICK COLOR: MATCH SW 7025 BACKDROP TEXTURE: SMOOTH

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Fond du Lac, WI 54935
920-926-9800
excelengineer.com

COLLABORATION

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PROJECT INFORMATION

PROPOSED CAR WASH FOR:
MISTER CAR WASH #1495 (LATSON)
1015 S. LATSON RD. • HOWELL, MI 48843

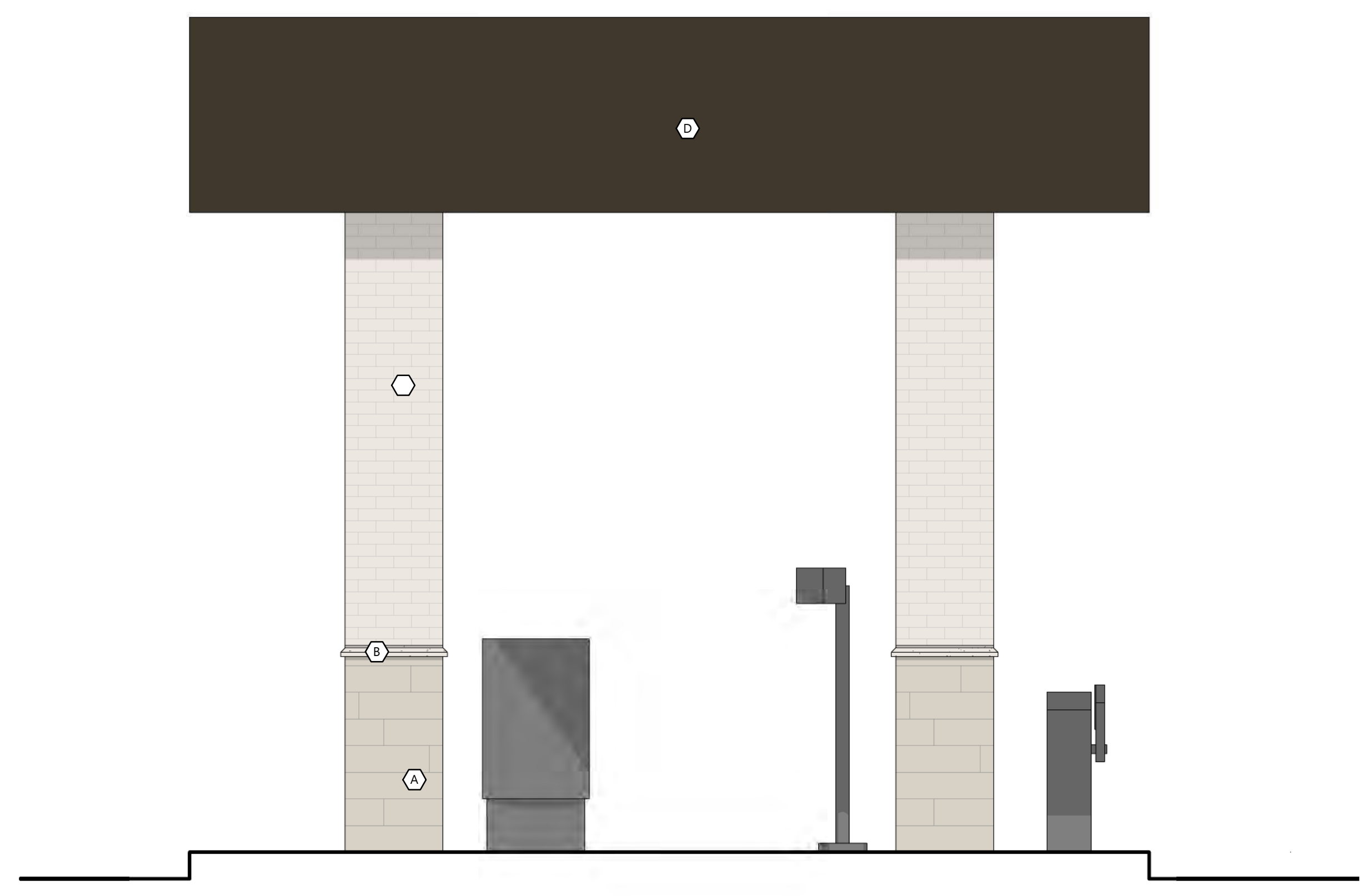
PROFESSIONAL SEAL

PRELIMINARY DATES
OCT. 2, 2023
JAN 12, 2024

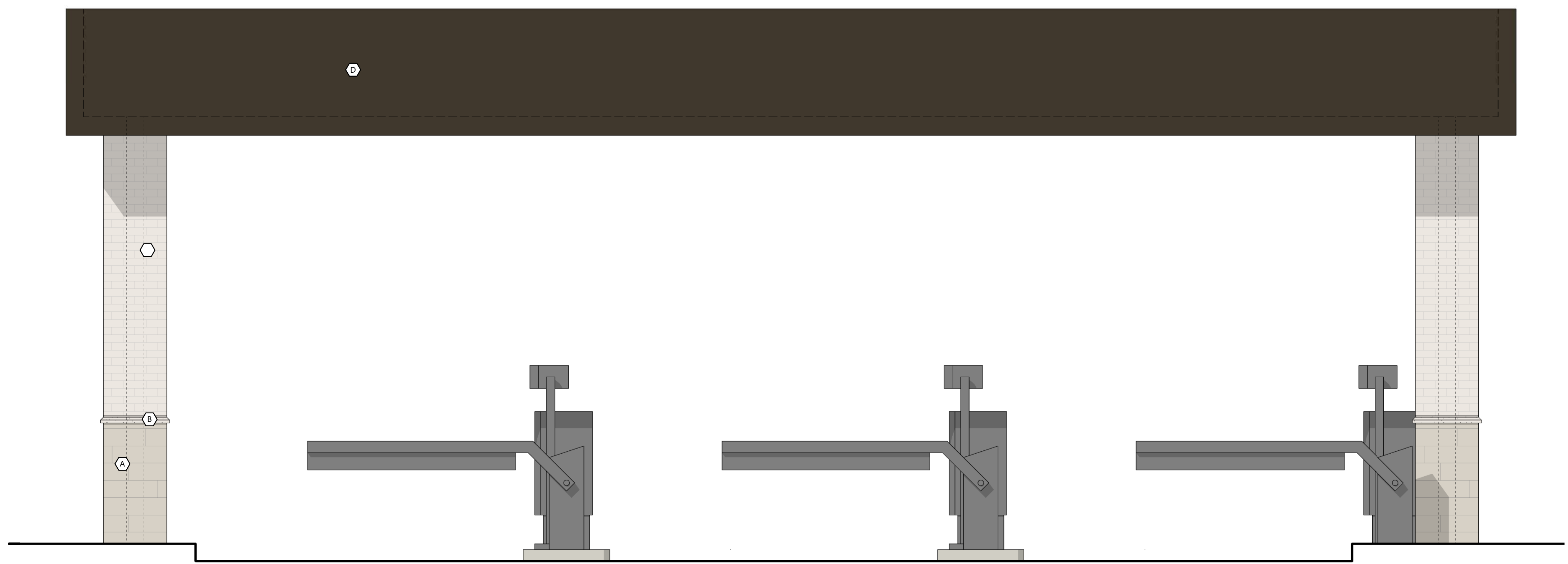
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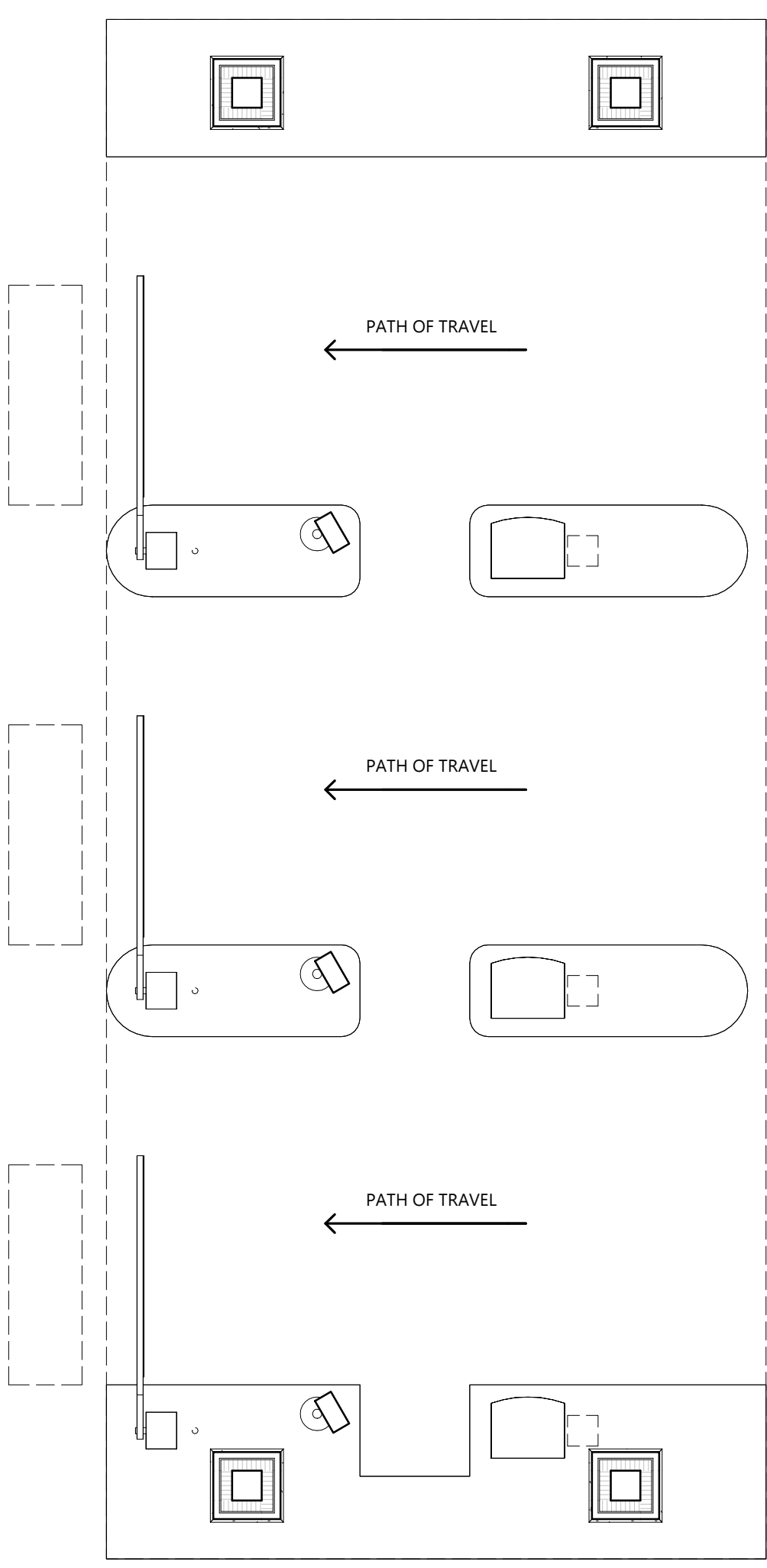
SHEET NUMBER
PRE-5



CANOPY ELEVATION
SCALE: 1/2" = 1'-0"



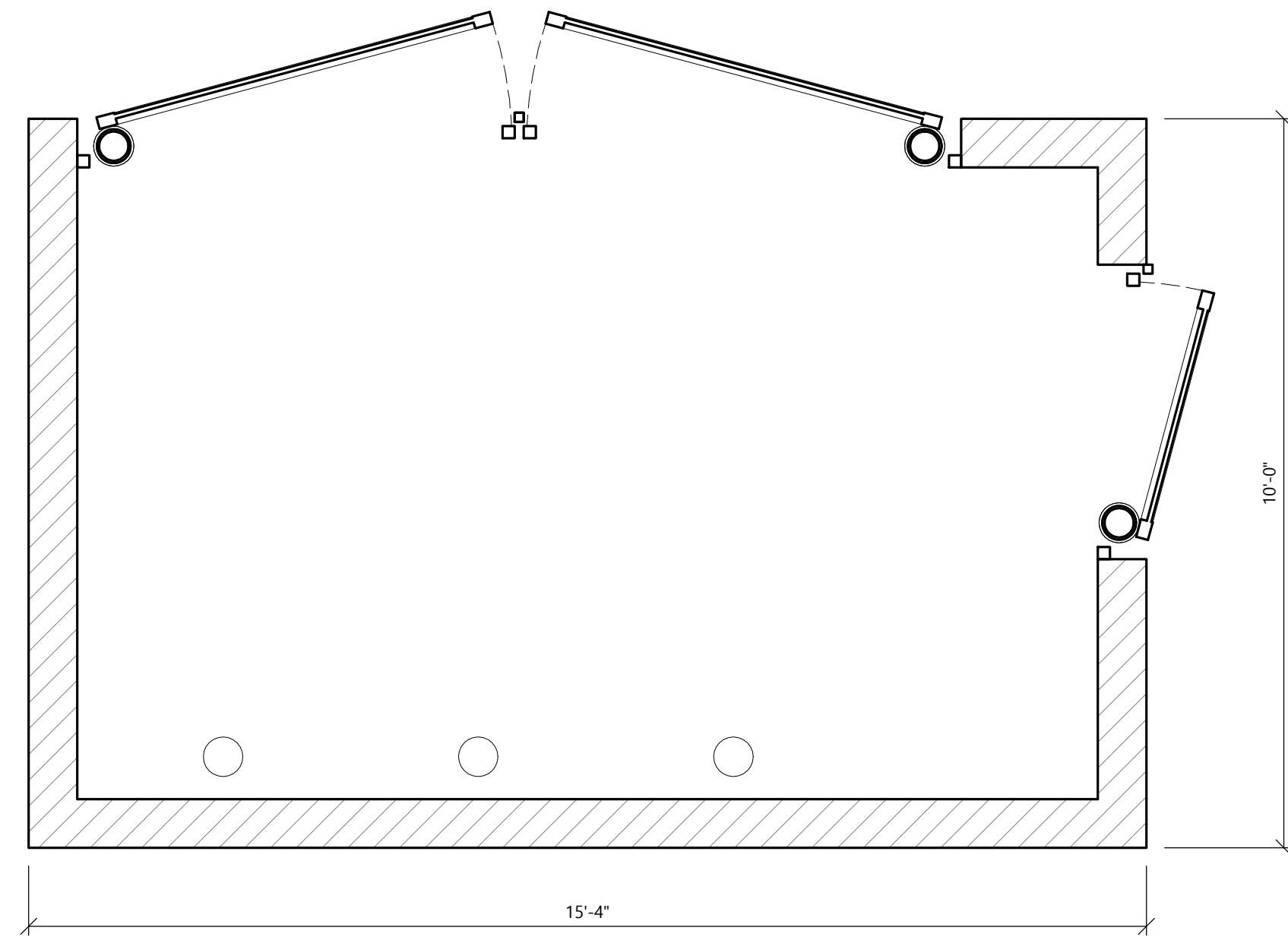
CANOPY ELEVATION
SCALE: 1/2" = 1'-0"



CANOPY PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES

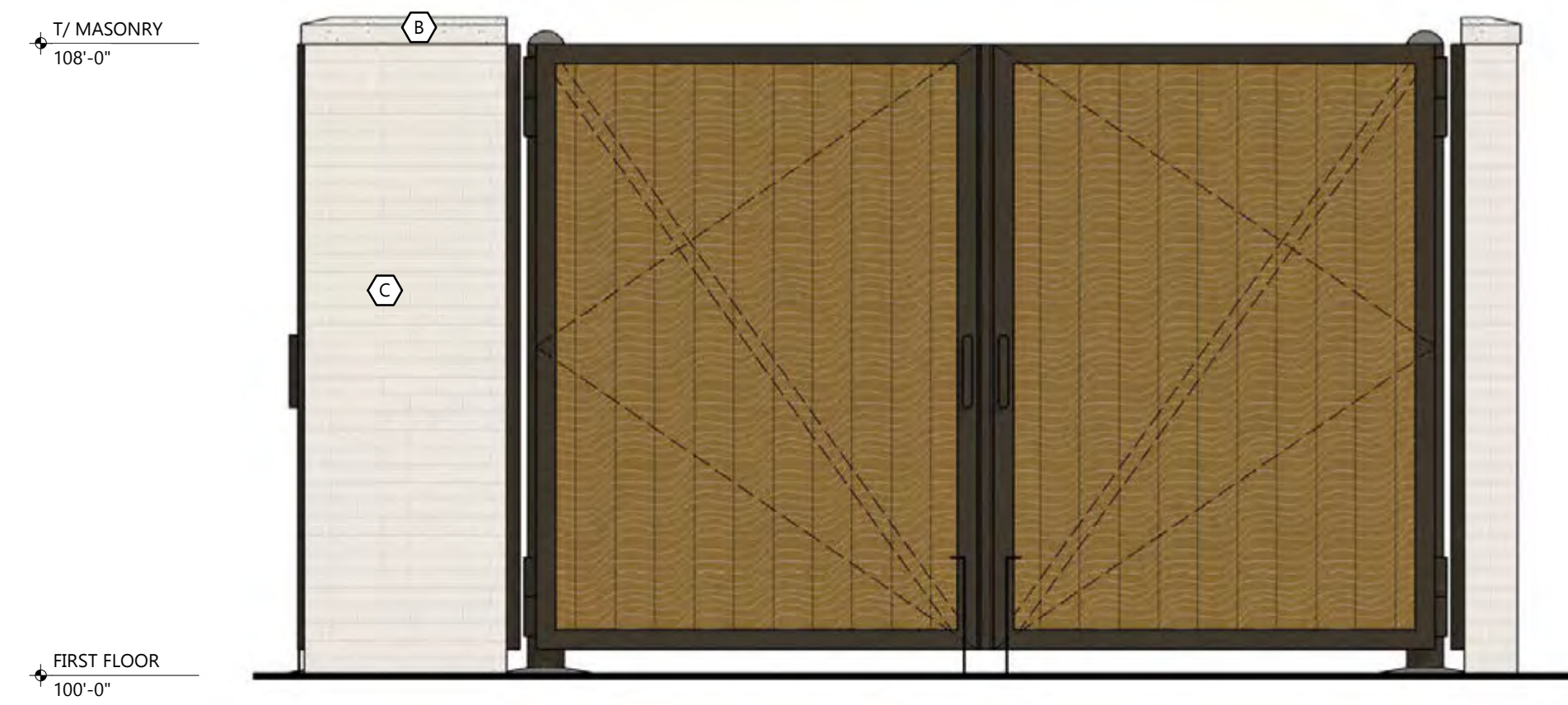
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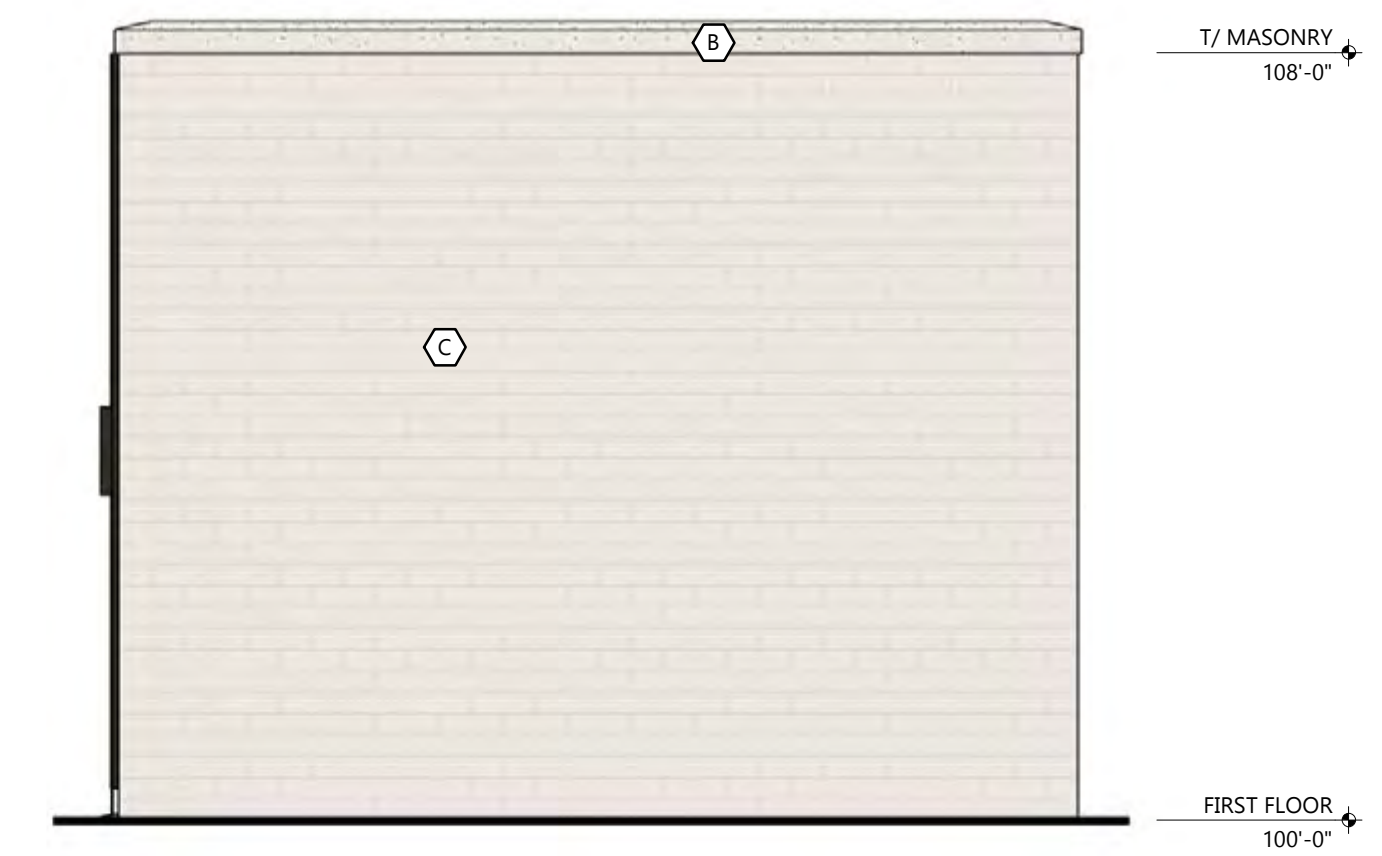
PLAN - DUMPSTER & VACUUM ENCLOSURE
SCALE: 1/2" = 1'-0"

EXTERIOR MATERIAL KEY

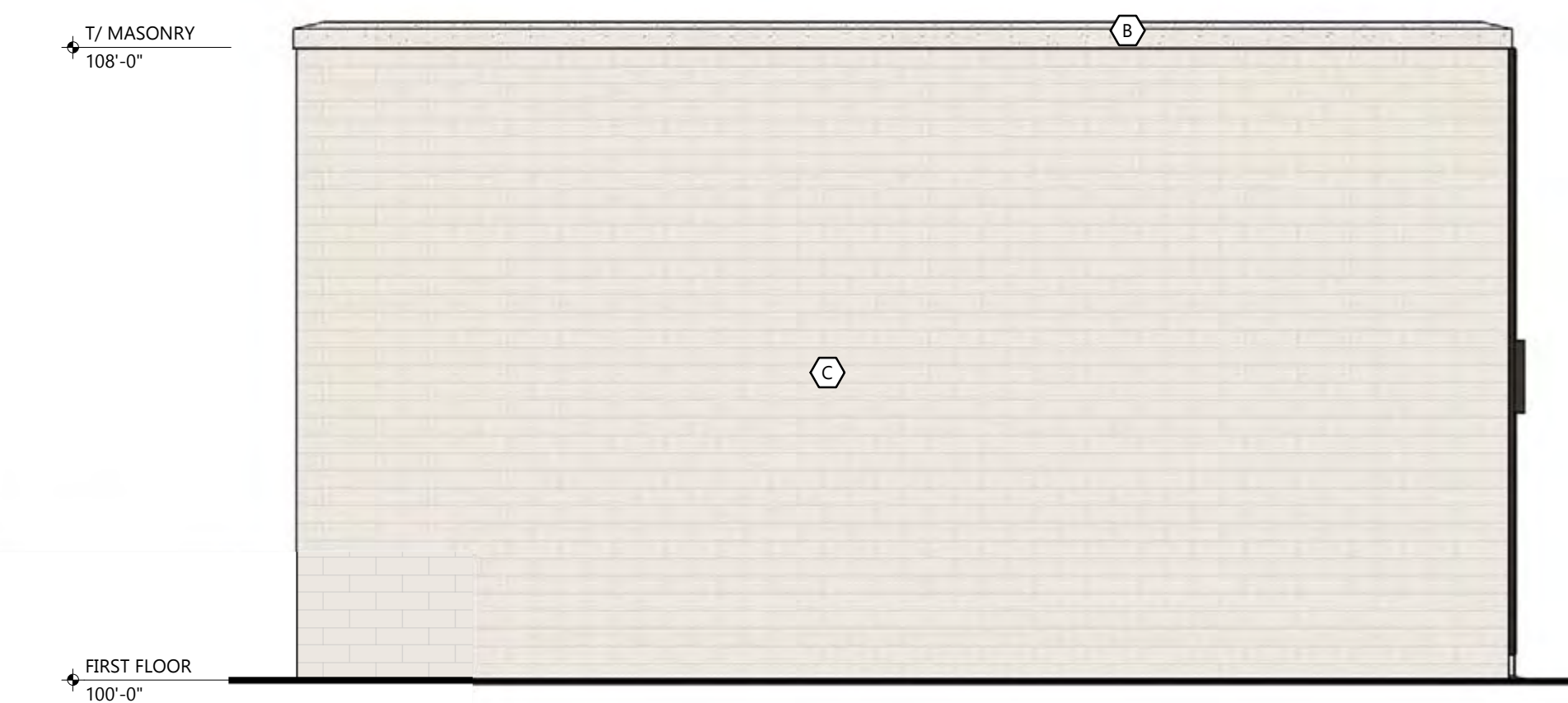
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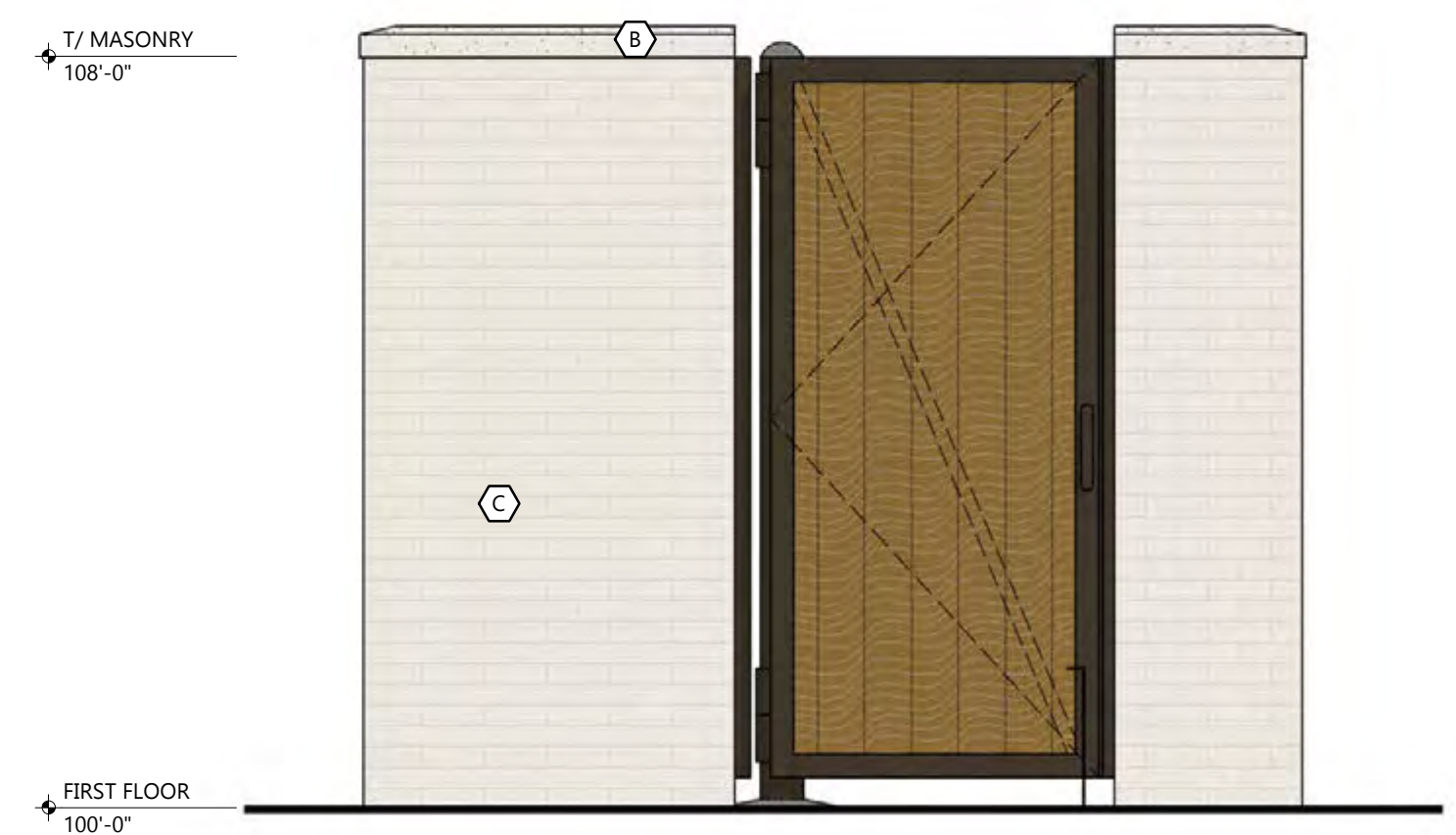
ELEVATION - GATE
SCALE: 1/2" = 1'-0"



ELEVATION - RIGHT
SCALE: 1/2" = 1'-0"



ELEVATION - REAR
SCALE: 1/2" = 1'-0"



ELEVATION - LEFT
SCALE: 1/2" = 1'-0"

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Fond du Lac, WI 54935
920-926-9800
excelengineer.com

COLLABORATION

Mister

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
MISTER CAR WASH #1495 (LATSON)
1015 S. LATSON RD. • HOWELL, MI 48843

PROFESSIONAL SEAL

PRELIMINARY DATES
OCT. 2, 2023
JAN 12, 2024

NOT FOR CONSTRUCTION

JOB NUMBER
230105800

SHEET NUMBER
PRE-6

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GENERAL NOTES

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EXCEL
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100 Camelot Drive
Fond du Lac, WI 54935
920-926-9800
excelengineer.com

COLLABORATION

Mister

PROJECT INFORMATION

PROPOSED CAR WASH FOR:
MISTER CAR WASH #1495 (LATSON)
1015 S. LATSON RD. • HOWELL, MI 48843

PROFESSIONAL SEAL

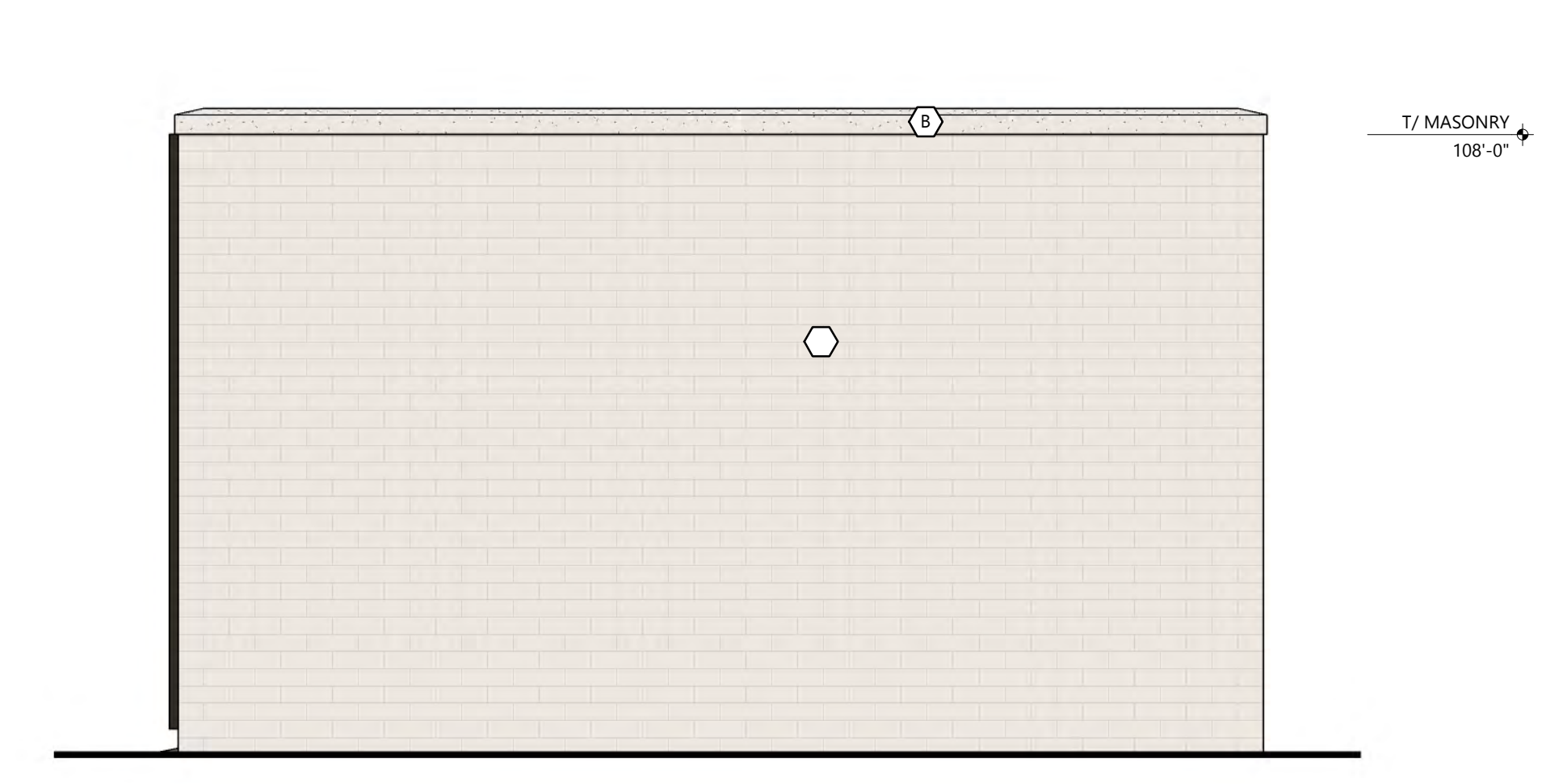
PRELIMINARY DATES

OCT. 2, 2023
JAN 12, 2024

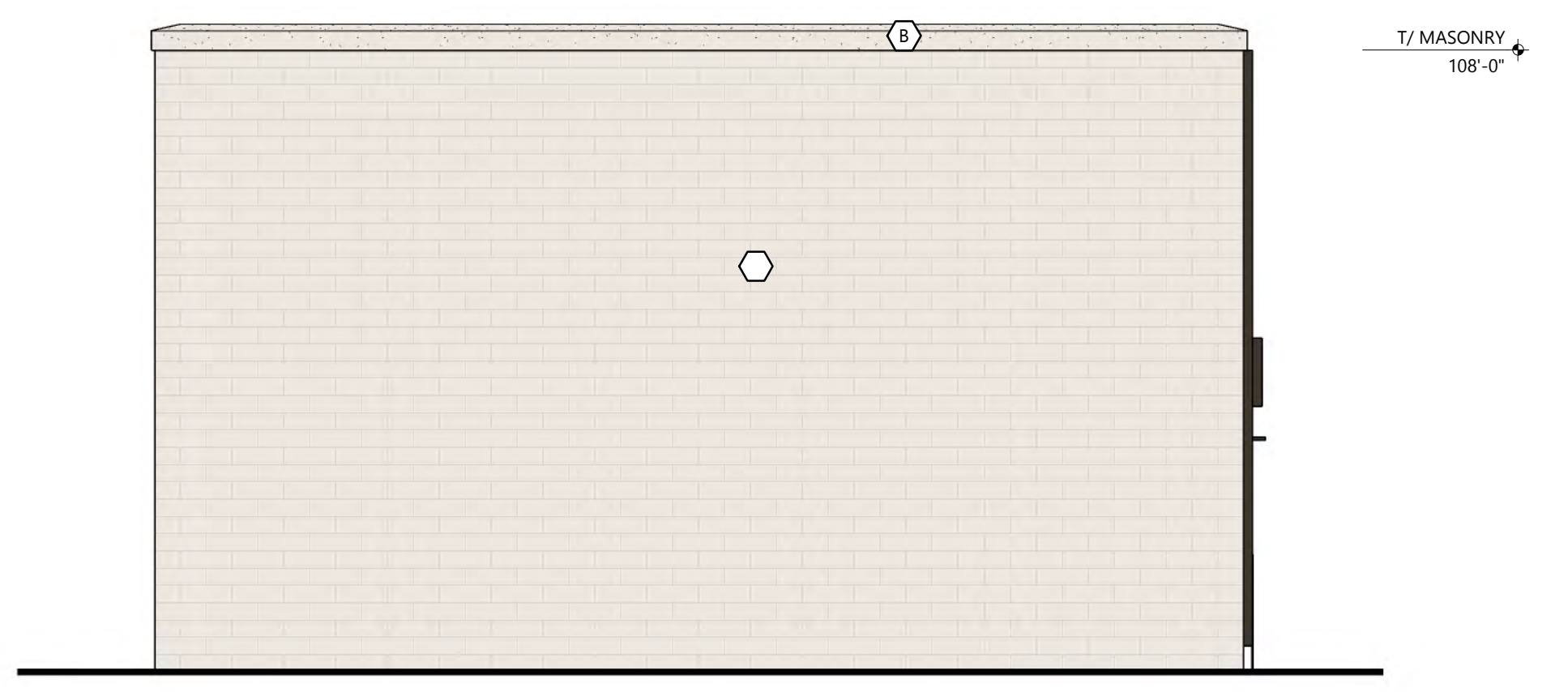
NOT FOR CONSTRUCTION

JOB NUMBER
230105800

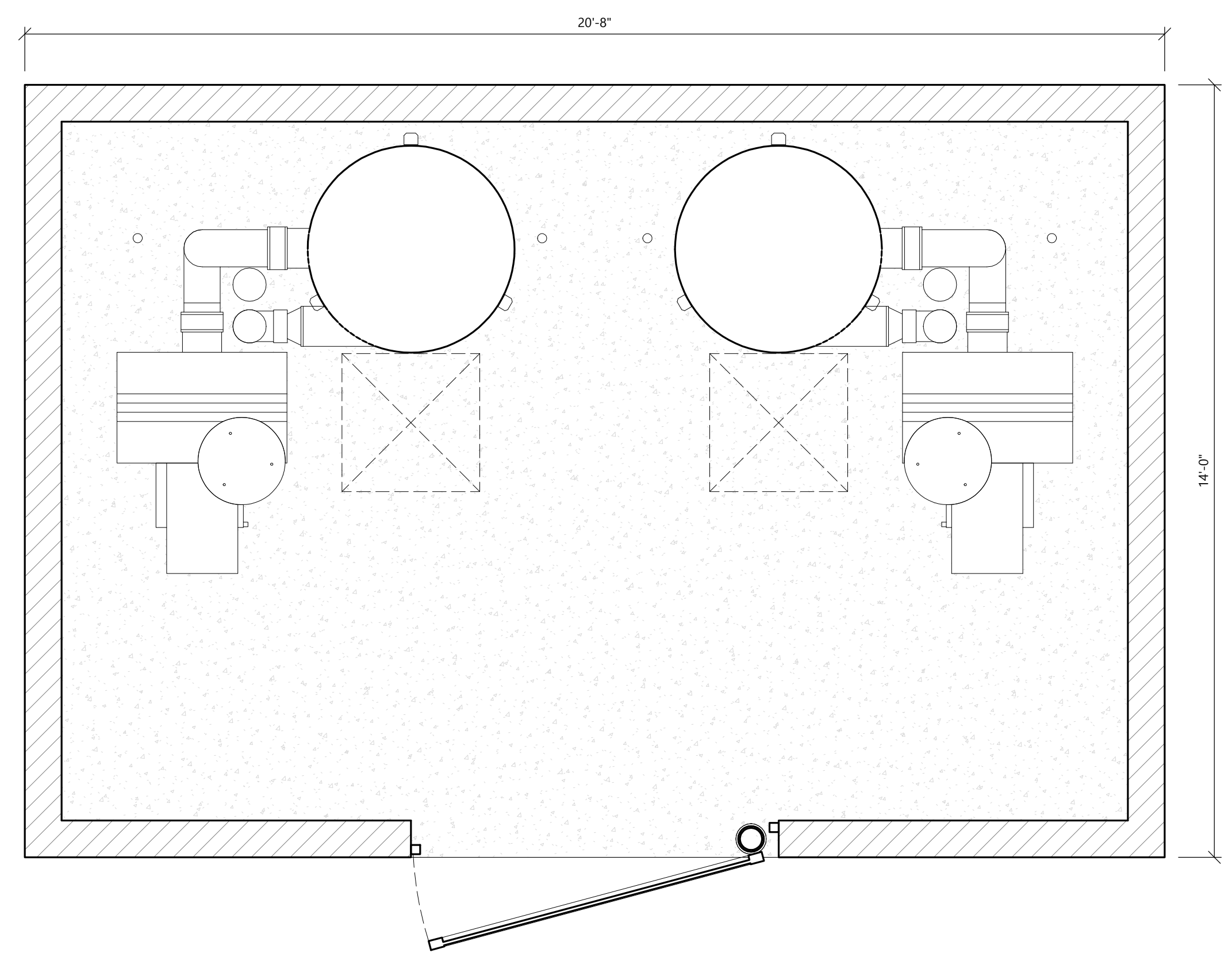
SHEET NUMBER
PRE-7



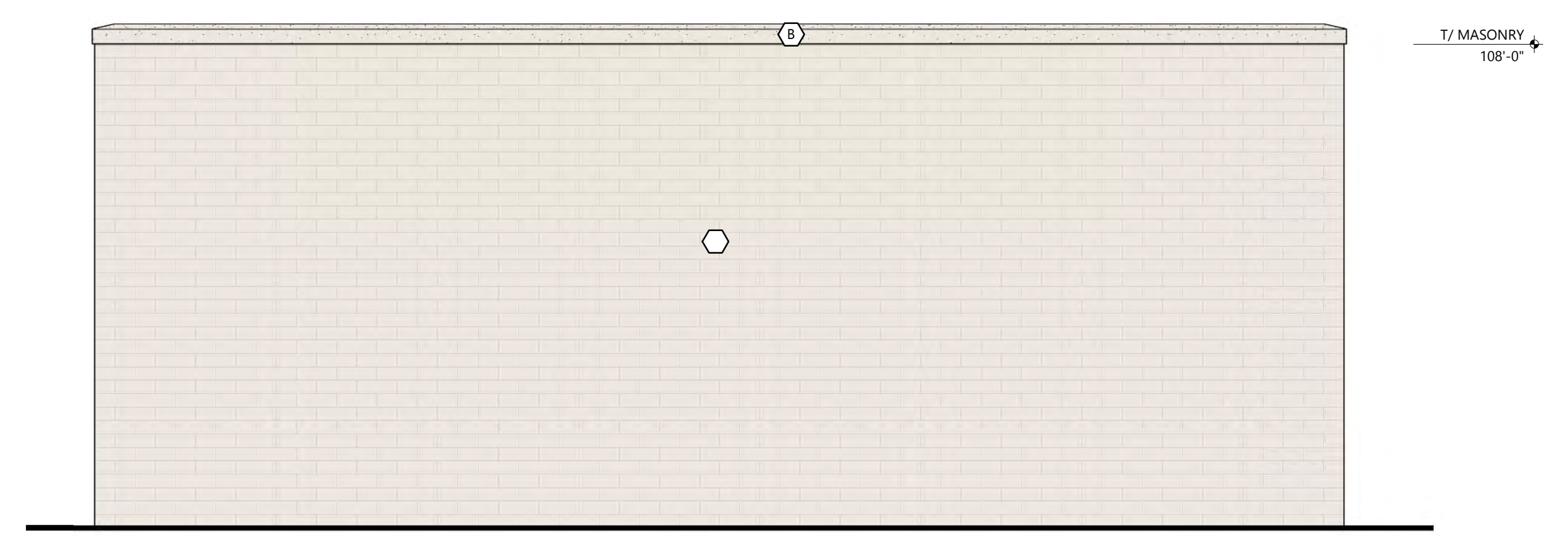
2 RIGHT ELEVATION
PRE-7 SCALE: 1/2" = 1'-0"



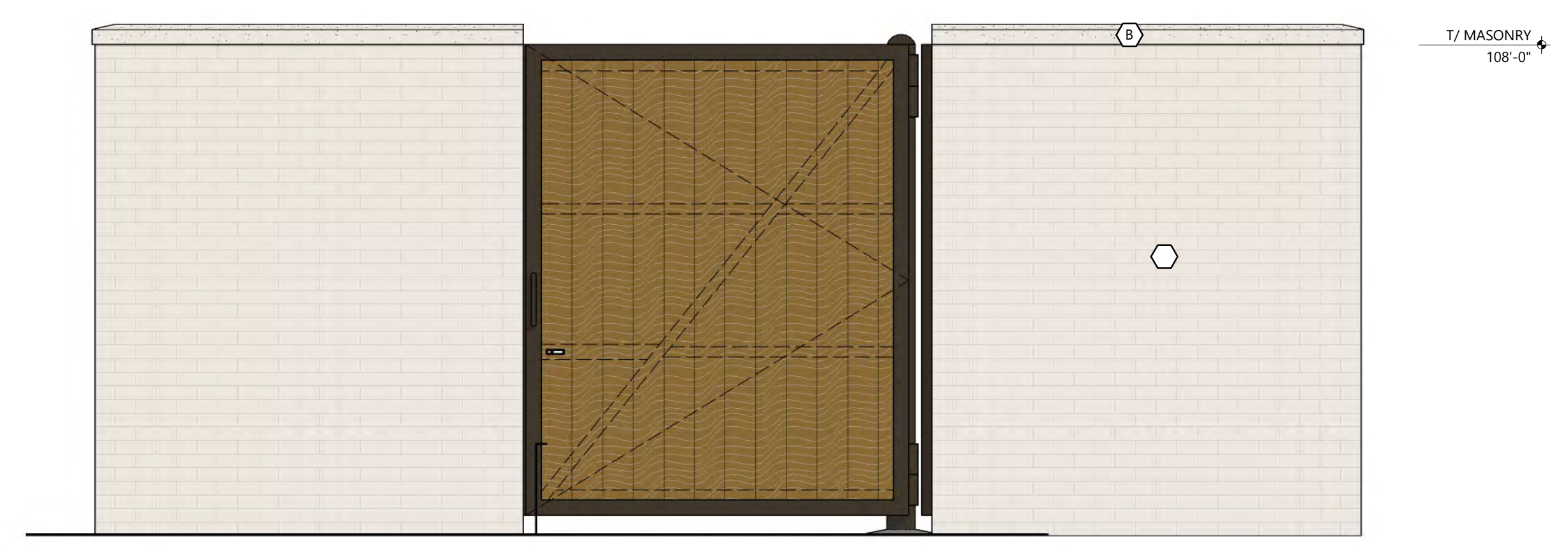
3 LEFT ELEVATION
PRE-7 SCALE: 1/2" = 1'-0"



1 PLAN - VACUUM EQUIPMENT ENCLOSURE
PRE-7 SCALE: 1/2" = 1'-0"



5 REAR ELEVATION
PRE-7 SCALE: 1/2" = 1'-0"



4 FRONT ELEVATION
PRE-7 SCALE: 1/2" = 1'-0"

PRELIMINARY VACUUM EQUIPMENT ENCLOSURE PLAN & ELEVATIONS



Mister





EXIT



UNLIMITED
MEMBER

UNLIMITED
MEMBER

UNLIMITED
MEMBER





Mister



Mister

ENTER

UNLIMITED
MEMBER

UNLIMITED
MEMBER



UNLIMITED MEMBER







EXIT



EXIT



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Amy Ruthig, Planning Director

DATE: March 27, 2024

RE: S. Latson Commercial Multi-Tenant Building– Vacant parcels #4711-04-300-017 and 4711-09-100-004
Special Land Use, Site Plan and Impact Assessment

Please find attached the project case for a special land use permit, site plan and environmental impact assessment for a proposed multi-tenant commercial center including a drive-through coffee shop and outdoor seating restaurant. The site consists of vacant parcels #4711-04-300-017 and 4711-09-100-004 and is located on the east side of Latson Road, south of Grand River Avenue. The property is zoned General Commercial District (GCD).



SUPERVISOR
Bill Rogers

CLERK
Paulette A. Skolarus

TREASURER
Robin L. Hunt

TRUSTEES
Jean W. Ledford
Terry Croft
Diana Lowe
Jeff Dhaenens

MANAGER
Kelly VanMarter

Procedurally, the Planning Commission is to review the special land use, site plan and environmental impact assessment, and put forth recommendations to the Township Board following a public hearing. The project was heard before the Planning Commission on March 11th, 2024 and the Commission recommended approval. Based on the recommendation from the Planning Commission and on the review of the revised submittal, I offer the following for your consideration:

SPECIAL USE PERMIT

Moved by _____, Supported by _____ to APPROVE the Special Use Permit to allow for a proposed multi-tenant commercial center including a drive-through coffee shop and outdoor seating restaurant located on vacant parcels #4711-04-300-017 and 4711-09-100-004. The site is located on the east side of Latson Road, south side of Grand River Avenue with the following condition:

- A variance from the Zoning Board of Appeals shall be obtained for the 500-foot requirement from an existing drive-through.

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to APPROVE the Environmental Impact Assessment dated January 16, 2024 to allow for a proposed multi-tenant commercial center including a drive-through coffee shop and outdoor seating restaurant located on vacant parcels #4711-04-300-017 and 4711-09-100-004. The site is located on the east side of Latson Road, south side of Grand River with the following condition:

- Official approval from MDOT for the stormwater discharge shall be submitted prior to land use permit issuance.

SITE PLAN

Moved by _____, Supported by _____ to APPROVE of the Site Plan dated March 14, 2024 to allow for a proposed multi-tenant commercial center including a drive-through coffee shop and outdoor seating restaurant located at vacant parcels #4711-04-300-017 and 4711-09-100-004. The site is located on the east side of Latson Road, south side of Grand River Avenue, with the following conditions:

- The required concrete pad for the Dumpster enclosure shall be installed.
- The reconfiguring of the parcels shall be approved prior to land use permit issuance.
- An executed cross access easement with the property to the north shall be submitted and recorded prior to land use permit issuance.
- All site plan review overage fees must be paid prior to issuance of a land use permit.

If you should have any questions, please feel free to contact me.

Best Regards,



Amy Ruthig
Planning Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

GENOA TOWNSHIP

OCT 04 2023

RECEIVED

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: KEVIN BAHNAM, 1015 LATSON ROAD LLC
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: 1015 LATSON ROAD LLC, 29592 BECK RD, WIXOM, MI 48393

SITE ADDRESS: 1111 S. LATSON RD PARCEL #(s): 4711-09-100-004
4711-04-300-017

APPLICANT PHONE: (248) 767-5337 OWNER PHONE: (248) 767-5337

OWNER EMAIL: kbahnam@usa2goquickstores.com

LOCATION AND BRIEF DESCRIPTION OF SITE: SITE IS LOCATED ON EAST SIDE OF
LATSON AND IS A VACANT SITE. SITE IS JUST SOUTH OF
GRAND RIVER AVE.

BRIEF STATEMENT OF PROPOSED USE: COMMERCIAL BUILDING WITH
MULTIPLE LEASABLE TENANT SPACES FOR GENERAL
COMMERCIAL USE. BUILDING IS 9,675 SFT AND HAS SOME
OUTDOOR SEATING SPACE.

THE FOLLOWING BUILDINGS ARE PROPOSED: 9675 SFT COMMERCIAL
BUILDING WITH LEASABLE TENANT SPACES INCLUDING
DRIVE-THRU COFFEE SHOP ON NORTH END OF BUILDING.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: [Signature]

ADDRESS: 29592 Beck Rd, Wixom MI 48393

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Scott Toussignant of BOSS ENGINEERING at scottt@bosseng.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 10-2-23

PRINT NAME: Karam Bahram PHONE: 248-767-5337

ADDRESS: 29592 Beck Rd, Wixom MI 48393



GENOA CHARTER TOWNSHIP
Special Land Use Application

GENOA TOWNSHIP

OCT 04 2023

RECEIVED

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: Kevin Bahnam, 1015 Latson Road LLC, 29592 Beck Road, Wixom, MI 48393

Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (248) 767-5337 EMAIL: kbahnam@usa2goquickstores.com

OWNER NAME & ADDRESS: Same as above

SITE ADDRESS: 1111 S Latson Rd PARCEL #(s): 4711-09-100-004, 471-04-300-017

OWNER PHONE: () EMAIL:

Location and brief description of site and surroundings:

Site is located on the East side of South Latson road, just south of Grand River Ave. The site is currently vacant and zoned GCD with HDR and GCD zoning to the east, GCD to the north, and NRPUD to the south and west. Site is immediately south of the existing O-Reilly Auto Parts on the south side of the Latson and Grand River Ave intersection. The site is currently vacant with tall grasses.

Proposed Use:

The proposed use will be a commercial building with multiple leasable tenant spaces. A coffee shop with drive thru is proposed on the north side of the building and outdoor seating is provided on the south side for a restaurant use.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed use will still have commercial identity and promote internal revenue and jobs within the township. The site is currently vacant and the proposed development will provide a nice landscaped corridor along the east side of Latson Road as the site is currently vacant and generally cleared land with a few trees.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The proposed drive thru and multiple other tenant spaces will provide a variety of mixed uses that fit within the GCD zoning.

The surrounding parcels are all commercial in use with the exception of the HDR zoning behind the property. So this proposed use will be consistent with the types of developments surrounding it.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

The site has access from Latson Road via an existing commercial drive approach and will have proposed cross access with the adjacent development to the north. Public water is available at the rear of the property and an existing sanitary lead is stubbed at the property. The site will be designed to accommodate fire truck circulation and will have adequate signing to promote vehicular and pedestrian safety. Continuation of a 8' sidewalk will be along the Latson Rd frontage.

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

The proposed use will provide adequate stacking spaces for the drive thru to ensure no impact on traffic on Latson Road. The use will contain a 6' screen wall at the rear of the property where it is adjacent to HDR zoning. The site lighting will be designed in compliance with Twp Ordinance to ensure no excess lighting. The site will not generate odors, smoke, fumes, or vibration.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

7.02.02 (j) 1) The building will be setback 50 feet from any adjacent right-of-way or property line. 2) Proposed use is a drive thru coffee shop not a drive through restaurant. 3) A single point of access to Latson Rd is provided. 4) A cross access with the adjacent development to the north is being proposed.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Kevin Bahnam, 1015 Latson Road LLC STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: [Signature]

ADDRESS: 29572 Beck Rd, Wixom MI 48393

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Scott Tousignant of Boss Engineering at scottt@bosseng.com
Name Business Affiliation Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 10-2-23

PRINT NAME: Karam Bahnam PHONE: 248-767-5337

LCRC's request for the signal changes. Mr. Tougissant stated they will be working with MDOT to modify the signalization as requested.

Commissioner Dhaenens is satisfied with the landscaping provided and would not require the petitioner to add additional trees.

The call to the public was made at 7:36 pm with no response.

Moved by Commissioner Rassel, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Special Use Application to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue as this Commissioner finds that the special land use standards of Section 19.03 are generally met and the conditions of Section 7.02.02(l) have been met. **The motion carried unanimously.**

Moved by Commissioner Rassel, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 16, 2024 to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Rassel, supported by Commissioner Rauch, to recommend to the Township Board approval of the Site Plan dated January 16, 2024 to allow for a proposed automatic car wash located on vacant parcels #4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue, with the following conditions:

- The color of the fencing shall be changed from blue to a dark bronze or black color.
- The required concrete pad at the Dumpster enclosure shall be installed.
- The Planning Commission approves the landscape deficiency.
- The property split of this parcel shall be approved.

The motion carried unanimously.

OPEN PUBLIC HEARING #3...Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by Kevin Bahnam, 1015 Latson Road LLC.

A. Recommendation of Special Use Application.

B. Recommendation of Environmental Impact Assessment (1-16-24)

C. Recommendation of Site Plan (1-16-24)

Mr. Scott Tousignant of Boss Engineering and Jeff Klatt, the architect, were present. Mr. Tousignant stated that MDOT's approval for the stormwater discharge applies to this site as well. He provided the changes made to the previous plans after discussions with the Planning Commission. They have relocated the access drive further to the north per the LCRC's request, moved the building closer to the access drive, relocated a bank of parking spaces, eliminated the site access from the right side of the property, and added the sidewalk.

Mr. Borden reviewed his letter dated February 6, 2024.

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Sections 7.02.02(i) and (j) and the buffer zone requirements of Section 12.02.03 must be met to the Commission's satisfaction.
- c. If a favorable recommendation is made, the Commission may wish to include a condition that a sound study be provided for the drive-through speaker system when the tenant is known.
- d. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Drive-Through Use Conditions (Section 7.02.02(j)):

- a. The 500-foot spacing between drive-throughs is not met (approximately 120 feet). The applicant notes that they will seek a variance from ZBA.

3. Site Plan Review:

- a. Building materials and color scheme are subject to review and approval by the Planning Commission.
- b. The landscape plan is deficient in width and a full screen wall for the easterly buffer zone; there is only a partial screen wall.

Mr. Barber reviewed Ms. Byrne's letter dated February 6, 2024 states:

1. The petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.
2. The petitioner is proposing a closed pipe type underground detention basin comprised of five 42-inch diameter pipes to provide 16,890 cubic feet of storage. The proposed building, site drive, and parking improvements do not allow enough space for any at-grade stormwater detention or retention.
3. Soil borings and infiltration testing should be provided within the proposed detention basin footprint and should show the documented high groundwater elevation. Soil borings shall be provided to a depth of at least 20 feet. The petitioner has noted that no geotechnical work has been completed for the site yet, but the geotechnical from the northern parcel was used for the current design. The infiltration rate and soil borings being used for the current design should be confirmed prior to construction of the storm system. Mr. Tousignant stated they will obtain those.

4. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The LCRC has indicated that the existing storm sewer is under MDOT jurisdiction and approval from MDOT will be required to connect to it. If approval from MDOT cannot be obtained the proposed site layout and storm management plan would change significantly, therefore we recommend that approval from MDOT be obtained prior to bringing the site plan before the Township Planning Commission.
5. The LCRC completed a review of the traffic impact study and plans, and the study was revised per their recommendation. The study recommended signal modifications at the Grand River Avenue and Latson Road intersection, which would need to be reviewed and discussed with MDOT. The study also recommended restricting the northernmost site driveway to right-in-right-out and aligning the southernmost site driveway to align directly with the existing Lowes driveway. Both site driveway recommendations have been addressed on the revised plans.

The Brighton Area Fire Authority Fire Marshal's letter dated February 2, 2024 states "The East drive clear width has been reduced to 23.5-feet and shall be increased to 26-feet as required. West drive fire lane signs are facing the incorrect direction." Mr. Tousignant stated they will amend the plans to meet the

Commissioner Rauch thanked the applicant for making the revisions. He is very happy with the building colors and materials. He noted that the color of the fencing should be changed as requested in the previous project.

Commissioner McCreary questioned the traffic impact study. Mr. Tousignant stated the changes to the signalization at Grand River and Latson Road will be made to improve the peak hour grades. This will be done at the time the project is developed.

Commissioner Dhaenens questioned Mr. Borden's suggestion regarding the noise ordinance and the drive thru speaker. Mr. Borden stated that since we do not know what is being built there, the Commission may wish to include a condition that a sound study be provided for the drive-through speaker system when the tenant is known.

The call to the public was made at 8:00 pm with no response.

Moved by Commissioner Chouinard, supported by Commissioner Rassel, to recommend to the Township Board approval of the Special Use Application to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Chouinard, supported by Commissioner Rassel, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 16, 2024 to allow for a proposed multi-tenant commercial center including a drive through coffee shop and

outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Chouinard, supported by Commissioner Rauch to recommend to the Township Board approval of the Site Plan dated January 16, 2024 to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-017 Latson Road, east side of Latson Road, south side of Grand River Avenue, with the following conditions:

- The color of the fencing shall be changed from blue to a dark bronze or black color.
- The ZBA's approval of the future drive thru uses.
- The required concrete pad at the Dumpster enclosure shall be installed.
- The property split of this parcel shall be approved.
- All conditions by other agencies shall be met.

The motion carried unanimously.

NEW BUSINESS:

OPEN PUBLIC HEARING #4...Consideration of a special land use application, environmental impact assessment and site plan to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue, south side of Grand River Avenue, west of Dorr Road. The request is petitioned by Wonderland Marine West.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (11-29-23)
- C. Recommendation of Site Plan (2-16-24)

Mr. Gary Mitter, Sr. stated they are in the process of renovating their existing building, and during construction, they need a temporary building. They purchased the building next to their business. They will be remodeling it and it will match the same style as their renovated existing building.

Mr. Borden reviewed his letter dated March 5, 2024.

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the use requirements of Section 7.02.02(c) must be met to the Commission's satisfaction.
- c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Use Requirements (Section 7.02.02(c)):

- a. The majority of the use conditions are met; however, the buffer zone/screen fence requirement for outdoor storage is not fully met at the rear of the site. They are proposing

- The LCRC's requirements for the stormwater and their response to the traffic impact study and what improvements they agree to make.

Commissioner McBain suggested reducing the number of vacuum bays, she reiterated her concerns regarding the traffic flow on the site and agrees with additional landscaping being needed on Latson Road.

Moved by Commissioner Rauch, supported by Commissioner Chouinard, to table Open Public Hearing Item #1 petitioned by CWP West, LLC. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2... Consideration of a special land use application, environmental impact assessment and site plan to allow for a proposed multi-tenant commercial center including a drive through coffee shop and outdoor seating restaurant located on vacant parcels#:4711-04-300-017 and 4711-09-100-~~017~~004 Latson Road, east side of Latson Road, south side of Grand River Avenue. The request is petitioned by Kevin Bahnam, 1015 Latson Road LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (10-26-23)
- C. Recommendation of Site Plan (10-25-23)

Mr. Brent LaVanway of Boss Engineering, Mr. Jeff Klatt, the architect, and Mr. Frank Jarbou of CWP West, LLC were present.

Mr. LaVanway provided a review of the project. This is a multi-use tenant building on the site adjacent to the previous agenda item and one of the tenants will include a drive thru. There is a partial existing wall on the east side and they are again proposing to add additional evergreens where there is no wall. They will be requesting two variances from the ZBA, one is for the location of the parking and the proximity of a drive thru to an existing drive thru.

Mr. Klatt showed colored building renderings and material samples. The building is modern with clear lines and the colors are consistent with other buildings in the area.

Mr. Borden reviewed his letter dated November 8, 2023.

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Sections 7.02.02(i) and (j) and the buffer zone requirements of Section 12.02.03 must be met to the Commission's satisfaction.
- c. If a favorable recommendation is made, the Commission may wish to include a condition that a sound study be provided for the drive-through speaker system when the tenant is known.

2. Drive-Through Use Conditions (Section 7.02.02(j)):

- a. The 500-foot spacing between drive-throughs is not met. The applicant states that they will seek a variance from ZBA.

3. Site Plan Review:

- a. The applicant will seek a variance from ZBA for the deficient front yard parking setback.
- b. He suggested the applicant add some vertical elements to help break up the overall building length of the rear façade.
- c. Building materials and color scheme are subject to review and approval by the Planning Commission.
- d. The proposed driveway does not meet the spacing requirements of Section 15.06.02 of the township ordinance.
- e. The lighting plan must be revised to match the currently proposed site plan. It was not updated when the outdoor seating was removed.
- f. The landscape plan is deficient in width for the Latson Road greenbelt and width and screen wall for the easterly buffer zone.
- g. There are minor discrepancies between the landscape plan and table that need to be corrected.

Additionally, the applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

Ms. Byrne reviewed her letter dated November 8, 2023, noting they are the same as the previous site and that LCRC approval will be needed for the drive and the stormwater.

1. The petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.
2. The Petitioner is proposing a closed pipe type underground detention basin comprised of five 42-inch diameter pipes to provide 16,890 cubic feet of storage. The proposed building, site drive, and parking improvements do not allow enough space for any at-grade storm water detention or retention.
3. Soil borings and infiltration testing should be provided within the proposed detention basin footprint and should show the documented high ground water elevation. Soil borings shall be provided to a depth of at least 20 feet. The Petitioner has noted that no geotechnical work has been completed for the site yet, but the geotechnical from the northern parcel was used for the current design. The infiltration rate and soil borings being used for the current design should be confirmed prior to construction of the storm system.
4. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The Petitioner will need to obtain approval from the LCRC to connect to their storm sewer and said approval should be provided to the Township prior to final site plan approval. In the past the LCRC has not allowed any increase in storm volume into their storm sewer. The underground detention design has been revised since the last submittal to allow for additional infiltration to limit the storm volume that would outlet into the LCRC sewer.

5. The Petitioner has provided a traffic impact study for the proposed development. The study included expected traffic volumes from other proposed developments in the area in the no-build condition and recommended signal timing and length be modified at the Grand River Avenue and Latson Road for both the no-build and build condition. The Livingston County Road Commission will review the traffic impact study as part of their approval for the proposed site driveways and they will need to review the recommendation of optimized signal timings at the Grand River Avenue and Latson Road intersection.

Mr. LaVanway stated they have addressed all of the concerns of the Brighton Area Fire Authority Fire Marshal's letter dated November 3, 2023.

The call to the public was made at 8:08 pm with no response.

Commissioner Rauch complimented the architect on the building design, materials, and colors. He stated that the petitioner is proposing a building that is too large for this site. The size is what necessitates the need for the 10 parking spaces in the front of the site and the need for two variances.

Mr. Jarbou stated they are proposing to develop a great project with a great design and materials, but there is a financial aspect. The property is very narrow and they have met most of the requirements. Commissioner McCreary noted that a financial hardship is not a reason to be granted a variance.

Commissioner Rauch noted that this site is proposing asphalt and Mister Car Wash is proposing concrete. He would like them to be the same. He is also concerned with the location of the driveways, and suggested the applicant complete the sidewalk to meet the one in front of the apartment complex.

Mr. Borden noted that the large number of parking spaces is due to the proposed uses of two restaurants. If this is changed, then the parking would be reduced and there would not be a need to have it in the front.

Mr. Lavanway stated he would like to redesign this project so that the curb cuts and traffic flows of the two sites work together.

The suggested changes to be made were noted as:

- Meeting the requirements for no parking in the front by reducing the size of the building or changing the uses.
- Changing the driveway accesses.
- Connecting the sidewalk to meet the existing sidewalk in front of the apartment complex.
- Update the rear building elevations as suggested by Mr. Borden.
- Provide details regarding site signage, the monument sign, and landscaping along Latson Road.

Moved by Commissioner Rauch, supported by Commissioner Lowe, to table Open Public Hearing Item #2 petitioned Kevin Bahnam of 1015 Latson Road, LLC. **The motion carried unanimously.**

The Planning Commission took a five minute break at 8:25 pm.

OPEN PUBLIC HEARING #3... Consideration of a sketch plan application, environmental impact assessment and sketch plan for proposed bike trails located at the Fillmore Park. The park is located at 7075 McClements, northwest corner of McClements and Kellogg Roads. The request is petitioned by the Livingston County Planning Department.

- A. Recommendation of Environmental Impact Assessment (10-25-23)
- B. Disposition of Site Plan. (10-25-23)

Ms. Martha Haglund, Principal Planner with the Livingston County Planning Department, stated they would like to use the western portion of the site to install mountain bike trails. They will be crossing Kellogg Road and have received approval from the Livingston County Road Commission for crossing signage. The work is being done by volunteers so she anticipates it taking 3-4 years to complete.

She has responded to Mr. Borden and Ms. Byrne's review letters.

Mr. Borden reviewed his letter dated November 8, 2023.

1. The submittal does not identify the proposed setbacks; however, the front yard setback requirement is not met at the trail crossing across Kellogg Road. He noted that since this is a trail, it could be considered similar to a sidewalk. Commissioner Rauch agrees; however, having it 50 feet off the road would allow it to be safer.
2. If granted, sketch plan approval is valid for only one year, though the project timeline extends out to 2026. The applicant will need to apply for and obtain extensions to cover the full project, which will be evaluated based on Ordinance standards and may or may not be granted.
4. Ms. Haglund did respond to his comment regarding the internal signs setbacks. They will be less than two square feet so they are exempt from sign regulations.

Additionally, the applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

Ms. Byrne reviewed her letter dated November 8, 2023.

1. The petitioner has already obtained a permit from the Livingston County Road Commission regarding the signage required for the proposed trail crossing and this has been provided to the Township.
2. The petitioner has noted that an EGLE wetland permit will be required for some portions of the proposed trail improvements. This permit should be provided to the Township for their records once it is obtained.



February 6, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	S. Latson Commercial Development – Special Land Use and Site Plan Review #3
Location:	1015 Latson Road – east side of Latson Road, south side of Grand River Avenue
Zoning:	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal for development of a multi-tenant commercial center, including a coffee shop with a drive-through (plans dated 1/16/24).

A. Summary

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Sections 7.02.02(i) and (j) and the buffer zone requirements of Section 12.02.03 must be met to the Commission’s satisfaction.
- c. If a favorable recommendation is made, the Commission may wish to include a condition that a sound study be provided for the drive-through speaker system when the tenant is known.
- d. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Drive-Through Use Conditions (Section 7.02.02(j)):

- a. The 500-foot spacing between drive-throughs is not met (approximately 120 feet). The applicant notes that they will seek a variance from ZBA.

3. Site Plan Review:

- a. Building materials and color scheme are subject to review and approval by the Planning Commission.
- b. The landscape plan is deficient in width and a full screen wall for the easterly buffer zone.

B. Proposal/Process

The applicant proposes development of an 8,925 square foot multi-tenant commercial building with space for up to 6 tenants. The plan includes a restaurant with a drive-through on the vacant 1.8 acre site.

Table 7.02 allows retail uses with up to 30,000 square feet of area as principal permitted uses; however, restaurants with drive-throughs require special land use approval in the GCD. As such, the request is also subject to the use conditions of Section 7.02.02(j).

Procedurally, the Planning Commission is to review the special land use, site plan, and Environmental Impact Assessment, and put forth recommendations to the Township Board following a public hearing.



Aerial view of site and surroundings (looking east)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Mixed Use – West Grand River. This classification states that “regional commercial uses, such as auto-oriented uses (including fast-food) are only intended at interchange uses and where otherwise currently existing along Grand River Avenue.”

The subject site is located near a major roadway intersection and within close proximity to an interchange. Furthermore, there are other auto-oriented uses (gas stations and another drive-through) in the immediate area.

As such, the Commission may find that the proposal is consistent with the Master Plan and Future Land Use Map.

- 2. Compatibility.** Surrounding properties are primarily commercial/service in nature, though the site also abuts residential zoning and land use along its east side lot line.

The primary concerns under this criterion are related to potential impacts (noise, light, overall intensity of uses) upon the adjacent residential property.

The use conditions of Section 7.02.02(j) and buffer zone requirements of Section 12.02.03 are intended to help mitigate potential off-site impacts.

In order to make a favorable finding under this criterion, the above standards must be met to the Commission’s satisfaction.

The previous submittal also notes that the drive-through will be available from 6AM to 9PM and that a sound study can be provided once a tenant is known. The Commission may wish to include this as a condition if a favorable recommendation is made.

- 3. Public Facilities and Services.** Given that the site fronts Latson Road near Grand River Avenue and was previously developed, we anticipate that necessary public facilities and services are in place.

However, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Similar to previous comments, use conditions and buffering requirements must be met to help ensure that the adjacent residential use is not adversely impacted by the proposed development.

5. Mitigation. If further concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Use Conditions (Drive-Through Restaurant)

Drive-through restaurants are subject to the use requirements of Section 7.02.02(j), as follows:

1. Principal and accessory buildings shall be setback fifty (50) feet from any adjacent public right of way line or property line.

The proposed building provides setbacks of at least 50 feet from each lot line.

2. The establishment of a new drive-through restaurant shall require the lot be separated a minimum of five hundred (500) feet from any other lot containing a drive-through restaurant.

Based on staff research, the subject site is approximately 120 feet from the property across Latson Road, which contains a drive-through restaurant. As such, this condition is not met. The revised submittal notes that the applicant will seek a variance from ZBA.

3. Only one (1) access shall be provided onto any street.

The site plan depicts a single driveway on-site to/from Latson Road.

4. Such restaurants constructed adjacent to other commercial developments shall have a direct vehicular access connection where possible.

The site plan provides for cross-access with the adjacent commercial development to the north.

E. Site Plan Review

1. Dimensional Requirements. As noted in the table below, the revised site plan complies with the dimensional requirements of the GCD:

	Min. Lot Req.		Minimum Yard Setbacks (feet)				Max. Lot Coverage (%)	Max. Height
	Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking Lot		
GCD	1	150	70	15	50	20 front 10 side/rear	35% building 75% impervious	35' 2 stories
Proposed	1.8	420	70	104 (N) 146 (S)	50	18 front 20 side 10 rear	11.3% building 74.2% impervious	20' 1 story

2. Building Design and Materials. The primary building materials are brick and stone, with relatively small amounts of wood paneling and metal as accent materials.

The revised submittal includes material calculations demonstrating compliance with the material standards of Section 12.01.

Building materials and colors are subject to review and approval by the Planning Commission.

3. Pedestrian Circulation. The site plan proposes an 8-foot wide concrete sidewalk along S. Latson.

The plan also provides internal pedestrian circulation between the parking areas and building entrances, as well as a crosswalk connection to the public sidewalk along Latson Road.

- 4. Vehicular Circulation.** The site plan proposes 1 curb cut for a full turning movement driveway along S. Latson. Cross-access is also provided with the proposed development to the north.

Drive aisles are of sufficient width for two-way traffic around the site.

The proposed driveway is nearly 400 feet from the existing driveway to the south (on the same side of Latson Road) and is aligned with the existing driveway across Latson Road.

The proposed un/loading area occupies a portion of a drive aisle in the northeast and southeast corners of the site; however, the revised plan includes a note that deliveries will be scheduled for off peak hours to avoid potential conflicts.

The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation.

- 5. Parking.** Based on information contained in the submittal, the project requires 72 parking spaces, while 73 are provided.

The design and dimensions of parking spaces and drive aisles comply with Ordinance standards.

The number of stacking spaces and barrier-free spaces is also compliant.

- 6. Exterior Lighting.** The lighting plan identifies 9 light poles and 12 wall mounted fixtures (6 of which are ornamental/architectural).

Based on the detail sheets, aside from the ornamental/architectural fixtures, the proposed fixtures are downward direct LEDs, as required.

Pole heights and photometric readings (both on-site and along property lines) comply with Ordinance standards.

- 7. Landscaping.** The landscape plan has been reviewed for compliance with the standards of Section 12.02, as follows:

Standard	Required	Proposed	Comments
Front yard greenbelt	20' width 10 canopy trees	20' width 10 canopy trees	In compliance
Buffer Zone C (N)	10' width 9 canopy trees OR 9 evergreen trees OR 36 shrubs	23' width 5 canopy trees 16 shrubs	In compliance
Buffer Zone B (S)	20' width 6' wall OR 3' berm 7 canopy trees 7 evergreen trees 26 shrubs	20' width 3' berm 7 canopy trees 7 evergreen trees 27 shrubs	In compliance
Buffer Zone B (E)	20' width 6' wall OR 3' berm 14 canopy trees 14 evergreen trees 56 shrubs	10' width Partial wall 14 canopy trees 14 evergreen trees 56 shrubs	Deficient width and full length wall
Parking lot	8 canopy trees 790 SF landscaped area	8 canopy trees 1,400 SF landscaped area	In compliance

The Commission has the authority to modify landscaping requirements, per Section 12.02.13.

8. Waste Receptacle. The proposed waste receptacle has been reviewed for compliance with the standards of Section 12.04, as follows:

	Requirement	Proposed	Comments
Location	Rear yard or non-required side yard AND not less than 20' from residential	Rear yard 20' from residential	Requirements met
Access	Clear access w/ out damaging buildings/vehicles	Turning template demonstrates sufficient maneuvering area	Requirements met
Base design	9' x 15' concrete pad	Approximately 20' x 25' concrete pad	Requirement met
Enclosure	3-sided enclosure w/ gate Masonry walls 6' height/taller than receptacle	3 sides w/ gate across 4 th Masonry walls 6' height	Requirements met

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,
SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



February 6, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: South Latson Commercial Development
Site Plan Review No. 3**

Dear Ms. Ruthig:

Tetra Tech conducted a third review of the proposed South Latson Commercial Development site plan last dated January 16, 2024. The plan was prepared by Boss Engineering on behalf of 1015 Latson Road, LLC. The development is located on two parcels with a total of 3.38 acres on the east side of Latson Road, approximately 350 feet south of the Latson Road and Grand River Avenue intersection. The Petitioner is proposing to split the site into two parcels that are being reviewed separately, and this review includes a proposed 8,925 square foot general commercial building on the proposed south parcel. The proposed improvements include a new parking lot, storm sewer, and underground detention.

We offer the following comments for your consideration:

GENERAL

1. The Petitioner should obtain approval from the Livingston County Road Commission (LCRC) for the proposed site driveway prior to final site plan approval.

DRAINAGE AND GRADING

1. The Petitioner is proposing a closed pipe type underground detention basin comprised of five 42-inch diameter pipes to provide 16,890 cubic feet of storage. The proposed building, site drive, and parking improvements do not allow enough space for any at-grade storm water detention or retention.
2. Soil borings and infiltration testing should be provided within the proposed detention basin footprint and should show the documented high ground water elevation. Soil borings shall be provided to a depth of at least 20 feet. The Petitioner has noted that no geotechnical work has been completed for the site yet, but the geotechnical from the northern parcel was used for the current design. The infiltration rate and soil borings being used for the current design should be confirmed prior to construction of the storm system.
3. The proposed underground detention basin will tie into the existing storm sewer on Latson Road. The LCRC has indicated that the existing storm sewer is under MDOT jurisdiction and approval from MDOT will be required to connect to it. If approval from MDOT cannot be obtained the proposed site layout and storm management plan would change significantly, therefore we recommend that approval from MDOT be obtained prior to bringing the site plan before the Township Planning Commission.

Ms. Amy Ruthig
Re: South Latson Commercial Development
Site Plan Review No. 3
February 6, 2024
Page 2

TRAFFIC AND PAVEMENT

1. The LCRC completed a review of the traffic impact study and plans, and the study was revised per their recommendation. The study recommended signal modifications at the Grand River Avenue and Latson Road intersection, which would need to be reviewed and discussed with MDOT. The study also recommended restricting the northern most site driveway to right-in-right-out and aligning the southernmost site driveway to align directly with the existing Lowes driveway. Both site driveway recommendations have been addressed on the revised plans.

We recommend the Petitioner address the above comments prior to Township approval. Please call or email if you have any questions.

Sincerely,



Shelby Byrne, P.E.
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

February 2, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: South Latson Commercial Development
1111 S. Latson Rd.
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on January 17, 2024, The plans are dated October 4, 2023 with latest revisions dated January 16, 2024. The project is based on proposed redevelopment of an existing vacant parcel for a new 9,675 square foot multi-tenant commercial retail development. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition. **Previously acknowledged and complied with notes have been removed from this letter.**

1. Two-way emergency vehicle access roads shall be a minimum of 26-feet wide. With a width of 26-feet, one side (building side) of the drive shall be marked as a fire lane. Include additional signage along curb lines at least every 50-feet. Access roads to the site shall be provided and maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 84,000 pounds, this includes over the underground retention. **(The East drive clear width has been reduced to 23.5-feet and shall be increased to 26-feet as required. West drive fire lane signs are facing the incorrect direction.)**

IFC D 103.6
IFC D 103.1
IFC D 102.1
IFC D 103.3

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

cc: Kelly VanMarter, kelly@genoa.org

Livingston County Road Commission

3535 Grand Oaks Drive • Howell, Michigan 48843-8575
Telephone: (517) 546-4250 • Facsimile: (517) 546-9628
Internet Address: www.livingstonroads.org

March 13, 2024

Scott Tousignant
Boss Engineering
3121 E. Grand River Ave
Howell, MI 48843

Re: South Latson Commercial Development, Genoa Township, Section 4
LCRC# C-24-06

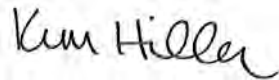
Dear Scott:

I have completed the review of the construction plans, dated January 16, 2024, for the above-referenced project and offer the following comments.

1. A contractor needs to be selected and the selected contractor must submit a certificate of insurance to the LCRC with the following language: "The Board of Livingston County Road Commissioners, the Livingston County Road Commission, and their officers, agents, and employees are listed additional insured parties with respects to General Liability." Please note this is note required for plan approval but will be required for issuance of a permit.
2. The type of MDOT concrete curb proposed within the Latson Road right-of-way should be labeled on the site plan.
3. Proposed sidewalk grades need to be provided in accordance with ADA requirements on the grading plan.
4. The proposed pavement cross section within the Latson Road right-of-way will need to match the existing cross section of Latson Road or at a minimum consist of 1.5" 5EML, 2.0" 4EML, 3.5" 3EML, 6" 21AA Aggregate, and 12" CL II sand.
5. Approval from the Livingston County Drain Commission and/or Genoa Township for the storm water system will need to be obtained and submitted prior to the issuance of the commercial driveway approach permit. MDOT approval has already been obtained and submitted for the discharge of the stormwater into their system at I-96 and Latson Road.

If you have any questions, please do not hesitate to contact me.

Sincerely,



Kim Hiller, P.E.
Utilities and Permits Engineer

Cc: File
Amy Ruthig, Genoa Township (via email)
Ken Recker, LCDC (via email)

**GENOA TOWNSHIP IMPACT ASSESSMENT
South Latson Commercial Development**

Prepared for:

**Owner / Applicant
1015 Latson Road LLC
Kevin Bahnam**

Prepared by:

Scott Tousignant, P.E.



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

**October 4, 2023
Revised: October 26, 2023
Revised: December 11, 2023
Revised: January 16, 2024**

DISCUSSION ITEMS

- A. Name(s) and address(es) of person(s) responsible for preparation of the Impact Assessment and a brief statement of their qualifications.

Prepared by:

Scott Tousignant, P.E.
Professional Engineer/Project Manager
Boss Engineering
3121 E Grand River
Howell, MI 48843

Prepared for:

Owner/Applicant:
1015 Latson Road LLC / Kevin Bahnam
29592 Beck Road
Wixom, MI 48393

- B. Description of the site, including existing structures, man-made facilities, and natural features, all-inclusive to within 10' of the property boundary.***

The project site is on parcels # 4711-04-300-017 and # 4711-09-100-004 in Sections 4 & 9, Genoa Township, Livingston County, MI.

The subject site is bordered:

- On the north by the 1.14 acre +/- parcel zoned General Commercial (GCD) with an existing O'Reilly Auto Parts store.
- On the east by the 9.13 acre +/- parcel zoned General Commercial (GCD) with the Country Corners Shopping center.
- On the east and south by the 12.09 acre +/- parcel zoned High Density Residential (HDR) with the Prentis Estates Apartments. An approximately 4' tall berm is directly along the property line here on the adjacent HDR parcel and is planted with large Red and Scotch Pines ranging in size from 11" d.b.h. to 24" d.b.h. There is an additional evergreen screen just south of the berm along the east property line planted with White Cedar.
- On the west by S. Latson Road and the Non-Residential PUD shopping center with Walmart, PetSmart, Lowe's and various fast-food restaurants.
- The north side of the proposed project will be immediately adjacent to another proposed development project within the GCD zoning.

MHOG sanitary runs along the west property line and South Latson Road. MHOG water runs along the east property line in the adjacent parcel. See the Existing Conditions for locations.

The subject site is a vacant parcel of land consisting of tall, unmaintained grasses and minimal trees. There are currently two existing commercial drive approaches accessing the 2 subject properties. Both will be removed and replaced with a full access drive that aligns with the existing Lowe's drive on the opposite side of Latson Road.

C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.

These currently vacant parcels are flat (2-6% slopes) and covered by grass and weeds. The 0.50 acre parcel at the south does feature a woodland with small trees and shrubs below 6" d.b.h. unless otherwise noted on the tree survey. Species within the woodland include *Pyrus* spp. (Pear), *Acer saccharinum* (Silver Maple), *Populus deltoides* (Eastern Cottonwood), *Prunus serotina* (Black Cherry), and *Pinus sylvestris* (Scotch Pine.)

The soils are largely Miami Loam with 2 to 6% slopes. Other soils on site are Conover Loam and Washtenaw Silt Loam. The site drains via surface flow from east to west to the South Latson Road storm sewer system. No wetlands/streams/creeks or other water bodies are located on site.

D. Impact on storm water management: description of soil erosion control measures during construction.

Storm water will be managed on site and installed before any building construction. Underground storm water detention is planned with a discharge to the South Latson Road storm system and ultimately to the regional detention basin to the south by I-96. Detailed construction plans will be reviewed by the Township Engineer and the Soil Erosion Control plans will be reviewed and permit issued by the Livingston County Drain Commissioners office prior to construction commencing. Ongoing/periodic soil erosion inspections will occur per County requirements to ensure soil erosion is managed proactively.

E. Impact on surrounding land use: Description of proposed usage and other man-made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.

Proposed uses on this General Commercial site include a Coffee Shop with Drive-Through and a variety of retail & restaurant spaces. The proposed uses conform to existing and potential development patterns and will not negatively impact adjacent properties with added lighting, noise or air pollution. The site development will comply with Township Ordinances for lighting levels as well as noise levels. The uses proposed do not impact adjacent properties with noise, light or air pollution.

An existing berm and evergreen screening in the adjacent parcel to the north along the High-Density Residential (HDR) property line screens that use from these proposed commercial uses. In addition, a 6-foot-tall screening fence is proposed for the northern portion and 8' high screen fence proposed for the southern portion of the east property line to screen the HDR use. An existing tree screen is on the property line and installing a screen fence would jeopardize and/or require removal of some of the mature trees currently screening the parcel. On the northern half of the east property line, there are no living units, so providing additional plantings to be a continuation of the landscaped screen to the adjacent HDR zoning is being proposed. A screen fence is proposed there as well given the reduction in landscape buffer width that is being sought. Proposed uses on this site are compatible with existing zoning and adjacent zoning on S. Latson Road.

F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.

The proposed commercial development does not add additional burden on the fire and police services as the site is surrounded by similar development that already receives coverage. The uses do not add population that impacts schools. The commercial retail will add to Township tax revenue as the site currently sits vacant. The commercial retail will add approximately 60 jobs which has a positive impact on the community.

G. Impact on public utilities: description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.

Storm water will be detained on-site via the use of an underground detention system. The storm water will be discharge at pre-development rates to the South Latson Road storm sewer system as the site currently sheet flows into this road storm system. Detailed construction plans would be reviewed by the Township Engineer and the Soil Erosion Control permit would be reviewed and issued by the Livingston County Drain Commissioner. MHOG sanitary sewer runs along the west property line and South Latson Road. It is expected that the site will be connected to MHOG sanitary sewer along South Latson Road and MHOG water along the east property line in the adjacent parcel. The commercial development, being supported by these public utilities is not anticipated to have a negative impact. The development is projected to be approximately 6 REU's (projecting possible end users of the commercial leasable space) which equates to approximately a peak flow usage of 7,000 gpd.

H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.

No storing or handling of any hazardous materials is expected for this development.

I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.

A traffic study has been performed. It is prepared under separate cover and submitted to the Township and Livingston County Road Commission. In summary of the Traffic Impact Study performed by Colliers Engineering & Design, *"Based on the results of this study, the following should be considered to provide acceptable traffic operations with the proposed development project. 1) Optimize signal timings at the intersection of Grand River Avenue and Latson Road. 2) Construct two driveways to Latson Road with the S. site driveway aligned with the existing Lowes driveway and the N. site driveway restricted to right-in-right-out only."*

The Livingston County Road Commission will be required to review and approve the commercial driveway approaches on South Latson Road. Communications with LCRC indicate that the proposed drive locations are acceptable. A right-in/right-out access will be provided on the site to the north and a full access drive provided on the subject site directly across from the existing Lowe's access drive. A cross access easement will be provided for the adjacent site to the north.

J. Special provisions: Deed restrictions, protective covenants, etc.

None of record.

K. Description of all sources:

- Genoa Township Zoning Ordinance
- "Soil Survey of Livingston County Michigan" Soil Conservation Services, USDA
- Traffic Impact Study by Colliers Engineering & Design dated September 15, 2023



Engineering
& Design

Traffic Impact Study

December 19, 2023

Latson Road Commercial Development
Genoa Township, Livingston County, Michigan

Prepared for:

Mr. Karam Bahnam
1015 Latson Road, LLC
29592 Beck Road
Wixom, MI 48393

Colliers Engineering & Design
20700 Civic Center Drive, Suite 170
Southfield, MI 48076
Main: 877 627 3772
Colliersengineering.com

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Appendix A | Traffic Count Data

Appendix B | Existing Conditions Data

Appendix C | No-Build Conditions Data

Appendix D | Build Conditions Data – Alternative 1

Appendix E | Build Conditions Data – Alternative 2

Introduction

This report presents the methodologies, analyses, results, and recommendations of a Traffic Impact Study (TIS) for the proposed commercial development project in Genoa Township, Livingston County, Michigan. The project site is located on the east side of Latson Road approximately 500 feet south of Grand River Avenue (I-96 BL) as shown on **Figure 1** and is currently vacant. The proposed development plans include construction of a 2,950 SF coffee-shop with drive-through, 2,700 SF sit-down restaurant, 4,025 SF of general retail space, and automated car wash. Two different site access alternatives were evaluated for the development per the request of LCRC as follows:

1. Alternative 1: A single site driveway to Latson Road aligned with the existing Lowes Drive.
2. Alternative 2: A single site driveway to Latson Road aligned with the existing Lowes Drive and right-in-right-out only driveway to Latson Road at the north end of the subject site.

A representation of the site plan is shown on **Figure 2**.

Latson Road is under jurisdiction of the Livingston County Road Commission (LCRC); whereby access permitting will be subject to LCRC review and standards. In accordance with LCRC standards a Traffic Impact Study (TIS) is required for site access permitting and project approvals. Additionally, the project is subject to Township review and approval as part of the site plan review process.

The purpose of this study is to identify the traffic related impacts, if any, of the proposed project on the adjacent road network. This study therefore includes analysis of the site access points as well as key off-site intersections surrounding the site. Analysis of the site access points will determine appropriate lane configurations as well as traffic control to process site traffic safely and efficiently. Key off-site intersections are analyzed to determine if new site-generated traffic passing through these locations would require improvements to mitigate any impacted traffic operations.

The scope of this study was developed based on Colliers Engineering & Design (CED) knowledge of the study area, understanding of the development program, accepted traffic engineering practice, and information published by the Institute of Transportation Engineers (ITE). Additionally, CED solicited input regarding the proposed scope of work from LCRC. The study analyses were completed using Synchro and SimTraffic, Version 11 traffic analysis software and in accordance with the methodologies and practices published by ITE and the applicable requirements of LCRC and the Township. This report is intended for use by LCRC and the Township to guide decisions related to development project approvals, access permitting, and identifying future roadway improvement needs.



**Latson Commercial Development
Genoa Township, MI**

Figure 1
Study Area Map

PAGE NO.	SCALE	DATE
2	No Scale	Oct '23



Roadway Data

Road Network

Vehicle transportation for the proposed development will be provided primarily via Latson Road and Grand River Avenue. The study intersections are identified below, and further details on the study roadways are summarized in **Table 1**.

Table 1: Roadway Summary

Roadway Data	Grand River Avenue	Latson Road
Functional Class	Principal Arterial	Minor Arterial
Direction	E-W	N-S
Speed Limit (mph)	45	55
Jurisdiction	MDOT	LCRC
Cross Section	5-Lane	5-Lane
AADT	31,000	22,000
AM Peak Hour Volume	2,075	1,380
PM Peak Hour Volume	3,250	2,370

Study Intersections

Grand River Avenue & Latson Road

At the intersection of Grand River Avenue & Latson Road, all approaches have dual left-turn lanes, two through lanes, and an exclusive right-turn lane. The intersection is traffic signal controlled with leading protected only left-turn phasing, and right-turn overlap phasing provided for all approaches. Dynamic “No Turn on Red” signs are also provided for all approaches to prohibit right-turns during the opposing approaches protected left-turn phase. Vehicle and pedestrian actuation are provided for all approaches and movements and marked crosswalks are provided for crossing all legs.



Figure 3: Grand River Avenue & Latson Road Intersection

Latson Road & Grand Oaks Drive

At the intersection of Latson Road & Grand Oaks Drive, the NB and SB approaches have an exclusive left-turn lane, through lane, and shared through/right-turn lane while the EB and WB approaches have an exclusive left-turn lane and shared through/right-turn lane. The intersection is traffic signal controlled with a leading permitted-protected left-turn phasing for the NB approach. Vehicle actuation is provided for all approaches and movements and marked crosswalks are provided for crossing the east, west, and north legs of the intersection with pedestrian actuation provided for the north crossing.



Figure 4: Latson Road & Grand Oaks Drive Intersection

Existing Traffic Data

Existing weekday AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hour turning movement counts were collected by CED at the study intersections. At the signalized intersections of Latson Road with Grand River Avenue and Grand Oaks Drive, counts were collected on Wednesday, November 13th, 2019. At the unsignalized Lowes and Wal-Mart driveways with Latson Road, counts were collected on Thursday, August 10th, 2023.

Data were collected in 15-minute intervals to establish the current peak hour traffic volumes. Major weather events, holidays, and other local special events were avoided. During collection of the manual intersection turning movement count, pedestrian data and commercial truck percentages were also recorded and used in the traffic analysis. Peak hour factors (PHFs) and commercial truck percentages were calculated by approach based on the requirements of MDOT's *Electronic Traffic Control Device Guidelines*. Traffic volumes along Latson Road were balanced upward between the Wal-Mart driveway and Grand River Avenue. Between Grand Oaks Drive and the north Lowes driveway, a dummy node was utilized to account for the large amount of traffic that turns in and out of the south Lowes driveway. All relevant traffic volume data are included in Appendix A and the resulting 2023 baseline peak hour volumes utilized for this study are summarized on **Figure 6**.



GRAND RIVER AVENUE

LATSON ROAD

SITE

WALMART DRIVE

N. SITE DRIVE

LOWES DRIVE

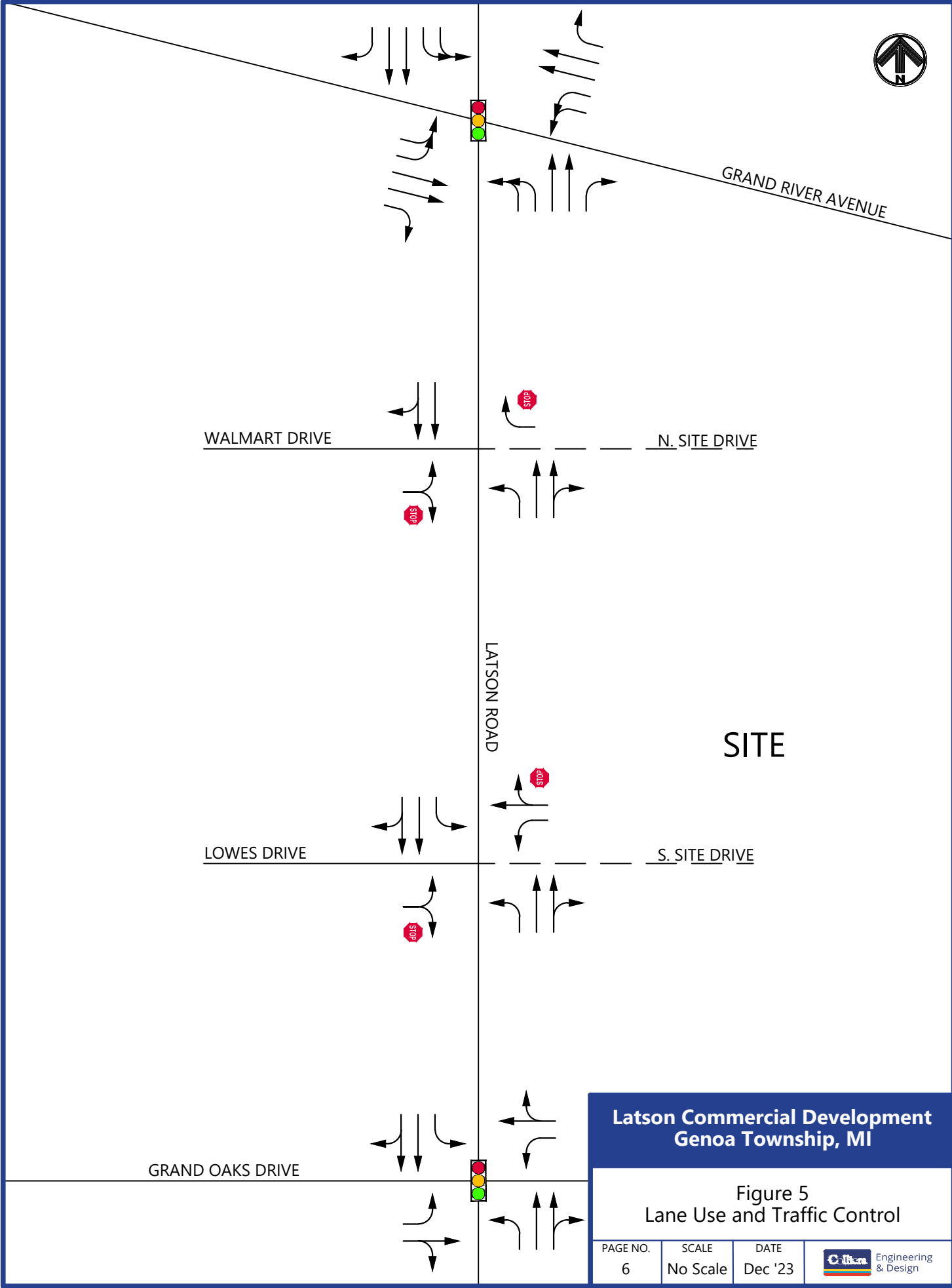
S. SITE DRIVE

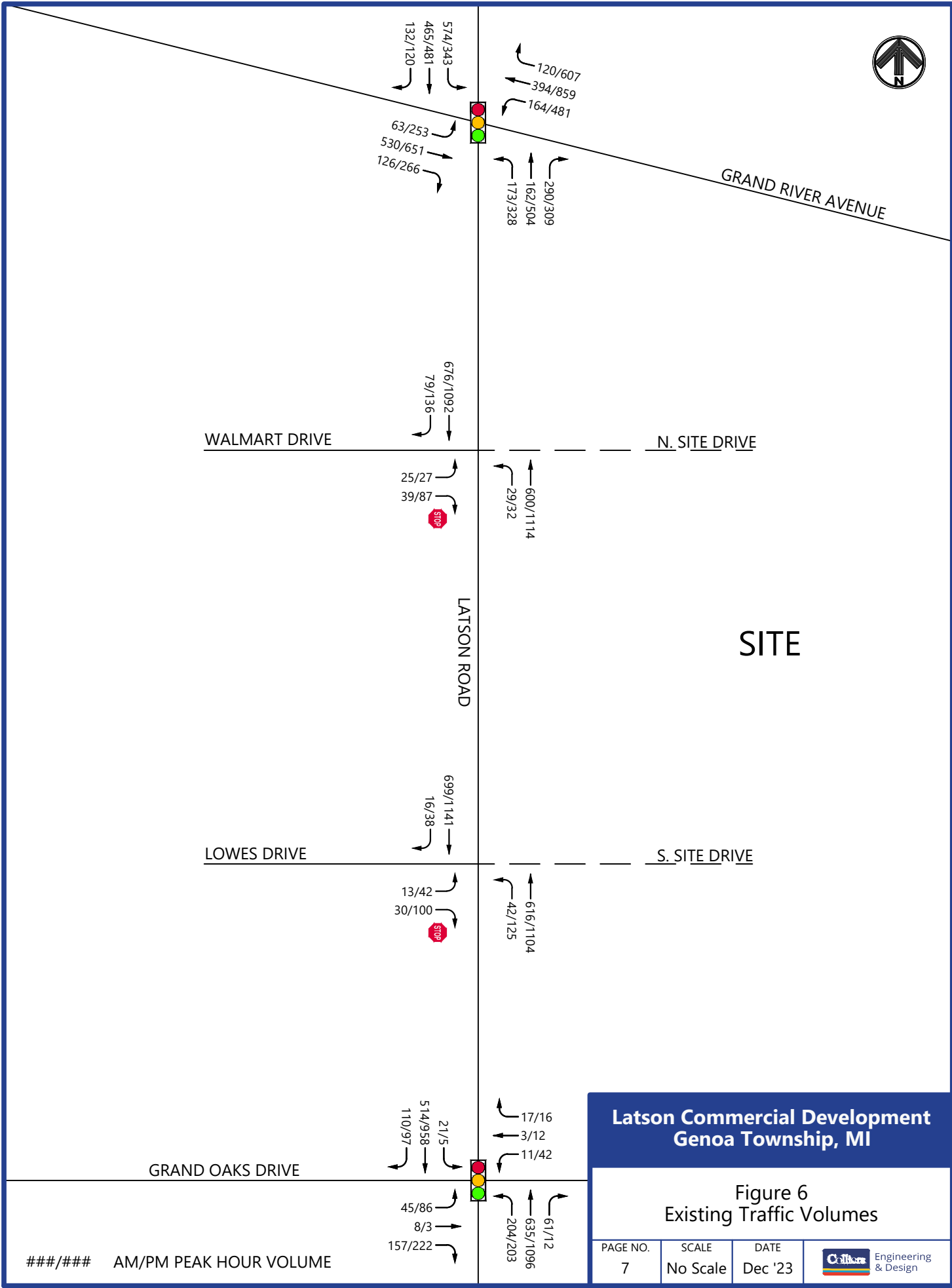
GRAND OAKS DRIVE

**Latson Commercial Development
Genoa Township, MI**

Figure 5
Lane Use and Traffic Control

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SITE

**Latson Commercial Development
Genoa Township, MI**

**Figure 6
Existing Traffic Volumes**

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###/### AM/PM PEAK HOUR VOLUME

2023 Existing Conditions

Analysis Methodologies

The performance of the study intersections was evaluated through a qualitative measure of operating conditions called Levels of Service (LOS). Six LOS are defined with letter designations from A to F with LOS A representing minimal delay, and LOS F indicating failing conditions. Typically, LOS D is considered acceptable in suburban/urban areas.

The LOS measurement for both signalized and unsignalized intersections is average control delay, which is quantified in terms of seconds of delay per vehicle. Control delay includes deceleration delay, stopped delay, queue move-up delay, and acceleration delay. The LOS criteria for unsignalized and signalized intersections taken from the HCM are included in Appendix B.

The LOS and delay calculations are based on the procedures and methodologies outlined in the Transportation Research Board's Highway Capacity Manual, 6th Edition (HCM6) which sets forth nationally accepted standards regarding traffic operations and capacity analysis. Traffic signal timings were modeled per traffic signal timing permits provided by LCRC.

Simulations of the study network were also observed using SimTraffic in order to identify potential issues related to vehicle queuing, traffic flow between intersections, and the overall study network. The existing conditions SimTraffic models were calibrated in accordance with the procedures outlined in the MDOT Electronic Traffic Control Device Guidelines.

Existing Traffic Conditions

Existing peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 5**, the existing traffic volumes shown on **Figure 6**, and the methodologies presented in the HCM. The results of the analysis of existing conditions are presented in **Appendix B**, summarized in **Table 2** and described in further detail below.

The results of the existing conditions analysis indicate that all approaches and movements at the study intersections are currently operating acceptably at a LOS D or better with the exception of the following:

- The NB right-turn movement at the signalized intersection of Grand River Avenue & Latson Road currently operates at a LOS E during the AM peak hour. During the PM peak hour, the NB left-turn movement operates at a LOS E while the WB left, and right-turn movement and SB left-turn movement operate at a LOS F.
- The STOP controlled Lowes Drive approach which currently operates at a LOS E during the PM peak hour.

Observation of peak hour simulations indicates acceptable traffic operations during the AM peak hour and significant vehicle queues are not observed. During the PM peak hour, long vehicle queues are observed for the WB right-turn movement and NB and SB left-turn movements at the

intersection of Grand River Avenue & Latson Road which occupy available storage lengths. A long vehicle queue is also observed for the STOP controlled Lowes driveway approach which lasts throughout the majority of the PM peak hour.

Table 2: Existing Conditions

Intersection	Control	Approach	Movement	AM Peak Hour		PM Peak Hour			
				Delay	LOS	Delay	LOS		
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.8	D		
			Thru	30.8	C	39.6	D		
			Right	21.4	C	26.9	C		
		WB	Left	49.4	D	64.6	E		
			Thru	26.7	C	37.2	D		
			Right	12.7	B	56.9	E		
		NB	Left	44.3	D	73.0	E		
			Thru	36.4	D	39.7	D		
			Right	62.3	E	28.1	C		
		SB	Left	41.7	D	108.2	F		
			Thru	30.1	C	40.8	D		
			Right	24.9	C	25.2	C		
		Overall				35.9	D	48.7	D
Latson Road & Grand Oaks Drive / Ascension Medical Drive	Signal	EB	Left	30.8	C	27.4	C		
			Thru/Right	37.9	D	33.3	C		
		WB	Left	37.9	D	37.1	D		
			Thru/Right	28.9	C	24.5	C		
		NB	Left	8.4	A	15.2	B		
			Thru/Right	6.0	A	10.3	B		
		SB	Left	10.2	B	12.8	B		
			Thru/Right	13.0	B	21.7	C		
		Overall				13.0	B	18.3	B
		Latson Road & Wal-Mart Drive	STOP (Minor)	EB	Left/Right	16.0	C	24.6	C
NB	Left			10.1	B	12.2	B		
	Thru			Free		Free			
SB	Thru/Right	Free		Free					
Latson Road & Lowes Drive	STOP (Minor)	EB	Left/Right	15.0	C	42.2	E		
		NB	Left	10.0	B	13.5	B		
			Thru	Free		Free			
		SB	Thru/Right	Free		Free			

No-Build Conditions

No-Build Traffic Volumes

Traffic impact studies typically include an evaluation of traffic operations in the future as they would be without the proposed development. This no-build condition serves to identify any mitigation that may be required, regardless of the project, and as a baseline for comparison of future buildout conditions. This scenario is comprised of existing traffic conditions, plus ambient traffic growth, plus traffic from approved developments in the study area that have yet to be constructed. At the time of this study the following developments were identified within the study area and immediate vicinity that have yet to be constructed or were currently under construction:

1. Versa Mixed-Use Development
2. Westbury Phase II Residential Development
3. SJMHS Hospital Expansion
4. Forest Ridge Residential Development
5. Pine Creek Residential Development

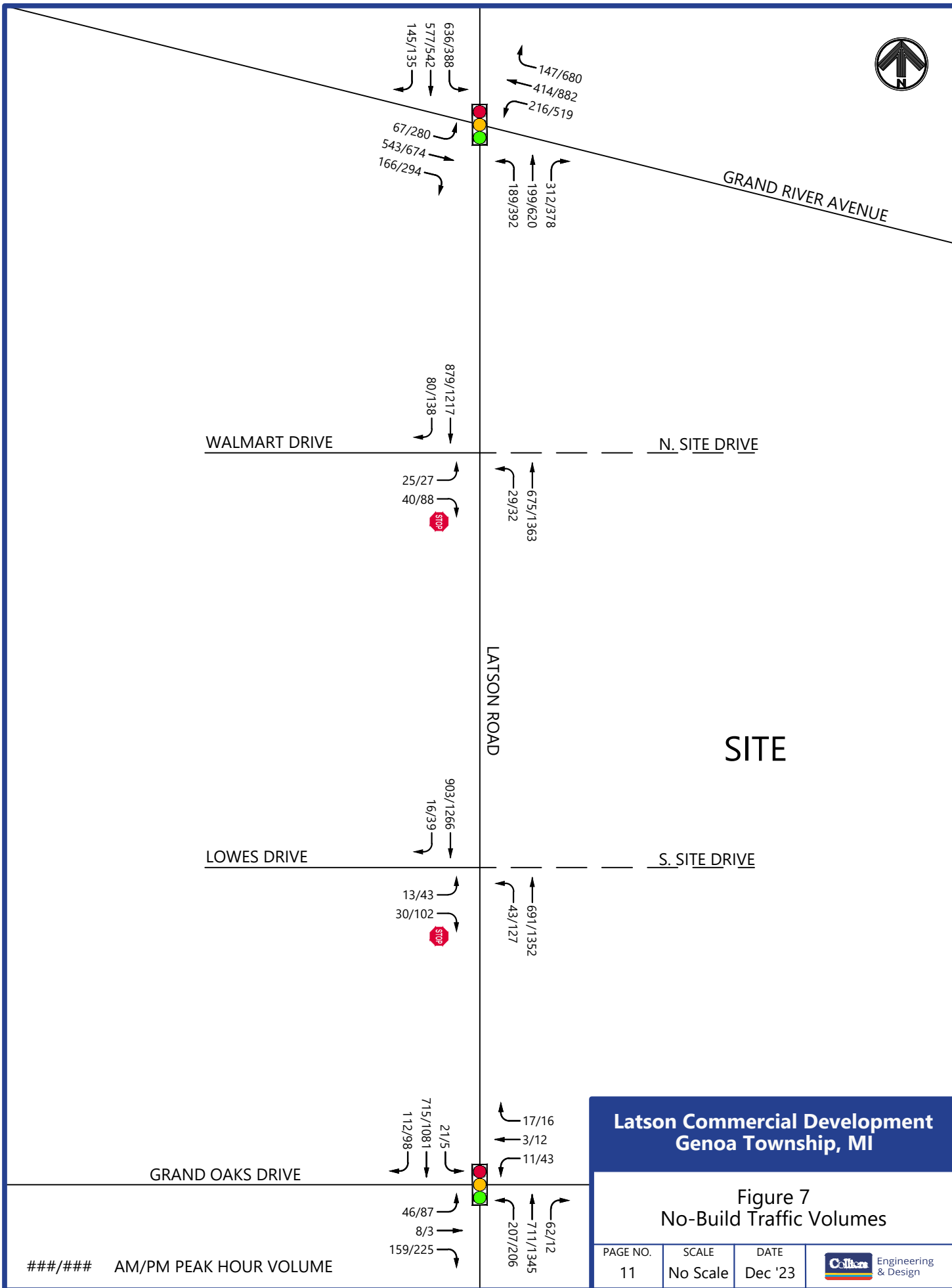
The vehicle trips that would be generated by the background developments were assigned to the study intersections based on the respective traffic study completed for each development. Where a traffic study was not completed for the development or the traffic study did not include the same intersections or time periods as this study, the number of vehicle trips was forecast based on data published by ITE in *Trip Generation, 11th Edition* and assigned to the study road network based on existing traffic patterns.

In addition to background developments, an ambient growth factor is applied to existing traffic volumes to account for future projects in the study area and population increases, as well as growth in regular traffic volumes due to development projects outside the study area. The recent construction of the I-96 & Latson Road interchange has resulted in significant changes in traffic patterns throughout the study area. As a result, historical traffic volumes do not provide an accurate representation of traffic growth in the area. Therefore, publicly available data from the Southeast Michigan Council of Governments (SEMCOG), including population and employment forecasts for Genoa Township were referenced.

The SEMCOG data indicates annual population and employment growths ranging from 0.35% to 1.64% between 2015 and 2045 as shown in **Table 3**. Therefore, an ambient background growth rate of 0.75% per year will be utilized for this study. The ambient growth rate and trips from the background developments were applied to the existing 2023 traffic volumes for a period of two years to forecast the no-build traffic volumes ***without the proposed development***. The resultant 2025 no-build traffic volumes are summarized on **Figure 7**.

Table 3: Community Annual Growth Rate

Community	Measure	Growth
Genoa Township	Employment	0.38%
	Population	1.54%
Howell	Employment	0.35%
	Population	0.57%
Brighton	Employment	0.47%
	Population	0.69%
Brighton Township	Employment	0.63%
	Population	1.64%
Average		0.78%



**Latson Commercial Development
Genoa Township, MI**

**Figure 7
No-Build Traffic Volumes**

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No-Build Traffic Conditions

No-build peak hour vehicle delays and LOS were calculated at the study intersections based on the existing lane configurations and traffic control shown on **Figure 5**, the no-build traffic volumes shown on **Figure 7**, and the methodologies presented in the HCM. The results of the analysis of no-build conditions are presented in Appendix C, summarized in **Table 4**, and described in further detail below.

Table 4: No-Build Traffic Conditions

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				Existing		No-Build		Existing		No-Build	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.5	D	43.8	D	44.9	D
			Thru	30.8	C	33.0	C	39.6	D	42.5	D
			Right	21.4	C	23.2	C	26.9	C	28.7	C
		WB	Left	49.4	D	74.1	E	64.6	E	83.4	F
			Thru	26.7	C	28.3	C	37.2	D	42.2	D
			Right	12.7	B	13.2	B	56.9	E	104.3	F
		NB	Left	44.3	D	43.9	D	73.0	E	126.4	F
			Thru	36.4	D	37.5	D	39.7	D	47.6	D
			Right	62.3	E	71.9	E	28.1	C	31.7	C
		SB	Left	41.7	D	43.4	D	108.2	F	158.9	F
			Thru	30.1	C	31.5	C	40.8	D	44.4	D
			Right	24.9	C	24.6	C	25.2	C	24.8	C
		Overall				35.9	D	39.4	D	48.7	D
Latson Road & Grand Oaks Drive / Ascension Medical Drive	Signal	EB	Left	30.8	C	30.7	C	27.4	C	27.2	C
			Thru/Right	37.9	D	37.8	D	33.3	C	33.1	C
		WB	Left	37.9	D	37.9	D	37.1	D	37.1	D
			Thru/Right	28.9	C	28.8	C	24.5	C	24.3	C
		NB	Left	8.4	A	10.1	B	15.2	B	18.0	B
			Thru/Right	6.0	A	6.3	A	10.3	B	12.4	B
		SB	Left	10.2	B	10.4	B	12.8	B	16.2	B
			Thru/Right	13.0	B	14.9	B	21.7	C	24.8	C
Overall				13.0	B	13.8	B	18.3	B	20.0	C
Latson Road & Wal-Mart Drive	STOP (Minor)	EB	Left/Right	16.0	C	19.9	C	24.6	C	30.2	D
		NB	Left	10.1	B	11.4	B	12.2	B	13.1	B
			Thru	Free		Free		Free		Free	
SB	Thru/Right	Free		Free		Free		Free			
Latson Road & Lowes Drive	STOP (Minor)	EB	Left/Right	15.0	C	18.4	C	42.2	E	65.1	F
		NB	Left	10.0	B	11.3	B	13.5	B	15.0	B
			Thru	Free		Free		Free		Free	
		SB	Thru/Right	Free		Free		Free		Free	

The results of the no-build conditions analysis indicate that all approaches and movements would continue to operate similar to existing conditions during both peak hours with the exception of the signalized intersection of Grand River Avenue & Latson Road which would be reduced to an overall LOS E during the PM peak hour. Additionally, several approaches and movements would be reduced to a LOS E or F including the WB left-turn movement during the AM peak hour and WB left

and right-turn movements and NB left-turn movement during the PM peak hour. At all other study intersections, no-build conditions remain acceptable and/or similar to existing conditions.

Review of network simulations continue to indicate acceptable traffic operations during the AM peak hour and significant vehicle queues are not observed. During the PM peak hour, long vehicle queues and cycle failures occur with increased frequency at the intersection of Grand River Avenue & Latson Road, as compared to existing conditions. Specifically, a long vehicle queue is observed for the SB left-turn movement and WB right-turn movement which exceeds available storage length throughout the majority of the PM peak hour. It should be noted that these operations reflect modeled prohibition of all right turns on red at this intersection. The dynamic case signs allow for additional right turn demand processing and would result in shorter queues for actual field conditions.

No-Build Improvements

In order to improve traffic operations in the no-build conditions, mitigation measures were investigated. At the intersection of Grand River Avenue & Latson Road, recent improvements were made as part of the I-96 & Latson Road interchange project to provide dual left-turn lanes and right turn overlap phasing on all approaches, as well as additional travel lanes along Latson Road. The intersection of Grand River Avenue & Latson Road is considered to be built out, and additional physical capacity improvements (i.e., additional lanes) at this intersection are constrained by available right-of-way. Therefore, further geometric improvements at the intersection to mitigate all movements to a LOS D or better are considered to be regional and beyond the scope and context of this study.

As a result, improvements at Grand River Avenue & Latson Road are limited to signal timing and traffic control modifications. Signal cycle length and timing changes were therefore evaluated. The results of this analysis indicate that optimized timings with a 90 second cycle length during both peak hours would result in improved traffic operations; however, several intersection approaches and movements would continue to operate at a LOS E or F during the peak hours (noting modeling constraints for dynamic right turn on red). The results of the no-build conditions analysis with the optimized signal timings are summarized in **Table 5**.

Although these improvements are needed to help mitigate no-build operations; these improvements are not included in any planned roadway improvements. Therefore, the build conditions analysis for this study evaluates traffic operations with the existing traffic signal timings and geometrics at the intersections.

Table 5: No-Build Traffic Conditions with Improvements

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				No-Build		No-Build IMP		No-Build		No-Build IMP	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.5	D	44.9	D	48.4	D
			Thru	33.0	C	32.8	C	42.5	D	47.1	D
			Right	23.2	C	23.7	C	28.7	C	27.5	C
		WB	Left	74.1	E	47.1	D	83.4	F	63.4	E
			Thru	28.3	C	26.8	C	42.2	D	41.5	D
			Right	13.2	B	13.2	B	104.3	F	78.4	F
		NB	Left	43.9	D	47.2	D	126.4	F	64.3	E
			Thru	37.5	D	37.5	D	47.6	D	65.8	E
			Right	71.9	E	58.6	E	31.7	C	33.5	C
		SB	Left	43.4	D	54.7	D	158.9	F	80.0	F
			Thru	31.5	C	32.5	C	44.4	D	57.3	E
			Right	24.6	C	25.3	C	24.8	C	26.8	C
		Overall			39.4	D	38.6	D	65.5	E	55.2

Build Conditions

The proposed development plan includes construction of a 2,950 SF coffee-shop with drive-through, 2,700, SF sit-down restaurant, 4,025 SF of general retail space, and automated car wash. Two different site access alternatives were evaluated for the development per the request of LCRC. Alternative 1 analyzes a single site driveway to Latson Road aligned with the existing Lowes Drive. Alternative 2 includes an additional right-in-right-out only driveway to Latson Road at the north end of the subject site.

Site Trip Generation

The number of AM and PM peak hour vehicle trips that will be generated by the proposed development will be forecast based on the rates and equations published by ITE in *Trip Generation, 11th Edition*. The proposed development plans include a 2,950 SF coffee-shop with drive-through, 2,700 SF sit-down restaurant, 4,025 SF of general retail space, and automated car wash.

The proposed uses were matched to the ITE land use category that most closely matches their proposed operation. For this study, ITE *Land Use #822, Strip Retail Plaza* was utilized for the retail space, *Land Use #932, High-Turnover Sit-Down Restaurant*, was utilized for the proposed restaurant, *Land Use #937, Coffee-Shop with Drive-Through* was utilized for the coffee-shop, and *Land Use #948, Automated Car Wash* was utilized for the carwash. For Land Use #948, trip generation data is not available during the AM peak hour as most carwashes are closed during this time frame or generate small amounts of traffic; however, to provide a conservative approach, AM peak hour trips were forecast to be 25% of the PM peak hour trips for this study.

As is typical of most retail and restaurant uses, a portion of the site-generated trips are already present on the adjacent road network and are interrupted to visit the site. These trips are known as 'pass-by' trips, which create turning movements at the site driveways, but do not increase traffic volumes on the adjacent road network or off-site intersections. Similar to pass-by trips, a portion of

the site-generated trips are vehicles that are traveling on the adjacent roadway that alter their direction of travel to visit the site then return to their original route. These trips are known as “diverted-link” trips. For the purposes of this study, pass-by trips were assumed to follow existing traffic patterns along Latson Road. Diverted link trips were applied to turning movements patterns at the intersection of Grand River Avenue & Latson Road.

ITE publishes pass-by rates for various commercial land uses in the *Trip Generation Handbook*. For Land Use #822 and #932, 34% and 43% of trips are expected to be pass-by in nature. ITE does not publish pass-by data for Land Use #937 or #948. For Land Use #937, 50% of trips were assumed to be pass-by in nature consistent with other fast-food with drive-through uses. For Land Use #948, 35% of trips were assumed to be pass-by in nature based on data for drive-in banks and other retail uses. The diverted-link trips are assumed to represent a portion of the pass-by trips, not an additional reduction to overall site trip generation. These trips are already present at the intersection of Grand River Avenue & Latson Road but divert to visit the site. The number of pass-by and diverted-link vehicle trips was subtracted from the total number of site-generated trips to determine the number of new peak hour trips for the overall development. The resultant trip generation forecast for the proposed development is shown in Table 6.

Table 6: Site Trip Generation

Land Use	ITE Code	Amount	Units	ADT	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Strip Retail Plaza	822	4,025	SF	400	9	6	15	21	20	41
		Pass-By (34% PM)		136	0	0	0	7	7	14
		New Trips		264	9	6	15	14	13	27
High-Turnover (Sit-Down) Restaurant	932	2,700	SF	289	14	12	26	15	9	24
		Pass-By (43%)		124	5	5	10	5	5	10
		New Trips		165	9	7	16	10	4	14
Coffee Shop with Drive-Through	937	2,950	SF	1,574	129	124	253	58	57	115
		Pass-By (50%)		787	63	63	126	29	29	58
		New Trips		787	66	61	127	29	28	57
Automated Car Wash	948	1	Tunnel	0	10	10	20	39	39	78
		Pass-By (35%)		0	3	3	6	13	13	26
		New Trips		0	7	7	14	26	26	52
Total		Total Trips		2,263	162	152	314	133	125	258
		Pass-By Trips		1,047	71	71	142	54	54	108
		New Trips		1,216	91	81	172	79	71	150

Trip Distribution

The vehicle trips that would be generated by the proposed development were assigned to the study road network based on existing peak hour traffic patterns, local population densities, and ITE methodologies. These methods indicate that pass-by trips enter and exit the development in their original direction of travel and new trips will return to their direction of origin. Peak hour traffic volumes on Grand River Avenue and Latson Road were reviewed together with local population densities to determine the origin and destinations of new site-generated traffic. Pass-by traffic was

assumed to follow existing traffic patterns along Latson Road and at the intersection of Grand River Avenue & Latson Road. The resultant site trip distribution is summarized in **Table 7**.

Site-generated trips were assigned to the site driveways based on these trip distribution percentages and the proposed site access plan for each alternative. For Alternative 1, all trips were assigned to enter and exit the site via the single site driveway. For Alternative 2, the north site driveway is expected to service both the carwash and retail uses while the south site driveway is expected to primarily service the retail / restaurant uses. Therefore, all retail / restaurant traffic was assumed to utilize the south site driveway while all car-wash traffic was assumed to utilize the north site driveway with the exception of restricted turning movements at the north site driveway. Traffic for these movements was assumed to utilize the south site driveway.

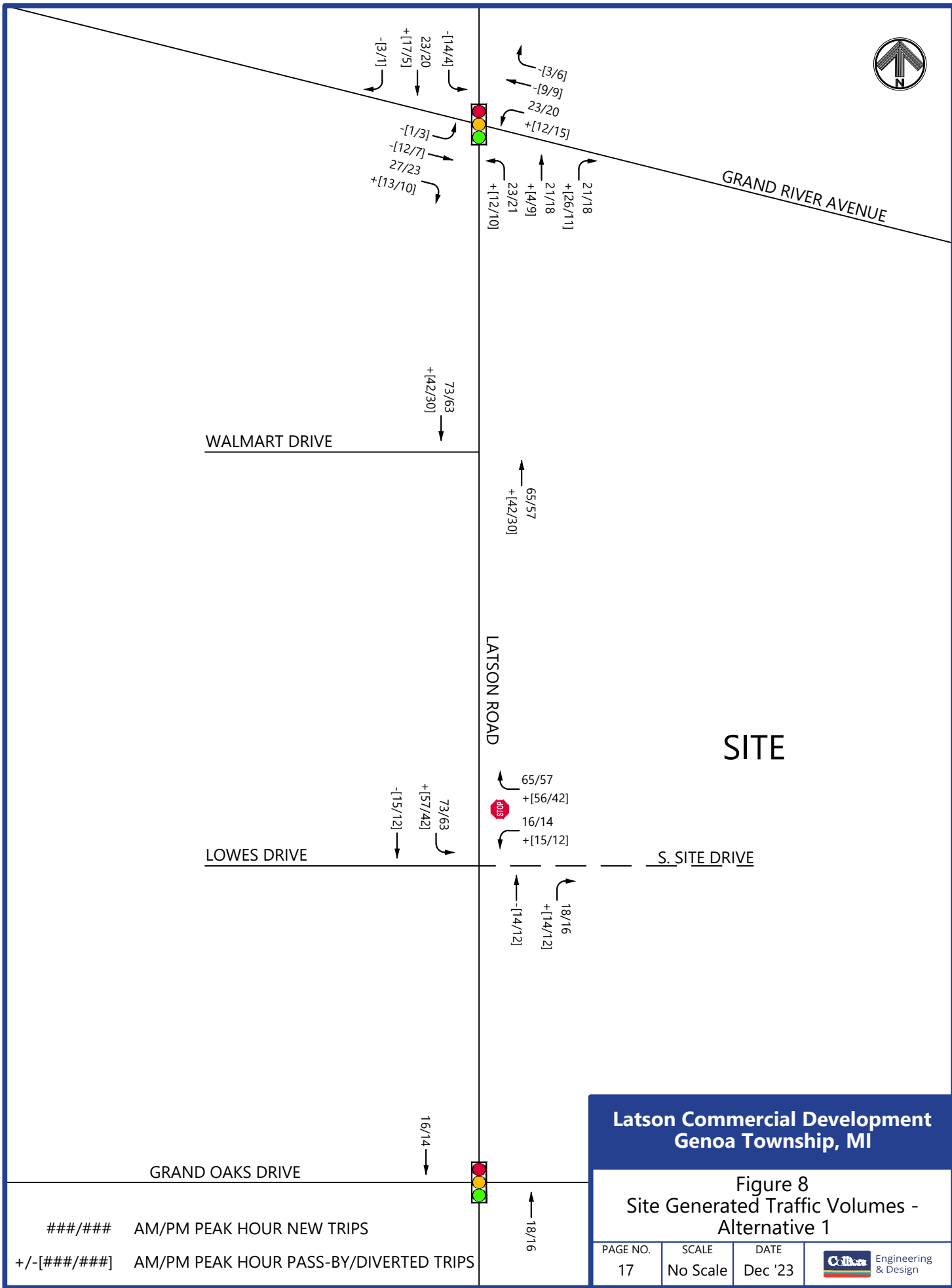
Table 7: Site Trip Distribution

NEW TRIPS			PASS-BY / DIVERTED TRIPS				
To/From	Via	AM/PM	From	To	Via	AM	PM
North	Latson Road	25%	South	North	Latson Road	19%	22%
South	Latson Road	20%	North	South	Latson Road	22%	22%
East	Grand River Avenue	25%	North	East	Grand River Avenue	19%	7%
West	Grand River Avenue	30%	North	West	Grand River / Latson	4%	2%
			West	North	Grand River / Latson	2%	12%
			West	East	Grand River / Latson	17%	17%
			East	North	Grand River / Latson	4%	5%
			East	West	Grand River / Latson	13%	13%
Total		100%	Total			100%	100%

The site-generated vehicle trips were assigned to the study network as shown on **Figure 8** and **Figure 9**. These trips were added to the 2025 no-build traffic volumes shown on **Figure 7** to calculate the future build traffic volumes shown on **Figure 10** and **Figure 11**.

Build Conditions – Alternative 1

Future build peak hour vehicle delays and LOS with the proposed development were calculated based on existing lane configurations and traffic control shown on **Figure 5**, build traffic volumes shown on **Figure 10**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. The build conditions results for site access Alternative 1 are included in **Appendix D** and summarized in **Table 8**.

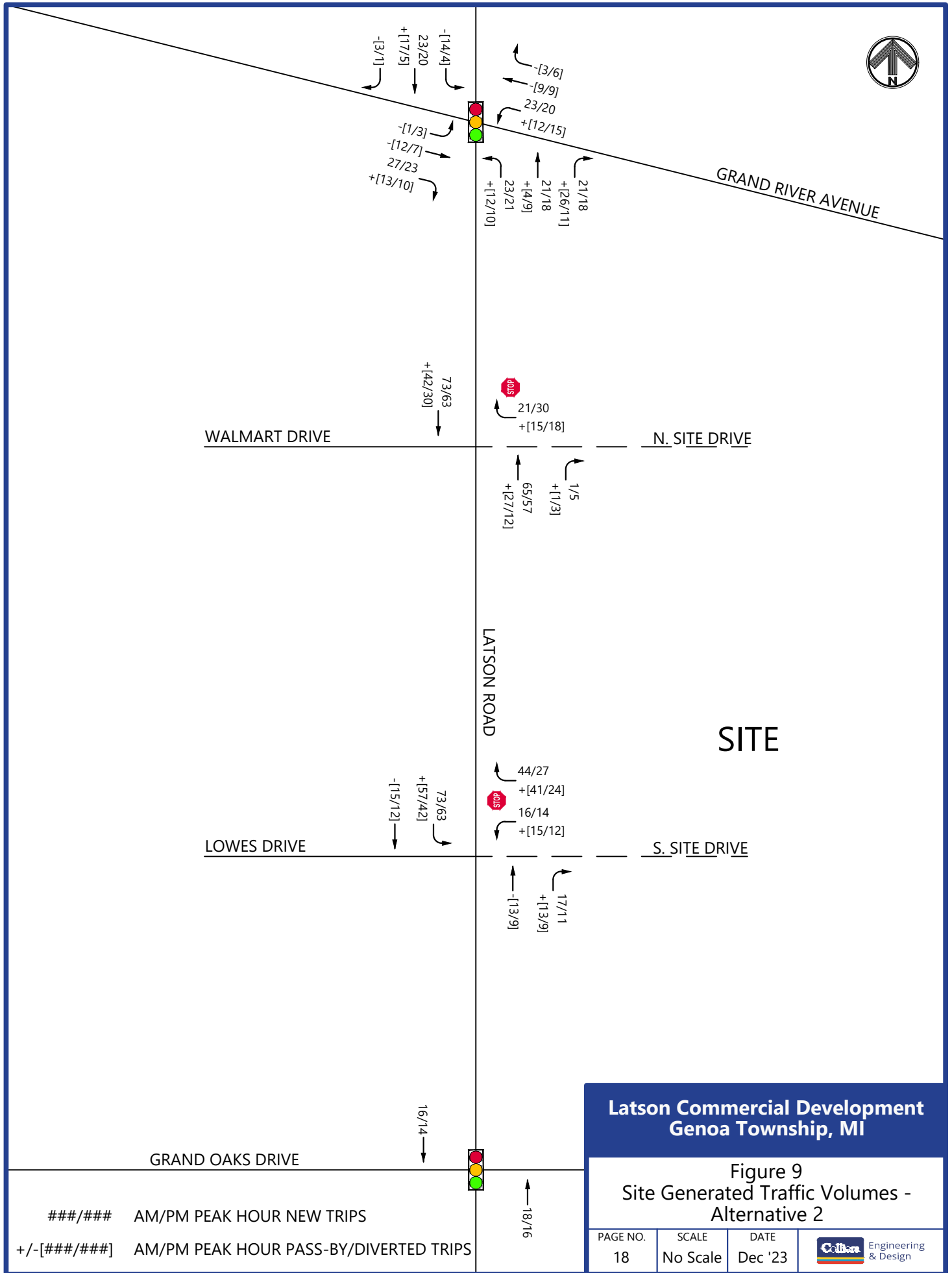


###/### AM/PM PEAK HOUR NEW TRIPS
 +/-[###/###] AM/PM PEAK HOUR PASS-BY/DIVERTED TRIPS

**Latson Commercial Development
 Genoa Township, MI**

**Figure 8
 Site Generated Traffic Volumes -
 Alternative 1**

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GRAND RIVER AVENUE

622/384
617/567
142/134

144/674
405/873
251/554

66/277
531/667
206/327

359/407
224/647
224/423

WALMART DRIVE

994/1310
80/138

25/27
40/88

782/1450
29/32

LATSON ROAD

LOWES DRIVE

130/105
888/1254
16/39

121/99
31/26

S. SITE DRIVE

13/43
30/102

32/28
677/1340
43/127

GRAND OAKS DRIVE

21/5
731/1095
112/98

17/16
3/12
11/43

46/87
8/3
159/225

62/12
729/1361
207/206

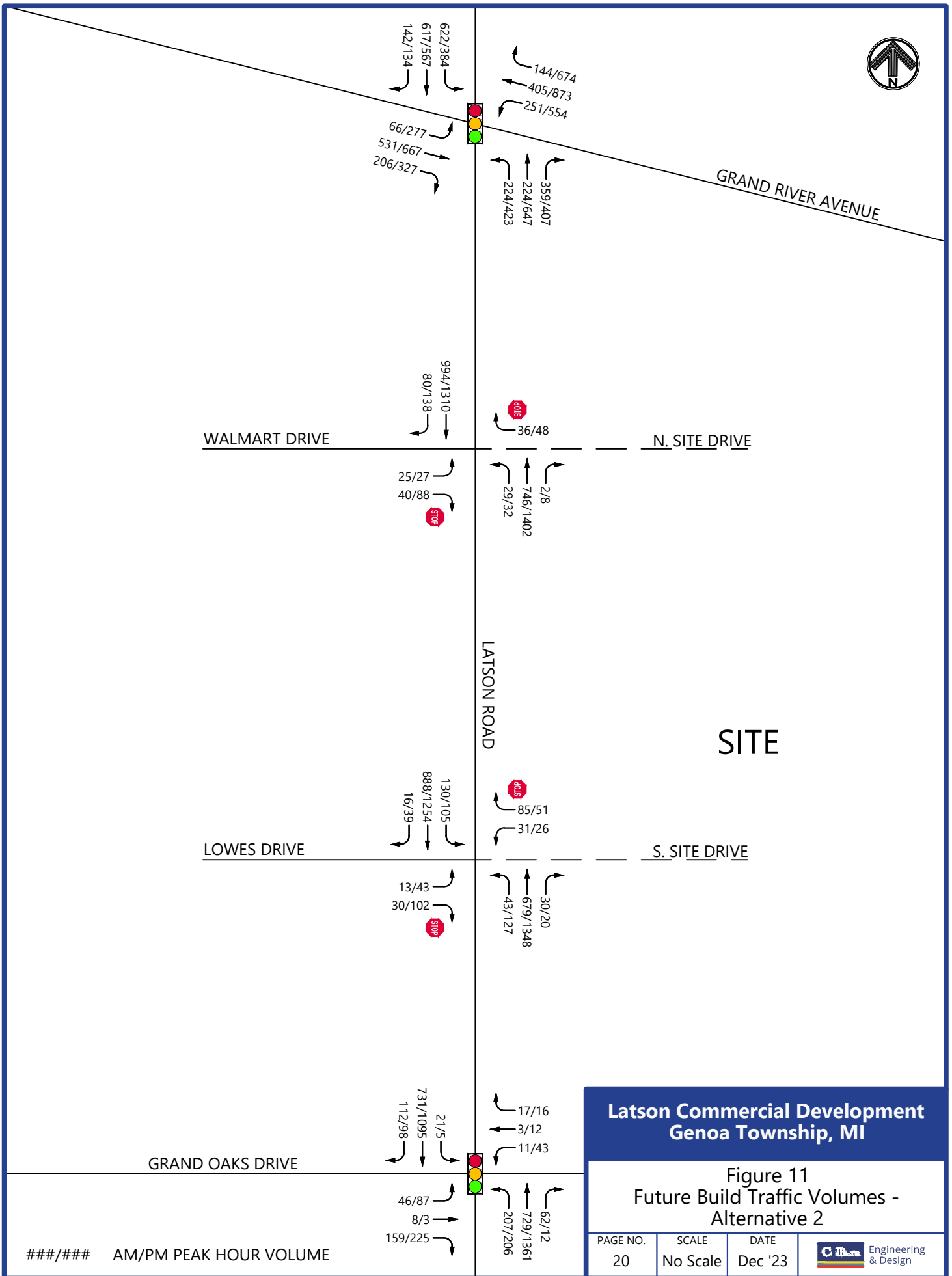
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**Latson Commercial Development
Genoa Township, MI**

**Figure 10
Future Build Traffic Volumes -
Alternative 1**

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###/### AM/PM PEAK HOUR VOLUME



###/### AM/PM PEAK HOUR VOLUME

**Latson Commercial Development
Genoa Township, MI**

**Figure 11
Future Build Traffic Volumes -
Alternative 2**

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Table 8: Build Traffic Conditions - ALT 1

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				No-Build		Build - ALT 1		No-Build		Build - ALT 1	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.5	D	44.9	D	44.8	D
			Thru	33.0	C	32.4	C	42.5	D	41.9	D
			Right	23.2	C	23.1	C	28.7	C	30.9	C
		WB	Left	74.1	E	114.2	F	83.4	F	105.0	F
			Thru	28.3	C	27.8	C	42.2	D	41.2	D
			Right	13.2	B	13.1	B	104.3	F	99.3	F
		NB	Left	43.9	D	43.1	D	126.4	F	159.3	F
			Thru	37.5	D	38.4	D	47.6	D	51.4	D
			Right	71.9	E	111.3	F	31.7	C	34.0	C
		SB	Left	43.4	D	42.9	D	158.9	F	153.5	F
			Thru	31.5	C	34.6	C	44.4	D	47.2	D
			Right	24.6	C	25.9	C	24.8	C	24.8	C
		Overall				39.4	D	47.0	D	65.5	E
Latson Road & Grand Oaks Drive / Ascension Medical Drive	Signal	EB	Left	30.7	C	30.7	C	27.2	C	27.2	C
			Thru/Right	37.8	D	37.8	D	33.1	C	33.1	C
		WB	Left	37.9	D	37.9	D	37.1	D	37.1	D
			Thru/Right	28.8	C	28.8	C	24.3	C	24.3	C
		NB	Left	10.1	B	10.3	B	18.0	B	18.4	B
			Thru/Right	6.3	A	6.4	A	12.4	B	12.6	B
		SB	Left	10.4	B	10.4	B	16.2	B	16.4	B
			Thru/Right	14.9	B	15.1	B	24.8	C	25.2	C
Overall				13.8	B	13.8	B	20.0	C	20.2	C
Latson Road & Wal-Mart Drive	STOP (Minor)	EB	Left/Right	19.9	C	23.1	C	30.2	D	35.3	E
		NB	Left	11.4	B	12.3	B	13.1	B	13.9	B
			Thru	Free		Free		Free		Free	
SB	Thru/Right	Free		Free		Free		Free			
Latson Road & Lowes Drive / Site Drive	STOP (Minor)	EB	Left	18.4	C	316.2	F	65.1	F	4,441.6	F
			Thru/Right			13.2	B			18.0	C
		WB	Left			296.3	F			2,842.9	F
			Thru/Right			13.2	B			18.4	C
		NB	Left	11.3	B	11.2	B	15.0	B	14.8	B
			Thru	Free		Free		Free		Free	
		SB	Left			10.8	B			14.8	B
			Thru/Right	Free		Free		Free		Free	

The results of the build conditions analysis indicate that the proposed development will not have a significant impact on the adjacent road network. All approaches and movements at the signalized intersections will continue to operate in a manner similar to no-build conditions and LOS for all movements will remain unchanged with the exception of the WB left-turn movement and NB right-turn movements at the intersection of Grand River Avenue & Latson Road which will be reduced from a LOS E to LOS F during the AM peak hour.

Most approaches will continue to operate acceptably at a LOS D or better during both peak hours. The signalized intersection of Grand River Avenue & Latson Road will continue to worsen with the

addition of site-generated traffic if those movements operating at a LOS E or F are not improved under no-build conditions.

At the proposed site driveway under site access Alternative 1, all approaches and movements will operate acceptably with the exception of the STOP controlled site driveway and Lowes Driveway left-turn movements which will operate at a LOS F during both peak hours. Review of peak hour simulations also indicate future build traffic operations which are similar to no-build conditions. Acceptable traffic operations are continued to be observed during the AM peak hour with no significant vehicle queues. Long vehicle queues and cycle failures are continued to be observed at the intersection of Grand River Avenue & Latson Road during the PM peak hour with queues for the NB, WB, and SB left-turn movements and WB right-turn movement exceeding available storage length. Additionally, brief periods of long vehicle queues are observed for the STOP controlled Lowes and site driveway approaches during the PM peak hour.

Vehicle queue lengths were also calculated and evaluated with respect to the proposed site driveways. On Latson Road, the NB approach queue from the signalized intersection of Grand River Avenue & Latson Road is critical to ingress and egress operation from the proposed site driveway. The queue length calculations based on SimTraffic simulations indicate queues from the intersection of Grand River Avenue & Latson Road will not block the site driveway during the AM peak hour; however, the NB left-turn queue will block the site driveway for approximately five minutes of the PM peak hour.

Build Improvements

In order to improve traffic operations in the build conditions, the mitigation measures previously identified under no-build conditions were investigated at the intersection of Grand River Avenue & Latson Road. Additionally, a traffic signal warrant analysis was investigated at the proposed site driveway / Lowes Driveway intersection with Latson Road to improve site egress operations. The *Michigan Manual on Uniform Traffic Control Devices (MMUTCD)* documents the standards, support, and guidance to determine whether installation of a traffic control signal is justified at a particular location. For this analysis, Warrant 1 – Eight Hour Vehicular Volume and Warrant 2 – Four Hour Vehicular volume were evaluated. Warrant 1 and 2 are intended for application at locations where (Condition A) there is a large volume of intersecting traffic, or (Condition B) traffic volumes on a major street are so heavy that traffic on a minor approach suffers excessive delay or conflict in entering the major street.

The MMTUCD provides an option to analyze reduced volume (70%) thresholds in cases where the speed on the major street exceeds 40 mph. As the speed limit on Latson Road is 50 mph, the 70% threshold volumes were utilized in the analysis. The future traffic forecast for this study includes traffic volumes for only two hours (AM and PM peak hours). In order to evaluate the 8-hour traffic signal warrant, hourly variations for trip generation of each of the proposed uses and existing Lowes / Wal-Mart uses published by ITE were referenced. These variation rates were applied to the PM peak hour forecasts to determine future site traffic volumes for 24-hours. Existing traffic volumes along Latson Road were determined from 24-hour count data collected in October, 2021.

For this analysis, the existing Wal-Mart Drive intersection to the north was assumed to be restricted to a right-in-right-out only driveway with all left-turns reassigned to the Lowes driveway. Currently, a pork chop island is constructed within the driveway suggesting that turns were intended to be prohibited; however, there is no existing signage to actually prohibit turns from occurring. Additionally, the MMUTCD states that right-turn traffic should not be included in the minor street volume if the movement enters the major street with minimal conflicts. If a signal were to be installed at the intersection, separate lanes for left and right-turns should be provided on both the Lowes and site driveway approaches. Therefore, a 45% reduction to right-turn volumes on these approaches was utilized in accordance with the MDOT signal warrants spreadsheet.

The traffic signal warrant analysis results show that a signal is warranted at the intersection of Latson Road & Lowes Drive / Site Drive, as Warrant 1A would be met for eleven (11) hours of the day. Therefore, an actuated-coordinated traffic signal could be installed at the intersection with vehicle detection provided for the minor road approaches and movements. Additionally, permissive-protected left-turn phase is recommended for the NB and SB left-turn movements at the intersection. The relevant signal warrant analysis spreadsheets are included in **Appendix D**.

With the installation of a traffic signal at the intersection, all traffic signals along Latson Road from Grand River Avenue through the I-96 interchange should run on a 90 second cycle length to provide progression along Latson Road between the closely spaced intersections. The results of the build conditions analysis with these improvements are summarized in **Table 9** below and indicate improved operations at the intersection of Grand River Avenue & Latson Road; however, several approaches and movements will continue to operate at a LOS E or F during the peak hours. As previously discussed, this intersection is considered to be built out, and additional physical capacity improvements (i.e., additional lanes) are constrained by available right-of-way. Therefore, further geometric improvements at the intersection to mitigate all movements to a LOS D or better are considered to be regional and beyond the scope and context of this study.

At the intersection of Latson Road & Lowes Drive / site driveway, the installation of a traffic signal would result in all approaches and movements operating at a LOS D or better during both peak hours. Review of network simulations also indicates acceptable traffic operations at all study intersections with the exception of the Grand River Avenue & Latson Road intersection where long vehicle queues are continued to be observed for the WB approach during portions of the PM peak hour. However, simulations indicate that traffic is able to progress through the traffic signals along Latson Road with no queue spillback between the closely spaced intersections.

Table 9: Build Traffic Conditions with Improvements – ALT 1

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour					
				Build - ALT 1		Build IMP		Build - ALT 1		Build IMP			
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
Latson Road & Grand River Avenue (I-96 BL)	Signal	EB	Left	43.5	D	43.5	D	44.8	D	48.3	D		
			Thru	32.4	C	33.9	C	41.9	D	52.6	D		
			Right	23.1	C	24.9	C	30.9	C	30.9	C		
		WB	Left	114.2	F	49.8	D	105.0	F	79.3	E		
			Thru	27.8	C	26.6	C	41.2	D	44.8	D		
			Right	13.1	B	13.1	B	99.3	F	85.0	F		
		NB	Left	43.1	D	51.1	D	159.3	F	81.9	F		
			Thru	38.4	D	42.5	D	51.4	D	63.5	E		
			Right	111.3	F	77.2	E	34.0	C	35.7	D		
		SB	Left	42.9	D	51.6	D	153.5	F	77.1	E		
			Thru	34.6	C	35.2	D	47.2	D	53.8	D		
			Right	25.9	C	26.2	C	24.8	C	25.9	C		
		Overall				47.0	D	41.5	D	69.4	E	59.1	E
Latson Road & Grand Oaks Drive / Ascension Medical Drive	Signal	EB	Left	30.7	C	34.8	C	27.2	C	32.4	C		
			Thru/Right	37.8	D	50.1	D	33.1	C	46.4	D		
		WB	Left	37.9	D	42.9	D	37.1	D	44.9	D		
			Thru/Right	28.8	C	32.6	C	24.3	C	28.9	C		
		NB	Left	10.3	B	7.1	A	18.4	B	9.3	A		
			Thru/Right	6.4	A	6.2	A	12.6	B	11.1	B		
		SB	Left	10.4	B	0.3	A	16.4	B	0.9	A		
			Thru/Right	15.1	B	1.6	A	25.2	C	4.0	A		
		Overall				13.8	B	9.3	A	20.2	C	12.6	B
		Latson Road & Lowes Drive / Site Drive	Signal	EB	Left	316.2	F	42.5	D	4,441.6	F	52.2	D
Thru/Right	13.2				B	34.9	C	18.0	C	51.0	D		
WB	Left			296.3	F	36.6	D	2,842.9	F	44.0	D		
	Thru/Right			13.2	B	39.5	D	18.4	C	46.6	D		
NB	Left			11.2	B	6.0	A	14.8	B	5.3	A		
	Thru			Free		1.0	A	Free		2.1	A		
SB	Left			10.8	B	6.1	A	14.8	B	5.1	A		
	Thru/Right			Free		1.5	A	Free		2.0	A		
Overall						5.7	A			6.9	A		

Build Conditions – Alternative 2

Future build peak hour vehicle delays and LOS with the proposed development were calculated based on existing lane configurations and traffic control shown on **Figure 5**, build traffic volumes shown on **Figure 11**, and HCM methodologies. SimTraffic simulations were also utilized to evaluate traffic flow and vehicle queues throughout the study network. As traffic volumes would remain the same at the off-site intersections under both site access alternatives, this section only summarizes results at the proposed site driveways along Latson Road. The build conditions results for site access Alternative 2 are included in **Appendix E** and summarized in **Table 10**.

The results of the build conditions analysis for site access Alternative 2 indicate that the STOP controlled left-turn movements from the Lowes Driveway and S. site driveway would continue to

operate at a LOS F during the peak hours; however, the proposed right-in-right-out only driveway would help to reduce vehicular delays and queues. Additionally, although the results of Alternative 1 demonstrate acceptable traffic operations with the installation of a traffic signal at the Lowes Driveway / S. site driveway intersection with Latson road, another closely spaced traffic signal along Latson Road may result in increased crashes along the corridor. The addition of a right-in-right-out only driveway would have minimal impact to traffic operations and safety along the corridor if designed and signed properly and would provide a remedial measure prior to installing a new traffic signal along the corridor. Therefore, site access Alternative 2 is recommended for the development.

Table 10: Build Traffic Conditions – ALT 2

Intersection	Control	Approach	Movement	AM Peak Hour				PM Peak Hour			
				Build - ALT 1		Build - ALT 2		Build - ALT 1		Build - ALT 2	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Latson Road & Wal-Mart Drive / RIRO Site Drive	STOP (Minor)	EB	Left/Right	23.1	C	27.9	D	35.3	E	48.1	E
		WB	Right			13.4	B			19.6	C
		NB	Left	12.3	B	12.3	B	13.9	B	13.9	B
			Thru	Free		Free		Free		Free	
SB	Thru/Right	Free		Free		Free		Free			
Latson Road & Lowes Drive / Site Drive	STOP (Minor)	EB	Left	316.2	F	265.3	F	4,441.6	F	3,752.1	F
			Thru/Right	13.2	B	13.2	B	18.0	C	18.0	C
		WB	Left	296.3	F	296.3	F	2,842.9	F	2,842.9	F
			Thru/Right	13.2	B	12.6	B	18.4	C	16.3	C
		NB	Left	11.2	B	11.2	B	14.8	B	14.8	B
			Thru	Free		Free		Free		Free	
		SB	Left	10.8	B	10.8	B	14.8	B	14.8	B
			Thru/Right	Free		Free		Free		Free	

Conclusions

The Conclusions related to this Traffic Impact Study and relative analyses are as follows:

1. Existing weekday AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hour turning movement counts were collected by CED at the study intersections. At the signalized intersections of Latson Road with Grand River Avenue and Grand Oaks Drive, counts were collected on Wednesday, November 13th, 2019. At the unsignalized Lowes and Wal-Mart driveways with Latson Road, counts were collected on Thursday, August 10th, 2023.
2. All study intersection approaches and movements currently operate acceptably at a LOS D or better during both peak hours with the exception of the following:
 - a. The NB right-turn movement at the signalized intersection of Grand River Avenue & Latson Road currently operates at a LOS E during the AM peak hour. During the PM peak hour, the NB left-turn movement operates at a LOS E while the WB left, and right-turn movement and SB left-turn movement operate at a LOS F.
 - b. The STOP controlled Lowes Drive approach which currently operates at a LOS E during the PM peak hour.

3. Ambient traffic growth of 0.75% was applied to establish 2025 no-build traffic volumes without the proposed development. Several background developments were also identified in the study area and included in this study.
4. No-build conditions analyses indicate that several movements at the intersection of Grand River Avenue & Latson Road will experience degraded operations.
5. Future build conditions analyses indicate that most study intersection approaches and movements will continue to operate acceptably; however, there are several movements with undesirable or failing conditions at the intersection of Grand River Avenue & Latson Road that are expected to worsen in the future if those movements operating at a LOS E or F are not improved under no-build conditions.
6. Under site access Alternative 1, a traffic signal is warranted at the intersection of Latson Road & Lowes Drive / Site Drive and would operate acceptably during the peak hours.
7. Under site access Alternative 2, the addition of a right-in-right-out only driveway would help to alleviate vehicular delays at the intersection of Latson Road & Lowes Drive / Site Drive and would provide a remedial measure prior to installing another traffic signal along Latson Road. Therefore, site access Alternative 2 is recommended.
8. With the improvements outlined below, all study network intersections and site driveways will operate acceptably, or in a manner similar or improved compared to no-build conditions during the peak hours.

Based on the results of this study, the following should be considered to provide acceptable traffic operations with the proposed development project:

1. Optimize signal timings at the intersection of Grand River Avenue & Latson Road.
2. Construct two driveways to Latson Road with the S. site driveway aligned with the existing Lowes driveway and the N. site driveway restricted to right-in-right-out only.



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*Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy*

PROPERTY DESCRIPTION:

PROPERTY DESCRIPTION PER KEM-TEC PROJECT
 #21-03542 DATE 11-24-21 PARCEL
 #4711-09-100-004

LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON IN THE STATE OF MICHIGAN AND IS DESCRIBED AS FOLLOWS:

A PART OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 9, TOWN 2 NORTH, RANGE 5 EAST, MICHIGAN, DESCRIBED AS: BEGINNING 6.32 FEET SOUTH OF THE NORTHWEST CORNER OF THE NORTHWEST 1/4, THENCE EAST 223.00 FEET, THENCE NORTH 97.67 FEET, THENCE WEST 223.00 FEET, THENCE SOUTH 97.67 FEET TO THE POINT OF BEGINNING.

PROPERTY DESCRIPTION PER METRO CONSULTING ASSOCIATES PROJECT #1037-17-8480 DATED 01-19-18 PARCEL #4711-04-300-017

Commencing at the Southwest Corner of Section 9, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, said corner being NO 1°46'11" W 19.43 feet from a point referenced in Quit Claim Deed dated January 29, 1957, recorded April 4, 1961 in Liber 391, Page 382, Livingston County Records; thence N0°11'04"07" E 56.81 feet along the North line of said Section 9 and the South line of said Section 4, as established and approved by the Livingston County Reimbursement Peer Group, dated June 6, 2002 and recorded in LSC# 171.0m, Livingston County Records to the POINT OF BEGINNING; thence S59°35'11" E 103.36 feet along the East line of MDOT Right-of-Way as recorded in Instrument #2011R-023812, Livingston County Records; thence N69°33'52" E 150.45 feet along the South line of Parcel 3 as described in a Warranty Deed recorded June 6, 2016, in Instrument # 2016R-019204 and the North line of the Consumers Power Company land per Warranty Deed recorded in 539, Page 13, Livingston County Records; thence S01°11'52" E 125.00 feet along said Consumers Power Company land and parallel with the West line of said Section 4; thence the following four (4) courses along the North, East and South line of a Quit-Claim Deed to Consumers Power Company, recorded in Liber 391, Page 382, Livingston County Records: (1) N69°33'52" E 12.94 feet (recorded as 13.00 feet), (2) S01°11'41"07" E 30.63 feet to the South line of said Section 4, (3) S01°46'21" E 557.91 feet and (4) S68°09'19" W 223.00 feet along the North line of the South 97.67 feet as stated in Warranty Deed recorded in Liber 232, Page 199, Livingston County Records; thence NO 1°46'11" W 61.11 feet along the West line of said Section 9 and within the Right-of-Way of Latson Road (Variable width); thence S69°52'35" E 33.10 feet along the South line of MDOT Right-of-Way as recorded in Instrument #2011R-023812; thence the following two (2) courses along said Right-of-Way: (1) NO 1°07'25" E 333.02 feet and (2) 163.72 feet along the arc of a 10,060.00 foot radius circular curve to the left, with a central angle of 0°05'55"77", having a chord which bears N0°05'55"07" E 163.71 feet to the POINT OF BEGINNING. Containing 2.09 acres of land, more or less. Being part of the SW 1/4 of the SW 1/4 of Section 4 and part of the NW 1/4 of Section 5, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan. Subject to the right of the Public over the West 33.00 feet thereof, as occupied by Latson Road (Variable Width), being subject to any other Easement and restrictions of record, if any.

RESULTANT PARCEL

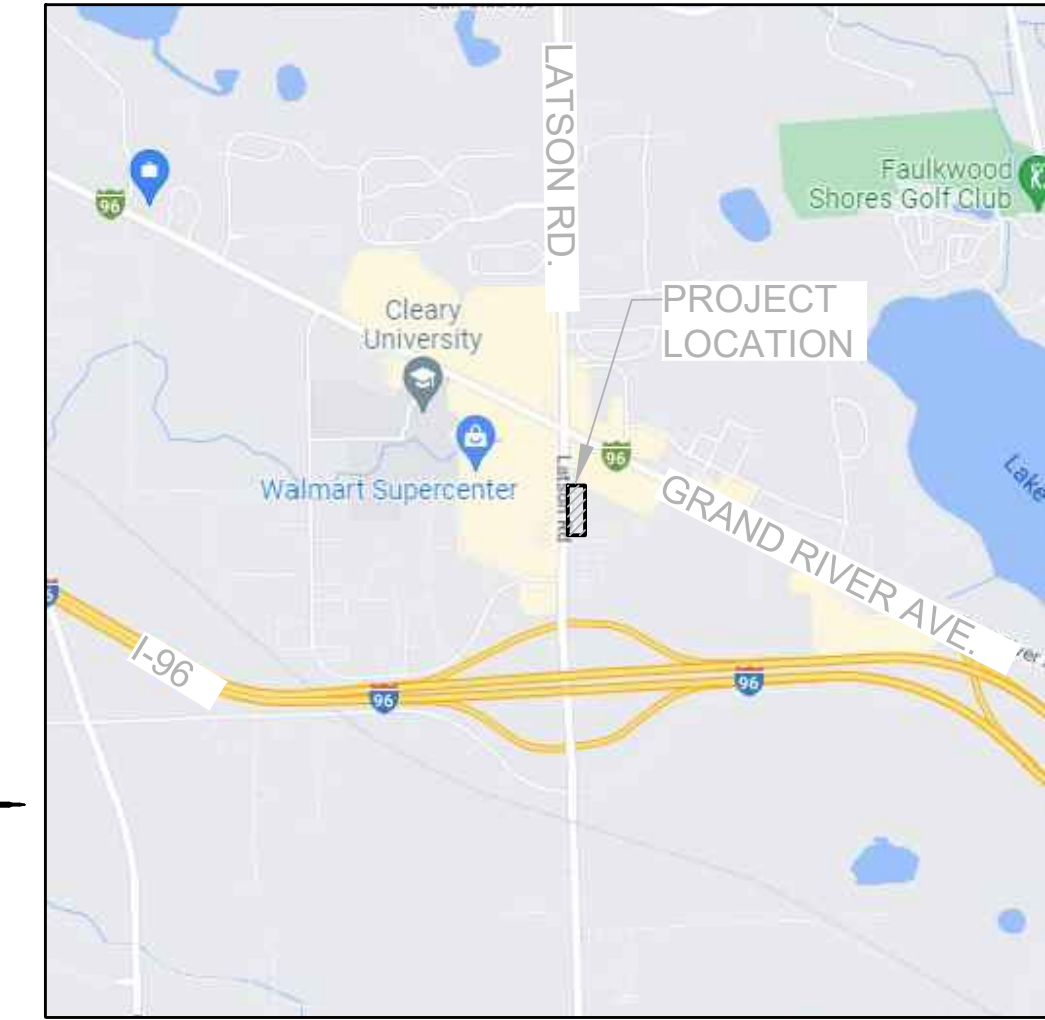
PROPOSED PARCEL 2 (SOUTH):
 Part of the Northwest 1/4 of Section 9, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northwest Corner of Section 9, also being the Southwest 1/4 of Section 4, said corner being North 01 degree 46 minutes 11 seconds West, 19.43 feet from a point referenced in Quit Claim Deed, dated January 29, 1957, recorded April 4, 1961 in Liber 391, Page 382, Livingston County Records; thence along the North line of Section 9 and the South line of Section 4, N 87°18'40" E, 56.81 feet; thence along the East line of MDOT Right-of-Way for Latson Road, as recorded in Instrument #2011R-023812, Livingston County Records, the following two (2) courses: 1) Southerly along an arc left, having a length of 163.71 feet, a radius of 10,091.50 feet, a central angle of 0°05'54", and a long chord which bears S 0°09'23" W, 163.71 feet; thence S 01°07'25" W, 68.33 feet, to the POINT OF BEGINNING of the Parcel to be described; thence N 88°33'38" E, 177.83 feet; thence S 01°46'21" E, 297.42 feet; thence S 01°46'11" E, 97.67 feet; thence S 88°08'19" W, 223.00 feet; thence along the West line of said Section 9 and within the Right-of-Way of Latson Road (Variable Width Right of Way), N 01°46'11" W, 158.78 feet; thence along the South line of MDOT Right-of-Way for Latson Road, as recorded in Instrument #2011R-023812, Livingston County Records, S 88°52'35" E, 33.10 feet; thence along the East line of MDOT Right-of-Way for Latson Road, as recorded in Instrument #2011R-023812, Livingston County Records, the following two (2) courses: 1) N 01°07'25" E, 239.66 feet, to the POINT OF BEGINNING, containing 1.81 acres, more or less, and subject to the rights of the public over the existing Latson Road. Also subject to any other easements or restrictions of record.

Bearings are based on Michigan State Plane Coordinate System, South Zone and legal description per Chicago Title Insurance Company, File No.: 21040145-C, Policy No.: 7430600-224063016, dated 6-4-21.

SITE PLAN FOR SOUTH LATSON COMMERCIAL DEVELOPMENT

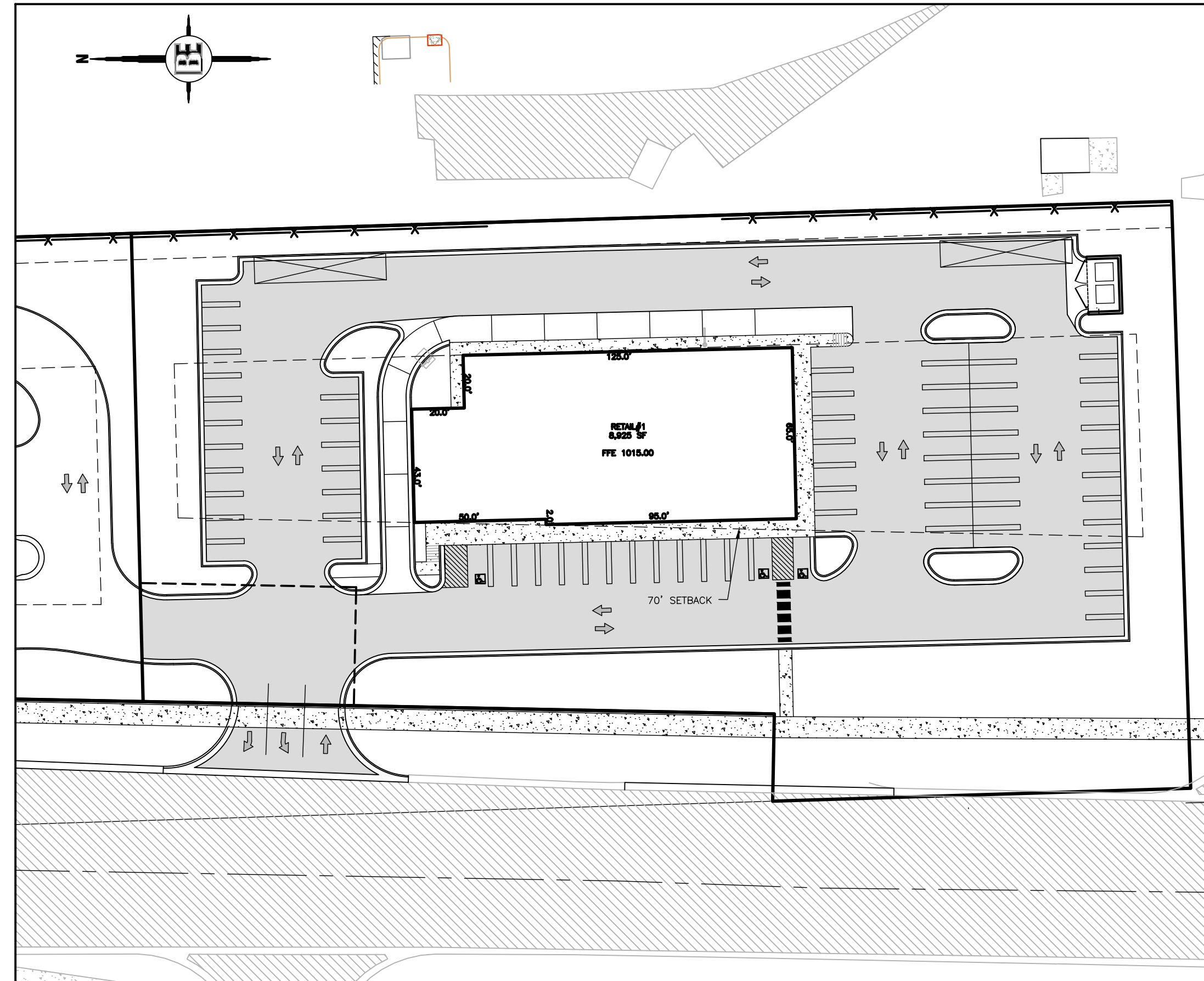
PART OF NW QUARTER, SECTION 4 & 9

GENOA CHARTER TOWNSHIP, LIVINGSTON COUNTY, MI



LOCATION MAP

NO SCALE



OVERALL SITE MAP

NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EXISTING CONDITIONS, DEMO & NATURAL FEATURES PLAN
4	OVERALL SITE PLAN
5	SITE PLAN
6	GRADING & DRAINAGE PLAN
7	SOIL EROSION & SEDIMENTATION CONTROL PLAN
8	UTILITY PLAN
9	LANDSCAPE PLAN
10	CONSTRUCTION DETAILS
11	BASIN DETAILS
12	UNDERGROUND DETENTION DETAILS
13-16	MHOG DETAILS
PLANS BY OTHERS	
1	PHOTOMETRIC PLAN
A.100	FLOOR PLAN
A.200	BUILDING ELEVATION
A.300	BUILDING RENDERING

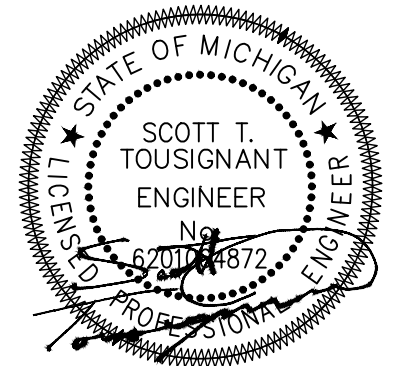
PERMITS & APPROVALS		
AGENCY	DATE SUBMITTED	DATE APPROVED
• TOWNSHIP ENGINEERING APPROVAL	-	-
• LCRC	-	-
• LCDC SESC	-	-
• EGLE - ACT 399	-	-

LIGHTING PREPARED BY:
 GASSER BUSH ASSOCIATES
 30984 INDUSTRIAL RD
 LIVONIA, MI 48150
 QUOTES@GASSERBUSH.COM
 PHONE: 734-266-6705

OWNER:
 1015 LATSON ROAD LLC
 29592 BECK RD
 WIXOM, MI 48393
CONTACT: KEVIN BAHNAM
 PHONE: 248.767.5337
 EMAIL: KBAHNAM@USA2GOQUICKSTORES.COM

PREPARED BY:

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843



517.546.4836 FAX 517.548.1670
CONTACT: SCOTT TOUSIGNANT, P.E.
 EMAIL: SCOTT@BOSSENG.COM

INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

NO	BY	CK	REVISION	DATE	JOB NO: 21-519
4	ST	ST	PER LCRC AND PC COMMENTS	03-14-24	1
3	ST	ST	LAYOUT MODIFICATIONS	01-16-24	
2	ST	ST	PER P.C. MEETING	12-11-23	
1	ST	ST	PER TOWNSHIP COMMENTS	10-25-23	
		CK	REVISION	DATE	

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
2. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
3. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
4. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
5. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
6. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS. WHERE EXISTING CONDITIONS AND/OR THE REQUIREMENTS OF THE PLANS WILL RESULT IN FINISHED CONDITIONS THAT DO NOT MEET ADA REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER PRIOR TO WORK COMMENCING.
7. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON PRIOR TO BEGINNING CONSTRUCTION.
8. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHT-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
9. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
10. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
11. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
12. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
13. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
14. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
15. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
16. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
17. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
18. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
19. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
21. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
22. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
23. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
24. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.
25. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL ITEMS REQUIRED FOR CONSTRUCTION OF THE PROJECT ARE INCLUDED IN THE CONTRACT. ANY ITEMS NOT SPECIFICALLY DESIGNATED IN THE PLANS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
26. THE CONTRACTOR IS RESPONSIBLE FOR HAVING A SET OF APPROVED CONSTRUCTION PLANS, WITH THE LATEST REVISION DATE, ON SITE PRIOR TO THE START OF CONSTRUCTION, IN THE EVENT OF ANY QUESTIONS PERTAINING TO THE INTENT OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR A FINAL DETERMINATION FROM THE DESIGN ENGINEER.
27. THE CONTRACTOR, NOT THE OWNER OR THE ENGINEER, ARE RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCE OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR SAFE EXECUTION OF THE PROJECT SCOPE IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS.
28. THE CONTRACTOR IS RESPONSIBLE FOR PRESERVING CONSTRUCTION STAKING AS NECESSARY. CONTRACTOR TO NOTIFY CONSTRUCTION SURVEYOR OF REPLACEMENT STAKES NEEDED WHICH SHALL BE AT THE CONTRACTORS EXPENSE.
29. THE OWNER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FRANCHISE UTILITY SERVICES (CABLE, ELECTRIC, GAS, ETC.) OWNER AND/OR CONTRACTOR SHALL WORK WITH UTILITY COMPANIES ON FURNISHING SITE UTILITY LAYOUTS AND PROVIDING CONDUIT CROSSINGS AS REQUIRED.
30. DAMAGE TO ANY EXISTING UTILITIES OR INFRASTRUCTURE (INCLUDING PAVEMENT, CURB, SIDEWALK, ETC.) SHALL PROMPTLY BE REPLACED IN KIND AND SHALL BE AT THE CONTRACTORS EXPENSE.
31. COORDINATION OF TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND PER ALL CITY/TOWNSHIP/COUNTY REQUIREMENTS. COPIES OF ALL TEST REPORTS SHALL BE FURNISHED TO THE DESIGN ENGINEER.
32. PRIOR TO THE START OF CONSTRUCTION, PROTECTION FENCING SHALL BE ERECTED AROUND THE TREE DRIPLINE OF ANY TREES INDICATED TO BE SAVED WITHIN THE LIMITS OF DISTURBANCE.
33. THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE PROJECT AREA AND ADJACENT AREAS. WHERE EXISTING DRAINAGE FACILITIES ARE IMPACTED/DISTURBED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY DRAINAGE PROVISIONS.
34. SOIL BORING LOGS ARE REPRESENTATIVE OF SPECIFIC POINTS ON THE PROJECT SITE, AND IF PROVIDED TO THE CONTRACTOR ARE FOR INFORMATIONAL PURPOSES ONLY.
35. WHERE CITY/TOWNSHIP STANDARD CONSTRUCTION DETAILS/SPECIFICATIONS ARE PROVIDED AND ARE IN CONFLICT WITH NOTES AND SPECIFICATIONS HEREIN, THE CITY/TOWNSHIP STANDARD SHALL GOVERN.

INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE, AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

CONTRACTOR TO FOLLOW MANUFACTURER SPECS/RECOMMENDATIONS THAT SUPERCEDE PLANS

GENERAL GRADING & SESC NOTES

1. THE CONTRACTOR SHALL HAVE IN PLACE ALL REQUIRED EROSION CONTROL METHODS AS INDICATED ON THE CONSTRUCTION PLANS AND AS REQUIRED BY GENERAL PRACTICE. SPECIFIC MEANS, METHODS AND SEQUENCES OF CONSTRUCTION MAY DICTATE ADDITIONAL SOIL EROSION CONTROL MEASURES BE NEEDED. THE CONTRACTOR SHALL COORDINATE WITH THE DESIGN ENGINEER ON THESE ANTICIPATED METHODS. ADDITIONAL SOIL EROSION CONTROL METHODS SHALL BE INCIDENTAL TO THE SCOPE OF WORK.
2. ACTUAL FIELD CONDITIONS MAY DICTATE ADDITIONAL OR ALTERNATE SOIL EROSION CONTROL MEASURES BE UTILIZED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DEFICIENCIES OR FIELD CONDITIONS THAT WARRANT ADDITIONAL AND/OR ALTERNATIVE SESC MEASURES BE UTILIZED.
3. AT THE CLOSE OF EACH DAY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL CONSTRUCTION OPERATIONS, MATERIALS, DEBRIS, ETC ARE CONTAINED ON-SITE.
4. AT THE CLOSE OF EACH WORKING DAY, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS AT THE FLOW LINE.
5. ALL SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE PER MDEGL REGULATIONS AND BEST PRACTICES. ALL SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR.
6. THE SOIL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE UNTIL SUCH A TIME THAT THE SITE IS DETERMINED TO BE ESTABLISHED WITH ACCEPTABLE AMOUNT OF VEGETATIVE GROUND COVER.
7. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
8. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
9. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
10. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
11. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOOT CLASS II).

GENERAL LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY. ALL STOCK SHALL BE NURSERY GROWN, CONFORMING TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", AND IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. STOCK SHALL EXHIBIT NORMAL GROWTH HABIT AND BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, & DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
 2. ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT, AND SECURELY WRAPPED AND BOUND.
 3. ALL PLANT BED MATERIALS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, OTHER EXTRANEIOUS OBJECTS, AND POOR SOILS TO A MINIMUM DEPTH OF 12-INCHES AND BACKFILLED TO GRADE WITH SPECIFIED PLANTING MIX (SEE BELOW).
 4. PLANTING MIXTURE SHALL CONSIST OF 5 PARTS TOPSOIL FROM ON-SITE (AS APPROVED), 4 PARTS COARSE SAND, 1 PART SPHAGNUM PEAT MOSS (OR APPROVED COMPOST), AND 5 LBS OF SUPERPHOSPHATE FERTILIZER PER CU. YD. OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED FOR UNIFORM CONSISTENCY.
 5. ALL PLANT BEDS AND INDIVIDUAL PLANTS, NOT OTHERWISE NOTED SHALL BE MULCHED WITH A 4-INCH LAYER OF SHREDDED BARK MULCH. EDGE OF MULCH BEDS AS SHOWN. DECIDUOUS TREES IN LAWN AREAS SHALL RECEIVE A 5-FT DIAMETER CIRCLE OF MULCH AND CONIFER TREES 8-FT (PLANTED CROWN OF TREE) UNLESS OTHERWISE NOTED.
 6. LANDSCAPE STONE SHALL BE INSTALLED WHERE NOTED OR INDICATED (HATCHED). STONE SHALL BE 3/4"-1-1/4" WASHED RIVER GRAVEL OR AS SELECTED AND SHALL BE INSTALLED TO A MINIMUM DEPTH OF 3-INCHES.
 7. ALL LANDSCAPE BEDS, UNLESS OTHERWISE NOTED SHALL BE INSTALLED OVER WEED BARRIER FABRIC - WATER PERMEABLE FILTRATION FABRIC OF NON-WOVEN POLYPROPYLENE OR POLYESTER FABRIC. FABRIC SHALL BE OF SUITABLE THICKNESS FOR APPLICATION.
 8. ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
 9. THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD OF TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT, DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL SPECIFICATIONS.
 10. EDGING SHALL BE PROVIDED FOR ALL LANDSCAPE BEDS NOT ADJACENT TO CONCRETE PAVEMENT. EDGING SHALL BE BLACK ALUMINUM EDGING, 3/16-INCH X 4-INCH. INSTALL PER MANUFACTURER'S INSTRUCTIONS, ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
 11. SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUE GRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4-INCH AT TIME OF PLANTING, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10-INCHES BY 18-INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36-HOURS AFTER CUTTING.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN-OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF 1 MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.
12. ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.
- SEED MIXTURE SHALL BE AS FOLLOWS:
 KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES - ADLPHI, RUGBY, GLADE, OR PARADE) 30%
 RUBY RED OR DAWSON RED FINE FESCUE 30%
 ATLANTA RED FESCUE 20%
 PENNFINE PERENNIAL RYE 20%
- THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 LBS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:
 10% NITROGEN - MIN 25% FROM A UREA FORMALDEHYDE SOURCE
 0 % PHOSPHATE
 10% POTASH - SOURCE POTASSIUM SULFATE OR POTASSIUM NITRATE
- THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 LBS PER 1000 SQ FT OF BULK FERTILIZER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RE-SEEDED AND SUCH RE-SEEDED SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.
13. ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 6-INCH LAYER OF CLEAN, FRIABLE TOPSOIL. THE SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
 14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.

GENERAL UTILITY NOTES

1. BEDDING SHALL EXTEND A MINIMUM OF 4" BELOW THE PIPE, UNLESS OTHERWISE NOTED ON THE PLANS. BEDDING SHALL BE OF UNIFORM GRADATION MDOOT 66A STONE OR MDOOT CLASS II GRANULAR MATERIAL FOR SANITARY AND STORM PIPE AND MDOOT CLASS II GRANULAR MATERIAL ONLY FOR WATERMAIN.
2. WHERE UNSTABLE GROUND CONDITIONS ARE ENCOUNTERED, STONE BEDDING SHALL BE USED AS DIRECTED BY THE ENGINEER.
3. BACKFILL SHALL BE OF A SUITABLE MATERIAL AND SHALL BE FREE OF ANY ORGANIC MATERIALS AND ROCKS.
4. BACKFILL ABOVE THE PIPE SHALL BE OF GRANULAR MATERIAL MDOOT CLASS II TO A POINT 12" ABOVE THE TOP OF THE PIPE. WHERE THE TRENCH IS NOT WITHIN THE INFLUENCE OF THE ROAD, SUITABLE SITE MATERIAL MAY BE COMPACTED AND UTILIZED FROM A POINT 12" ABOVE THE PIPE TO GRADE. WHERE THE TRENCH IS WITHIN A 1:1 INFLUENCE OF THE ROAD, GRANULAR MATERIAL, MDOOT CLASS II OR III, IS TO BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 12" IN THICKNESS. COMPACTION SHALL BE 95% AS DETERMINED BY AASHTO T99.
5. 18" MINIMUM VERTICAL SEPARATION AND 10" HORIZONTAL SEPARATION IS TO BE MAINTAINED BETWEEN WATERMAIN AND SANITARY/STORM SEWER TO THE MAXIMUM EXTENT POSSIBLE.

GENERAL STORM NOTES

1. ALL STORM PIPE LENGTHS ARE SHOWN FROM C/L TO C/L OF STRUCTURE OR FROM C/L OF STRUCTURE TO DISCHARGE END OF FLARED END SECTION.
2. STORM PIPE MATERIALS SHALL BE AS FOLLOWS:
 2.1. RCP(REINFORCED CONCRETE PIPE); SHALL MEET THE REQUIREMENTS OF ASTM C76 WITH MODIFIED GROOVED TONGUE AND RUBBER GASKETS MEETING THE REQUIREMENTS OF ASTM C443. RCP TO BE EITHER CLASS IV OR V AS CALLED OUT ON THE PLANS.
 2.2. HDPE(HIGH DENSITY POLYETHYLENE); SHALL MEET THE REQUIREMENTS OF ASTM F2648.
 2.3. PP(POLYPROPYLENE); SHALL MEET THE REQUIREMENTS OF ASTM F2881.
 2.4. PVC(POLYVINYL CHLORIDE); SHALL MEET THE REQUIREMENTS OF ASTM D3034.
3. STORM PIPE JOINTS SHALL MEET THE REQUIREMENTS OF ASTM D3212. HDPE AND PP PIPE GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477.
4. ALL STORM PIPE TO HAVE WATERTIGHT PREMIUM JOINTS, UNLESS OTHERWISE NOTED ON THE PLANS.
5. STORM DRAINAGE STRUCTURES SHALL BE FURNISHED WITH STEPS WHICH SHALL BE STEEL ENCASED WITH POLYPROPYLENE PLASTIC OR EQUIVALENT. STEPS SHALL BE SET AT 16" CENTER TO CENTER.
6. ALL FLARED END SECTIONS 15" AND LARGER SHALL BE FURNISHED WITH AN ANIMAL GRATE.
7. FLARED END SECTIONS DISCHARGING STORM WATER SHALL RECEIVE A MINIMUM OF 10 SQ YDS OF PLAIN CRESTLESTONE RIP RAP WITH A MINIMUM STONE SIZE OF 6" AND SHALL BE PLACED ON A GEOTEXTILE FABRIC WRAP.
8. ALL CATCH BASINS WITHIN THE ROADWAY SHALL INCLUDE INSTALLATION OF 6" DIAMETER PERFORATED PIPE SUBDRAIN.
9. STORM DRAINAGE STRUCTURE COVERS SHALL BE OF THE FOLLOWING (OR APPROVED EQUAL):
 TYPE LOCATION FRAME COVER/INLET
 'MH' ALL 1040 SANITARY-SOLID SELF-SEALING STORM-VENTED
 'CB' TYPE A CURB 7000-T1-M1 FLAT GRATE WITH VERT. OPEN BACK
 'CB' TYPE B CURB 7065-T1-M1 FLAT GRATE WITH ROLL BACK
 'CB' PAVEMENT/SHOULDER 1020-M1 FLAT GRATE
 'CB' OPEN AREA 1020-01 BEEHIVE GRATE 4" HIGH
 'CB' GUTTER 5100 CONCAVE INLET

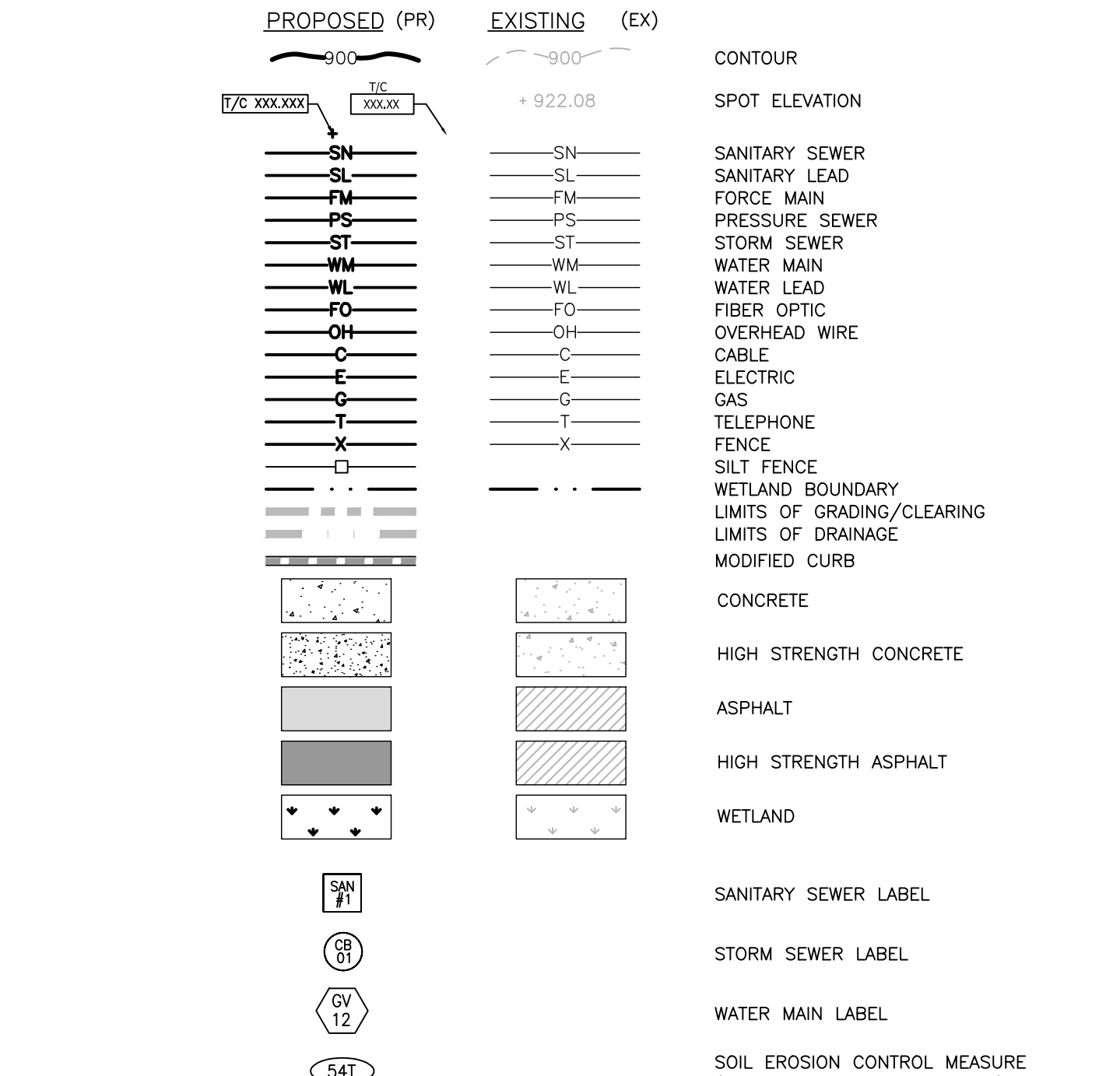
GENERAL SANITARY NOTES

1. ALL SANITARY PIPE LENGTHS ARE SHOWN FROM C/L OF STRUCTURE TO C/L OF STRUCTURE.
2. SANITARY PIPE MATERIALS SHALL BE AS FOLLOWS:
 2.1. PVC SDR-26 (SANITARY MAIN)
 2.2. PVC SDR-23.5 (SANITARY LEADS)
 2.3. HDPE DR-11 (SANITARY FORCEMAIN)
3. ALL PVC SDR SANITARY SEWER PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3034 AND D2241. PVC SCHD 40 PIPE SHALL MEET THE REQUIREMENTS OF ASTM D1785. GASKET JOINTS FOR SANITARY PIPE SHALL MEET THE REQUIREMENTS OF ASTM D3139 AND D3212.
4. SANITARY STRUCTURES SHALL BE FURNISHED WITH STEPS WHICH SHALL BE STEEL ENCASED WITH POLYPROPYLENE PLASTIC OR EQUIVALENT. STEPS SHALL BE SET AT 16" CENTER TO CENTER.
5. ALL NEW MANHOLES SHALL BE MINIMUM 4' DIAMETER, PRECAST MANHOLE SECTIONS AND AN ECCENTRIC CONE. PRECAST MANHOLE JOINTS SHALL BE INSTALLED WITH BUTYL ROPE MEETING THE REQUIREMENTS OF ASTM C990.
6. MANHOLES SHALL BE CONSTRUCTED WITH FLOW CHANNEL WALLS THAT ARE FORMER, AT A MINIMUM, TO THE SPRINGLINE OF THE PIPE.
7. ALL NEW MANHOLES SHALL HAVE AN APPROVED FLEXIBLE, WATERTIGHT SEALS WHERE PIPES PASS THROUGH MANHOLE WALLS.
8. WHEREVER AN EXISTING MANHOLE IS TO BE TAPPED, THE STRUCTURE SHALL BE CORED AND A KOR-N-SOAL BOOT UTILIZED FOR THE PIPE CONNECTION.
9. ALL MANHOLES SHALL BE PROVIDED WITH WATERTIGHT COVERS. COVERS TO BE EJCO 1040 TYPE 'A' SOLID COVER.
10. A MAXIMUM OF 12" OF GRADE ADJUSTMENT RINGS SHALL BE USED TO ADJUST THE FRAME ELEVATION. BUTYL ROPE SHALL BE USED BETWEEN EACH ADJUSTMENT RING.
11. SANITARY SEWER LATERALS SHALL HAVE A MINIMUM SLOPE OF 1.0%.
12. CLEANOUTS SHALL BE INSTALLED EVERY 100', AT ALL BENDS AND STUBS.
13. PUBLIC SANITARY SEWER SHALL BE CENTERED WITHIN A 20 FOOT WIDE SANITARY SEWER EASEMENT.

GENERAL WATERMAIN NOTES

1. WATERMAIN PIPE MATERIALS SHALL BE AS FOLLOWS:
 1.1. D.I.P. CL52 (WATERMAIN)
 1.2. TYPE 'K' COPPER (WATER LATERAL - MAIN TO CURB STOP)
 1.3. HDPE DR-9 (WATER LATERAL - CURB STOP TO STUB)
2. WATERMAIN FITTINGS SHALL BE OF DUCTILE IRON WITH CEMENT MORTAR LINING AND MECHANICAL JOINTS CONFORMING TO AWWA C110.
3. WATERMANS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651. BAC-T SAMPLES SHALL BE TAKEN IN ACCORDANCE WITH R235.11110 OF THE ADMINISTRATIVE RULES PROMULGATED UNDER MICHIGAN SAFE DRINKING WATER ACT, 1976 PA 399, AS AMENDED.
4. ALLOWABLE LEAKAGE OR HYDROSTATIC PRESSURE TESTING SHALL BE IN ACCORDANCE WITH AWWA C600 AND C605.
5. MAXIMUM DEFLECTION AT PIPE JOINTS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURERS CURRENT RECOMMENDATIONS AND AWWA SPECIFICATIONS.
6. A FULL STOCK OF PIPE SHALL BE LAID CENTERED AT A PIPE CROSSING IN ORDER TO MAINTAIN THE MAXIMUM SEPARATION OF WATERMAIN JOINT TO THE CROSSING PIPE.
7. WATERMAIN SHALL BE INSTALLED WITH A MINIMUM OF 5.5' OF COVER FROM FINISHED GRADE TO TOP OF PIPE AND NO MORE THAN 8' OF COVER, UNLESS SPECIAL CONDITIONS WARRANT.
8. WATERMAIN VALVES SHALL BE IRON BODY RESILIENT WEDGE GATE VALVES, NON-RISING STEMS, COUNTERCLOCKWISE OPEN, AWWA C509.
9. FIRE HYDRANTS SHALL BE INSTALLED WITH AN AUXILIARY VALVE WITH CAST IRON VALVE BOX. THE HYDRANT PUMPER HOSE CONNECTION SHALL FACE THE ROADWAY.
10. THE BREAKAWAY FLANGE AND ALL BELOW GRADE FITTINGS SHALL HAVE STAINLESS STEEL NUTS AND BOLTS.
11. PUBLIC WATERMAIN SHALL BE CENTERED WITHIN A 25 FOOT WIDE WATERMAIN EASEMENT.

LINES & HATCHES LEGEND



SANITARY SEWER INVENTORY:		STORM SEWER INVENTORY:		STORM SEWER INVENTORY:	
RM=1009.24 INV. N=1002.04 (8") INV. S=1002.14 (8")	LT2B RIM=1009.05 M INV. S=1003.27 R (15")	LT21 RIM=1011.78 M INV. S=1001.20 R (24") INV. N=1001.10 R (24")	LT22 RIM=1010.55 M INV. S=1001.55 R (24") INV. N=1001.65 R (18") INV. E=1006.78 R (12")	LT19 RIM=1012.86 M INV. S=1001.18 R (24") INV. N=1000.70 R (24") INV. E=1008.00 R (12")	LT23 RIM=1012.62 M INV. W=1009.00 R (12")
RM=1011.15 INV. N=1004.05 (8") INV. S=1004.15 (8")	LT24 RIM=1009.36 M INV. S=1002.78 R (18")	LT21A RIM=1011.61 M INV. S=1001.90 R (12") INV. N=1008.20 R (12")	LT22A RIM=1010.48 M INV. W=1007.10 R (12") INV. N=1007.20 R (12")	LT19A RIM=1012.94 R INV. W=1009.00 R (12")	
RM=1012.06 INV. N=1005.11 (8") INV. S=1005.16 (8")	LT24A RIM=1009.12 M INV. N=1009.51 R (12") INV. W=1006.50 R (12")	LT23A RIM=1012.23 M INV. S=1002.25 R (24") INV. N=1003.30 R (24") INV. E=1007.00 R (12")	LT22B RIM=1010.40 M INV. S=1007.30 R (12")	LT18 RIM=1013.17 M INV. S=1000.00 R (30") INV. N=1000.50 R (24") INV. E=1008.50 R (12")	
RM=1013.91 INV. N=1006.81 (8") INV. S=1006.91 (8") INV. E=1008.91 (8")	LT24B RIM=1009.64 M INV. S=1007.00 R (12")	LT23B RIM=1011.93 M INV. S=1008.00 R (12")	LT22C RIM=1010.46 M INV. S=1007.00 R (12")	LT18A RIM=1013.07 M INV. W=1009.50 R (12")	

GENERAL SURVEY NOTES:

- BEARINGS WERE ESTABLISHED FROM METRO CONSULTING ASSOCIATES, JOB NO. SG-19193, DATED 01/19/2018.
- SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
- EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
- ELEVATIONS WERE ESTABLISHED WITH GPS USING OPUS GPS POST-PROCESSING. (NAVD83 DATUM)
- CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
- THE LOCATIONS OF STORM SEWER, SANITARY SEWER & WATERMAIN, AS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES ALONG WITH DRAWINGS SUPPLIED BY MDOT AND MHOC.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
- ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.
- THERE WAS SNOW ON THE GROUND AT THE TIME OF FIELDWORK FOR THIS SURVEY.

SOIL NOTES:

THE PROJECT SITE IS COMPRISED OF THE FOLLOWING SOIL TYPE ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE:
 Cva0B -- CONOVER LOAM, 0 TO 4 % SLOPES
 MoB -- MIAMI LOAM, 2 TO 6 % SLOPES
 Wh -- WASHTENAW SILT LOAM

SITE BENCHMARKS (NAVD83):

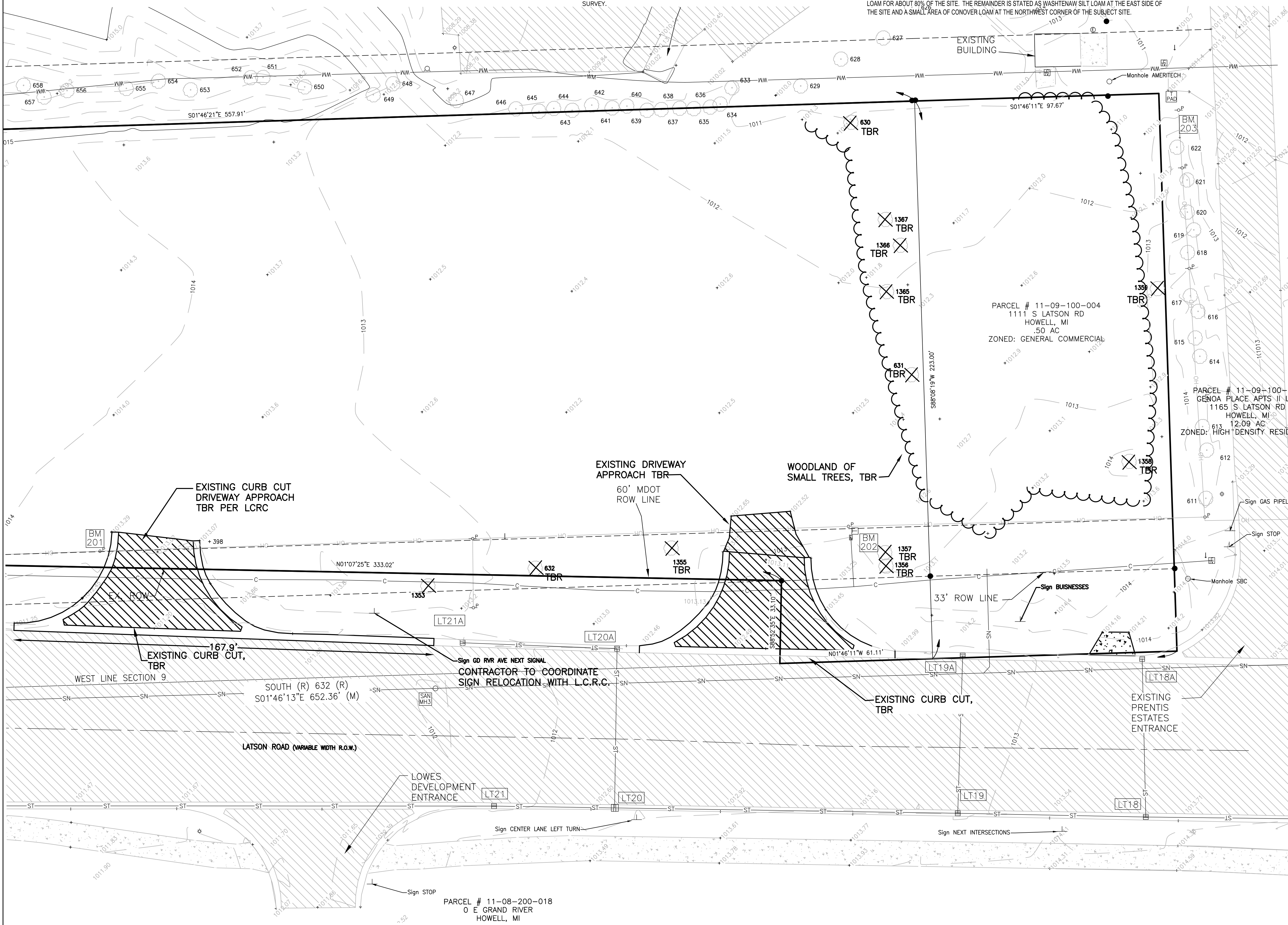
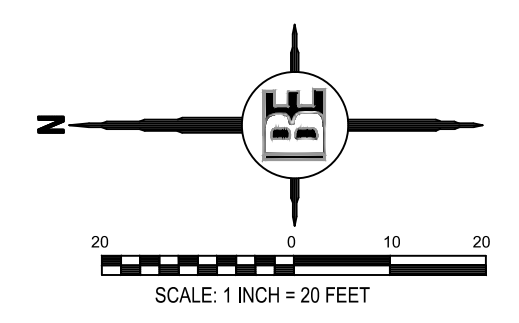
- BM #200 = NAIL/TAG S/S POWER POLE ELEV.=1013.34
- BM #201 = NAIL/TAG NE/S POWER POLE ELEV.=1014.28
- BM #202 = NAIL/TAG NE/S POWER POLE ELEV.=1013.57
- BM #203 = NORTH EAST CORNER TRANS-PAD ELEV.=1011.58

NATURAL FEATURES NARRATIVE:

NATURAL FEATURES WERE IDENTIFIED DURING AN ON-SITE VISIT TO THE PROPERTY ON SEPTEMBER 28, 2023. SITE IS VACANT AND PRIMARILY CAN BE DESCRIBED AS UNMANICURED TALL GRASS. THE SOUTHERN PORTION OF THE SITE CONTAINS SOME TREES AS INDICATED BY THE PLAN BELOW AND TREE LIST ON THIS SHEET.

ENTIRE SITE IS RELATIVELY FLAT, WITH A LOWER ELEVATION AT LATSON ROAD. SITE SLOPES WESTERLY TO LATSON ROAD AT SLOPES OF 2-4%. SOILS ARE ALSO UNIFORM PER USDA NRCS SOILS DATA CONSISTING OF MIAMI LOAM FOR ABOUT 80% OF THE SITE. THE REMAINDER IS STATED AS WASHTENAW SILT LOAM AT THE EAST SIDE OF THE SITE AND A SMALL AREA OF CONOVER LOAM AT THE NORTHWEST CORNER OF THE SUBJECT SITE.

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



Tag #	Botanical Name	Common Name	Size	Condition
1357	Quercus rubra	Northern Red Oak	18"	good
1358	Pinus strobus	Red Pine	21"	good
1359	Quercus rubra	Northern Red Oak	18"	good
1360	Pinus strobus	Red Pine	18"	good
611	Pinus strobus	Red Pine	14.5"	good
612	Pinus strobus	Red Pine	17"	fair
613	Pinus strobus	Red Pine	14.5"	fair
614	Pinus strobus	Red Pine	10"	poor
615	Pinus strobus	Red Pine	12"	poor
616	Pinus strobus	Red Pine	9"	poor
617	Pinus strobus	Red Pine	12"	poor
1361	Acer rubrum	Red Maple	8"	good
618	Pinus strobus	Red Pine	13.5"	poor
619	Pinus strobus	Red Pine	7"	poor
620	Pinus strobus	Red Pine	14"	poor
621	Pinus strobus	Red Pine	15"	poor
622	Pinus strobus	Red Pine	13"	poor
623	Picea abies	Norway Spruce	14"	good
624	Picea abies	Norway Spruce	14"	good
625	Picea abies	Norway Spruce	17"	good
626	Picea abies	Norway Spruce	25"	good
627	Pinus strobus	Red Pine	15"	fair
628	Pinus strobus	Red Pine	11"	fair
629	Pinus strobus	Red Pine	13"	good
1362	Quercus rubra	Northern Red Oak	11" 13"	poor
1363	Quercus rubra	Northern Red Oak	13" 14"	poor
1364	Pinus strobus	Red Pine	13"	fair
1365	Pinus strobus	Red Pine	11" 14"	good
1366	Pinus strobus	Red Pine	11" 14"	good
1367	Pinus strobus	Red Pine	11" 14"	good
1368	Pinus strobus	Red Pine	11" 14"	good
1369	Pinus strobus	Red Pine	11" 14"	good
1370	Pinus strobus	Red Pine	11" 14"	good
1371	Pinus strobus	Red Pine	11" 14"	good
1372	Pinus strobus	Red Pine	11" 14"	good
1373	Pinus strobus	Red Pine	11" 14"	good
1374	Pinus strobus	Red Pine	11" 14"	good
1375	Pinus strobus	Red Pine	11" 14"	good
1376	Pinus strobus	Red Pine	11" 14"	good
1377	Pinus strobus	Red Pine	11" 14"	good
1378	Pinus strobus	Red Pine	11" 14"	good
1379	Pinus strobus	Red Pine	11" 14"	good
1380	Pinus strobus	Red Pine	11" 14"	good
1381	Pinus strobus	Red Pine	11" 14"	good
1382	Pinus strobus	Red Pine	11" 14"	good
1383	Pinus strobus	Red Pine	11" 14"	good
1384	Pinus strobus	Red Pine	11" 14"	good
1385	Pinus strobus	Red Pine	11" 14"	good
1386	Pinus strobus	Red Pine	11" 14"	good
1387	Pinus strobus	Red Pine	11" 14"	good
1388	Pinus strobus	Red Pine	11" 14"	good
1389	Pinus strobus	Red Pine	11" 14"	good
1390	Pinus strobus	Red Pine	11" 14"	good
1391	Pinus strobus	Red Pine	11" 14"	good
1392	Pinus strobus	Red Pine	11" 14"	good
1393	Pinus strobus	Red Pine	11" 14"	good
1394	Pinus strobus	Red Pine	11" 14"	good
1395	Pinus strobus	Red Pine	11" 14"	good
1396	Pinus strobus	Red Pine	11" 14"	good
1397	Pinus strobus	Red Pine	11" 14"	good
1398	Pinus strobus	Red Pine	11" 14"	good
1399	Pinus strobus	Red Pine	11" 14"	good
1400	Pinus strobus	Red Pine	11" 14"	good



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND EASEMENTS FROM THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND EASEMENTS FROM THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
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 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

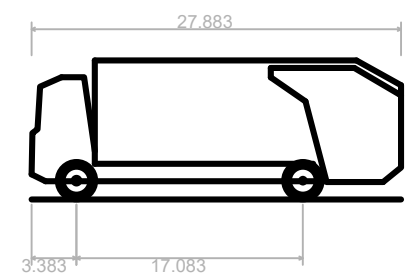
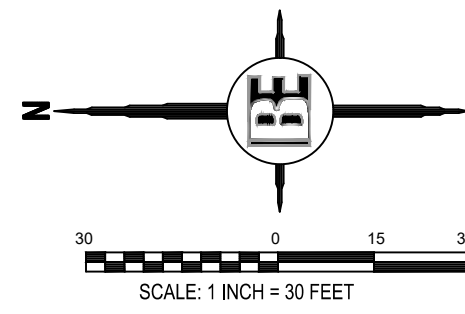
SOUTH LATSON COMMERCIAL DEVELOPMENT

PROJECT: SOUTH LATSON COMMERCIAL DEVELOPMENT
 PREPARED FOR: 1015 LATSON ROAD LLC
 29932 BECK ROAD
 WOODON, MI 48393
 248.773.9992

TITLE: EXISTING CONDITIONS, DEMO & NATURAL FEATURES PLAN

NO	BY	DATE	REVISION PER
1	ST	10-25-23	PER TOWNSHIP COMMENTS
2	ST	12-11-23	PER P.C. MEETING
3	ST	1-16-24	LAYOUT MODIFICATIONS
4	ST	3-14-24	PER LORC AND PC COMMENTS

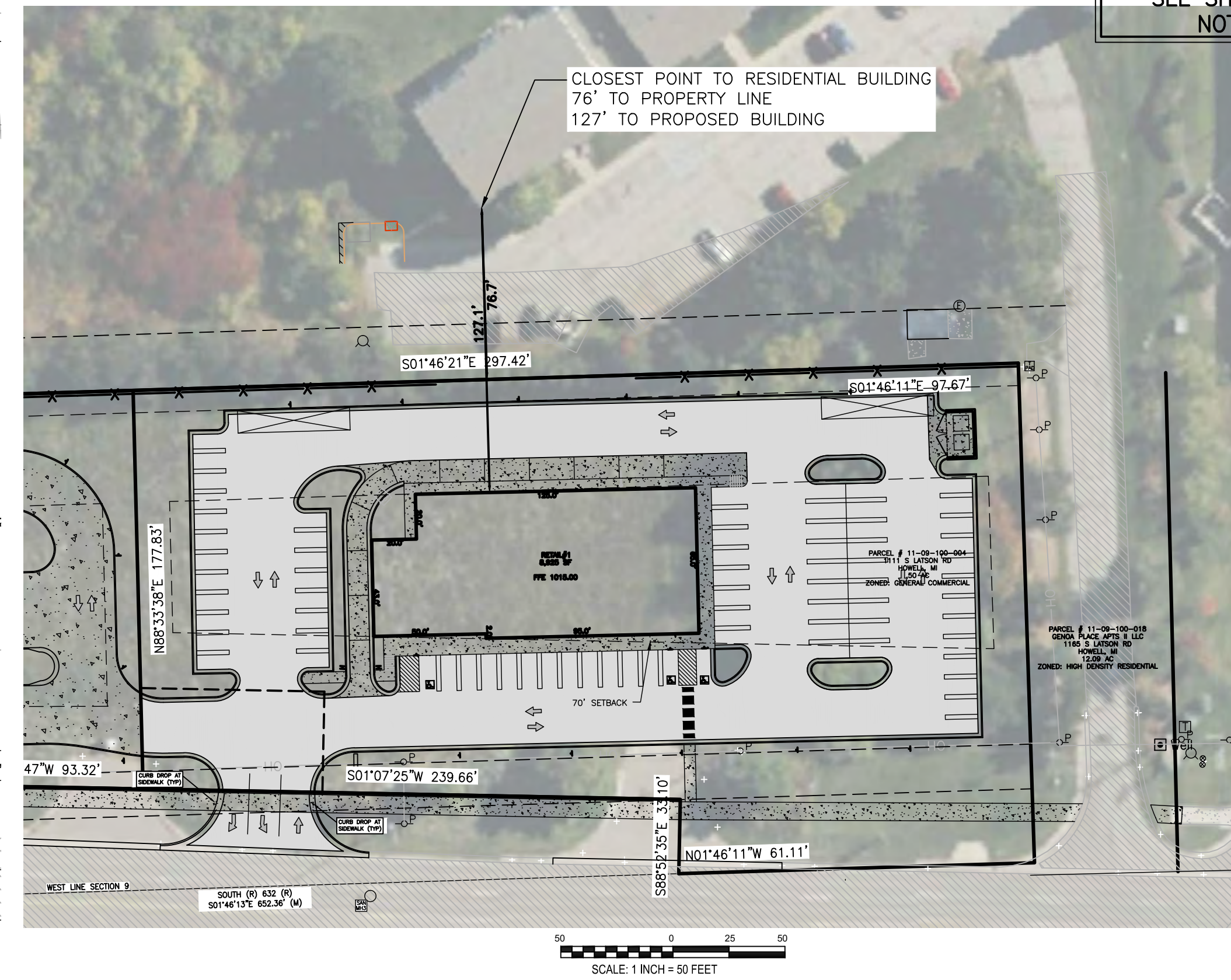
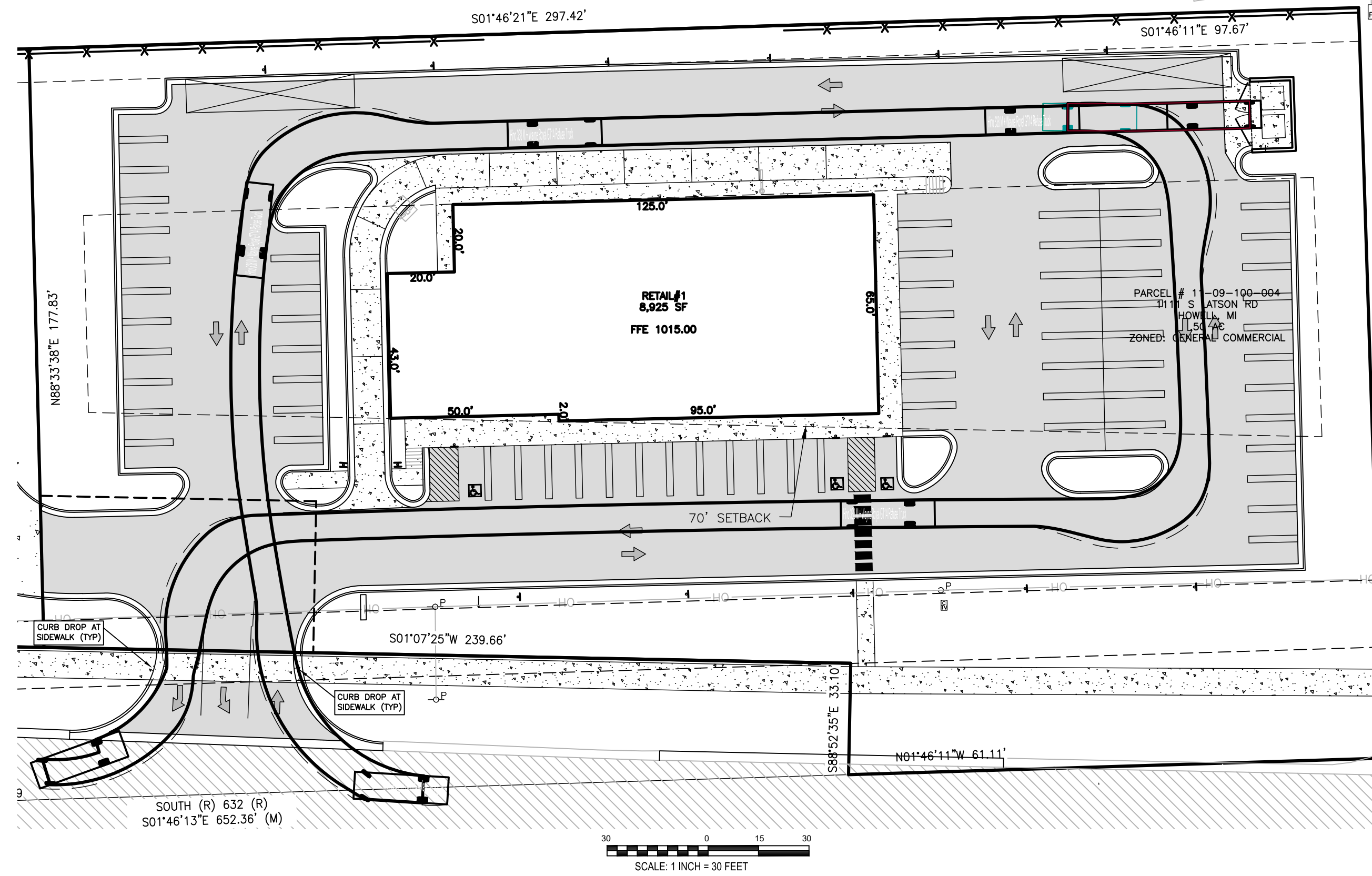
DESIGNED BY: ST
 DRAWN BY: ST
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 21-519
 DATE: 10/04/2023
 SHEET NO. 3



Hino 338 M + Wayne Royal GT14 Refuse Truck
 Overall Length 27.883ft
 Overall Width 8.042ft
 Overall Body Height 10.488ft
 Min Body Ground Clearance 1.318ft
 Track Width 8.042ft
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 27.400ft



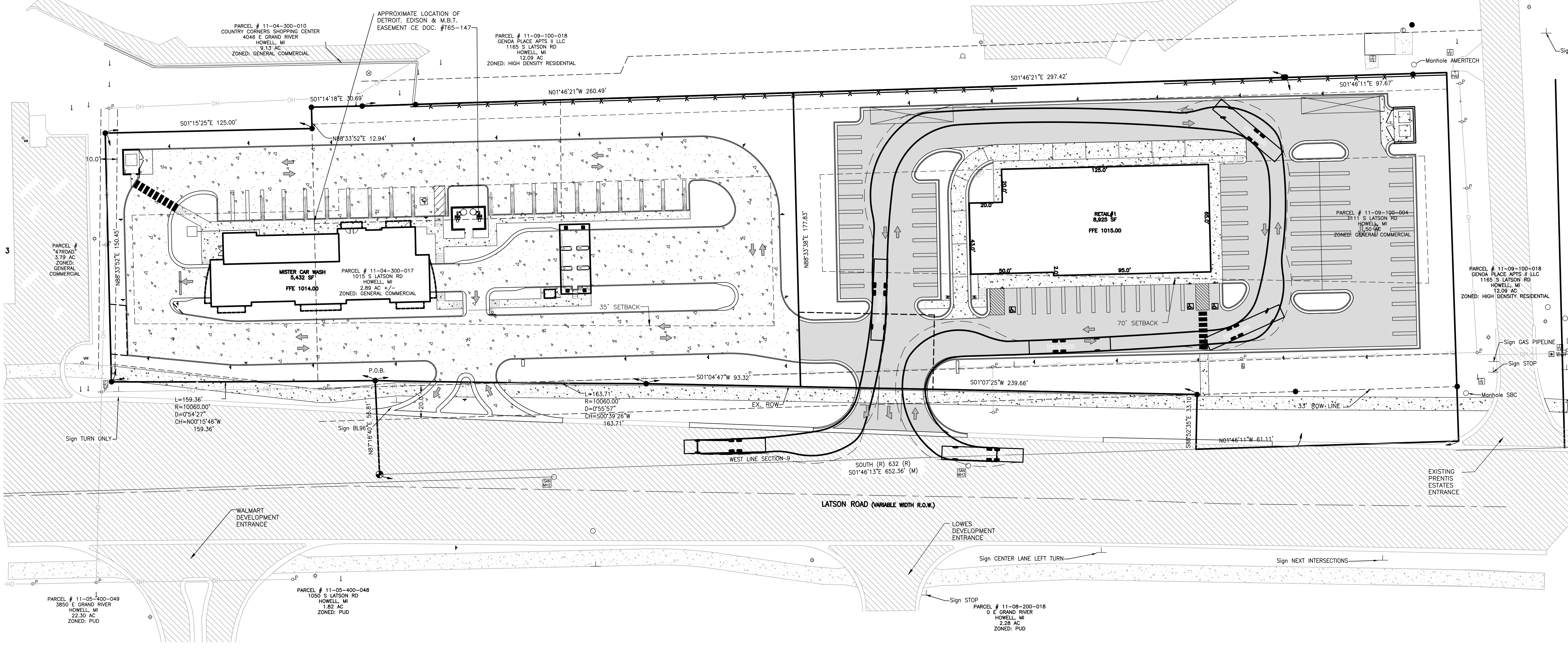
Brighton Area Fire Authority
 Overall Length 49.083ft
 Overall Width 8.167ft
 Overall Body Height 7.500ft
 Min Body Ground Clearance 0.750ft
 Track Width 8.167ft
 Lock-to-lock time 5.00s
 Max Steering Angle (Virtual) 45.00°



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO ASSURANCE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF ALL UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.
 BE Engineering
 3121 E. GRAND RIVER AVE.
 HOWELL, MI 48843
 517.546.4836 FAX 517.548.1670

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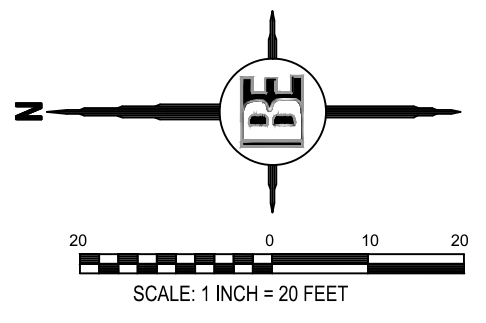
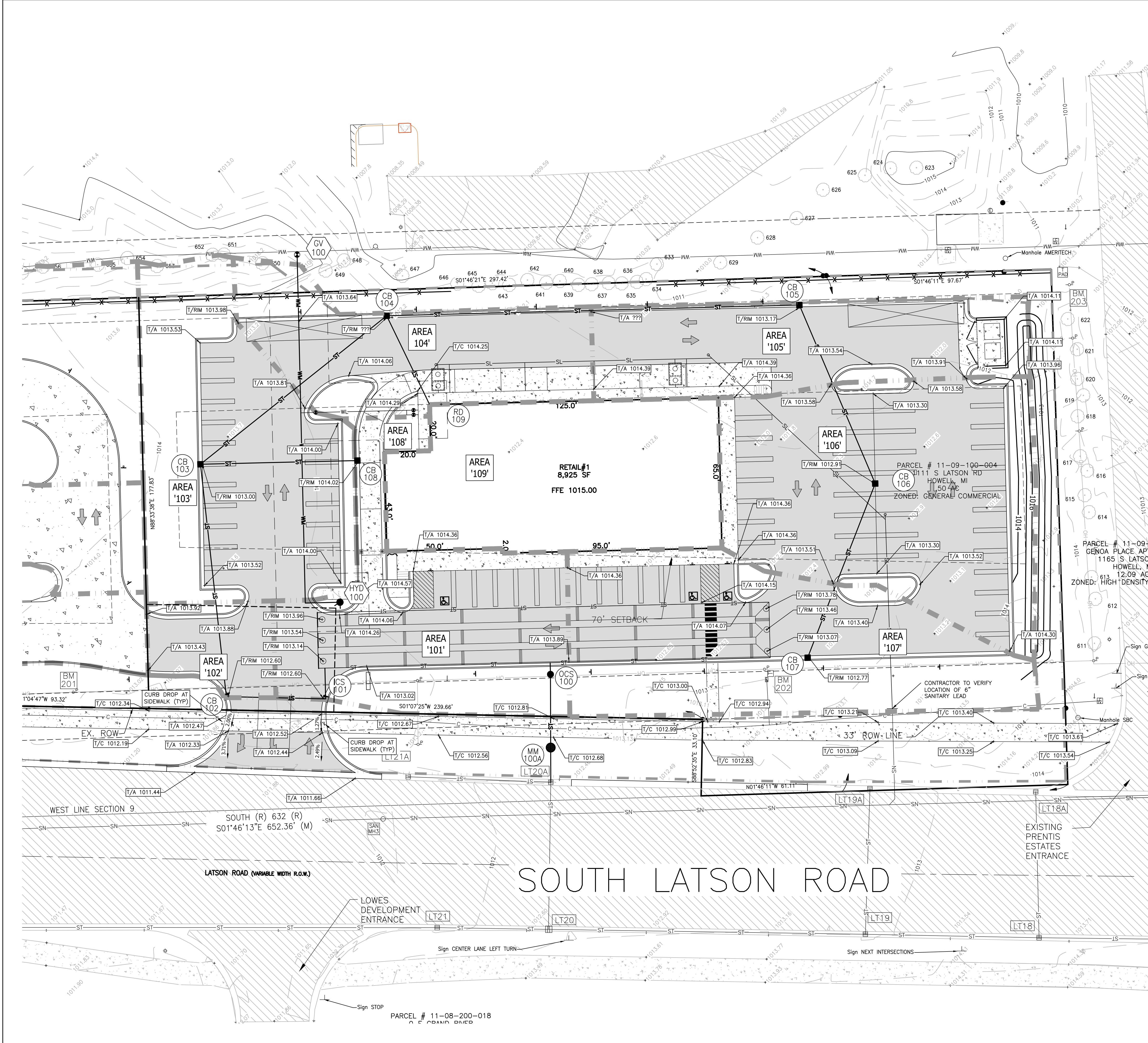


PROJECT: SOUTH LATSON COMMERCIAL DEVELOPMENT
 PREPARED FOR: 1015 LATSON ROAD LLC
 29932 BECK ROAD
 WOODON, MI 48393
 248.773.7992
 TITLE: OVERALL SITE PLAN

NO	BY	DATE	REVISION PER
4	ST	3-14-24	PER LORC AND PC COMMENTS
3	ST	1-16-24	LAYOUT MODIFICATIONS
2	ST	12-11-23	PER P.C. MEETING
1	ST	10-25-23	PER TOWNSHIP COMMENTS

DESIGNED BY: ST
 DRAWN BY: ST
 CHECKED BY:
 SCALE: VARIES
 JOB NO: 21-519
 DATE: 10/04/2023
 SHEET NO. 4





SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

DRAINAGE AREA TABLE				
DRAINAGE AREA	TOTAL AREA (AC)	IMP. AREA (AC)	C VALUE	A ² C
100	-	-	-	-
101	0.18	0.14	0.72	0.13
102	0.05	0.04	0.84	0.04
103	0.25	0.14	0.60	0.15
104	0.15	0.12	0.77	0.12
105	0.16	0.15	0.85	0.14
106	0.29	0.26	0.82	0.24
107	0.26	0.15	0.60	0.16
108	0.02	0.02	0.75	0.02
109	0.20	0.20	0.90	0.18
TOTALS	1.58	1.23	0.74	1.17

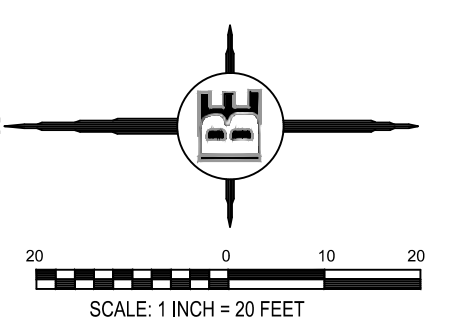
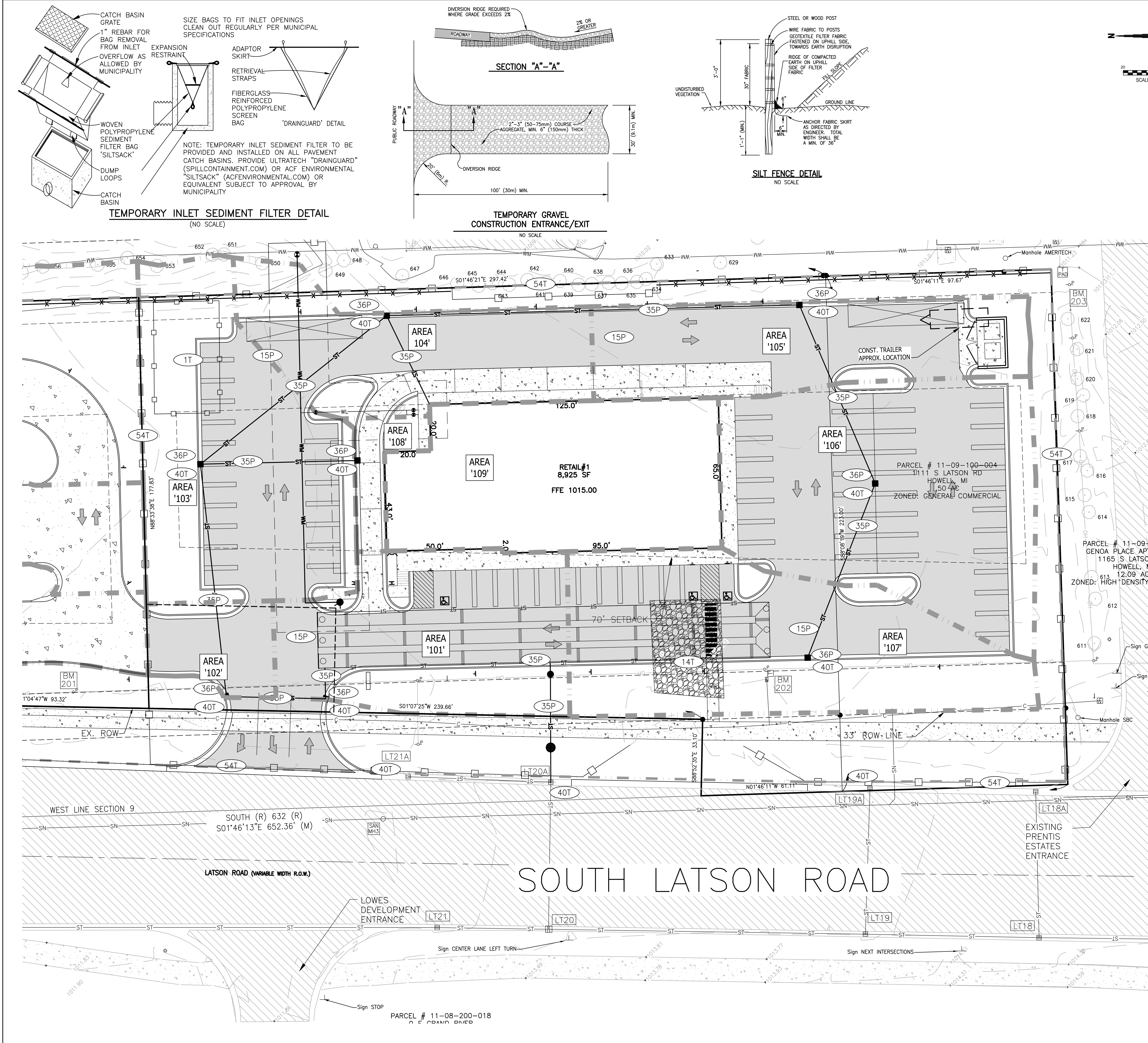
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO ATTEMPT WILL BE MADE TO LOCATE OR VERIFY THE LOCATION, DEPTH, OR ELEVATION OF EXISTING UTILITIES UNLESS SPECIFICALLY NOTED OTHERWISE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

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PROJECT: SOUTH LATSON COMMERCIAL DEVELOPMENT
 PREPARED FOR: 1015 LATSON ROAD LLC
 29932 BECK ROAD
 WOODHURST, MI 48993
 248.773.7992
 TITLE: GRADING & DRAINAGE PLAN

NO	BY	DATE	REVISION
4	ST	3-14-24	PER LORC AND PC COMMENTS
3	ST	1-16-24	LAYOUT MODIFICATIONS
2	ST	12-11-23	PER P.C. MEETING
1	ST	10-25-23	PER TOWNSHIP COMMENTS
NO	BY	DATE	REVISION

DESIGNED BY: ST
 DRAWN BY: DH
 CHECKED BY:
 SCALE: 1" = 20'
 JOB NO: 21-519
 DATE: 10/04/2023
 SHEET NO. 6



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

NO.	MEASURE	DESCRIPTION
1	STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE SUBSOIL AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEEDED
6	SEEDING WITH MULCH AND/OR MATTING	ESTABLISHES VEGETATION COVER (OPTIMUM FOR DRAINAGE) WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL, EROSION CONTROL MATTING, AND MULCH
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THIS MINIMIZES EROSION FOMES CONSTRUCTION TRAFFIC IN WETTER WEATHER MAY BE USED AS PART OF PERMANENT BASE PROTECTION OF PAVED AREAS
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY
16	CURB & GUTTER	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE COLLECTS AND CONVEYS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGEWAY
35	STORM SEWER	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF CONVEYS RUNOFF TO MUNICIPAL SEWER SYSTEM OR STABILIZED OUTFALL LOCATION USE CATCH BASINS TO COLLECT SEDIMENT
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER OVER INLET
40	INLET SEDIMENT FILTER	EASY TO SHAPE COLLECTS SEDIMENT MAY BE CLEANED AND EXPANDED AS NEEDED
51	RETAINING WALL	REDUCES GRADIENT WHERE SLOPES ARE EXTREMELY STEEP PERMITS REVISION OF EXISTING VEGETATION, KEEPING SOIL STABLE IN CRITICAL AREAS MINIMIZES MAINTENANCE
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POSTS OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE RETAIL SHEET)

T= TEMPORARY, P= PERMANENT
TOTAL DISTURBED AREA= 1.81 AC.

SURFACE WATER & COUNTY DRAINS
WETLAND - APPROXIMATELY 200 FT SOUTHEAST BEHIND PLATINUM CONTRACTING
LAKES - APPROXIMATELY 4000 FT NORTHEAST TO LAKE CHEMUNG
STREAMS - APPROXIMATELY 1000 FT NORTHWEST TO LIVINGSTON COMMONS SHOPPING CENTER
BASINS - APPROXIMATELY 900 FT NORTHWEST TO SLEEPCHICK MATRESS STORE
DRAINS - APPROXIMATELY 650 FT NORTHWEST TO LATSON ROAD DRAIN
PONDS - APPROXIMATELY 200 FT EAST BEHIND PLATINUM CONTRACTING

CONSTRUCTION SEQUENCE

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.

1 DAY	1. INSTALL SILT FENCE AS SHOWN ON PLANS.
30 DAYS	2. ROUGH GRADE AND INSTALL STORM DRAINAGE.
1 DAY	3. INSTALL INLET PROTECTION ON STORM INLETS.
180 DAY	4. START BLDG. CONSTRUCTION
30 DAYS	5. INSTALL PAVEMENT
10 DAYS	6. FINE GRADE AROUND BUILDING, SPREAD TOPSOIL, SEED OR SOD AS APPLICABLE.
1 DAY	7. REMOVE ALL EROSION CONTROL STRUCTURES.
1 DAY	8. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.

CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE

ACTIVITY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH	X	X	X
CLEAN INLETS		X	X
COLLECT LITTER	X		X
SWEEP PARKING LOT		X	X

CONTROLS & MEASURES NARRATIVE

ACTIVITY	DESCRIPTION
MAINTAIN LANDSCAPING, REPLACE MULCH	COLLECT GRASS, TREE, AND SHRUB CLIPPINGS, DISPOSE IN APPROVED CONTAINER, REPLACE DEAD SOD, TREES AND SHRUBS.
CLEAN INLETS	REMOVE LITTER, SEDIMENT, AND DEBRIS, DISPOSE OF IN APPROVED LANDFILL.
COLLECT LITTER	DISPOSE OF WITH INLET DEBRIS.
SWEEP PARKING LOT	REMOVE MUD, DIRT, GREASE AND OIL WITH PERIODIC SWEEPING
DUST CONTROL	SPRINKLE WATER AS NEEDED

PROPOSED CONST. SCHEDULE FOR THE YEAR 2024

ACTIVITY	MAY	JUNE	JULY	AUG	SEPT	OCT
DEMOL & CLEAR						
MASS GRADING						
UNDERGROUND UTILITY						
FINAL GRADING						
SEED & MULCH						

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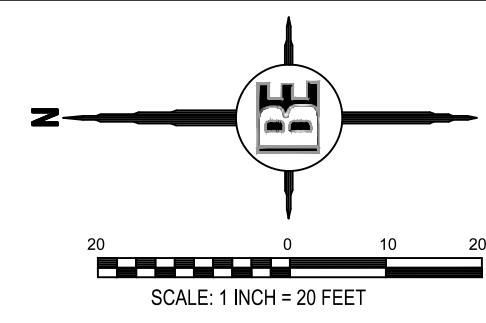
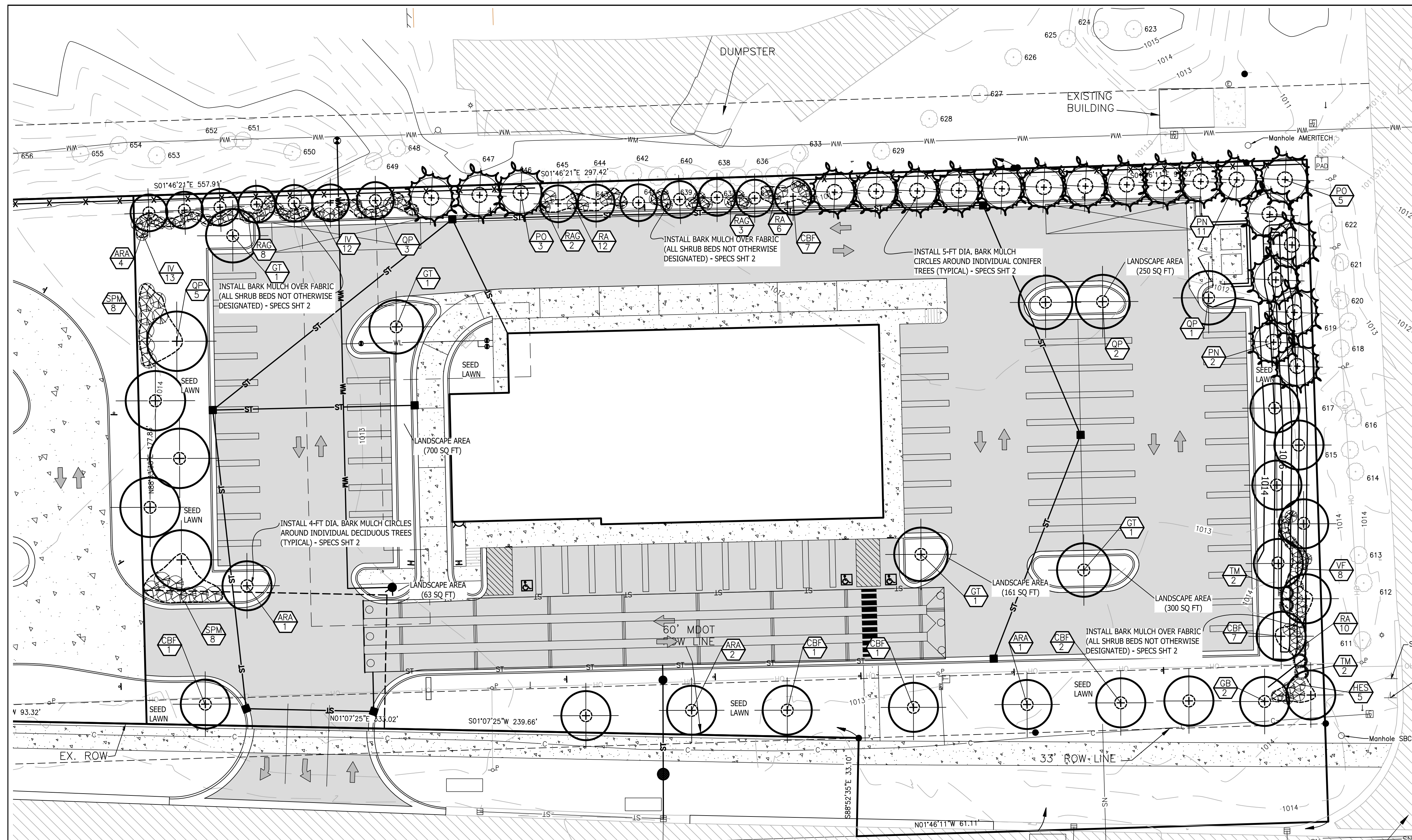
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HOWELL, MI. 48843
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SOUTH LATSON COMMERCIAL DEVELOPMENT

1015 LATSON ROAD LLC
29932 BECK ROAD
WILSON, MI 48393
248.773.9992

SOIL EROSION & SEDIMENTATION CONTROL PLAN

DESIGNED BY: ST
DRAWN BY: JS
CHECKED BY:
SCALE: 1" = 20'
JOB NO: 21-519
DATE: 10/04/2023
SHEET NO. 7



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND

LANDSCAPE CALCULATIONS GCD ZONING:

REQUIRED:

GREENBELT - PUBLIC R.O.W. : 1 CANOPY TREE / 40 LFT FRONTAGE, MIN 20 FT WIDTH

BUFFER - SOUTH
 ADJ. TO MULTI-FAMILY - TYPE B: MIN. 20-FT WIDTH, 6-FT HGT CONTINUOUS WALL OR 3-FT HGT BERM + 1 CANOPY TREE + 1 CONIFER TREE + 4 SHRUBS / 30 LFT

BUFFER - NORTH
 ADJ. TO COMMERCIAL - TYPE C: 1 CANOPY OR CONIFER TREE OR 4 SHRUBS / 20 LFT MIN. 10 FT WIDTH

BUFFER - EAST
 ADJ. TO MULTI-FAMILY - TYPE B: 6-FT HGT CONTINUOUS WALL + 1 CANOPY TREE + 1 CONIFER TREE + 4 SHRUBS / 30 LFT

PARKING AREA (>10 SPACES): 1 CANOPY TREE & 100 SF OF LANDSCAPE AREA / 10 SPACES. 1/3 OF TREES MUST BE ON THE INTERIOR OF THE PARKING AREA - UNDERGROUND SYSTEM

DETENTION / RETENTION BASIN: N/A - UNDERGROUND SYSTEM

PROVIDED:

GREENBELT - PUBLIC R.O.W. : 396.79 LFT FRONTAGE / 40 = 10 CANOPY TREES PROVIDED

BUFFER - SOUTH PROP. LINE:
 ADJ. TO MULTI-FAMILY - TYPE B: 190.00 / 30 = 7 CANOPY + 7 CONIFER TREES + 26 SHRUBS WITH BERM AND 20-FT WIDTH

BUFFER - NORTH PROP. LINE
 ADJ. TO COMMERCIAL - TYPE C: 177.83 / 20 = 9 TREES OR 36 SHRUBS OR COMBINATION 5 TREES + 16 SHRUBS PROVIDED

BUFFER - EAST
 ADJ. TO MULTI-FAMILY - TYPE B: 395.70 / 30 = 14 CANOPY + 14 CONIFER TREES + 56 SHRUBS + 290-FT WALL ;

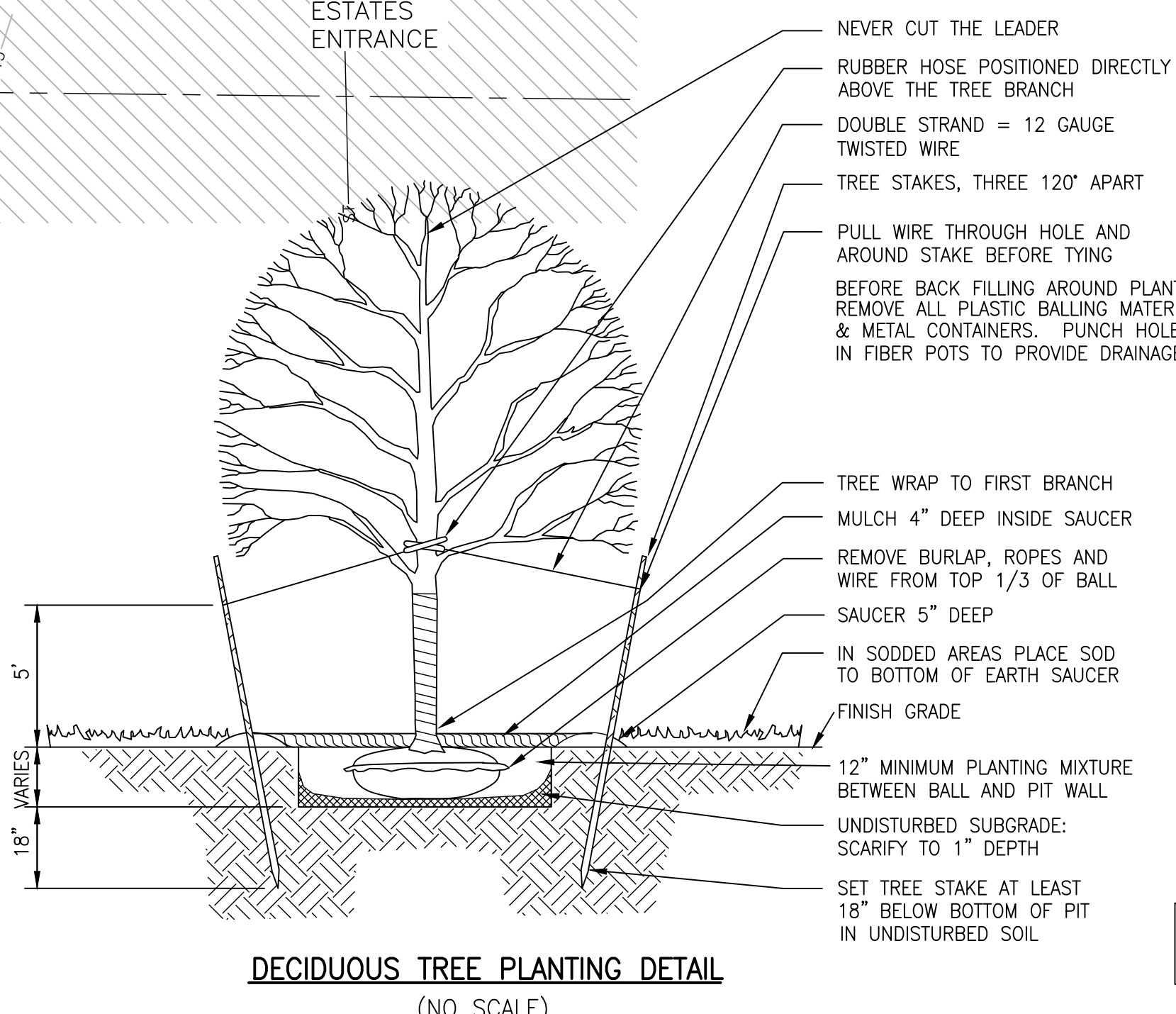
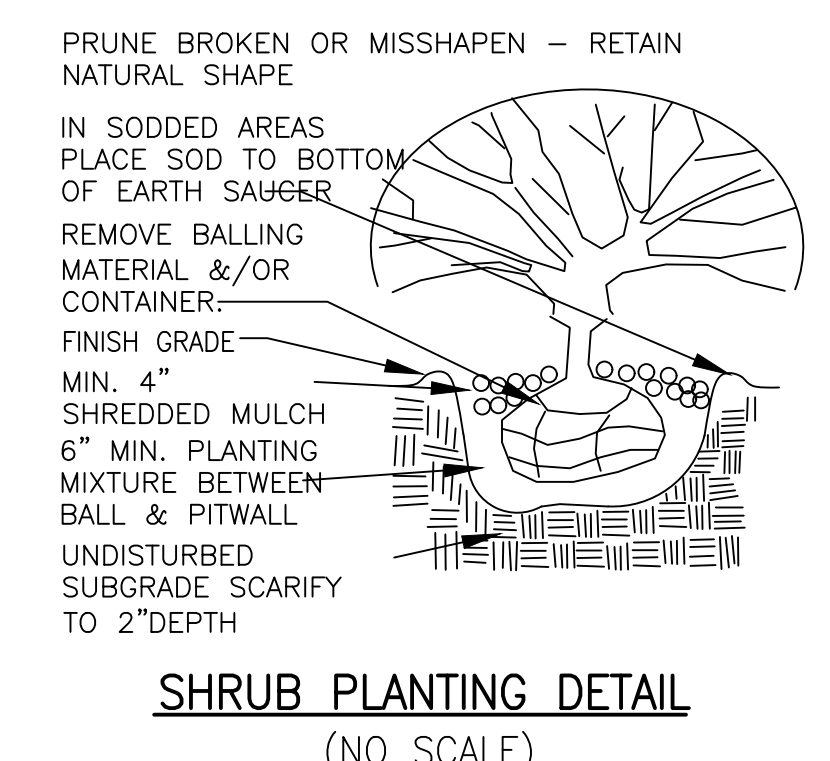
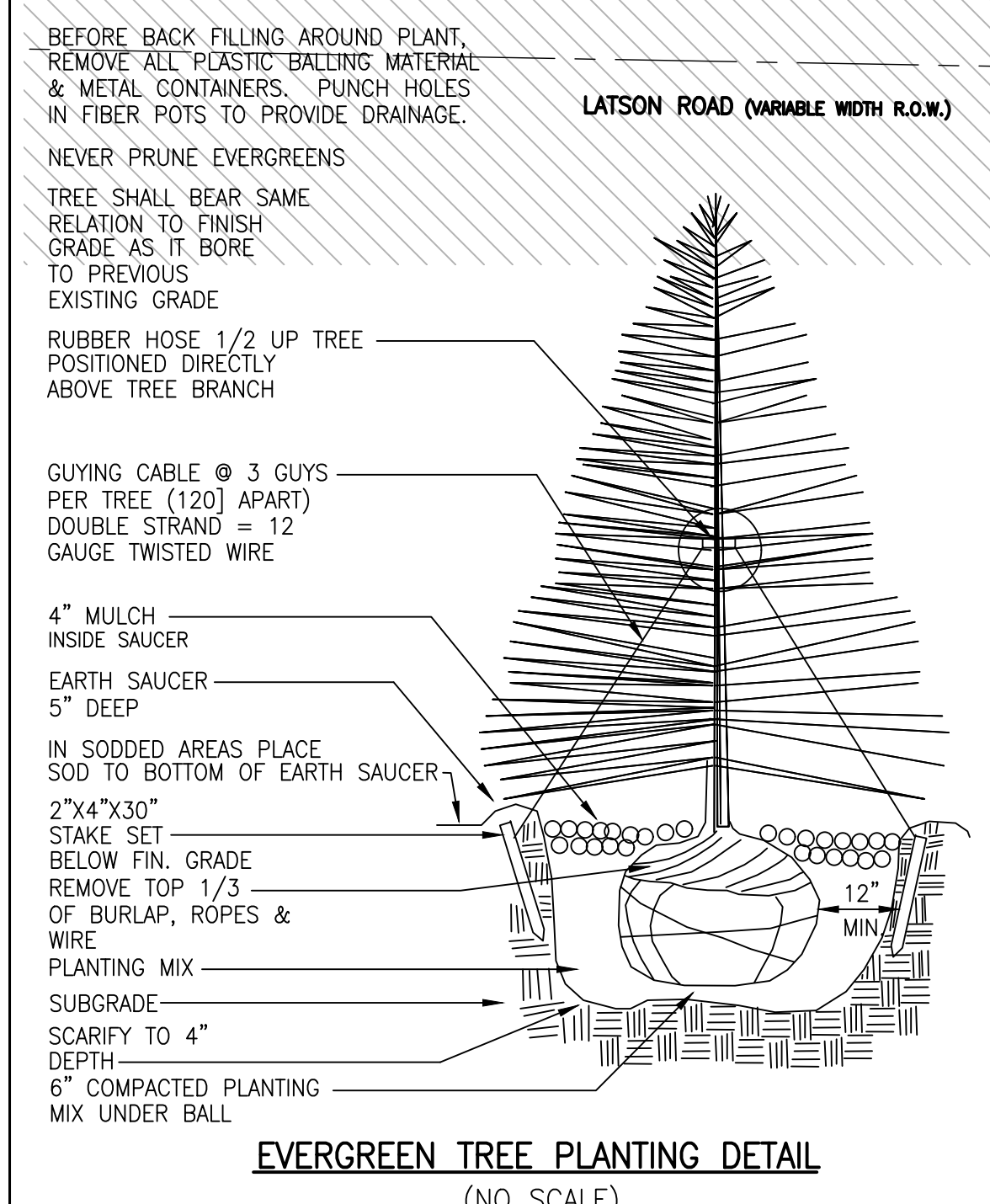
PROPOSED SHORTER LENGTH WALL DUE TO EX. CONDITIONS: APPROX. 90 LFT OF EX. MATURE CONIFER SCREENING VEGETATION AT THE PROPERTY LINE RESTRICTS NEW WALL INSTALLATION

PARKING AREA (>10 SPACES): 73 (SPACES PROVIDED) / 10 = 8 TREES + 800 SQFT OF LANDSCAPE AREA 8 TREES & 1400+ SQFT OF LANDSCAPE AREA PROVIDED

PLANT LIST

KEY	QUAN	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
DECIDUOUS TREES					
ARA	8	Acer rubrum 'Jfs KW 78'	Armstrong Gold Red Maple	2-1/2" cal.	B-B
CBF	19	Cornus betulus 'Frans Fontaine'	Frans Fontaine European Hornbeam	2-1/2" cal.	B-B
GB	2	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Columnar Ginkgo	2-1/2" cal.	B-B
GT	4	Gleditsia triacanthos var inermis 'Skycole'	Skyline Honeylocust	2-1/2" cal.	B-B
QP	11	Quercus plaustris	Northern Pin Oak	2-1/2" cal.	B-B
CONIFER TREES					
PN	13	Pinus nigra 'Oregon Green'	Oregon Green Austrian Pine	6-ft hgt.	B-B
PO	8	Picea amorika	Serbian Spruce	6-ft hgt.	B-B
CONIFER SHRUBS					
TM	4	Taxus x media 'Densiformis'	Densiformis Spreading Yew	30" ht./#5	Cont.
DECIDUOUS SHRUBS					
HES	5	Hydrangea macrophylla 'Bailmer'	Endless Summer Hydrangea	36" ht./#5	Cont.
IV	25	Itea virginica 'Sprich'	Little Henry Virginia Sweetspire	25" ht./#3	Cont.
RA	28	Ribes Alpinum 'Greenmound'	Greenmound Currant	18" ht./#3	Cont.
RAG	13	Rhus aromatica 'Gro-Low'	Gro-Low Fragrant Sumac	24" ht./#3	Cont.
SPM	16	Syringa patula 'Miss Kim'	Miss Kim Lilac	24" ht./#3	Cont.
VF	8	Viburnum farreri nanum	Dwarf Fragrant Viburnum	18" ht./#3	Cont.

SUPPLEMENTAL LANDSCAPE NOTES
 1. ANY SUBSTITUTIONS OF PLANT MATERIAL FROM THE APPROVED SITE PLAN WILL BE APPROVED BY THE TOWNSHIP PRIOR TO INSTALLATION.



FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: SOUTH LATSON COMMERCIAL DEVELOPMENT
 PREPARED FOR: 1015 LATSON ROAD LLC
 29932 BECK ROAD
 WOODHULL, MI 48893
 248.773.9992

TITLE: LANDSCAPE PLAN

NO	BY	DATE	REVISION PER
4	ST	3-14-24	PER LORC AND PC COMMENTS
3	ST	1-16-24	LAYOUT MODIFICATIONS
2	PC	12-11-23	PER. P.C. MEETING
1	ST	10-25-23	PER TOWNSHIP COMMENTS
NO	BY		

DESIGNED BY: PC
 DRAWN BY: PC
 CHECKED BY:
 SCALE: 1" = 20'-0"
 JOB NO: 21-519
 DATE: 10/03/2023
 SHEET NO. 9

PROJECT SUMMARY

CALCULATION DETAILS
LOADING = HS20/HS25
APPROX. LINEAR FOOTAGE = 593 LF

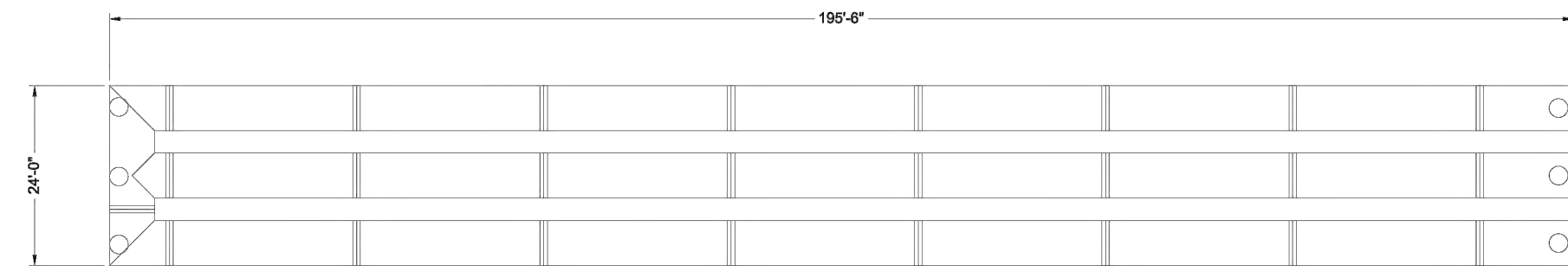
STORAGE SUMMARY
STORAGE VOLUME REQUIRED = 18,170 CF
PIPE STORAGE VOLUME = 16,767 CF
BACKFILL STORAGE VOLUME = 0 CF

PIPE DETAILS

DIAMETER = 72"
CORROSION OR = 5s1
GAGE = 18
COATING = A1T2
WALL TYPE = PERFORATED
BARRREL SPACING = 36"

BACKFILL DETAILS

WIDTH AT ENDS = 12"
ABOVE PIPE = 0"
WIDTH AT SIDES = 12"
BELOW PIPE = 0"



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO BEGINNING OF FABRICATION.
ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A886.
ALL RISERS AND STUBS ARE 2 1/2" x 1/2" CORRUGATION AND 18 GAGE UNLESS OTHERWISE NOTED.

CONTECH ENGINEERED SOLUTIONS LLC
CONTECH CMP DETENTION SYSTEMS
DYO39920 East Latson - South Parcel
South Parcel - COPY
Howell, MI
DETENTION SYSTEM

ASSEMBLY
SCALE: 1" = 20'

Table with columns: PROJECT NO., REV. NO., DATE, DESIGNED, DRAWN, CHECKED, APPROVED, SHEET NO.

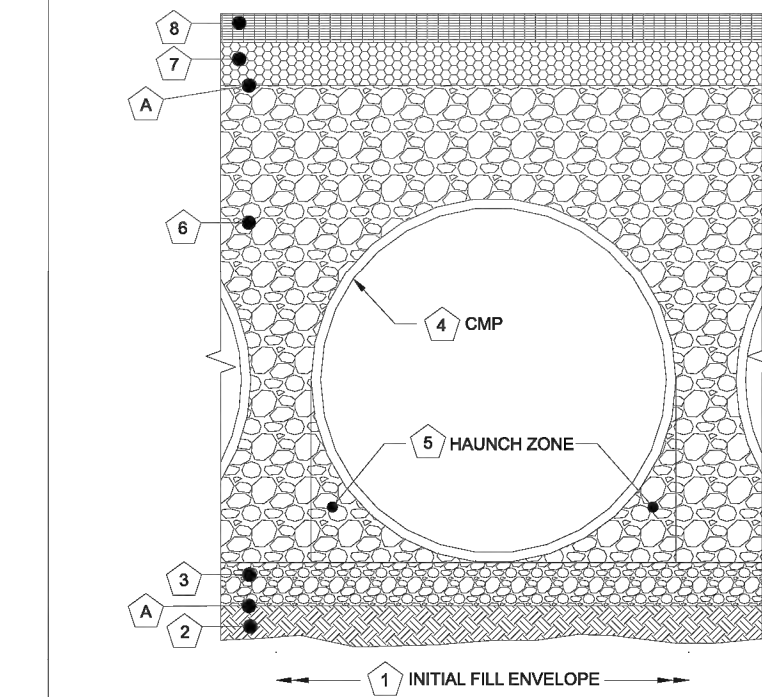
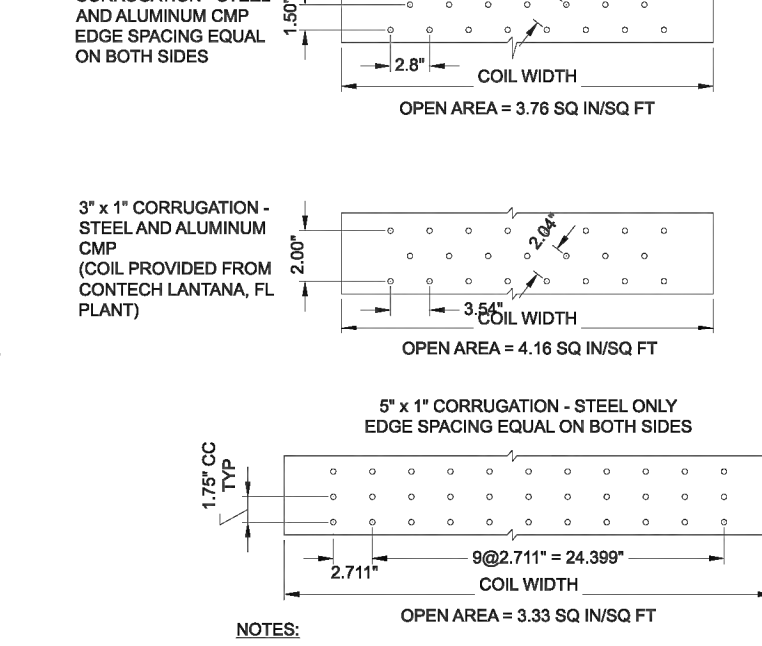
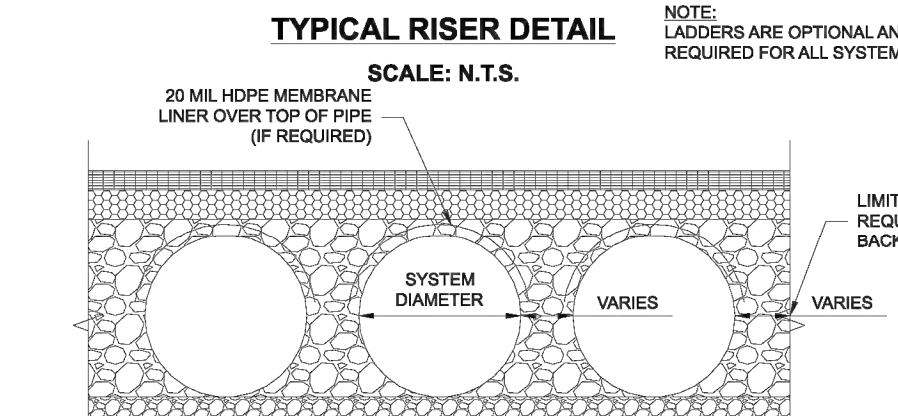
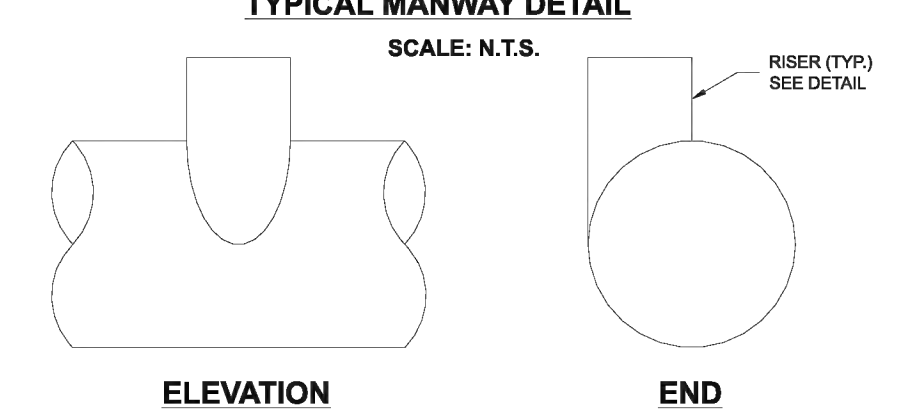
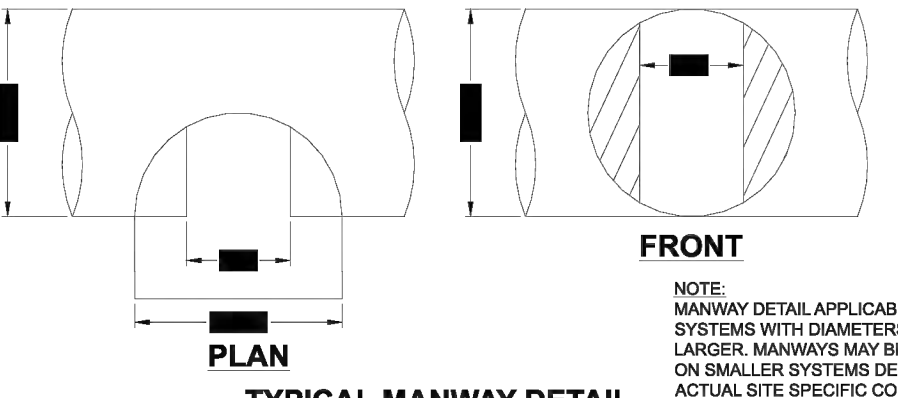


Table with columns: Material Location, Description, Material Designation, Designation. Lists components like Onsite Layer, Backfill, Bedding Stone, Geotextile Layer.



NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PRECONSTRUCTION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.

TYPICAL PERFORMANCE DETAIL
SCALE: N.T.S.

NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, AN HDPE MEMBRANE LINER IS RECOMMENDED WITH THE SYSTEM.

Table with columns: DATE, REVISION DESCRIPTION, BY.

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ASSEMBLY
SCALE: 1" = 20'

Table with columns: PROJECT NO., REV. NO., DATE, DESIGNED, DRAWN, CHECKED, APPROVED, SHEET NO.

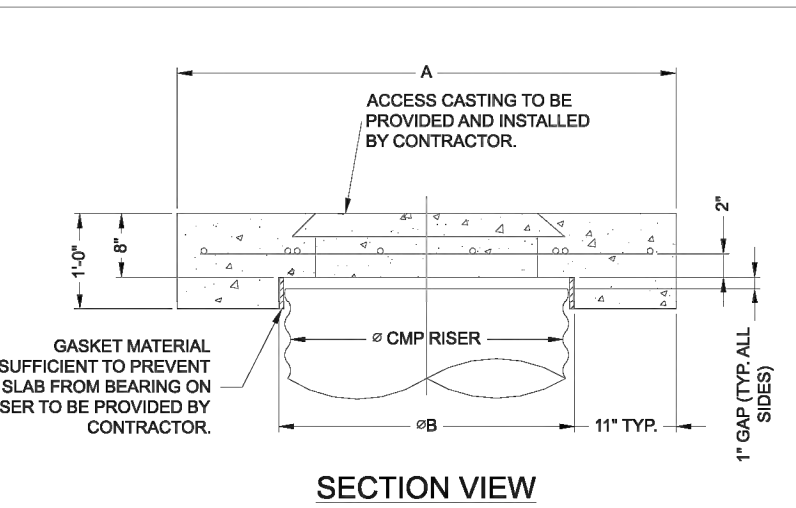
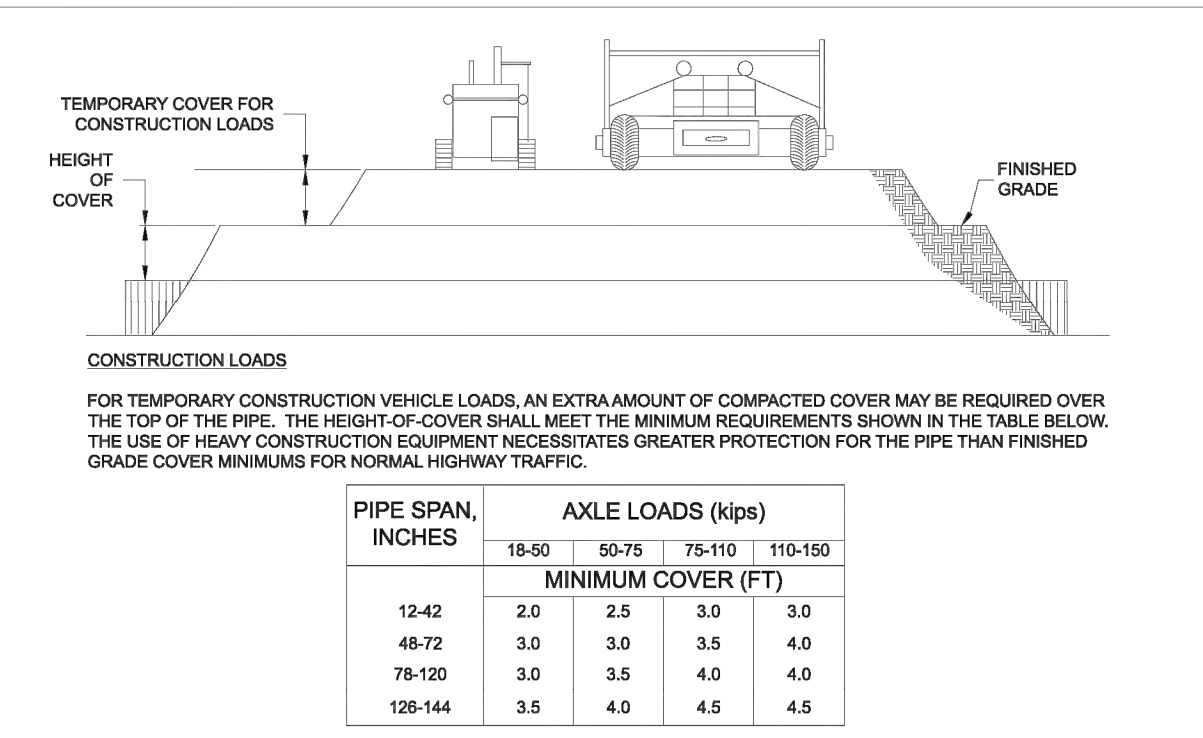
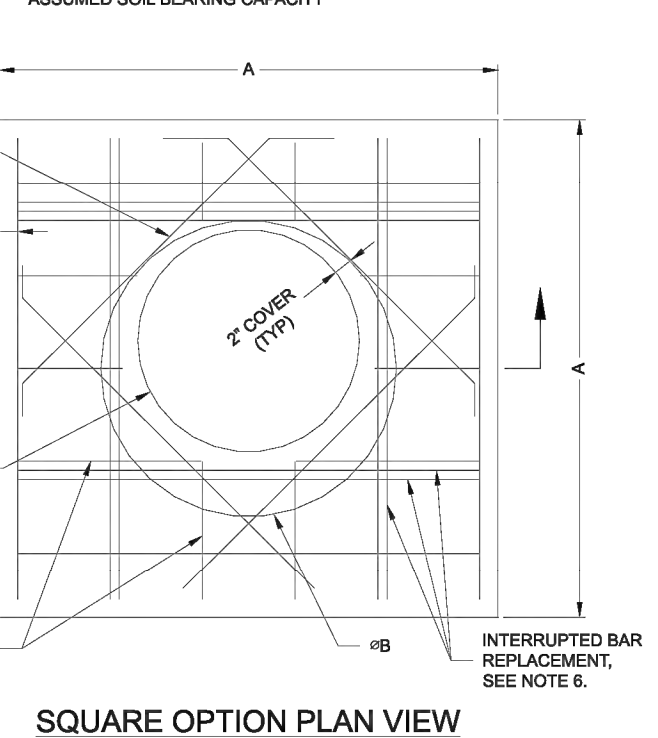
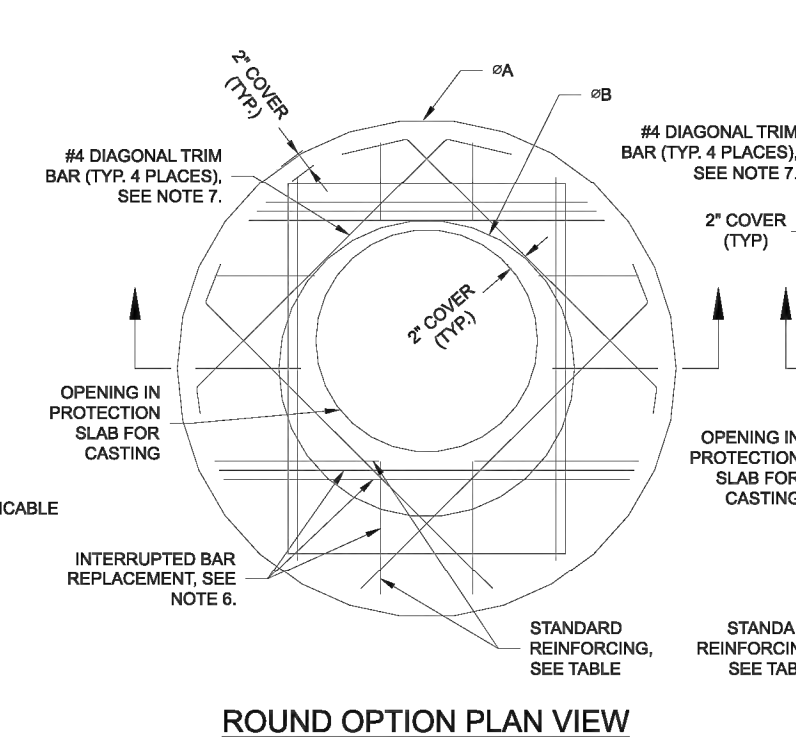


Table with columns: CMP RISER, A, B, REINFORCING, BEARING PRESSURE (PSF). Lists reinforcement details for different riser sizes.

Table with columns: PIPE SPAN, AXLE LOADS (kips), MINIMUM COVER (FT). Lists cover requirements for different pipe spans and axle loads.



CONSTRUCTION LOADING DIAGRAM
SCALE: N.T.S.
SPECIFICATION FOR DESIGNED DETENTION SYSTEM:
SCOPE: THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

REINFORCING TABLE
** ASSUMED SOIL BEARING CAPACITY
GRADE THE FOUNDATION SUBGRADE TO A UNIFORM OR SLIGHTLY SLOPING GRADE. IF THE SUBGRADE IS CLAY OR RELATIVELY NON-POROUS AND THE CONSTRUCTION SEQUENCE WILL LAST FOR AN EXTENDED PERIOD OF TIME, IT IS BEST TO SLOPE THE GRADE TO ONE END OF THE SYSTEM.

MANHOLE CAP DETAIL
SCALE: N.T.S.
1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.

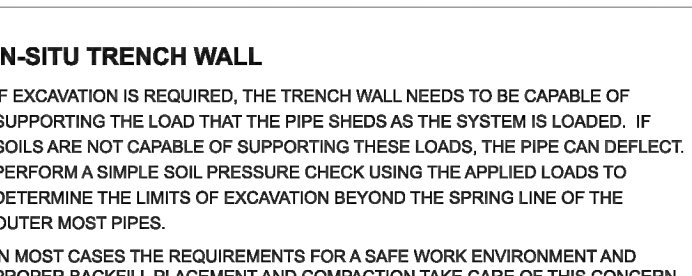
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DETENTION SYSTEM

ASSEMBLY
SCALE: 1" = 20'

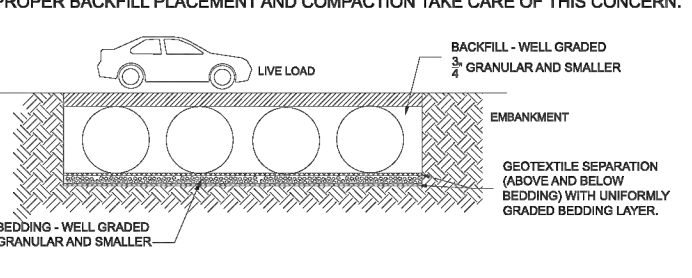
Table with columns: PROJECT NO., REV. NO., DATE, DESIGNED, DRAWN, CHECKED, APPROVED, SHEET NO.

CMP DETENTION INSTALLATION GUIDE
PROPER INSTALLATION OF A FLEXIBLE UNDERGROUND DETENTION SYSTEM WILL ENSURE LONG-TERM PERFORMANCE. THE CONFIGURATION OF THESE SYSTEMS OFTEN REQUIRES SPECIAL CONSTRUCTION PRACTICES THAT DIFFER FROM CONVENTIONAL FLEXIBLE PIPE CONSTRUCTION.



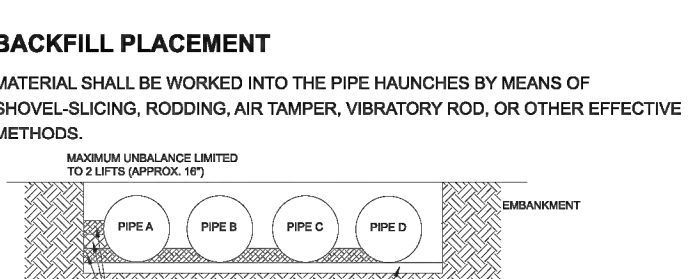
WHEN FLOWABLE FILL IS USED, YOU MUST PREVENT PIPE FLOATATION. TYPICALLY, SMALL LIFTS ARE PLACED BETWEEN THE PIPES AND THEN ALLOWED TO SET UP PRIOR TO THE PLACEMENT OF THE NEXT LIFT.

FOUNDATION
CONSTRUCT A FOUNDATION THAT CAN SUPPORT THE DESIGN LOADING APPLIED BY THE PIPE AND ADJACENT BACKFILL WEIGHT AS WELL AS MAINTAIN ITS INTEGRITY DURING CONSTRUCTION.



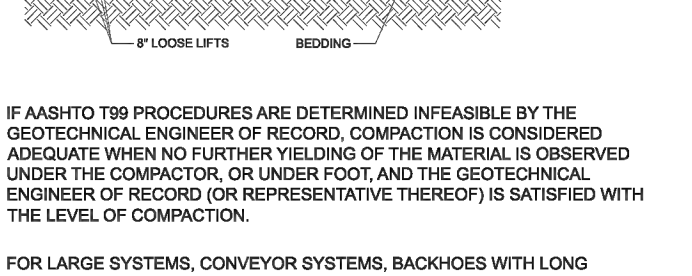
CONSTRUCTION LOADING
TYPICALLY, THE MINIMUM COVER SPECIFIED FOR A PROJECT ASSUMES H20 LIVE LOAD. BECAUSE CONSTRUCTION LOADS OFTEN EXCEED DESIGN LIVE LOADS, INCREASED TEMPORARY MINIMUM COVER REQUIREMENTS ARE NECESSARY.

GEOMEMBRANE BARRIER
A SITES RESPONSIBILITY MAY CHANGE OVER TIME WHEN VARIOUS TYPES OF SALTING AGENTS ARE USED, SUCH AS ROAD SALTS FOR DEICING AGENTS. IF SALTING AGENTS ARE USED ON OR NEAR THE PROJECT SITE, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM.



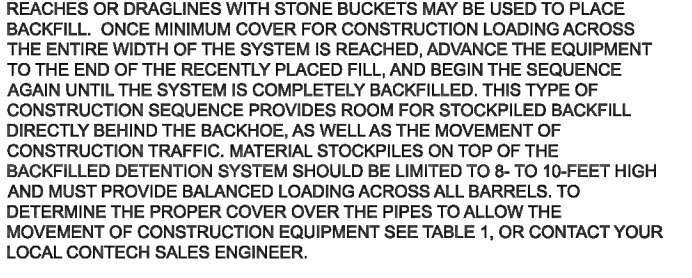
ADDITIONAL CONSIDERATIONS
BECAUSE MOST SYSTEMS ARE CONSTRUCTED BELOW-GRADE, RAINFALL CAN RAPIDLY FILL THE EXCAVATION, POTENTIALLY CAUSING FLOATATION AND MOVEMENT OF THE PREVIOUSLY PLACED PIPES.

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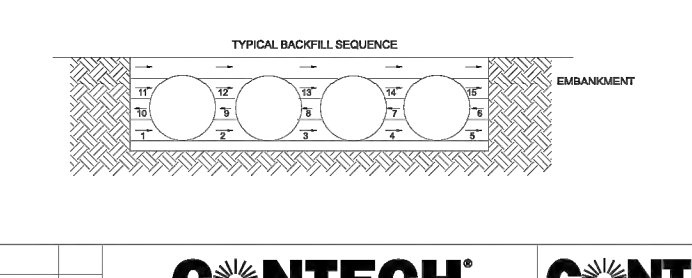
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Table with columns: DATE, REVISION DESCRIPTION, BY.

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CONTECH CMP DETENTION SYSTEMS
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South Parcel - COPY
Howell, MI
DETENTION SYSTEM

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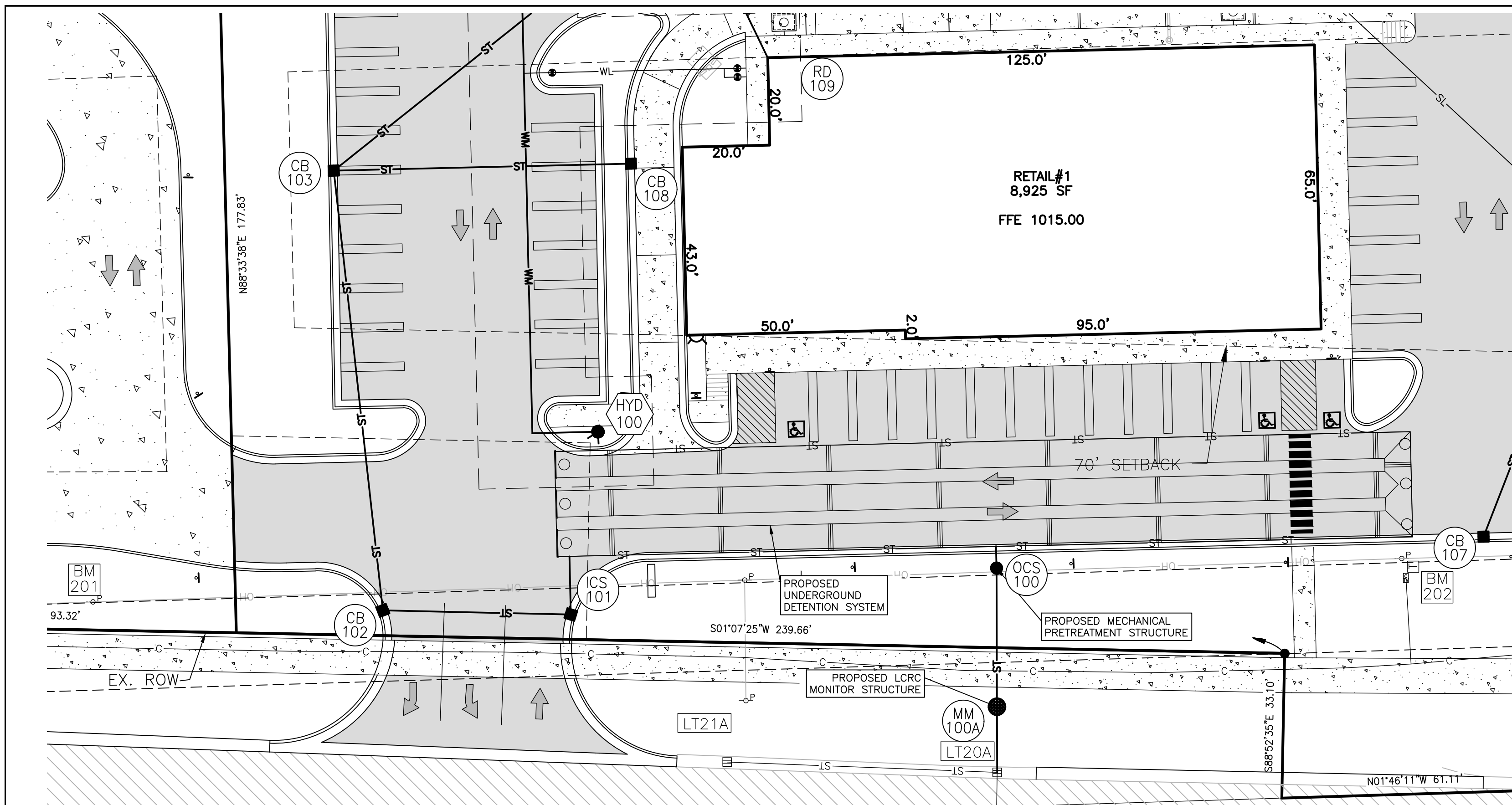
BOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

CONTECH ENGINEERED SOLUTIONS LLC
CONTECH CMP DETENTION SYSTEMS
DYO39920 East Latson - South Parcel
South Parcel - COPY
Howell, MI
DETENTION SYSTEM

UNDERGROUND DETENTION DETAILS
1015 LATSON ROAD LLC
29592 BEC ROAD
WILSON, MI 48393
248.773.9992

Table with columns: PROJECT, PREPARED FOR, PER LORC AND P.C. COMMENTS, LAYOUT MODIFICATIONS, PER P.C. MEETING, PER TOWNSHIP COMMENTS, DATE, REVISION PER.

DESIGNED BY: ST
CHECKED BY: DH/JS
SCALE: NO SCALE
JOB NO: 21-519
DATE: 10/04/2023
SHEET NO. 12



STORM WATER MANAGEMENT NARRATIVE

PRE-DEVELOPMENT:
THE SITE CURRENTLY SITS VACANT AND SHEET FLOWS FROM EAST TO WEST TO THE LATSON ROAD STORM SEWER SYSTEM.

POST DEVELOPMENT:
THE SITE WILL BE DEVELOPED AND PAVED FOR USE AS A MULTI-TENANT COMMERCIAL SPACE WITH RESTAURANT AND RETAIL USE. THE SITE WILL CONTAIN A STORM SEWER COLLECTION SYSTEM WHICH WILL COLLECT ALL ON-SITE (AND SOME TRIBUTARY OFF-SITE) STORM WATER AND ROUTE IT TO A MECHANICAL PRETREATMENT UNIT. THE MECHANICAL PRETREATMENT UNIT IS PROPOSED AND DESIGNED TO MEET THE REQUIRED WATER QUALITY STANDARDS PRIOR TO DISCHARGE INTO THE PROPOSED ON-SITE UNDERGROUND DETENTION SYSTEM. INFILTRATION TESTING HAS BEEN COMPLETED ON A NEARBY AREA TO THE NORTH THAT INDICATE THAT ON-SITE SOILS IN THE VICINITY OF THE PROPOSED BASIN ARE APPROXIMATELY 1.5 IN/HR. APPLYING A FACTOR OF SAFETY OF 2, THE SITE IS UTILIZING A SOILS INFILTRATIVE CAPACITY OF 0.75 IN/HR.

ONE OF THE MAIN GOALS OF THE CURRENT LIVINGSTON COUNTY DRAIN COMMISSIONER STORM WATER STANDARDS IS TO PROMOTE ON-SITE INFILTRATION IF SUITABLE SOILS EXIST. IF SITE SOILS EXCEED 0.25 IN/HR, INFILTRATION IS EXPECTED TO BE IMPLEMENTED, AND WITH ON-SITE SOILS WITH INFILTRATIVE RATES GREATER THAN 0.50 IN/HR, THE SOILS DO NOT NEED ANY AMENDMENT TO FURTHER PROMOTE INFILTRATION. DUE TO THE GEOMETRICS OF THE SUBJECT SITE (BEING SHALLOW AND A SMALLER COMMERCIAL PARCEL), THERE ARE MINIMAL OPPORTUNITIES TO PROMOTE INFILTRATION OTHER THAN AT THE LOCATION OF THE UNDERGROUND DETENTION SYSTEM. IN ORDER TO PROMOTE INFILTRATION AT THE BASIN FOOTPRINT PRIOR TO STORM WATER DISCHARGE TO THE LATSON ROAD STORM SEWER SYSTEM OCCURRING, THE UNDERGROUND DETENTION SYSTEM PIPE INVERT IS SET BELOW THE OUTLET CONTROL ORIFICE ELEVATION BY 2.5'. SO 2.5' OF THE 6' DIAMETER UNDERGROUND SYSTEM PIPE WILL BE BELOW THE OUTLET ELEVATION. A PERFORATED PIPE AND THE SURROUNDING STRUCTURAL BACKFILL AROUND THE UNDERGROUND DETENTION SYSTEM WILL AID IN PROMOTION OF THE INFILTRATION OF STORM WATER IN THE ON-SITE 0.75 IN/HR SOILS. THE VOLUME WITHIN THE UNDERGROUND SYSTEM THAT IS BELOW THE OUTLET ELEVATION IS 6,613 CFT.

593 LFT PIPE X 11.1511 CFT/LFT OF PIPE (BOTTOM 2.5' OF 6' DIA PIPE) = 6,613 CFT
THE 6,613 CFT PROVIDED BELOW THE INVERT IS INTENDED TO MEET OR EXCEED THE REQUIRED CHANNEL PROTECTION VOLUME 5,517 CFT. THIS DESIGN MEETS THAT REQUIREMENT.

PER THE LDCD STANDARDS, VOLUME PROVIDED FOR THE CHANNEL PROTECTION VOLUME CAN BE CREDITED TOWARDS THE REQUIRED 100-YR DETENTION VOLUME, SO LONG AS THE REMAINING DETENTION VOLUME REQUIRED IS NOT LESS THAN THE EXTENDED DETENTION VOLUME. WITH THIS, A REMAINING 9,019 CFT OF VOLUME IS NEEDED:

15,632 CFT - 6,613 CFT = 9,019 CFT (REMAINING VOLUME NEEDED ABOVE OUTLET)
9,019 CFT + 8,064 CFT (EXTENDED DETENTION VOLUME)

A VOLUME OF 10,154 CFT IS PROVIDED ABOVE THE OUTLET CONTROL ELEVATION.
593 LFT PIPE X 17.1232 CFT/LFT OF PIPE (TOP 3.5' OF 6' DIA PIPE) = 10,154 CFT
THE TOTAL STORAGE VOLUME PROVIDED IN THE SYSTEM IS 16,767 CFT
(6,613 CFT BELOW OUTLET FOR CPVC INFILTRATION VOLUME + 10,154 CFT ABOVE OUTLET)

IN ORDER FOR INFILTRATION TO OCCUR IN THE BASIN FOOTPRINT, AN ADEQUATE FOOTPRINT FOR INFILTRATION MUST BE PROVIDED. PER THE LDCD STANDARDS AND WITH AN INFILTRATION RATE OF 0.75 IN/HR, A MINIMUM BASIN FOOTPRINT OF 3,153 SFT IS REQUIRED. A BASIN FOOTPRINT OF THE PROPOSED SYSTEM IS 4,692 SFT. WITH THIS FOOTPRINT AREA AND ON-SITE INFILTRATION RATE, THE PROVIDED RATE OF INFILTRATION IS 293.3 CFT/HR WHICH RESULTS IN FULL INFILTRATION WITHIN 22.5 HOURS.

4,692 SFT X (0.75 IN/HR X 1FT/12IN) = 293.3 CFT/HR
6,613 CFT / 293.3 CFT/HR = 22.5 HRS TO INFILTRATE THE PROVIDED CPVC STORAGE VOLUME BELOW THE OUTLET INVERT.

LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
1.23	0.9	1.10
0.00	0.7	0.00
0.35	0.2	0.07

COMPOUND C: 0.74
TOTAL DRAINAGE AREA: 1.58 ACRES

WATER QUALITY VOLUME V_{WQ}
 $V_{WQ} = 3,630(C)/A = 4244 \text{ FT}^3$
Are upstream infiltration BMP's provided? no
 $V_{i} = 0.15(V_{WQ}) = 637 \text{ FT}^3$

WATER QUALITY RATE FOR MECHANICAL STRUCTURE
 $T_C = \text{MAX TIME OF CONCENTRATION} = 18.63 \text{ MIN}$
 $Q_{WQ} = (C)(A)^{0.30} / (T_C + 9.17)^{0.81} = 2.39 \text{ CFS}$

CHANNEL PROTECTION VOLUME CONTROL - REQUIRED
 $V_{CP,R} = 4.719(C)/A = 5517 \text{ FT}^3$

CHANNEL PROTECTION VOLUME CONTROL - PROVIDED
In-Situ Infiltration rate = 0.75 IN/HR
Are upstream infiltration BMP's provided? NO INFILTRATION
Basin Footprint Infiltration Area Required = 3153 FT^2
 $V_{CP,P} = 6613 \text{ FT}^3$

CHANNEL PROTECTION RATE CONTROL (EXTENDED DETENTION VOLUME)
 $V_{ED} = 6,897(C)/A = 8064 \text{ FT}^3$

EXTENDED DETENTION OUTLET RATE
 $Q_{ED} = V_{ED} / (48 \text{ hr}) = 0.047 \text{ CFS}$
 $H_{ED} = V_{ED} / (4,800 (H^2)^{0.5}) = 1.0 \text{ 1" HOLES}$
 $H = 2.39 \text{ FT}$
 $ELEV_{ED} = 1010.56 \text{ FT}$

100-YEAR ALLOWABLE OUTLET RATE
 $Q_{DRAIN} = \text{Restricted Drain Rate} = 0.15 \text{ CFS/ACRE}$
 $Q_{DRAIN} = 1.1055 - 0.206LN(A) = 1.000 \text{ CFS/ACRE}$
 $Q_{INCP} = (\text{LESSER OF } Q_{DRAIN} \text{ \& } Q_{DRAIN})^A = 0.237 \text{ CFS}$

100-YEAR DETENTION VOLUME
 $V_{100R} = 18985(C)/A = 22197 \text{ FT}^3$
 $Q_{100IN} = (C)(A)^{0.30} / (T_C + 9.17)^{0.81} = 6.59 \text{ CFS}$
 $R = 0.206 - 15 \ln(Q_{100R} / Q_{100IN}) = 0.7048$
 $V_{1000} = V_{100R} - R \cdot V_{CP,P} = 9031 \text{ FT}^3$
Is $V_{1000} \geq V_{ED}$? YES
 $V_{1000} = 9031 \text{ FT}^3$

BASIN STORAGE PROVIDED
Lineal Footage of Pipe in system: 593 ft

ELEVATION	INCREMENTAL VOLUME / LFT (FT ³)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)
1011.67	1.1254	667.4	10,154
1011.17	1.9721	1169.5	9,487
1010.67	2.4302	1441.1	8,317
1010.17	2.7225	1614.4	6,876
1009.67	2.9009	1720.2	5,262
1009.17	2.9861	1770.8	3,542
1008.67	2.9861	1770.8	1,771
1008.17	0.0	0.0	0
1008.17	2.9009	1720.2	6,613
1007.67	2.7225	1614.4	4,892
1007.17	2.4302	1441.1	3,278
1006.67	1.9721	1169.5	1,837
1006.17	1.1254	667.4	667
1005.67	0	0	0

PROVIDED FOOTPRINT OF BASIN BOTTOM AREA: 4692 FT^2

OUTLET CONTROL STRUCTURE
 $Q_{ED,ACTUAL} = 1 \text{ (1" HOLES)}$
 $A_{ED} = 0.0055 \text{ FT}^2$
 $Q_{ED,ACTUAL} = (A_{ED}) / (0.62 \times (2 \times 32.2 \times h)^{0.5}) = 0.042 \text{ CFS}$
 $Q_{ORIFICE,ACTUAL} = Q_{ED,ACTUAL} = 0.195 \text{ CFS}$
 $A_{100} = Q_{100,ACTUAL} / (0.62 \times (2 \times 32.2 \times (ELEV_{ED} - ELEV_{ED}))^{0.5}) = 0.037 \text{ FT}^2$
AREA OF 2 INCH DIAMETER ORIFICE = 0.022 FT^2
ORIFICES = $A_{100} / 0.005 = 1.0$ ORIFICES

OVERFLOW SPILLWAY DESIGN
Design Flow Rate: $Q_{100IN} = 6.59 \text{ CFS}$
Depth of Spillway: $D_{SPILL} = 6 \text{ INCHES}$
Width of Spillway: $W_{SPILL} = Q_{100IN} / (3.33 D_{SPILL}^{3/2}) = 5.6 \text{ FT}$

BASIN DESIGN SUMMARY
BASIN SIZE REQUIRED = 9031 FT^3
BASIN SIZE PROVIDED = 10,154 FT^3

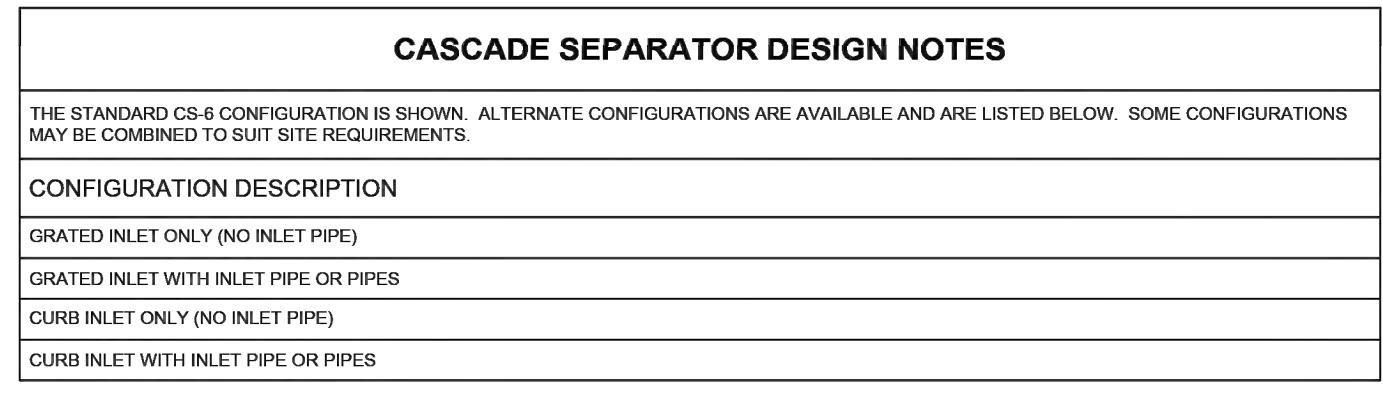
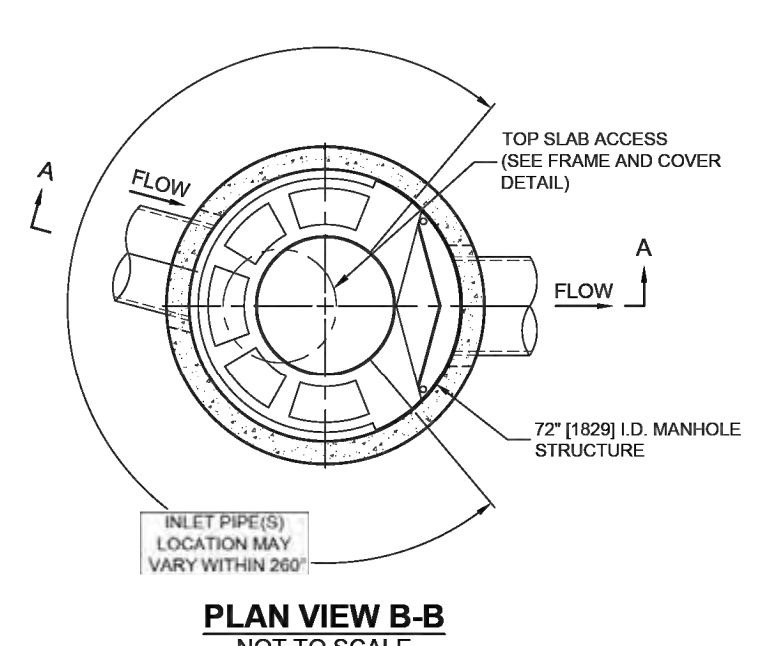
ORIFICE DESIGN SUMMARY

ELEVATION	# OF HOLES	DIAMETER OF HOLES
1008.17	1.0	1-INCH
1010.56	1.0	2-INCH

OVERFLOW SPILLWAY SUMMARY
WIDTH OF OVERFLOW SPILLWAY = 6 FT

Design Criteria			
Site Designation	CS 101	Sizing Method	Treatment Flow Rate
Screening Required?	No	Treatment Flow Rate	2.58
Groundwater Depth (ft)	5 - 10	Pipe Invert Depth (ft)	0 - 5
Multiple Inlets?	No	Grate Inlet Required?	Yes
Required Particle Size Distribution?	No	90° between two inlets?	N/A
Peak Flow (cfs)	5.39	Bedrock Depth (ft)	5 - 10
Pipe Size (in)	18.00		

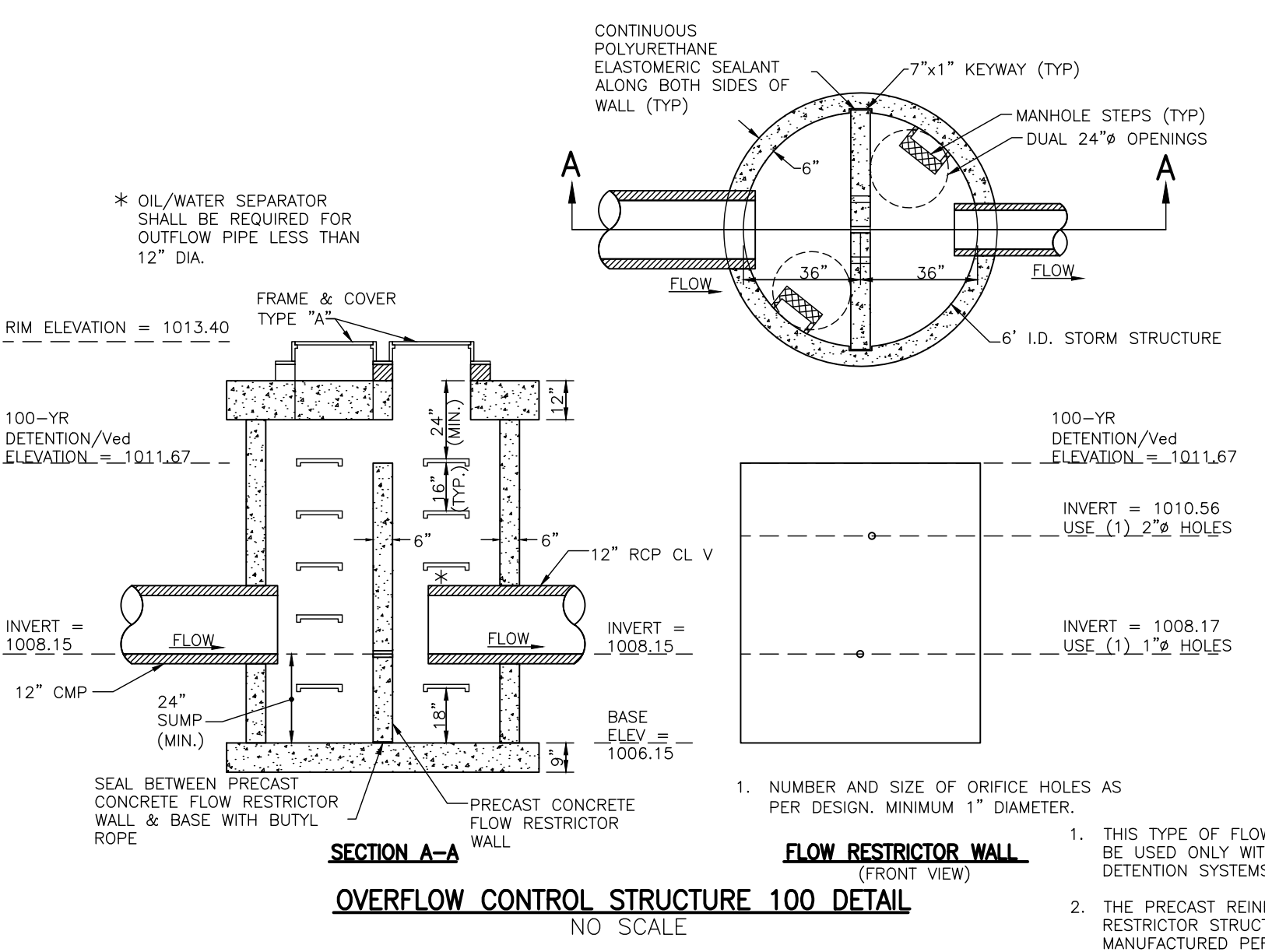
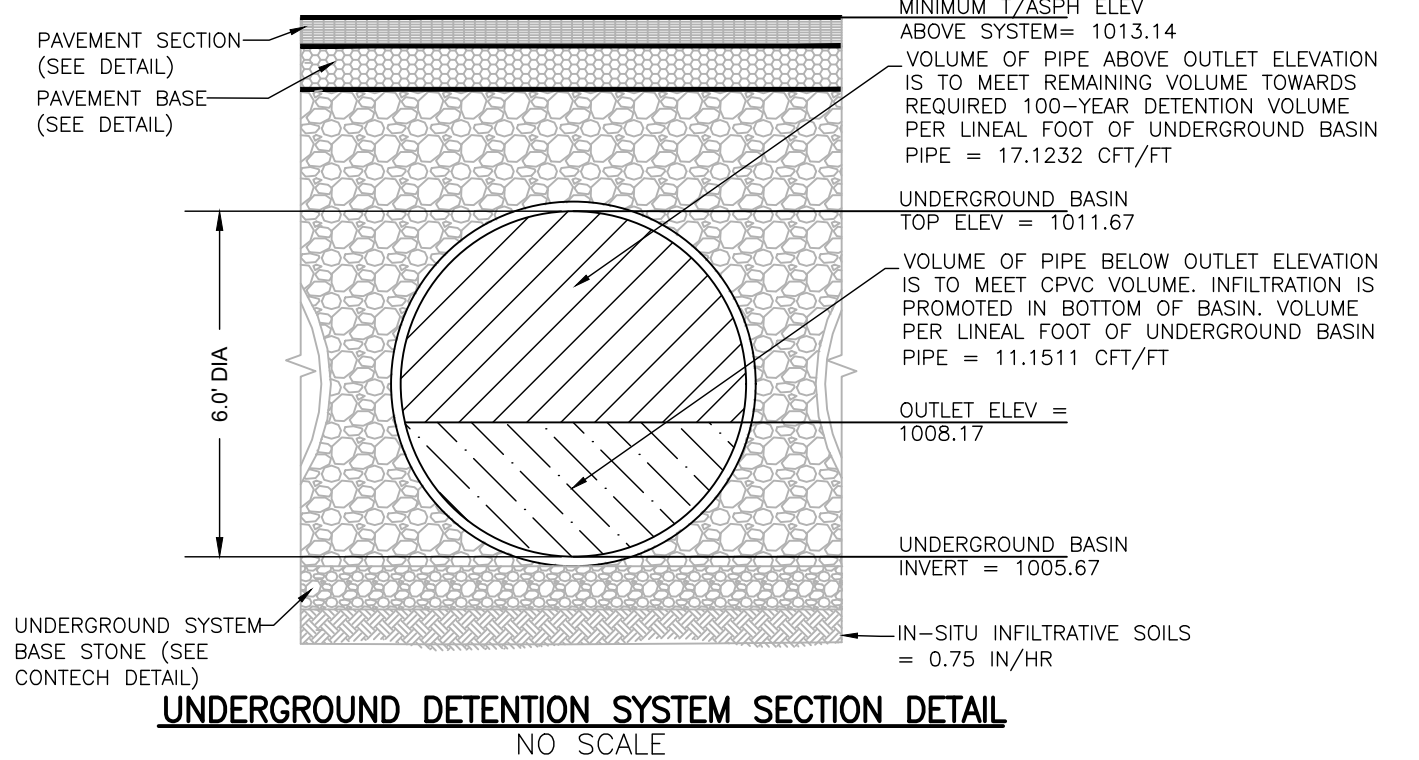
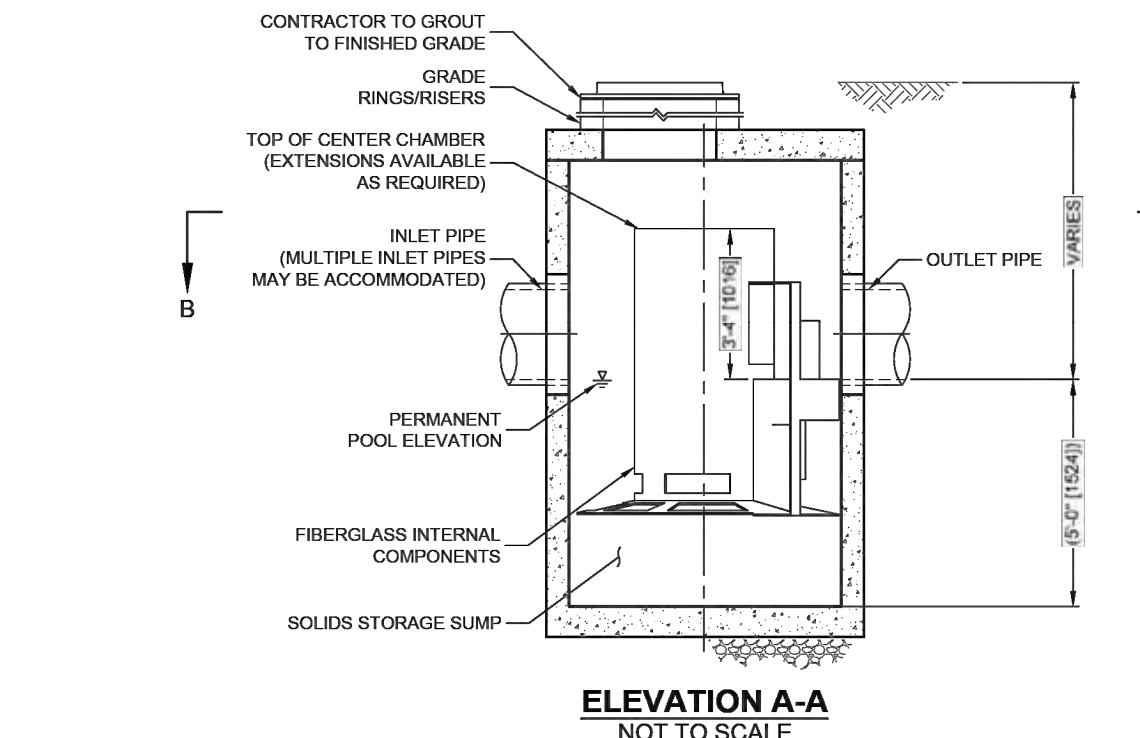
Treatment Selection			
Treatment Unit	CASCADE SEPARATOR	System Model	CS-6
Target Removal	80%	Particle Size Distribution (PSD)	250



SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	
WATER QUALITY FLOW RATE (gals L/HR)	
PEAK FLOW RATE (gals L/HR)	
RETURN PERIOD OF PEAK FLOW (yrs)	
RIM ELEVATION	
PIPE DATA	
INLET PIPE 1	INVERT MATERIAL DIAMETER
INLET PIPE 2	
OUTLET PIPE	

NOTES/SPECIAL REQUIREMENTS:



CS-6
CASCADE SEPARATOR
STANDARD DETAIL

BEBOSSE
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

SOUTH LATSON COMMERCIAL DEVELOPMENT

PROJECT: 1015 LATSON ROAD LLC
29502 BECK ROAD
WILSON, MI 48393
248.773.7992

PREPARED FOR: 1015 LATSON ROAD LLC

TITLE: BASIN DETAILS

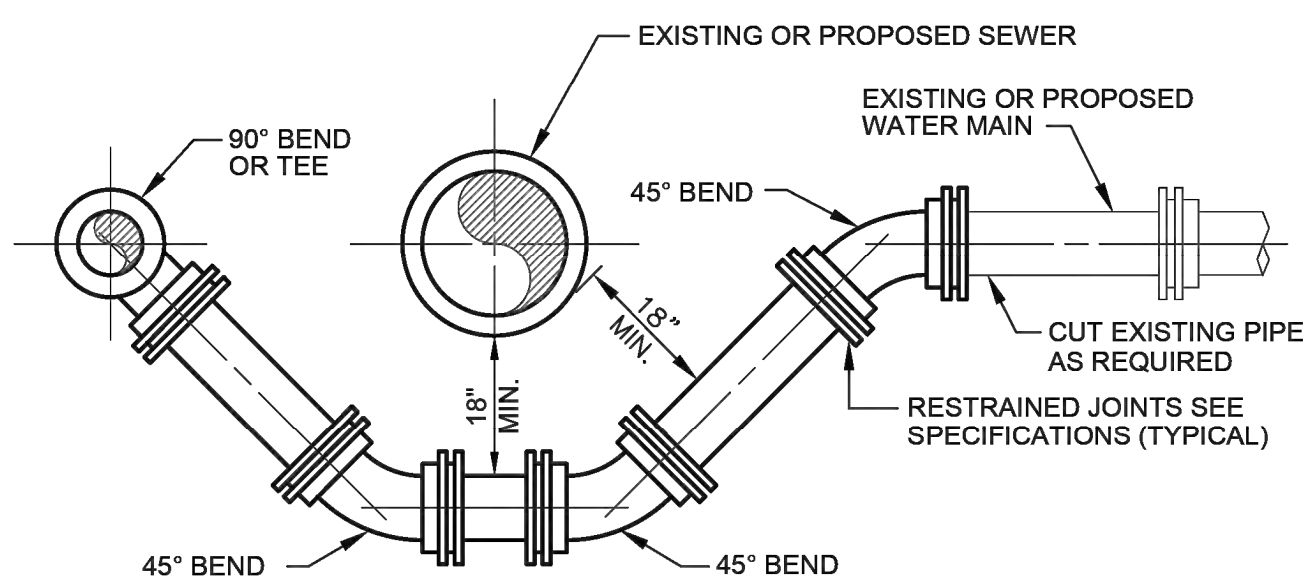
NO	BY	DATE	REVISION PER
4	ST	3-14-24	PER LORC AND PC COMMENTS
3	ST	1-16-24	LAYOUT MODIFICATIONS
2	ST	12-11-23	PER P.C. MEETING
1	ST	10-25-23	PER TOWNSHIP COMMENTS

DESIGNED BY: ST
DRAWN BY: DH
CHECKED BY:
SCALE: 1" = 20'
JOB NO: 21-519
DATE: 10/04/2023
SHEET NO. 11

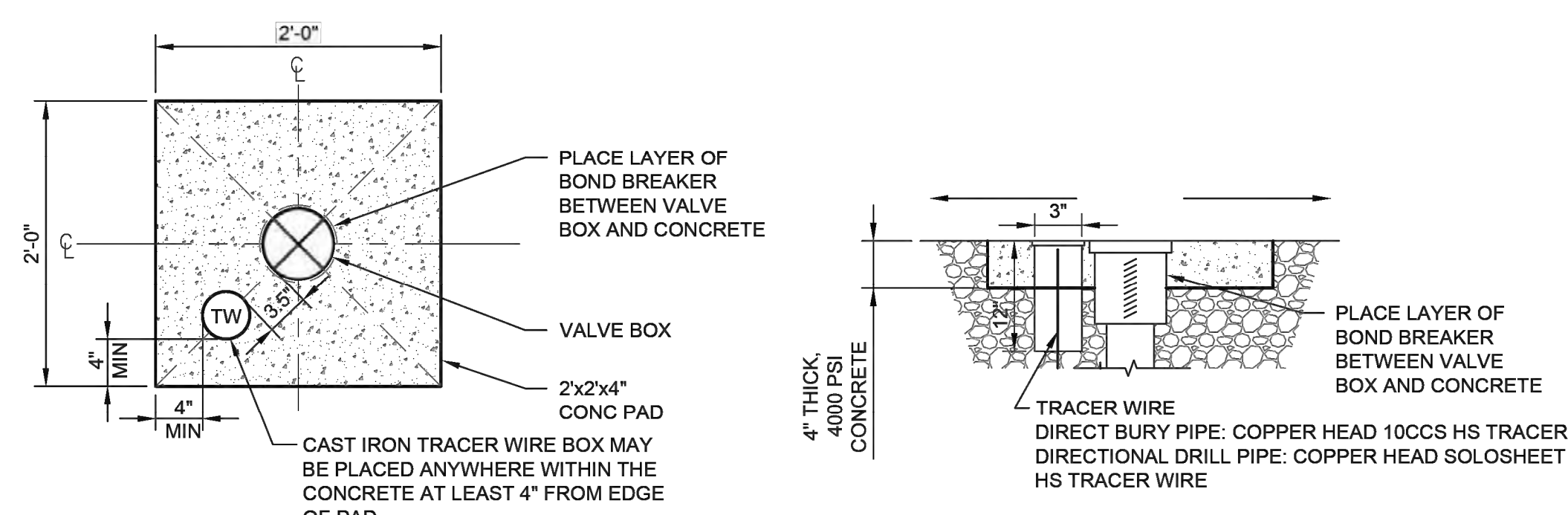
PIPE RESTRAINT SCHEDULE							
GROUND BURIED PRESSURE PIPE - POLYETHYLENE ENCASED DUCTILE IRON PIPE							
PIPE DIAMETER	TEES, 90° BENDS	45° BENDS	22-1/2° BENDS	11-1/4° BENDS	DEAD ENDS	REDUCERS (ONE SIZE REDUCTION)*	REDUCERS (TWO SIZE REDUCTION)*
4	13	5	3	1	40	--	--
6	19	8	4	2	58	31	--
8	24	10	5	2	75	30	70
12	34	14	7	3	107	57	116
16	43	18	9	4	139	59	137
20	52	22	10	5	169	59	134
24	61	25	12	6	199	60	132
30	73	30	15	7	242	85	168
36	84	35	17	8	281	84	168

- LENGTHS OF PIPE RESTRAINT ARE GIVEN IN FEET.
- IF REQUIRED PIPE DIAMETER IS NOT LISTED IN THIS TABLE, THE NEXT LARGEST PIPE DIAMETER SHALL BE USED.
- THIS TABLE IS BASED ON A TEST PRESSURE OF 180 PSI (OPERATING PRESSURE PLUS WATER HAMMER. FOR OTHER TEST PRESSURES, ALL VALUES TO BE INCREASED OR DECREASED PROPORTIONALLY.
- THE VALUES PROVIDED OF RESTRAINT LENGTH ARE IN EACH DIRECTION FROM THE POINT OF DEFLECTION OR TERMINATION EXCEPT FOR TEES, AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE STEM.
- IF TIE RODS ARE USED, USE FOUR RODS MINIMUM AND ADD 1/8-INCH TO BAR DIAMETER AS CORROSION ALLOWANCE.

* SIZE REDUCTION IS BASED UPON THE PIPE DIAMETER SHOWN IN THIS TABLE.
 BASED UPON: INTERNAL PRESSURE: 180
 PIPE DEPTH: 5
 BEDDING CLASS: TYPE 4
 SOIL TYPE: GOOD SAND
 SAFETY FACTOR: 2



WATER MAIN UTILITY OFFSET

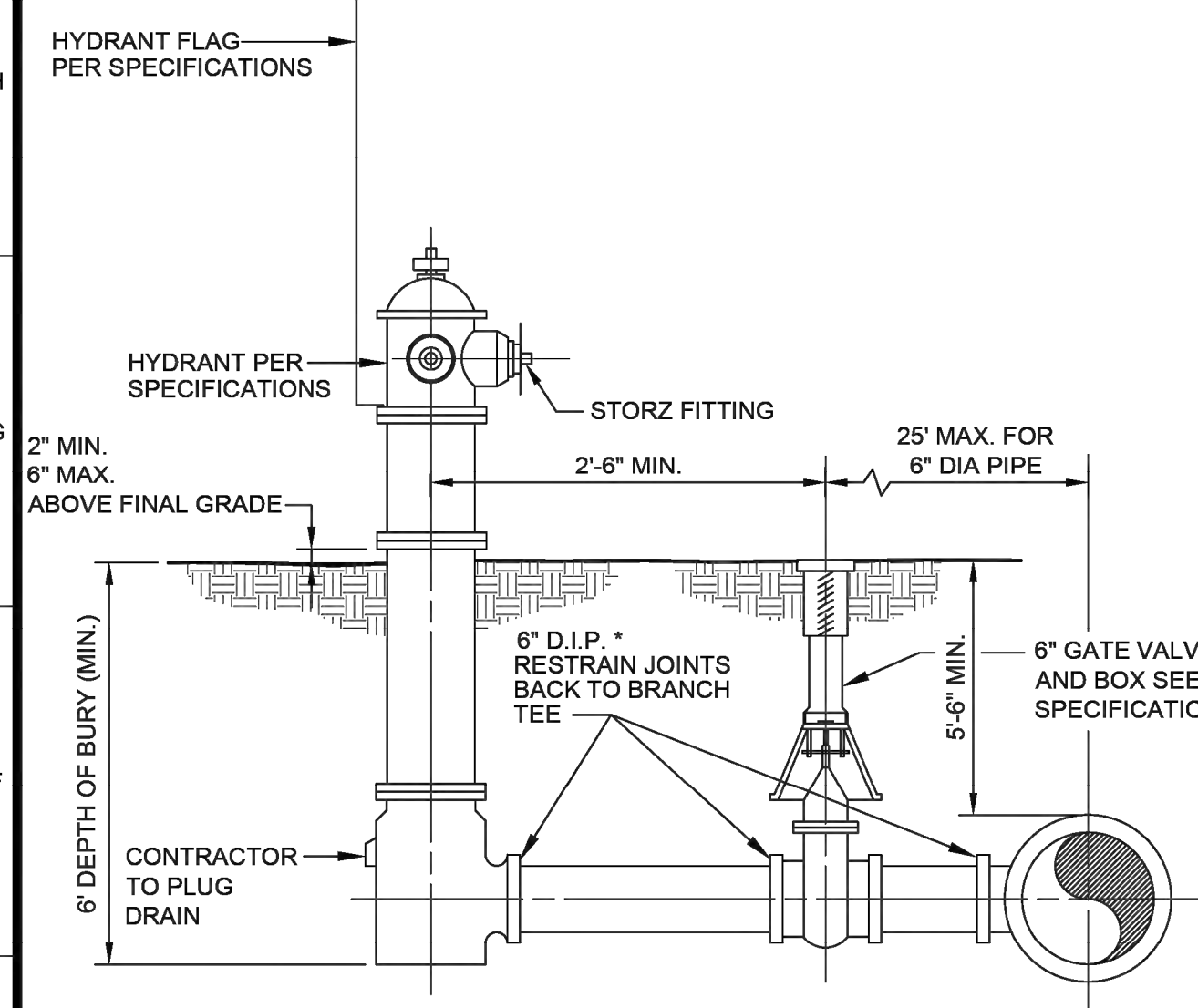


PLAN
VALVE/TRACER WIRE BOX IN CONCRETE DETAIL
 NO SCALE

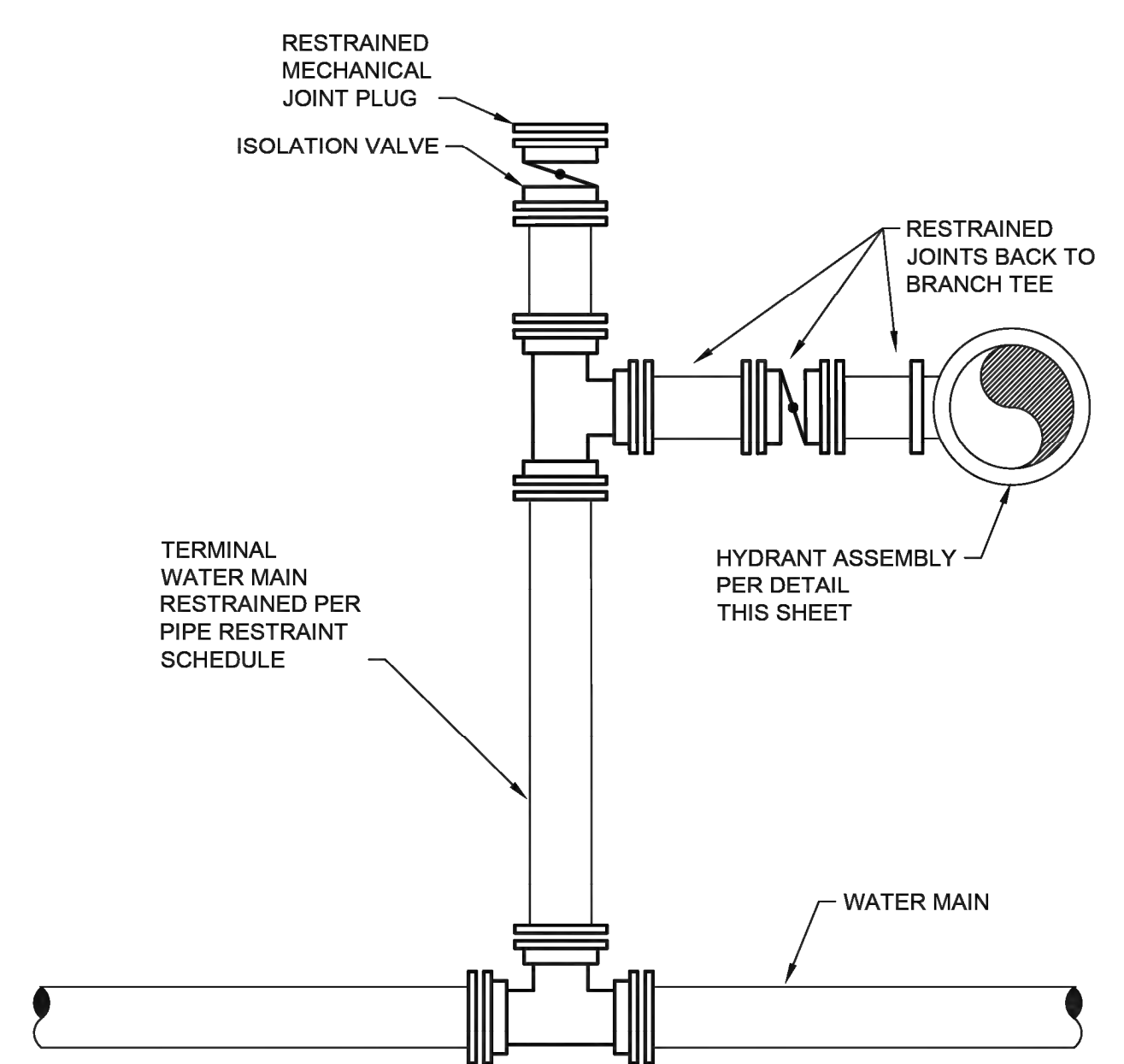
NOTE: ALL BOXES & ADJOINING TW BOXES SHALL BE ENCASED IN A CONC. PAD UNLESS OTHERWISE DETERMINED BY MHOG.

SECTION

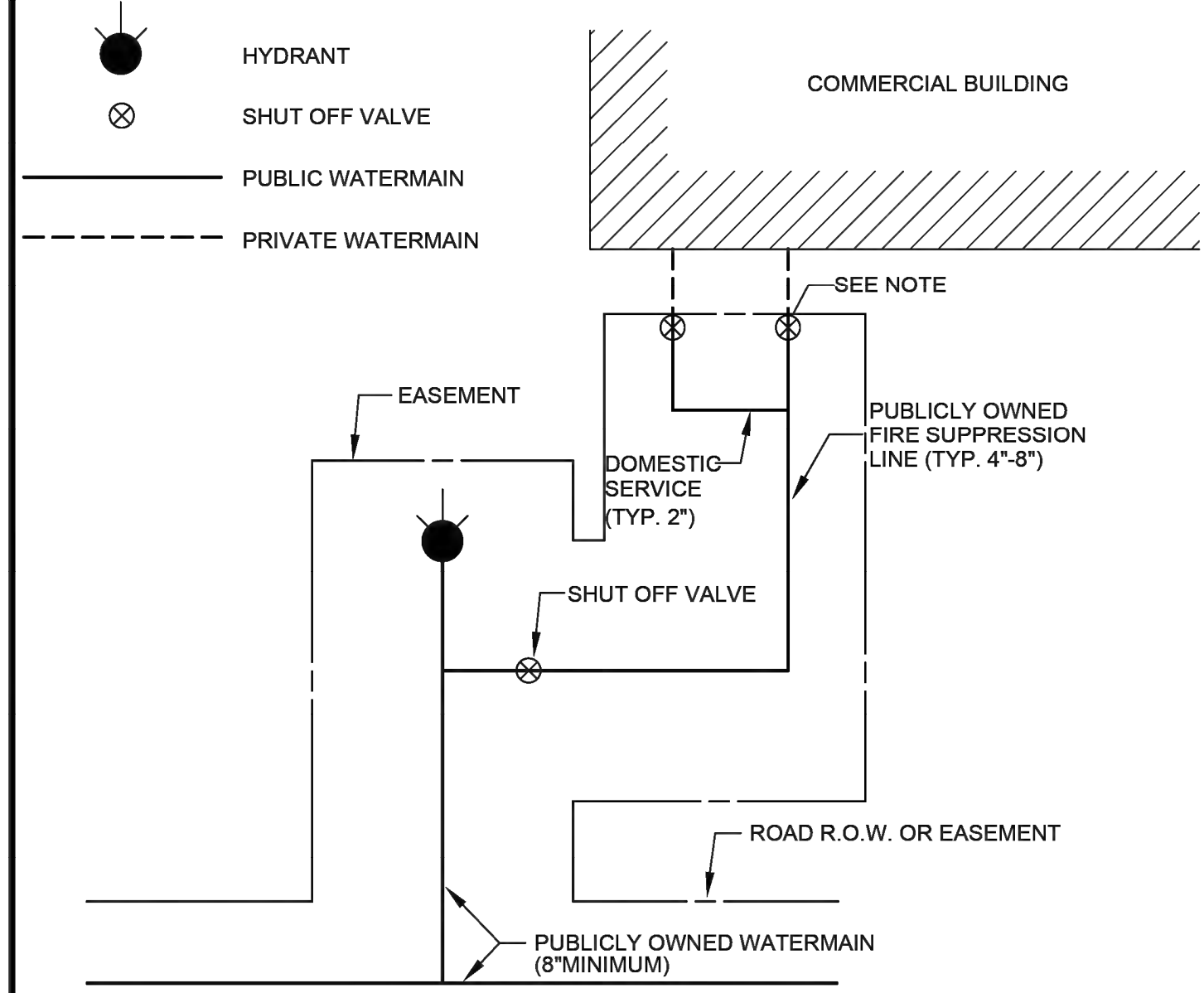
NOTE:
 1. TRACER WIRE BOXES LOCATED WITHOUT A VALVE BOX ONLY REQUIRE AN 18" X 18" CONCRETE PAD.
 2. TRACER WIRE BOX SHALL HAVE A LOCKING LID W/STANDARD AWWA PENTAGON KEY.
 3. TRACER WIRE BOX SHALL BE COPPERHEAD RB14"TP IN ASPHALT INSTALLATIONS AND CD14"TP FOR ALL OTHER INSTALLATIONS.



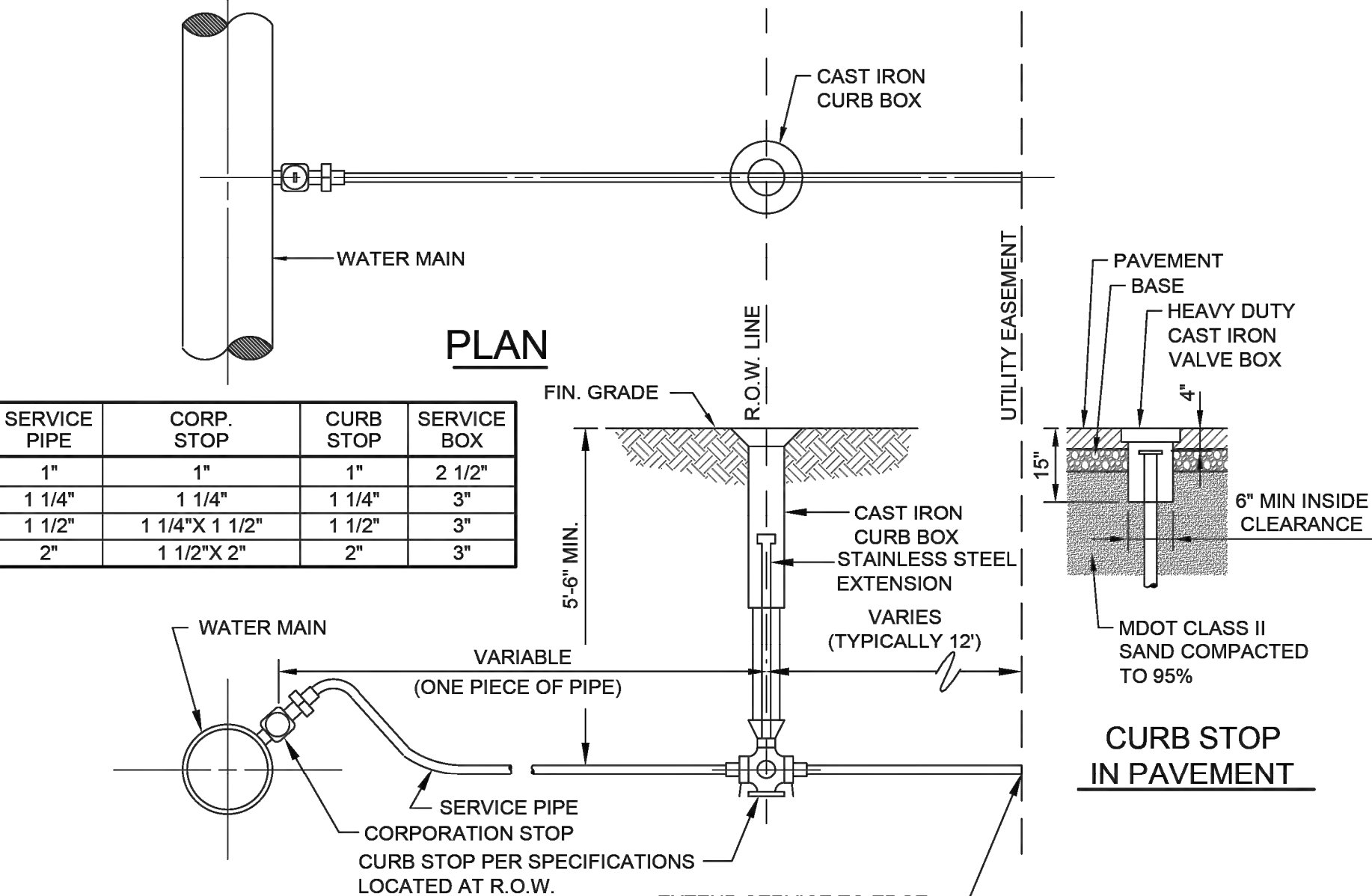
FIRE HYDRANT ASSEMBLY



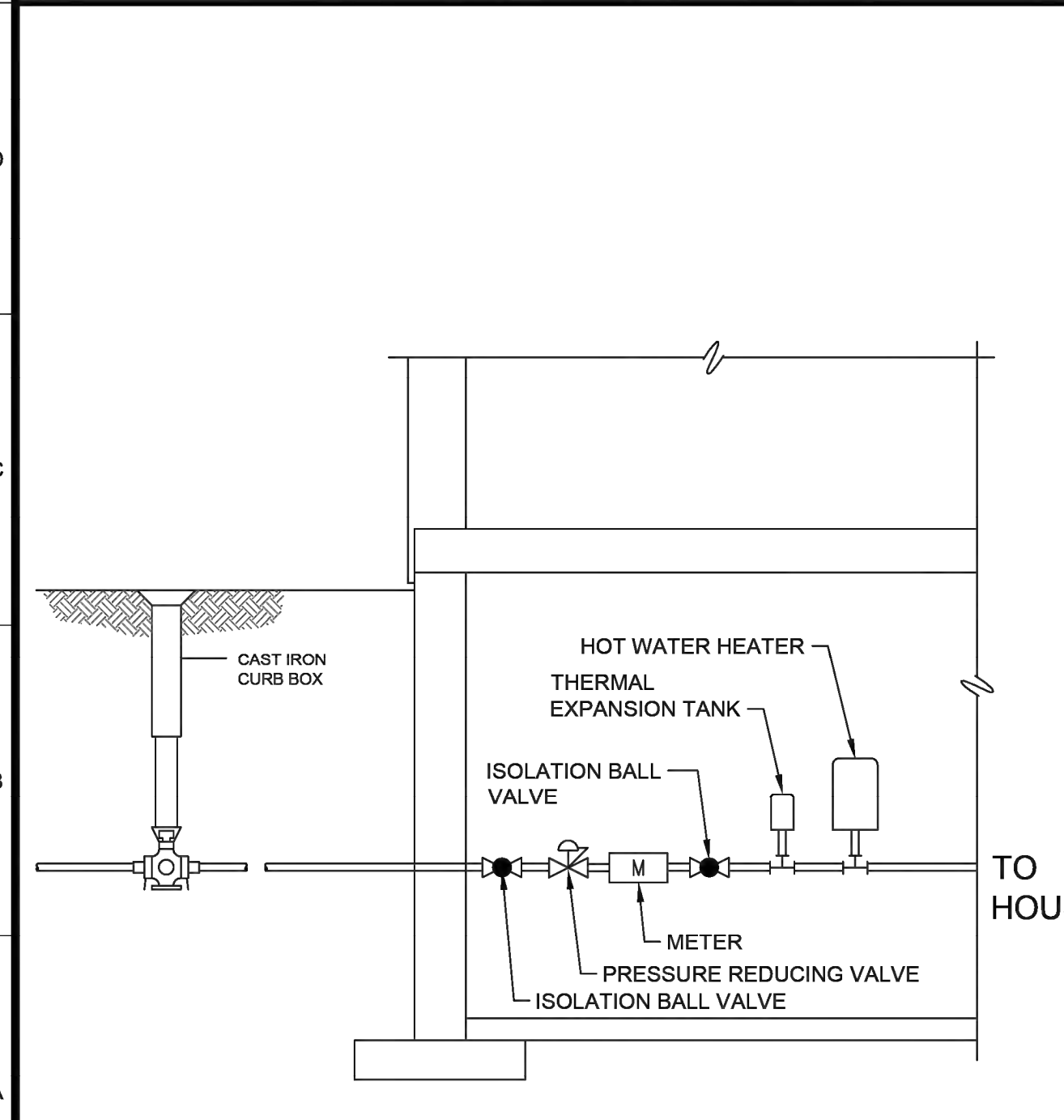
TERMINAL HYDRANT DETAIL



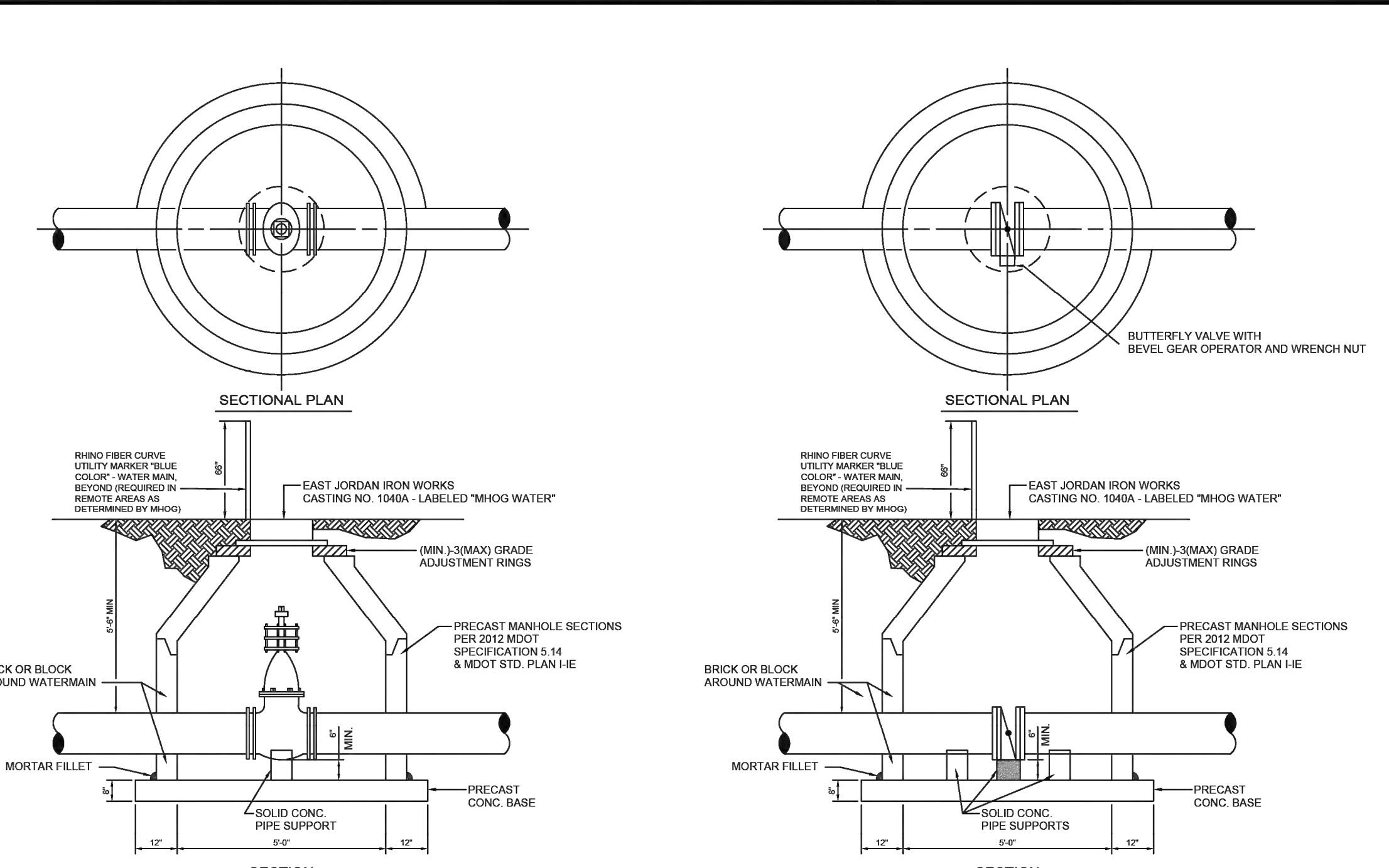
COMMERCIAL BUILDING WATER SERVICE LAYOUT



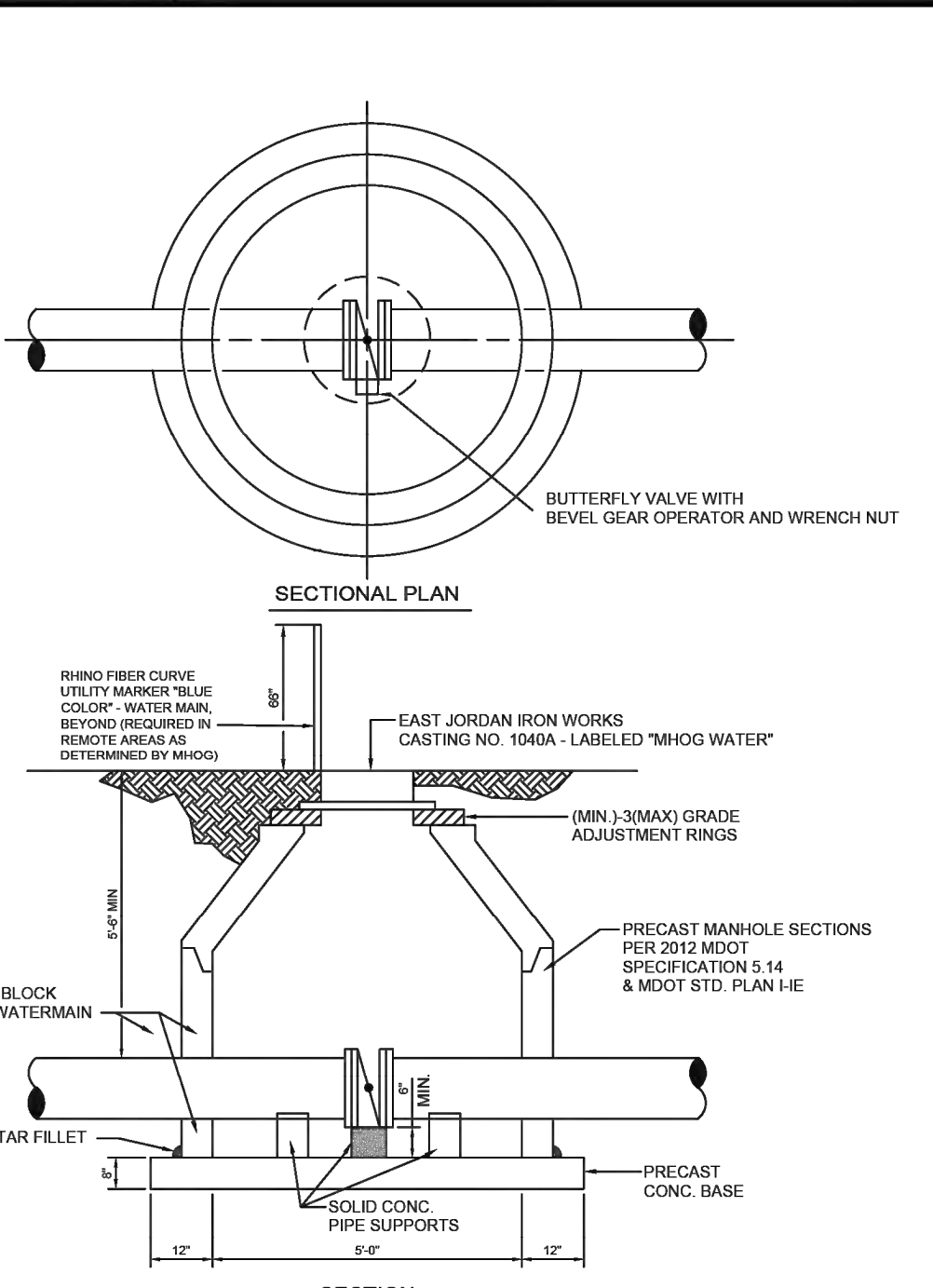
SECTION WATER SERVICE LATERAL



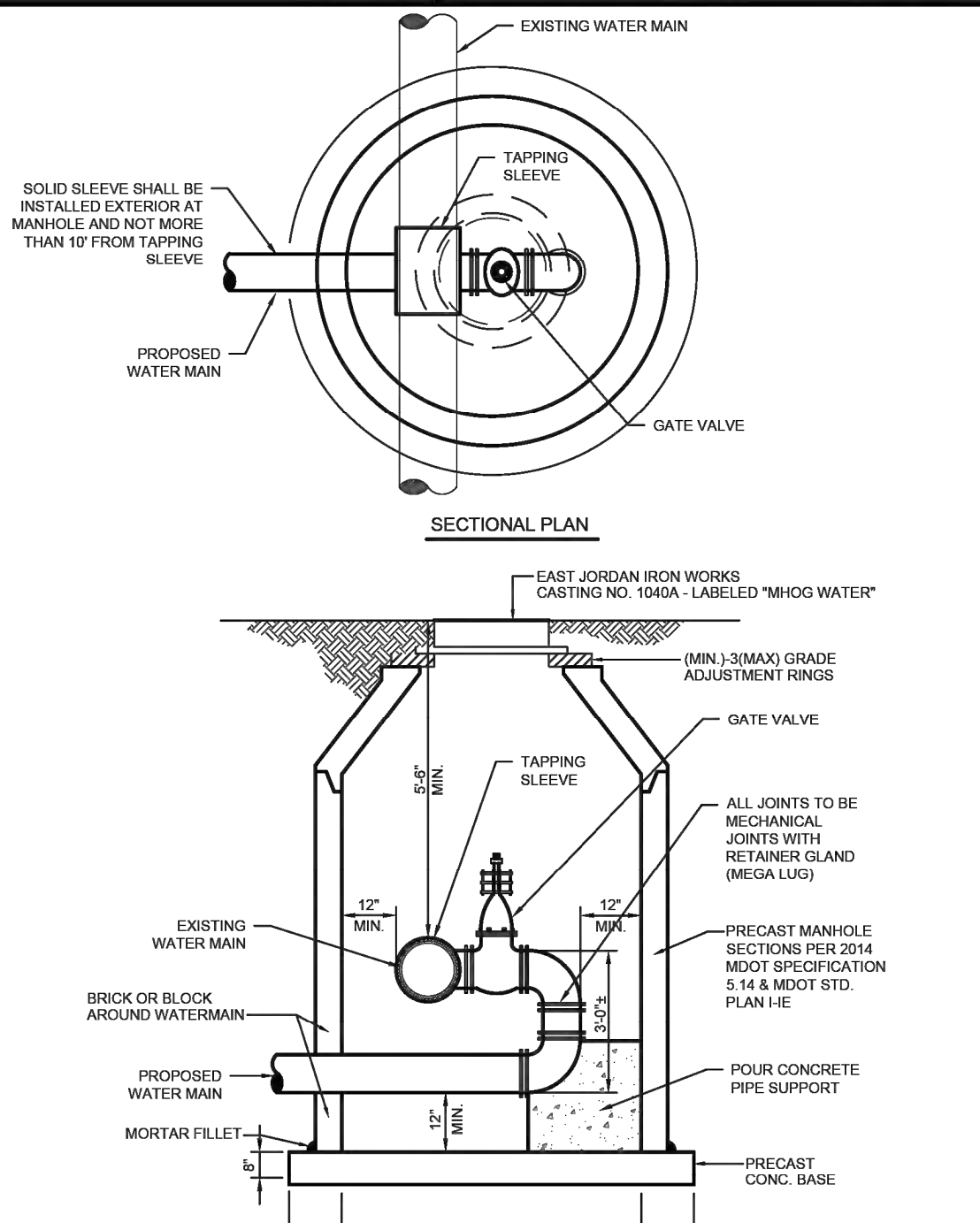
PRIVATE RESIDENCE PRESSURE REDUCING VALVE (PRV)



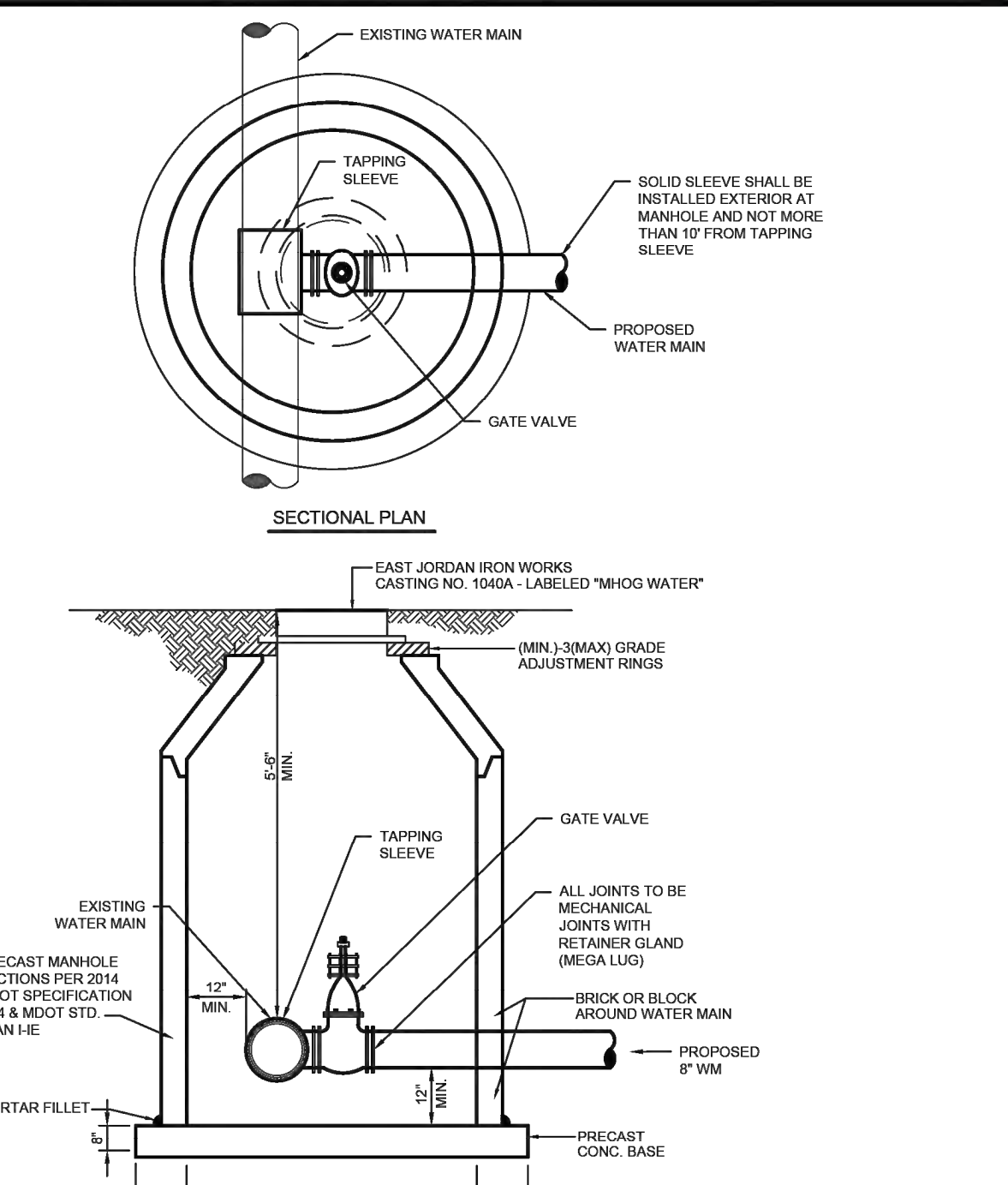
VALVE AND GATE WELL



BUTTERFLY VALVE AND WELL



REVERSE TAP GATE WELL



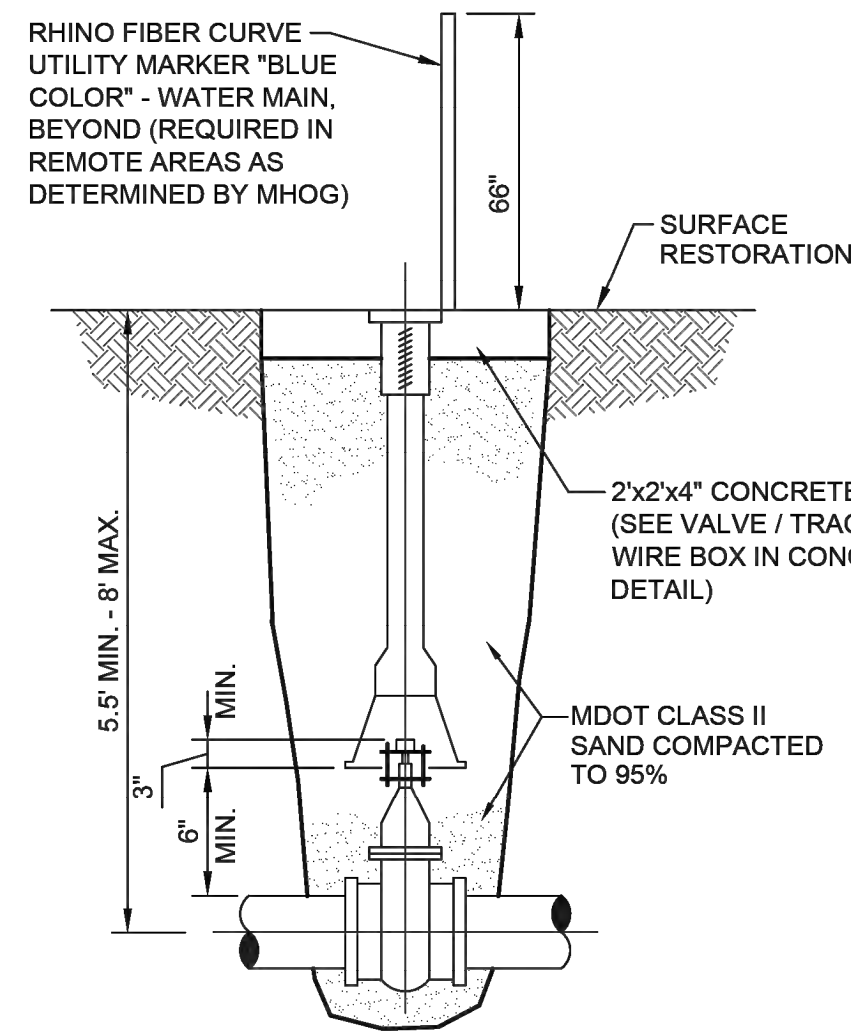
REGULAR TAP GATE WELL



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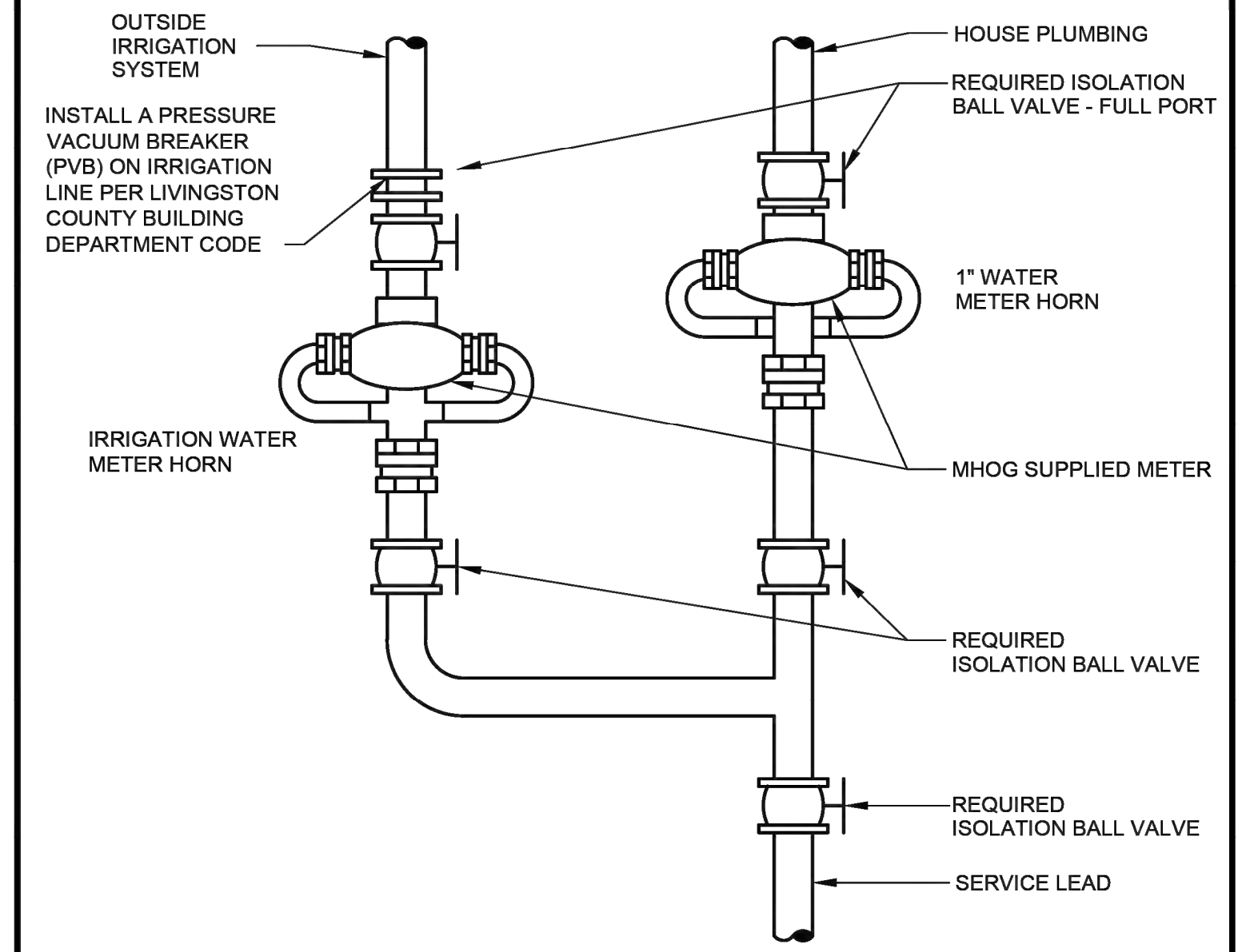
Scale: NONE
 Issued Date: JANUARY - 2014
 UPDATED: MAY 2015
 UPDATED: FEBRUARY 2016
 UPDATED: APRIL 2016
 UPDATED: OCTOBER 2017
 UPDATED: FEBRUARY 2019
 UPDATED: NOVEMBER 2022

STANDARD DETAILS



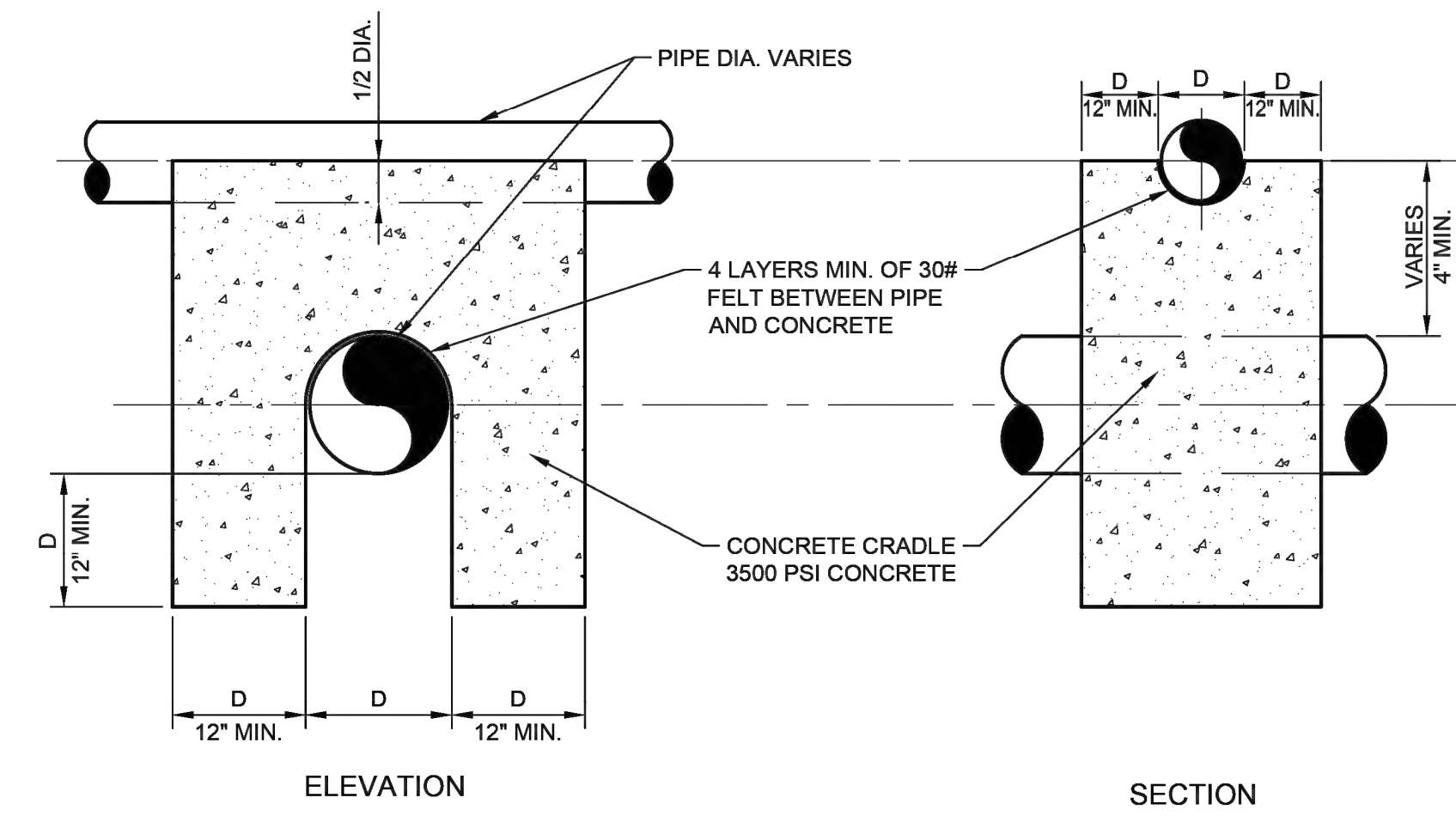
- NOTES:
1. VALVE BOX SHALL NOT REST ON VALVE OR MAIN LINE PIPE.
 2. A VALVE STEM EXTENSION WITH CENTERING RING IS REQUIRED FOR VALVES BURIED DEEPER THAN 6\"/>

GATE VALVE AND BOX



- NOTES:
1. ALL METERS ARE TO BE INSTALLED HORIZONTALLY IN A DRY, CLEAN, SANITARY LOCATION THAT IS READILY ACCESSIBLE. THIS DRAWING IS NOT TO SCALE & IS ONLY A REPRESENTATION OF HOW THE VALVES AND METERS SHOULD BE INSTALLED. THE SECOND METER IS OPTIONAL FOR IRRIGATION USAGE. METERS SHOULD NOT BE INSTALLED IN LINE (ONE RIGHT AFTER THE OTHER).
 2. PROPERTIES DESIGNATED "HIGH HAZARD" PER THE MHOG CROSS CONNECTION RULES MANUAL WILL REQUIRE THE INSTALLATION OF A REDUCED PRESSURE ZONE (RPZ) BACK FLOW PREVENTION DEVICE.

TYPICAL METER HORN INSTALLATION



CONCRETE CRADLE DETAIL

SCALE: NONE



MHOG CASTING DETAIL

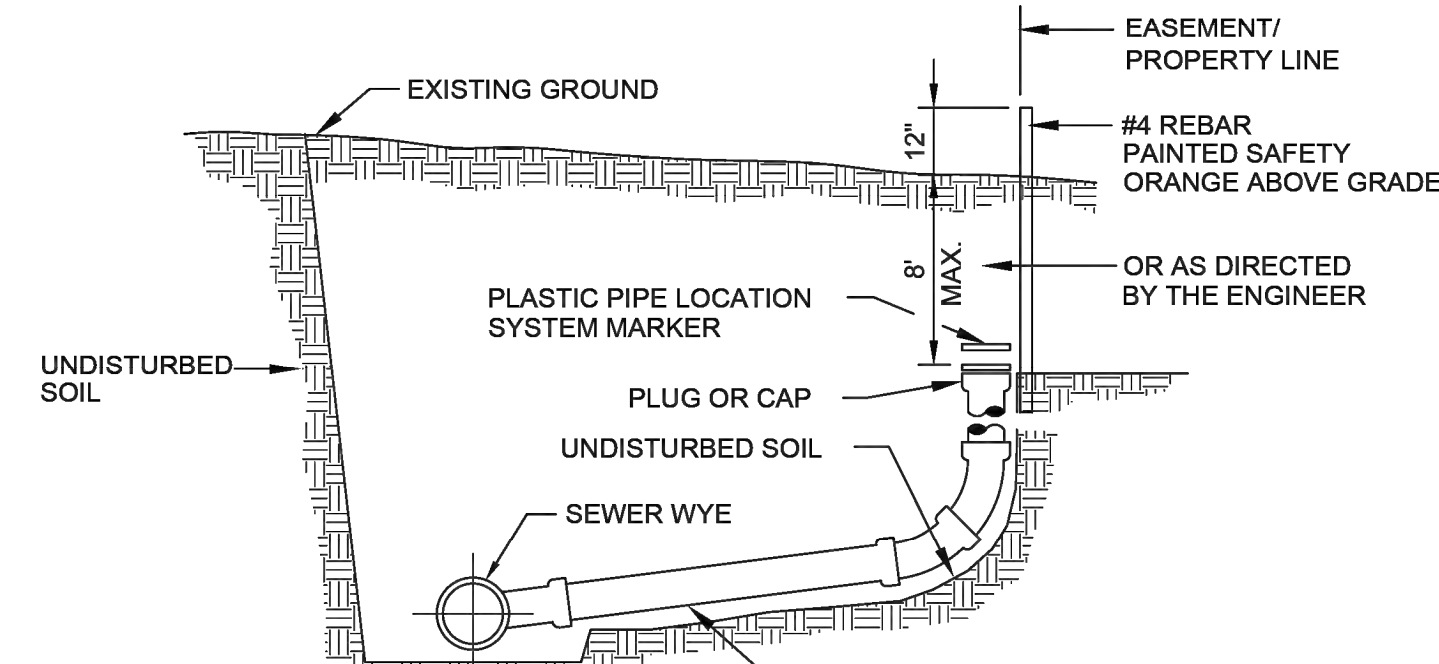
NO SCALE



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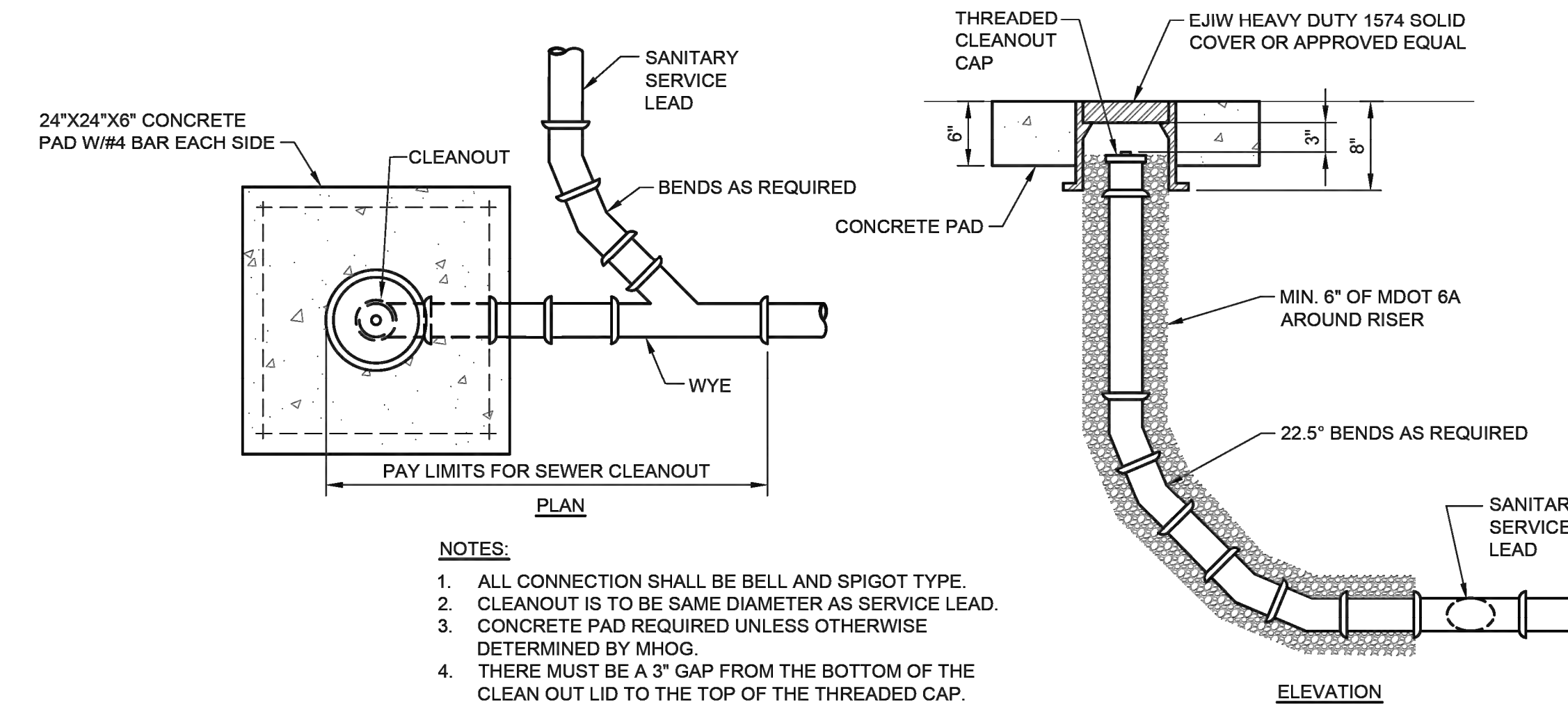
STANDARD DETAILS

Scale:	NONE
Issued Date	JANUARY - 2014
UPDATED:	MAY 2015
UPDATED:	FEBRUARY 2016
UPDATED:	APRIL 2016
UPDATED:	OCTOBER 2017
UPDATED:	FEBRUARY 2019
UPDATED:	NOVEMBER 2022



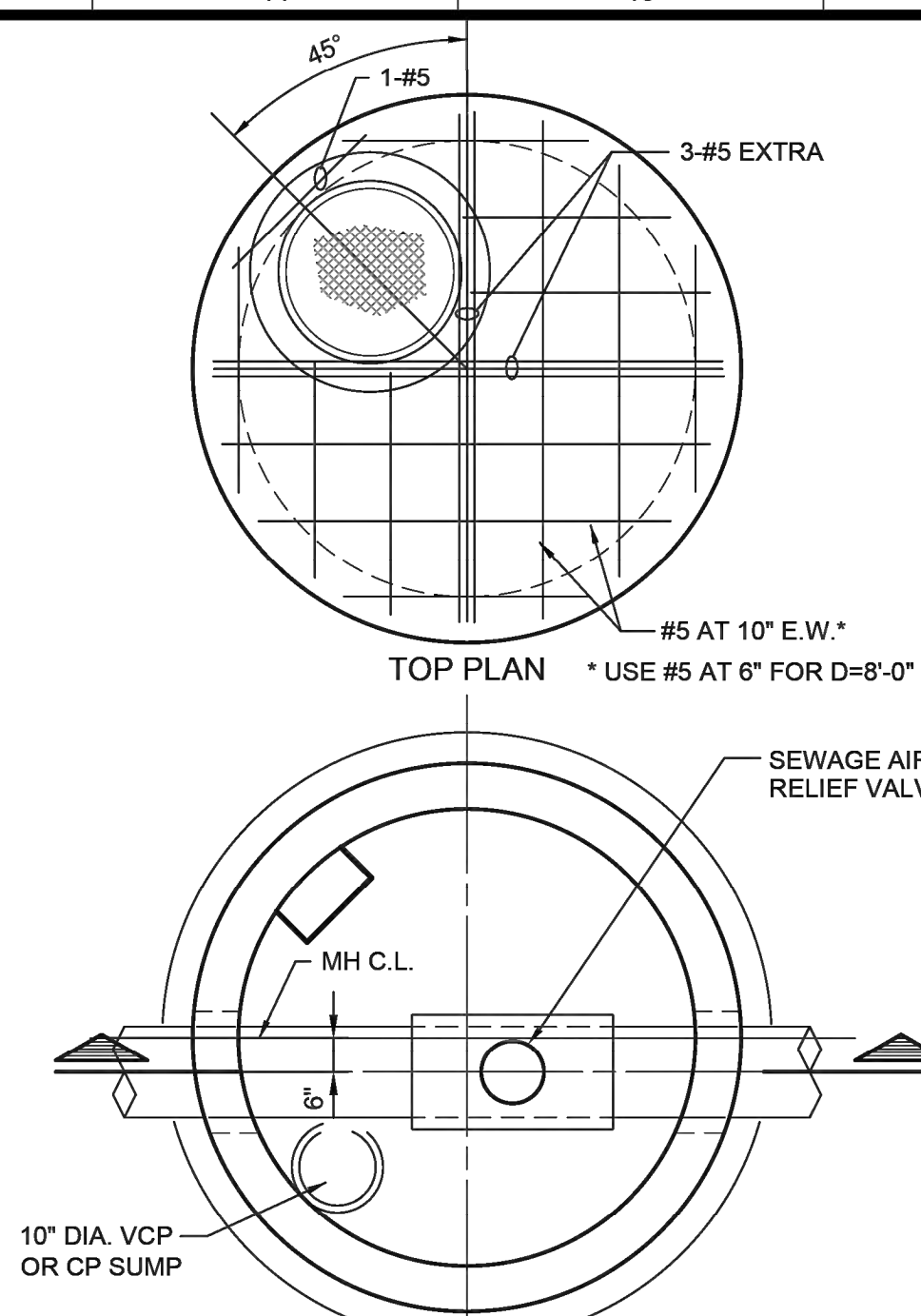
SANITARY SEWER LATERAL

NOTE:
 1. RISER PIPE MAY NOT BE REQUIRED FOR SHALLOW SEWERS AS SHOWN.
 2. WHEN CONNECTING TO AN EXISTING SEWER THE AUTHORITY MAY REQUIRE CORING OF THE EXISTING PIPE AND INSTALLATION OF A SEWER SADDLE. SADDLE SHALL BE ROMAC "CB" SEWER SADDLE OR APPROVED EQUAL.

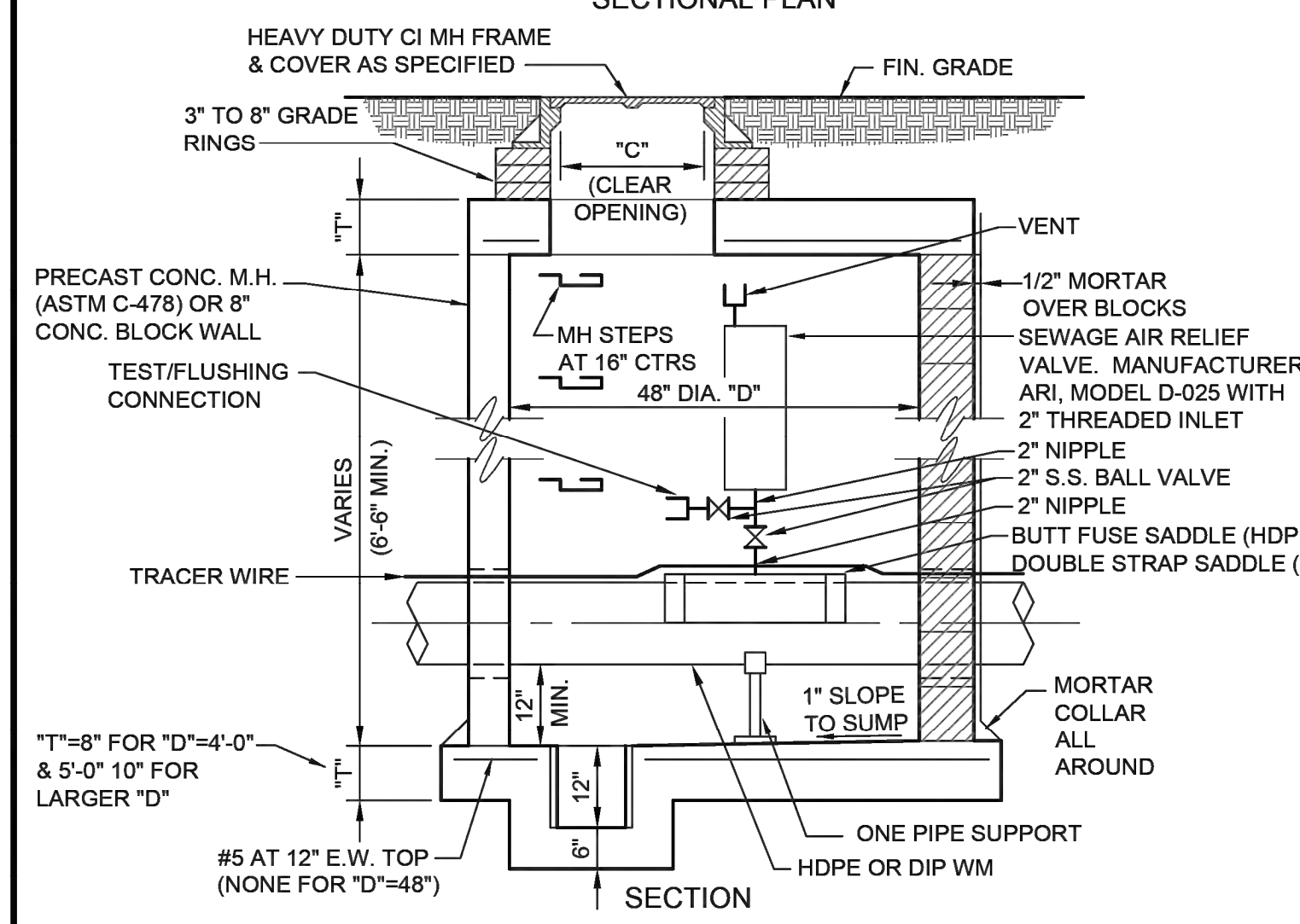


SEWER CLEANOUT DETAIL

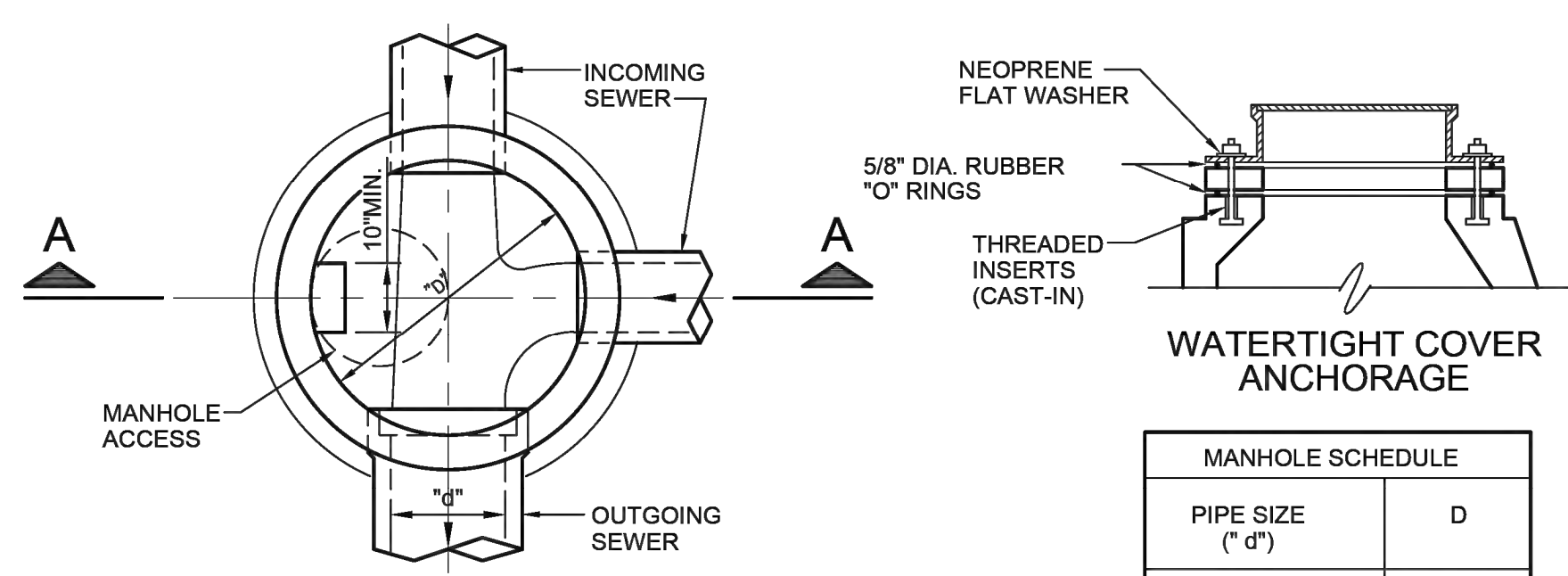
NOTES:
 1. ALL CONNECTION SHALL BE BELL AND SPIGOT TYPE.
 2. CLEANOUT IS TO BE SAME DIAMETER AS SERVICE LEAD.
 3. CONCRETE PAD REQUIRED UNLESS OTHERWISE DETERMINED BY MHO.
 4. THERE MUST BE A 3" GAP FROM THE BOTTOM OF THE CLEAN OUT LID TO THE TOP OF THE THREADED CAP.



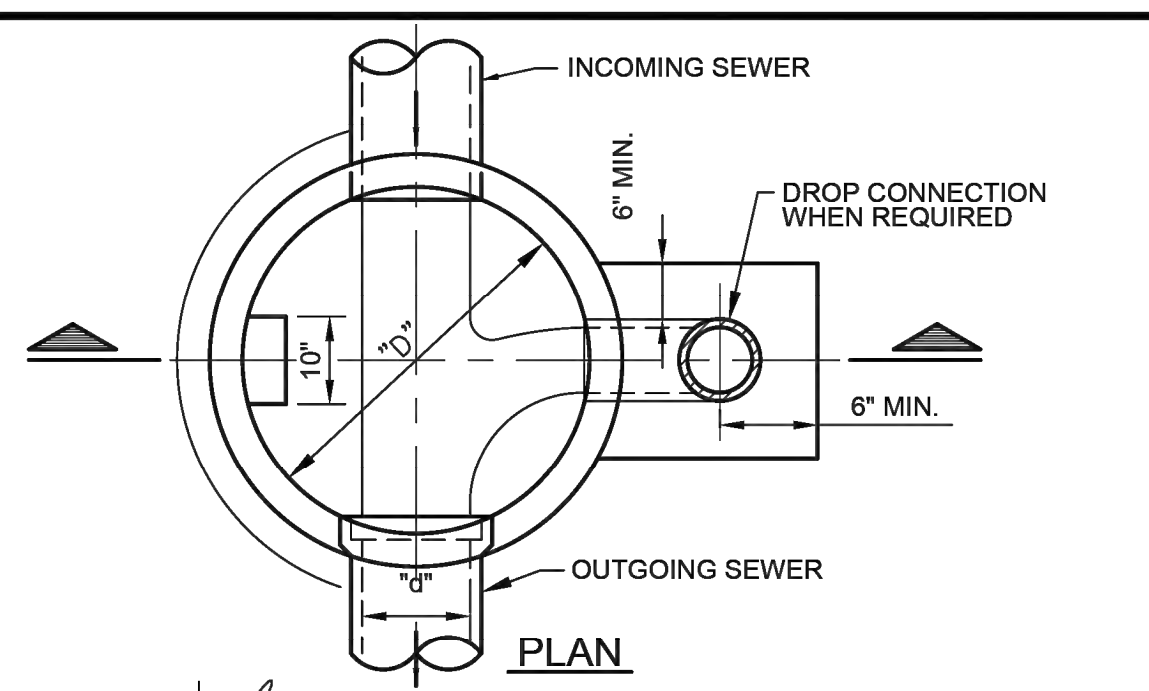
AIR RELIEF STRUCTURE



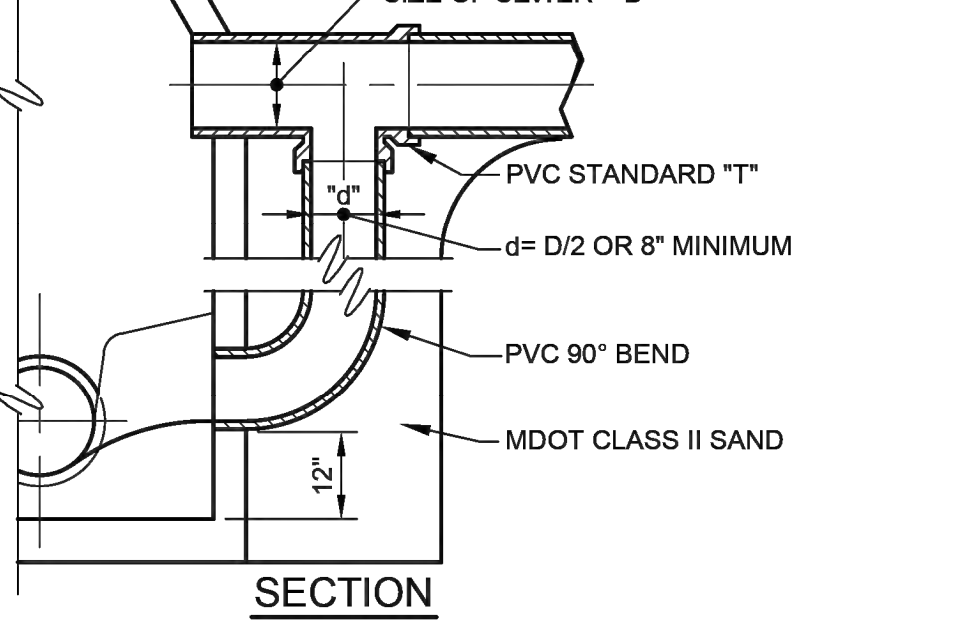
NOTE: ALL PLUMBING MATERIALS TO BE NON-CORROSIVE, ALL FITTINGS SHALL BE STAINLESS STEEL.



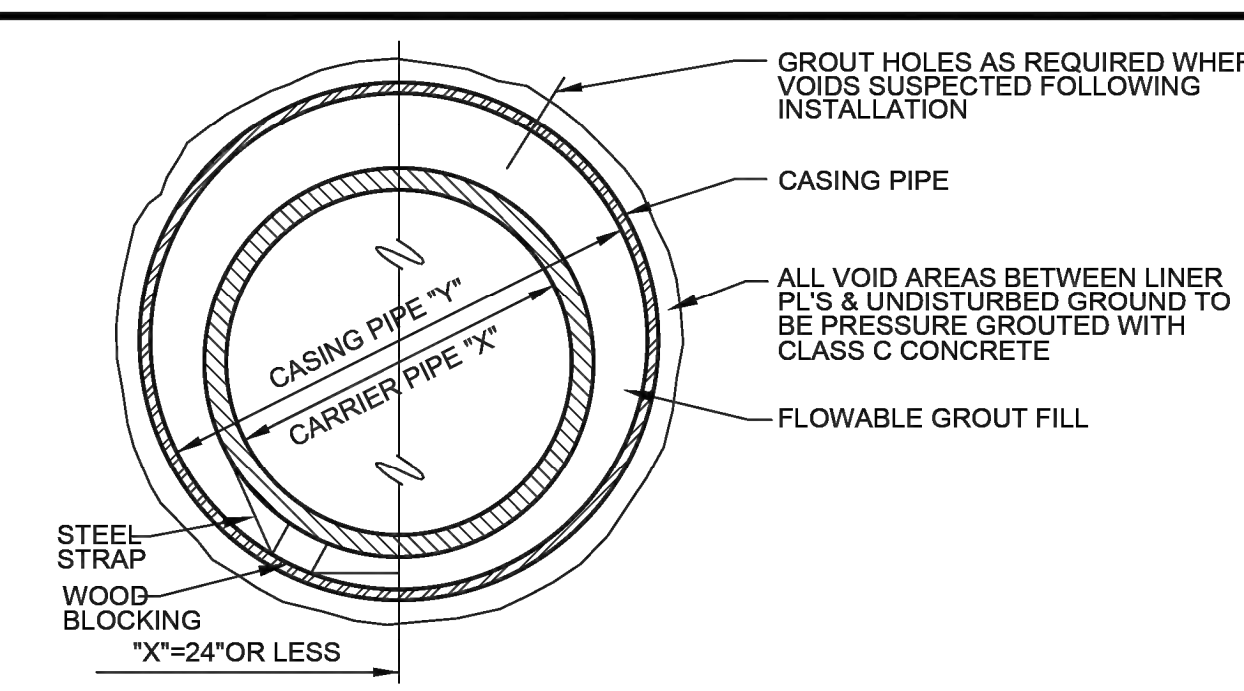
PIPE SIZE ("d")	D
8"-24"	48"
27"-36"	60"
42"-48"	72"
54"	84"



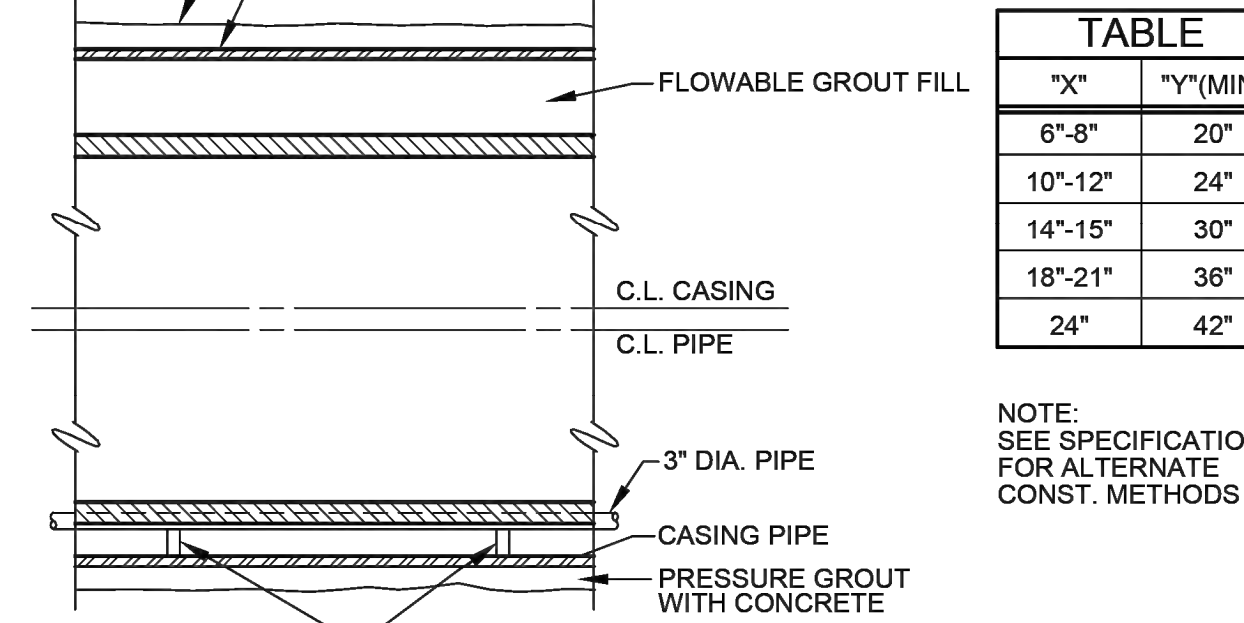
DROP CONNECTION



REQUIRED WHEN AN INLET PIPE IS 24" OR MORE ABOVE THE OUTLET PIPE IN A MANHOLE

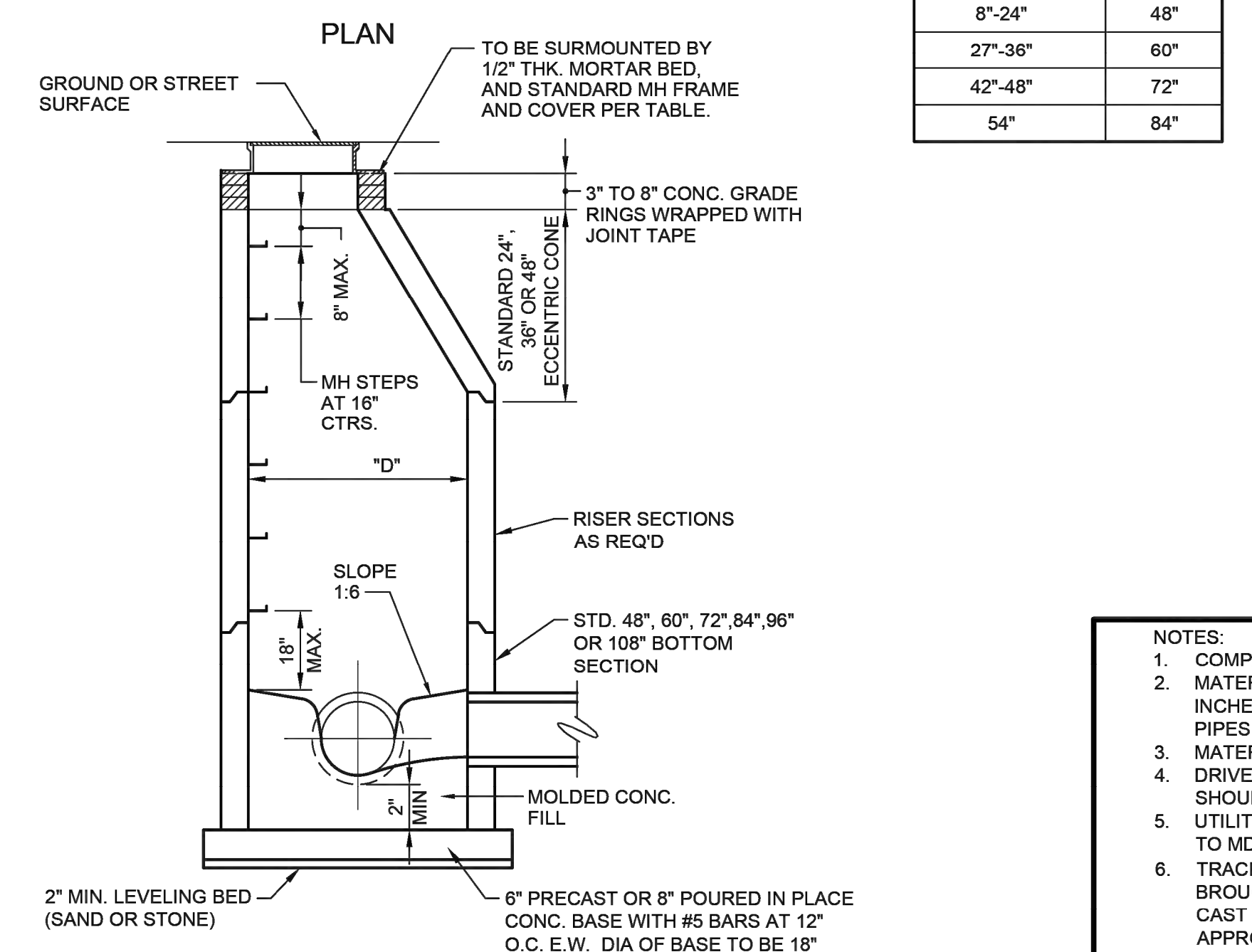


CASING PIPE



"X"	"Y"(MIN)
6"-8"	20"
10"-12"	24"
14"-15"	30"
18"-21"	36"
24"	42"

NOTE: SEE SPECIFICATIONS FOR ALTERNATE CONST. METHODS

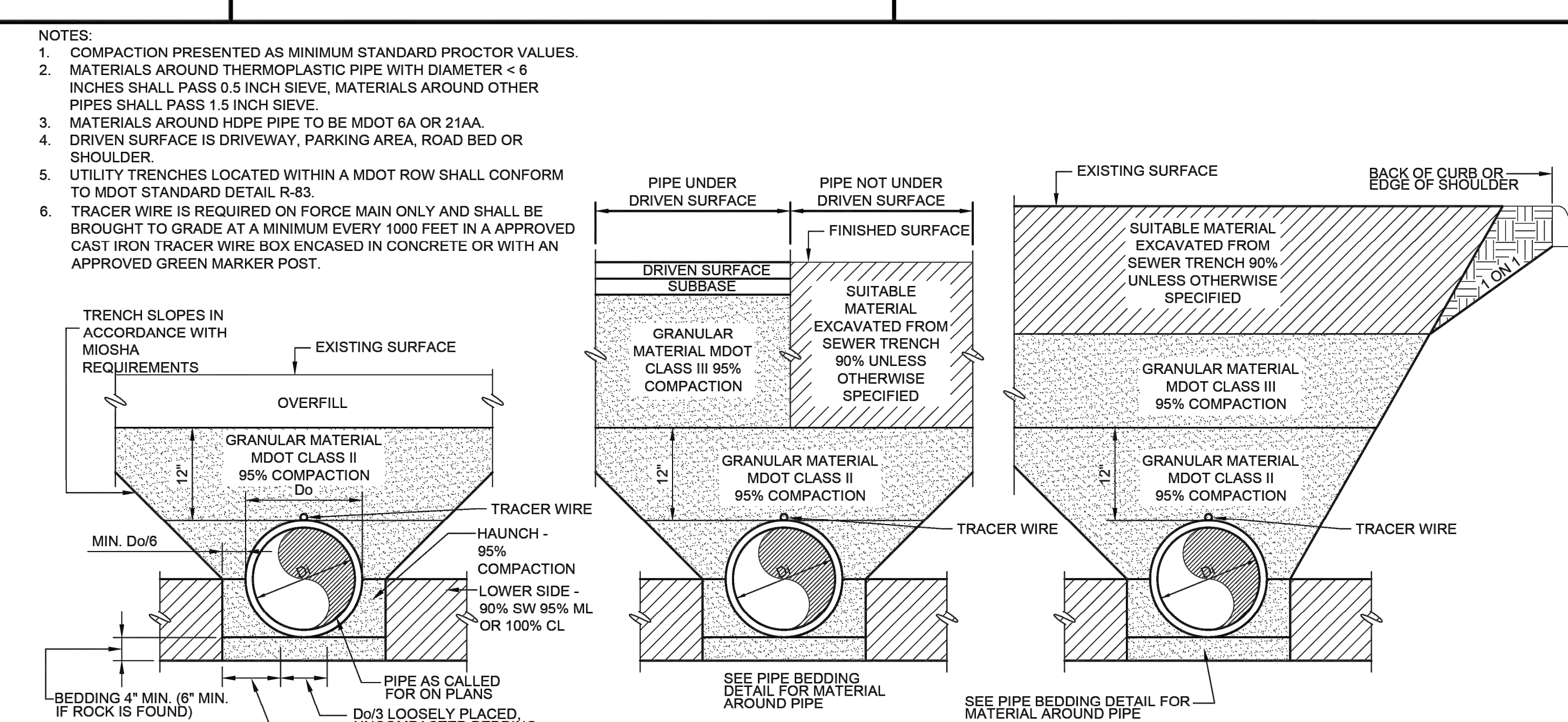


SECTION A-A

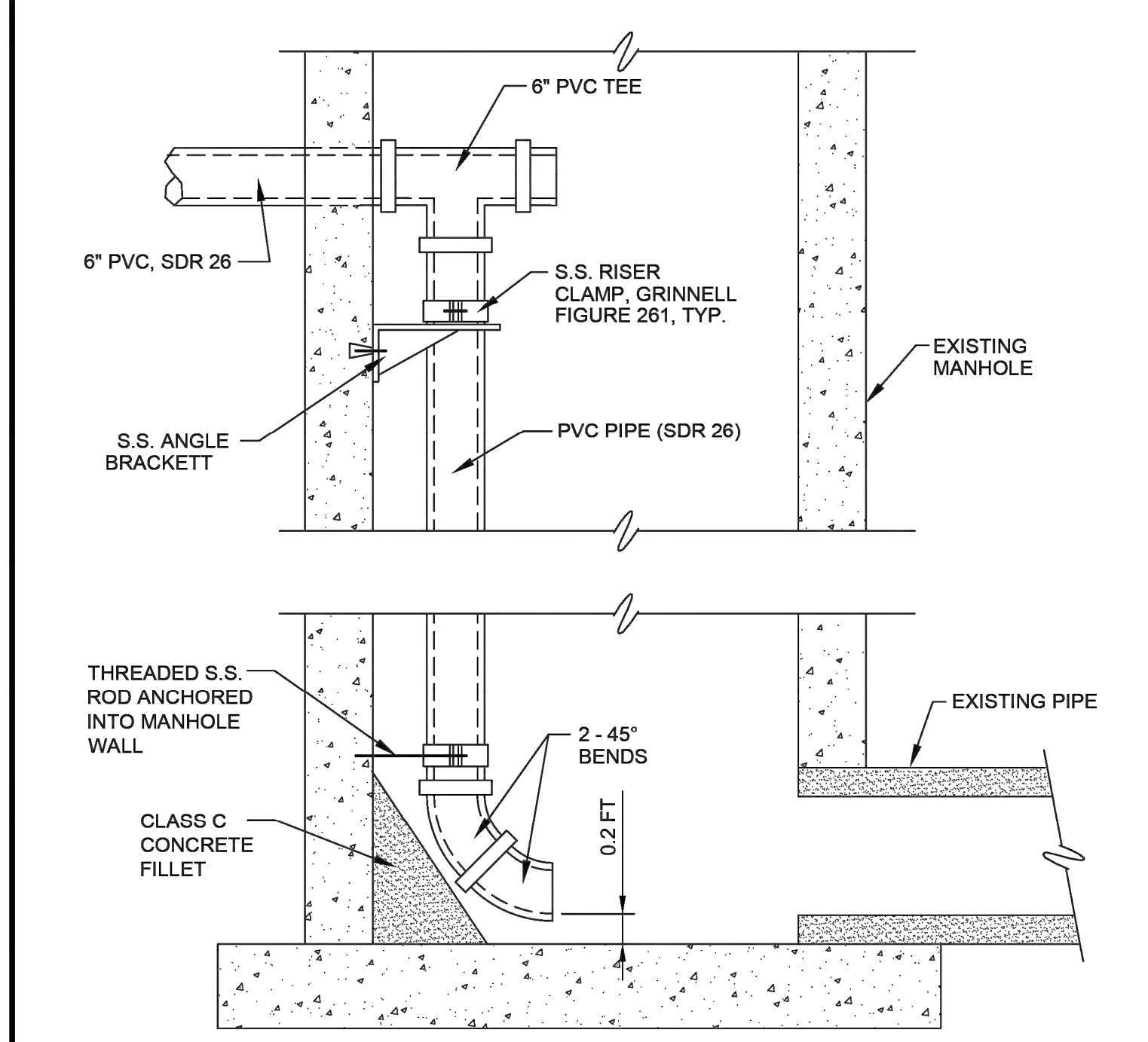
NOTES:
 1. ALL SANITARY MANHOLES TO BE PRECAST REINFORCED CONCRETE WITH PREMIUM JOINTS. SEE SPECIFICATIONS FOR BASE SLAB AND PIPE OPENINGS AND CONNECTIONS.
 2. MANHOLE CONES SHALL BE THE ECCENTRIC TYPE.
 3. PROVIDE 6" OF COMPACTED GRANULAR MATERIAL UNDER ALL PRECAST CONCRETE BASE SPLVC.
 4. FORCE MAINS CONNECT DIRECTLY TO A MANHOLE SHALL BE INSTALLED SO THAT THE ELEVATION OF THE PIPE CROWNS MATCH. THE FORCE MAIN SHALL BE DIRECTED DOWNWARD INTO THE FLOW CHANNEL.
 5. FOR SANITARY SEWERS ALL PIPES SHALL ENTER MANHOLE THROUGH RUBBER BOOTED CONNECTION.

TYPE	FRAME & COVER FOR SANITARY SEWER MANHOLES	MANUFACTURER OR EQUAL	
		EAST JORDAN	NEENAH
MH	SANITARY - SOLID SELF-SEALING	1040.0000	R-1642
MH	SANITARY - SOLID WATERTIGHT	1040-APT	R-1916-F
CO	SOLID	1574A	R-1973-A

STANDARD MANHOLE



TRENCH EXCAVATION & PIPE BEDDING



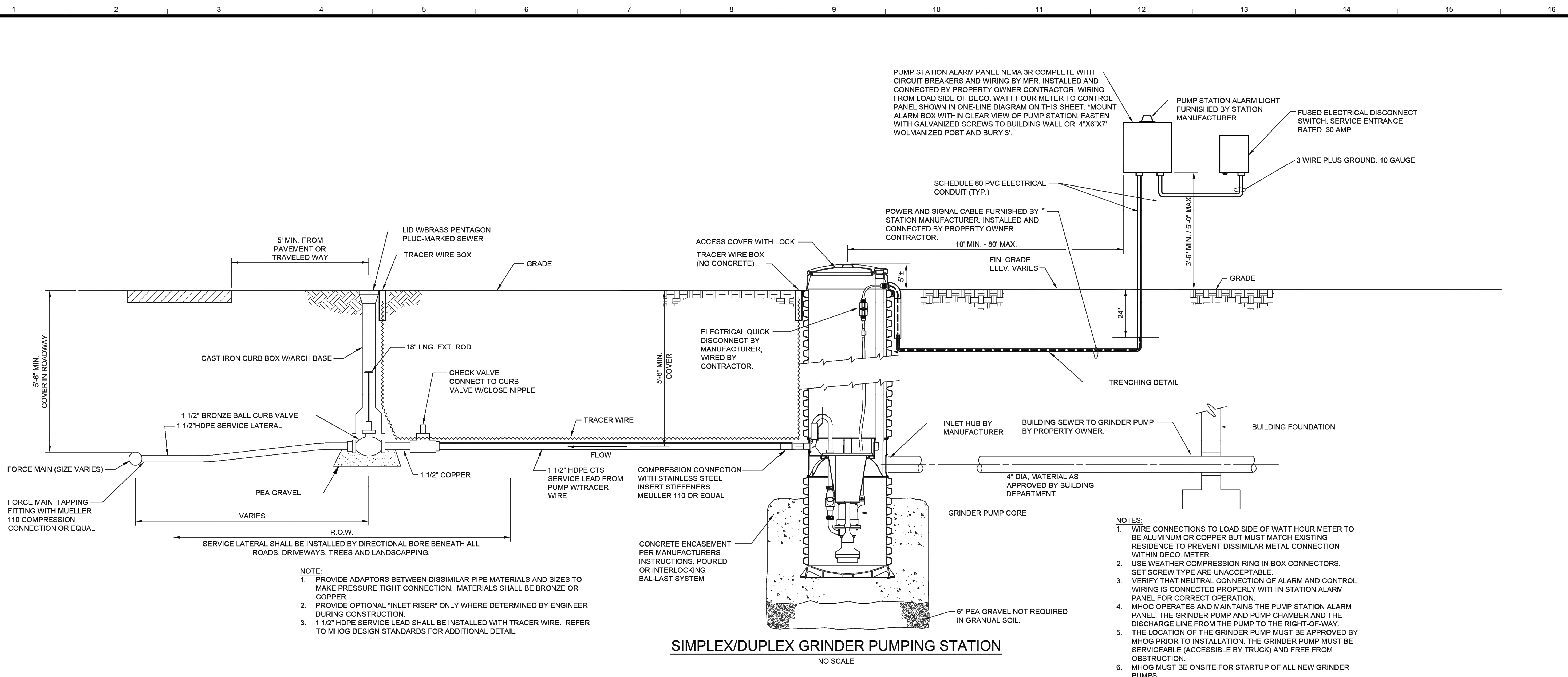
INTERIOR SEWER LATERAL DROP CONNECTION



MARION HOWELL OCEOLA GENOA
 Sewer and Water Authority

Scale: NONE
 Issued Date: JANUARY - 2014
 UPDATED: MAY 2015
 UPDATED: FEBRUARY 2016
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 UPDATED: OCTOBER 2017
 UPDATED: FEBRUARY 2019

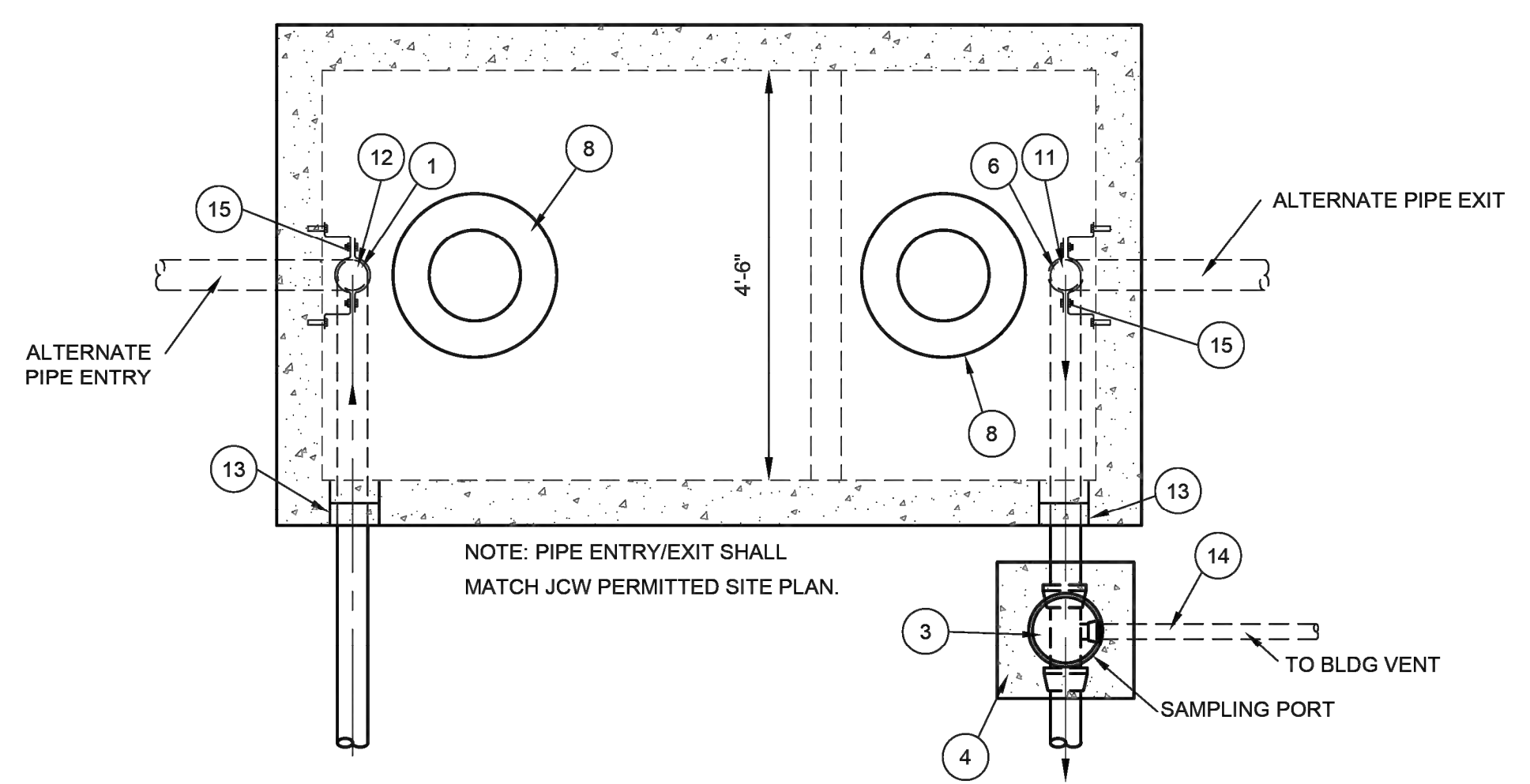
STANDARD DETAILS



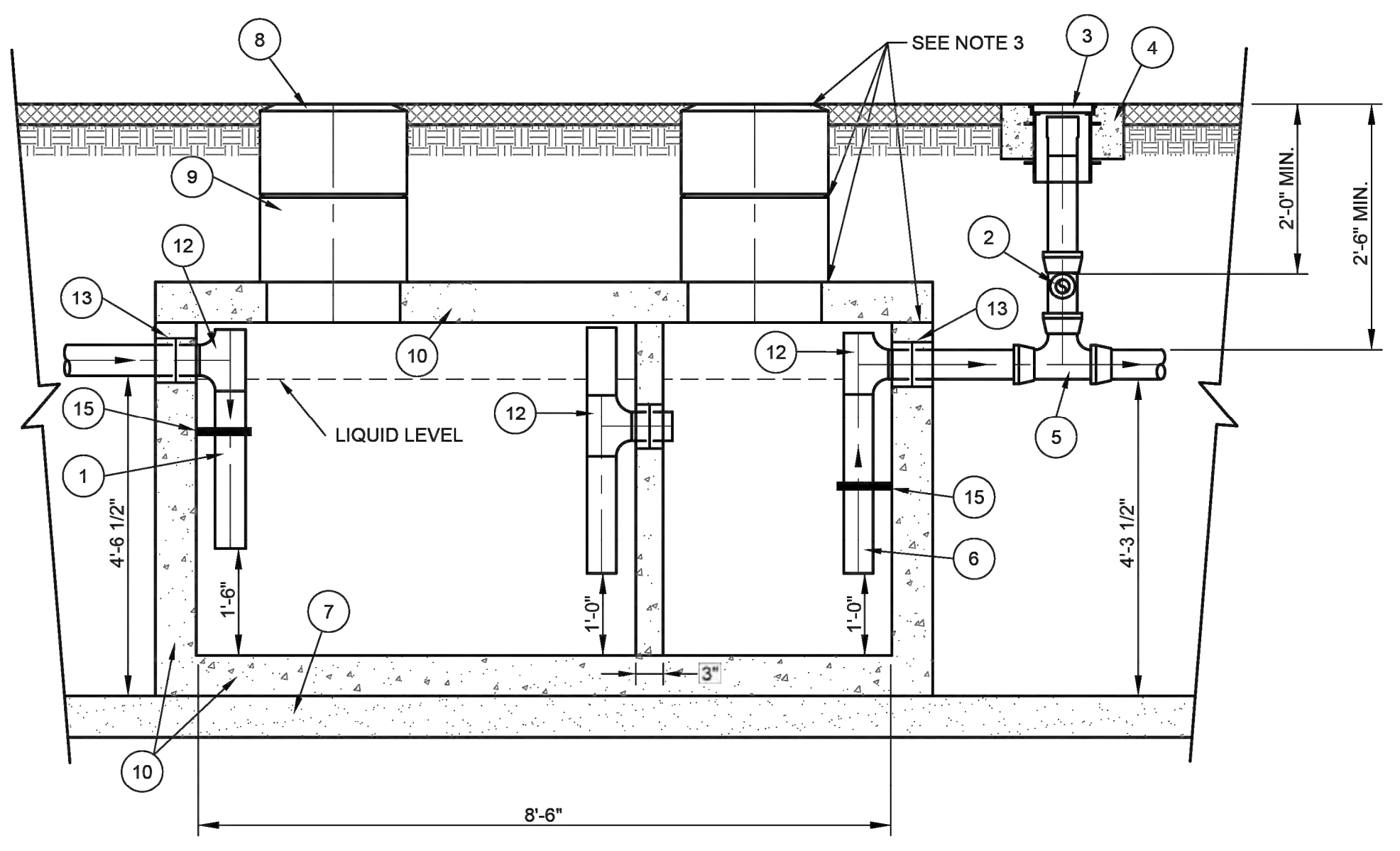
SIMPLEX/DUPLEX GRINDER PUMPING STATION
NO SCALE

- NOTE:
1. PROVIDE ADAPTORS BETWEEN DISSIMILAR PIPE MATERIALS AND SIZES TO MAKE PRESSURE TIGHT CONNECTION. MATERIALS SHALL BE BRONZE OR COPPER.
 2. PROVIDE OPTIONAL "INLET RISER" ONLY WHERE DETERMINED BY ENGINEER DURING CONSTRUCTION.
 3. 1 1/2" HDPE SERVICE LEAD SHALL BE INSTALLED WITH TRACER WIRE. REFER TO MHOG DESIGN STANDARDS FOR ADDITIONAL DETAIL.

- NOTES:
1. WIRE CONNECTIONS TO LOAD SIDE OF WATT HOUR METER TO BE ALUMINUM OR COPPER BUT MUST MATCH EXISTING RESIDENCE TO PREVENT DISSIMILAR METAL CONNECTION WITHIN DECO. METER.
 2. USE WEATHER COMPRESSION RING IN BOX CONNECTORS. SET SCREW TYPE ARE UNACCEPTABLE.
 3. VERIFY THAT NEUTRAL CONNECTION OF ALARM AND CONTROL WIRING IS CONNECTED PROPERLY WITHIN STATION ALARM PANEL FOR CORRECT OPERATION.
 4. MHOG OPERATES AND MAINTAINS THE PUMP STATION ALARM PANEL, THE GRINDER PUMP AND PUMP CHAMBER AND THE DISCHARGE LINE FROM THE PUMP TO THE RIGHT-OF-WAY.
 5. THE LOCATION OF THE GRINDER PUMP MUST BE APPROVED BY MHOG PRIOR TO INSTALLATION. THE GRINDER PUMP MUST BE SERVICEABLE (ACCESSIBLE BY TRUCK) AND FREE FROM OBSTRUCTION.
 6. MHOG MUST BE ONSITE FOR STARTUP OF ALL NEW GRINDER PUMPS.



NOTE: PIPE ENTRY/EXIT SHALL MATCH JCW PERMITTED SITE PLAN.



GREASE INTERCEPTOR 1000 GALLON
NO SCALE

ITEM	DESCRIPTION
1	4" PVC INLET PIPE*
2	4"x4"x2" TEE WITH 2" PIPE TO BUILDING VENT*
3	THREADED C/O CAP JOSAM 58880 OR APP EQUAL**
4	CONCRETE PAD
5	4"x4"x4" TWO-WAY CLEANOUT TEE*
6	4" PVC OUTLET*
7	4" - 6" GRAVEL BEDDING
8	HEAVY-DUTY CAST IRON FRAME AND COVER ***
9	CONCRETE ADJUSTMENT RINGS
10	REINFORCE AS REQUIRED FOR SERVICE CONDITIONS
11	4" PVC 90° ELBOW*
12	4" PVC TEE*
13	A-LOK OR PRESS SEAL PSX PIPE/WALL CONNECTOR
14	2" VENT PIPE (IDENTIFY PIPE TYPE, CLASS & JOINT AS REQUIRED FOR PROJECT)
15	STAINLESS STEEL PIPE SUPPORT CLAMP ****

* 6" PIPE MAY BE SUBSTITUTED TO MATCH UPSTREAM PIPE DIAMETER.
 ** REFER TO CLEAN OUT DETAILS ON STANDARD DETAIL SHEET
 *** CLAY & BAILEY 2008 BV OR EQUAL (FROST PROOF COVERS OPTIONAL)
 **** FM STAINLESS FASTENERS #63 OR EQUAL. 1/2"x2-1/2" SS BRACKET W/ 1/2"x1-1/2" FULLY THREADED SS HEX BOLT WITH 1/2" SS WASHER AND 1/2"x1-3/4" SS ANCHORS. CLAMP TO BE FACTORY INSTALLED.

- NOTES:
1. THREE COVERS AND RISERS SHOWN. TWO COVERS AND RISERS CENTERED OVER UPPER TWO BAFFLES ARE OPTIONAL.
 2. INTERCEPTOR SIZE - 1000 GAL MINIMUM (REVISE THE SIZE DIMENSIONS, AS NEEDED, FOR LARGER CAPACITY INTERCEPTORS)
 3. ALL JOINTS AT THE FRAME & COVER, CONCRETE ADJUSTMENT RINGS AND THE LID OF THE INTERCEPTOR SHALL BE SEALED WITH A MINIMUM OF TWO (2) ROWS OF 3/4 TO 1 INCH PREFORMED BUTYL JOINT SEALER AND A 6" BUTYL JOINT WRAP AROUND SLEEVE (EZ WRAP). THE ENDS OF THE 6" EZ WRAP SHALL OVERLAP BY 12".
 4. PIPING ON THE INTERIOR OF THE INTERCEPTOR SHALL BE PVC WITH SOLVENT-CEMENTED JOINTS.
 5. GREASE INTERCEPTOR INCLUDING ADJUSTMENT RINGS AND CASTINGS SHALL BE WATER TESTED FOR WATER TIGHTNESS AFTER THE BACKFILL OPERATIONS HAVE BEEN COMPLETED. WATER TESTING SHALL CONSIST OF THE FOLLOWING: 1. SEAL THE TANK, 2. FILL WITH WATER, 3. LET STAND FOR 24 HOURS, 4. REFILL TANK, 5. TANK IS APPROVED IS WATER LEVEL IS HELD FOR 1 HOUR.
 6. ONLY KITCHEN WASTE SHALL BE DIVERTED TO THE GREASE TRAP.



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Sewer and Water Authority

STANDARD DETAILS

Scale: NONE
 Issued Date: JANUARY - 2014
 UPDATED: MAY 2015
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 UPDATED: APRIL 2016
 UPDATED: OCTOBER 2017
 UPDATED: FEBRUARY 2019
 UPDATED: NOVEMBER 2022

D-Series Size 1 LED Area Luminaire

Specifications

- EPA: 0.69 ft² (0.64 m²)
- Length: 32.71" (831 mm)
- Width: 14.26" (362 mm)
- Height H1: 7.68" (195 mm)
- Height H2: 2.73" (69 mm)
- Weight: 34 lbs (15.4 kg)

Introduction

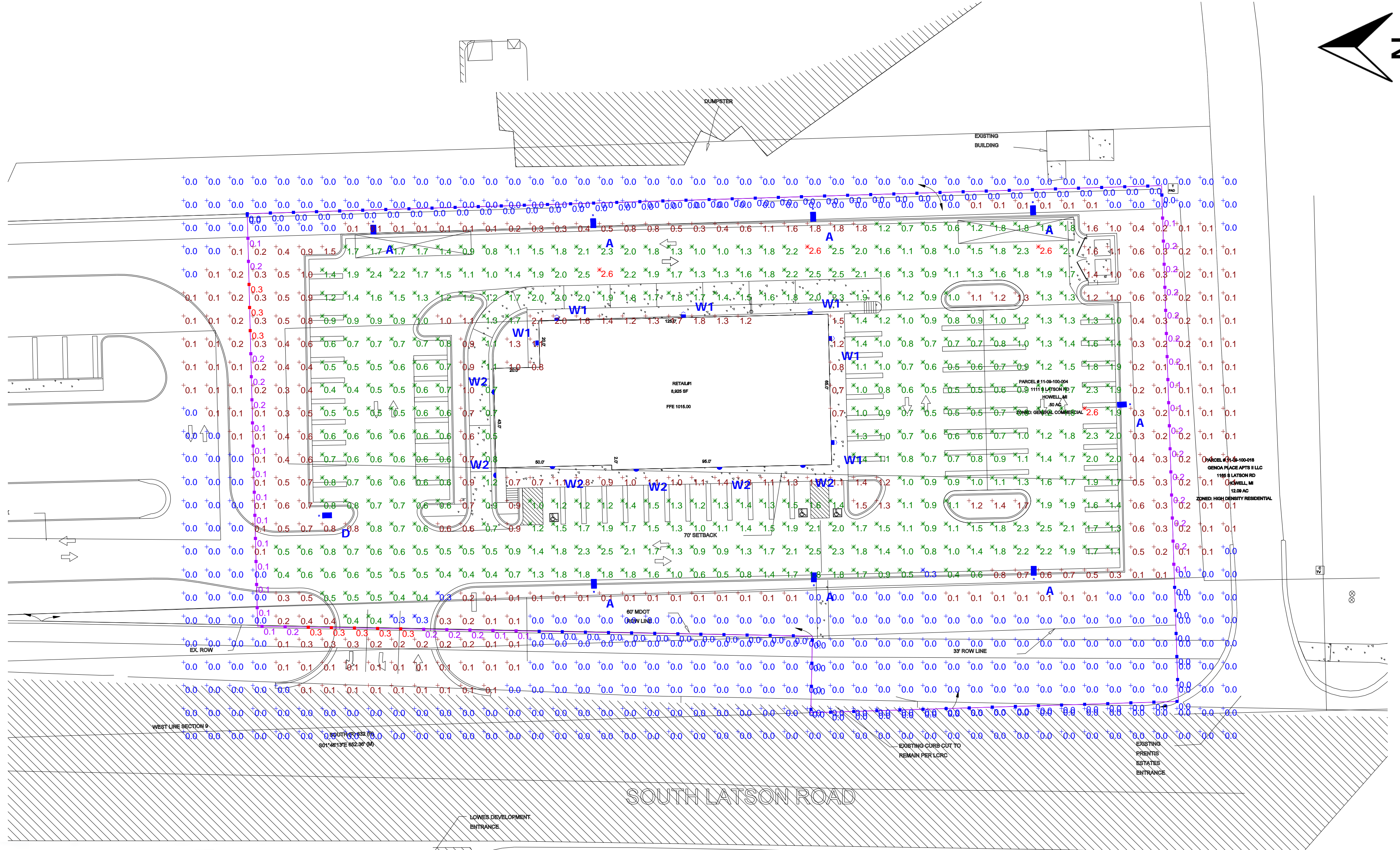
The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

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

Ordering Information EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAR2 PIRHN DDBX2

Series	LED	Color Temperature	Light Distribution	Dimensions	Finish	Mounting
DSX1 LED	Forward optics (this section 70CRI only)					
	P1	P6	30K	70CRI	T3M	SPR
	P2	P7	40K	70CRI	T3M	SPR
	P3	P8	50K	70CRI	T3M	SPR
	P4	P9	50K	70CRI	T3M	SPR
	P5	P10	50K	70CRI	T3M	SPR
	Related optics					
	P11	P11	27K	80CRI	T3M	SPR
	P12	P12	30K	80CRI	T3M	SPR
	P13	P13	40K	80CRI	T3M	SPR

LITHONIA LIGHTING COMMERCIAL OUTDOOR
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WDGE2 LED Architectural Wall Sconce Precision Refractive Optic

Specifications

- Depth (D1): 7"
- Depth (D2): 1.5"
- Height: 9"
- Width: 11.5"
- Weight: 13.5 lbs (without options)

Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight™ AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

WDGE LED Family Overview

Luminaire	Optic	Standard EM, FT	Color, 30° C	Sensor	FP	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W	19W	Standard / night	750	1,200	2,000	3,000	4,500	6,000	—
WDGE2 LED	Visual Comfort	19W	19W	Standard / night	1,200	2,000	3,000	4,500	6,000	—	
WDGE3 LED	Precision Refractive	30W	19W	Standard / night	700	1,200	2,000	3,200	4,200	—	
WDGE4 LED	Precision Refractive	15W	19W	Standard / night	7,500	8,500	10,000	12,000	—	—	
WDGE4 LED	Precision Refractive	15W	19W	Standard / night	12,000	16,000	18,000	20,000	22,000	25,000	

Ordering Information EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBX2

Series	Package	Color Temperature	CR	Distribution	Finish	Mounting
WDGE2 LED	P0	27K	250K	70CRI	T15	APR (3-ohm)
	P1	30K	300K	80CRI	T3M	Type II Medium
	P2	40K	400K	80CRI	T3M	Type II Medium
	P3	50K	500K	80CRI	T3M	Type II Medium

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PRO-15 [H4]

STANDARD SPECIFICATIONS

FRAME
Heavy duty aluminum with roll formed aluminum bands. The optional trim bars are sold 0.25" thick aluminum, held in place by fasteners.

DIFFUSER
Translucent, UV-stabilized, white acrylic. Diffuser is form molded allowing for a uniform standard thickness of 0.100" throughout.

PAN
Heavy duty formed aluminum, featuring thread inserts to prevent ruting of fasteners.

LED PERFORMANCE - 3500K STANDARD
120-277V - 3500K, 82 CRI - L80 rating - 60,000 hrs - L70 rating (projected) - 100,000 hrs
Amperage rated @ 110V input
Operating ambient temperature: -20°C / -4°F - 50°C / 122°F

Delivered 3500K lumens noted. Consult Brownlee.com for performance of all CCTs.
B06 - 6W nominal, 25 A input - 484 lm, Non-dimming
B12 - 12W nominal, 10 A input - 957 lm, Dimmable (0-10V)
C09 - 9W nominal, 10 A input - 675 lm, Dimmable (0-10V)
C17 - 16W nominal, 15 A input - 1584 lm, Dimmable (0-10V)
C24 - 23W nominal, 20 A input - 2186 lm, Dimmable (0-10V)

MOUNTING
Directly to box (by others). Mounting hardware included.

FINISH
All 7601 parts are prepared using a three step pre-treatment/sealing process, followed by a powder coat primer prior to applying any of the Brownlee paint finishes.

WARRANTY
5 year limited warranty on this LED product. Consult factory for details.

ORDERING INFORMATION

Model: 7601

2. FINISH

AB	Antique Bronze
AS	Antique Silver
BL	Black
BZ	Bronze
DB	Desert Bronze
GM	Gun Metal
MB	Metallic Bronze
NI	Nickel Tone
PL	Platinum
WH	White

3. WATTAGE

B06	6W B Series LED
B12	12W B Series LED
C09	9W C Series LED
C17	16W C Series LED
C24	23W C Series LED

4. TRIM

V00	No trim
V01	1 vertical bar*
V02	2 vertical bars*

5. COLOR TEMPERATURE

35K	3500K standard color temperature
27K	2700K color temperature
30K	3000K color temperature
40K	4000K color temperature

6. AVAILABLE OPTIONS

BAC	Buy American Compliant
BBF	Integral Battery Backup (IBB) (adds 1.5" to depth)
BBW	Integral Battery Backup, Cold Weather (11W) (adds 1.5" to depth)
BBW	Integral Battery Backup, Cold Weather (11W) (adds 1.5" to depth)
BBW	Integral Battery Backup, Cold Weather (11W) (adds 1.5" to depth)
BLD	Bi-Level Dimming (All except B06)
DTR	Trac (Line Voltage Dimming (0-20V) (All except B06)
ECW	Extreme Cold Weather (-40°C / -40°F min.)
ESP	ENERGY STAR®
EXT	Extended Housing (branded to match BB(C) aesthetic) (Adds 1.5" to depth)
FCL	French Canadian Labels
DCS	Discreet Sensor
T2P	Tab 2x 6ft Compliant (B12 & C24 in 3000K only)

CUSTOM
Provide color sample or RAL code to match.

General Note

- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0'.

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Mounting Height
A		8	Lithonia Lighting	DSX1 LED P2 40K 70CRI BLC4	D-Series Size 1 Area Luminaire P2 Performance Package 4000K CCT 70 CRI Type 4 Extreme Backlight Control	LED	1	7334	0.9	67.79	20'-0"
D		1	Lithonia Lighting	DSX1 LED P1 40K 70CRI 15W HS	D-Series Size 1 Area Luminaire P1 Performance Package 4000K CCT 70 CRI Type 5 Wide House-side Shield	LED	1	5473	0.9	50.9015	20'-0"
W1		6	Lithonia Lighting	WDGE2 LED P1 40K 70CRI 14M	WDGE2 LED WITH P1 - PERFORMANCE PACKAGE 4000K, 70CRI, TYPE 4 MEDIUM OPTIC	LED	1	1397	0.9	11,1658	12'-0"
W2		6	Brownlee Lighting	7601-C17-40K	Formed housing, frosted plastic lens enclosure	LED	1	1594	0.9	16.21	12'-0"

PROJECT:
MODEL #:
FIXTURE TYPE:

NT finish, V00 trim

PARCEL # 11-00-00-018
18 QUAD FOUR
FOWLER, MI
3.8 AC
20000 PWS

Plan View
Scale - 1" = 30ft

Ordering Note

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

Drawing Note

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

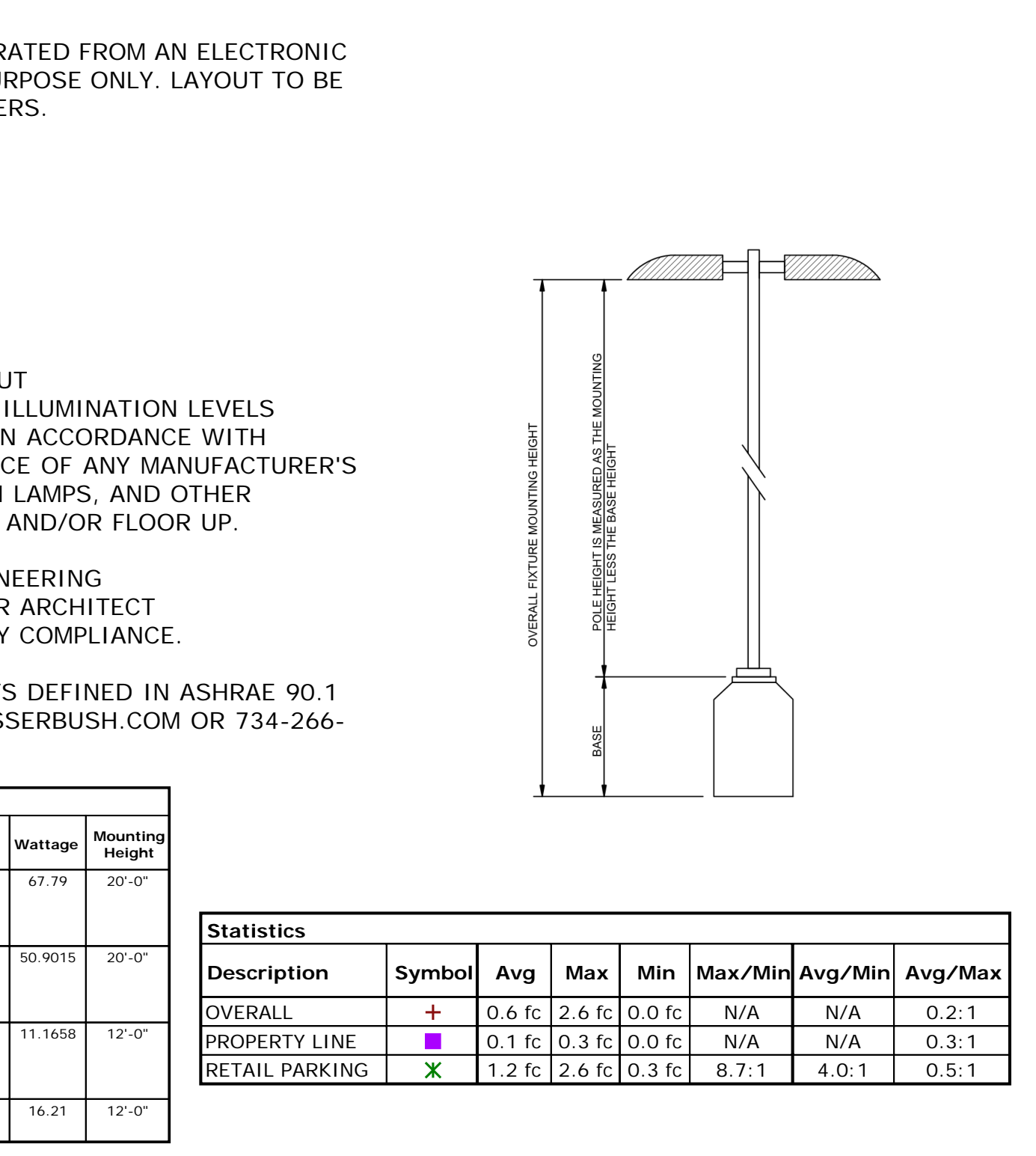
General Note

- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0'.

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

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

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





2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: March 27, 2024
RE: Coppersafe Self-Storage – 2630 Grand River Avenue
Special Land Use, Site Plan and Impact Assessment

Please find attached the project case file for a proposed special land use permit, site plan and impact assessment for a proposed outdoor storage RV/campers storage yard as part of the existing climate-controlled indoor commercial storage operation which was approved in 2022. The property is located at 2630 Grand River Avenue, south side of Grand River Avenue and east of Chilson Road. The property is zoned General Commercial District (GCD).

Subject Property



SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ladford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

Procedurally, the Planning Commission is to review the special land use, site plan and environmental impact assessment, and put forth recommendations to the Township Board following a public hearing. The project was heard before the Planning Commission on March 11th, 2024 and the Commission recommended approval. Based on the recommendation from the Planning Commission, I offer the following for your consideration:

SPECIAL USE PERMIT

Moved by _____, Supported by _____ to APPROVE the Special Use Permit to allow for outdoor RV/camper storage at 2630 Grand River Avenue.

ENVIRONMENTAL IMPACT ASSESSMENT

Moved by _____, Supported by _____ to APPROVE the Environmental Impact Assessment dated February 16, 2024 to allow for outdoor RV/camper storage at 2630 Grand River Avenue.

SITE PLAN

Moved by _____, Supported by _____ to APPROVE the site plan dated February 16, 2024 to allow outdoor RV/camper storage at 2630 Grand River Avenue with the following condition:

- The slat material shown on the details of the fencing shall be switched for a fabric material to be attached to the existing chain link fence and shall be maintained in good condition.

If you should have any questions, please feel free to contact me.

Best Regards,



Amy Ruthig
Planning Director



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Schafer Constuction - 150 N. First St, STE 100, Brighton, MI 48393
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Aaron Amuchasteguiajcsv, LLC - 8816 Mendocino Drive, Austin, TX 76735

SITE ADDRESS: 2630 Grand River Ave PARCEL #(s): 4711-06-200-061

APPLICANT PHONE: (810) 220-0296 OWNER PHONE: (805) 904-8369

OWNER EMAIL: _____

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located at 2630 E. Grand River Ave. along the south side of Grand River Ave, east of Chilson Road in Genoa Twp.

The site is currently used as an indoor self-storage facility.

BRIEF STATEMENT OF PROPOSED USE: The proposed use of this project is to utilize the existing pavement on the southeast side of the property as an outdoor RV/Camper storage lot.

THE FOLLOWING BUILDINGS ARE PROPOSED: No Buildings are proposed.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: Luke Wenger, Greentech Engineering

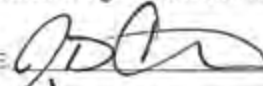
ADDRESS: 51147 Pontiac Trail, Wixom, MI 48393

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Luke Wenger of Greentech Engineering at luke@greentechengineering.net
 Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE  DATE: 11/29/23
 PRINT NAME: JOE CHILDESTER PHONE: 810-923-8540
 ADDRESS: 150 N. FIRST ST STE100 BRIGHTON, MI 48116



GENOA CHARTER TOWNSHIP

Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: Schafer Construction - 150 N. First St, STE 100, Brighton, MI 48393

Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (810) 220-0296 EMAIL: jchidester@schaferconstruction.net

OWNER NAME & ADDRESS: Aaron Amuchasteguiacsv, LLC - 8816 Mendocino Drive, Austin, TX 76735

SITE ADDRESS: 2630 Grand River Ave PARCEL #(s): 4711-06-200-061

OWNER PHONE: (805) 904-8369 EMAIL: _____

Location and brief description of site and surroundings:

The site is located at 2630 E. Grand River Ave. along the south side of Grand River Ave, east of Chilson Road in Genoa Twp.

To the west, and east of the property are a commercial plaza and commercial carpet/flooring business respectively. To the south of the property is a tree line buffer between the building and residential homes.

Proposed Use:

The proposed use of this project is to utilize the existing pavement on the southeast side of the property as an outdoor RV/Camper storage lot. The on-site building is currently used as an indoor self-storage facility.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The property is zoned as IND (Industrial). The proposed use is compatible with the zoning district because the site will accommodate light industrial operations in the form of outdoor storage that will not affect any of the surrounding districts in a detrimental way.

The proposed outdoor storage will compliment and improve the operations of the current on-site building used for indoor self-storage.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

There is an existing pavement area located on the southeast side of the property where the outdoor RV/Camper storage is proposed.

The improvements for this project will consist of adding striping to designate parking areas and adding entrance and exit mechanics via gates and fencing around the perimeter. The improvements will optimize the use of this lot without any significant alterations.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

There are no proposed utilities for this project. The outdoor storage area will be accessed via the existing drive from Grand River Ave.

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

No. There will be very low daily traffic production from this use and the noise production from the outdoor storage of parked RVs and Campers will be negligible.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

The outdoor storage is located on a parcel greater than 3 acres. The perimeter of the outdoor storage area will be fenced in with a gated entrance/exit. The use will be limited to storage only. The applicant is requesting a variance for parking located closer than twenty-five feet from any non-residential zoning district.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED _____ STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: _____

ADDRESS: _____

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Luke Wanger of Greentech Engineering at luke@greentechengineering.net
Name Business Affiliation Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 11/29/23

PRINT NAME: JOE CHIDESTER PHONE: 810-923-8540

Commissioner Dhaenens asked why they are proposing parking in the front. Mr. Mitter stated they need to have the spaces in the front for handicap access to enter the building. He added that there is front parking all along Grand River in this area.

Commissioner Rauch stated this shouldn't be reviewed by the Planning Commission until it has been before the ZBA. The site design could change depending on the outcome of that meeting. He is also concerned about the increased stormwater runoff as noted by the township engineer. He would not support approving this item without further information.

There was a discussion regarding moving the parking to the rear of the site. Mr. Mitter would consider that if it would meet the handicap requirements. This would eliminate the applicant needing to obtain a variance from the ZBA.

It was noted that a 30-foot drive is proposed from this property to the existing Wonderland site to the east, but there is not enough room because of the pole barn on that property. Mr. Mitter stated they removed part of the pole barn to accommodate that driveway. Ms. Ruthig stated that change to the pole barn was not included in the site plan approval for the existing Wonderland site.

The call to the public was made at 8:45 pm with no response.

Moved by Commissioner Dhaenens, supported by Commissioner Rassel, to table Open Public Hearing #4 of a special land use application, environmental impact assessment and site plan to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue until on or before the May 13, 2024 Planning Commission meeting. **The motion carried unanimously.**

The Planning Commission took a five-minute break from 8:50 pm - 8:55 pm.

OPEN PUBLIC HEARING #5...Consideration of a special land use application, environmental impact assessment and site plan to allow for outdoor RV/camper storage at 2630 Grand River Avenue, south side of Grand River Avenue, east of Chilson Road. The request is petitioned by Schafer Construction.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (1-16-24)
- C. Recommendation of Site Plan (2-19-24)

Mr. Luke Wenger of Greentech Engineering stated they are requesting approval to allow for the storage of RV's and campers.

Mr. Borden reviewed his letter dated March 5, 2024.

- 1. Special Land Uses (Section 19.03):
 - a. The special land use standards of Section 19.03 are generally met.

- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(d) must be met to the Commission's satisfaction.
 - c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.
2. Outdoor Commercial Storage (Section 7.02.02(d)):
- a. The Commission may require improvements to the paved surfacing of the outdoor storage area.
 - b. The plan does not fully provide the required buffer zones; however, the Planning Commission has the authority to waive or modify these requirements. He noted there is existing vegetation.
 - c. He suggests the chain link fencing utilize a screen fabric, instead of privacy slats, if the Commission is amenable to this option.
3. Site Plan Review:
- a. The applicant must coordinate refuse removal since the waste receptacle is behind a security gate.
 - b. The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority, particularly with respect to the security gate.

Mr. Barber stated that all of Ms. Byrne's previous concerns have been addressed.

The Brighton Area Fire Authority Fire Marshal's letter dated March 1, 2024 states all of his previous comments have been addressed.

Commissioner Dhaenens questioned the condition of the pavement where this storage is proposed. Mr. Wegner stated they do not believe the pavement needs to be replaced. He also stated that they will coordinate trash pickup with the contractor. He added they can accommodate the request to change the screening on the fence.

The call to the public was made at 9:12 pm with no response.

Moved by Commissioner Rauch, supported by Commissioner Rassel, to recommend to the Township Board approval of the Special Land Use Application to allow for outdoor RV/camper storage at 2630 Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Rauch, supported by Commissioner McCreary, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 16, 2024 to allow for outdoor RV/camper storage at 2630 Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner Rauch, supported by Commissioner Rassel, to recommend to the Township Board approval of the Site Plan dated February 19, 2024 to allow for outdoor

RV/camper storage at 2630 Grand River Avenue, south side of Grand River Avenue, east of Chilson Road, with the following condition:

- The slat material shown on the details of the fencing shall be switched for a fabric material to be attached to the existing chain link fence.

The motion carried unanimously.

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated there will be four items on the April Planning Commission agenda..

Approval of the February 12 and February 13, 2024 Planning Commission meeting minutes

One needed change was noted for the February 12 minutes.

Moved by Commissioner McCreary, seconded by Commissioner Dhaenens, to approve the minutes of the February 12, 2024 Planning Commission Meeting as amended. **The motion carried unanimously.**

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to approve the minutes of the February 13, 2024 Planning Commission Meeting as presented. **The motion carried unanimously.**

Member Discussion

Commissioner Rauch noted that some of the items on tonight's agenda were not ready to be before the Planning Commission. Commissioner Dhaenens stated that the car wash and the retail building on Latson Road were successful this evening because of them coming before the Planning Commission previously and us working with them.

Commissioner McCreary requested to have a list of the meetings and the submittal deadlines on the table.

Adjournment

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to adjourn the meeting at 9:24 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary



March 5, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Grand River Self Storage – Special Land Use and Site Plan Review #2
Location:	2630 Grand River Avenue –south side of Grand River, east of Chilson Road
Zoning:	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Schafer Construction for outdoor RV/camper storage for the property at 2630 Grand River Avenue (site plan dated 1/23/24).

A. Summary

1. Special Land Uses (Section 19.03):

- a. The special land use standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(d) must be met to the Commission’s satisfaction.
- c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Outdoor Commercial Storage (Section 7.02.02(d)):

- a. If deemed necessary, the Commission may require improvements to the paved surfacing of the outdoor storage area.
- b. The plan does not fully provide the required buffer zones; however, the Planning Commission has the authority to waive or modify these requirements.
- c. We suggest the chain link fencing utilize a screen fabric, instead of privacy slats (if the Commission is amenable to this option).

3. Site Plan Review:

- a. The applicant must coordinate refuse removal since the waste receptacle is behind a security gate.
- b. The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority (particularly with respect to the security gate).

B. Proposal/Process

The applicant proposes development of an outdoor storage yard for RVs/campers as part of the existing climate-controlled indoor commercial storage facility (approved in 2022).

Table 7.02 allows outdoor commercial sales, display or storage with special land use approval in the GCD. The request is also subject to the use conditions of Section 7.02.02(d).

Procedurally, the Planning Commission is to review the special land use, site plan, and Environmental Impact Assessment, and put forth recommendations to the Township Board following a public hearing.



Aerial view of site and surroundings (looking north)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Mixed Use – West Grand River. The Plan includes the following commentary on this category:

This area is envisioned for a higher intensity of commercial and residential uses than the East Grand River District. Currently developed with general commercial and office along Grand River, this area is intended to continue to promote these uses that are supported by area and regional residents as well as pass-by traffic along Grand River Avenue, including interchange traffic from I-96.

As an accessory component to the existing climate-controlled indoor commercial storage use, the proposal is generally consistent with the Master Plan and Future Land Use Map.

- 2. Compatibility.** This area of Grand River contains a variety of land uses, including commercial, service and office. The subject site also abuts residential to the south.

Protection of the residential area is the primary concern under this criterion.

The use conditions of Section 7.02.02(d), which include setback and screening requirements, are intended to help mitigate potential off-site impacts of the outdoor storage area.

Provided these conditions are met to the Commission's satisfaction, the proposal is expected to be compatible with the existing and intended character of the area.

- 3. Public Facilities and Services.** As a previously developed site along Grand River Avenue, we anticipate that necessary public facilities and services are in place.

With that being said, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Similar to comments under criterion #2 above, the use conditions for outdoor commercial storage must be met to the Commission's satisfaction.

- 5. Mitigation.** If additional concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Conditions (Outdoor Commercial Storage)

Outdoor commercial sales, display or storage is subject to the use requirements of Section 7.02.02(d), as follows:

- 1. Minimum lot area shall be one (1) acre.**

The subject site contains 3.67 acres of area.

- 2. Any stockpiles of soils, fertilizer or similar loosely packaged materials shall be sufficiently covered or contained to prevent dust or blowing of materials.**

The proposal is for outdoor storage of recreational vehicles (RVs and campers) and does not include stockpiles or loosely packaged materials.

- 3. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose stormwater without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

The proposed outdoor storage area is paved as it was previously used as a parking lot.

As discussed during review of the climate controlled indoor storage business, the site's pavement was in relatively poor condition and in need of improvement.

If this area remains in poor condition, the Commission may require improvement as part of this project.

- 4. No outdoor storage shall be permitted in any required yard (setback) of buildings for the district in which the commercial outdoor display, sales or storage use is located. Any approved outdoor sales or display within a parking lot shall meet the required parking lot setback; provided the Planning Commission may require additional landscaping screening or ornamental fencing.**

The revised site plan demonstrates compliance with this requirement.

- 5. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.**

The site contains an existing building with 43,555 square feet of gross floor area. As previously noted, the building is used for climate-controlled indoor commercial storage (approved in 2022).

- 6. All loading and truck maneuvering shall be accommodated on-site.**

Aside from any patrons that utilize the existing cross-access with the adjacent properties to the north and west, this standard is met.

- 7. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.**

A buffer zone A is required along the rear lot line, while buffer zone Bs are required along the east and north side of the storage area.

The rear yard provides the width required for a buffer zone A and landscaping is provided via existing mature vegetation, but the wall/berm is not provided.

The remaining sides include existing mature vegetation, but do not meet the width or wall/berm requirements.

With that being said, the entire outdoor storage area is enclosed with 6-foot tall chain link fencing with privacy slats. In our experience, privacy slats often fall quickly into disrepair and should generally be avoided. If the Commission is amenable, we suggest that an alternative material be used, such as a screening fabric.

The Planning Commission has the authority to waive or modify landscaping requirements based on the standards of Section 12.02.13.

- 8. The height of all material and equipment stored in an outdoor storage area shall not exceed the height of any landscape screening, wall or fence. Boats and recreational vehicles may exceed the height of the fence provided that they are setback from the fence a distance equal to their height. Storage of materials up to the height of the adjacent building wall may be permitted in the rear yard if it is illustrated on the site plan, the rear yard does not abut a residential district, will not be visible from an expressway and such storage is confined to within twenty (20) feet of the building.**

The revised submittal notes that the combination of existing landscaping, fencing and setback will provide sufficient screening for RV's and boats.

E. Site Plan Review

- 1. Dimensional Requirements.** No changes are proposed that impact the dimensional requirements of the GCD.
- 2. Building Design and Materials.** No building changes are proposed as part of this project.

Modifications were approved as part of the climate-controlled indoor commercial storage project in 2022.

- 3. Pedestrian Circulation.** A performance guarantee for bike path construction was required as part of the 2022 project approval.
- 4. Vehicular Circulation.** No alterations are proposed to existing site circulation; however, the applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority (particularly with respect to the security gate).
- 5. Exterior Lighting.** The revised lighting plan includes 5 light poles and 3 wall mounted fixtures.

Based on the detail sheets provided, the proposed fixtures are downward directed LED, as required.

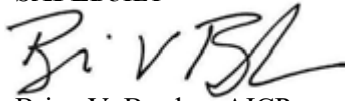
Pole heights and photometric readings (both on-site and along property lines) comply with Ordinance standards.

- 6. Waste Receptacle.** The 2022 project included approval of a compliant waste receptacle and enclosure in the rear yard.

Since the receptacle will now be located behind a security gate, the applicant must coordinate arrangement with their refuse removal provider.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,
SAFE BUILT



Brian V. Borden, AICP
Michigan Planning Manager



February 22, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Copper Safe Outdoor Storage
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech conducted a second review of the proposed Copper Safe Outdoor Storage site plan last dated February 16, 2024. The plan was prepared by Greentech Engineering, Inc. on behalf of Shafer Construction. The development is located on the south side of Grand River Avenue, east of Chilson Road. A site plan for indoor storage at the site was approved in fall 2022, and the Petitioner is now proposing to expand with outdoor storage in the southeast parking lot. Proposed improvements include new fence and parking striping.

The revised plans have addressed our previous comments, including adding a pavement cross section and showing the existing parking lot and storm sewer accurately, therefore we have no further engineering related concern with the proposed site plan.

Please call or email if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads 'Shelby Byrne'.

Shelby Byrne, P.E.
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

March 1, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Copper Safe Outdoor Storage
2630 Grand River
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on February 20, 2023 and the drawings are dated November 29, 2023 with recent revisions dated February 16, 2024. The project is based on an existing 4.24-acre parcel with an existing 48,858 square foot S-1 self storage structure. The proposal is to add additional outdoor storage lot to the East side of the structure. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

All previous comments regarding access throughout the proposed outdoor storage area have been complied with or acknowledged by the applicant on the most recent submittal.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

Received 2-16-24

Impact Assessment for

Grand River Self Storage

2650 Grand River

Howell, MI 48843

Prepared by:



Date:

November 29, 2023

Grand River Self Storage

Impact Assessment Statement

Preparer (18.07.01)

This Impact Assessment was prepared under the direction of Daniel LeClair, PE. PS and GreenTech Engineering, Inc. 51147 W Pontiac Trail, Wixom, MI 48393. Mr. LeClair is a licensed Civil Engineer and Land Surveyor and is a professional engineering consultant offering services throughout all of Michigan and the Midwest since 1993. GreenTech Engineering offers consulting services to private land development clients including residential, commercial and industrial projects.

Location (18.07.02)

The site is located at 2630 Grand River Avenue which is located along the south side of Grand River Avenue east of Chilson Road. The site includes a 43,555 square foot building that is currently being used as an indoor self-storage facility. The parcel identification number for this site is 4711-06-200-061. See exhibit 'A' attached for a location map. The site is adjoining a shopping center on the west, a retail store and car dealership to the east, and single family residential to the south.

Impact on natural features (18.07.03)

The subject site has been previously developed including the existing 43,555 square foot building along with parking lots located along the northerly and easterly portion of the site. The proposed re-use of the parking lot to the east of the building is contemplating very limited re-configuration of the existing site. There is an existing wooded natural area along the southerly portion of the site that will remain unchanged as part of this development.

Soils: The native soils on the subject property consist of loamy sands as indicated on the USDA soils map attached as Exhibit 'B'. The rear (southerly) portion of the site appears to remain in it's native state, however the surface soils have been altered as part of the previous development of the property.

Topography: The existing site topography consists of two separate drainage areas. The area north (front) of the existing building surface slopes downward in a northwesterly direction, while the area east of the building slopes downward in a southerly direction. The area immediately south of the building slopes downward toward a drop off in the rear yard near the southerly property line. The proposed development plan will utilize the existing asphalt area on the east, but does not include any re-grading of the parking lot. The remainder of the site remains unchanged as part of this development proposal.

A wetland study was not performed as part of this application as there are no changes to the site other than the minor modification to the existing paved areas.

Impact on stormwater management (18.07.04)

The existing site drainage patterns consists of two separate drainage areas. The area north (front) of the existing building surface slopes downward in a northwesterly direction, while the area east of the building slopes downward in a southerly direction. The area immediately south of the building slopes downward toward a drop off in the rear yard near the southerly property line.

The proposed development plan does not include any changes to the existing pavement other than the removal and pavement repair of two islands located in the easterly parking lot. The remainder of the site remains unchanged as part of this development proposal.

With a no change in the impervious area, we anticipate no negative impact to the existing stormwater management system from the proposed development.

Impact on surrounding land uses (18.07.05)

Description of Proposed Uses: The existing parking lot along the easterly side of the building will be fenced in. No permanent foundation, grade changes and/or repaving of the existing easterly parking area will be required.

Hours of Operation: The hours of operation will include will include office hours from 8 am until 8 pm Monday through Friday and 8 am until 5 pm on Saturday and Sundays. Access to the exterior RV/Camper storage areas will be 24 hours to customers with valid access codes.

Phasing: The proposed improvements will be constructed in one phase.

In summary, the optimization of the existing easterly asphalt lot on this site will increase the usability and services provided to people in the community. It will include an on-site office attendant who will also act as an on-site caretaker in addition to the new fencing around the easterly parking lot. It is anticipated that the new use will turn a vacant asphalt lot into a usable location for people needing a place to store an RV or Camper. See Exhibit 'C' for images of the existing site.

Impact on public facilities and services (18.07.06)

The proposed re-development of the subject site is anticipated to reduce the impact to the public facilities and services. We anticipate one to two full time employees during the business day along with random customer visits to the site. The traffic impact to the adjoining streets and neighborhood is anticipated to have a low impact due to the use of the site.

Impact on public utilities (18.07.07)

The proposed lot will not have any effect on public utilities as no utilities are proposed for this project.

Storage and handling of hazardous materials (18.07.08)

Per the terms of the rental contracts, no hazardous materials will be allowed to be stored or handled on site. There are no known underground tanks on the subject property.

Traffic Impact Study (18.07.09)

Based on review of the institute of Transportation Engineers Trip Generation Manual and related studies and reports, a detailed traffic impact study is not warranted. Typical days, as noted above, will generate fewer than 30 visitors throughout the course of the day, falling far below the 100 directional trips during the peak hour of traffic.

Historic and Cultural Resources (18.07.10)

The existing building does not have any historic or cultural significance, and is less than 50 years old.

Special Provision (18.07.11)

There are no deed restrictions, protective covenants, master deed or association bylaws encumbering the subject property.

List of Sources (18.07.12)

The sources utilized in preparing report include personal knowledge of the subject property by the applicant/owner, aerial photography and partial topographic survey as prepared by GreenTech Engineering, and the Genoa Township ordinance.

EXHIBIT 'A'



LOCATION MAP

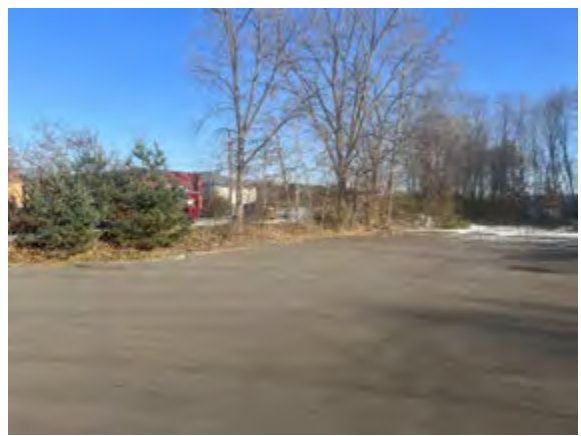
EXHIBIT 'B'

Livingston County, Michigan (MI093)			
Livingston County, Michigan (MI093)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FrB	Fox-Boyer complex, 2 to 6 percent slopes	0.5	11.9%
MoB	Wawasee loam, 2 to 6 percent slopes	4.0	88.1%
Totals for Area of Interest		4.5	100.0%



SOILS MAP

EXHIBIT 'C'



BENCHMARKS:

SITE BM #1
RAILROAD SPIKE, SOUTH FACE OF UTILITY POLE ALONG THE EAST PROPERTY LINE OF #2630 E. GRAND RIVER AVENUE, 192± SOUTHWEST OF THE NORTHEAST PROPERTY CORNER. ELEVATION: 963.72 N.A.V.D.88

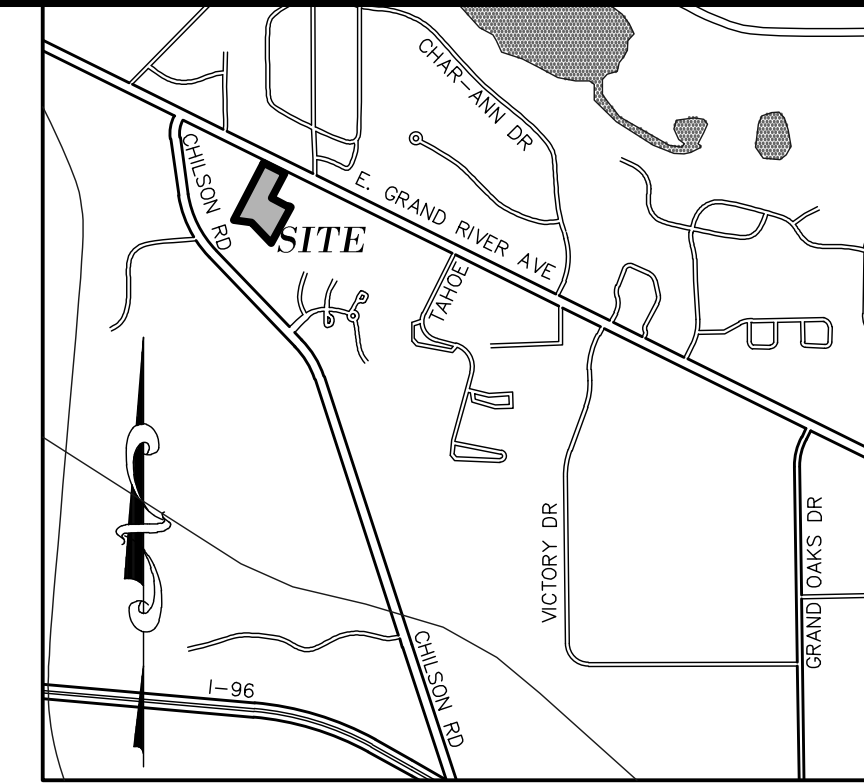
SITE PLANS

for

GRAND RIVER SELF STORAGE

OUTDOOR STORAGE

2630 GRAND RIVER AVENUE
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



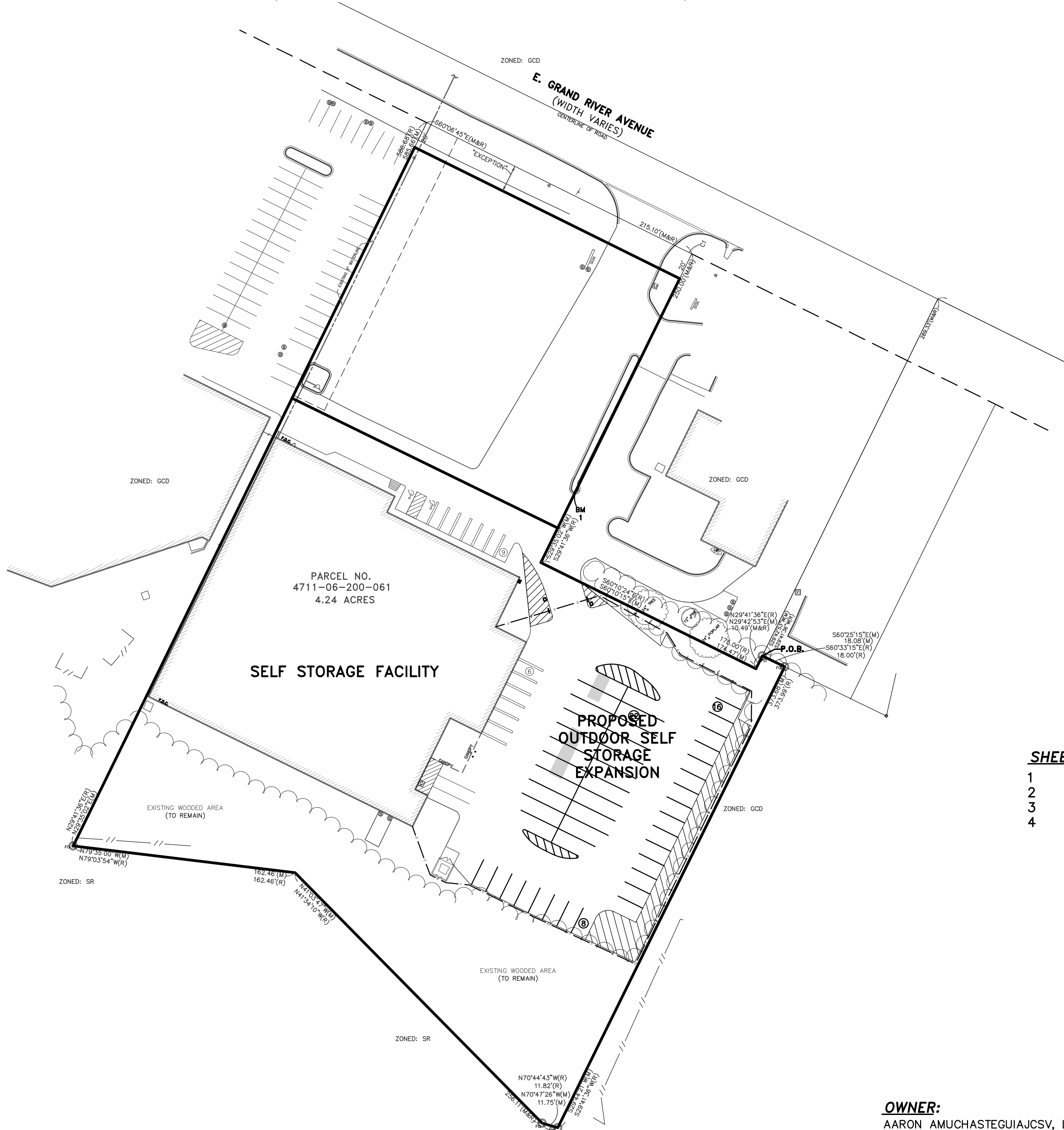
RESIDENTIAL
Site Consultation
Site Preparation
Final Plans

COMMERCIAL
Site Planning
Site Preparation
Industrial & Multi-Unit
Land Surveying

SURVEYING
Boundary Surveys
Topographic Surveys
Precise & Multi-Point
Construction Staking

GREENTECH
ENGINEERING, INC.
CIVIL ENGINEERS & LAND SURVEYORS

51147 Pontiac Trail, Wixom, MI 48393
Phone: (248) 668-0700 Fax: (248) 668-0701



GENERAL NOTES:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB.
3. CONTRACTOR TO OBTAIN ALL REQUIRED APPROVALS AND PERMITS PRIOR TO THE START OF CONSTRUCTION.

DESCRIPTION: PARCEL #4711-06-200-061 (BY OTHERS)

PART OF THE NORTHEAST 1/4 OF SECTION 6, T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 6; THENCE N02°17'07"E 594.63 FEET TO THE CENTERLINE OF GRAND RIVER AVENUE THENCE N60°39'00"W ALONG SAID CENTERLINE 2381.67 FEET; THENCE CONTINUING ALONG SAID CENTERLINE N60°06'45"W 224.71 FEET; THENCE S29°41'36"W 289.33 FEET TO THE POINT OF BEGINNING; THENCE S60°33'15"E 18.00 FEET; THENCE S29°41'36"W 373.99 FEET; THENCE N70°44'43"W 11.82 FEET; THENCE N41°34'10"W 256.11 FEET; THENCE N79°03'54"W 162.46 FEET; THENCE N29°41'36"E 586.58 FEET TO THE SOUTHERLY RIGHT-OF-WAY OF GRAND RIVER AVENUE; THENCE ALONG SAID RIGHT-OF-WAY S60°06'45"E 211.40 FEET; THENCE CONTINUING ALONG RIGHT-OF-WAY ALONG THE ARC OF A CURVE LEFT CHORD BEARING S60°06'50"E 3.60 FEET; THENCE S29°41'36"W 250.00 FEET; THENCE S60°10'24"E 175.00 FEET; THENCE N29°41'36"E 10.49 FEET TO THE POINT OF BEGINNING, CONTAINING 4.24 ACRES, MORE OR LESS, AND SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD, SPLIT FROM 019 EXCEPTING THE NORTHEASTERLY 20 FEET AND PARALLEL TO GRAND RIVER, AS DEEDED TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION CORR 3/2014.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

NOTE:
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

SHEET INDEX:

- 1 COVER SHEET
 - 2 DIMENSION & PAVING PLAN
 - 3 EXISTING CONDITIONS & DEMOLITION PLAN
 - 4 CIRCULATION PLAN
- PHOTOMETRIC PLAN

OWNER:
AARON AMUCHASTEGUIAJCSV, LLC
8616 MENDOCINO DRIVE
AUSTIN, TX 78735
PHONE: (805)-904-8369

APPLICANT:
SCHAFER CONSTRUCTION
102 E. GRAND RIVER AVE
BRIGHTON, MI 48393
CONTACT: MATT VETTER
PHONE: (810) 220-0296

ENGINEER/SURVEYOR:
GREENTECH ENGINEERING, INC.
51147 PONTIAC TRAIL
WIXOM, MI 48393
CONTACT: DAN LECLAIR, P.E.
(248) 668-0700



CLIENT: SCHAFER CONSTRUCTION

COVER SHEET

2630 GRAND RIVER AVE - PARCEL NO 4711-06-200-061
SECTION: 6 TOWNSHIP: 2 N RANGE: 5 E
CHARTER TOWNSHIP OF GENOA
LIVINGSTON COUNTY
MICHIGAN

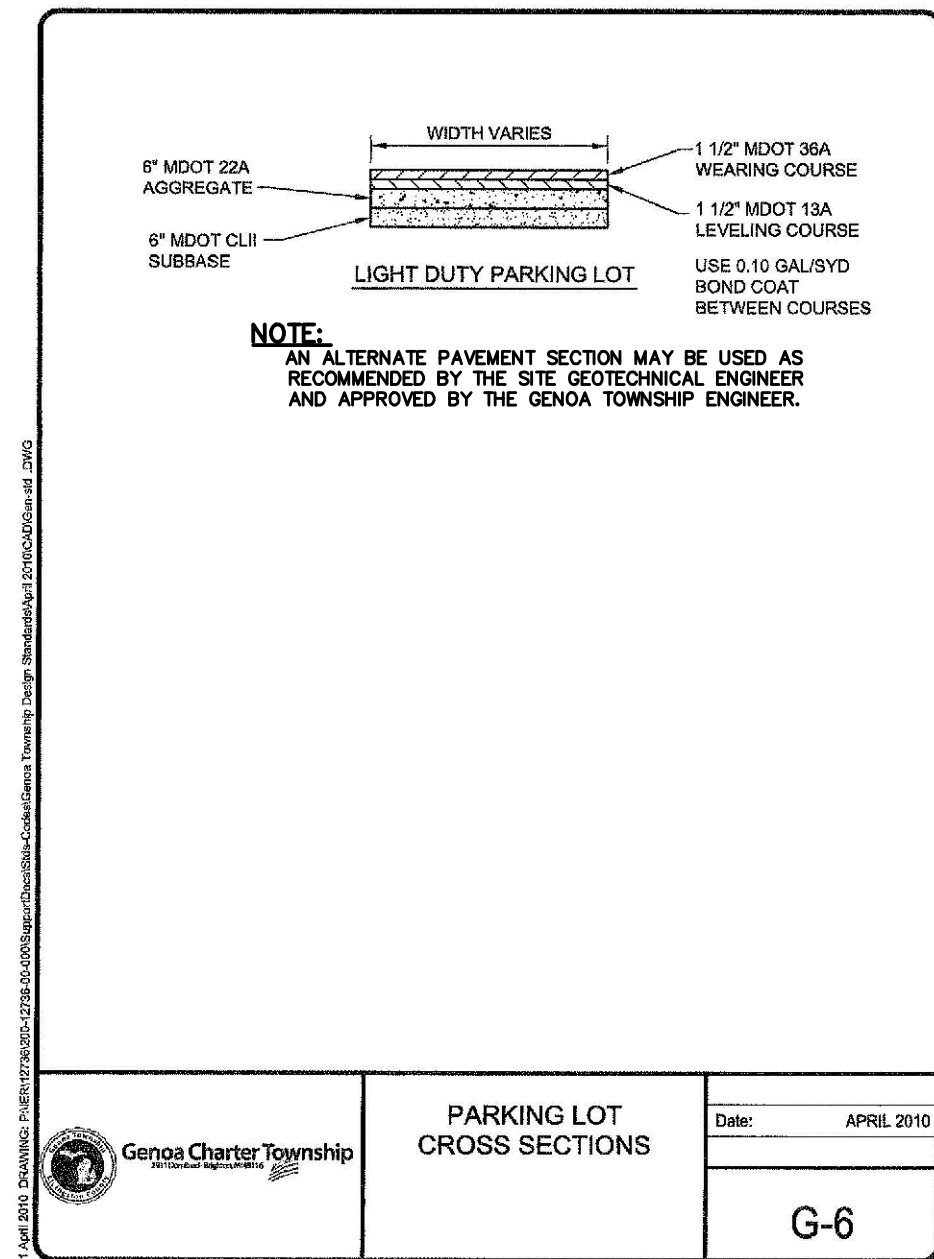
REVISED
2024-1-23 PER REVIEW
2024-2-16 PER REVIEW



DATE: 11-29-2023
DRAWN BY: RMS
CHECKED BY: DJL
FBK: ---
CHF: MM
SCALE: HOR 1"= 50 FT. VER 1"= -- FT.
1
21-315

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE CONFORMING TO THE CURRENT STANDARDS AND SPECIFICATIONS ADOPTED BY GENOA TOWNSHIP AND LIVINGSTON COUNTY.
- ALL SIDEWALK, RAMPS, AND LANDINGS, MUST MEET THE AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS.
- THE CONTRACTOR SHALL PAY FOR, OBTAIN AND COMPLY WITH ALL PERMITS NECESSARY FROM PUBLIC AGENCIES INCLUDING BUT NOT LIMITED TO GENOA TOWNSHIP, LIVINGSTON COUNTY.
- ALL PAVEMENT, DRIVEWAYS, SHOULDERS, LANDSCAPING, DRAINAGE PIPES, MAILBOXES, SIGNS, ETC. DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO EQUAL OR BETTER CONDITION.
- EXISTING MONUMENTS AND PROPERTY CORNERS SHALL BE PRESERVED AND PROTECTED, AND RESTORED IF DISTURBED, AT CONTRACTORS EXPENSE.
- NO WORK WITHIN THE GRAND RIVER BOULEVARD RIGHT-OF-WAY SHALL TAKE PLACE.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN, PRIOR TO CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB.
- STATE REQUIREMENTS FOR BARRIER FREE PARKING SPACES SUPERSEDE ANY TOWNSHIP REQUIREMENTS.
- ALL DIMENSIONS SHOWN ARE TO EDGE OF PAVEMENT, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- ALL WORK SHALL BE COMPLETED IN ONE PHASE.
- ALL LOADING AND UNLOADING SHALL TAKE PLACE DURING TYPICAL BUSINESS HOURS. NO LOADING OR UNLOADING SHALL TAKE PLACE OUTSIDE OF THE GATED AREAS.



Genoa Charter Township	PARKING LOT CROSS SECTIONS	Date: APRIL 2010
		G-6

FLOOD HAZARD STATEMENT:

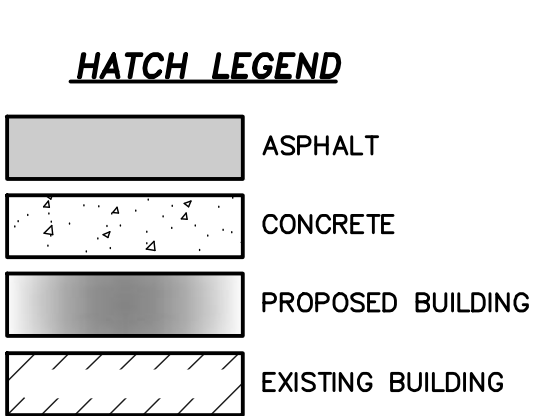
THIS PROPERTY IS LOCATED WITHIN A FEMA DESIGNATED ZONE X FLOOD HAZARD AREA AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FOR MICHIGAN FLOOD INSURANCE RATE MAP (FIRM) #26093C0307D (COMMUNITY ID NO. 260843 - TOWNSHIP OF GENOA, MI) WITH AN EFFECTIVE DATE OF SEPTEMBER 17, 2008. THIS STATEMENT IS BASED ON THE RESULTS OF GRAPHIC PLOTTING ONTO THE ABOVE NAMED MAP AND PANEL WHICH IS THE CURRENT MAP FOR THE COMMUNITY IN WHICH THE PROPERTY IS LOCATED. ZONE "X" INDICATES AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

NOTE:

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.



ZONED: GCD
E. GRAND RIVER AVENUE
(WIDTH VARIES)
CENTERLINE OF ROAD



LIGHTING NOTE
NO CHANGES TO THE EXISTING SITE LIGHTING ARE PROPOSED. PHOTOMETRIC PLAN ISSUED FOR REFERENCE ONLY.

UTILITY NOTE
NO CHANGES TO THE EXISTING SANITARY SEWER, STORM SEWER OR WATER MAIN INFRASTRUCTURE ARE ANTICIPATED AS PART OF THE PROPOSED DEVELOPMENT.

SESC NOTE
THERE IS NO PROPOSED EARTH CHANGE THAT WILL REQUIRE A SOIL EROSION CONTROL PERMIT FOR THIS PROJECT ACTIVITY.

PAVEMENT NOTE
NO PAVEMENT WILL BE REMOVED AS PART OF THIS PROJECT. MINOR PAVEMENT ADDITIONS WITHIN EXISTING ISLAND REMOVAL AREAS WILL BE REQUIRED. SEE EXISTING CONDITIONS & DEMOLITION PLAN FOR LOCATION DETAILS.

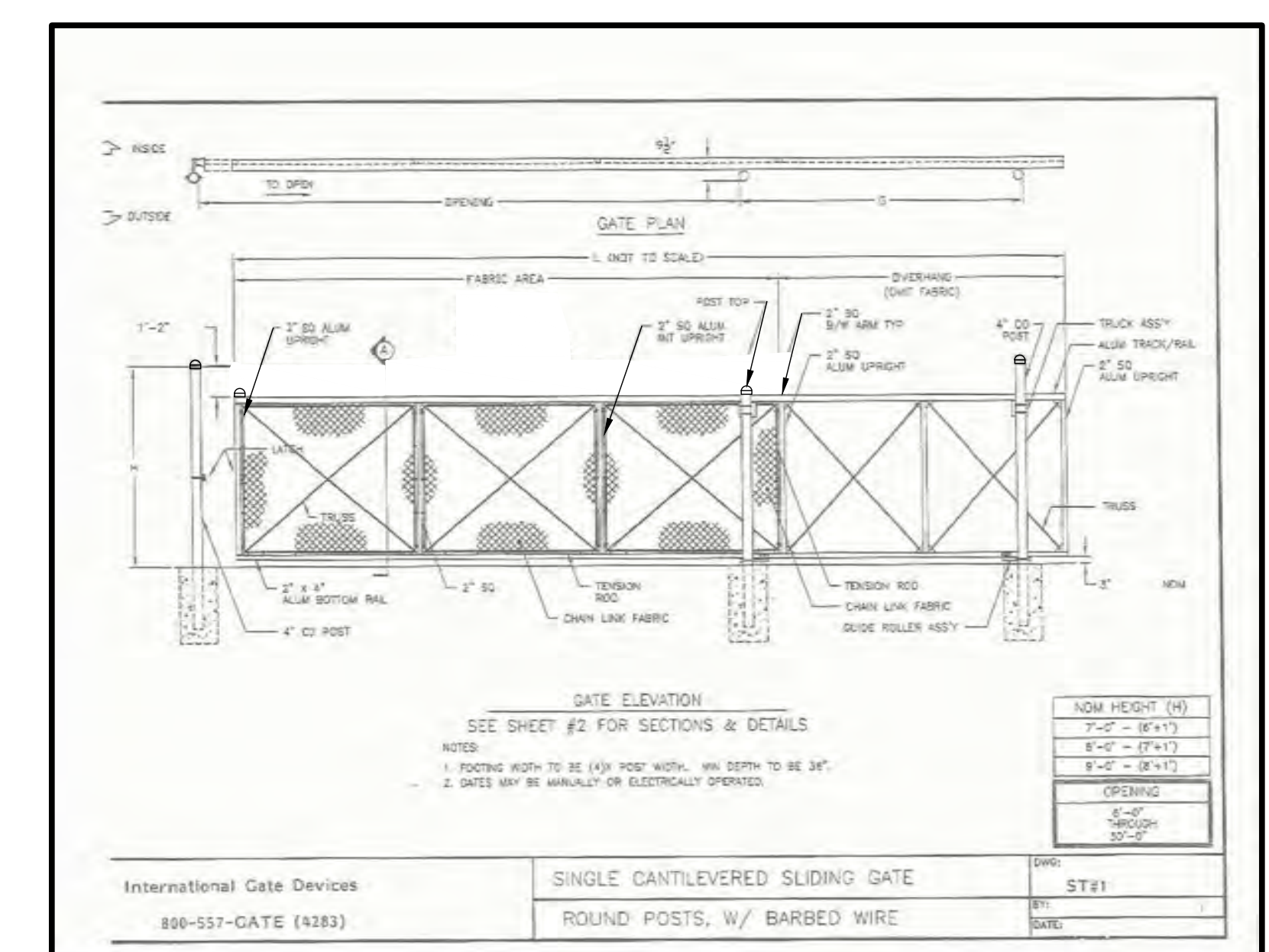
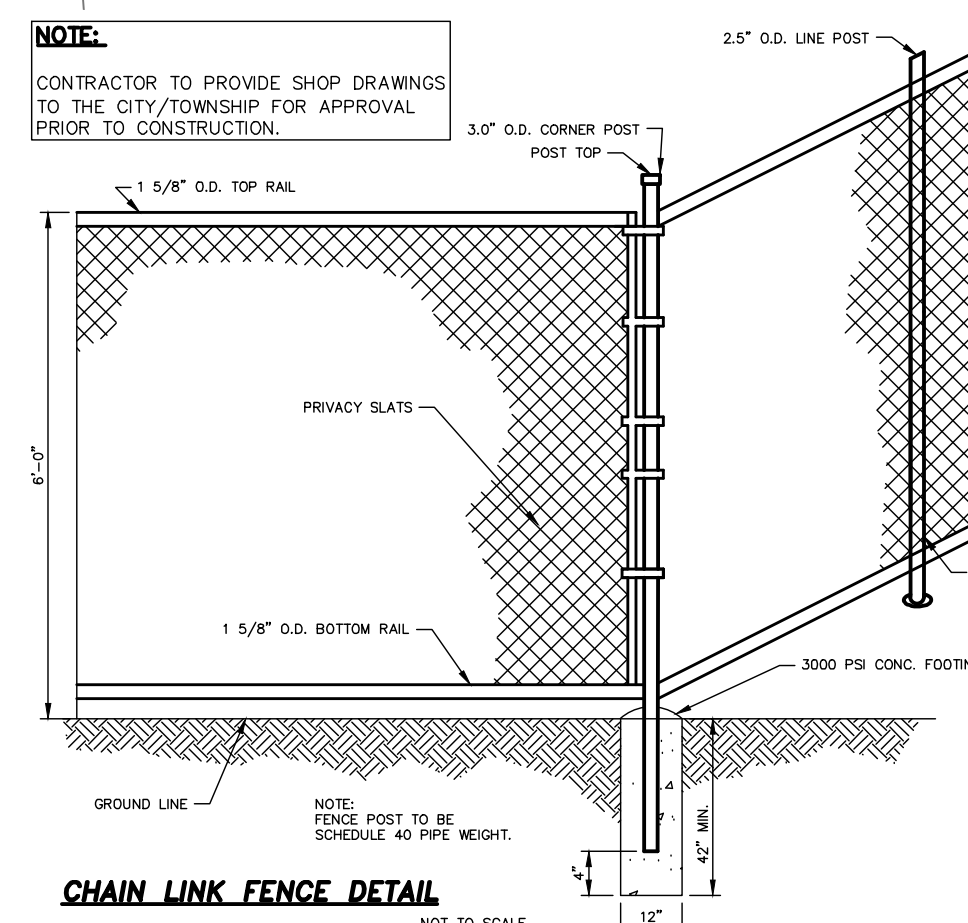
KNOX BOX NOTE
KNOX BOX LOCATION TO BE COORDINATED WITH THE BRIGANTON AREA FIRE AUTHORITY. THE KNOX BOX FOR THE REAR ACCESS GATE SHALL INCLUDE A KEY SWITCH FOR CONTROL & BYPASS OF THE ACCESS CONTROL OF THE GATE.

LANDSCAPING NOTE
THERE IS NO LANDSCAPING PLAN INCLUDED IN THE SUBMITTAL DUE TO THE PREVIOUS LANDSCAPING IMPROVEMENTS.

SITE USE NOTE
THE SITE WILL BE USED TO STORE RV'S AND BOATS THAT MUST HAVE A MAXIMUM HEIGHT OF 15' BASED ON THE SCREENING AND SETBACK DISTANCE.

CURRENT ZONING:
GCD, GENERAL COMMERCIAL DISTRICT

PARKING SETBACKS:
FRONT: 20 FEET
REAR: 10 FEET
SIDES: 10 FEET
PER GENOA TOWNSHIP ORDINANCE



GREENTECH ENGINEERING, INC.
CIVIL ENGINEERS & LAND SURVEYORS
51147 Portico Trail, Wixom, MI 48393
Phone: (248) 868-0700 Fax: (248) 868-0701

811
Know what's below
Call before you dig.

SCHAFFER CONSTRUCTION

DIMENSION & PAVING PLAN

CLIENT: 2630 GRAND RIVER AVE - PARCEL NO 4711-06-200-061
SECTION: 6 TOWNSHIP: 2 N RANGE: 5 E
CHARTER TOWNSHIP OF GENOA LIVINGSTON COUNTY MICHIGAN

REVISED
2024-1-23 PER REVIEW
2024-2-16 PER REVIEW

DATE: 11-29-2023
DRAWN BY: RMS
CHECKED BY: DJL

SCALE: HOR 1"=30 FT. VER 1"= 10 FT.

2
21-315

BENCHMARKS:

SITE BM #1
RAILROAD SPIKE, SOUTH FACE OF UTILITY POLE ALONG THE EAST PROPERTY LINE OF #2630 E. GRAND RIVER AVENUE, 192'± SOUTHWEST OF THE NORTHEAST PROPERTY CORNER. ELEVATION: 963.72 N.A.V.D.88

SURVEY LEGEND

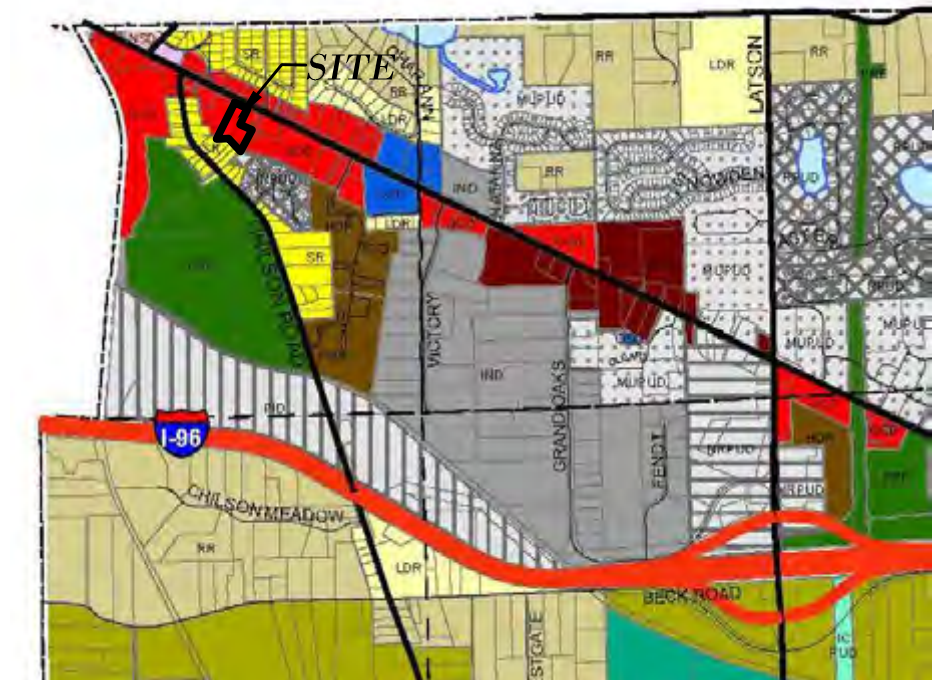
- EX. SECTION CORNER
- EX. FIBER/FIP/MON
- EX. MAILBOX
- EX. SOIL BORE
- EX. SIGN
- EX. FIBER MARKER
- EX. SANITARY MANHOLE
- EX. CATCH BASIN
- EX. STORM MANHOLE
- EX. HYDRANT
- EX. GATE VALVE & WELL
- EX. WATER SHUT-OFF
- EX. LIGHT POLE
- EX. UTILITY POLE
- EX. PEDISTAL
- EX. HAND HOLE
- EX. UTILITY FLAG
- EX. COMMUNICATIONS
- EX. SANITARY SEWER
- EX. GAS LINE
- EX. WATER MAIN
- EX. OVERHEAD UTILITIES
- EX. FENCE
- EX. SWALE
- WETLAND BOUNDARY
- 590- CONTOUR MAJOR
- 591- CONTOUR MINOR
- EX. ZONING
- EX. TREELINE
- EX. CONIFEROUS
- EX. DECIDUOUS

FLOOD HAZARD STATEMENT:

THIS PROPERTY IS LOCATED WITHIN A FEMA DESIGNATED ZONE X FLOOD HAZARD AREA AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FOR MICHIGAN FLOOD INSURANCE RATE MAP (FIRM) #2609303070 (COMMUNITY ID NO. 260843 - TOWNSHIP OF GENOA, MI) WITH AN EFFECTIVE DATE OF SEPTEMBER 17, 2008. THIS STATEMENT IS BASED ON THE RESULTS OF FIELD PLOTTING ONTO THE ABOVE NAMED MAP AND PANEL, WHICH IS THE CURRENT MAP FOR THE COMMUNITY IN WHICH THE PROPERTY IS LOCATED. ZONE "X" INDICATES AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

DEMOLITION LEGEND:

- CURB REMOVAL
- ASPHALT REMOVAL
- CONCRETE PAVEMENT AND SIDEWALK/BRICK REMOVAL



Zoning Map
Genoa Charter Township
Livingston County, Michigan

- Legend**
- AG
 - CE
 - RR
 - LDR
 - SR
 - LRR
 - UR
 - MDR
 - HDR
 - RPUD
 - MHP
 - RC
 - GC
 - NS
 - OS
 - NRPU
 - IND
 - PID
 - PRF
 - MUPUD
 - RDPUD
 - Town Center
 - CAPUD
 - ICPLUD

NOTE:

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NOTE:
PROTECT ALL OFF SITE FEATURES ADJACENT TO PERIMETER PROPERTY LINES. THESE INCLUDE BUT ARE NOT LIMITED TO LANDSCAPING, OVERHEAD UTILITIES, CONCRETE PAVEMENT, ELECTRICAL BOXES ETC. COORDINATE WITH ADJACENT LANDOWNER AS REQUIRED DURING CONSTRUCTION.

CAUTION!!!
UNDERGROUND UTILITIES PRESENT WITHIN INFLUENCE OF WORK AREA. LOCATE AND PROTECT DURING CONSTRUCTION.

EXISTING TREES TO BE RELOCATED ON SITE

REMOVE EXISTING CURB & GUTTER

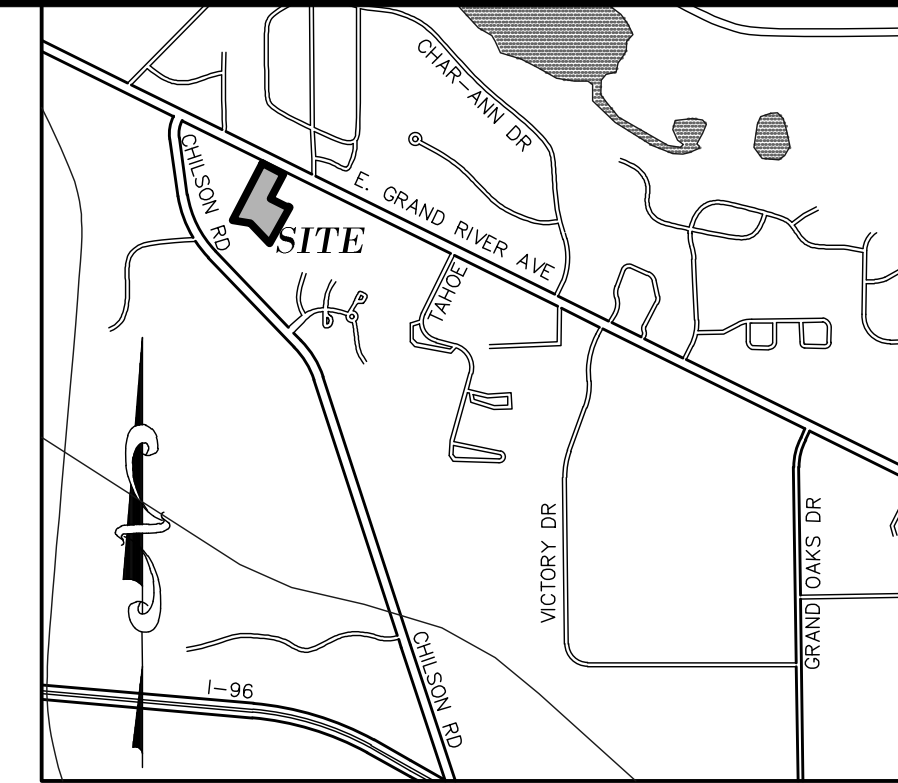
EXISTING PAVEMENT THIS AREA TO REMAIN

EXISTING PAVEMENT THIS AREA TO REMAIN

DESCRIPTION: PARCEL #4711-06-200-061 (BY OTHERS)

PART OF THE NORTHEAST 1/4 OF SECTION 6, T2N-R5E, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE EAST 1/4 CORNER OF SAID SECTION 6; THENCE N02°17'07"E 594.63 FEET TO THE CENTERLINE OF GRAND RIVER AVENUE THENCE N60°39'00"W ALONG SAID CENTERLINE 2381.67 FEET; THENCE CONTINUING ALONG SAID CENTERLINE N60°06'45"W 224.71 FEET; THENCE S29°41'36"W 289.33 FEET TO THE POINT OF BEGINNING; THENCE S60°33'15"E 18.00 FEET; THENCE S29°41'36"W 373.99 FEET; THENCE N70°44'43"W 11.82 FEET; THENCE N41°34'10"W 256.11 FEET; THENCE N79°03'54"W 162.46 FEET; THENCE N29°41'36"E 586.68 FEET TO THE SOUTHERLY RIGHT-OF-WAY OF GRAND RIVER AVENUE; THENCE ALONG SAID RIGHT-OF-WAY S60°06'45"E 211.40 FEET; THENCE CONTINUING ALONG RIGHT-OF-WAY ALONG THE ARC OF A CURVE LEFT CHORD BEARING S60°06'50"E 3.60 FEET; THENCE S29°41'36"W 250.00 FEET; THENCE S60°10'24"E 175.00 FEET; THENCE N29°41'36"E 10.49 FEET TO THE POINT OF BEGINNING, CONTAINING 4.24 ACRES, MORE OR LESS, AND SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD. SPLIT FROM D19 EXCEPTING THE NORTHEASTERLY 20 FEET AND PARALLEL TO GRAND RIVER, AS DEEDED TO THE MICHIGAN DEPARTMENT OF TRANSPORTATION CORR 3/2014.

CURVE TABLE			
CURVE	LENGTH	RADIUS	CHORD
C1	3.60	85,993.70'	00°00'09" S60°06'50"E 3.60'



DEMOLITION NOTES:

- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:
- ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
 - ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
 - STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
 - REMOVE ALL STRUCTURES DESIGNED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
 - REFER TO LANDSCAPE PLANS FOR TREE PROTECTION DETAILS.
 - THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15' OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) LATEST EDITION.
 - THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION, AS APPLICABLE.
 - THE CONTRACTOR SHALL NOTIFY MISS DIG, GENOA TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.



Livingston County, Michigan (MI093)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
FrB	Fox-Boyer complex, 2 to 6 percent slopes	5.7	19.4%
Frc	Fox-Boyer complex, 6 to 12 percent slopes	2.6	8.9%
MoB	Wawasee loam, 2 to 6 percent slopes	20.6	70.0%
MoC	Wawasee loam, 6 to 12 percent slopes	0.5	1.8%
Totals for Area of Interest		29.5	100.0%

GREENTECH ENGINEERING, INC.
CIVIL ENGINEERS & LAND SURVEYORS
5114.7 Perlic Dr., Livonia, MI 48303
Phone: (248) 668-0700 Fax: (248) 668-0701

811
Know what's below
Call before you dig.

EXISTING CONDITIONS & DEMOLITION PLAN
2630 GRAND RIVER AVE - PARCEL NO 4711-06-200-061
SECTION: 6 TOWNSHIP: 2 N RANGE: 5 E
LIVINGSTON COUNTY MICHIGAN

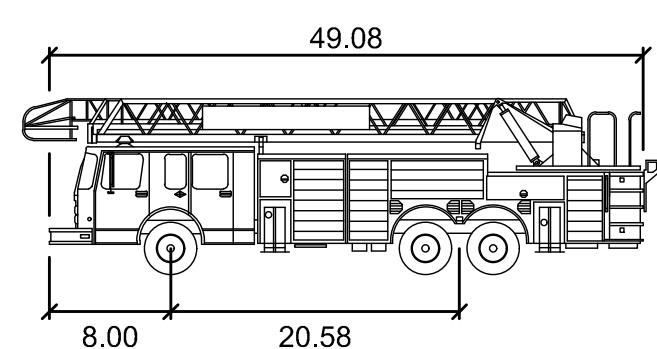
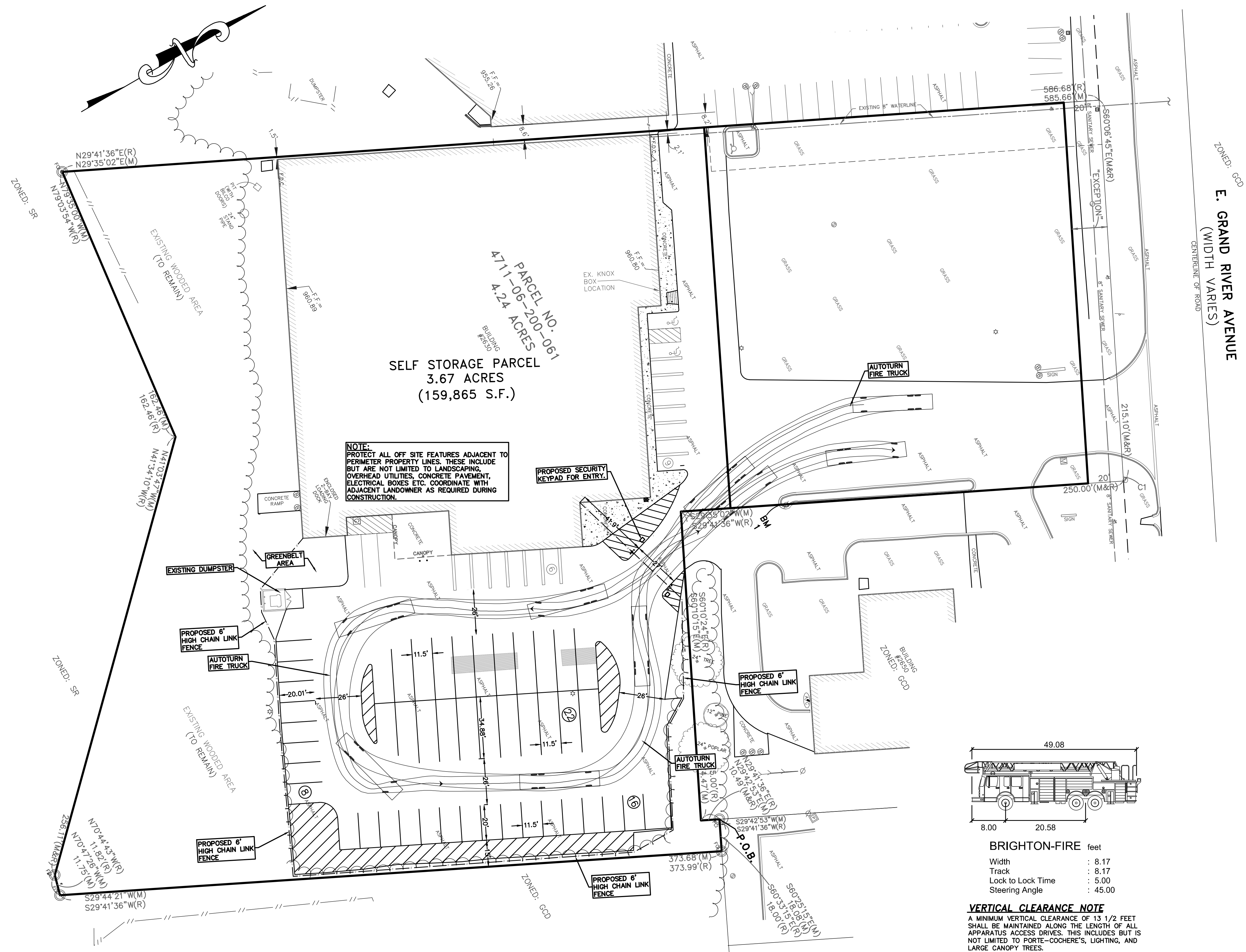
CLIENT: SCHAFFER CONSTRUCTION

REVISED
2024-1-23 PER REVIEW
2024-2-16 PER REVIEW

DATE: 11-29-2023
DRAWN BY: RMS
CHECKED BY: DJL

FBK: ---
CHF: MM
SCALE: HOR 1"=30 FT.
VER 1"= 10 FT.

3
21-315



BRIGHTON-FIRE feet

Width	: 8.17
Track	: 8.17
Lock to Lock Time	: 5.00
Steering Angle	: 45.00

VERTICAL CLEARANCE NOTE
 A MINIMUM VERTICAL CLEARANCE OF 13 1/2 FEET SHALL BE MAINTAINED ALONG THE LENGTH OF ALL APPARATUS ACCESS DRIVES. THIS INCLUDES BUT IS NOT LIMITED TO PORTE-COCHERE'S, LIGHTING, AND LARGE CANOPY TREES.

NOTE:
 THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

ZONED: GCD
E. GRAND RIVER AVENUE
 (WIDTH VARIES)
 CENTRELINE OF ROAD

GREENTECH
 ENGINEERING, INC.
 CIVIL ENGINEERS & LAND SURVEYORS

RESIDENTIAL
 COMMERCIAL
 SURVEYING
 INDUSTRIAL

51147 Porticoe Trail, Wixom, MI 48393
 Phone: (248) 668-0700 Fax: (248) 668-0701

811
 Know whats below
 Call before you dig.

CLIENT: SCHAFER CONSTRUCTION

CIRCULATION PLAN

2630 GRAND RIVER AVE - PARCEL NO 4711-06-200-061
 SECTION: 6 TOWNSHIP: 2 N RANGE: 5 E.
 CHARTER TOWNSHIP OF GENOA
 LIVINGSTON COUNTY
 MICHIGAN

REVISED
 2024-1-23 PER REVIEW
 2024-2-16 PER REVIEW

DATE: 11-29-2023
 DRAWN BY: RMS
 CHECKED BY: DJL

SCALE: HOR 1"=30 FT.
 VER 1"= 4 FT.

4
 21-315



MEMORANDUM

TO: Honorable Board of Trustees
FROM: Amy Ruthig, Planning Director
DATE: March 27, 2024
RE: Brighton Area Chamber of Commerce Assembly Ordinance submittal
Yellowstone Country Music Festival

2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

Please find attached a request from the Brighton Area Chamber of Commerce to conduct an outdoor assembly not to exceed 3,000 attendees on June 22, 2024 from 4:00pm to 10:00pm for the “Yellowstone Country Music Festival” to be located at 4141 Bauer Road, Brighton. The submittal was required per the Genoa Charter Township Assembly Ordinance.

I have reviewed the information that was submitted under the Assembly Ordinance including Section 10, Requirements for Issuance of License, and I offer the following for your consideration:

Section 5. Site Plan.

g) The site plans that the applicant provided are the same as what was submitted in last years application. The Board may allow the aerial submitted as sufficient to meet this requirement as long as the Brighton Area Fire Department and Livingston County Sheriffs Department find it sufficient also.

Section 6. Request for Recommendations.

The applicant must assume the responsibility of obtaining the recommendations from the local offices as required.

Section 10. Requirements for Issuance of License.

a) Security Personnel. Applicant shall submit an executed agreement with the Livingston County Sheriff and an executed agreement/contract with Great Lakes Security prior to issuance of the certificate of license.

b) Water Facilities.

Applicant shall ensure that the existing facility is in compliance with and obtain all necessary approvals from the Livingston County Health Department.

c) Restroom Facilities.

According to Livingston County Environmental Health Department, a permit will be required for the assembly. A copy of the permit from Livingston County Environmental Health shall be submitted to the Township prior to the event.

d) Food Services.

Applicant shall ensure that the food trucks receive Livingston County Health Department and Brighton Area Fire Department approval 7-10 days prior to the event as required by the Brighton Area Fire Department.

e) Medical Facilities.

The applicant should supply the appropriate number of emergency medical trained personal as recommended by the Livingston County EMS and Brighton Area Fire Department. Applicant must adhere to those recommendations.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

j) Access and Traffic Control.

Applicant shall follow the Livingston County Sheriff's Department recommendations. Staff is concerned with a potential effect on local roads due to limiting the attendees to exit only to the east at Challis Road and to the south at the Bauer Road exit. Attendees who want to go west or north could turn around at the nearby subdivision entrances causing a negative impact on those roadways especially with the construction of the round-about located at the Challis and Bauer Road intersection. The applicant should enforce that no parking or access is allowed from the neighborhood to the south. The applicant should address any concerns to the satisfaction of the Livingston County Sheriff and Brighton Area Fire Department.

k) Parking.

The existing parking on site does not meet the requirement for the maximum number of attendees. There appears to be parking spaces for 2,100 patrons. The Applicant is proposing a max of 3,000 patrons. Applicant should address how parking is going to be maintained if they are over the allowable parking. Applicant shall work with Brighton Area Fire Department to ensure adequate lighting is accommodated in the parking lot. If any site electrical work is required, applicant must obtain approval from the Livingston County Building Department if required.

m) Illumination.

Staff utilized the existing photometric plan on file to fulfill this requirement. The parking lot must have sufficient lighting to insure the safety of the attendees.

o) Bonding.

Applicant has submitted a bond meeting all of the criteria for this section.

p) Fire Protection.

Per the Brighton Area Fire Department review letter dated March 7, 2024, they had no opposition to the holding of the event. If any revisions are required per Fire Dept., a copy of the revision must be filed with the Township and the applicant shall address revisions to the satisfaction of the Fire Dept.

q) Sound Producing and Amplifying Equipment.

Applicant has stated that any noise complaints will go through the Livingston County Sheriff's Department and they will inform the staff since they will be on site. Applicant must stay in conformance with the noise ordinance. Applicant shall ensure that the noise is not a nuisance to the neighbors. Three neighbors had complaints about the noise from the concerts that were held last year.

r) Fencing.

Applicant shall ensure that appropriate sizing and spacing for ingress and egress and the existing fencing meets the Brighton Area Fire Department requirements and the requirements of this section.

s) Communications.

This requirement is met due to modern technology and the communication plan with the Livingston County Sheriff's Department.

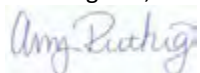
Other Considerations:

Applicant has indicated to staff that the stage will be erected on site. Applicant shall ensure that all safety requirements are followed.

Applicant shall be aware that the Board can revoke a license whenever the licensee, neglects or refuses to fully comply with any and all provisions and regulations or requirements set forth herein or with any and all provisions, ordinances, regulations, statutes, or other laws incorporated herein by reference. If the required agreements, approvals and any information required to be submitted prior to this event are not submitted in time then the license can be revoked.

If you should have any questions, please feel free to contact me.

Best Regards,



Amy Ruthig



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

March 7, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Yellowstone Country Music Festival
4141 Bauer Rd.
Brighton, MI
Attn: Linda Carey
lindac@brightoncoc.org

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned revised site plan. The plans were received for review on February 26, 2024. This review is based on an application to hold an assembly event for up to 3,000 people on the property of Mt. Brighton and all documents submitted. The review is based on incident management for large events and requirements of the International Fire Code (IFC) 2021 edition, and is based solely on the information provided at the time of review.

Based on previous event history, and parameters outlined in the event documentation, the fire authority has no opposition to the holding of the event.

Additional comments will be provided during event planning meetings and will be determined by event type and size. If there are any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert
Fire Marshal

cc: Amy Ruthig amy@genoa.org

Genoa Township
2911 Dorr Road
Brighton, MI 48116

February 12, 2024

RE: Request for Assembly Ordinance
Yellowstone Country Music Festival
June 22, 2024 from 4:00PM to 10:00PM

Pamela McConeghy, President and CEO
Linda Carey, Director of Events
Greater Brighton Area Chamber of Commerce
218 E Grand River
Brighton, MI 48116

The Greater Brighton Area Chamber of Commerce, with the permission of Mt Brighton, is requesting that we be granted an Assembly Ordinance for an event at Mt Brighton; Brighton's Yellowstone Country Music Festival to be held on June 22, 2024. The event hours will be from 4:00p.m. to 10:00p.m. We will allow people to start coming in at 3:30p.m. We are planning for a maximum of 3,000. We will be selling tickets via Eventbrite as soon as the assembly permit is approved.

1. Section 4

- a. Pamela McConeghy, President and CEO
Linda Carey, Director of Events,
Greater Brighton Area Chamber of Commerce
218 E. Grand River Brighton, MI 48116
 - i. Attached is Board of Director Approved Resolution for the Event. (1)
 - ii. Attached is the copy of articles of Incorporation. (2)
- b. This event will be an evening Country Music Festival with Regional Bands playing from 4:00pm to 10:00pm. There will be Food Trucks for food. The bands are only penciled in at this point, waiting for approval from the township.
- c. Mt. Brighton Ski Resort 4141 Bauer Road Brighton MI 48116
 - i. Attached is Notarized copy of approval from Mt Brighton. (3)
- d. June 22, 2024 from 4:00 PM to 10:00 PM
- e. Maximum of 3,000 people. We will be selling tickets on Eventbrite once the assembly is approved. We will have wristbands for all participants. If the event does not sell out prior, we will sell the remaining wristbands at the event. The wristbands will be obtained at the ticket counters at Mt. Brighton. The wristband must be on prior to entry into the event and must be worn at all times in the event.
- f. Detailed Plans
 - i. Police and Fire Protection
 1. We have met with Lt Sell at the Livingston County Sheriff's Department. He has gone over details of the event with us. He suggested that we will need

five deputies and one Sargent to be on site for the day of the event. (The same as we did for the Smokin Jazz Festival in 2023.) We have agreed to do whatever they feel is necessary. Their plan has 1 Deputy that will be in the parking lot and monitoring the roads to make sure that no one is parking on the Challis or Bauer Roads, 2 at the entrance, and 2 inside the event area. They want to remain fluid, so that may change throughout the event. They will also set up a mobile command center in the Ski Patrol Building. They will meet with the head of the security detail from Great Lakes Security a couple of weeks prior to the event. I have confirmed Josh North, the Event Director with Great Lakes Security that this will happen. We will have metal detectors on site to randomly scan for weapons. (Per Sheriff's recommendation) There will be no weapons allowed. The only exception, will be for off duty police officers that will be vetted by the Sheriff's Deputy that is near the booth. If they are approved, they will receive a different color wristband that will be put on their shooting arm so they are easily recognized by deputies in an emergency situation. This was at the request of the Sheriff's Lieutenants. When asked about the 25 foot ingress and egress, they said that both entrances are ample for that. We will also maintain the Fire Lanes. The Undersheriff stated that they do not need an exclusive safety lane because anyone that may be driving in that lane can be told to get out of the way. The Sheriff's department will be on hand and pull in patrol units to also assist with traffic when the event is over.

- a. We spoke with them regarding the roundabout going in at Chalis and Bauer Roads. I told him that I had talked to Jody Tedesco with the Livingston County Road Commission. She informed me that they were going out to bid in March/April time frame. She was informed of our plans with the Yellowstone Country Music Festival. She said that they will make sure that the contracted construction company knows that they have to allow access to Mt. Brighton for the event. She said it would not be an issue, because it is a Saturday event and only one day.
- b. Lt Sell stated that we should also contact MDOT to get their schedule for Grand River closings. I have reached out to George Seif with MDOT. I met with George and he stated that there will be no Grand River closings in 2024. There will be in 2025 and 2026. He told me to get him the dates for the 2025 and 2026 events so that he can put them in the contracts for the construction company that is awarded the job. He said that they can make sure that they do not close Grand River on those dates.

The Sheriff's department will wait until closer to the event to determine how the construction will affect the parking. Deputies will be directing the cars exiting. The exits will have all traffic exiting East on Challis only. The traffic exiting on Bauer Road will be going south only. They will have deputies at Grand River and Brighton Road if necessary. The staff parking lot available for staff and volunteers. Agreement for Law Enforcement is

attached. We will get the countersigned one to the township as soon as it is obtained. (4)

2. We have also contacted Great Lakes Security for additional security personnel to work the event. We have 15 booked for the maximum number of attendees. We have signed their Proposal. We will have a total of 20 security personnel, 5 deputies and 15 from Great Lakes Security. This puts us well over the 12 minimum security personnel that is needed for the event.. We will have this amount, regardless of the number of attendants. They will be stationed throughout the event per the Sheriff's Department. The Sheriff's Department will go over with them, prior to the event, where and what they need from them, so that they are informed prior to the event. This meeting will be arranged through Josh North at Great Lakes Security. (Already confirmed that this is what needs to happen, and they are in agreement). Copy of proposal is attached (5)
3. I reached out to the Fire Marshal, Rick Boisvert. I informed him of our plans for the Yellowstone Country Music Festival via email. His response was that based on what I presented, he didn't have any issues, but would make a full assessment when the application is received from the township for review. I have attached the email.(6) We have the emergency plan that was written up for the 2023 events. We will get the auxiliary lighting for unpaved parking area. We will work with Brighton Fire to make sure that all food vendors are inspected prior to the event by the fire department. We will fill out any applications needed for tents with the Fire Department. We will also get any tents approved and inspected through them as we do for all our events in the city. We are still working on the number of tents. At this time, they are all smaller than the permit required size. We have sponsors that will have VIP seating in tents, so the number of tents will change as the sponsors change. Mt. Brighton will have most of their buildings open in case of an emergency with weather. People will be able to shelter inside.
4. Reached out to Amy Chapman, Deputy Director of Livingston County EMS. She said that they can have a dedicated unit at the event again this year.

ii. Food and Water Supply and Facilities

1. The event will have food trucks to serve food at the event. We are decreasing the number of food trucks. There will probably only be 6 to 8 food trucks. As with all of our events, we work with the County Health Department and their staff to make sure that all of the food trucks are up to code for the County Health Department, they have insurance, and are licensed with the county. They will also be inspected by the fire department to make sure that they have what is required. We will have plenty of bottled water available for everyone. We have several water companies that are chamber members that donate water for our events. We will have tables and chairs by the food trucks. We rent all of our equipment through Classic Tent and Events. They will also provide any of

the tents if required. Again, we will work with the fire department on any permits for these directly.

iii. Health and Sanitation facilities

1. In addition to Mt Brighton's 18 ladies bathroom stalls, 6 men's bathroom stalls and 8 men's urinals, and 10 lavatories, we will make sure that we have additional restroom facilities (through John's Sanitation). They have been contracted to provide 10 additional portable toilets, 1 additional Handicap toilet, and 3 wash stations. John's Sanitation will haul away and dispose of the waste themselves. Final placement will be determined by the driver of the delivery truck. They will split them between the Food area and the other side of the stage. Wash stations and handicap toilets will be split between both areas also. Attached is a copy of that contract. (7). Mt. Brighton's capacity rate is 3000 without additional parking. I have also reached out to Heather Blair with the Livingston County Health Department. We will be filing for the permit after the assembly permit has been filed with Genoa. (The health department will not charge when there is a permit pending with the township.) Heather has given me the requirements for this year for bathrooms and trash. I have attached that email. (8) We will forward the permit approval at least two weeks prior to the event.

iv. Medical and service including emergency vehicles and Equipment.

1. An ambulance will be at the event for any emergencies and will be stationed at the Ski Patrol building. They will have access to the building for emergencies that come in. It will also have a driveway to bring the ambulance into the venue area.
2. The fire department will be on hand to inspect the morning of the event for any food vendors, tent placement and all fire requirements.
3. There are several access points for emergency vehicles. The Sheriff's department plans to use the Ski Patrol building as their command center.
4. John O'Malley, President of Trinity Health Livingston is a Board Member of the Chamber, he is aware of the event and is in support of it.

v. Vehicle access and Parking

1. The parking at Mt Brighton can accommodate 750 cars in the paved area and 250 cars in the dirt area. The employees and volunteers can park in the employee parking lot. This should be ample parking for the amount of attendees.
2. There are two entrances/exits into the parking area. We will make the decision based on construction, how this will be handled with the Sheriff's department. Deputies will be directing traffic for exit. The exits will have all traffic exiting East on Challis only. They will have deputies at Grand River if necessary. The traffic exiting on Bauer Road will be going south only. They will have deputies at Brighton Road if necessary.
3. We will have volunteers on hand to help with parking. They will help direct people to the open parking spaces. There will be Handicap parking areas that the volunteers will also help with. The dirt part of the lot will follow

the same grid at the main lot. Prior to the event, we will have cones and ropes set up to delineate the rows.

4. There is a fire lane. Security and Deputies will be in the lot to enforce no parking in fire lanes and ingress egress areas.
 5. We will be putting up No Parking signs on Bauer and Challis Roads. We will also have security monitoring, along with the Sheriff's deputies. They will be preventing people from doing this. Although this should not be an issue due to the parking lot should accommodate all attendees.
 6. There will be posted signs of "No Tailgating", "No outside alcohol", "Parking is for event guests only". The security and deputies will be monitoring this.
- vi. Camping and trailer facilities
1. No one is staying overnight.
- vii. Illumination
1. Mt. Brighton has lighting at their facilities. They can light the entire area to make it look like daylight. We will obtain the supplemental lighting for the dirt parking area again.
- viii. Noise Control and abatement
1. The mountain will help with the noise control.
 2. The event will remain in compliance with the noise ordinance at all times. We will have Joe Heslip Sound Company there for this event. We had one complaint at the Smokin Jazz Festival at Mt Brighton in 2023, it was handled and there was not another complaint to our knowledge. Joe Heslip provides all speakers, mixers, amplifiers, microphones and processor for the event. If there are any complaints, it can be adjusted by Joe. Any complaints will most likely go through the Sheriff's department, and they will be at the event to inform us of the issue. Attached is the Outdoor Festival Sound System that Joe Heslip will be using. (8)
- ix. Solid waste disposal and clean-up
1. Mt Brighton has a 20 yard dumpster on site at all times. We will be getting an additional 30 yard dumpster for the day of the event. Because Mt Brighton already has the account with Waste Management, they have agreed to obtain the extra dumpster for us, and we will reimburse them for it. It will be dropped at their normal dropping point next to the Ski Hill Grill. Mt Brighton has a national contract with Waste Management, so it is not possible to give a copy of the contract. The events in 2023 were clean at the end of each night with no trash left out.
 2. We have volunteers that empty the trash cans throughout the event so that we do not have overflowing trash cans. We use heavy duty trash bags to contain the mess. The chamber owns many garbage bins that will be used. We also have the Waste Management Trash Stash boxes if needed, but we find that the trash bins don't blow over as easily.
- x. Insurance
1. As with all of our events, the vendors must produce insurance for the event.

- a. We have also attached our insurance copy naming Genoa Township as additional insured. (We increased the amount from 100,000 to 1,000,000 (9)

xi. Bonding

- 1. We will provide Surety Bond in the amount needed. The application states 100,000. We have the bond that is still good until 7/21/24. So this is already taken care of. Copy Attached (10)

xii. Fire Protection

- 1. Mt Brighton has fire protection that was established by the Fire Department, and they are up to code. The stage will have fire extinguishers. All food vendors must comply with the fire extinguisher codes also. Any and all tents must be up to code with the fire department. The Fire Marshall will check the morning of the event, prior to start, to make sure that everything is to code.

xiii. Fencing

- 1. Mt Brighton does have fencing around portions of it. They are within the code for the fire department.

xiv. Communication

- 1. Since almost everyone has a cell phone, this no longer applies. We will be in contact with the Sheriff's department before and throughout the event. We will have emergency cell phone numbers for staff and commanders.

2. Section 5

- a. Map with Legal Description and Existing Conditions
- b. Map with Boundary Survey with Contours
- c. Map of Parking area and existing buildings.
- d. Zoning Map for Genoa Township
- e. Google Earth Map with Proposed locations

Thank you for your time in this matter. We look forward to having another successful event again in Genoa Township. If you have any additional questions or concerns, please contact me.



Linda Carey, Director of Events
Greater Brighton Area Chamber of Commerce
218 East Grand River
Brighton, MI 48116



Pamela McConeghy, President and CEO
Greater Brighton Area Chamber of Commerce
218 East Grand River
Brighton, MI 48116



Greater Brighton Area Chamber of Commerce
Resolution Number 2024-01
Authorization to Apply for Assembly Permit in Genoa Township
Brighton's Yellowstone Country Music Festival

The Board of Directors of the Greater Brighton Area Chamber of Commerce, on February 8, 2024, approved the following resolution.

Resolved:

The Greater Brighton Area Chamber of Commerce, through its Board of Directors, make an application to Genoa Township for an Assembly Permit to hold our Festival at Mt Brighton on Saturday, July 22, 2024 at the following location and address.

Location Name: Mt Brighton

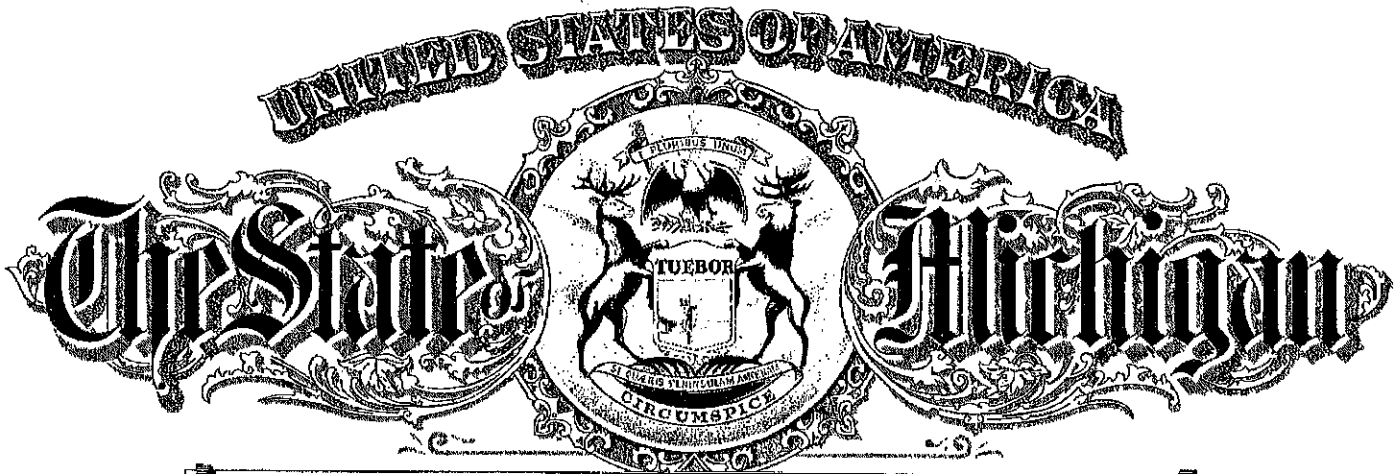
Location Address: 4141 Bauer Road Brighton, MI 48116 County of Livingston

This is an outdoor location.

Type of Event: Chamber Fundraiser - **Brighton's Yellowstone Country Music Festival**

Signed,

Kate Lawrence
Chairman of the Board
February 8, 2024



Michigan Department of Commerce

Lansing, Michigan

To All To Whom These Presents Shall Come:

I, Richard K. Helmbrecht, Director, Michigan Department of Commerce,
Do Hereby Certify That Articles of Incorporation of _____

THE GREATER BRIGHTON AREA CHAMBER OF COMMERCE

were duly filed in this office on the _____ 2nd day of _____ October, 19 72,
in conformity with Act 327, Public Acts of 1931, as amended.

In testimony whereof, I have hereunto set my
hand and affixed the Seal of the Department,
in the City of Lansing, this _____ 2nd day
of _____ October, 19 72.

Richard K. Helmbrecht
Director




2/15/2024

To Whom It May Concern:

Mt. Brighton Ski Area gives approval to the Greater Brighton Area Chamber of Commerce to seek the Assembly Ordinance License and that we will adhere to the conditions of the license. We approve this for the "Yellowstone" Event, taking place on June 22nd of 2024.

Sincerely,
Mike Giorgio
General Manager

Signature: 

Date: 2/15/24

Acknowledged by Michael Giorgio before me on the
15th day of Feb, 2024



ROBERT PETERS
Notary Public, State of Michigan
County of Washtenaw
My Commission Expires 02-26-2026
Acting in the County of Livingston



AGREEMENT FOR LAW ENFORCEMENT SERVICES

THIS AGREEMENT made and entered into this 30^h day of January 2024 by and between the COUNTY OF LIVINGSTON, State of Michigan (hereinafter referred to as the "COUNTY"), and LIVINGSTON COUNTY SHERIFF (hereinafter referred to as the "SHERIFF"), and the Brighton Chamber of Commerce. (Hereinafter referred to as the "BCOC").

WITNESSETH:

For and in consideration of the mutual covenants hereinafter contained, **IT IS HEREBY AGREED** as follows:

1. **Services to be Performed by SHERIFF.** The SHERIFF shall furnish police services as set forth in the attached Appendix A.
2. **Insurance.** BCOC shall be responsible for obtaining and maintaining its own property and liability insurance.
3. **Compensation.** BCOC shall pay the COUNTY the sum of SEVENTY AND NO/100 DOLLARS (\$70.00) per hour per Sheriff Deputy performing services under this Agreement.
4. **Location Where Compensation is to be Paid.** BCOC shall remit all payments to Livingston County, 150 S. Highlander Way, Howell, MI 48843, Attention Lt. Eric Sanborn.
5. **Status of Sheriff Deputies Assigned Under This Agreement.** The Sheriff Deputies assigned to the BCOC event under this Agreement shall remain employees of the SHERIFF and under his supervision, direction, management, and control.
6. **Removal of Sheriff Deputies for Emergencies.** The SHERIFF reserves the right, at his sole discretion, to remove any Sheriff Deputy, who is otherwise assigned to the BCOC event, for emergencies that might exist outside the area designated by this Agreement.
7. **Nondiscrimination.** In carrying out the terms of this Agreement, the parties hereto shall adhere to all applicable Federal, State and local laws and regulations prohibiting discrimination. The parties hereto, as required by law, shall not discriminate against persons to receive services under this Agreement or against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, disability that is unrelated to the individual's ability to perform the duties of a particular job or position, height, weight, or marital status. Breach of this covenant shall be regarded as a material breach of this Agreement.
8. **Complete Agreement.** This Agreement contains all the terms and conditions agreed upon by the parties hereto, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement or any part thereof shall have any validity or bind any of the parties hereto.



9. **Agreement Period.** This Agreement shall commence upon the 30th day of January 2024 and shall continue until the 31st day of December, 2024, at which time it shall terminate.

Notwithstanding any other provision of this Agreement to the contrary, this Agreement may be terminated at any time by either the County, the Sheriff, or BCOC upon eight (8) hours prior written notice to the other parties.

THE AUTHORIZED REPRESENTATIVES OF THE PARTIES HERETO HAVE FULLY SIGNED THIS AGREEMENT FOR LAW ENFORCEMENT SERVICES ON THE DAY AND YEAR FIRST ABOVE WRITTEN.

COUNTY OF LIVINGSTON

Brighton Chamber of Commerce

By: _____
Jay Drick, Chairman
County Board of Commissioners

Date: _____

By: _____
Jason Pless, Undersheriff

Date: _____

By: Pamela McConeghy
(Signature)
Name: PAMELA McConeghy
(Print or Type)
Title: PRESIDENT + CEO
(Print or Type)
Date: 1/30/2024



APPENDIX A

DESCRIPTION OF SERVICES:

TO PROVIDE GENERAL LAW ENFORCEMENT/SECURITY AND TRAFFIC CONTROL EVENTS HELD BY THE BRIGHTON CHAMBER OF COMMERCE.

THE INITIAL EVENT WILL BE THE YELLOWSTONE MUSIC FESTIVAL TO BE HELD ON JUNE 22ND 2024 3:00 PM TO 10:30 PM, UNLESS REQUESTED LONGER. THE EVENT IS BEING HELD AT MT. BRIGHTON IN GENOA TOWNSHIP, IN THE COUNTY OF LIVINGSTON.

THERE WILL BE A STAGE AND FIVE BANDS PLAYING CONCERTS FROM 3P-10P. THE EXPECTATION IS UP TO 3,000 PEOPLE THROUGHOUT THE EVENT.

6 DEPUTIES (5 DEPS AND 1 SGT) FROM 3:00PM TO 10:30 PM ON 7-24-23. TO WORK IN CONJUNCTION WITH THE SECURITY COMPANY (20 SECURITY OFFICERS) AND THE ORGANIZERS.

OTHER EVENTS MAY BE MUTALLY AGREED UPON.

4

Linda Carey

From: Linda Carey
Sent: Wednesday, January 31, 2024 3:38 PM
To: Eric Sanborn
Subject: RE: 2024 Yellowstone Contract
Attachments: Agreement for Law Enforcement Yellowstone 2024.pdf

Thank you very much.
Here is the signed copy from Pam

Linda

Linda Carey, CTA
Director of Signature Events
Greater Brighton Area Chamber of Commerce
218 E Grand River Brighton MI 48116
p 810.227.5086
lindac@brightoncoc.org | brightoncoc.org

Yellowstone Country Music Festival - June 22, 2024
Brighton's Street Art Fair August 23 -25, 2024
Smokin' Jazz and Barbecue Blues Festival – September 6 & 7, 2024
Holiday Glow with Christmas Market – November 23, 2024

From: Eric Sanborn [mailto:ESanborn@livgov.com]
Sent: Tuesday, January 30, 2024 3:38 PM
To: Linda Carey <lindac@brightoncoc.org>
Subject: 2024 Yellowstone Contract

Linda:

Attached is the contract for this year based on your meeting with Lt. Sell.

Let me know if you need anything else.

Thanks,

Lt. Eric J. Sanborn #318, MADM
Livingston County Sheriff's Office
Field Services Commander
150 S. Highlander Way
Howell, MI 48843

6

Linda Carey

From: Rick Boisvert <rboisvert@brightonareafire.com>
Sent: Tuesday, January 23, 2024 3:05 PM
To: Linda Carey
Subject: Re: Yellowstone 2024

Linda based on what you have presented here I don't have any issues. We will obviously make a full assessment when the application is received from the township for review.
Cordially,

Rick Boisvert, FM, CFPS
Fire Marshal
Brighton Area Fire Authority
615 W. Grand River
Brighton, MI 48116
O:(810)229-6640 D:(810)299-0033
F:(810)229-1619 C:(248)762-7929
rboisvert@brightonareafire.com



On Wed, Jan 17, 2024 at 11:12 AM Linda Carey <lindac@brightoncoc.org> wrote:

Good Morning Rick,

I wanted to touch base with you regarding the planned Yellowstone Country Music Festival for 2024.

We are planning to have it at Mt Brighton again this year.

The date is June 22, 2024.

Time will be 3:30 – 10:00

First band starting at 4:00pm.

I plan to have less food trucks so that they make more money. There will be six or less.

We are limiting the tickets to 3000 so that we do not have to get the extra parking and security.

We are planning to have what we had at Smokin Jazz, which worked out fine.

10

I wanted to get your thoughts before I put in an application to Genoa.

Do you have time to meet with me in the next week or so? If you do not feel that it is necessary, that is fine too.

Just wanted to start with you.

Linda

Linda Carey, CTA

Director of Signature Events

Greater Brighton Area Chamber of Commerce

218 E Grand River Brighton MI 48116

p 810.227.5086

lindac@brightoncoc.org | brightoncoc.org

Yellowstone Country Music Festival - June 22, 2024

Brighton's Street Art Fair August 23 -25, 2024

Smokin' Jazz and Barbecue Blues Festival – September 6 & 7, 2024

Holiday Glow with Christmas Market – November 23, 2024



CONTRACT JOHN'S SANITATION

59075 OASIS CENTER DRIVE., SOUTH LYON, MI 48178

PHONE: 248-437-0841, FAX: 248-437-0130

EMAIL ADDRESS: johnsanitation1@yahoo.com WEBSITE ADDRESS: www.johnssanitation.com

Brighton Chamber of Commerce
218 E. Grand River
Brighton, MI 48116
C/O Linda Carey
810-227-5086 Fax: 810-227-5940
Lindac@brightoncoc.org

DATE: 02/06/24
Yellowstone Contry Music Fest
EVENT: June 22nd 2024
DELIVER: June 20th or 21st 2024
Pick UP: June 24th or 25th 2024

QUANTITY	DESCRIPTION	UNIT	TOTAL
10	Portable Toilet	70.00	\$700.00
1	Handicap Toilet	140.00	\$140.00
3	Hand Sinks	125.00	\$375.00
Toilets have Hand sanitizers in each unit with no extra Charge			
Deliver: Mt Brighton 4141 Bauer Rd Brighton, MI			
Our Prices include, delivery-set up chemicals,paper products and pick up.			
(Prices may change if quantity changes)			
		TOTAL:	\$1,215.00

Lessee rents from John's the Units above. Term commences on delivery of Units and expires upon receipt of payment in full for full rental amount, all additional charges and timely return of Units in good condition, free from damage, ordinary wear and tear excepted. Rental is at rate stated above and is due before delivery. Any Unit kept beyond Return Date billed at \$8.50 per day. Lessee is charged highest lawful rate of interest applicable as of Due Date for late and/or partial payments, and a fee of \$40.00 for all returned checks. Lessee shall use Units only for their intended purpose and shall in no way use them, or permit them to be used, for any unlawful purpose or in any manner inconsistent with their intended purpose. Lessee responsible for loss or damage to Units beyond ordinary wear and tear whatever the cause and bears full replacement cost if, in John's sole opinion, Units cannot be repaired. **JOHNS DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.** The Units are, and at all times remain, the property of John's. Lessee may not move or transfer Units from original Event site. Lessee shall provide, at John's request, proof of insurance for full Unit replacement cost and shall indemnify and hold harmless John's from and against any and all claims, actions, proceedings, costs, damages and liabilities whatsoever arising out of use of the Units, same extends to Lessee's employees, invitees, guests, agents, successors and assigns. In event of default John's may terminate Lease and/ or to pursue any other available remedy at law or in equity including, but not limited to, immediate repossession of the Units. If any disputes cannot be informally resolved the Parties shall forego formal litigation and submit to binding arbitration according to the rules and procedures of the American Arbitration Association for consumer or commercial agreements, as applicable. This constitutes entire agreement and supersedes any prior oral or written agreements and may not be altered or amended except by subsequent signed written agreement. Lessee may not assign this Lease or any of its rights or responsibilities hereunder. This Lease is governed by the laws of the State of Michigan. John's is not responsible or liable for circumstances beyond its control including, but not limited to, force majeure, equipment malfunction, acts of God, weather conditions, strikes, lockouts or illness / injury. Should any part of this Agreement be declared void or unenforceable in a court of law it shall be severed from this Agreement and shall not adversely affect the remaining terms herein, which shall continue with full force and effect. This Agreement may be signed in two original counterparts. The person signing this Lease warrants that s/he is an authorized representative of Lessee who may contract for, represent and bind Lessee. **A 3% credit card processing fee will be added to orders paid on Credit Cards.**

Please Sign Below and Fax

Customer Signature: Linda Carey Date: 2/6/2024



Linda Carey

From: Heather Blair <HBlair@livgov.com>
Sent: Wednesday, January 24, 2024 4:59 PM
To: Linda Carey
Subject: RE: Public Assemblage Application

Hi Linda,

Restrooms = 24
Garbage = 120 (30 gallon cans)

This can include the restrooms and garbage cans within the facility.

Let me know if you need anything else.

Thanks,

Heather

From: Linda Carey <lindac@brightoncoc.org>
Sent: Wednesday, January 24, 2024 3:24 PM
To: Heather Blair <HBlair@livgov.com>
Subject: [EXT] RE: Public Assemblage Application

"The e-mail below is from an external source. Please do not open attachments or click links from an unknown or suspicious origin."

Good Afternoon Heather,
I am getting ready to do another application for the Yellowstone Country Music Festival with Genoa Township.
I know that the last one that I did, I had 2000 people attending.
If a move it to 3,000 from 4:00 pm to 10:00pm, what would the number of restrooms and garbage cans be?

Linda

Linda Carey, CTA
Director of Signature Events
Greater Brighton Area Chamber of Commerce
218 E Grand River Brighton MI 48116
p 810.227.5086
lindac@brightoncoc.org | brightoncoc.org

- Yellowstone Country Music Festival - June 22, 2024**
- Brighton's Street Art Fair August 23 -25, 2024**
- Smokin' Jazz and Barbecue Blues Festival – September 6 & 7, 2024**
- Holiday Glow with Christmas Market – November 23, 2024**



GREABRI-01

TMOORE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

2/8/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hartland Insurance Agency, Inc. PO Box 129 Hartland, MI 48353	CONTACT NAME: Heather Joseph
	PHONE (A/C, No, Ext): (810) 800-1212 FAX (A/C, No): (810) 632-6775
	E-MAIL ADDRESS: heatherjoseph@hartlandinsurance.com
	INSURER(S) AFFORDING COVERAGE
INSURED Greater Brighton Area Chamber Pamala McConeghy 218 E Grand River Ave. Brighton, MI 48116	INSURER A: National Specialty Ins a Division of West Bend Mutual Ins Company NAIC # 15350
	INSURER B: Accident Fund Company 12305
	INSURER C:
	INSURER D:
	INSURER E:
	INSURER F:

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD YWVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR		1237007	12/10/2023	12/10/2024	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 OTHER \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		1237007	12/10/2023	12/10/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ OTHER \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTIONS 0		1237007	12/10/2023	12/10/2024	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 OTHER \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OF FIC/PC/NUMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A 100081821	1/1/2024	1/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS/LOCATIONS / VEHICLES (ACORD 101. Additional Remarks Schedule may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

Township of Genoa
2911 Dorr Rd
Brighton, MI 48116

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Jim Campbell



THE SILVER LINING®

21249

D

BOND EXECUTION REPORT

Date: 07/19/2023

Bond Number: 2551045

HARTLAND INSURANCE AGENCY INC
2532 OLD US 23 PO BOX 129
HARTLAND, MI 48353

PRINCIPAL INFORMATION:

Greater Brighton Area chamber of Commerce
218 E Grand River Ave
Brighton, MI 48116-1512

Billing Address - if blank, see Principal above:

c/o:

Obligee Information:

Genoa Township
2911 Dorr Rd
Brighton, MI 48116-9436

WB Index: 2551045
Bond Eff Date: 07/22/2023
Bond Exp Date: CONTINUOUS UNTIL CANCELED

Bond Type: Non-Construction Performance and Payment
Work Description:

Current Bond Limit:	\$ 100,000.00	Bond Premium:	\$ 1,000.00
Previous Bond Limit:	\$ 100,000.00	Premium Change:	\$ 1,000.00

THIS IS NOT AN INVOICE

MICHIGAN ONLY: This policy is exempt from filing requirements of Section 2236 of the Insurance Code of 1956, 1956 PA 218 and MCL 500.2236.

P.O. Box 620976 | Middleton, WI 53562 | Phone: (608) 410-3410 | Fax: (608) 674-2665 | www.the-silver-lining.com



19

Bond Number 2551045

License and Permit Bond

Not valid for Contract, Performance, Maintenance, Subdivision, Supply or Utility Guarantee Bond

Principal: (Full name and address)
Greater Brighton Area chamber of Commerce
218 E Grand River Ave
Brighton, MI 48116-1512
 Effective Date: 07/22/2023

Obligee: (Principal's customer)
Genoa Township
2911 Dorr Rd
Brighton, MI 48116-9436
 Expiration Date: 07/22/2024

PENAL AMOUNT OF BOND:

One Hundred Thousand Dollars and Zero Cents Dollars (\$ 100,000.00).

lawful money of the United States, to be paid to the said obligee, for which payment well and truly to be made we bind ourselves and our legal representative, jointly and severally.

The condition of this obligation is such, that whereas, the principal has been licensed by the Obligee for:

NOW, THEREFORE, if said Principal shall faithfully perform all the duties and comply with the laws and ordinances, (including all amendments) pertaining to the license or permit, then this obligation shall be null and void; otherwise to remain in full force unless renewed by continuation certificate.


This bond may be terminated at any time by the Surety upon sending notice in writing to the Obligee and to the Principal and at the expiration of thirty-five (35) days from the mailing of notice or as soon thereafter as permitted by applicable law, whichever is later, this bond shall ipso facto terminate and the Surety shall be relieved from any liability for any subsequent acts or omissions of the Principal.

Principal shall save and keep harmless the Obligee from all losses or damage which it may sustain or for which it may become liable on account of the issuance of said license and permit. The maximum liability shall not exceed the bond penalty.

Signed with our hands and sealed with our seals this, the 19th day of July, 2023.

Greater Brighton Area chamber of Commerce

 (Principal)

WEST BEND MUTUAL INSURANCE COMPANY

 Kevin A. Steiner, Chief Executive Officer



MICHIGAN ONLY: This policy is exempt from the filing requirements of Section 2236 of the Insurance Code of 1956, 1956 PA 218 and MCL 500.2236.



THE SILVER LINING®

Bond No. 2551045

POWER OF ATTORNEY

Know all men by these Presents, That West Bend Mutual Insurance Company, a corporation having its principal office in the City of West Bend, Wisconsin does make, constitute and appoint:

Jason Enders

lawful Attorney(s)-in-fact, to make, execute, seal and deliver for and on its behalf as surely and as its act and deed any and all bonds, undertakings and contracts of suretyship, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount the sum of: One Hundred Thousand Dollars and Zero Cents 100,000.00

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of West Bend Mutual Insurance Company at a meeting duly called and held on the 21st day of December, 1999.

Appointment of Attorney-In-Fact. The president or any vice president, or any other officer of West Bend Mutual Insurance Company may appoint by written certificate Attorneys-In-Fact to act on behalf of the company in the execution of and attesting of bonds and undertakings and other written obligatory instruments of like nature. The signature of any officer authorized hereby and the corporate seal may be affixed by facsimile to any such power of attorney or to any certificate relating therefore and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the company, and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the company in the future with respect to any bond or undertaking or other writing obligatory in nature to which it is attached. Any such appointment may be revoked, for cause, or without cause, by any said officer at any time.

In witness whereof, the West Bend Mutual Insurance Company has caused these presents to be signed by its president undersigned and its corporate seal to be hereto duly attested by its secretary this 17th day of August, 2021.

Attest Christopher C. Zwygart
Christopher C. Zwygart
Secretary



Kevin A. Steiner
Kevin A. Steiner
Chief Executive Officer/President

State of Wisconsin
County of Washington

On the 17th day of August, 2021, before me personally came Kevin A. Steiner, to me known being by duly sworn, did depose and say that he resides in the County of Washington, State of Wisconsin; that he is the President of West Bend Mutual Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation and that he signed his name thereto by like order.



Matthew E. Carlton
Matthew E. Carlton
Senior Corporate Attorney
Notary Public, Washington Co., WI
My Commission is Permanent

The undersigned, duly elected to the office stated below, now the incumbent in West Bend Mutual Insurance Company, a Wisconsin corporation authorized to make this certificate, Do Hereby Certify that the foregoing attached Power of Attorney remains in full force effect and has not been revoked and that the Resolution of the Board of Directors, set forth in the Power of Attorney is now in force.

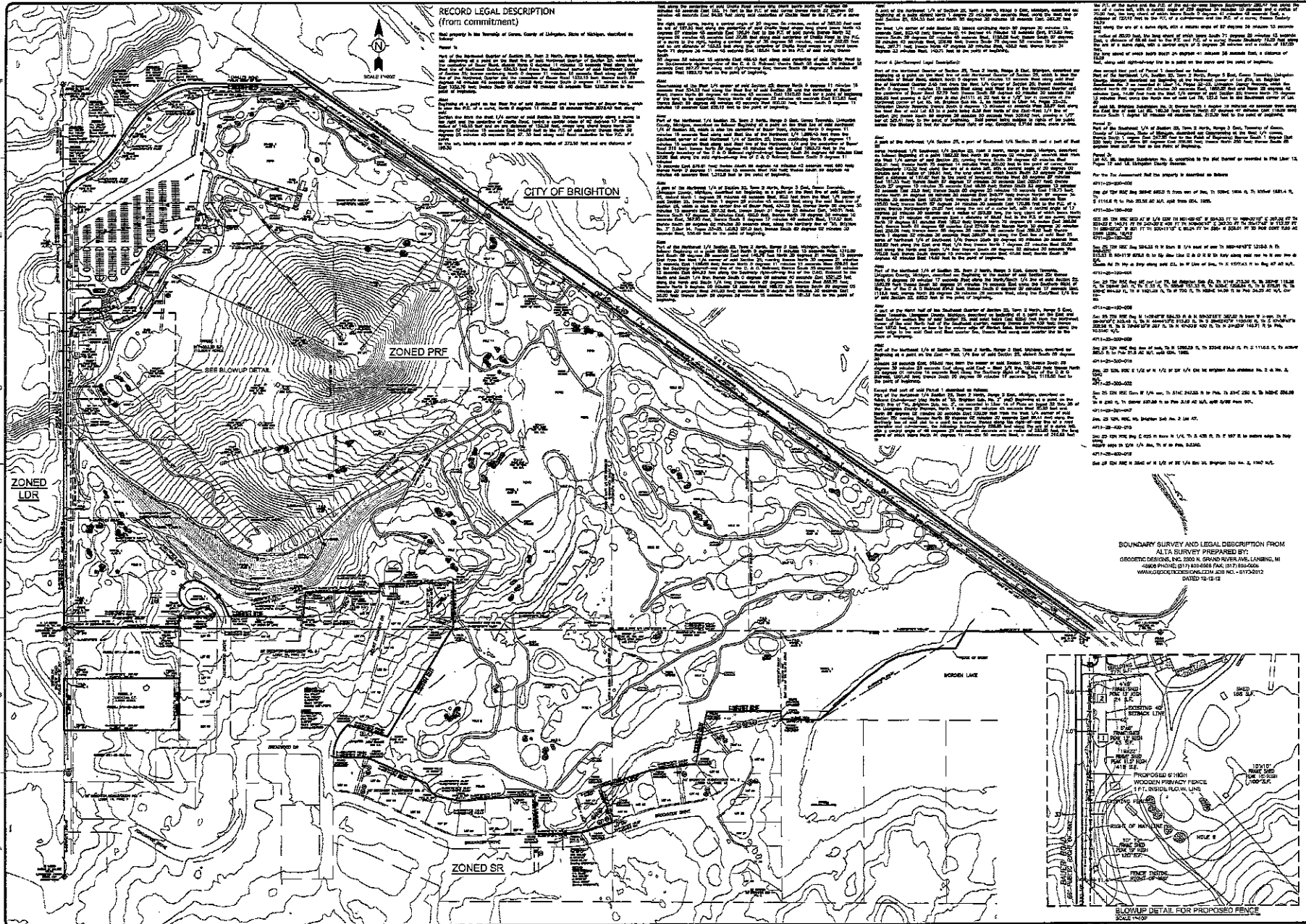
Signed and sealed at West Bend, Wisconsin this 19th day of July, 2023




Heather A. Dunn
Heather Dunn
Vice President - Chief Financial Officer

Notice: Any questions concerning this Power of Attorney may be directed to the Bond Manager at West Bend Mutual Insurance Company.

10 large copies of maps will delivered in person with original application and check





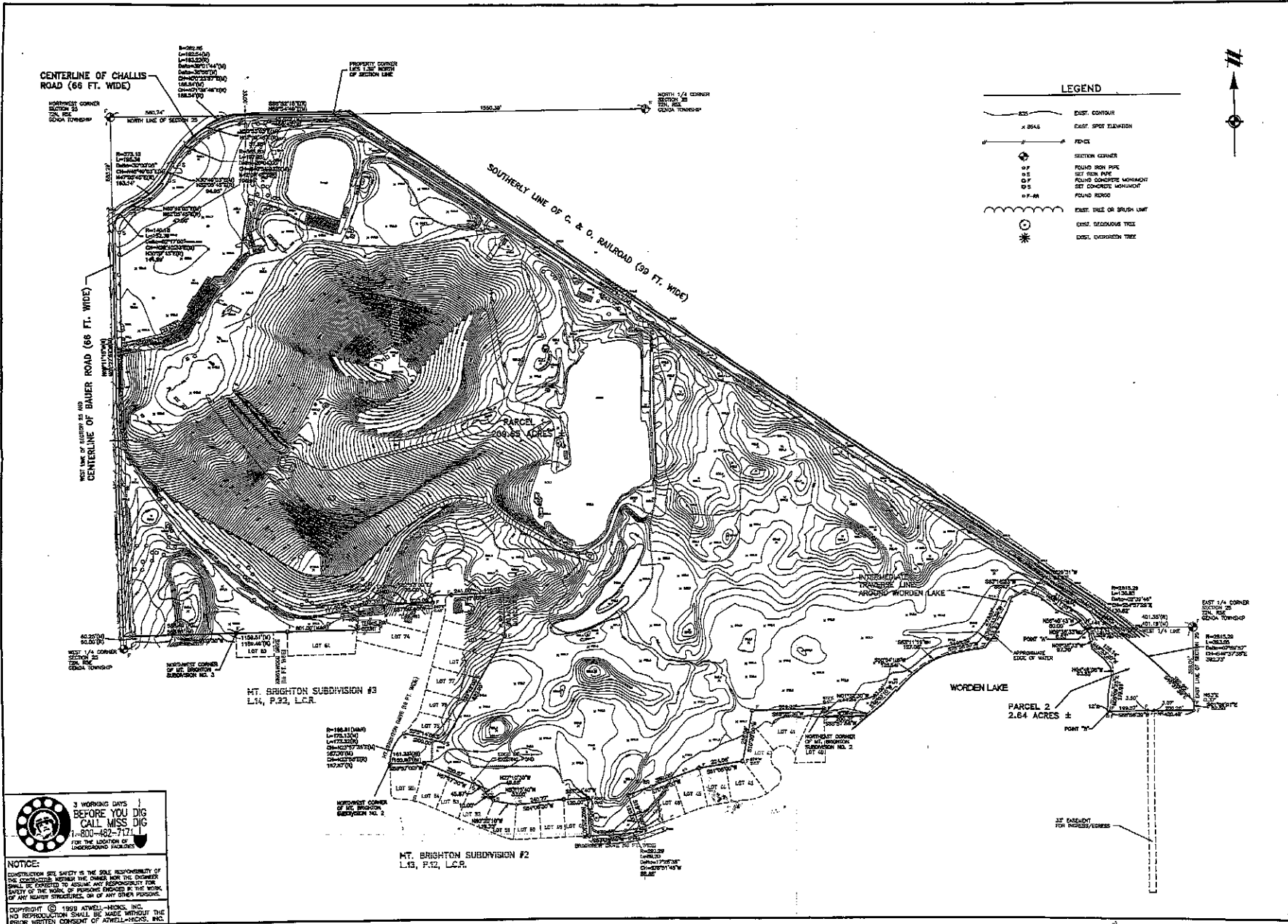
TETRA TECH
401 SOUTH WASHINGTON SQUARE, SUITE 100
ANN ARBOR, MI 48106-1000
PHONE: (810) 233-8822 FAX: (810) 494-4240

MARK	DATE	DESCRIPTION
4-15-18	4-15-18	TOP SUBMITTAL
4-25-18	4-25-18	TOP SUBMITTAL - REVIEW

WILSHOUSING INC. - MAIL DEVELOPMENT COMPANY
 1111 WILSON ROAD, SUITE 100
 PROJECT IMPROVEMENT PLAN
**LEGAL DESCRIPTION AND
 EXISTING CONDITIONS**

Project No.:	20180234701
Designed By:	
Drawn By:	TJH
Checked By:	GLM

C101
Copyright: Tetra Tech



LEGEND

—	EXIST. CONTOUR
X	EXIST. SPOT ELEVATION
—	FE-CEL
+	SECTION CORNER
○	FOUND IRON PIPE
○	SET IRON PIPE
○	FOUND CONCRETE MONUMENT
○	SET CONCRETE MONUMENT
○	FOUND IRON
○	FOUND IRON
○	EXIST. TREE OR BRUSH LUMP
○	EXIST. DECIDUOUS TREE
○	EXIST. EVERGREEN TREE



ATWELL-HICKS, INC.
 Civil Engineering • Surveying
 Planning • Environmental Services
 Ann Arbor, MI
 734 991 4000
 810 786 5860

SECTION 25
 TOWN 2 NORTH, RANGE 6 EAST
 COUNTY OF GONIA, MICHIGAN
 LIVINGSTON COUNTY, MICHIGAN

DESIGN 3
 MOUNT BRIGHTON
 BOUNDARY SURVEY
 WITH CONTOURS

DATE
 APRIL 5, 1999

AH

SCALE 1" = 200 FEET
 DRAWN BY CA, TDS
 P.M. LMO
 BOOK 4 LVJ
 JOB LVJ1102
 FILE NO. LV-1208-1-2

3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 FOR THE LOCATION OF UNDERGROUND UTILITIES

NOTICE:
 CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE ENGINEER NOR THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE SAFETY OF THE WORK, OR PERSONS ENGAGED IN THE WORK, OR ANY NEARBY STRUCTURES OR OF ANY OTHER PERSONS.

COPYRIGHT © 1999 ATWELL-HICKS, INC. NO REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL-HICKS, INC.

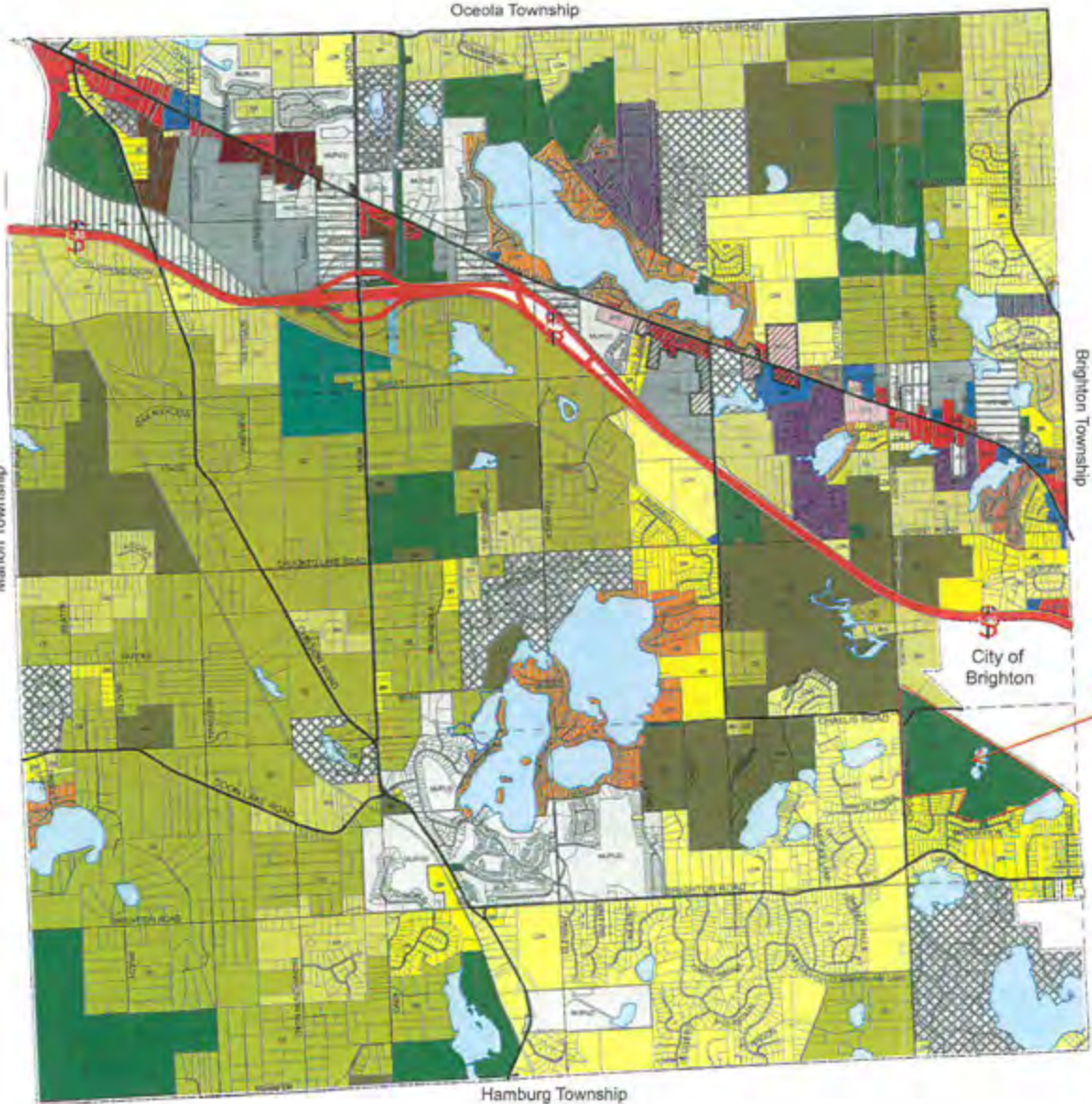
Zoning Map

Genoa Charter Township Livingston County, Michigan

Legend

	AG		GC
	CE		NS
	RR		OS
	LDR		NRPUD
	SR		IND
	LRR		PID
	UR		PRF
	MDR		MUPUD
	HDR		RDPUD
	RPUD		Town Center
	MHP		CAPUD
	RC		ICPUD

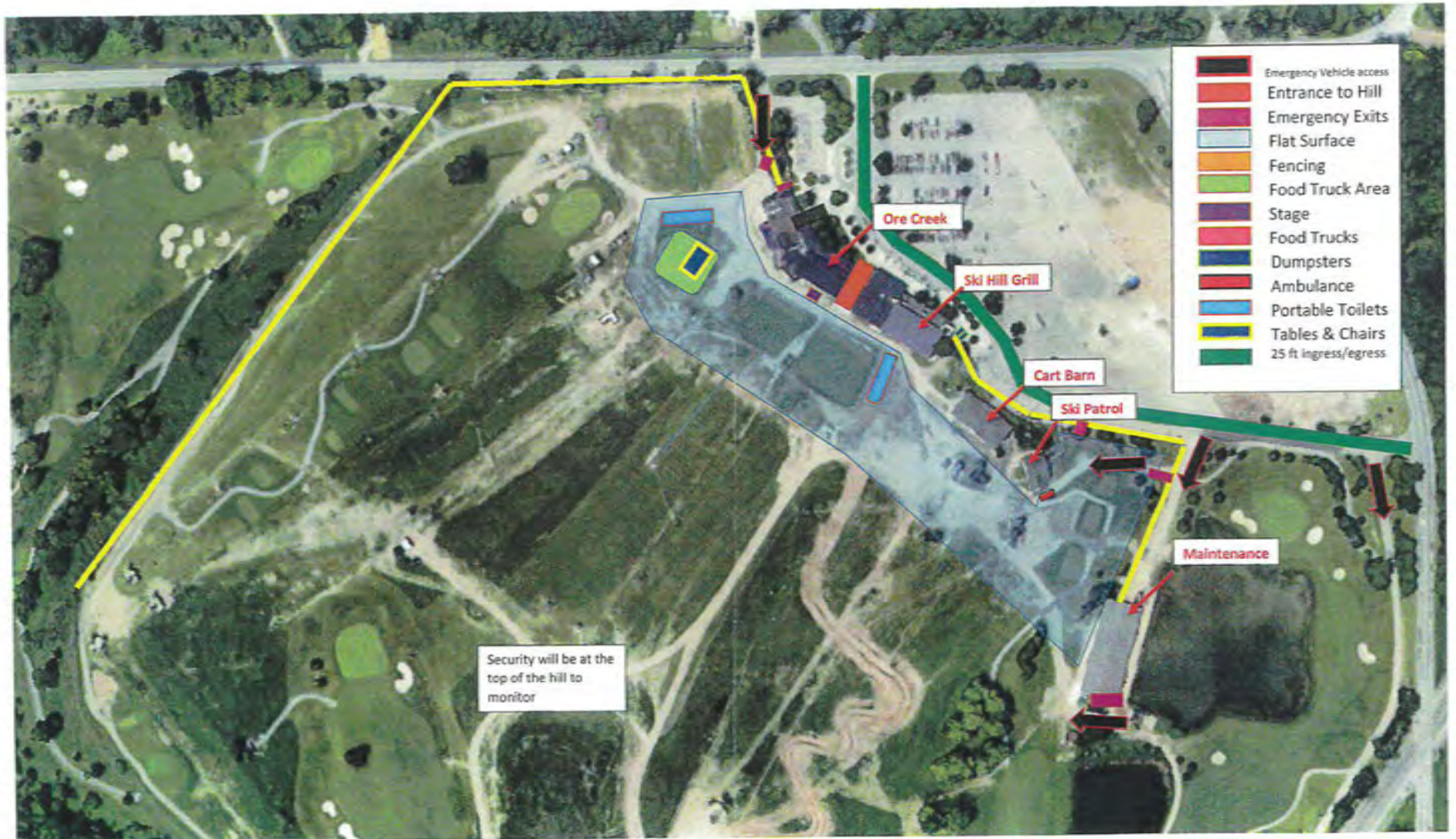
Subject property



- Updates:**
- 04/1/08 - Multiple Revisions (12 parcels)
 - 09/12/08 - 4488 & 4495 Oak Pointe Drive (LRR)
 - 02/29/11 - United Way Conditional Rezoning (OSD)
 - 02/06/12 - 7777 Berden Rezoning (OSD)
 - 02/21/12 - Corrected Map re: court stipulation for Pet Rip from 05/13/2006 (AG)
 - 11/09/12 - Corrected Map re: Zeeb property approved 3/15/04 (MUPUD)
 - 01/27/13 - Dakota (14-150-014) Conditional Rezoning (OSD)
 - 03/20/13 - Corrected Map re: (26-205-028) - was incorrect 8/18/03 (RPUD)
 - 11/13/14 - Removed Lucy Rd 425 Area, Remove Leason Elementary (26-100-039 RR MRPUD)
 - Correct Brighton Lake Rd. Engr (RPUD-LDR)
 - 05/04/15 - Red Olive (05-400-029) to NRPUD
 - 06/10/15 - Chestnut Landing Rezoning (OSD/TC to OSO)
 - 01/21/15 - Cleary University Rezoning to MUPUD
 - 03/27/16 - Lakeshore Village (08-400-018) from MDR to HDR
 - 03/18/16 - Oliveto Rezoning (12-100-007 008.010-013) RR & PRF to CE
 - 05/17/15 - Finore Park Rezoning (PRF)
 - 06/21/18 - Chestnut Springs Rezoning (LDR)
 - 05/12/19 - Birkenstock Self Storage Rezoning (PID)
 - 07/19/20 - Premier PSD Rezoning (PDPUD)
 - 03/03/20 - Sidle Express Rezoning (LDR)
 - 08/16/20 - Versa S. Leason Rezoning (CAPUD & ICPUD)
 - 08/01/22 - 6320 Richardson Rd Rezoning (RR to CE)
 - 11/01/22 - Legacy Arts, Rezoning (NSG/MDR/TCO to RPUD/HDR)

1 inch = 3,500 feet

Official Zoning Map
 Adopted May 2, 2006, Revised Nov. 21, 2022
 Created by: Kelly VanDerKamer
 Basemap layers provided by:
 Livingston County GIS



ASSEMBLY ORDINANCE

An ordinance to license, regulate and control, in the interest of the public health, safety and welfare, outdoor assemblies of persons in excess of 1,000 in number, to provide penalties for violations thereof and to repeal all ordinances or parts of ordinances inconsistent therewith.

The Township of Genoa ordains:

Section 1. Preamble. The board of the Township of Genoa finds and declares that the interests of the public health, safety and welfare of the citizens of the Township require the regulation, licensing and control of assemblages of large numbers of people in excess of those normally drawing upon the health, sanitation, fire, police, transportation, utility and other public services regularly provided in the Township.

Section 2. Definitions.

a) "Outdoor Assembly" also referred to as "assembly" means any event attended by more than 1,000 attendants, all or any part of which includes a theatrical exhibition, public show, display, entertainment, amusement or other peace festival or similar gatherings, but does not mean:

1. An event which is conducted or sponsored by a governmental unit or agency on publicly owned land or property; or
2. An event entirely within the confines of a permanently enclosed and covered structure.

b) "Persons" means any natural person, partnership, corporation, association, organization or any combination thereof.

c) "Sponsor" means any person who organizes, promotes, conducts, or causes to be conducted an outdoor assembly.

d) "Attendant" means any person who obtains admission to an outdoor assembly by the payment of money or by the rendering of services in lieu of the payment of money for admission.

e) "Licensee" means any person to whom a license is issued pursuant to this ordinance.

Section 3. A person shall not sponsor, operate, maintain, conduct or promote an outdoor assembly in the several Townships unless he shall have first made application for and obtained, as hereinafter prescribed, a license for each such assembly.

Section 4. Application for License, Fee, Contents of Application. Application for a license to conduct an outdoor assembly must be made in writing on such forms and in such manner as prescribed by the Township and shall be made ninety days, or more, prior to the date of the proposed assembly. Each applicant shall pay to the Township an application fee of one hundred fifty dollars, (\$150.00) and said fee shall be paid at the time of filing the application. The application shall contain the following information.

a) The name, age, residence and mailing address of the persons making the application. (Where the person making the application is a partnership, corporation or other association, this information shall be provided for all partners, officers and directors, or members. Where the person is a corporation, a copy of the articles of incorporation shall be filed, and the names and addresses shall be provided of all shareholders having financial interest greater than (\$500.00).

b) A detailed statement of the kind, character and type of proposed assembly including a list of speakers and/or entertainers and the type of performance to be presented.

c) The address, legal description and proof of ownership of the site at which the proposed assembly is to be conducted. Where ownership is not vested in the prospective licensee, he shall submit license and/or affidavit from the owner indicating his consent to the use of the site for the proposed assembly.

d) The date or dates and hours during which the proposed assembly is to be conducted.

e) An estimate of the maximum number of attendants expected at the assembly for each day it is conducted and detailed explanation of the evidence of admission which shall be used and of the sequential numbering or other method which will be used for accounting purposes.

f) Each application shall be accompanied by a detailed explanation of the licensee's plans to provide for the following:

- 1) Police and fire protection,
- 2) Food and water supply and facilities,
- 3) Health and sanitation facilities,
- 4) Medical and service including emergency vehicles & Equipment,
- 5) Vehicle access and parking facilities,
- 6) Camping and trailer facilities,
- 7) Illumination,
- 8) Noise control and abatement,
- 9) Solid waste disposal and clean-up,
- 10) Insurance and bonding arrangements,

Section 5. Site Plan. East applicant shall submit, along with the initial application, 10 copies of a detailed Site Plan which shall include the following data and information:

a) Site Identification. The location and boundaries of the site shall be fully described in terms of distance, direction, and area and shall be correlated with the legal description of the property.

b) Map or Plan. The map or plan of the site shall be made to scale not larger than 1:240 (20 feet to the inch) and not smaller than 1:2400 (200 feet to the inch.) The map shall be of sufficient accuracy to permit accurate readings of dimensions of buildings and structures, and similar features and accurate calculations of area. The map or plan will show the scale and orientation used in its construction, and its point of departure or beginning shall bear clear reference to a convenient survey corner of the public land survey.

c) Natural and Terrain Features. The map or plan shall show topography at a contour interval no greater than two (2) feet, and shall show wooded areas, streams, and lakes. It shall also show any other terrain feature of significance to the area of the plan.

d) Man made Features. The map or plan shall show existing man made features include buildings, structures, utility installations, roads, bridges, dikes, drains, fixtures and other similar man made features of significance to the site.

e) Existing Zoning and Use. The map or plan shall show the zoning and the land use of the site and of all adjacent properties and their owners.

f) Proposed Site. The map or plan shall show all buildings, structures, erections, and installations contemplated as part of the assembly site. It shall show all streets, sidewalks, and other features of vehicle and pedestrian circulation. It shall show all fences, gates, walls, site barriers, and land-

scaping which shall be required. It shall show any topographic alterations and changes in the natural terrain. It shall show placement of police, security, fire, medical and health personnel and facilities, and location of telephones.

g) Such Site Plan shall be prepared by a registered professional Planner, Engineer, Land Surveyor, Architect or Landscape Architect.

Section 6. REQUEST FOR RECOMMENDATIONS. On receipt, by the clerk, of application and accompanying data, copies of the application and data, along with a request for recommendations, shall be forwarded to the local office of the Michigan State Police, the office of the Livingston County Sheriff, the office of the Livingston County Health Department, the local office of the Detroit Edison Company, the fire departments for the Cities of Howell and Brighton, the office of administrator of the McPherson Community Hospital and to such other municipal governmental agencies as may be affected by the assembly.

Section 7. LICENSE, ISSUANCE OR DENIAL, NOTICE. Within 45 days of the filing of the application, the Board shall issue, set conditions prerequisite to the issuance of, or deny, a license. The Board may require that adequate security or insurance be provided before a license is issued. Where conditions are imposed as prerequisite to the issuance of a license, or where a license is denied, within five (5) days of such action, notice thereof shall be mailed to the applicant by first class mail, and, in the case of denial, the reason therefor shall be stated in the notice.

Section 8. BASIS FOR DENIAL. The Township Board may deny issuance of a license if:

a) The applicant fails to comply with any or all requirements of this ordinance, or with any or all conditions imposed pursuant hereto, or with any other applicable provision of State or local law; or

b) The applicant knowingly makes a false, misleading or fraudulent statement in the application or in any other data submitted

Section 9. CERTIFICATE OF LICENSE. A license shall specify the name and address of the licensee, the kind and location of the assembly, the maximum number of attendants permissible, the duration of the license and any other conditions imposed pursuant to this ordinance. It shall be posted in a conspicuous place upon the premises of the assembly, and shall not be transferred to any other person or location.

Section 10. REQUIREMENTS FOR ISSUANCE OF LICENSE. The applicant shall, prior to the issuance of a certificate of license satisfy the Township Board that the following minimum requirements have been met.

a) Security Personnel. The licensee shall employ at his own expense security personnel as necessary and sufficient to provide for the adequate security and protection of the maximum number of attendants at the assembly for its duration in the ratio of 1 for every 250 persons in attendance.

b) Water Facilities. The licensee shall provide potable water, sufficient in quantity and pressure to assure proper operation of all water using facilities under conditions of peak demand. Such water shall be supplied from a public water system, if available, and if not available, then from a source constructed, located and approved in accordance with Act 294, Public Acts of 1965, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable state or local law, or from a source and delivered and stored in a manner approved by the County Health Officer.

c) Restroom Facilities. The licensee shall provide separate enclosed flush-type water closets as defined in Act 266, Public Acts of 1929, and the rules and regulations adopted pursuant thereto and in accordance with any other applicable state or local law. If such flush-type facilities are not available, the County Health Officer may permit the use of other facilities which are in compliance with Act 273, Public Acts of 1939, and the rules and regulations adopted pursuant thereto and in accordance with any other applicable state or local law.

The licensee shall provide lavatory and drinking water facilities constructed, installed, and maintained in accordance with Act 266 of the Public Acts of 1929, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable state or local law. All lavatories shall be provided with hot and cold water and soap and paper towels.

The number and type of facilities shall be determined, on the basis of the maximum number of attendants, in the following manner:

<u>Facilities</u>	<u>MALE</u>	<u>FEMALE</u>
Toilets	1:300	1:150
Urinals	1:250	
Lavatories	1:300	1:300

Where the assembly is for more than 12 hours, the licensee shall provide shower facilities, on the basis of estimated number of attendants, in the ratio of one shower head for every 200 attendants, and the owner or licensee shall give evidence of contract with licensed firm if portable units are to be used.

d) Food Service. If food service is made available on the premises, it shall be delivered only through concessions licensed and operated in accordance with the provisions of act 269, Public Acts of 1968, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable State or Local Law.

e) Medical Facilities. Licensee shall provide an emergency medical facility on site, clearly marked and defined. Staff shall include one (1) licensed Doctor on site for the duration of the assembly, two (2) if the maximum number of attendants exceeds 6,000. In addition one (1) registered nurse shall be provided for every 2,500 persons. Medical supplies and equipment on hand in such a facility shall be as prescribed by the attending physician. Licensee shall have available for the duration of the assembly, on site, an ambulance or rescue vehicle properly stocked and equipped, with a 2 man crew.

f) Liquid Waste Disposal. The licensee shall provide for liquid waste disposal in accordance with all rules and regulations pertaining thereto established by the County Health Officer. In any case, liquid waste disposal shall be in accordance with the minimum standards set forth in United States Public Health Service Publication No. 526, entitled, "Manual of Septic Tank Practice." If liquid waste retention and disposal is dependent upon pumpers and haulers, they shall be licensed in accordance with Act. 243, Public Acts of 1951, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable state or local law, and, prior to issuance of

any license, the licensee shall provide the Township with a true copy of an executed agreement in force and effect with a licensed pumper or hauler, which agreement will assure proper, effective and frequent removal of liquid waste from the premises so as to neither create nor cause a nuisance or menace to the public health.

g) Solid Waste Disposal. The licensee shall provide for solid waste storage on, and removal from the premises. Storage shall be in approved, covered, fly tight and rodent proof containers, in such number as will serve a ratio of 10 cubic yards for every 2,500 people in attendance. Prior to issuance of any license, the licensee shall provide the Township with a true copy of an executed agreement in force and effect with a licensed refuse collector, which agreement will assure proper, effective and frequent removal of solid waste from the premises so as to neither create nor cause a nuisance or menace to the public health.

The licensee shall implement effective control measures to minimize the presence of rodents, flies, roaches and other vermin on the premises, Poisonous materials, such as insecticides or rodenticides shall not be used in any way so as to contaminate food, equipment, or otherwise constitute a hazard to the public health. Solid Waste containing food waste shall be stored so as to be inaccessible to vermin. The premises shall be kept in such condition as to prevent the harborage or feeding of vermin.

h) Public Bathing Beaches. The licensee shall provide or make available or accessible public bathing beaches only in accordance with Act 218, Public Acts of 1967, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable provision of state or local law.

i) Public Swimming Pools. The licensee shall provide or make available public swimming pools only in accordance with Act 230, Public Acts of 1966, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable provision of state or local law.

j) Access and Traffic Control. Licensee shall provide at least two (2) separate points for ingress and egress from the assembly site and to insure orderly flow of traffic shall station 1 person at each site to direct flow. Access to and from the site shall be from a highway or road which is part of the County or State Highway System. Licensee shall provide a 25 foot ingress and egress traffic safety lane, designated and marked as such, for the exclu-

sive use of emergency, police, and fire vehicles. Such lane shall be kept open at all times.

k) Parking. Licensee shall provide parking area to accommodate all motor vehicles, but no less than 1 space for every 3 persons in attendance. Each parking space shall have an area of at least 180 square feet and dimensions of at least 9 by 20 feet.

l) Camping and Trailer Parking. A license who permits attendants to remain on the premises between the hours of 2 a.m. and 6 a.m. shall provide for camping and trailer parking and facilities in accordance with Act 171, Public Acts of 1970, and the rules and regulations adopted pursuant thereto, and in accordance with any other applicable provision by state or local law.

m) Illumination. Licensee shall provide to the Township Board a lighting plan indicating the number, illumination capacity, location and placement for the lighting system. Lighting shall be provided to the entire site area including parking area to insure the safety, comfort, and maximum visibility to participants.

n) Insurance. Before the issuance of a license, the licensee shall obtain public liability insurance with limits of not less than \$300,000 and property damage insurance with a limit of not less than \$100,000 from a company or companies approved by the Commissioner of Insurance of the State of Michigan, which insurance shall insure liability for death or injury to persons or damage to property which may result from the conduct of the assembly or conduct incident thereto and which insurance shall remain in full force and effect in the specified amounts for the duration of the license. The evidence of insurance shall include an endorsement to the effect that the insurance company shall notify the clerk of the Township in writing at least 10 days before the expiration or cancellation of said insurance.

o) Bonding. Before the issuance of a license the licensee shall obtain from a corporate bonding company authorized to do business in Michigan a corporate surety bond in the amount of \$100,000 or its equivalent as determined by the Township Board, conditioned upon the licensee's faithful compliance with all of the terms and provisions of this ordinance and all applicable provisions of

State or Local Law, and which shall indemnify the township, its agents, officers, and employees and Board against any and all loss, injury or damage whatever arising out of or in any way connected with the assembly and which shall indemnify the owners of property adjoining the assembly site for any costs attributable to cleaning up and/or removing debris, trash or other waste resultant from the assembly.

p) Fire Protection. The licensee shall provide on site fire protection in the form of one (1) class 2A hand fire extinguisher, or its equivalent for every 500 persons estimated to attend the assembly.

q) Sound Producing and Amplifying Equipment. Licensee shall provide, to the Township, a list of all sound producing and amplification equipment with indication as to amplification capacity, number of units to be used and location and placement and method of operation. Said devices shall be operated so as not to be a nuisance or disturbance to the peace and tranquility of the citizens of the Township.

r) Fencing. The licensee shall provide and if necessary erect enclosing the assembly site including parking areas and said fence shall be of a minimum height of four feet, with four gates for ingress and egress having a minimum width of seven feet and in the event that estimated attendance exceeds 6000 people, additional gates at a ratio of one gate for every additional 1,500 persons.

s) Communication. Licensee to provide at least 1 phone (public) for every 1000 persons and at least two (2) such for the exclusive used by police, security, fire and emergency.

SECTION 11. Revocation. The board may revoke a license whenever the licensee, his employee or agent fails, neglects or refuses to fully comply with any and all provisions and regulations or requirements set forth herein or with any and all provisions, ordinances, regulations, statutes, or other laws incorporated herein by reference.

SECTION 12. Violations. It shall be unlawful for a licensee, his employee or agent to knowingly:

a) Advertise, promote or sell tickets to, conduct, or operate an assembly without first obtaining a license as herein provided.

b) Conduct or operate an assembly in such a manner as to create a public or

Private nuisance.

c) Conduct or permit, within the assembly, and display, exhibition, show, play, entertainment or amusement that is obscene according to local community standards.

d) Permit any person on the premises to cause or create a disturbance in, around or near the assembly by obscene or disorderly conduct.

e) Permit any person to unlawfully consume, sell or possess intoxicating liquor while on the premises.

f) Permit any person to unlawfully use, sell or possess any narcotics, narcotic drugs, drugs or other substances as defined the Controlled Substances Act of 1971.

It is further provided that should any of the above violations be found, the license shall be revoked.

SECTION 13. Severability. If any portion of this ordinance or the application thereof to any person or circumstances shall be found to be invalid by a Court, such invalidity shall not affect the remaining portions or applications of this ordinance which can be given effect without the invalid portion or application, provided such remaining portions are not determined by the Court to be inoperable and to this end this ordinance is declared to be severable.

SECTION 14. Effective Date. This Ordinance shall take effect on the 15th day of November 1974, and - all ordinances or parts of ordinances inconsistent herewith are hereby repealed.

STATE OF MICHIGAN)
) SS.
COUNTY OF LIVINGSTON)

I hereby certify that the foregoing ordinance is a true copy of the ordinance enacted by the township board on the 15th day of October 1974, and that the necessary legal provisions have been observed.

Dorothy Verellen
Dorothy Verellen, Township Clerk

I, Dorothy Verellen, Clerk of the Township of Genoa, hereby certify that the foregoing ordinance was published within ten days after adoption by printing the same in the Livingston County Press on the 23rd day of October 1974.

Dorothy Verellen
Dorothy Verellen, Township Clerk

1st DUPLICATE COPY



2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Adam VanTassell

DATE: April 1, 2024

RE: Proposed Township Hall computer replacement

In accordance with the Township computer replacement schedule (see attached), six workstations are up for replacement this year.

Recommended Motion:

Moved by _____, Supported by _____ to approve the proposal from Dell for the purchase of 6 new workstations for \$4,989.60.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

<u>Asset ID</u>	<u>Employee</u>	<u>Date Acquired</u>	<u>Description</u>	<u>Date of Replacement</u>
1	Van Marter, Kelly	4/1/2020	Dell Optiplex	4/1/2025
2	Rojewski, Deborah	4/1/2020	Dell Optiplex	4/1/2025
3	Sapienza, Kristen	4/1/2020	Dell Optiplex	4/1/2025
4	Gambino, Laura	4/1/2020	Dell Optiplex	4/1/2025
5	VanTassell, Adam	4/1/2021	Dell Optiplex	4/1/2026
6	Archinal, Michael	4/1/2021	Dell Optiplex	4/1/2026
7	Overby, Cindy	4/1/2021	Dell Optiplex	4/1/2026
8	Hunt, Robin	4/1/2022	Dell Optiplex	4/1/2027
9	Stone, Sharon	4/1/2022	Dell Optiplex	4/1/2027
10	Schneirs, Denise	4/1/2022	Dell Optiplex	4/1/2027
11	Lindberg, Tammy	4/1/2022	Dell Optiplex	4/1/2027
12	Buttermore, Jessica	4/1/2022	Dell Optiplex	4/1/2027
13	Vacant Manager	4/1/2013	Dell Optiplex 790	4/1/2024
14	Murphy, Kathleen	4/1/2019	Dell Optiplex 790	4/1/2023
15	Ruthig, Amy	4/1/2013	Dell Optiplex 790	4/1/2024
16	Krencicki, Mary	5/1/2014	Dell Optiplex 7010	4/1/2024
17	Skolarus, Polly	4/1/2019	Dell Optiplex 7010	4/1/2023
18	Elections	5/1/2014	Dell Optiplex 7010	4/1/2024
19	Board Room	4/1/2013	Dell Optiplex 790	4/1/2019
20	QVF Server		State supplied computer	
21	Clerk Front Counter	7/1/2019	Dell Optiplex	TBD
22	Tax Front Counter	7/1/2019	Dell Optiplex	TBD
23	Map Room	7/1/2005	Dell Optiplex	TBD
24	Utility Front Counter	7/1/2019	Dell Optiplex	TBD

Genoa Computers

Kelly VanMarter

From: Dell (please do not reply) <automated_email@dell.com> on behalf of Dell Inc. <dell_automated_email@dell.com>
Sent: Tuesday, March 26, 2024 9:25 AM
To: info
Subject: Dell Computer - Saved Quote Information -3000173951801



You have saved an eQuote 3000173951801

An eQuote is now saved in your Dell Online Store.
This will be held for 60 days and will expire on 05/25/2024

Your eQuote has been sent to:

Emailed to: info@genoa.org
info@genoa.org
info@genoa.org

To retrieve this eQuote

Login to [Premier](#)
Sign in to GENOA TOWNSHIP
Click on "Quotes" in the top menu bar and search for eQuote number 3000173951801

eQuote Name	2024 Refresh
Saved By	info@genoa.org
eQuote Description	
Authorized Buyer	Adam VanTassell
Notes/Comments	
Account Name	GENOA TOWNSHIP
Contract Code	C000000979569
Contract Name	Dell Midwestern Higher Education Compact (MHEC) Master Agreement
Customer Agreement #	MHEC-04152022

Shipping Info

Adam VanTassell
Genoa Township
2911 Dorr Rd
Brighton, MI 48116-9498
(810) 227-5225

eQuote Summary

Description	Quantity	Unit Price	Subtotal
OptiPlex Small Form Factor	6	\$831.60	\$4,989.60

eQuote Subtotal	\$4,989.60
Shipping*	\$0.00
Shipping Discount*	\$0.00
Tax*	\$299.37
Environmental Disposal Fee*	\$0.00

eQuote Total* \$5,288.97

*The eQuote total, including applicable taxes and additional fees, may be viewable online.

Note: Your order may contain one or more items which are billed on a recurring basis. See Important Notes for details on your specific offering and, for customers with auto-renewing subscriptions, how to turn off automatic renewal.

eQuote Details

Description	Quantity	Price
s015d2osffusr OptiPlex Small Form Factor	6	\$9,072.00
Premier Discount		\$4,082.40
(Unit Price after discount: \$831.60 ea.)		<u>\$4,989.60</u>

Module	Description	Product Code	Sku	ID
OptiPlex Small Form Factor (7010)	OptiPlex Small Form Factor (7010)	GDAUB5Y	[210-BFXF]	1
Processor	13th Gen Intel® Core™ i5-13500 (24 MB cache, 14 cores, 20 threads, 2.50 GHz to 4.80 GHz Turbo, 65 W)	G63CSUH	[338-CHBS]	146
Operating System	Windows 11 Pro, English, Brazilian Portuguese, French, Spanish	G01OWWE	[619-ARSB]	11
Microsoft Office	No Microsoft Office Licence Included - 30 day Trial Offer Only	GC70FJV	[658-BCSB]	1002
Memory	16 GB: 1 x 16 GB, DDR4	G17YEX2	[370-AGFR]	3
Storage	512 GB, M.2 2230, PCIe NVMe, SSD, Class 35	GWE6Q5J	[400-BOQM] [412-AAQT] [773-BBBC]	8
Additional Storage	No Additional Hard Drive	G780XKR	[401-AANH]	637
Graphics	Intel® Graphics	GZQDA24	[490-BBFG]	6
Chassis Options	OptiPlex SFF with 180W Bronze Power Supply	GEPA2UZ	[329-BHPU]	116
Power Cord	System Power Cord (US)	GA5894N	[450-AAOJ]	20

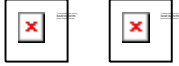
Optical Drive	No Optical Drive	G69A5CJ	[429-ABKF]	16
Optical Software	PowerDVD Software not included	GI5LS2C	[632-BBBJ]	597
Wireless	No Wireless LAN Card (no WiFi enablement)	GE7Y41P	[555-BBFO]	19
Wireless Driver	None	GQMKF4C	[340-AFMQ]	7
Serial Port Adapter	No PCIe add-in-card	GVEYOQ7	[492-BBFF]	698
Additional Video Ports	Optional DisplayPort	GFE9LI7	[382-BBKE]	495
Keyboard	No Keyboard Selected	GAX9P57	[580-AABG]	4
Mouse	No Mouse Selected	GKJD14Q	[570-AAAF]	12
Cable Cover	No Cable Cover	GDT2C7Z	[325-BCZQ]	376
External Speakers	No External Speaker	GTNM7E2	[817-BBBC]	200095
Non-Microsoft Application Software	Dell Additional Software	GJAR81X	[658-BFPY]	1003
Operating System Recovery Options	OS-Windows Media Not Included	GLA9OQ1	[620-AALW]	200013
ENERGY STAR	ENERGY STAR Qualified	G6J34SM	[387-BBLW]	122
Documentation	Safety/Environment and Regulatory Guide (English/French Multi-language)	G7RB0GY	[340-AGIK]	21
System Monitoring Options	Dell Watchdog Timer	GW4YJIC	[379-BEZG]	39
Placemat	Quick Start Guide, OptiPlex Small Form	GJ7NCE0	[340-DDFL]	60
EAN/UPC Labels	Print on Demand Label	GLBM3TR	[389-BDQH]	292
TPM Security	Trusted Platform Module (Discrete TPM Enabled)	GJMDKT6	[329-BBJL]	297
Shipping Material	Shipping Material	GDKRO4V	[340-CQYR] [389-BBUU]	465
Label	Regulatory Label for OptiPlex SFF 180W, FSJ	GYMH4UB	[389-FBFX]	676
Hard Drive Cables and Brackets	M.2 Caddy	GGPQ1ML	[575-BBKX]	705
Intel Responsiveness Technologies	SW Driver, Intel Rapid Storage Technology, OptiPlex Small Form	G1523VT	[658-BFQF]	707
Processor Label	Intel Core i5 vPro Enterprise Processor Label	GYMP5L4	[389-EDDQ]	749
Transportation from ODM to region	DT BTS/BTP Shipment	GL09IMP	[800-BBIP]	200080
Security Software and PC Protection	No anti-virus software	GD4K19S	[650-AAAM]	1014
Chassis intrusion switch	Chassis Intrusion Switch	GWR6EM9	[461-AAJL]	289
Add-in Cards	No Additional Add In Cards	GNV4J7Q	[382-BBHX]	583
Speakers	Internal Speaker	GR068XC	[520-AARD]	18
Systems Management	Intel vPro Enterprise	GFCZ8Q2	[631-BBKK]	49
Stands and Mounts	No Stand or Mount	GJO5ZSE	[575-BBBI]	558
Adapter	No Additional Cable	GIX0L8M	[379-BBCY]	592
Windows AutoPilot	No AutoPilot	GYEO2AP	[340-CKSZ]	291
FGA Module	SFF_1H24_015D2/US/BTS	FG0039	[998-GQPZ]	572
EPEAT 2018	EPEAT 2018 Registered (Silver)	GTZOE2H	[379-BDTO]	200331
Service	3Y Basic Onsite Service after remote diagnosis with Hardware-Only Support	NBD3	[803-8583] [803-8590]	29

eQuote Subtotal	\$4,989.60
Shipping*	\$0.00
Shipping Discount*	\$0.00
Tax*	\$299.37
Environmental Disposal Fee*	\$0.00

eQuote Total* \$5,288.97

*The eQuote total, including applicable taxes and additional fees, may be viewable online.

Let's connect.



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2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Adam VanTassell

DATE: April 1, 2024

RE: Proposed Township Hall camera installation

The Township Basketball Courts and the new Survivor Park have attracted a great deal of attention from park patrons. To address security concerns, Staff has consulted with SecureTech to design a plan for additional cameras to monitor these new additions.

These cameras would be integrated into the current Township Hall Security Camera system that was originally designed and installed by SecureTech.

Recommended Motion

Moved by _____, Supported by _____ to approve the proposal from SecureTech for the purchase of 6 new cameras and equipment for \$12,302.13.

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

We have prepared a quote for you

**Additional cameras for new Senior Survivor Park at
Genoa Twp**

Quote # 000095 Version 1

Prepared for:

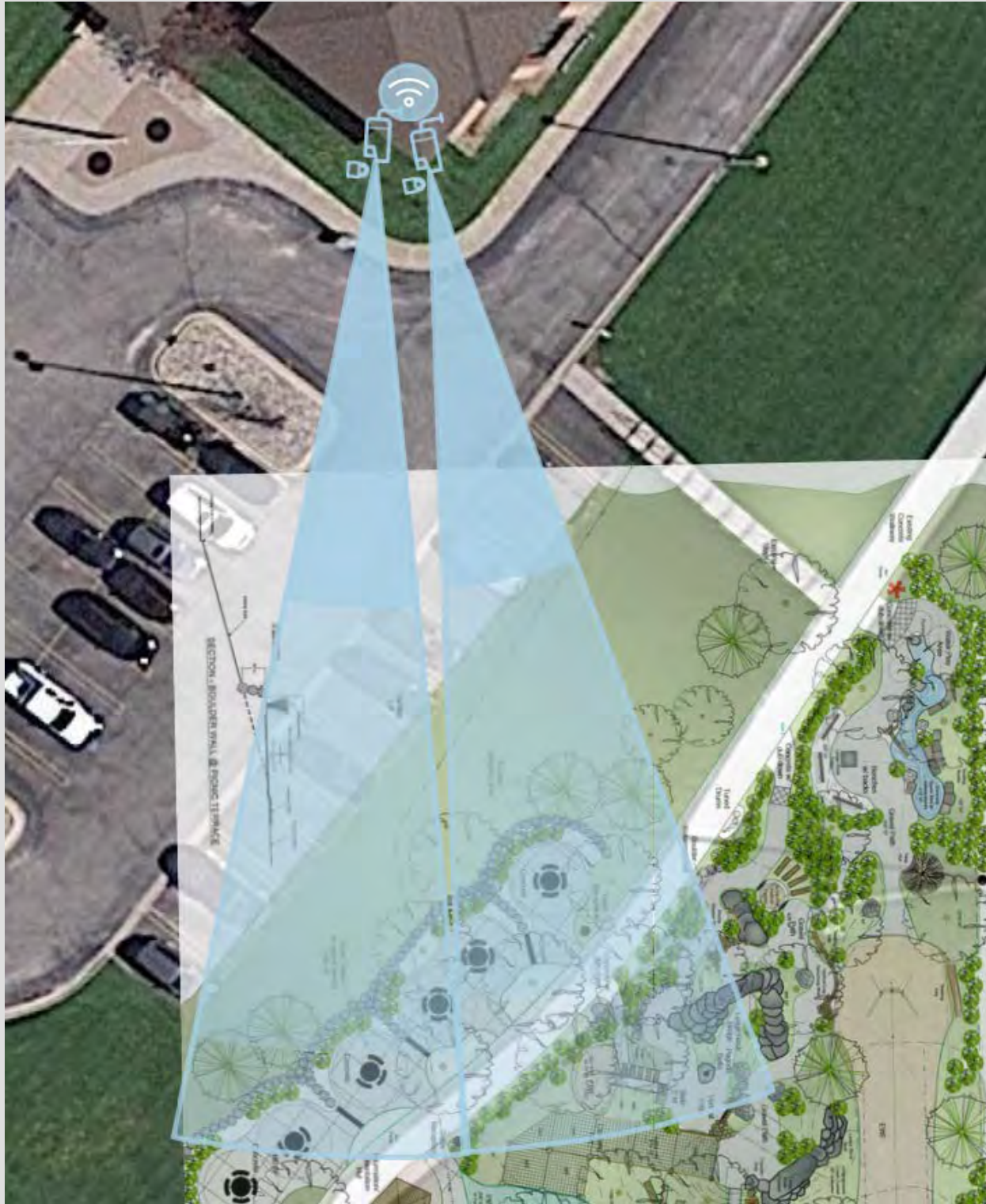
Genoa Township

Prepared by:


Joel Kocovar

Survivor Park

Description	Price	Qty	Ext. Price
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Survivor Park

Description	Price	Qty	Ext. Price
2 Long Range cameras, building mounted to capture detail and analytics of East Seating area of Survivor Park			
			
If additional storage is needed, an external storage appliance can be added			
Long Range 5MP bullet camera with 6~50mm vari-focal p-iris lens with motorized zoom, auto-focus, color in near-total darkness and IR. Analytics (IVA) support perimeter detection, with configurable actions and events. Exterior Rated, 5 year warranty	\$930.00	2	\$1,860.00
DW Spectrum Single Camera Recording License	\$111.41	2	\$222.82
IT Labor: Server OS updates, Software updates. Configure and program cameras	\$145.00	4	\$580.00
Installer Labor to run network cable for 2 x building cameras	\$145.00	8	\$1,160.00
Subtotal:			\$3,822.82

Basket Ball Courts

Description	Price	Qty	Ext. Price
	\$2,329.99	1	\$2,329.99
<p>Multi Imager camera (4 cameras, 5MP each) with 2~8mm vari focal p-iris lens with motorized zoom, auto-focus, color in near-total darkness and IR. Analytics (IVA) support perimeter detection, with configurable actions and events. Exterior Rated, 5 year wa</p>			

Basket Ball Courts

Description	Price	Qty	Ext. Price
MEGApix Ai 5MP ANPR bullet IP camera with a vari-focal lens, IR Searchable License plate and Make/Brand/Color/Type	\$2,715.70	1	\$2,715.70
DWMounting Bracket for Network Camera Pole 	\$38.56	2	\$77.12
DW Mounting Bracket for IP Camera - White 	\$242.84	1	\$242.84
DW Back box for Bullet Camera	\$44.27	1	\$44.27
Wifi Point to Point	\$1,106.57	1	\$1,106.57
Wire, cable, supports, conduit to support: 1 x Pole mounting box and fittings for bullet camera with power and wifi uplink 1 x Pole mounting box and fittings for multi imager		1	
USWFU 120VAC to 60w POE adapter		2	
USW-Flex switch		2	
U6 Mesh Point to Point WIFI outdoor link		2	
Power on pole by others. Will require 110VAC constant power at about 10' height			
DW Spectrum Single Camera Recording License	\$111.41	2	\$222.82
IT Labor: Configure and program cameras, network point to point devices	\$145.00	4	\$580.00
Installer Labor: mount cameras on customer pole, connect to customer provided power. Install point to point wifi.	\$145.00	8	\$1,160.00
Subtotal:			\$8,479.31

Additional cameras for new Senior Survivor Park at Genoa Twp

Prepared by:**Secure Tech Group**

Joel Kocevar
517-947-0206
joel@securetechgrp.com

Prepared for:**Genoa Township**

2911 Door Rd.
Brighton, MI 48116
Adam VanTassell
(810) 227-5225
info@genoa.org

Quote Information:**Quote #: 000095**

Version: 1
Delivery Date: 03/15/2024
Expiration Date: 04/15/2024

Quote Summary

Description	Amount
Survivor Park	\$3,822.82
Basket Ball Courts	\$8,479.31
Total:	\$12,302.13

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.

Secure Tech Group

Genoa Township

Signature: _____

Signature: _____

Name: Joel Kocevar

Name: Adam VanTassell

Title: Managing Partner

Date: _____

Date: 03/15/2024

MEGAPIX® IVA/IVA+™

IP cameras with Intelligent Video Analytics

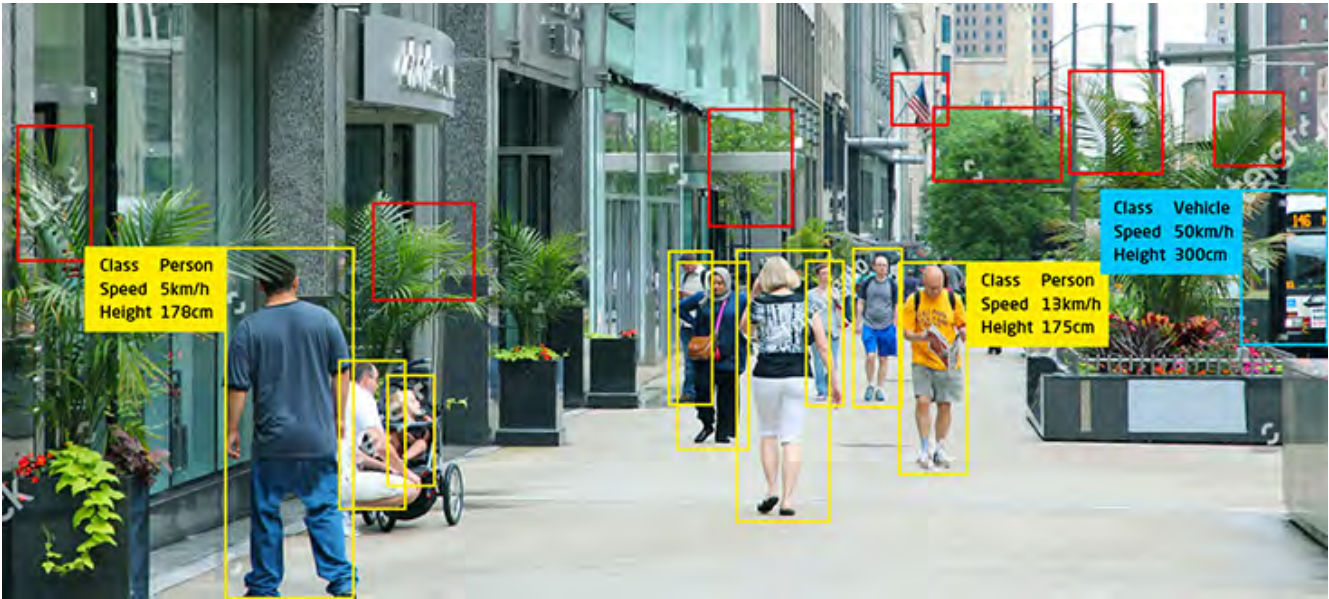


NDAA-compliant powerful Intelligent Video Analytics (IVA) detecting and classifying people and objects in real-time.

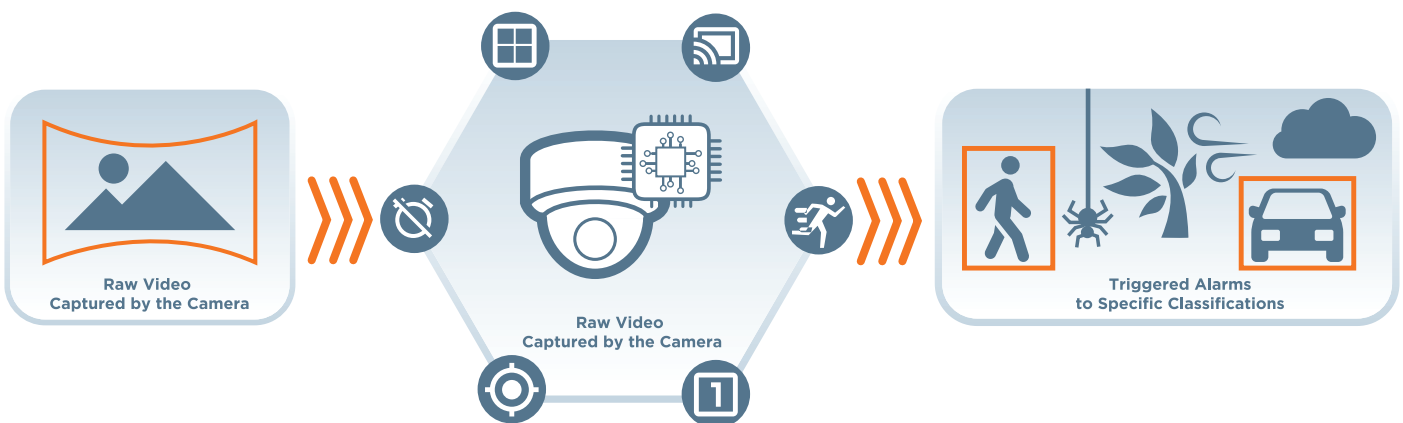


What is MEGApix IVA?

The analysis of video content by the IVA engine provides users the ability to automatically analyze video, detect and determine events at the edge. Processing the raw video data in the camera itself, near the source, significantly reduces bandwidth consumption increases accuracy and reduces response time.



Using Logical Rules with multiple zones and virtual tripwires linked together, the MEGApix IVA cameras can be configured with multiple trigger points, allowing for a greater event detection level.



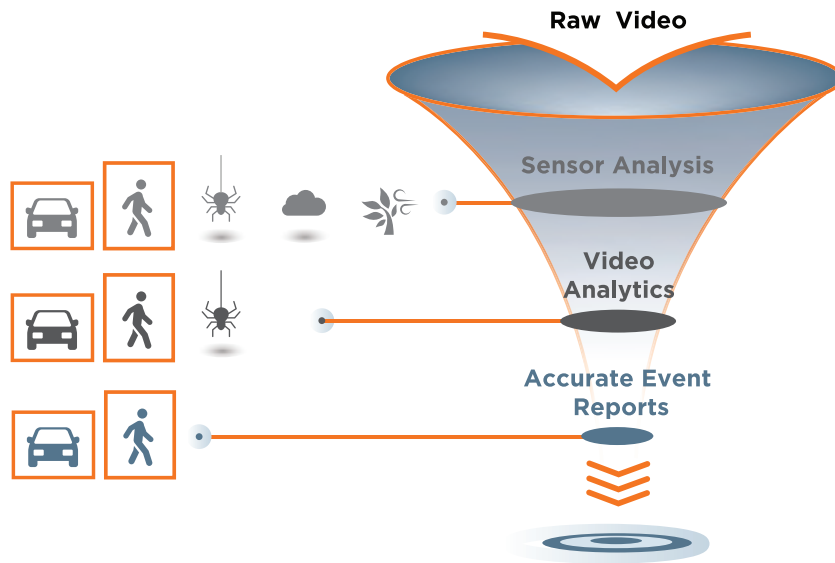
By providing quick deployment and easy setup features MEGApix IVA cameras are up and running quickly with a minimal amount of effort.



Manage your recording storage smarter by fine-tuning events and alarms to be recorded. Combining IVA analytics, logic rules and non-detection zones, users can create conditions unique to their environment people and objects must trigger to activate an alarm. Smart management of your available storage.



MEGApix IVA's intelligent algorithms offer better object classification and identify environmental elements. The result is a substantial reduction in false alarms for control room operators and security personnel. By allowing only valid events to filter through MEGApix IVA cameras increase efficiency, productivity and cut unnecessary costs.



- Logic Rules
- Tailgating
- Intrusion
- Tamper
- Stopped
- Object Removed
- Loitering
- Object Left
- Appear
- Counting Line
- Disappear
- Direction
- Enter
- Exit
- Line Crossing

MEGApix IVA analytics are seamlessly integrated with DW Spectrum IPVMS for easy configuration, real-time alerts and automatic notifications.



MEGApix IVA cameras include a base package of Intelligent Video Analytics detection capabilities already activated on the camera and ready for deployment. The **MEGApix IVA+** package offers additional advanced Video Content Analysis detection capabilities. These additional features can be purchased separately and easily added to your existing MEGApix IVA camera.



Intrusion

Detect people or objects crossing into the detection zone.



Line Crossing

Detect people or objects crossing the detection line.



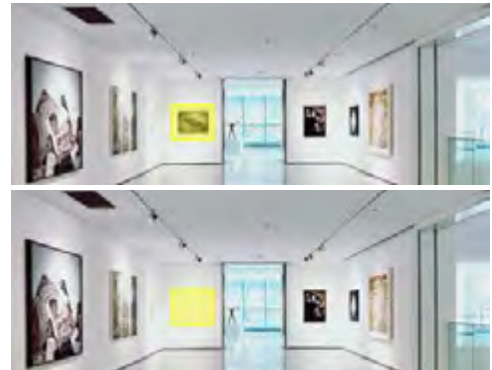
Counting Line

Calculate the number of people or objects crossing the detection line.



Object Removed

Detect in real-time of objects removed from the detection zone.



Tailgating

Detect a person or object crossing the detection line within a set period from the previous people or objects that have passed through the detection zone.



Direction

Detect people or objects crossing the detection line from a specific direction or angle.



MEGApix IVA cameras include a base package of Intelligent Video Analytics detection capabilities already activated on the camera and ready for deployment. The **MEGApix IVA+** package offers additional advanced Video Content Analysis detection capabilities. These additional features can be purchased separately and easily added to your existing MEGApix IVA camera.



Loitering

Detect people or objects entering the detection zone but not exiting after a set duration.



Stopped

Detect people or objects stopped in the detection zone for a set duration.



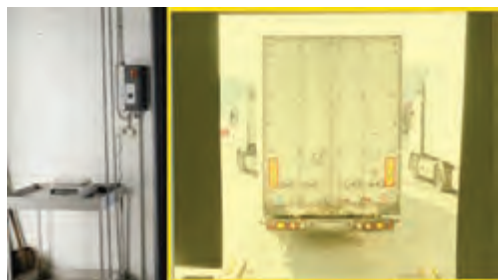
Enter

Detect people or objects crossing into the detection zone's border from outside the zone.



Appear

Start tracking people or objects in the detection zone without crossing into the zone.



MEGApix IVA cameras include a base package of Intelligent Video Analytics detection capabilities already activated on the camera and ready for deployment. The **MEGApix IVA+** package offers additional advanced Video Content Analysis detection capabilities. These additional features can be purchased separately and easily added to your existing MEGApix IVA camera.



Exit

Detect people or objects crossing the detection zone's border from inside the zone.



Tamper

Detect camera tampering triggers an alarm.



Disappear

Stop tracking people or objects in the detection zone without crossing out of the zone.



Abandoned

Detect in real-time of objects left or abandoned in the detection zone.



Ultra-wide single-sensor views

The ultra-wide view single-sensor bullet IP camera comes pre-loaded with IVA or IVA+ analytics engine and can deliver real-time 30fps crystal-clear video with a 2.3mm ultra-wide view lens. The camera offers wide-area situational awareness and edge-to-edge image clarity without pixel loss, suitable for narrow corridor installations, with clear images as close as 19.5-23.5 inches from the camera.



Easy image stitching

The 360° view vandal fisheye IP cameras with IR monitor an entire room with a single camera, providing the ultimate ROI. The 9MP and 5MP sensors produce real-time 30fps panoramic images.

NDAA Compliant

DW® IP cameras, analog cameras, NVRs, DVRs, network devices and management software sold and distributed worldwide are designed and developed in U.S.A. and Korea. Manufactured in Korea.

Most DW® products qualify for GSA Schedule Contracts and other government opportunities because they are NDAA compliant.



Contact us:



California Office
 16220 Bloomfield Avenue
 Cerritos, California USA 90703
 Hours: 8:00am - 5:00pm PST.



Florida Office
 5436 West Crenshaw Street
 Tampa, Florida USA 33634
 Hours: 8:30am - 5:30pm EST.

Phone (Toll-Free).....	1.866.446.3595
Fax.....	1.813.888.9262
Customer Service (U.S.).....	1.866.446.3595
Customer Service (International).....	1.813.888.9555
Customer Service (French).....	1.514.360.1309
Sales Email.....	sales@digital-watchdog.com
Tech Support Email.....	technicalsupport@digital-watchdog.com

☎ : 866.446.3595

✉ : sales@digital-watchdog.com

🌐 : www.digital-watchdog.com





2911 Dorr Road
 Brighton, MI 48116
 810.227.5225
 810.227.3420 fax
 genoa.org

MEMORANDUM

TO: Honorable Board of Trustees
FROM: Kelly VanMarter, Township Manager
DATE: March 27, 2024
RE: Park Maintenance - Howell Parks and Recreation
 Memorandum of Understanding

The Township currently utilizes Perfect Maintenance Cleaning Services for the Township Hall and Park maintenance. Township staff is extremely happy with the personnel and service provided by Perfect Maintenance. In addition, online feedback regarding the park often references how clean and well-maintained the facilities are. A breakdown of the current services for the park and monthly cost is provided in the table below.

Park Services	Monthly Cost
Daily Cleaning	\$4300
- Pavilions and Restrooms	
- Trash/Dog Waste	

Over the past few years, the Township has added considerable amenities to the park property such as the basketball courts/pavilion and the survivor playscape. We have also added nearly 140 acres of land abutting the park and across Crooked Lake Road. With these additional features comes increased responsibility. Without a dedicated Parks or DPW Department I am concerned that current staff capabilities cannot adequately manage these additional resources.

To address this anticipated need, we have been working with the Howell Parks and Recreation Authority (HAPRA) to see if there is an opportunity to work collaboratively to help manage our facilities. The Township’s current relationship with HAPRA has them on-site frequently to program and manage the soccer fields. To help meet our park management needs, Township staff has negotiated with HAPRA on a Memorandum of Understanding (MOU) to increase their services at the Township Park. The MOU is attached for your review. This agreement is to include the following services:

- Monday-Friday: Trash collection, dog station maintenance, and inspection/clean-up of fields, playgrounds, pavilions, and basketball facilities.
- Twice Weekly: Blow off of hard surface playgrounds, pavilions, and courts, playgrounds slide mulch maintenance, walking path/sled hill inspection, and observation of vacant parkland.
- Monthly: Spray for weeds, inspect netting near I-96, and inspect soccer field lighting.
- As needed: Reporting, providing supplies, addressing problems, completing special projects.

SUPERVISOR
 Bill Rogers
CLERK
 Paulette A. Skolarus
TREASURER
 Robin L. Hunt
TRUSTEES
 Jean W. Ledford
 Terry Croft
 Diana Lowe
 Jeff Dhaenens
MANAGER
 Kelly VanMarter

HAPRA Park Maintenance MOU

The cost to provide these additional park services is proposed to be \$1,000 each month. The MOU also includes a dedicated hourly rate for out-of-scope or additional work. I believe this arrangement will greatly improve our capabilities to maintain our beautiful park and to keep the facilities operating in a safe and secure state. This will provide needed personnel to address issues promptly and will allow us to be proactive to identify and resolve issues at the park with available resources. I also believe this is the most cost-effective way to address this issue because HAPRA can use existing personnel, vehicles, and equipment.

BUDGETARY IMPLICATIONS:

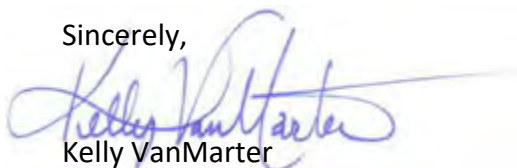
If approved, Perfect Maintenance will continue to clean the bathrooms and pavilions daily and will also manage the trash/pet waste collection on Saturday and Sunday. Elimination of the trash collection Monday through Friday from the Perfect Maintenance contract will represent a cost savings of \$200 each month. See the attached proposal. To address the budget implications of this proposed arrangement I have provided a table showing the fiscal year impact of this change below:

Park Service Currently	Current Monthly Cost	Proposed Park Services	Monthly Cost
Perfect Maintenance - Daily Cleaning - Pavilions and Restrooms - Trash/Dog Waste	\$4300	Perfect Maintenance - Daily Cleaning of Pavilion/Restroom - Weekend Trash/Dog Waste	\$4100
		HAPRA - Weekday Trash/Dog Waste & Park Inspections - Twice Weekly surface cleaning, mulch replace, property, playground and path inspections - Monthly Reports	\$1000
TOTAL COST	\$4300		\$5,100
Monthly Cost Increase			+\$800 each month
Annual Cost Increase			\$9,600

The approved Township Budget for the 2024-2025 Fiscal Year assumed an increase in Parks and Recreation maintenance costs from \$142,000 (FY23/24) to \$175,000. The additional cost of \$9,600 per year will be easily accommodated within the approved budget. Staff requests your consideration to support approval of the Memorandum of Understanding in the proposed motion below:

Moved by _____, Supported by _____ to approve the Memorandum of Understanding with Howell Parks and Recreation for park maintenance services and support for \$1,000 per month plus hourly rates for additional work orders and to eliminate the park trash collection Monday-Friday with Perfect Maintenance for a cost savings to the Township of \$200 each month.

Sincerely,



Kelly VanMarter



MEMORANDUM OF UNDERSTANDING (MOU)

This Memorandum of Understanding (the "MOU") is entered into on April 1, 2024, between Genoa Township, hereinafter referred to as the "Client," and HAPRA, hereinafter referred to as the "Service Provider."

1. Purpose: The purpose of this MOU is to establish the terms and conditions under which the Service Provider will maintain the Client's grounds and property as defined below.

2. Scope of Work: The Service Provider agrees to provide regularly scheduled visual inspection and clean-up up of the Client's grounds and property. This includes trash removal, clearing pavilion, playground, fields and courts of debris and routine checks of the walking path. Exhibit A displays a routine task list. Additional work orders outside the routine work can be submitted. Exhibit B shows map of properties where routine and scheduled work will be completed on Client's property.

3. Billing Rate: The Client agrees to compensate the Service Provider at a rate of \$1000 per month for the services provided under this MOU (Exhibit A). The billing rate may be subject to adjustment with mutual agreement in writing. The billing rate includes Service Provider staff hours and vehicle usage. Any additional equipment, services or projects request by the Client will be quoted and billed separately from this agreement. Exhibit C breaks down billing for additional work orders.

4. Invoicing: An Invoice will be submitted by the Service Provider to the Client monthly. The services unit will be tracked by the Service Provider and the Client will be updated monthly with a service report. Any additional service requests from Client will be quoted by the service provider. Once the client has approved the quote for the extra services, the Service Provider will complete the service and invoice client.

5. Payment Terms: Payment is due within 30 days of the invoice date.

6. Term of Agreement: This MOU shall commence on the date the agreement is signed and will continue until December 31st, 2024, unless terminated earlier by mutual agreement. This agreement can be extended if both parties agree to the services and compensation for future needs of both parties.

7. Termination: Either party may terminate this MOU with written notice to the other party in the event of a material breach. Upon termination, the Client agrees to pay for all services provided up to the termination date

Genoa Township Supervisor

Howell Recreation Executive Director

Exhibit A

Genoa Property Maintenance List	Completed		Week of
Monday			
Trash empty and replace (9)			
Dog stations empty and replace (2)			
Walk fields daily during rentals			
Walk playgrounds/pavilions for trash			
Walk basketball courts for trash			
Tuesday			
Trash empty and replace (9)			
Dog Stations empty and replace (2)			
Walk fields daily during rentals			
Walk playgrounds/pavilions for trash			
Walk basketball courts for trash			
Wednesday			
Trash empty and replace (9)			
Dog Stations empty and replace (2)			
Walk fields daily during rentals			
Walk playgrounds/pavilions for trash			
Walk basketball courts for trash			
Thursday			
Trash empty and replace (9)			
Dog Stations empty and replace (2)			
Walk fields daily during rentals			
Walk playgrounds/pavilions for trash			
Walk basketball courts for trash			
Friday			
Trash empty and replace (9)			
Dog Stations empty and replace (2)			
Walk fields daily during rentals			
Walk playgrounds/pavilions for trash			
Walk basketball courts			
Weekly - (Twice a week detailed prop check)	1st	2nd	
Blow off hard surfaces (playgrounds, pavilions, courts)			
Fix mulch at base of slides			
Observation of basketball courts			
Observation of playgrounds			
Drive walking path			
Check of the sled hill			
Observation of Property A			
Observation of Property B			
Monthly Tasks/Checks			
Weed Spraying (sidewalks, parking lots, courts, ect)			
Back netting by 96			
Lights (operational)			
Reports			
Supplies needed			
Problems			
Other observations			
Work orders completed			

Exhibit B



Genoa Township – Howell Parks and Rec Property Maintenance Agreement

Exhibit C – Additional Work Orders

Additional work orders can be submitted via email to HAPRA Operations Manager

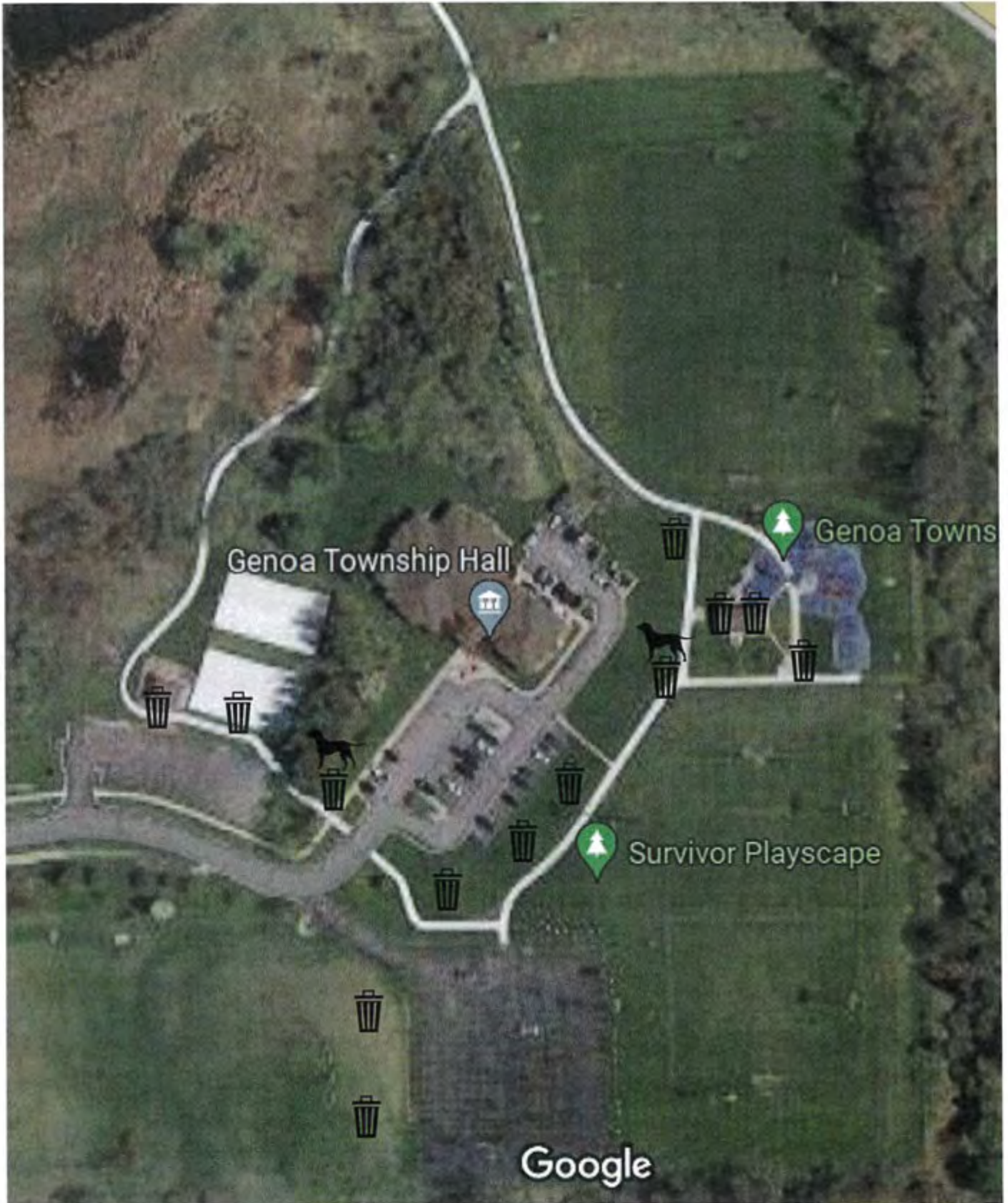
Billing breaks down as followed:

Hourly rate for specific jobs/tasks (minimum of two hours)

- \$45/hour for a single body
- \$80/hour for two bodies
- Operations manager rate \$40/hour. Planning, administrative duties, meeting with contractors if needed.
- Includes tools and truck use that would be considered normal.
- Rented equipment or purchase of materials to complete projects would be billed out. Example, Paint and brushes for the handrails.

Genoa Township Trash Can Map

As of 3/27/24





2911 Dorr Road
 Brighton, MI 48116
 810.227.5225
 810.227.3420 fax
 genoa.org

MEMORANDUM

TO: Honorable Board of Trustees

FROM: Kelly VanMarter, Township Manager

DATE: March 27, 2024

RE: Additional Building Cleaning – Perfect Maintenance

The Township currently utilizes Perfect Maintenance Cleaning Services for the Township Hall cleaning. Township staff is extremely happy with the personnel and service provided by Perfect Maintenance. Our assigned cleaning person (Julie) is conscientious, hard-working, and often goes above and beyond to make sure the Township Hall is looking its best. The current cleaning program is twice weekly and she typically comes in the evening on Wednesday and Friday. The monthly cost is \$750.

Township staff has been noticing that with the increased use of the facility, the current cleaning schedule is not sufficient. There are often meetings and groups using the conference rooms and board room in addition to park visitors using the facility more frequently which is causing issues with cleanliness. Overfull trash cans, dirty floors, empty hand towel dispensers, and unsanitary public restrooms are becoming more frequent. To address this problem which is sure to increase with fair weather use of the grounds, we are recommending that we increase the frequency to include a third cleaning. This additional cleaning would be done at such a time and manner that it would not conflict with meetings in the Board room but would allow for an additional cleaning to keep things clean and tidy.

The additional cost for the third cleaning is proposed to be \$350 each month. The budgetary implications of this are presented in the table below:

Township Hall Cleaning Services	Current Cost	Proposed Cost
Lobby/Entry, Conference rooms, Boardroom, Main Office Area, Restrooms (4), Private Offices, Kitchen/Lunchroom	Monthly \$750 for 2x/week	Monthly \$1,100 for 3x/week
Total Annual Cost	\$9,000	\$13,200
Annual Cost Increase of 3rd Cleaning		\$4,200

The approved Township Budget for the 2024-2025 Fiscal Year exceeds this spending of the current fiscal year by at least \$12,000 therefore we believe the additional cost of \$4,200 per year will be easily accommodated within the approved budget. Staff requests your

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

March 27, 2024

Additional Cleaning – Perfect Maintenance

Page 2 of 2

consideration to support approval of the Service Agreement with Perfect Maintenance as follows:

Moved by _____, Supported by _____ to approve the Service Agreement with Perfect Maintenance Cleaning Services to include a third weekly cleaning of the Township Hall for \$1,100 per month.

Sincerely,

A handwritten signature in blue ink that reads "Kelly VanMarter". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Kelly VanMarter

**PERFECT MAINTENANCE
CLEANING SERVICES**
PO BOX 2225
HOWELL, MI 48844
perfectmaintenancelc@gmail.com

Genoa Township
2911 Dorr Road
Brighton, MI 48114

January 19, 2024

SERVICE AGREEMENT


In consideration for services rendered as set forth in the "Proposal for Cleaning Services" Genoa Township agrees to pay Perfect Maintenance Cleanings the sum of **\$5400.00** per month. This cost included **\$1100** for the Township Hall and **\$4300.00** for the Soccer Fields.

Pricing for the Soccer Fields will be reduced to **\$4100.00** when the schedule for Howell Recreation Center trash collection five (5) days per week comes into effect.

This agreement will run on a month to month basis and is subject to change due to added or deleted areas/tasks.

Either party may cancel this agreement with one months written notice.

Genoa Township



Perfect Maintenance Cleaning Services

Dated: 1-19-24

PERFECT MAINTENANCE
CLEANING SERVICES
PO BOX 2225
HOWELL, MI 48844
perfectmaintenancelic@gmail.com

Genoa Township
2911 Dorr Road
Brighton, MI 48114

January 19, 2023

PROPOSAL FOR CLEANING SERVICES
(revised)

Township Hall

General cleaning: \$1100.00 per month

Schedule: Monday, Wednesday and Friday

Areas included: Lobby/entry way
Conference room
Boardroom
Main office area
Private offices
Bathrooms (4)
Kitchen
Employee entrance

Supplies: Provided by Genoa Township

ACLU of Michigan

[Menu](#)

[Donate](#)

ACLU CALLS ON GENOA TOWNSHIP CLERK TO REINSTATE VOTERS IMPROPERLY REMOVED FROM REGISTRATION ROLLS

MEDIA CONTACT

Ann Mullen, amullen@aclumich.org (<mailto:amullen@aclumich.org>), 313-400-8562

MARCH 18, 2024

[READ LETTER TO GENOA TOWNSHIP CLERK](https://www.aclumich.org/sites/default/files/field_documents/letter_to_genoa_clerk_3.18.24_w_attachment.pdf)

([HTTPS://WWW.ACLUMICH.ORG/SITES/DEFAULT/FILES/FIELD DOCUMENTS/LETTER TO GENOA CLERK_3.18.24 W ATTACHMENT.PDF](https://www.aclumich.org/sites/default/files/field_documents/letter_to_genoa_clerk_3.18.24_w_attachment.pdf))

FOR IMMEDIATE RELEASE

DETROIT, Mich. – The ACLU of Michigan and the law firm of Covington & Burling LLP sent a letter today to the Genoa Township Clerk calling on her to reinstate all voters improperly removed from the voter registration rolls since approximately October 1, 2023. The letter describes how the clerk removed as many as 112 voters based on improper residency-related challenges, likely in violation of state and federal voter protection laws. Today’s letter also raises concerns that the clerk may have also wrongfully removed or considered removing as many as 500 voters.

In October 2023, the organization Stand Up Livingston submitted 50 affidavits to the Genoa Township Clerk challenging 112 voters’

registration status based on residency-related issues. Wrongly relying on outdated state laws that have been preempted by more recent state and federal provisions, the group called for the voters to be removed from registration rolls within 30 days. After the ACLU learned of this, in December 2023 it called and emailed the clerk's office raising concerns about the challenges as well as filing a public records request for documents and correspondence related to the mass challenges. At that time, the clerk assured the ACLU that no voters were wrongfully removed.

On February 7, 2024, the ACLU sent a letter to the clerk, further explaining the ACLU's concerns about the voter registration challenges, and why it would be illegal to cancel registrations based on Stand Up Livingston's submissions. The letter also informed the clerk that in order to cancel a voter's registration based on residency, state law and the National Voter Registration Act require that a voter either confirm a change of residency or both fail to respond to a notice that their registration will be cancelled *and* fail to vote in the next two federal elections. On February 12, shortly after the ACLU's letter, the Secretary of State issued similar written guidance to all Michigan clerks.

On March 3, [the New York Times](https://www.nytimes.com/2024/03/03/us/politics/trump-voter-rolls.html) (<https://www.nytimes.com/2024/03/03/us/politics/trump-voter-rolls.html>) reported that the Genoa Township clerk had in fact cancelled the voter registrations of many of the voters challenged by Stand Up Livingston. The report contradicted the earlier statement by the clerk that no voters were removed. After the article was published, the ACLU called the clerk on March 8 to try to understand the discrepancy but did not receive satisfactory explanations as to what had happened.

In that March 8 phone conversation, the clerk's office indicated that some voters had in fact been removed and that it was reviewing the

registration status of not only the 112 voters identified in the Stand Up Livingston affidavits, but possibly as many as 500 voters.

In addition to calling on the clerk to reinstate all voters who had their registrations cancelled, today's letter requests detailed information about all voters removed, the basis for removal, the process by which this was done, and other information.

Delaney Barker, ACLU of Michigan Equal Justice Works Fellow had this response:

“The ACLU has serious concerns that the appropriate procedures were not followed in Genoa Township in response to improper mass challenges it received last fall. Commonsense voter protection laws have been on the books for decades and are critical to our democracy. These laws ensure that voters who are properly registered but do not reside at a Michigan address daily – such as members of the military, students, snowbirds and others – are not disenfranchised. We will remain vigilant to ensure every eligible voter has access to the ballot box, and call on all election officials, including local clerks, to do the same.”

Letter to Genoa Township Clerk can be read below

###



State Headquarters
2966 Woodward Avenue
Detroit, MI 48201
Phone 313.578.6800
Fax 313.578.6811
E-mail aclu@aclumich.org
www.aclumich.org

Legislative Office
115 West Allegan Street
Lansing, MI 48933
Phone 517.372.8503
Fax 517.372.5121
E-mail aclu@aclumich.org
www.aclumich.org

West Michigan Regional Office
1514 Wealthy St. SE, Suite 260
Grand Rapids, MI 49506
Phone 616.301.0930
Fax 616.301.0640
Email aclu@aclumich.org
www.aclumich.org

March 18, 2024

SENT VIA EMAIL

Polly Skolarus, Clerk
Genoa Township Hall
2911 Dorr Road
Brighton, MI 48116-9498

Dear Clerk Skolarus,

We are writing to follow up on the ACLU of Michigan's recent communications. In this letter we request corrective action and clarifying information regarding voters whose registration has been challenged based on residency-related issues. The legal bases for our concerns are stated in our February 7, 2024 letter¹ which we enclose here for your reference. By way of very brief summary of that letter, both Michigan law and the federal National Voter Registration Act (NVRA) provide strong protections to ensure that voters are not disenfranchised by having their registration wrongfully cancelled. In order to protect against such an outcome, the law provides that if a clerk receives reliable information that a voter may have moved out of the jurisdiction in which they are registered, the proper and lawful course of action is to send a notice to the voter and to place them in a countdown whereby their registration is canceled only if they respond to the notice requesting to have their registration cancelled or both (1) fail to respond to the notice *and* (2) fail to vote in either of the next two federal elections.

Since our February 7 letter, there have been further developments that we wish to note.

As you are likely aware, on February 12, 2024, Jonathan Brater, Director of the Bureau of Elections, wrote to all municipal Clerks and Election Directors regarding recent challenges to the registrations of Michigan voters (the "[Brater Letter](#)"). In this letter, Director Brater advised that voters generally are not to be removed from the rolls pursuant to MCL 168.512 on the basis of residency issues unless, among other things, the voter is provided notice of the alleged residency issue that complies with MCL 168.509aa and the NVRA and "either the voter confirms the voter has changed residency or the voter does not respond to the notice and does not vote during the period of two federal elections following the notice." Brater Letter at 1. Accordingly, and as stated in our February 7, 2024 letter, voters are not to be removed from the registration rolls based on the 30-day window set forth in MCL 168.512.

In addition, the Brater Letter set forth various requirements that apply to any attempt to challenge a voter's registration. As relevant here, a clerk may consider only a voter registration challenge "to a single voter, not a mass challenge to multiple voters," accompanied by a written, notarized affidavit specifying the grounds for a voter's disqualification. Brater Letter at 2. The

¹ It is our understanding that due to an administrative oversight, you did not actually open and view our letter until March 8.

challenges based on secondhand information that Stand Up Livingston has lodged with your office plainly do not meet these requirements. For one, approximately 50 affidavits were filed purporting to challenge the registrations of 112 voters, a direct violation of Director Brater’s clear instruction that “an individual may not submit a single challenge to multiple registered voters within a single affidavit.” Brater Letter at 2.

Furthermore, there is no reason to believe that the Stand Up Livingston canvassers informed people whose doors they knocked on that the information they were gathering would be used to cancel voter registrations. There is no evidence that canvassers made relevant and necessary inquiries before challenging a voter, such as attempting to determine whether the challenged voter is a student, military member, overseas voter, or snowbird. Such voters (and others as well) might all be properly registered at an address in Genoa Township, even if they were not physically residing at that address on the day that a Stand Up Livingston canvasser happened to knock on the door. In fact, several of the affidavits were not even signed by anyone who lives at the address in question. Rather, they are signed by an appointed officer of the Livingston County Republican Party and provide—at best—only hearsay about what some (often unnamed) person may have said.

Accordingly, and for the reasons stated in our February 7, 2024 letter, any removal of voters from the registration rolls under the 30-day window provided by MCL 168.512 violates both Michigan law and the NVRA, and likely Article 2, § 4 of the Michigan Constitution, which guarantees a fundamental right to vote.

We regret the necessity to send this letter, but it follows several months of less formal attempts on the behalf of the ACLU of Michigan to work collaboratively with your office to ensure that voters’ registrations were not erroneously canceled.

On December 27, 2023, we filed a Freedom of Information Act (FOIA) request with your office for documents and correspondence relating to a canvassing effort by Stand Up Livingston to challenge voter registrations. In response to our FOIA request, you provided approximately 50 affidavits that were sent to your office challenging the voter registrations of 112 individuals.

Since then, we have been in touch with your office several times to try to make sure that your response to these affidavits was lawful and did not result in cancellation of voter registrations. On January 2, 2024, in an email exchange with Delaney Barker, one of the undersigned, you informed us that no voters had been removed in response to the challenges submitted by Stand Up Livingston. You informed us, at most, some of the 112 challenged voters had been marked as “challenged” in the Qualified Voter File (QVF) and that cancellations were not going to be considered until after the presidential election this November. You reaffirmed this position in January 4 and January 9 telephone calls with Ms. Barker.

We were, therefore, surprised and disappointed to read in an article published in the *New York Times* on March 3, 2024, that voters in Genoa Township whose registrations were challenged by Stand Up Livingston had, in fact, had their registrations canceled by your office. Berzon & Corasaniti, *Trump’s Allies Ramp Up Campaign Targeting Voter Rolls*, *New York Times* (March 3, 2024) <<https://www.nytimes.com/2024/03/03/us/politics/trump-voter-rolls.html>>.

Since that article was published, we have been unable to obtain confirmation from your office that no voters are being removed from the registration rolls in response to the challenges posed by Stand Up Livingston or others. Rather, in a March 8, 2024 call, your office indicated that some voters had in fact been removed from the registration rolls. In the course of this call, it seemed that your office has been reviewing the registration statuses of more than just the 112 voters identified in the Stand Up Livingston affidavits, perhaps encompassing a larger list of as many as 500 voters. You were not able to provide the number of voters whose registrations were ultimately canceled nor to provide a detailed explanation of the basis for any cancellations or the process that was followed.

Accordingly, by this letter, we are requesting that you take the following actions to confirm that this matter has been resolved appropriately:

1. Reinstatement every voter who was removed from the registration rolls since October 1, 2023 in response to a challenge based on residency, unless such removal complied with the NVRA's notice and countdown requirements—i.e., the voter was sent notice of the challenge and did not vote in the period of two federal elections following the notice;
2. Mail a notice to all voters who previously received a notice that their voter registration had been challenged on the basis of residency-related issues since October 1, 2023, informing them that they were not removed from the voter rolls and will be eligible to vote in November 2024; and
3. Provide us with the following specific information, so that we can ensure that no further Genoa Township voters are at risk of being disenfranchised going forwards:
 - a. A list of every voter whose registration was challenged between October 1, 2023 and the date of this letter, including the full list of as many as 500 registered voters for whom you considered challenges;
 - b. A list of every voter who was removed from the Genoa Township's rolls between October 1, 2023 and the date of this letter;
 - c. As to each voter removed from the rolls, a statement of the reasons for removal, including a statement as to whether this removal complied with the NVRA countdown requirements;
 - d. A statement as to how the voters were removed in the QVF—i.e., what information had to be entered into the QVF and what reason was given in the QVF for the removals;
 - e. A list of all voters who have been reinstated between October 1, 2023 and the date of your response to this letter, and the reasons why they were reinstated;
 - f. A list of all voters who received notice that their status had been challenged between October 1, 2023 and the date of this letter, an explanation of how

that notice was provided, and copies of the notices that were sent by your office;

- g. A list of any voters who have been placed into the NVRA countdown since October 1, 2023, with confirmation that the appropriate notice was sent under the NVRA and MCL 168.509aa–509cc;
- h. A list of the voters who are still on the registration rolls but were moved into challenged status;
- i. An explanation of the legal basis for putting voters into challenged status; and
- j. An explanation of the consequences of being placed into “challenged” status” as regards a voter’s ability to vote either in person or via absentee ballot.

In any event, we are requesting a response confirming that items (1) and (2) have occurred by no later than April 1. We request that you provide the additional information requested in item (3) by April 15, and invite you to contact us if such information can be most suitably provided in a somewhat different way or format than we have requested. Our goal is not to place onerous or unnecessary demands on the time of you and your staff, but, rather, to understand what has occurred so that we can help ensure that it does not happen again either in Genoa Township or other jurisdictions. We would of course prefer to resolve this without the need to enlist judicial guidance. But given that we are in the midst of a significant election cycle, we cannot permit this issue to remain unresolved.

Sincerely,

/s/Philip Mayor
Philip Mayor (P81691)
Delaney Barker
American Civil Liberties Union
Fund of Michigan
2966 Woodward Ave.
Detroit, MI 48201
(313) 578-6803
pmayor@aclumich.org

/s/Robert Fram
Robert Fram
Covington & Burling LLP
Salesforce Tower
415 Mission St., Suite 5400
San Francisco, CA 95105
rfram@cov.com

Pierre Anquetil
August Gweon
One City Center
Covington & Burling LLP
850 Tenth Street, NW
Washington, DC 20001

Attachment

February 7, 2024 Letter from ACLU-MI
to Clerk Skolarus



State Headquarters
2966 Woodward Avenue
Detroit, MI 48201
Phone 313.578.6800
Fax 313.578.6811
E-mail aclu@aclumich.org
www.aclumich.org

Legislative Office
115 West Allegan Street
Lansing, MI 48933
Phone 517.372.8503
Fax 517.372.5121
E-mail aclu@aclumich.org
www.aclumich.org

West Michigan Regional Office
1514 Wealthy St. SE, Suite 260
Grand Rapids, MI 49506
Phone 616.301.0930
Fax 616.301.0640
Email aclu@aclumich.org
www.aclumich.org

February 7, 2024

SENT VIA EMAIL

Genoa Township Clerk
Livingston County, Michigan
2911 Dorr Road
Brighton, MI 48116-9498

Dear Clerk Skolarus,

Thank you for providing information responding to our request pursuant to the Michigan Freedom of Information Act, MCL 15.231 *et seq.* We see that your office is being asked to utilize MCL 168.512 (“section 512”) to remove voters from the voter rolls within 30 days due to a residency-based registration challenge without adhering to the process outlined in MLC 168.509aa-509cc (“sections 509aa-509cc”) or the National Voter Registration Act (“NVRA”), which provide for a process that removes voters only if they have not responded to a notice and then failed to vote in two consecutive federal elections. We write to inform you of our position, which is that we believe it would be unlawful to use the 30-day section 512 process for residence-based voter removals. Instead, the process laid out in MCL 168.509aa-509cc is the process required by Michigan law if a clerk has received information that they deem to be reliable regarding a voter’s potential change of residence.

Section 512 instructs clerks who receive an affidavit challenging the registration of a voter that otherwise complies with the law to send a certified letter containing the grounds for the challenge to the voter. It further provides that the voter must be removed from the rolls if they do not respond to a notice within a 30-day window.

But critically, as applied to challenges to a voter’s registration based upon an alleged change in residence, section 512 is superseded in Michigan law by MCL 168.509aa-509cc, which specifically governs what clerks may do when they receive information they deem reliable that a voter may have changed their residence. Moreover, if section 512 were to be applied to challenges based on alleged changes of residence, section 512 would be squarely in conflict with the National Voter Registration Act (“NVRA”) and therefore preempted by that federal statute. See, e.g., *Arizona v Inter Tribal Council of Arizona, Inc*, 570 US 1, 14 (2013) (holding that the NVRA preempts conflicting state laws); see also *US Student Ass’n Foundation v Land*, 546 F3d 373, 386 (CA 6, 2008) (holding that removal of voters from the rolls by reason of change of address may only be conducted in accordance with specific requirements set forth in NVRA).

Indeed, sections 509aa-509cc were enacted to bring Michigan law into compliance with the NVRA. In its first legislative session after the NVRA was passed, the Michigan legislature enacted sections 509aa-509cc (among other provisions) to bring Michigan into compliance with the NVRA. See 1994 PA 441. These sections implement the NVRA and provide further details

for how to implement the NVRA’s prescribed process for removal of a voter from the rolls in response to information that the voter has changed their residency. The NVRA provides that “a state shall not remove the name of a registrant from the official list of eligible voters in elections for Federal office on the ground that the registrant has changed residence unless the registrant” goes through either of two processes: (1) the voter sends a direct communication indicating that they wish to be removed or (2) the state goes through the NVRA’s prescribed process of notifying the voter, giving them an opportunity to respond, and then waiting two election cycles in which the voter does not vote before removing them. 52 USC 20507(d); see also *League of Women Voters of Indiana, Inc v Sullivan*, 5 F4th 714, 723 (CA 7, 2021). During the waiting period, a voter can respond to the question as to their residence by responding to the notice, updating their registration, or voting. This policy ensures voters are not erroneously removed from the voter rolls and disenfranchised.

Under the plain terms of sections 509aa-509cc and the NVRA, this process applies whenever the clerk receives “change of address information supplied by the United States postal service or other reliable information received by the clerk that identifies registered voters whose addresses may have changed as provided in this section.” MCL 168.509aa. Therefore, the plain language of sections 509aa-509cc and the NVRA clearly indicate that removal of a voter who has moved using section 512’s 30-day process would be unlawful. Accordingly, sections 509aa-509cc are the exclusive basis under Michigan law for removing voters based on a change in their residence, including any challenge based on an alleged change in residence. Permitting mass purges of the voting rolls within 30 days under section 512 threatens widespread baseless disenfranchisement of Michigan voters and would be illegal under both federal and Michigan law. For example, military voters who are currently stationed abroad and last resided in Genoa Township may well be among those whom Stand Up Livingston has challenged, as the military status of a former homeowner or renter would not be known to canvasser or current residents. If the 30-day section 512 process were used, such voters might find themselves removed from the rolls before they could reasonably respond and thus unable to vote absentee in the upcoming elections.

As I have noted, this letter describes the ACLU of Michigan’s position on the illegality of using section 512 to remove voters from the rolls in response to a residency-based challenge. Please feel free to consult with the Secretary of State for further advice and guidance.

Sincerely,
/s/ Delaney Barker

Delaney Barker
Equal Justice Works Fellow
ACLU of Michigan
2966 Woodward Ave.
Detroit, MI 48201
dbarker@aclumich.org

Board Correspondence



March 20, 2024

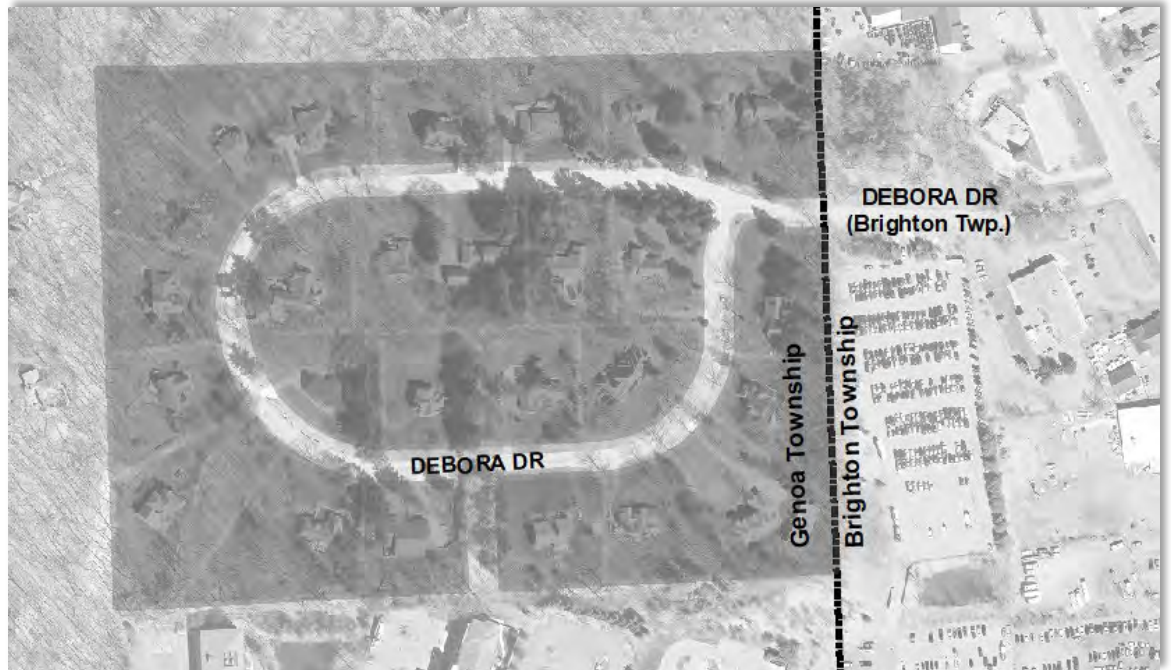
Grand Ravines Subdivision Property Owner

2911 Dorr Road
Brighton, MI 48116
810.227.5225
810.227.3420 fax
genoa.org

**RE: Road Improvement Meeting
Tuesday, April 9th, 2024 at 6:00pm
Genoa Township Hall, 2911 Dorr Road, Brighton 48116**

Dear resident,

Genoa Township has been contacted regarding helping to finance a road improvement project in your neighborhood. Debora Drive is under the jurisdiction of the Livingston County Road Commission and is located in both Genoa Township and Brighton Township. The Township boundary line and the limits of your subdivision (dark shading) are shown in the graphic below.



An estimate from the Livingston County Road Commission has been provided to the Township for rehabilitation of the portions of Debora Drive within Genoa Township. The estimate to rehabilitate the portion of the road within your subdivision involves approximately 0.52 miles of roadway at an estimated cost of **\$390,000**. This includes milling the existing asphalt, proof rolling and repairing soft and yielding areas, and performing necessary subgrade undercutting and drainage improvements prior to placing two lifts of hot mix asphalt totaling 4.5" to meet the grade of the existing curb and gutter. A copy of the estimate is attached to this letter for your review.

Public Act 188 of 1954 allows for the Township, through the special assessment process, to assist residents by providing funding and financing for the cost of the improvement, and then

SUPERVISOR

Bill Rogers

CLERK

Paulette A. Skolarus

TREASURER

Robin L. Hunt

TRUSTEES

Jean W. Ledford

Terry Croft

Diana Lowe

Jeff Dhaenens

MANAGER

Kelly VanMarter

March 20, 2024

Grand Ravines/Debora Drive Road Rehabilitation Special Assessment

Page 2 of 4

levying and collecting the special assessment to pay off the debt. The Township's role in the project is strictly financing and the Board has full discretion over whether or not to approve the project. For road projects improving public roads, the Township Board has established a policy to help support projects by contributing 25% of the project costs or \$1,500 per parcel, whichever is less. For this project, the Township contribution would be \$1,500 per parcel or \$39,000.

If the Board chooses to support the project, the assessments are spread over a period of time. Although the Township Board ultimately determines the length of the term, staff has contemplated a 15-year payback. The Township currently charges 2% interest. Based on the information discussed above and the following assumptions, the Township estimates declining annual assessment costs of \$1,176.67 in year one and \$923.23 in year fifteen. The spreadsheet showing cost allocation and a map of the project area are also attached for your reference.

Grand Ravines Road Improvement District Assumptions:

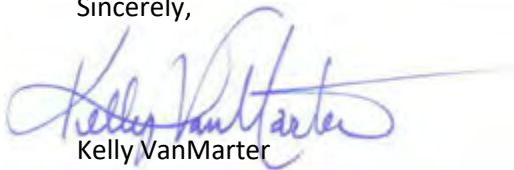
- 26 Parcels
- Construction cost estimate of \$390,000
- Township Contribution of \$39,000 (\$1500 per parcel)
- 15-year payback with 2% interest
- Statutory notice and publication cost of \$2,000

To formally present this information to the neighborhood, you are invited to attend an informational meeting on **Tuesday, April 9th at 6:00 PM at the Genoa Township Hall** located at 2911 Dorr Road, Brighton, Michigan. The purpose of the meeting is to review the special assessment process and answer any questions you may have.

For the project to move forward at least 51% of the property owners must file a petition supporting the project. Petitions will be available at the meeting for you to distribute and/or sign. The petitions have very specific language required by state statute. All owners of a property who are listed on the deed must sign the petition for it to be valid for each parcel. For a trust, the Township will need documentation from the trust to verify that the person signing the petition is authorized by the trust to do so.

If you are unable to attend or if you have any questions please feel free to contact me at (810) 227-5225 or via email kelly@genoa.org.

Sincerely,



Kelly VanMarter
Manager

Cc: Township Board Correspondence; Grand Ravines/Debora Drive Road SAD Project File
Garrett Olson, Construction Engineer, Livingston County Road Commission

Attachments (2): Cost allocation spreadsheet and project area map
Estimate from Livingston County Road Commission dated 12/15/23

March 20, 2024

Grand Ravines/Debora Drive Road Rehabilitation Special Assessment

Attachment 1 – Cost Allocation Spreadsheet & Project Area

Debora Drive (Grand Ravines) Road Improvement Project (15 years)						
PROJECT COST		\$			390,000.00	
ADMINISTRATIVE COSTS		\$			2,000.00	
TOWNSHIP CONTRIBUTION *		\$			(39,000.00)	*
TOTAL		\$			353,000.00	
INTEREST %						2
NUMBER OF PROPERTIES						26
TOTAL PER PARCEL		\$	13,576.90			
YEAR	PAYMENT		TO INTEREST	TO PRINCIPAL		OUTSTANDING
1	2024	\$ 1,176.67	\$ 271.54	\$ 905.13	\$ 905.13	\$ 12,671.78
2	2025	\$ 1,158.56	\$ 253.44	\$ 905.13	\$ 905.13	\$ 11,766.65
3	2026	\$ 1,140.46	\$ 235.33	\$ 905.13	\$ 905.13	\$ 10,861.53
4	2027	\$ 1,122.36	\$ 217.23	\$ 905.13	\$ 905.13	\$ 9,956.41
5	2028	\$ 1,104.26	\$ 199.13	\$ 905.13	\$ 905.13	\$ 9,051.28
6	2029	\$ 1,086.15	\$ 181.03	\$ 905.13	\$ 905.13	\$ 8,146.15
7	2030	\$ 1,068.05	\$ 162.92	\$ 905.13	\$ 905.13	\$ 7,241.03
8	2031	\$ 1,049.94	\$ 144.82	\$ 905.13	\$ 905.13	\$ 6,335.90
9	2032	\$ 1,031.85	\$ 126.72	\$ 905.13	\$ 905.13	\$ 5,430.77
10	2033	\$ 1,013.74	\$ 108.62	\$ 905.13	\$ 905.13	\$ 4,525.64
11	2034	\$ 995.64	\$ 90.51	\$ 905.13	\$ 905.13	\$ 3,620.51
12	2035	\$ 977.53	\$ 72.41	\$ 905.13	\$ 905.13	\$ 2,715.38
13	2036	\$ 959.43	\$ 54.31	\$ 905.13	\$ 905.13	\$ 1,810.26
14	2037	\$ 941.33	\$ 36.21	\$ 905.13	\$ 905.13	\$ 905.13
15	2038	\$ 923.23	\$ 18.10	\$ 905.13	\$ 905.13	\$ -
		\$ 15,749.20	\$ 2,172.30	\$ 13,576.91		

* \$1500 PER PARCEL



March 20, 2024

Grand Ravines/Debora Drive Road Rehabilitation Special Assessment

Attachment 2 – Road Commission Estimate

Livingston County Road Commission

3535 Grand Oaks Drive • Howell, Michigan 48843-8375

Telephone: (517) 546-4250 • Facsimile: (517) 546-9638

Internet Address: www.livingscountroads.org

December 15, 2023

Ms. Kelly VanMarter
Genoa Charter Township
2911 Dorr Rd
Brighton, MI 48116

Re: Debora Drive Rehabilitation Estimate

Dear Ms. VanMarter,

The following is a road rehabilitation estimate that was requested for the above mentioned subdivision in Genoa Township.

Debora Drive (Grand Ravines Subdivision)

The project is approximately 0.52 miles long within the Grand Ravines Subdivision Plat (550' west of Grand River Avenue through Debora Drive loop), and the existing pavement is in fair to poor condition. The existing asphalt pavement should be milled, and the roads proof rolled to identify any soft and yielding areas to be addressed prior to placing asphalt pavement. Staff recommends two lifts of hot mix asphalt totaling 4.5" to meet the grade of the existing curb and gutter. Any subgrade undercutting and drainage improvements will be performed as necessary. The estimate for this work is **\$390,000**.

The above estimate is based on visual inspection. If existing pipes are found to be in poor condition, a revised estimate may be necessary to include sewer replacement as needed. Staff recommends pavement cores be performed to determine the existing conditions and determine the proposed section. The above price is based on estimated contract prices for our 2024 Pavement Preservation Program (PPP).

If you have any questions or concerns, please contact me.

Sincerely,



Garrett Olson, P.E.
Construction Engineer

Stephen F. Crane • Chairman
Steven J. Wasylk • Managing Director

Kevin T. Spicher • Vice Chairman
Jodie M. Tedesco • County Highway Engineer

Paul S. Funk • Member
Trevor J. Bennett • Director of Operations